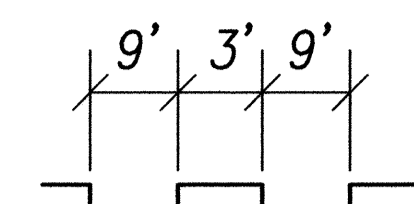
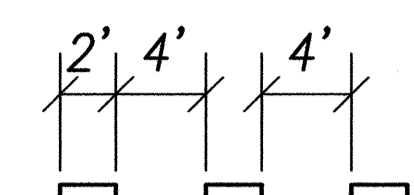
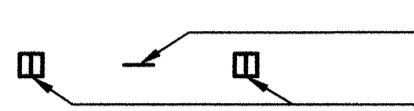
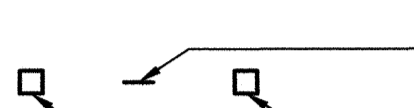

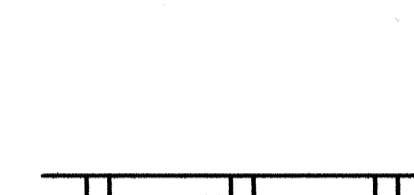



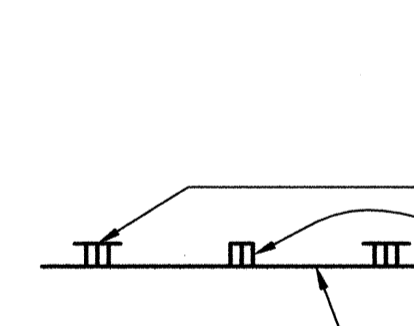
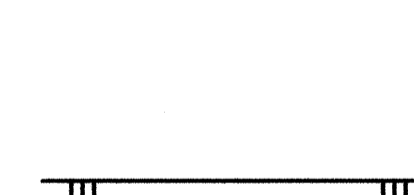
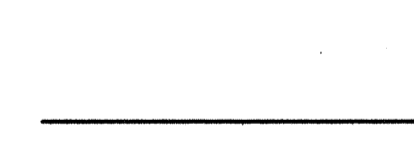

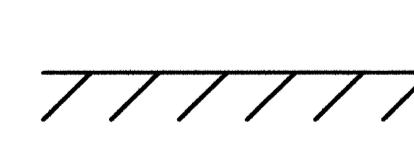
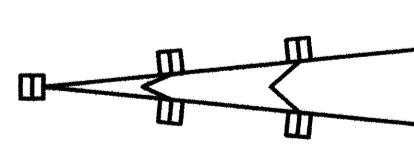
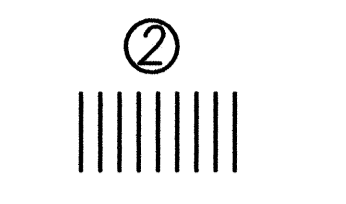
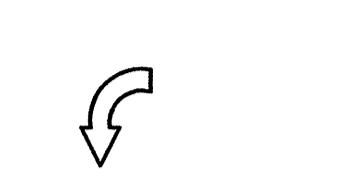

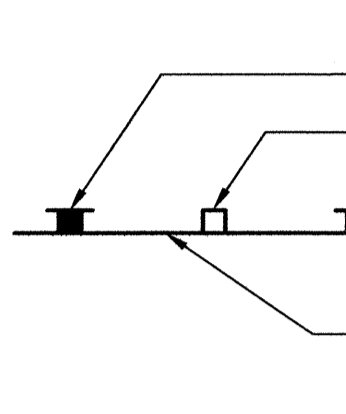
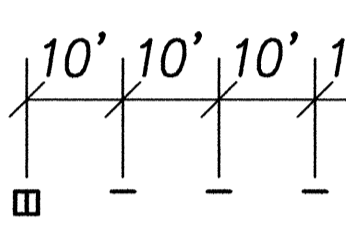
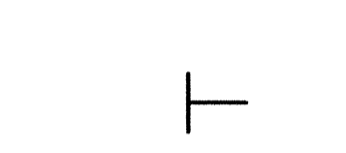

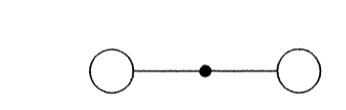
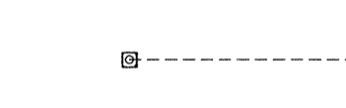
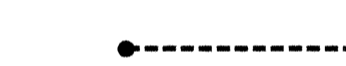


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(8)	2004	54	127

PAVEMENT MARKING LEGEND

-  8" White Lane Drop Marking
(Tape, Type I or Thermoplastic Extrusion)
-  4" White Guide Line
(Tape, Type I or Thermoplastic Extrusion)
-  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 II or Thermoplastic
Extrusion)
-  4" Double Solid Yellow 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)

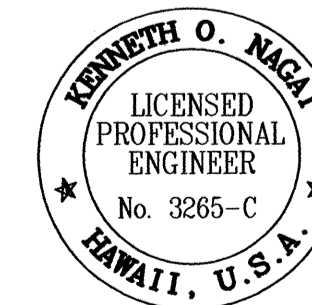
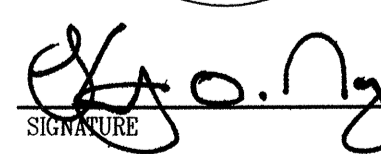
-  Crosswalk and Stop Line. All Stop Lines shall be
10'-0" from Crosswalk unless otherwise noted. The
circled number indicates the number of lanes for
payment (Tape, Type III or Thermoplastic Extrusion)
-  Pavement Arrow (Tape, Type III or Thermoplastic
Extrusion)
-  Pavement Word (Tape, Type III or 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)
-  4'-0" Flexible Delineator Post with RM-2 Marker 1
-  Existing Street Light Standard
-  New Street Light Standard
-  Existing Traffic Signal Standard
-  New Traffic Signal Standard

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 and striping not incorporated in the final traffic pattern shall be removed as directed by the Engineer. The removal of the 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 or directed by the Engineer shall not be paid for and shall be considered incidental to the various signing items.
6. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.

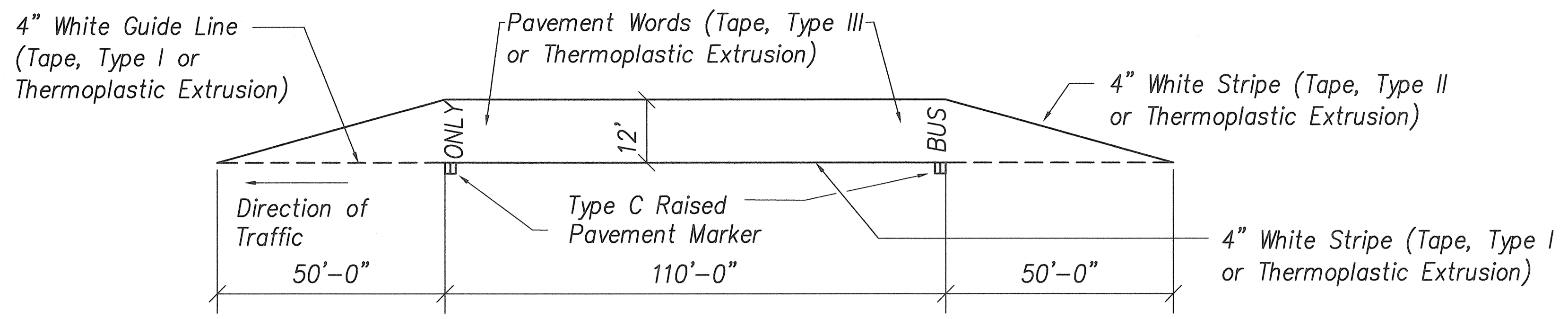
7. All pavement striping shall be as noted on the legend or plans.
8. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior 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.
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 Alphabet for Highway 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 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 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.
- 1 16. 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.

DATE
DESIGNED BY
CHECKED BY
NO.

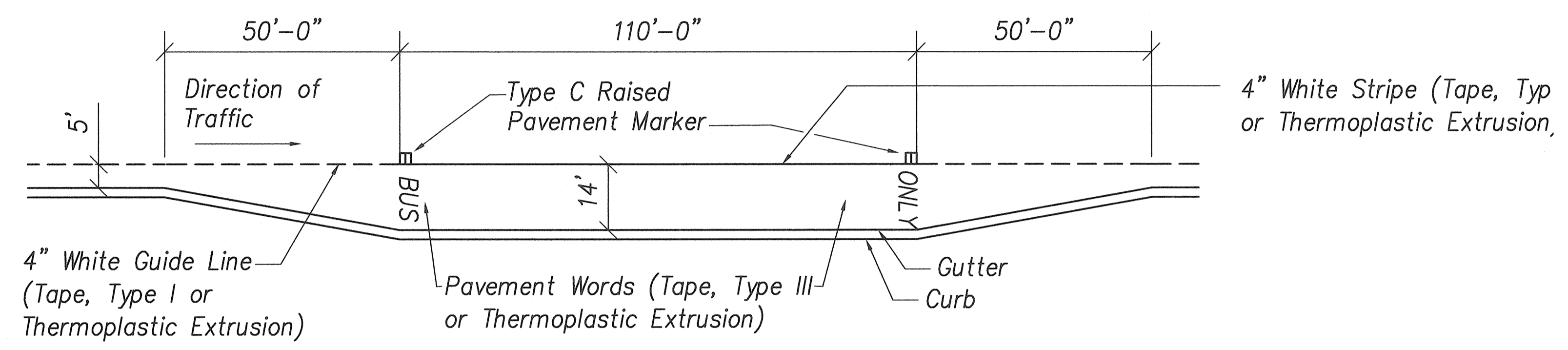

 SIGNATURE

 APRIL 30, 2004
 EXPIRATION DATE OF LICENSE
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

1/16/04	Deleted Quantity, Revised Note
Date	Revision
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION SIGNING AND PAVEMENT MARKINGS LEGEND & NOTES FORT WEAVER ROAD WIDENING NEAR LAULAUNUI STREET FEDERAL AID PROJECT NO. CMAQ-076-1(8) SCALE: NOT TO SCALE DATE: October 2003 SHEET No. 1 OF 7 SHEETS	

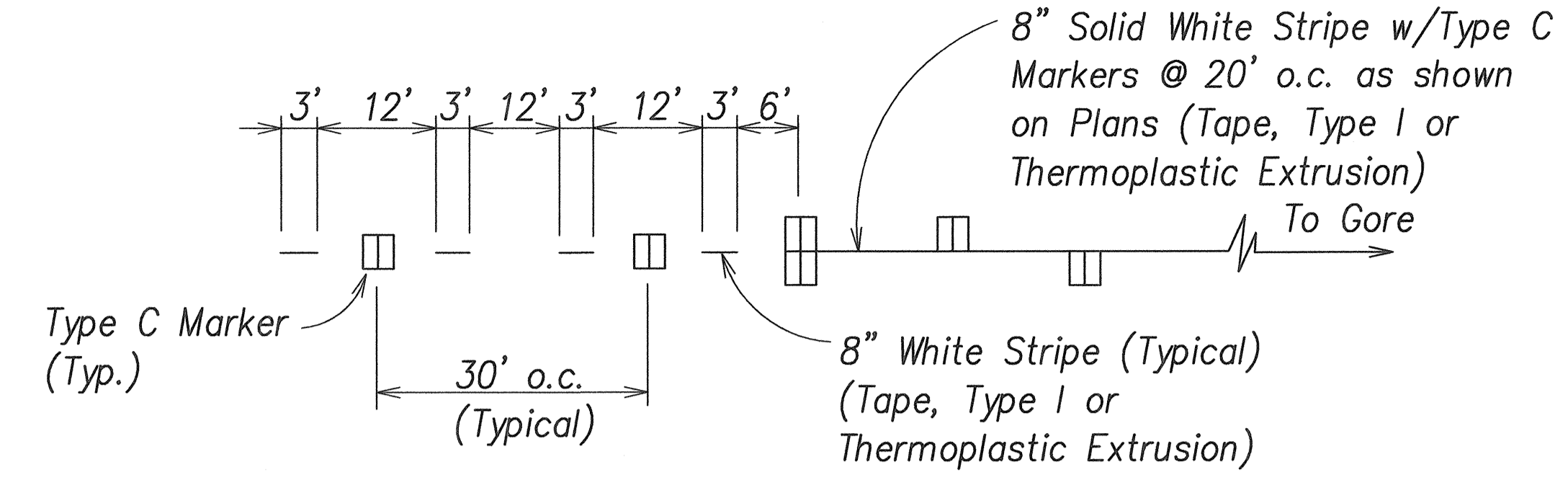
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(8)	2004	55	127



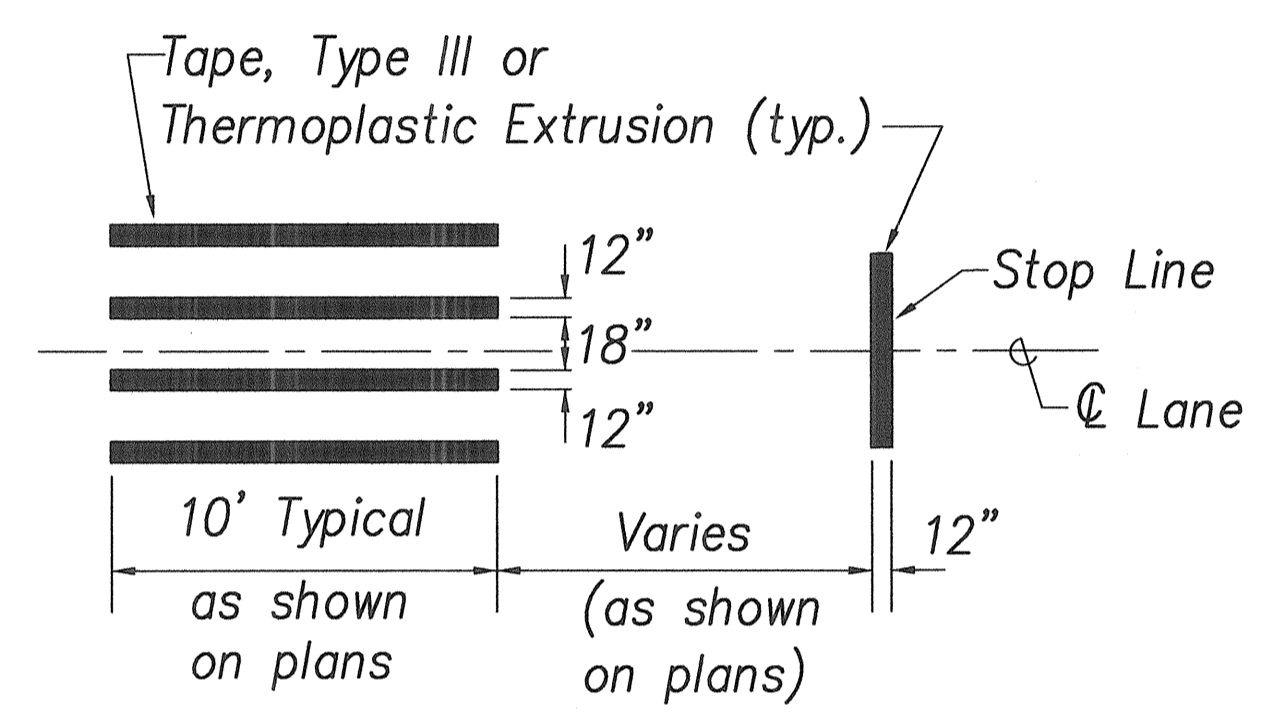
IN BOUND BUS BAY STRIPING
Not to Scale



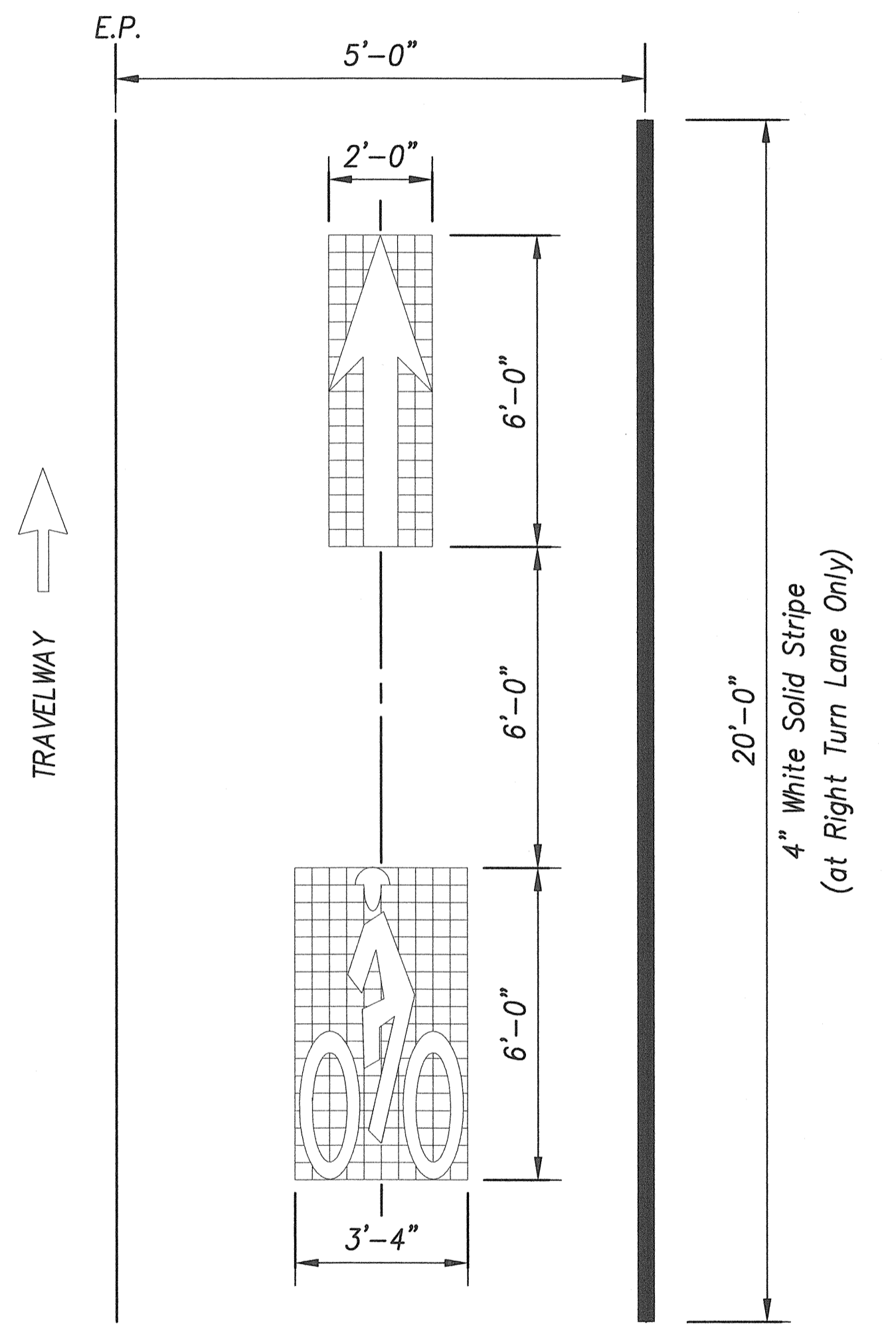
OUT BOUND BUS BAY STRIPING
Not to Scale



LANE DROP MARKING
Not to Scale

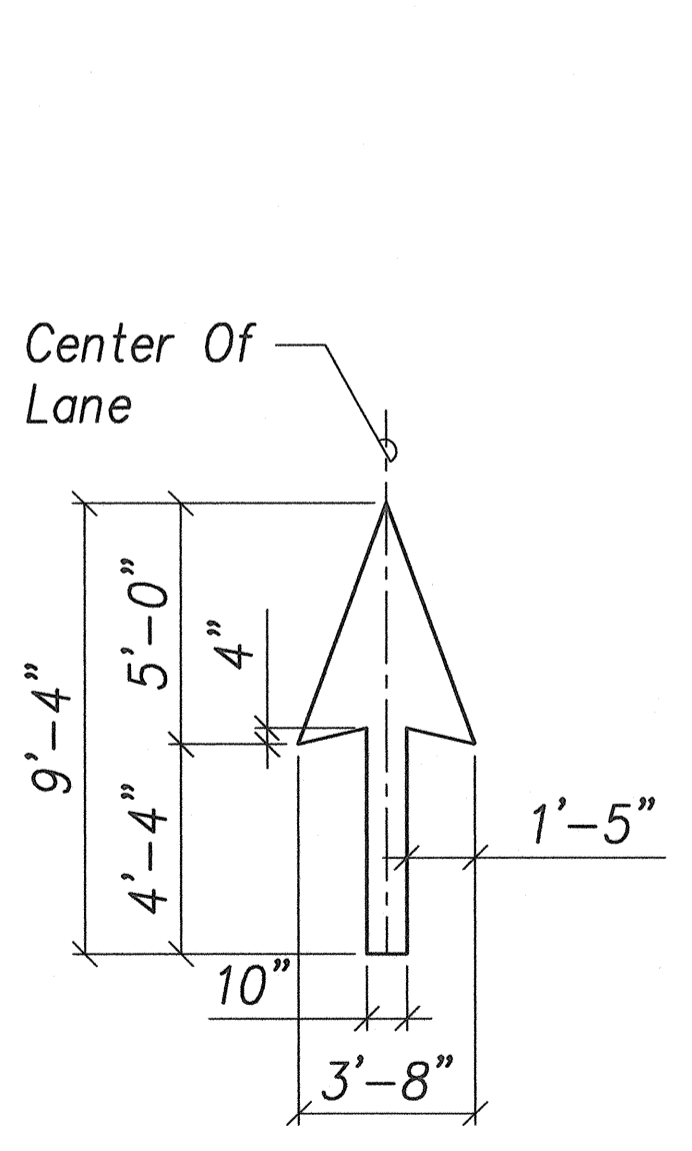


CROSSWALK STRIPING DETAIL
Not to Scale

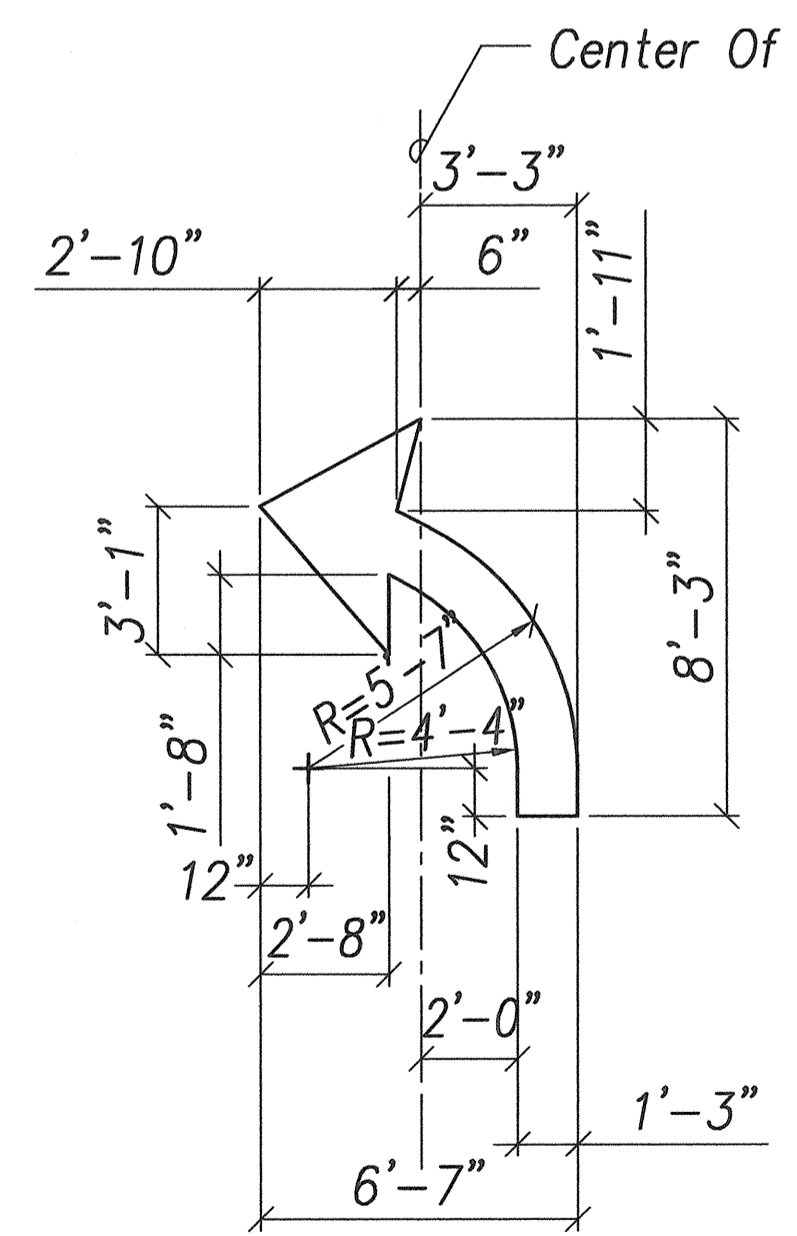


NOTE:
☐ = 4" x 4"

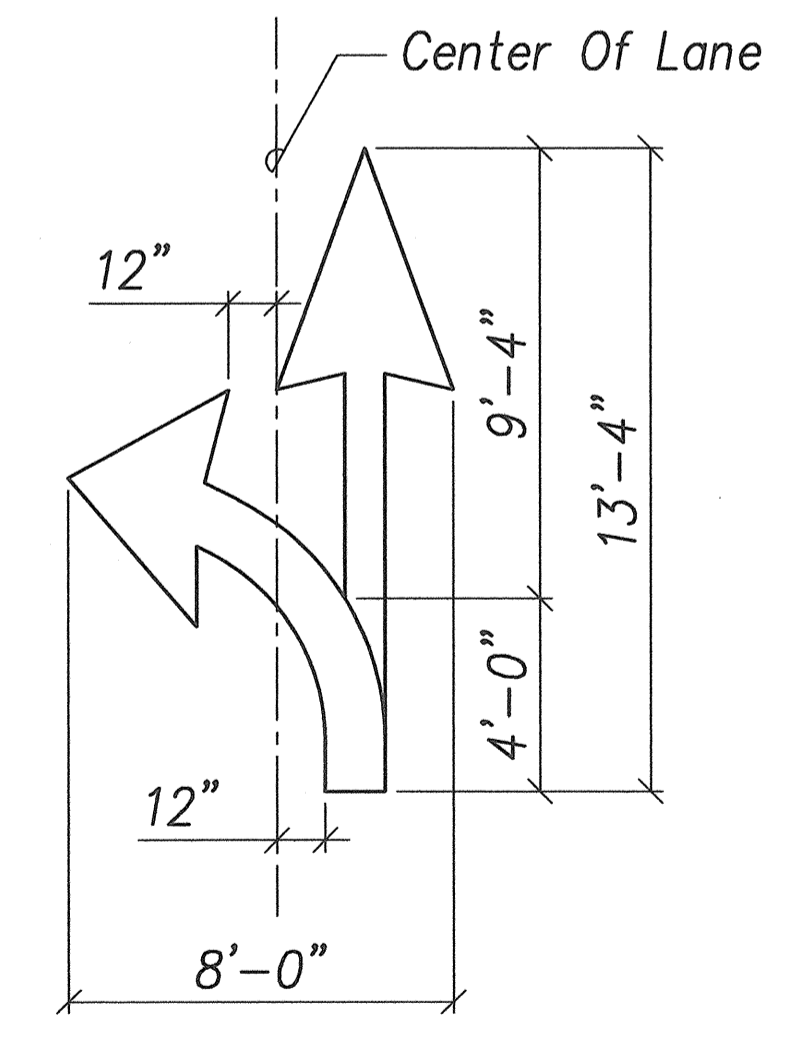
BICYCLE PAVEMENT MARKING DETAIL
Not to Scale



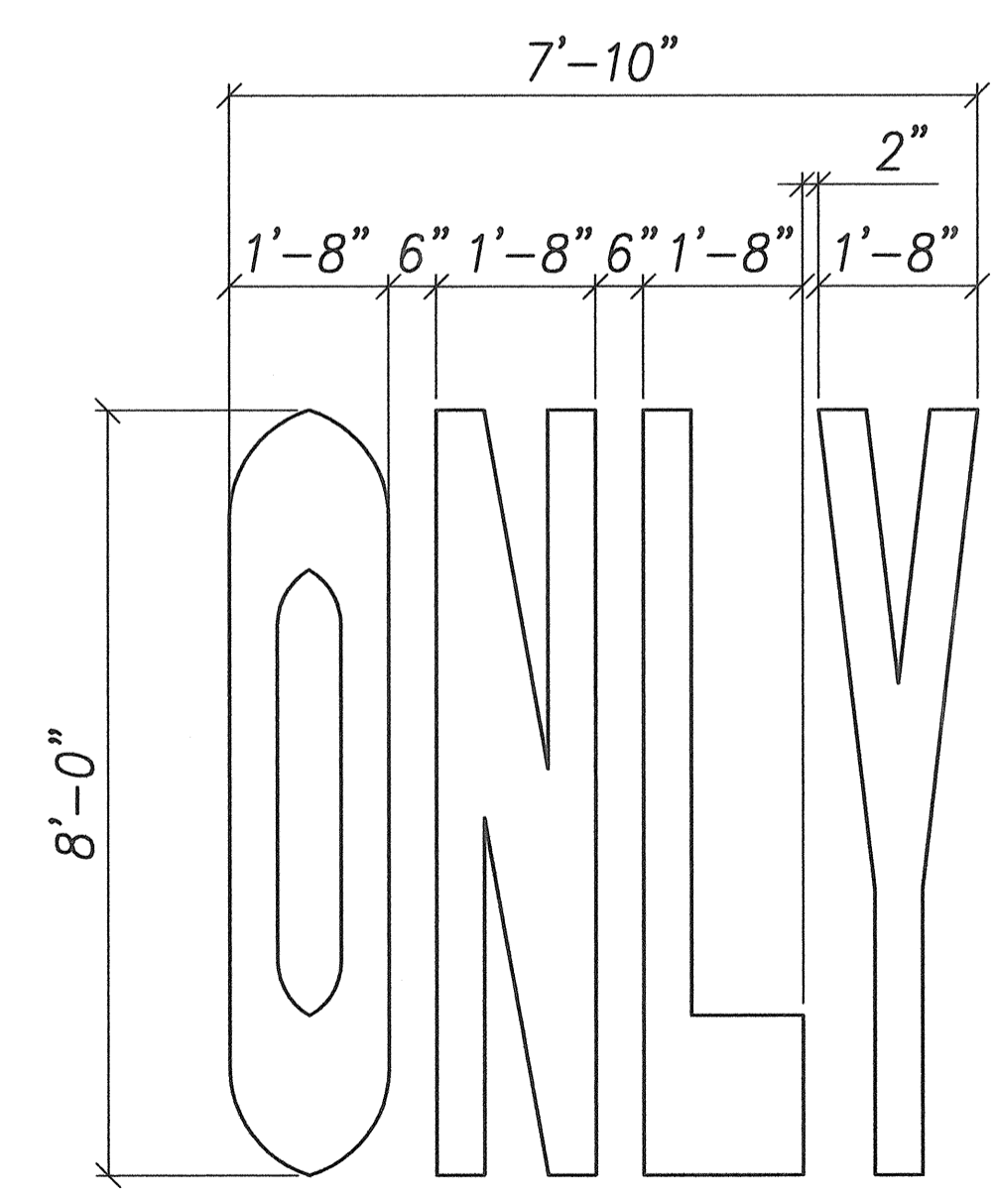
THROUGH ARROW



TURN ARROW



COMBINED ARROWS



STANDARD "ONLY" DETAIL
Scale: 1/2" = 1'-0"

Note:
When this marking is used, it shall be painted in each lane of traffic approaching the intersection.

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

PAVEMENT ARROWS
Scale: 1/4" = 1'-0"

KENNETH O. NAGAI
LICENSED PROFESSIONAL ENGINEER
No. 3265-C
HAWAII, U.S.A.

Signature: *K.O. Nagai*
APRIL 30, 2004
EXPIRATION DATE OF LICENSE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING AND PAVEMENT MARKINGS
DETAILS

FORT WEAVER ROAD WIDENING
NEAR LAULAUNUI STREET

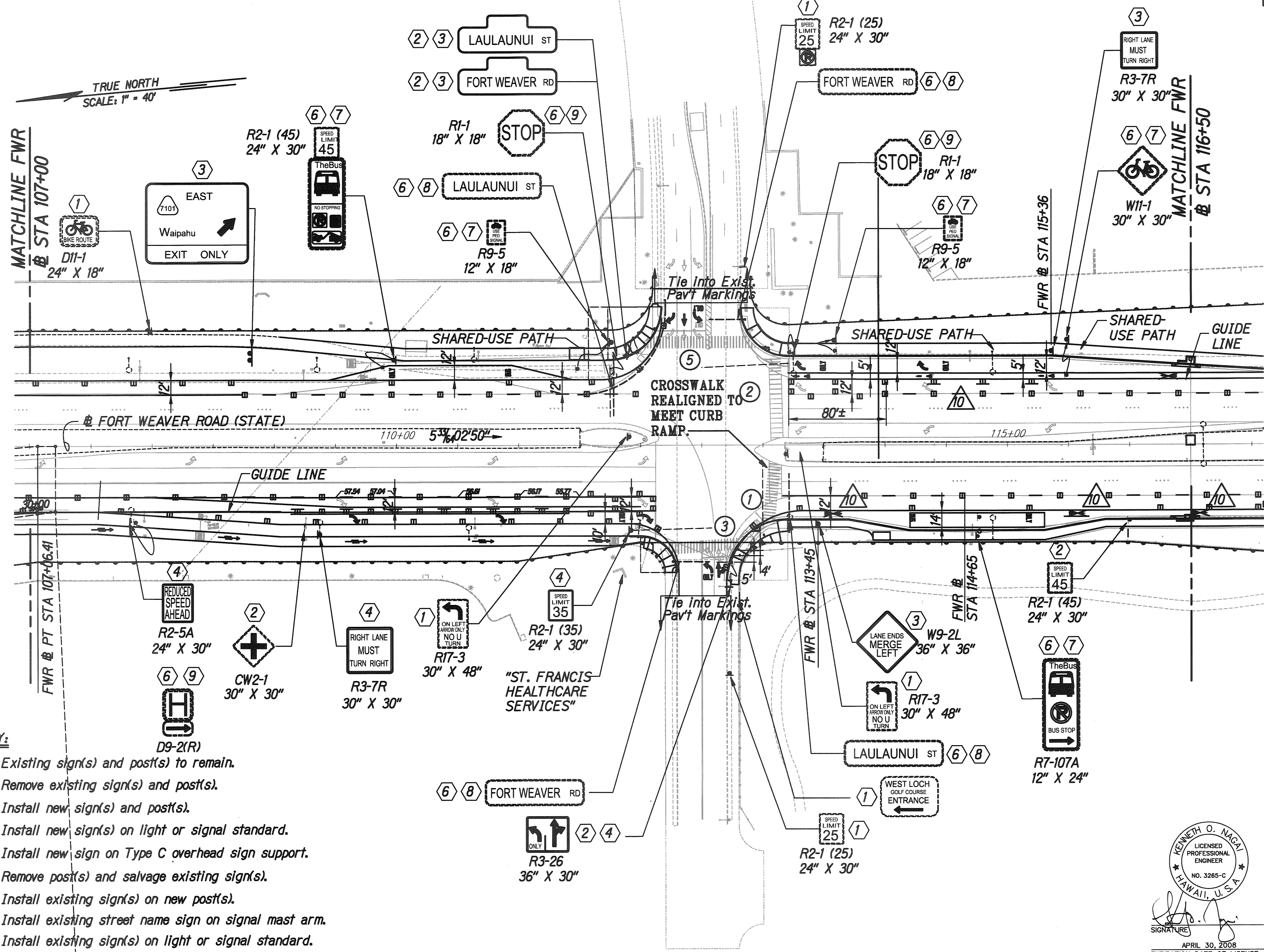
FEDERAL AID PROJECT NO. CMAQ-076-1(8)

SCALE: AS NOTED DATE: October 2003

SHEET No. 2 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(8)	2004	57	127

TRUE NORTH
SCALE: 1" = 40'



LEGEND FOR AS-BUILT POSTINGS

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

- KEY:**
- ① Existing sign(s) and post(s) to remain.
 - ② Remove existing sign(s) and post(s).
 - ③ Install new sign(s) and post(s).
 - ④ Install new sign(s) on light or signal standard.
 - ⑤ Install new sign on Type C overhead sign support.
 - ⑥ Remove post(s) and salvage existing sign(s).
 - ⑦ Install existing sign(s) on new post(s).
 - ⑧ Install existing street name sign on signal mast arm.
 - ⑨ Install existing sign(s) on light or signal standard.

Revision	Date	Description
11	06/17/05	Revised Bike Lane Striping, Added Merge Pavement Arrows
10	04/27/05	Deleted Bike Lane Symbols

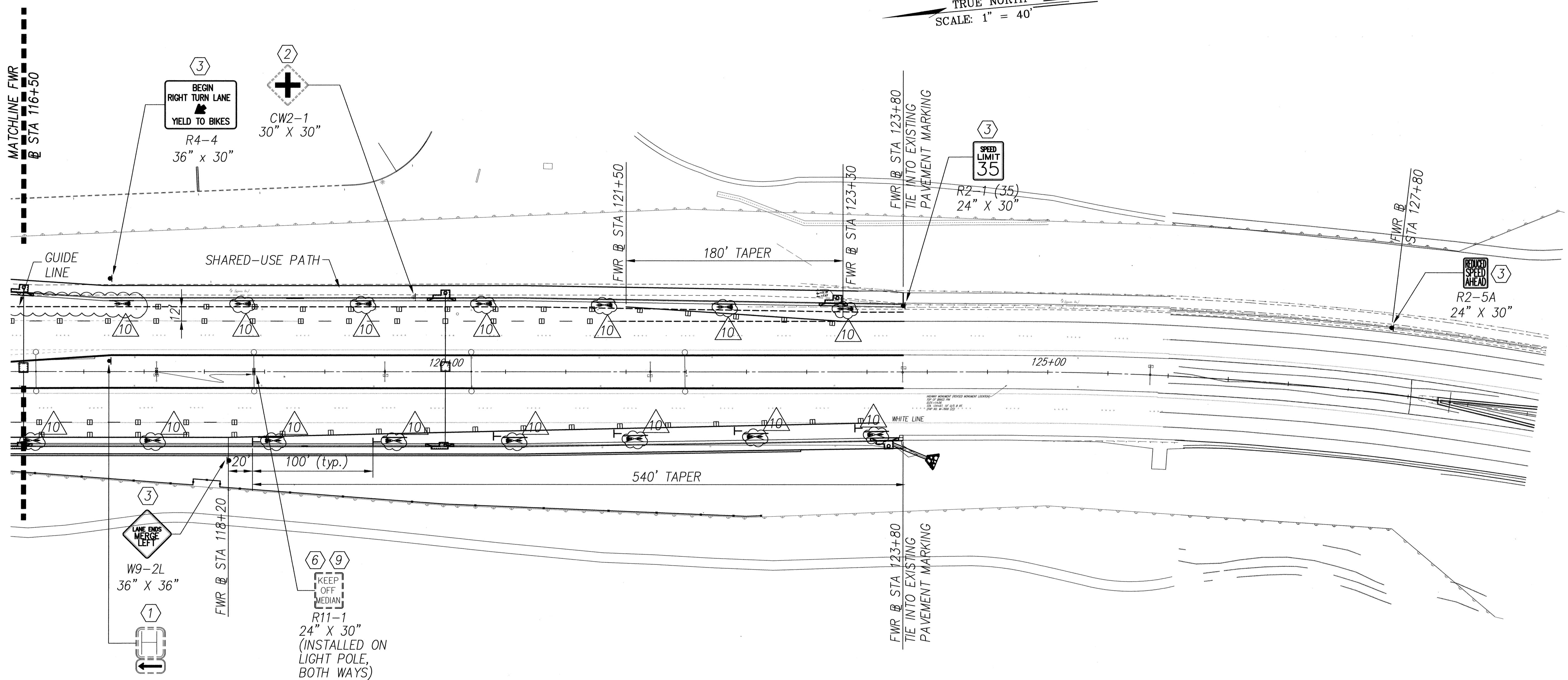
DATE: _____
 SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 ORIGINAL PLAN: _____
 NOTE BOOK: _____
 CMAQ-076-1(8)
 No. 057.dwg

KENNETH O. NAGAL
 LICENSED PROFESSIONAL ENGINEER
 NO. 3285-C
 HAWAII, U.S.A.
 SIGNATURE: _____
 APRIL 30, 2008
 EXPIRATION DATE OF LICENSE
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
SIGNING AND PAVEMENT MARKING PLAN
FORT WEAVER ROAD WIDENING
NEAR LAULAUNUI STREET
FEDERAL AND PROJECT NO. CMAQ-076-1(8)
 SCALE: 1"=40' DATE: October 2003
 SHEET No. 4 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(8)	2004	58	127

TRUE NORTH
SCALE: 1" = 40'



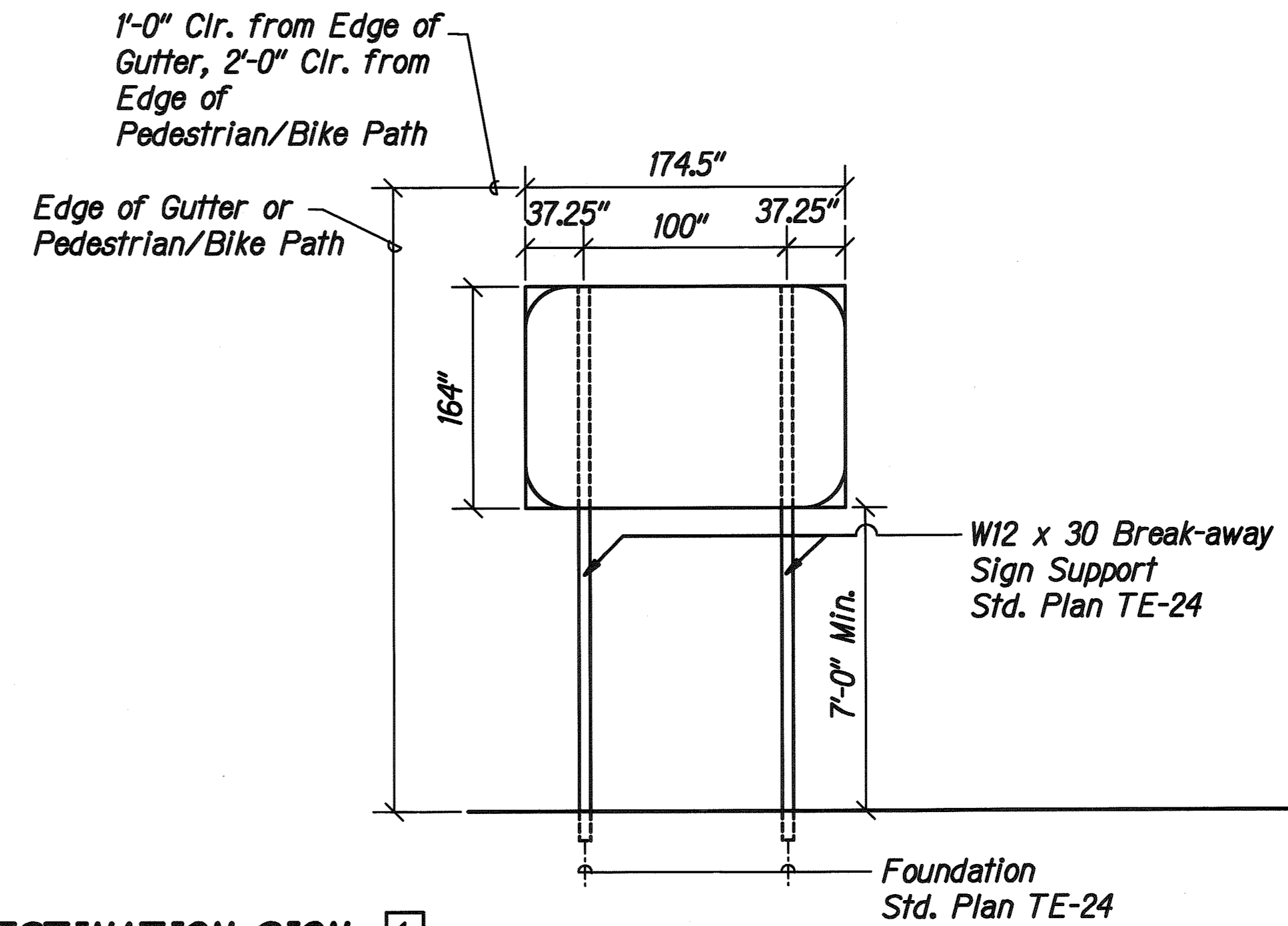
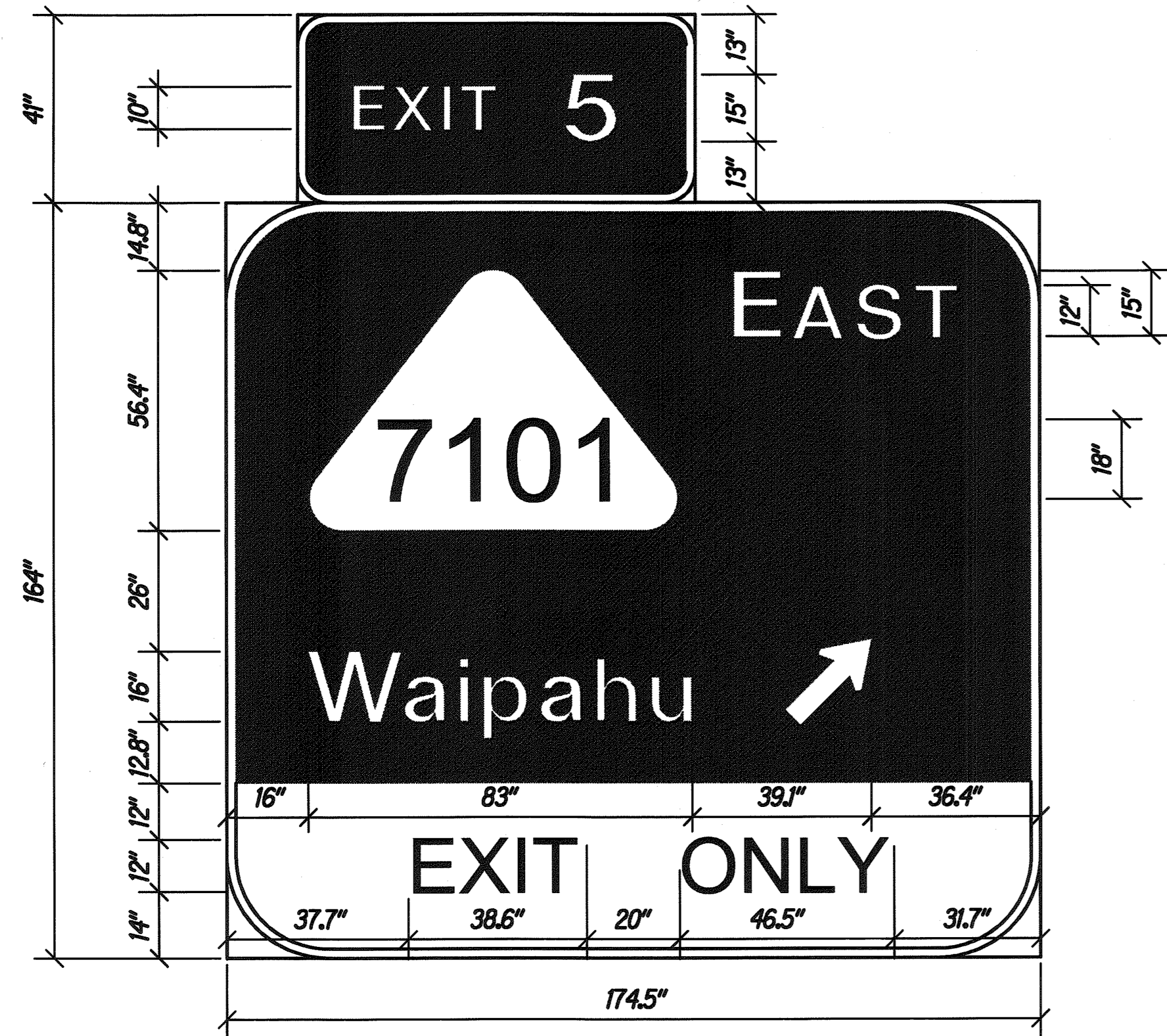
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

- KEY:**
- ① Existing sign(s) and post(s) to remain.
 - ② Remove existing sign(s) and post(s).
 - ③ Install new sign(s) and post(s).
 - ④ Install new sign(s) on light or signal standard.
 - ⑤ Install new sign on Type C overhead sign support.
 - ⑥ Remove post(s) and salvage existing sign(s).
 - ⑦ Install existing sign(s) on new post(s).
 - ⑧ Install existing street name sign on signal mast arm.
 - ⑨ Install existing sign(s) on light or signal standard.

KENNETH O. NAGLE
LICENSED PROFESSIONAL ENGINEER
No. 3285-C
HAWAII, U.S.A.
APRIL 30, 2006
EXPIRATION DATE OF LICENSE
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

⑩	04/27/05	Deleted Bike Lane Symbols
Revision	Date	Description
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION SIGNING AND PAVEMENT MARKING PLAN FORT WEAVER ROAD WIDENING NEAR LAULAUNUI STREET FEDERAL AID PROJECT NO. CMAQ-076-1(8) SCALE: 1"=40' DATE: October 2003 SHEET No. 5 OF 7 SHEETS		

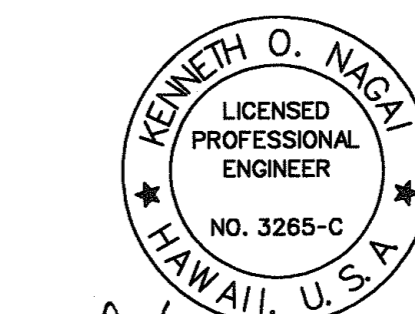
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(8)	2004	59	127



GROUND MOUNTED DESTINATION SIGN 1
Not to Scale

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
DATE	
CMAQ-076-1(8)	
4/25/04	

1/16/04	1	Revised Detail, Revised Standard Plan References
Date	Revision	



SIGNATURE
APRIL 30, 2008

EXPIRATION DATE OF LICENSE
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GROUND MOUNTED DESTINATION SIGN

**FORT WEAVER ROAD WIDENING
NEAR LAULAUNUI STREET**

FEDERAL AND PROJECT NO. CMAQ-076-1(8)

SCALE: NOT TO SCALE DATE: October 2003

SHEET No. 6 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	CMAQ-076-1(8)	2004	60	127

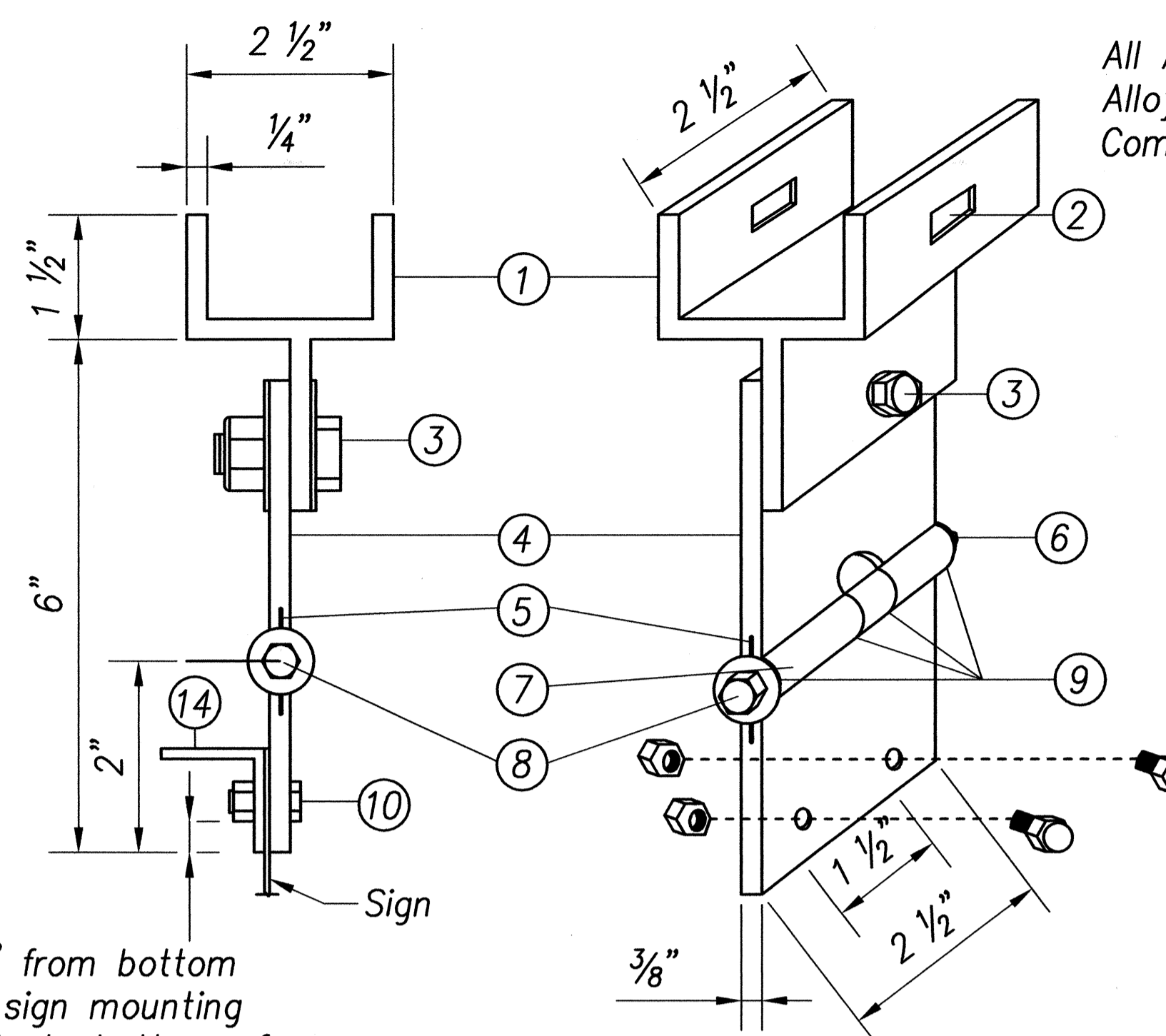
NOTES:

- The Contractor shall relocate the existing Street Name Sign onto the new Traffic Signal Mast Arm using the two (2) existing Swing Sign Brackets and an additional Swing Sign Bracket with Aluminum Angle on the following existing Street Name Sign. Each relocated sign shall have three (3) Swing Sign Brackets (2 existing & 1 new).

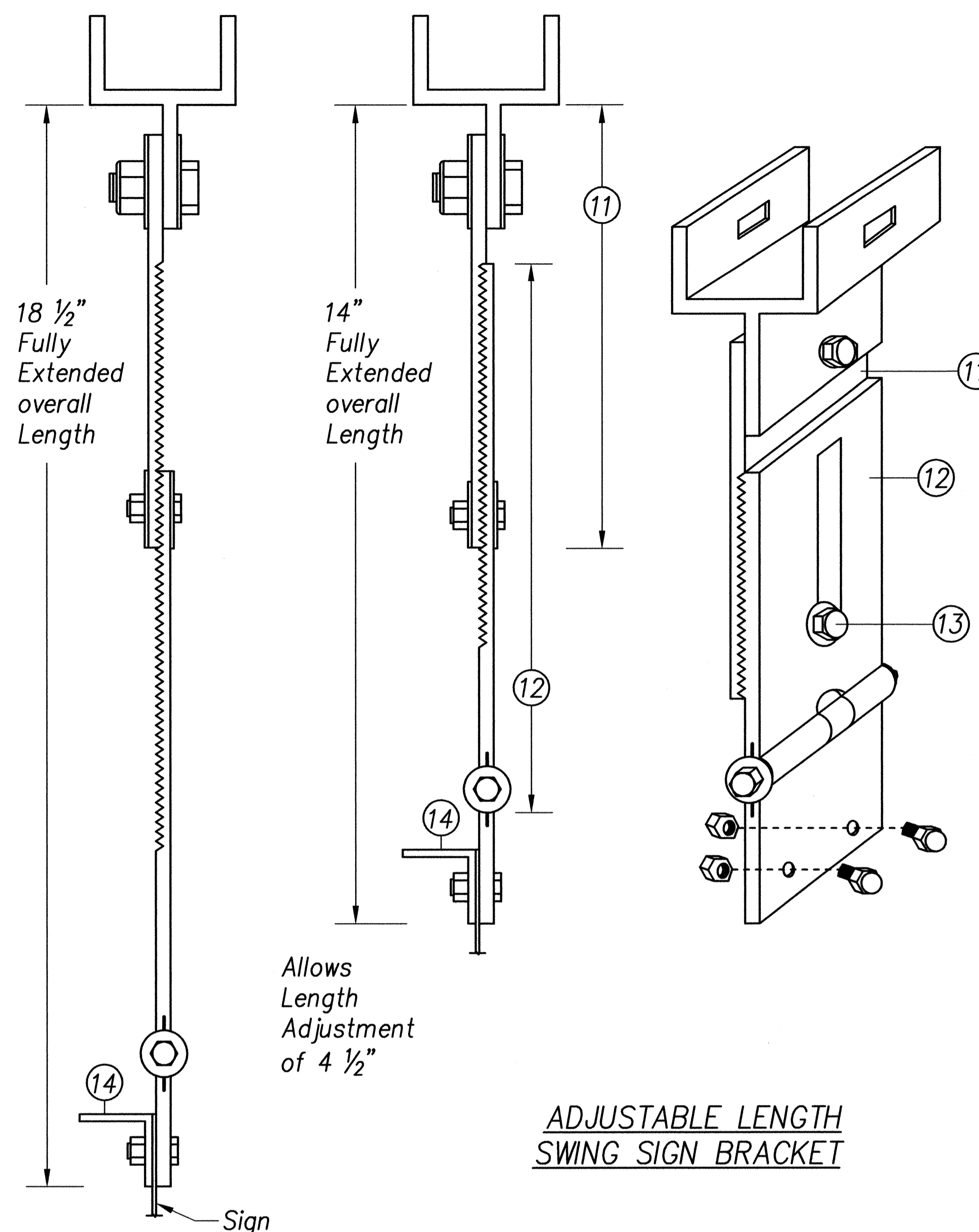
Street Name	No. of Signs	No. of Brackets w/Aluminum Angle
LAULAUNUI STREET	2	2

- The accepted quantities of Swing Sign Brackets w/Aluminum Angle will be paid for at the contract unit price per each complete in place. The contract unit price paid shall be full compensation for relocating the existing sign with the two (2) existing Swing Sign Brackets, the additional Swing Sign Bracket w/Aluminum Angle for all necessary hardware, equipment, tools, labor, materials, and other incidentals for the installation of the Existing Street Name Sign on the New Traffic Signal Mast Arm.

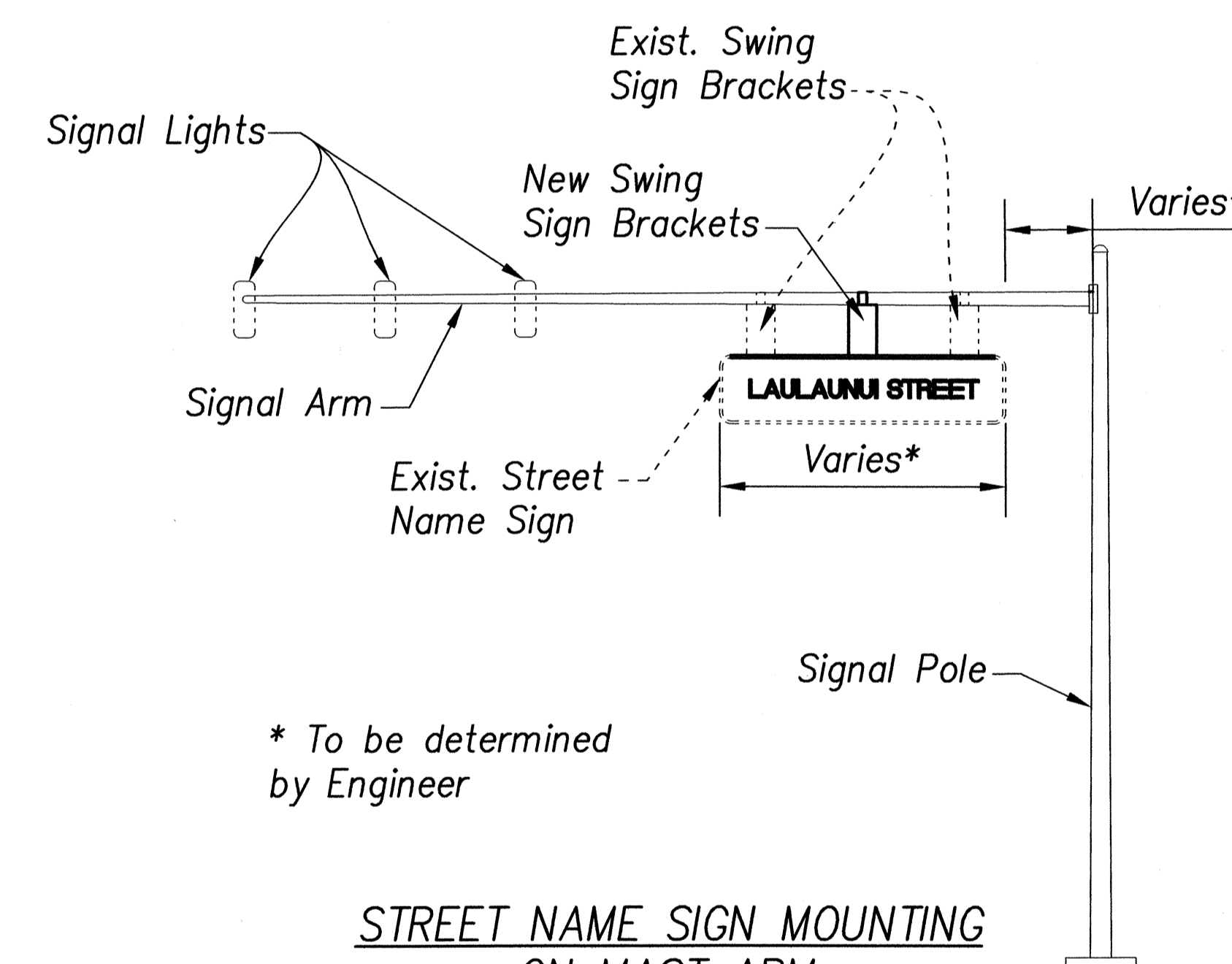
- The Swing Sign Brackets w/Aluminum Angle shall be paid under Item No. 621.0200 Relocating Existing Street Name Sign on Traffic Signal Mast Arm.



FIXED LENGTH NON-ADJUSTABLE SWING SIGN BRACKET



ADJUSTABLE LENGTH SWING SIGN BRACKET

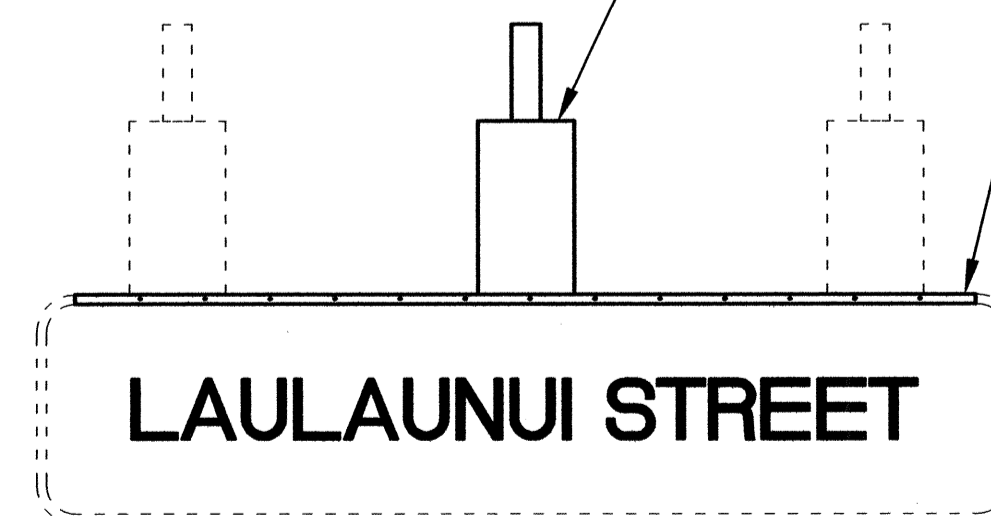


* To be determined by Engineer

STREET NAME SIGN MOUNTING ON MAST ARM

The contractor shall install new swing sign bracket at the midpoint of the two existing swing sign brackets

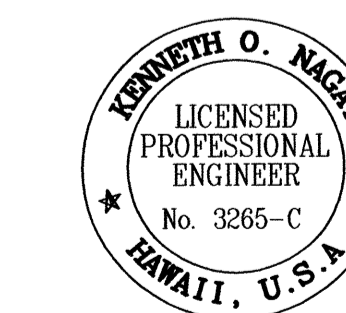
New Aluminum Angle secured to back of sign w/Pop Rivets @ 6" spacing



(REAR VIEW) TYPICAL SWING BRACKET LAYOUT

- Pivotal Upper Bracket
- 1 5/8" x 1/4" Slot for double strapping to electrolier mast arm (M2G-34S(HD) .030" x 3/4" Heavy Duty Stainless Steel Strap with M2G-34B(HD) Buckle recommended)
- 1/2" - 13 x 1 1/2" Stainless Steel Hex Head Bolt with Stainless Steel Hex Lock Nut and 1/16" Stainless Steel Washer (both sides). Allows upper bracket to pivot and align with electrolier mast arm.
- 6" Overall drop with Fixed Length Sign Bracket
- Stainless Steel Damper Spring (Removable).
- Stainless Steel Hex Lock Nut with 1/16" Stainless Steel Washer.
- 1" O.D. Axle Housing
- 1/2" - 13 x 4" Stainless Steel Hex Head Bolt with 1/16" Stainless Steel Washer.
- Ollite Bushing
- Sign Mounting Sets, consisting of two each 5/16" - 18 x 1" Stainless Steel Hex Head Bolt with Stainless Steel Hex lock Nut. Two holes on 1/2" centers provide positive lock sign mounting to brackets
- 8 1/4" overall length Upper Adjustable Sign Bracket section.
- 9" overall length Lower Adjustable Sign Bracket section including Axle Housing (8" overall length to top of Axle Housing).
- 1/2" - 13 x 1 1/2" Stainless Steel Hex Bolt with Stainless Steel Hex Lock Nut and 1/16" Stainless Steel Washers (both sides). Loosen lock nut, adjust bracket teeth to level sign.
- 1 1/4" x 1 1/4" x 1/8" Aluminum Angle.

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



Signature: *Kenneth O. Nagai*
 APRIL 30, 2004
 EXPIRATION DATE OF LICENSE
 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

SWING SIGN BRACKET DETAIL

FORT WEAVER ROAD WIDENING
 NEAR LAULAUNUI STREET

FEDERAL AID PROJECT NO. CMAQ-076-1(8)

SCALE: NOT TO SCALE DATE: October 2003

SHEET No. 7 OF 7 SHEETS