

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	42	51

TRAFFIC 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.
- Sign installation shall reflect best trade practice. No sign overlap. Post shall not extend past top sign. Sign and post shall be plumb and straight. Sign facing and height shall be best aligned per MUTCD and achieve uniform and consistent appearance with other signs.
- Final locations and height of all signs shall be field approved by the Engineer prior to any installation work.
- All pavement striping shall be as noted on the legend or plans.
- 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.
- Interstate Route Marker Symbols shall conform to details shown on the plans and as specified in the MUTCD.
- 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."
- Borders, messages, arrows, symbols and shields 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.
- 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.
- 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.
- Removal of Existing Delineators and Posts shall be considered incidental to the various signing items.

- All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as directed by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
- Removing 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.
- Install type II object marker on all utility poles or trees that are within the State highway right of way and within 30 feet of the roadway edge of pavement shall be marked as directed by the Engineer.
- Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
- The Contractor shall notify the Traffic Signal Branch, Department of Transportation Services, City & County of Honolulu, 2 weeks prior to commencing any loop detector work.
- Dept. of Transportation Services, City & County of Honolulu, will assist the Engineer in construction inspection for the loop detector work.
- The exact locations of the new loop detectors shall be determined in the field by the Engineer.
- Loop detectors damaged during the Contractor's reconstruction of pavement areas or cold planing operation, shall be replaced within 48 hours. Replacement and location of the new loop detectors shall be as directed by the Engineer.
- All fire hydrants within project limits shall be marked with bi-directional, blue raised pavement markers in accordance with BWS Water System Standards. Detail No. FH12 and FH13, 2002 Revision.
- Street name signs shall be installed and oriented to reflect actual street alignment and address numbering in accordance with City and County of Honolulu Standard Details.

EXPRESSWAY (E) AND DESTINATION (D) SIGN NOTES

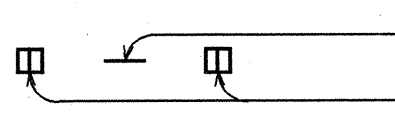
- The Contractor shall verify the locations and dimensions of existing Sign Panels and supports.
- New overlay shall include the new reflective green background and compatible with existing sign type.
- Letter Size:
 - When letters are all uppercase, use series "E"
 - When initial uppercase letter is used in conjunction with lowercase letters, use series "E"(M) for uppercase
- 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.
- The amount and center-to-center spacing of Expressway Sign Luminares shall be in accordance with the luminares manufacturer's instructions. Maximum center-to-center spacing of luminares shall be 10-feet.
- Destination and Expressway Sign Posts shall be as noted on the plans.
- Repaint destination sign posts: prep, prime and 3 coats of dark green enamel. The overhead destination sign on Kahuapaani is excluded.
- Adjust sign supports, luminares & electrical to match new sign configuration at overhead destination sign on Kahuapaani. This work will not be paid separately but shall be considered incidental and inclusive to the various contract items.
- Incidental parts and services, including sign lighting system, not shown on the plans or specified but deemed necessary for the sign installation, shall be furnished and installed by the Contractor as part of the work contracted.
- Removal and disposal of existing sign panels, posts with foundation, luminares and supports will not be paid for separately, but shall be considered incidental to the various signing items.

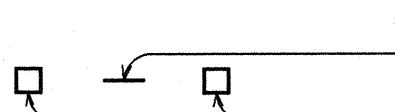
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
NOTE BOOK		
NO. 101/1000		

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
TRAFFIC NOTES
HALAWA HEIGHTS ROAD REHABILITATION Kikania Street to Fernridge Place and Kahuapaani Interchange, Moanalua Freeway Route H201 Project No. HWY-0-06-03M
Date: May 2004
SHEET No. 71 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	43	51

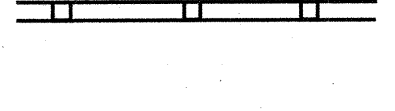
LEGEND

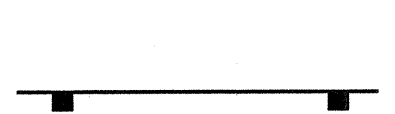
- 

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

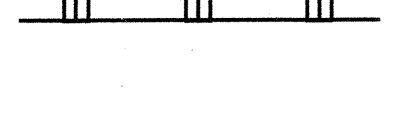
4 each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.
- 

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" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c. (Tape, Type I 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)
- 

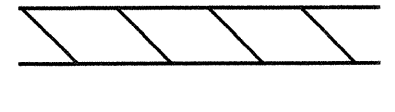
4" or 8" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Tape, Type I or Thermoplastic Extrusion); See Standard Plans TE-31
- 

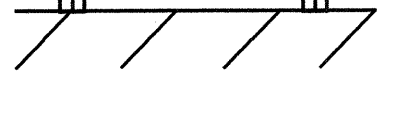
4" White Guide Lines (Tape, Type III or Thermoplastic Extrusion except for bus bays)
- 

Transverse Median Marking (Tape, Type I or Thermoplastic Extrusion)
- 

Transverse Shoulder Marking (Tape, Type I or Thermoplastic Extrusion); See Standard Plans TE-31
- 

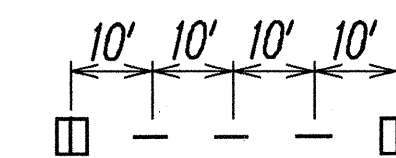
Channelizing Island or Deceleration Lane Gore (Tape, Type I or Thermoplastic Extrusion); See Standard Plans TE-31
- 

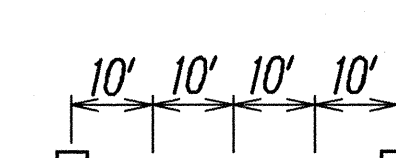
②
Crosswalk and Stop Line. All Stop Lines shall be 10'-0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment (Tape, Type III or Thermoplastic Extrusion)
- 

Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)
- 

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

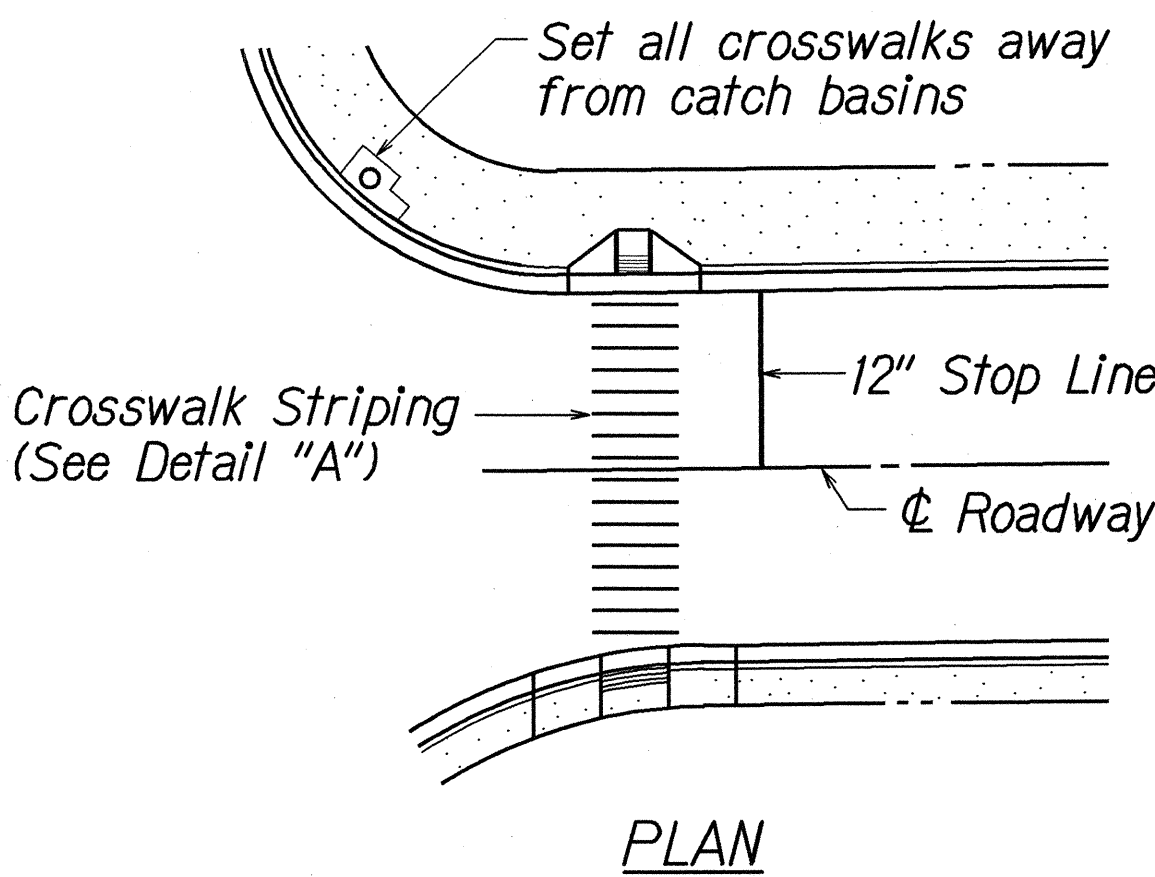
4 Each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.
Type H Raised Pavement Markers (Reflective Surface facing no-passing direction)
4" Single Solid Yellow Stripe (Tape, Type I or Thermoplastic Extrusion)

- 

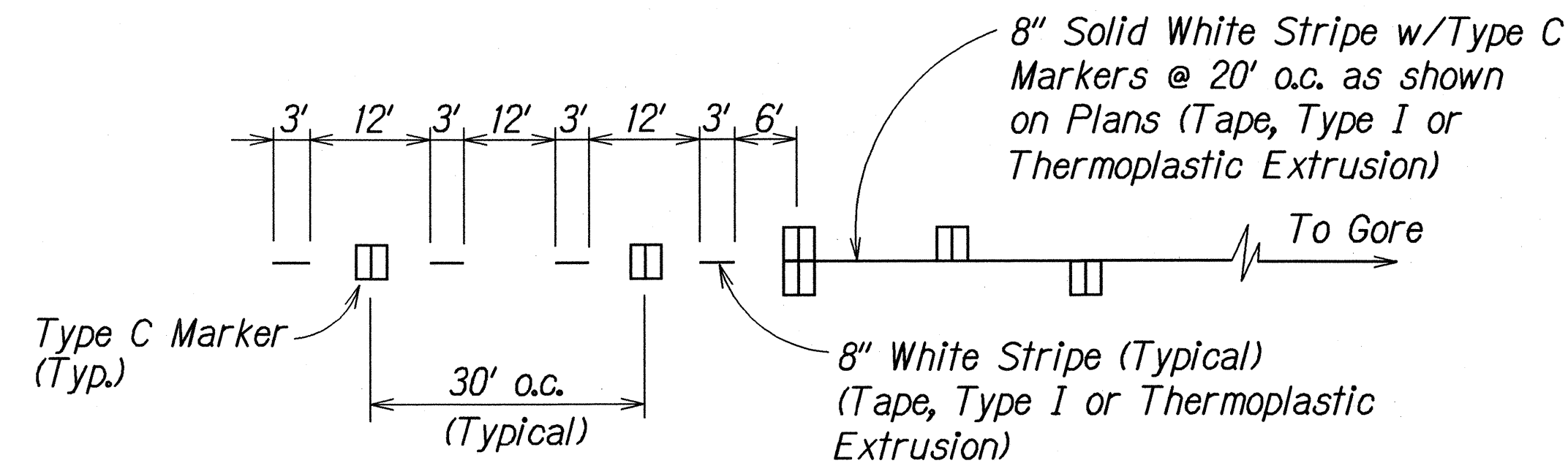
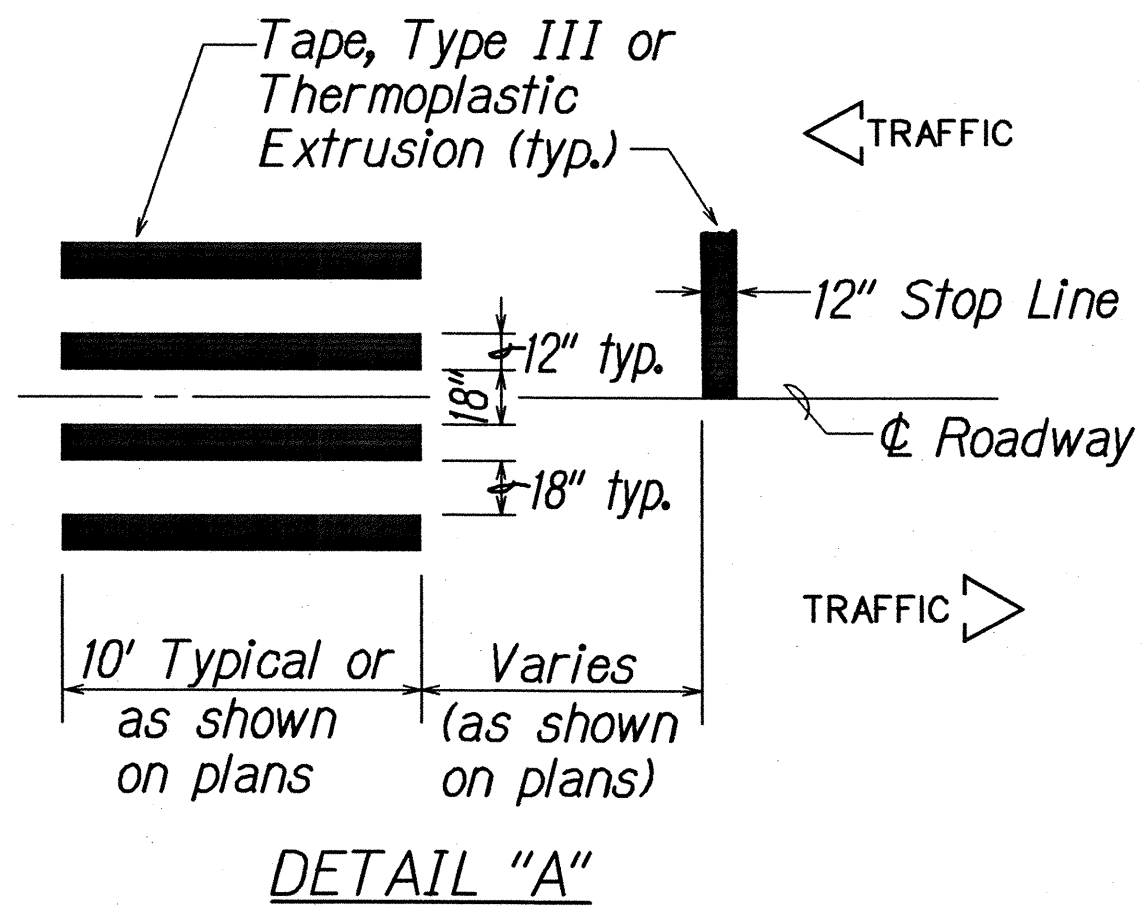
Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. w/Type C Markers @ 40'-0" o.c. (Tape, Type III or Thermoplastic Extrusion)
- 

Extension of Median Line, 4" Wide x 2'-0" Long Yellow Stripe @ 10'-0" o.c. w/Type D Markers @ 40'-0" o.c. (Tape, Type III or Thermoplastic Extrusion)
- 

Flex Delineator with RM-2 Marker



CROSSWALK STRIPING DETAIL
Not to Scale



LANE DROP MARKING
Not to Scale

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

PAVEMENT MARKING

LEGEND & DETAILS

HALAWA HEIGHTS ROAD REHABILITATION

Kikania Street to Fernridge Place and Kahuapaani Interchange, Moanalua Freeway Route H201

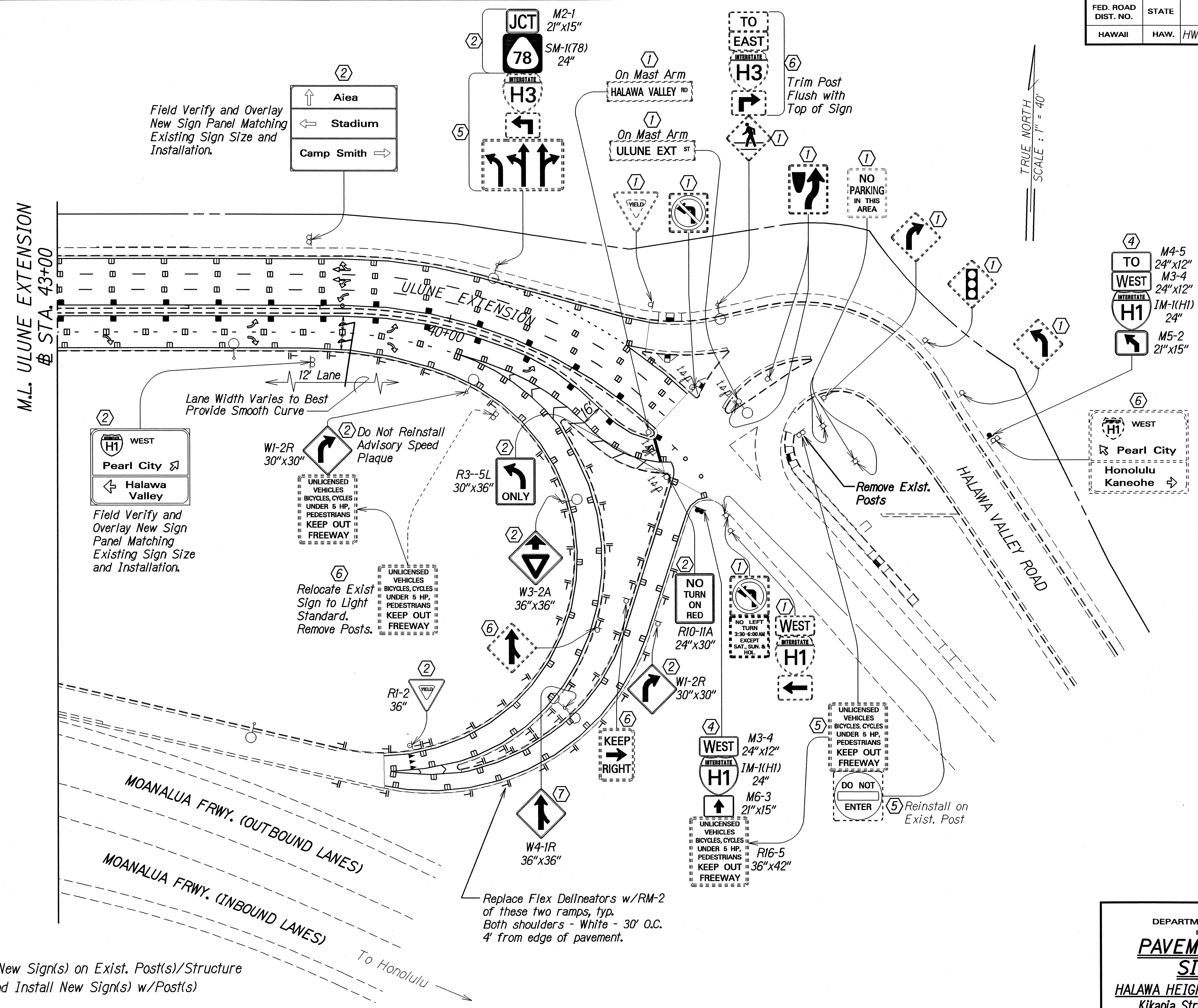
Project No. HWY-0-06-03M

Scale: As Noted Date: May 2004

SHEET No. T2 OF 10 SHEETS

43

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	45	51



KEY:

- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) and Install New Sign(s) on Exist. Post(s)/Structure
- ③ Remove Exist. Sign(s) & Post(s) and Install New Sign(s) w/Post(s)
- ④ Install New Sign(s) w/Post(s)
- ⑤ Remove Exist. Sign(s) and Reinstall on New Post
- ⑥ Remove Exist. Sign(s) and Post(s)
- ⑦ Install New Sign(s) on Exist. Post(s)/Structure

DATE	12/2/03
DESIGNED BY	HWY-0
DRAWN BY	HWY-0
CHECKED BY	HWY-0
IN CHARGE	HWY-0

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

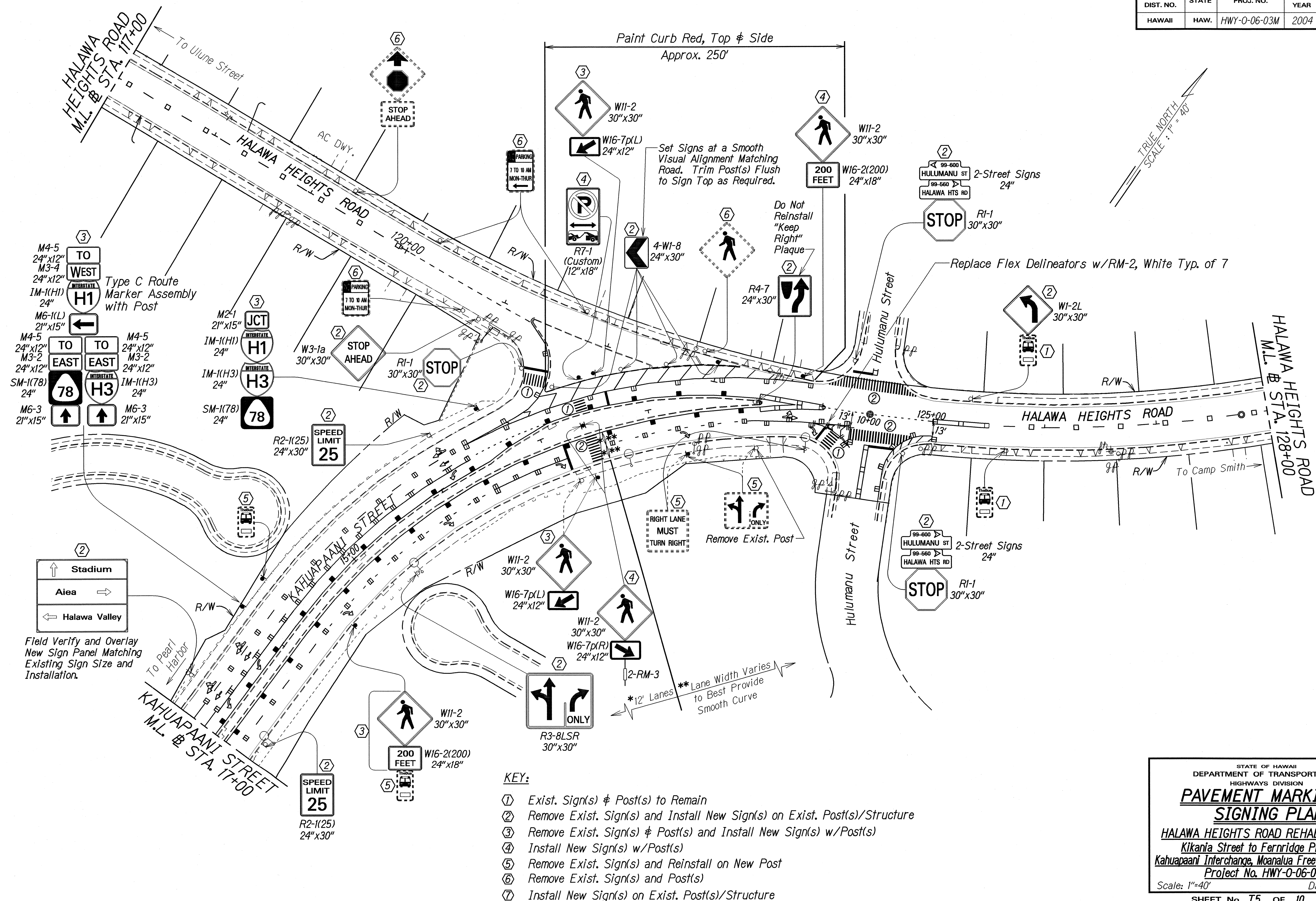
PAVEMENT MARKING & SIGNING PLAN

HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway Route H201
Project No. HWY-0-06-03M

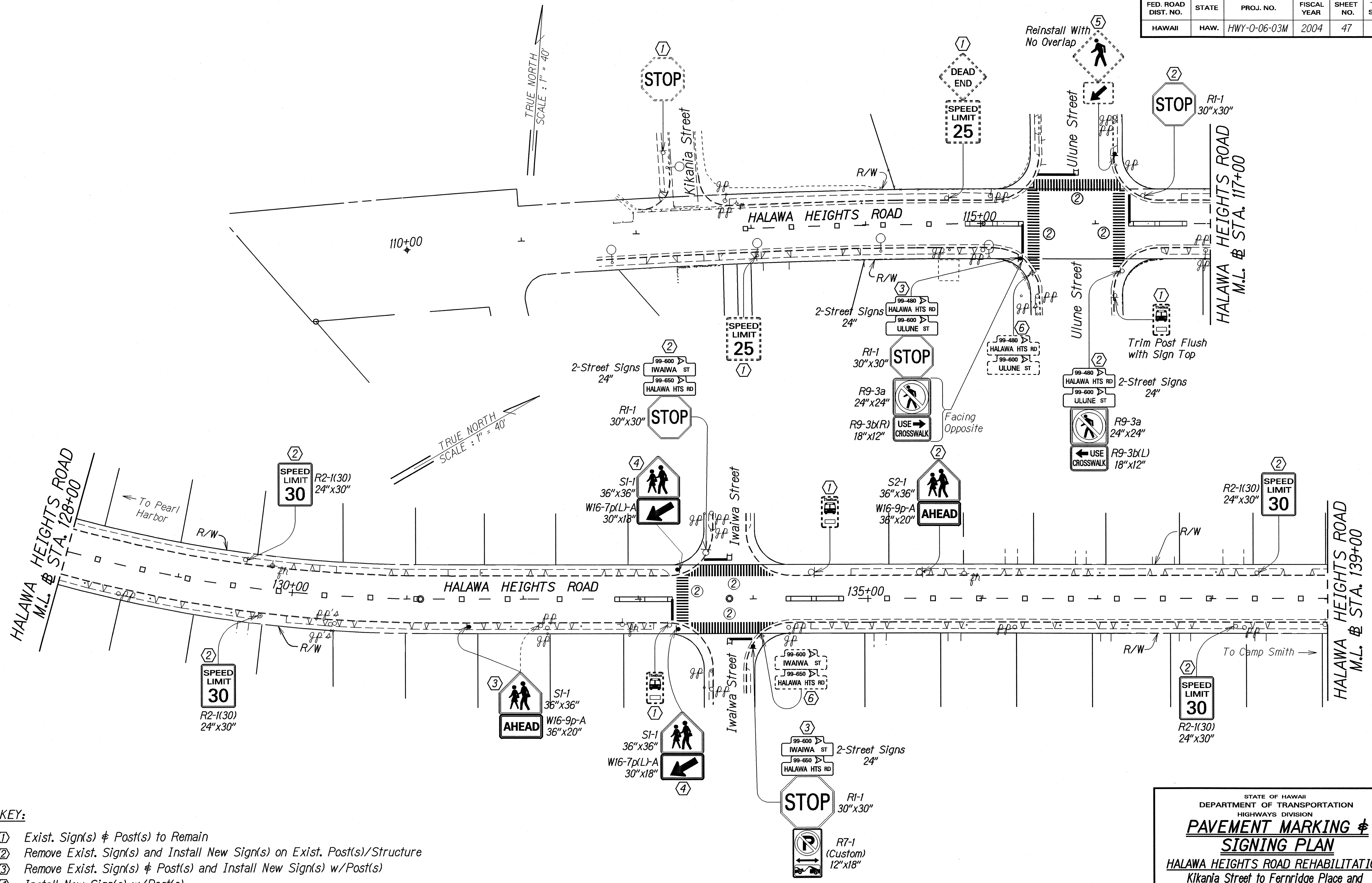
Scale: 1"=40' Date: May 2004

SHEET No. 45 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	46	51



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	47	51



KEY:

- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) and Install New Sign(s) on Exist. Post(s)/Structure
- ③ Remove Exist. Sign(s) & Post(s) and Install New Sign(s) w/Post(s)
- ④ Install New Sign(s) w/Post(s)
- ⑤ Remove Exist. Sign(s) and Reinstall on New Post
- ⑥ Remove Exist. Sign(s) and Post(s)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

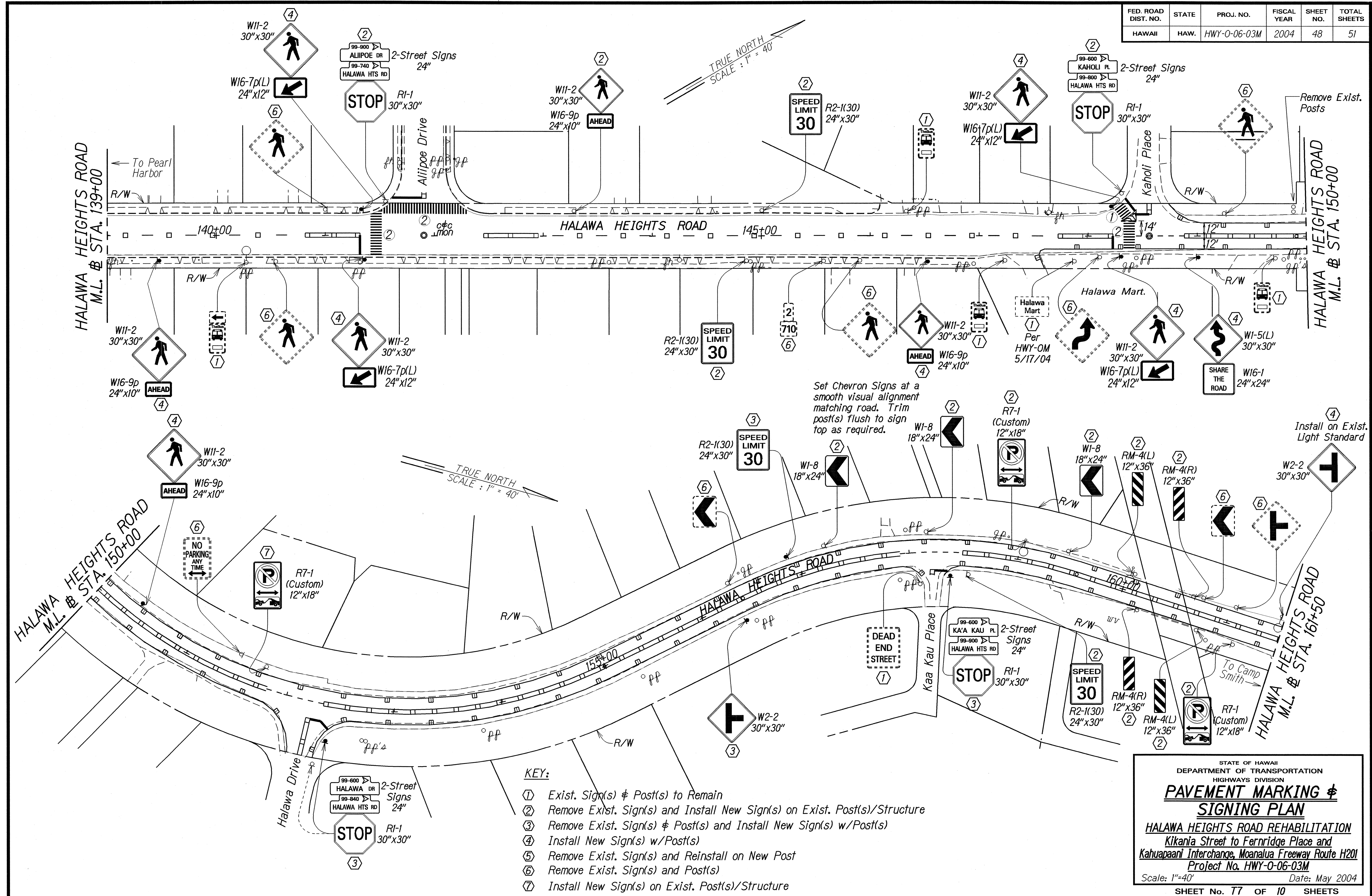
**PAVEMENT MARKING &
SIGNING PLAN**

HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway Route H201
Project No. HWY-0-06-03M

Scale: 1"=40' Date: May 2004

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED FOR	DRAWN BY	
DESIGNED BY	TRACED BY	
CHECKED BY	DESIGNED BY	
	DESIGNED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	48	51



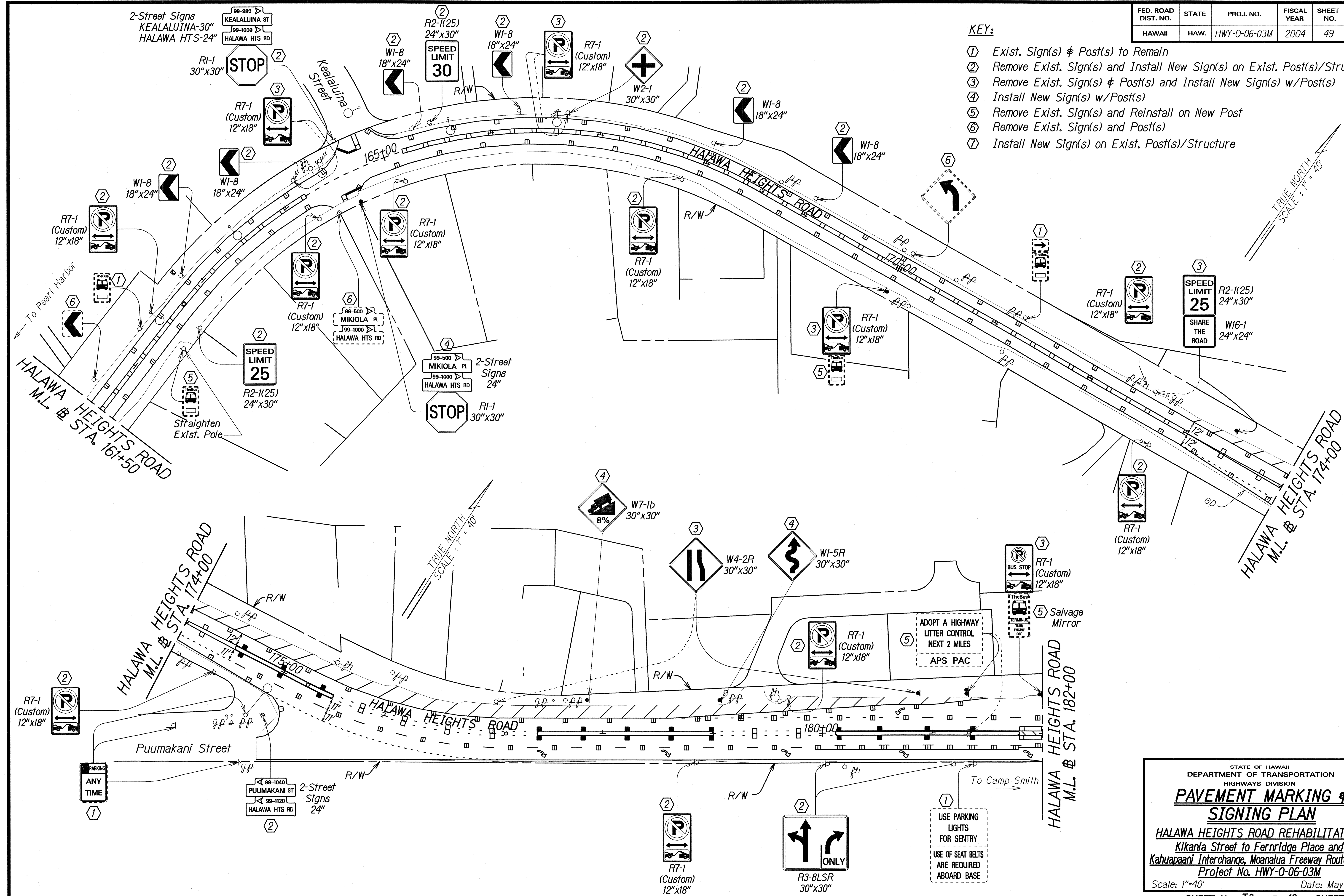
SURVEY PLOTTED BY: DATE: 5/16/04
 DESIGNED BY: JMW/TO
 CHECKED BY: JMW/TO
 ORIGINAL PLAN: 10/1/00
 MODIFIED BY: JMW/TO
 CHECKED BY: JMW/TO

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
HALAWA HEIGHTS ROAD REHABILITATION
 Kikania Street to Fernridge Place and
 Kahuapaani Interchange, Moanalua Freeway Route H201
 Project No. HWY-0-06-03M
 Scale: 1"=40' Date: May 2004
 SHEET No. 77 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	49	51

KEY:

- Exist. Sign(s) & Post(s) to Remain
- Remove Exist. Sign(s) and Install New Sign(s) on Exist. Post(s)/Structure
- Remove Exist. Sign(s) & Post(s) and Install New Sign(s) w/Post(s)
- Install New Sign(s) w/Post(s)
- Remove Exist. Sign(s) and Reinstall on New Post
- Remove Exist. Sign(s) and Post(s)
- Install New Sign(s) on Exist. Post(s)/Structure



DATE	5/6/04
DESIGNED BY	HWY-0
DRAWN BY	HWY-0
CHECKED BY	HWY-0
APPROVED BY	HWY-0
ORIGINAL PLAN	
NOTES	
QUANTITIES	
CHECKED BY	

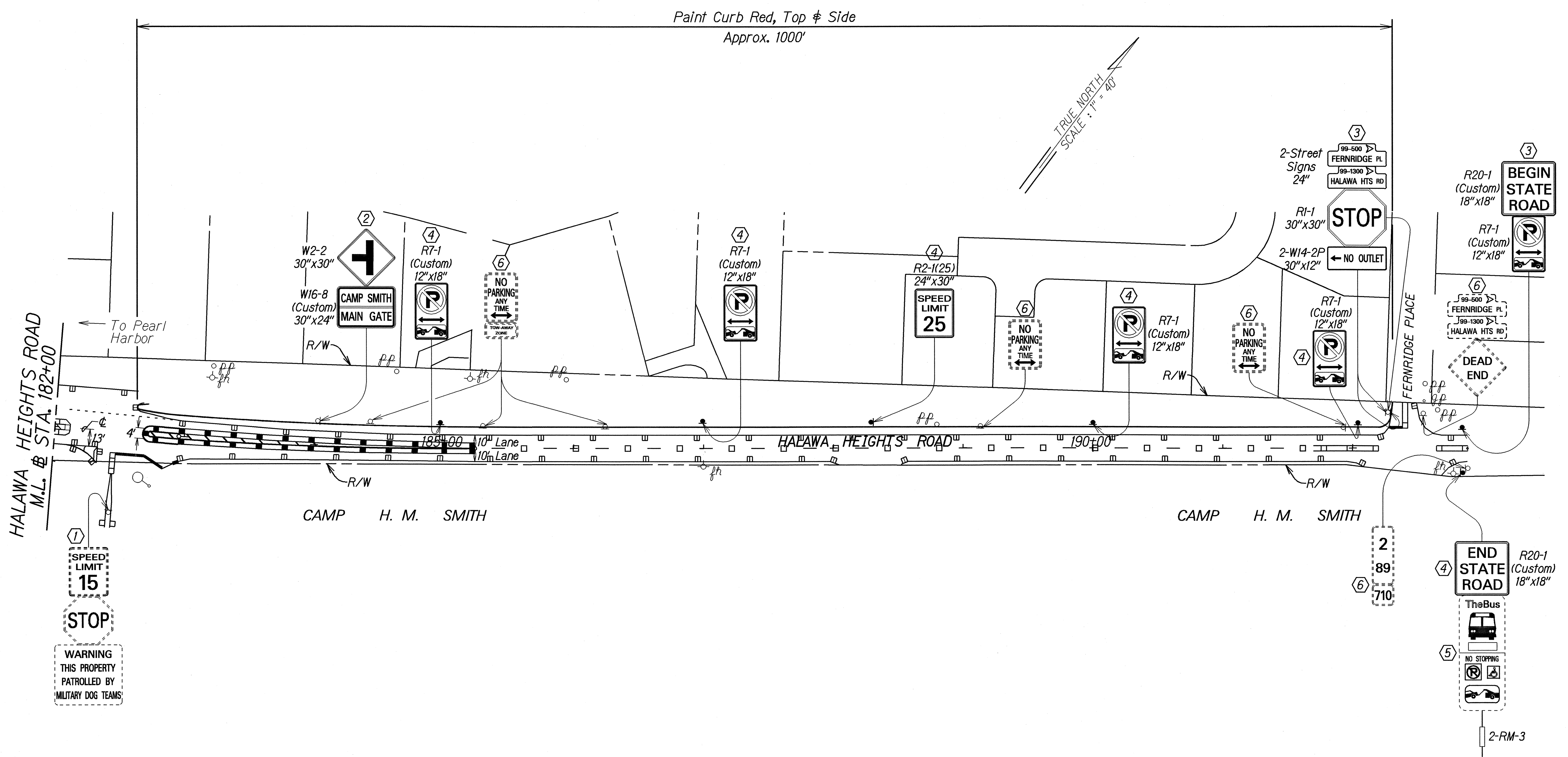
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway Route H201
Project No. HWY-0-06-03M
Scale: 1"=40' Date: May 2004

SHEET No. 78 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	50	51



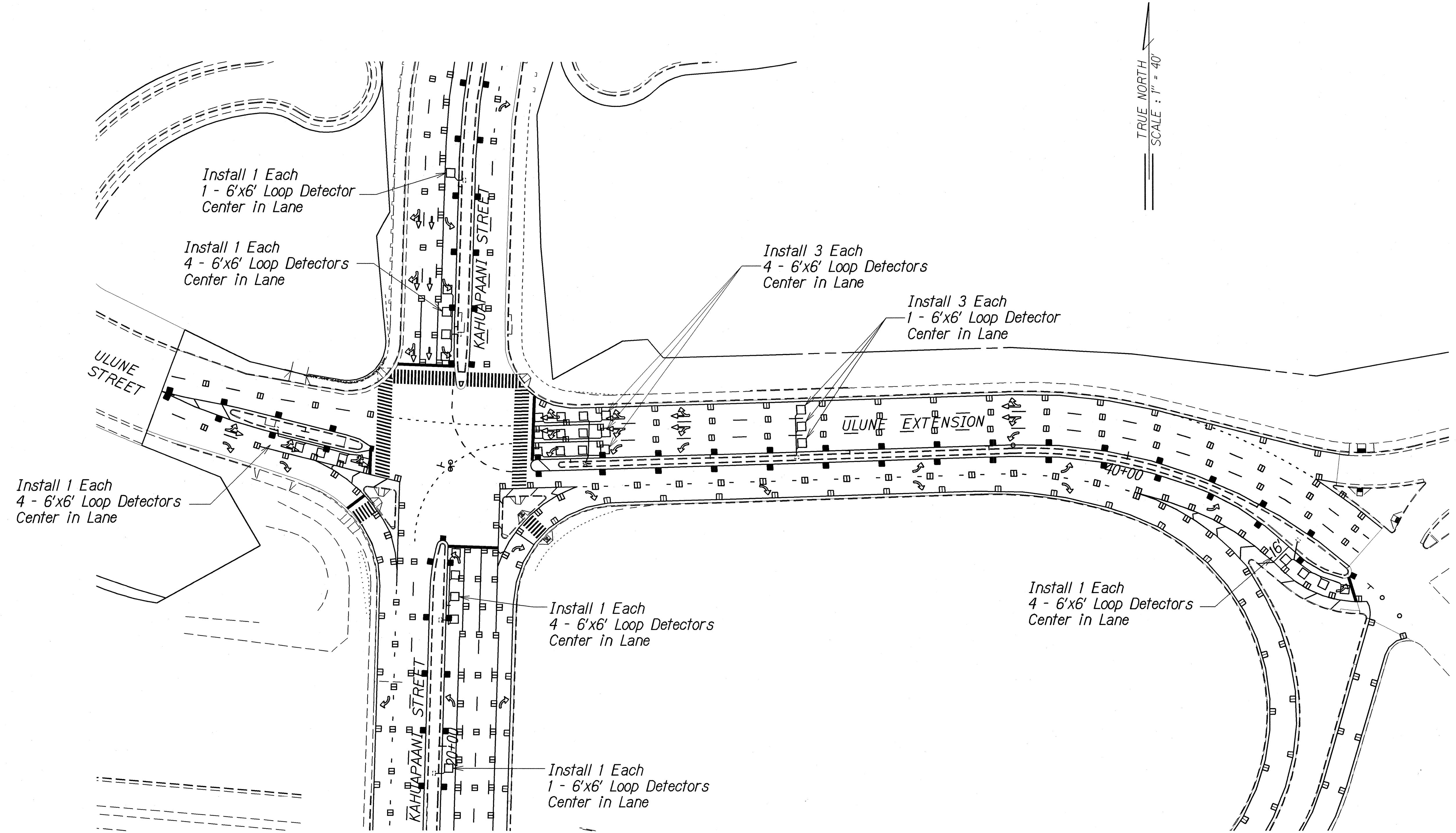
- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) and Install New Sign(s) on Exist. Post(s)/Structure
 - ③ Remove Exist. Sign(s) & Post(s) and Install New Sign(s) w/Post(s)
 - ④ Install New Sign(s) w/Post(s)
 - ⑤ Remove Exist. Sign(s) and Reinstall on New Post
 - ⑥ Remove Exist. Sign(s) and Post(s)
 - ⑦ Install New Sign(s) on Exist. Post(s)/Structure

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	5/6/04
DESIGNED BY	CHKD BY	
APPROVED BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN
HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway Route H201
Project No. HWY-0-06-03M
Scale: 1"=40'
Date: May 2004

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	51	51



Note: See Traffic Note Nos. 21 thru 24 on Plan Sheet No. 37.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTES BOOK	DRAWN BY	5/26/04
DESIGNED BY	TRACED BY	
CHECKED BY	DESIGNED BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

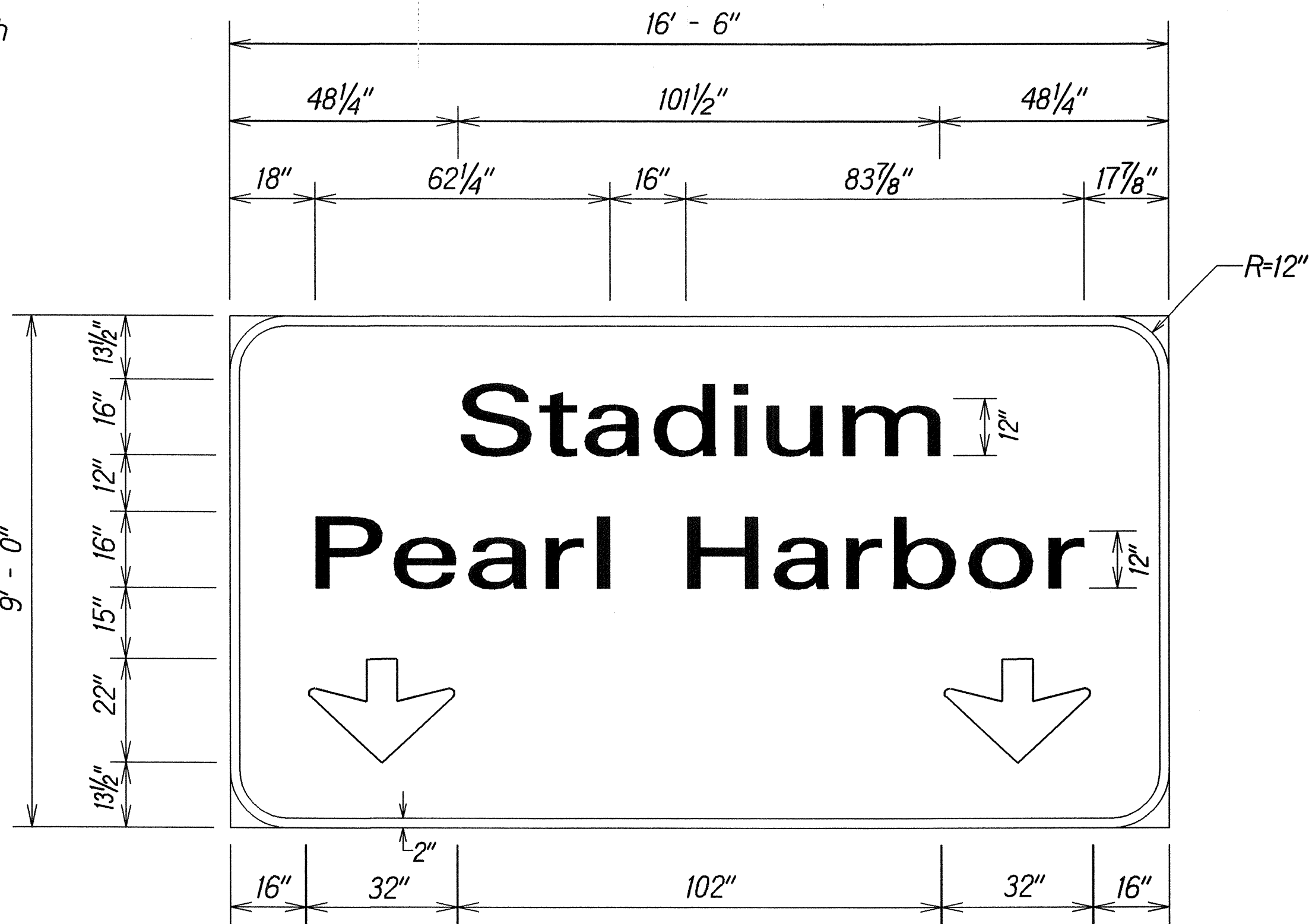
LOOP DETECTORS PLAN

HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway Route H201
Project No. HWY-0-06-03M
Scale: 1"=40' Date: May 2004

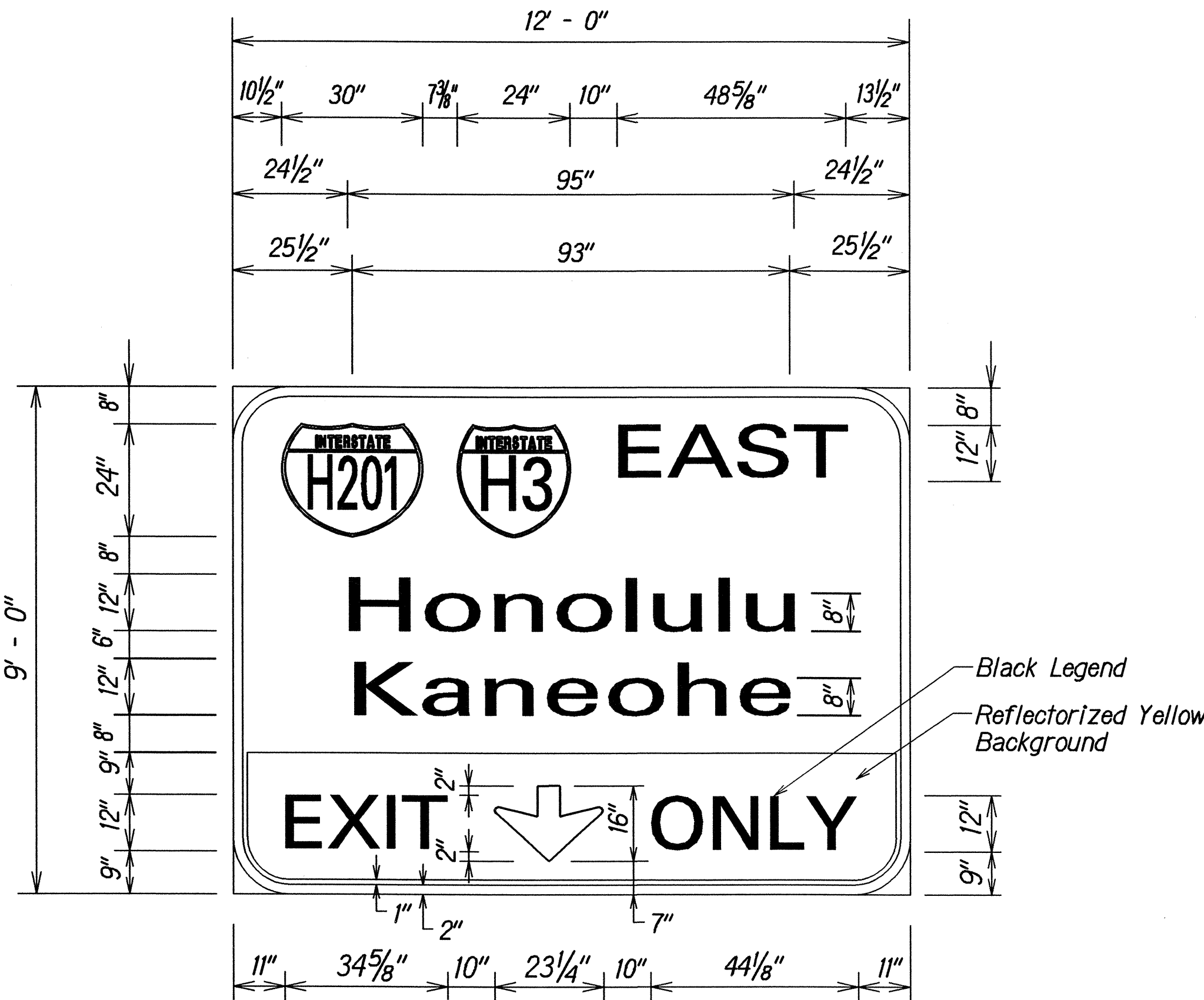
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	C.O.51S-1	51

Notes:

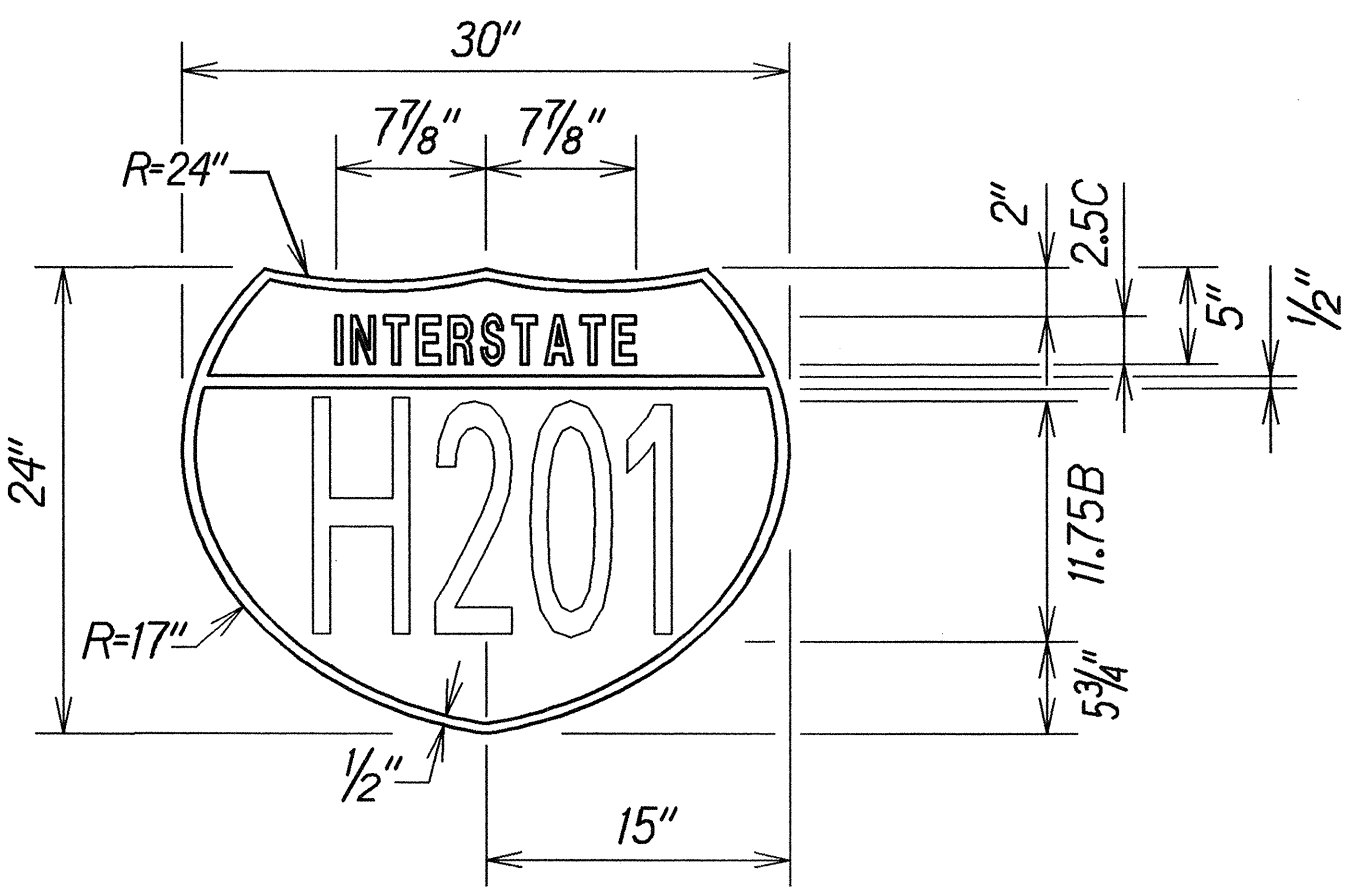
1. Fabricate and install overlay panels in accordance with manufacturer's instructions and as specified by Engineer. Submit splices for acceptance before fabrications.
2. Remove existing letters, numerals, symbols, and borders. Clean and prepare sign panel for overlaying, as recommended by panel manufacturer and as accepted by Engineer.
3. For existing laminated aluminum sign panels, install the overlay using $\frac{5}{16}$ "D x 2"L stainless steel flathead bolts with nuts and washers along the outside edges at 12" o.c., and additional $\frac{3}{16}$ " x $\frac{5}{8}$ "L rivets at 12" o.c. in the interior and along overlay splices.
4. For existing solid aluminum extruded sign panels, install the overlay with $\frac{3}{16}$ "D x $\frac{5}{8}$ "L rivets 1" inside the panel edge every 8" o.c. Install the remaining overlay with rivets at 12" o.c. in the interior and along overlay splices.



E-1(L)
Scale: $\frac{1}{2}$ "=1'-0"



E-1(R)
Scale: $\frac{1}{2}$ "=1'-0"



INTERSTATE ROUTE MARKER
Not to Scale

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DESTINATION SIGN DETAILS

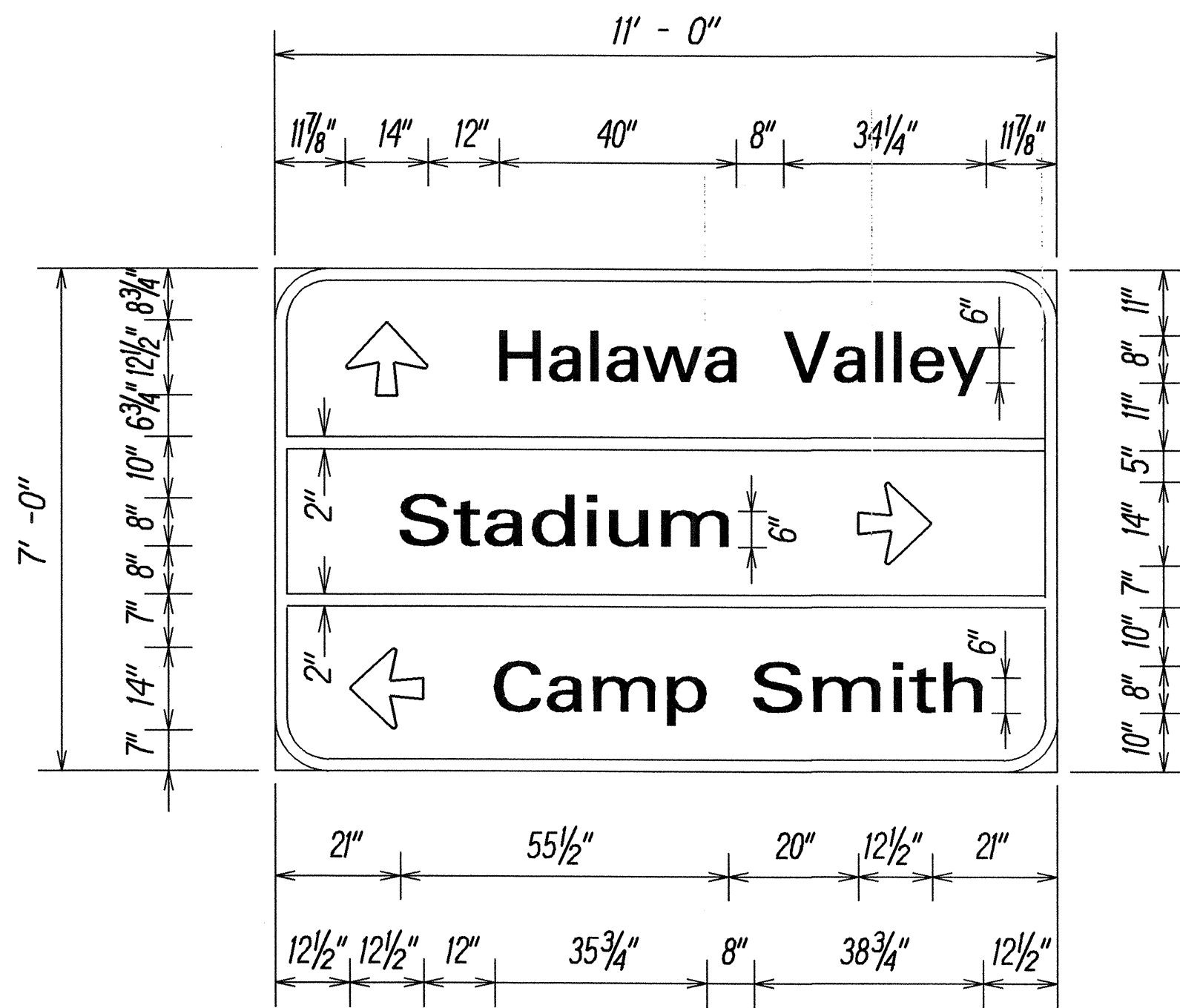
HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway, H201
Project No. HWY-0-06-03M

Scale: As Noted

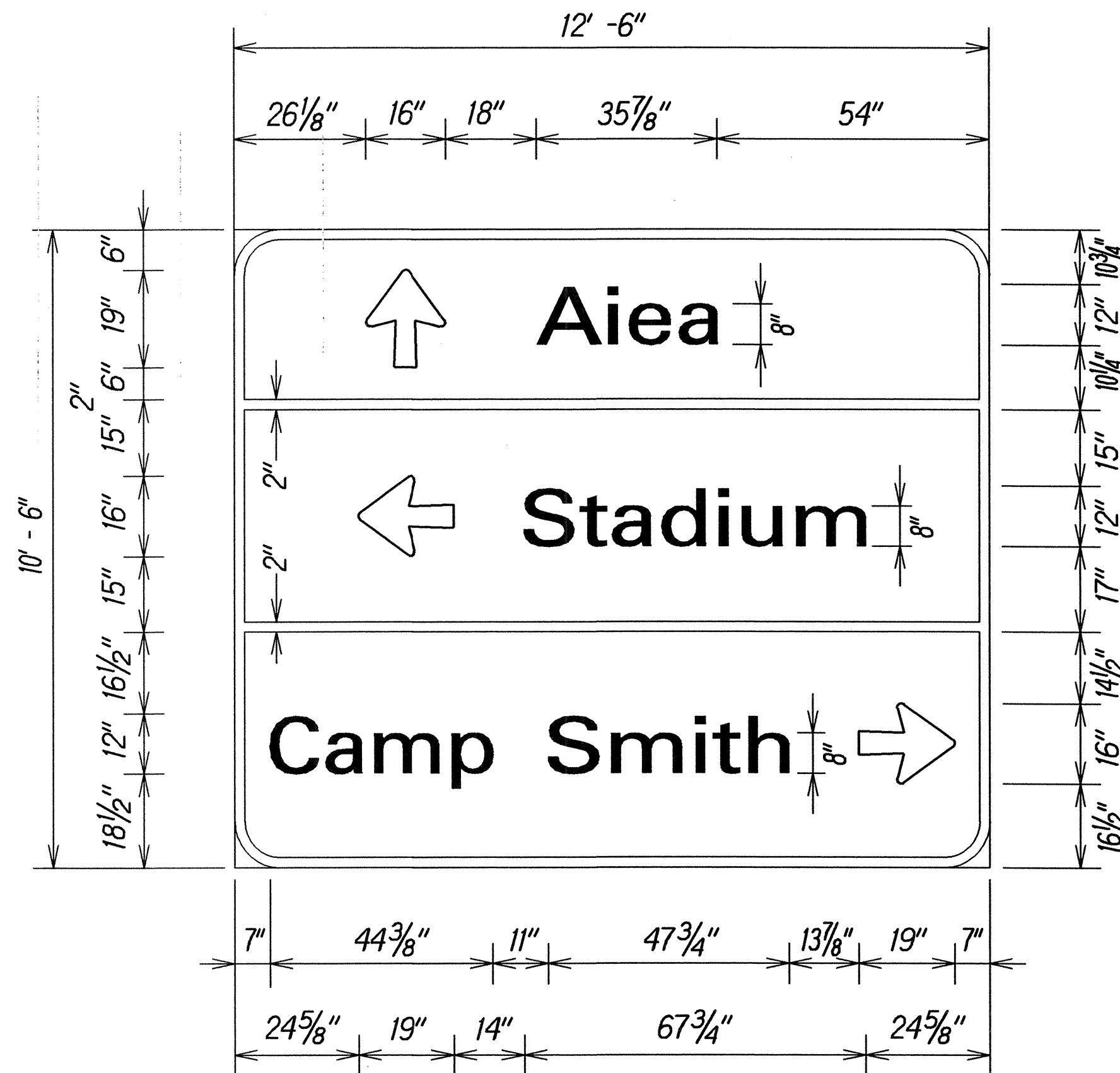
Date: May, 2006

SHEET No. **T10A** OF **10** SHEETS

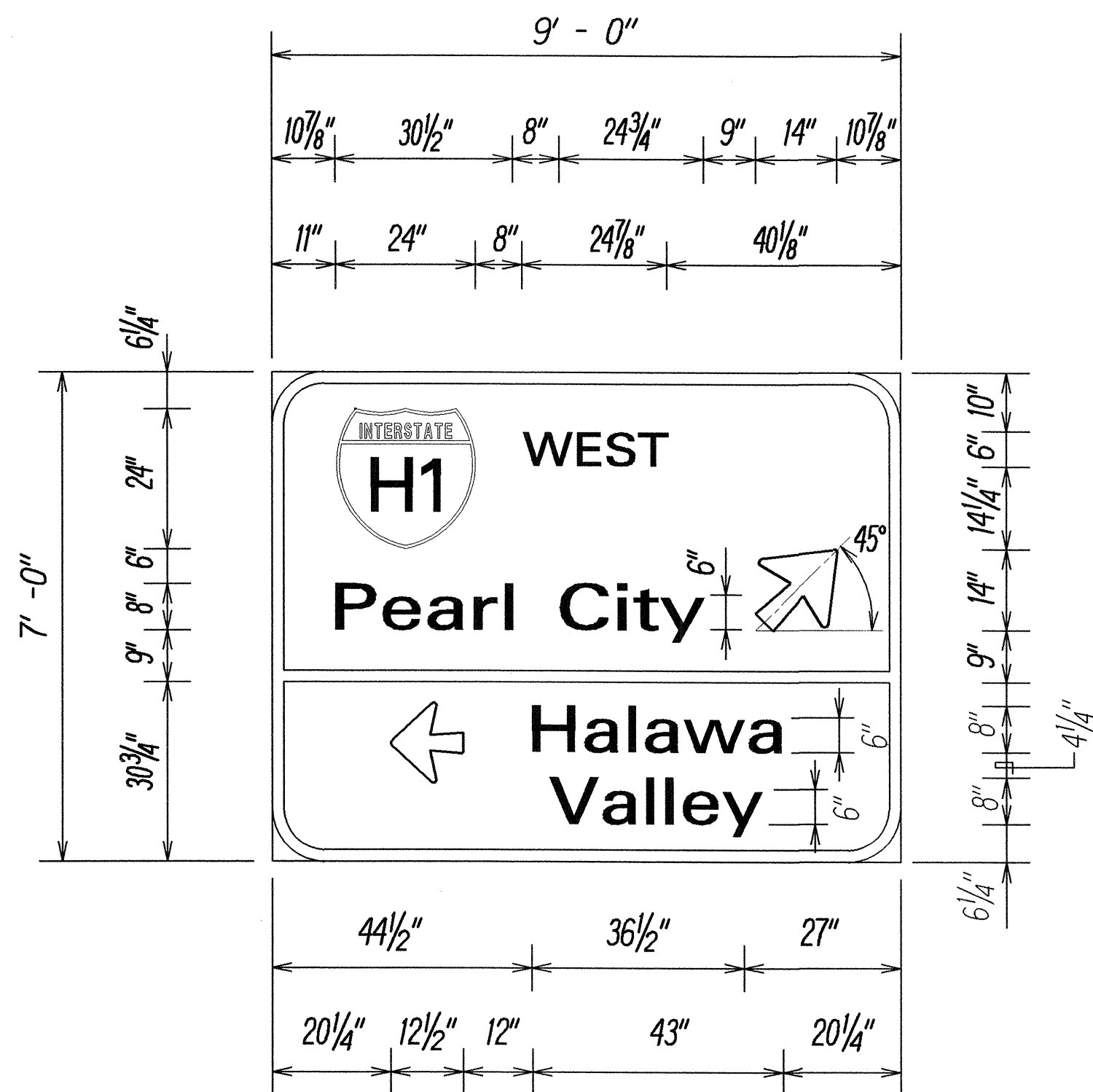
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	C.O.51S-2	51



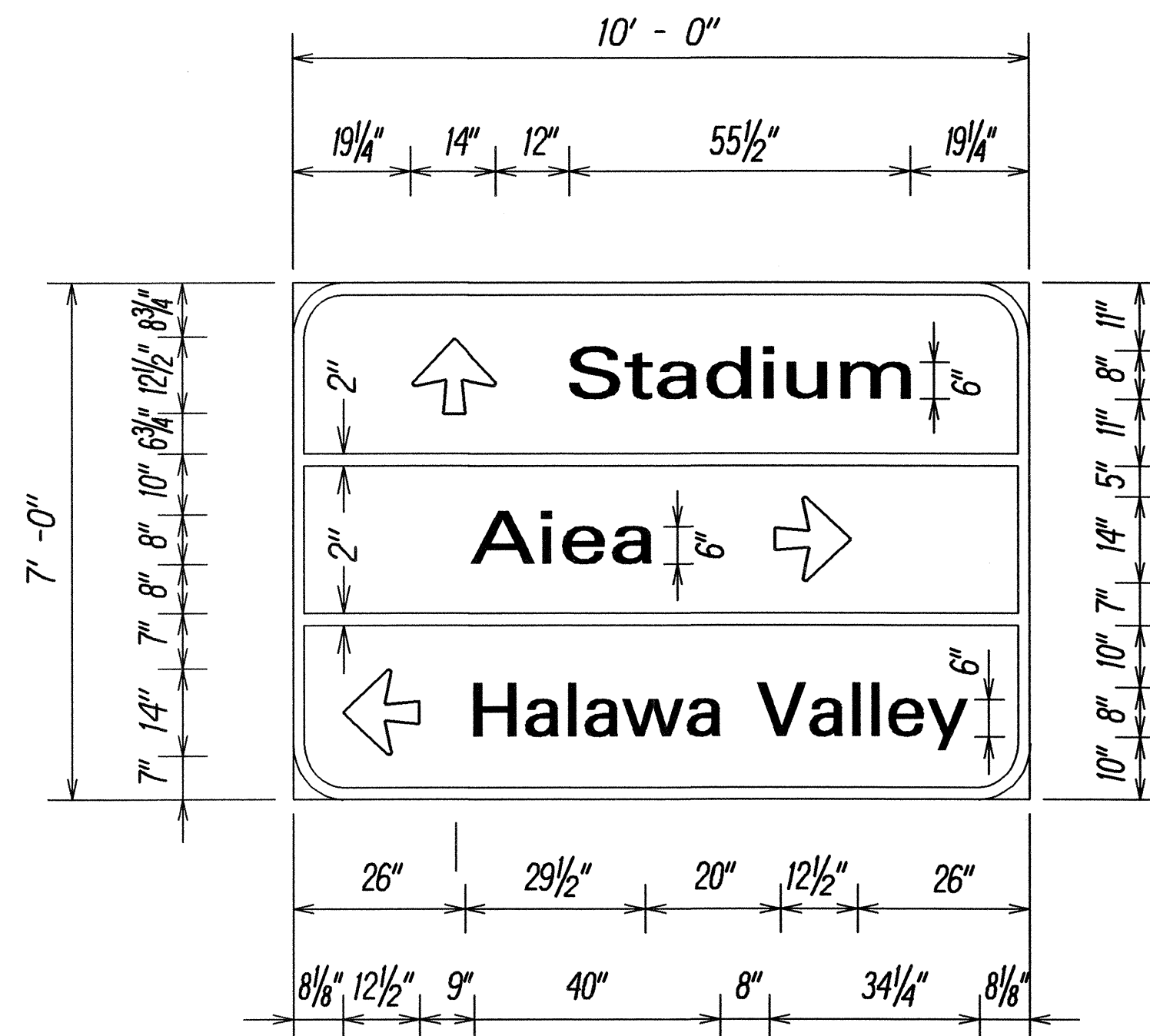
D-1
Scale: 1/2"=1'-0"



D-2
Scale: 1/2"=1'-0"



D-3
Scale: 1/2"=1'-0"



D-4
Scale: 1/2"=1'-0"

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DESTINATION SIGN DETAILS
HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway, H201
Project No. HWY-0-06-03M
Scale: As Noted Date: May, 2006

SHEET No. T10B OF 10 SHEETS

C.O. 51S-2