

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	62	107

### HIGHWAY LIGHTING SCHEDULE

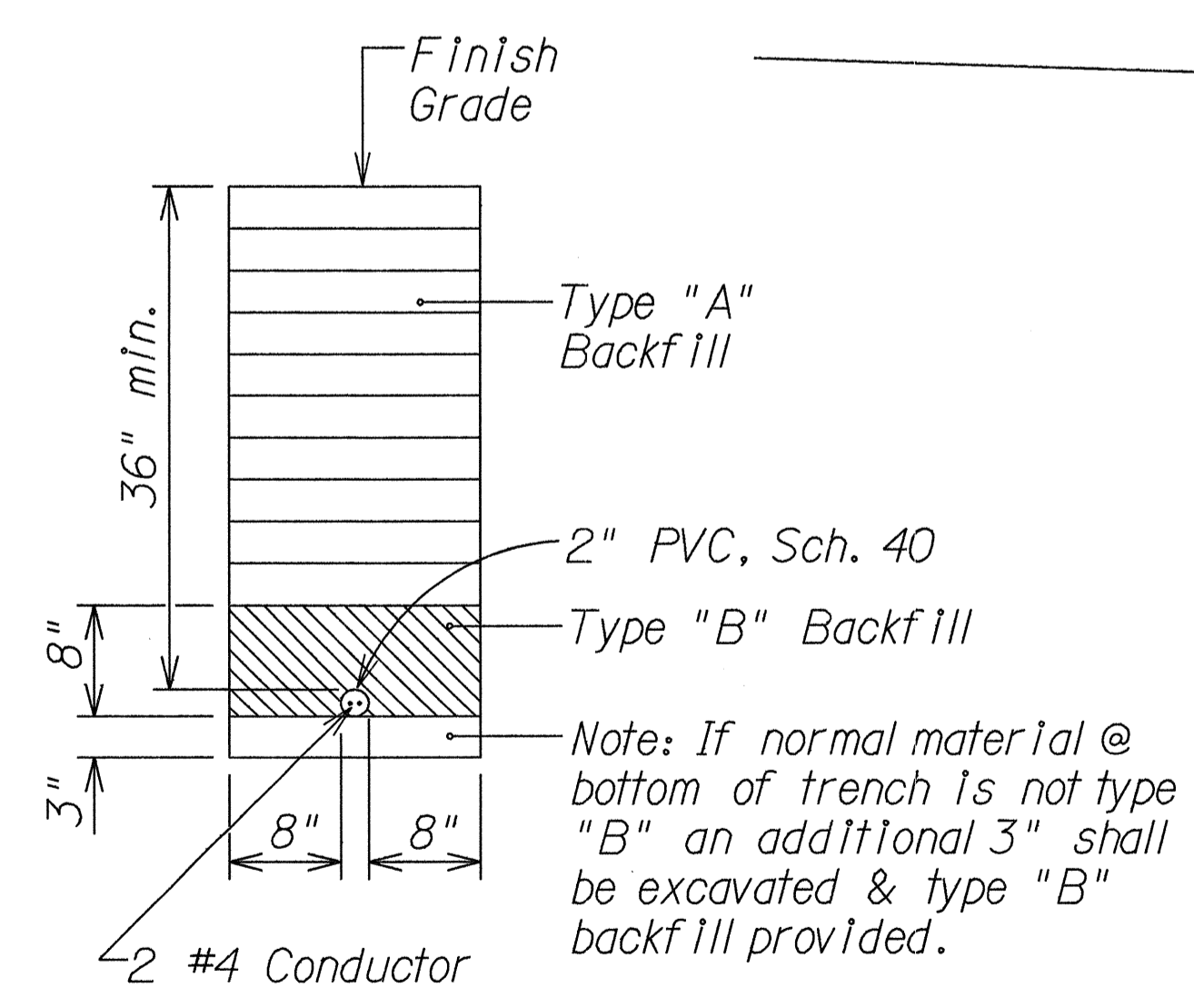
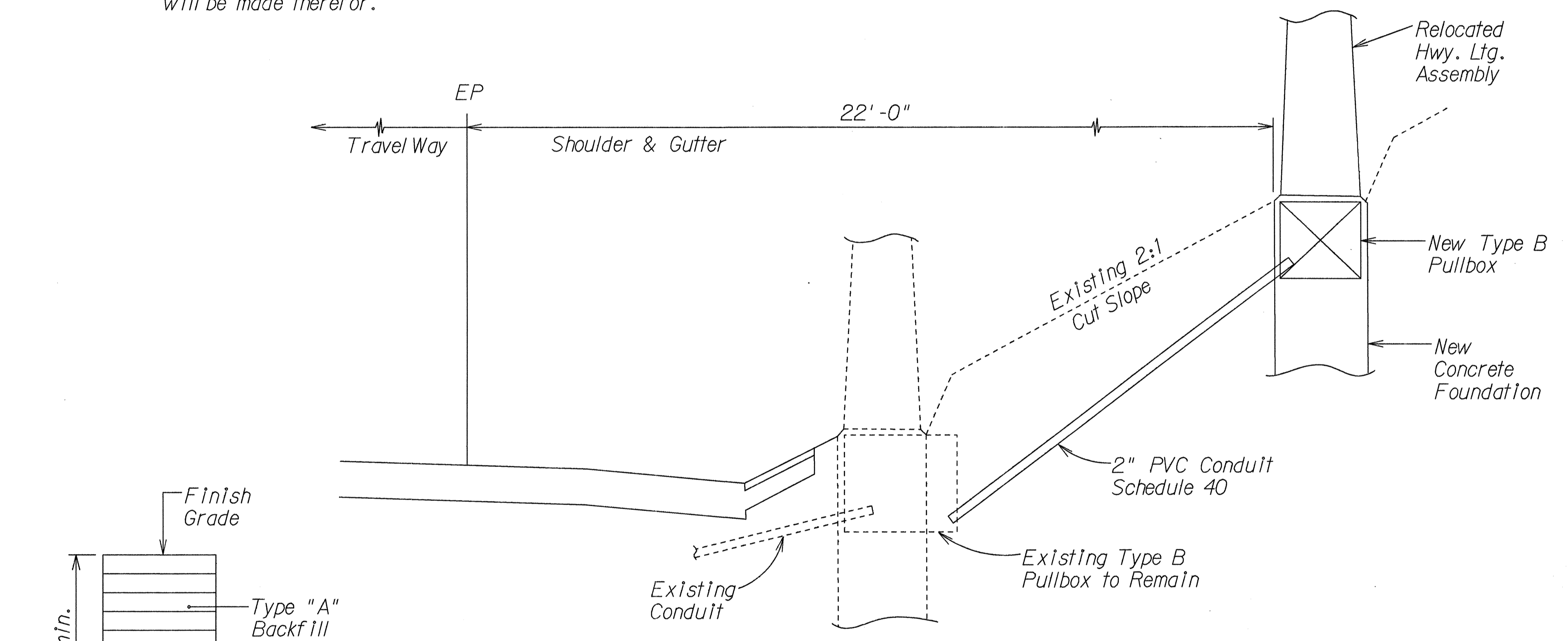
LOCATION	DESCRIPTION OF WORK
H-2 O.B. Sta. 431+30 Lt.	Relocate Exist. Hwy. Ltg. Assembly behind guardrail w/New Conc. Anchor Base
433+30 Lt.	↓
435+30 Lt.	
437+30 Lt.	
439+30 Lt.	
441+50 Lt.	
443+50 Lt.	
445+30 Lt.	↓
447+40 Lt.	
449+30 Lt.	
451+40 Lt.	
453+30 Lt.	
455+20 Lt.	
457+00 Rt.	Relocate Exist. Hwy Ltg. Assembly w/New Slip Base System
H-2 I.B. Sta. 370+75 Rt.	↓
372+75 Rt.	
374+75 Rt.	
449+00 Lt.	
451+00 Lt.	Relocate Exist. Hwy. Ltg. Assembly w/New Breakaway Coupling & Skirt
453+00 Lt.	To Remain
454+85 Lt.	↓
457+00 Lt.	
Ramp H-2 O.B. Sta. 506+70 Lt.	Relocate Exist. Hwy. Ltg. Assembly w/New Breakaway Coupling & Skirt
508+40 Lt.	↓
510+40 Lt.	
512+30 Lt.	
515+20 Lt.	
Ramp H-2 I.B. Sta. 503+20 Lt.	↓
505+40 Lt.	
507+30 Lt.	↓
509+20 Lt.	
511+20 Lt.	
513+20 Lt.	
515+20 Lt.	
517+20 Lt.	
519+20 Lt.	
521+20 Lt.	
523+00 Lt.	
524+90 Lt.	
526+90 Lt.	
528+90 Lt.	

### HIGHWAY LIGHTING NOTES

- The final locations of all highway lighting equipment shall be approved by the Engineer.
- All existing Highway Lighting Standards shall be operable during the Contractor's non-working hours.
- The Contractor shall assume that existing utilities may exist, although not shown. The Contractor shall verify the locations of existing utilities with the respective owners prior to start of construction. Any damage to existing utilities shall be repaired at the Contractor's expense.
- Trench excavation and backfill for Highway Lighting Conduits shall be considered incidental to the various contract items and no measurement for payment nor payment will be made therefor.

### LEGEND

- L— New Hwy. Lighting Conduit & Wiring
- L— Exist. Hwy. Lighting Conduit & Wiring
- New Type "B" Pullbox
- Exist. Hwy. Lighting Pullbox



TYPICAL DUCT SECTION DETAIL  
Not to Scale

TYPICAL DETAIL  
Relocation of Highway  
Lighting Assembly  
Not To Scale

ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NO.	

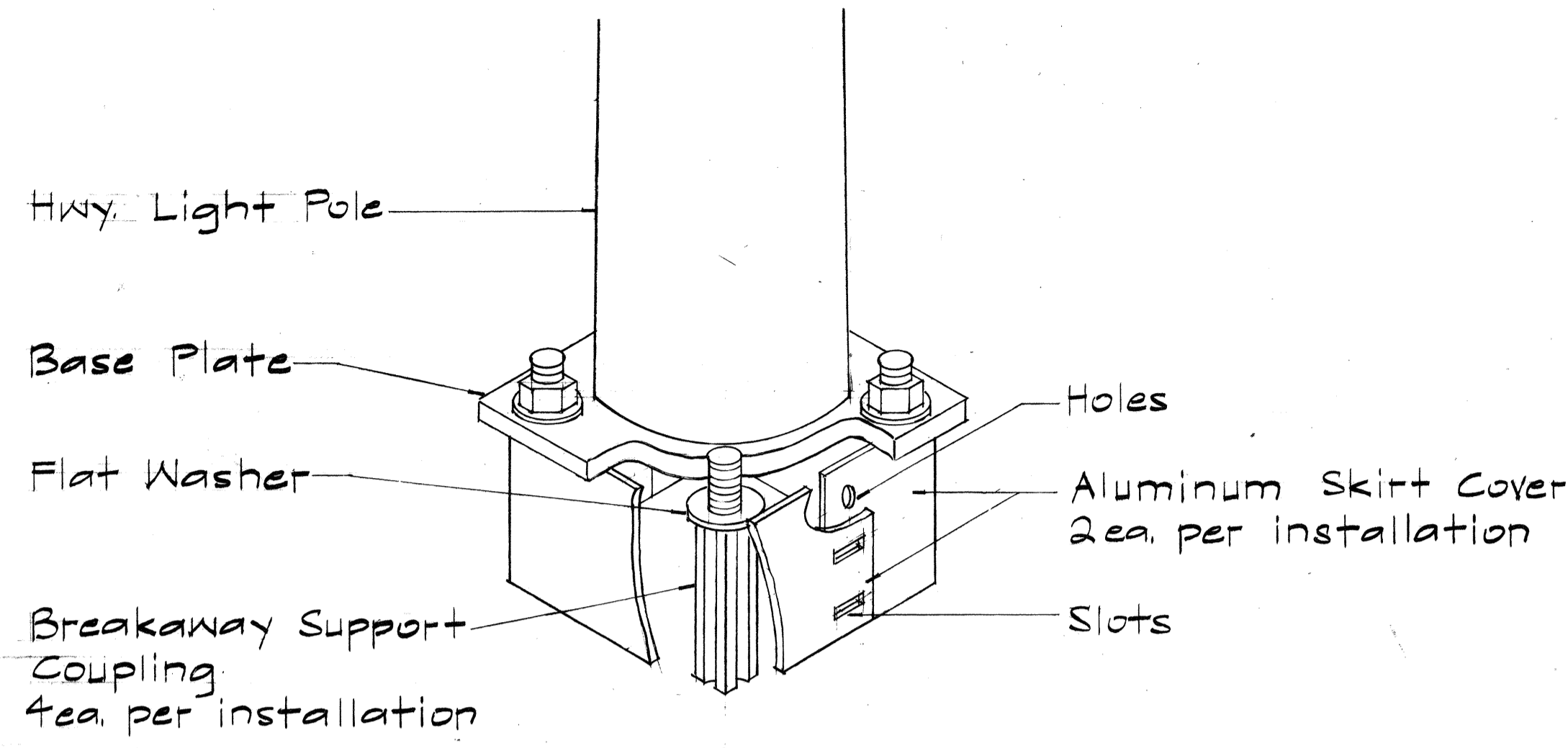
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

### HIGHWAY LIGHTING NOTES. DETAIL & SCHEDULE

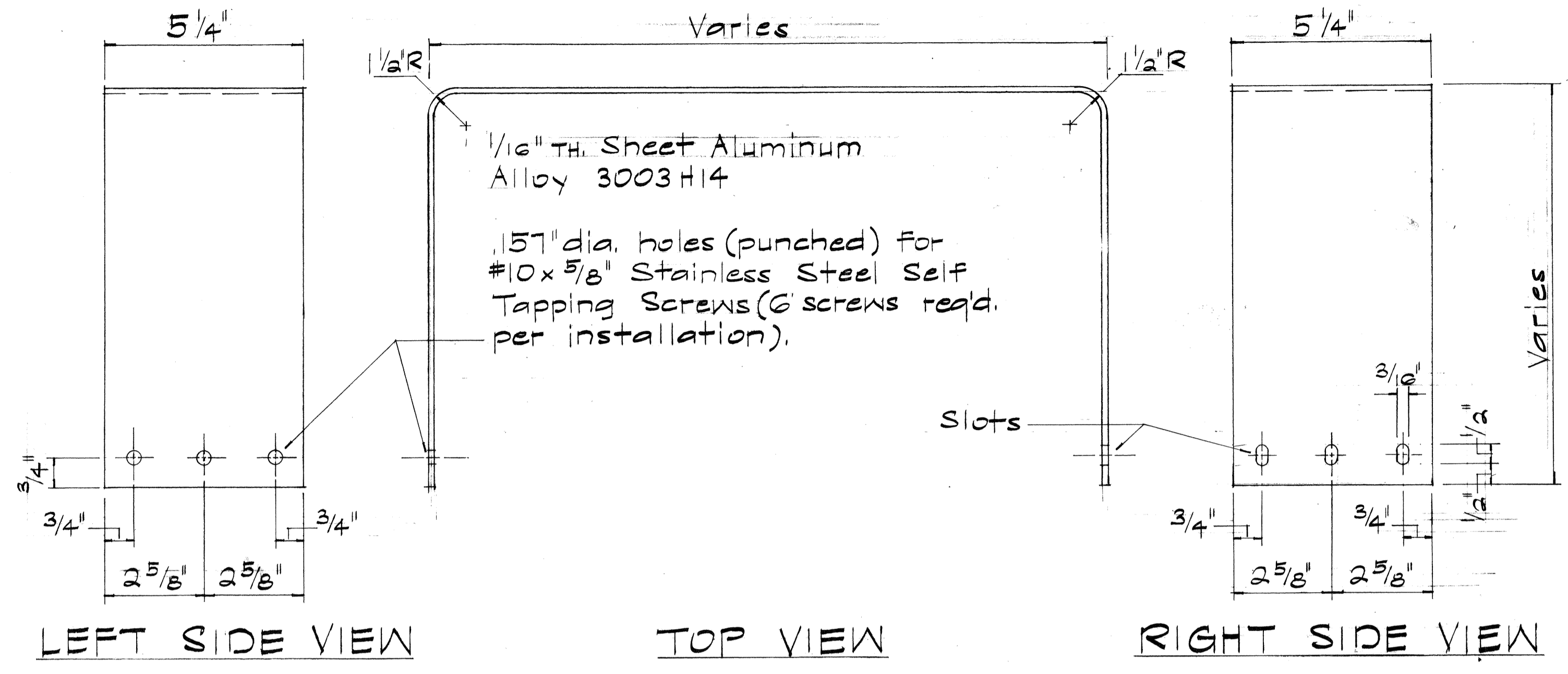
INTERSTATE RTE. H-2 HOV LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Project No. IR-H2-1(26)

Scale: As Shown      Date: September 1990

SHEET No. E1 OF 4 SHEETS



**SKIRT COVER DETAIL**

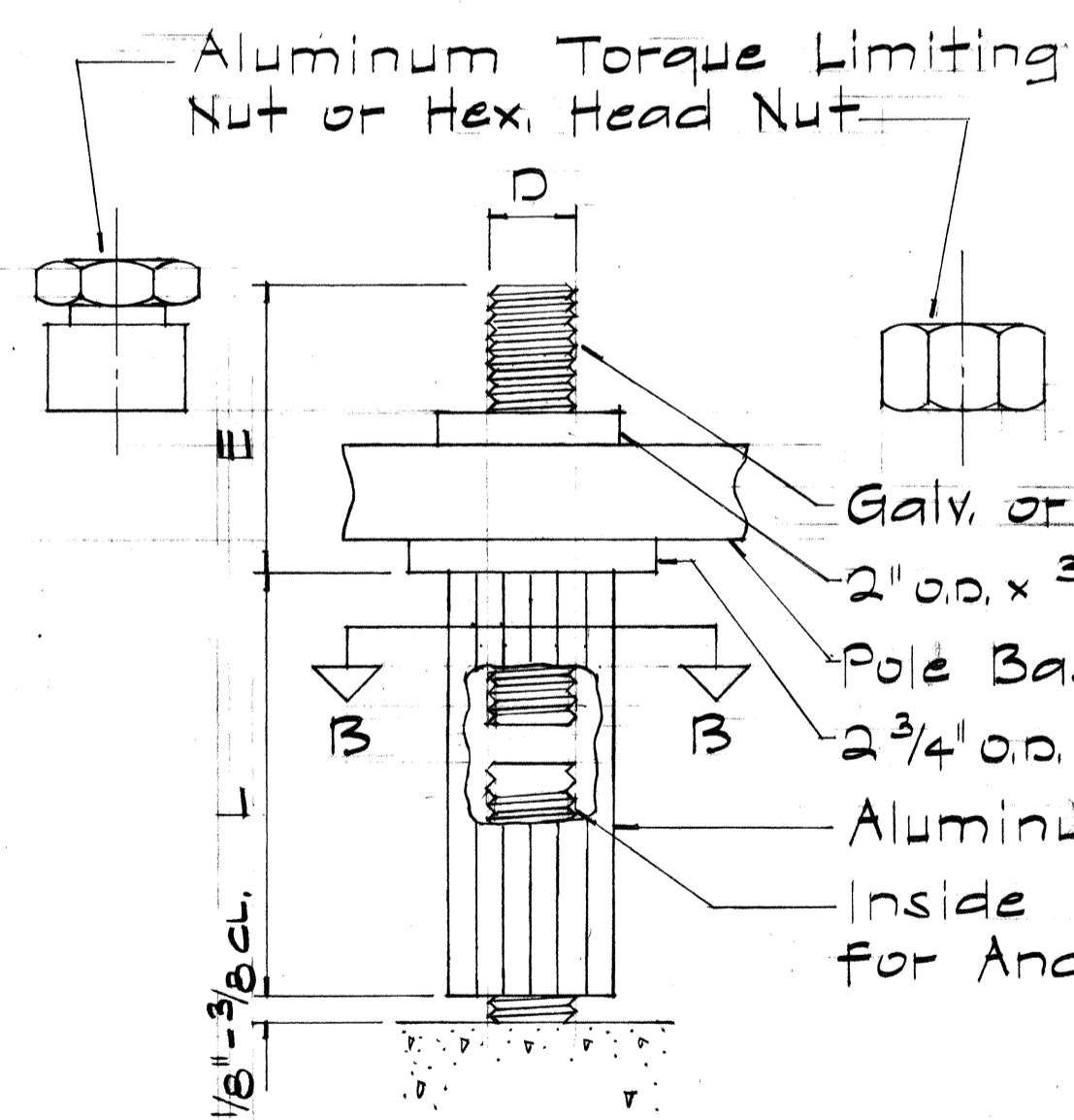


**LEFT SIDE VIEW      TOP VIEW      RIGHT SIDE VIEW**

**SKIRT COVER FOR BREAKAWAY SUPPORT COUPLING**

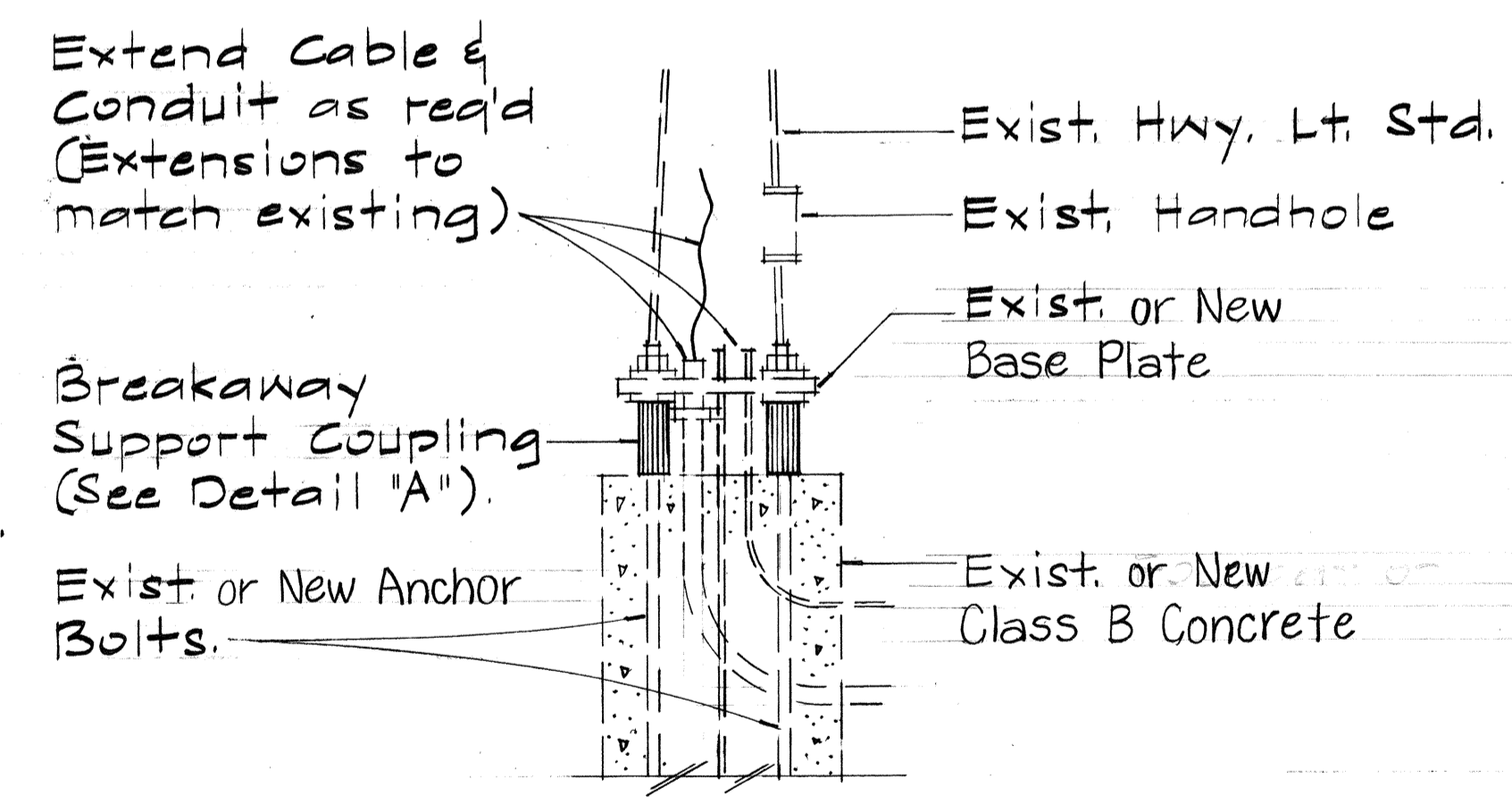
Not to Scale

**SECTION "B-B"**



**DETAIL "A"**  
Not to Scale

DIMENSION SCHEDULE				
D	THREAD	L	E	NUT TORQUE ± 25 FT. LBS.
1"	8 UNC	4 3/4"	3 5/16"	175
1/4"	7 UNC	4 7/8"	3 9/16"	as recommended by manufacturer



**MOUNTING DETAIL**  
Scale: 3/4" = 1'-0"

**BREAKAWAY SUPPORT COUPLING**

Scale: As Shown

**GENERAL NOTES:**

- Contractor shall verify size of exist. anchor bolts & base plates prior to ordering couplings & skirt covers.
- Breakaway support coupling shall conform to the applicable requirements of AASHTO standards & shall be fabricated from either die cast aluminum alloy 380 according to ASTM B85, or extruded from alloy 2024-T8511 according to ASTM B 221.
- Hex. nut shall meet the requirements of ASTM A563 grade A, and ANSI B18.2.2.
- Torque nut shall be fabricated from aluminum alloy and grooved to separate at the specified torque.
- Threaded stud shall meet the requirements of ASTM A 675 grade 90 or AISI stainless steel.

SURVEY PLOTTED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 NOTE BOOK No. \_\_\_\_\_

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 LAND TRANSPORTATION FACILITIES DIVISION  
**TYPICAL DETAILS**  
**BREAKAWAY SUPPORT**  
**COUPLING & SKIRT COVER**  
 F.A.I. Project No. IR-H2-1(26)  
 Scale: As Shown      Date: Sept. 1990  
 SHEET NO. 63 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1B-H2-1(26)	1990	64	107

**NOTES**

- ALL STEEL SHAFTS, P'S, MAST ARMS, BOLTS, SCREWS NUTS & WASHERS TO BE GALV. AFTER FAB. OR MODIFICATION.
- P'S TO CONFORM TO ASTM A-36.
- CAST OPTION TO CONFORM TO ASTM A-486 CL. 50.
- TORQUE 7/8"  $\phi$  H.S. SLIP BASE P BOLTS TO 84 FT. LBS
- 7/8"  $\phi$  H.S. ANCHOR BARS, WRENCH TIGHTEN-TORQUE REQUIREMENT WAIVED.
- FABRICATORS ELECTING LARGER THAN MIN ARM DIAMETERS MUST ADJUST DETAILS AS REQUIRED TO PERMIT SOLID SEATING OF CAP SCREWS. IN LIEU OF TORQUE REQUIREMENTS FOR H.S. BOLTS, CAP SCREWS SHALL BE TIGHTENED BY THE TURN OF NUT METHOD 1/6 TURN FROM SNUG TIGHT CONDITION. NO WASHER WILL BE REQUIRED.
- 4" x 6 1/2" HANDHOLE REINFORCED W/ #3 GA. RING 1 1/2" WIDE WELDED TO OUTSIDE OF POLE COVER OF 10 GA. P LOCATE 90 DEGREES OF MAST ARM UNLESS SHOWN OTHERWISE.
- 28 GA. KEEPER P, PLACE ON TOP OF MIDDLE FLAT WASHER ASTM A526 125 COMMERCIAL.
- PLATE WASHER
- 3-7/8"  $\phi$  H.S. BARS, THREAD 6" & GALV. 10", W/ HEX, HD, NUT, LEVELING NUT & WASHER
- HEX. HD. NUT SHOWN OR AS AN ALT. DET. ANCHOR P'S MAY BE RETAINED W/ 5/16" FILLET WELDS ALL ROUND OR FORMED HEADS.
- ROUND TAPERED STEEL TUBE W/ MAX. TAPER OF 0.15"/FOOT.
- NO. 11 GAGE SHEET STEEL OF WELDABLE GRADE ACCEPTABLE IF STEEL AFTER FABRICATION HAS A MIN. YIELD STRENGTH OF 40,000 P.S.I.

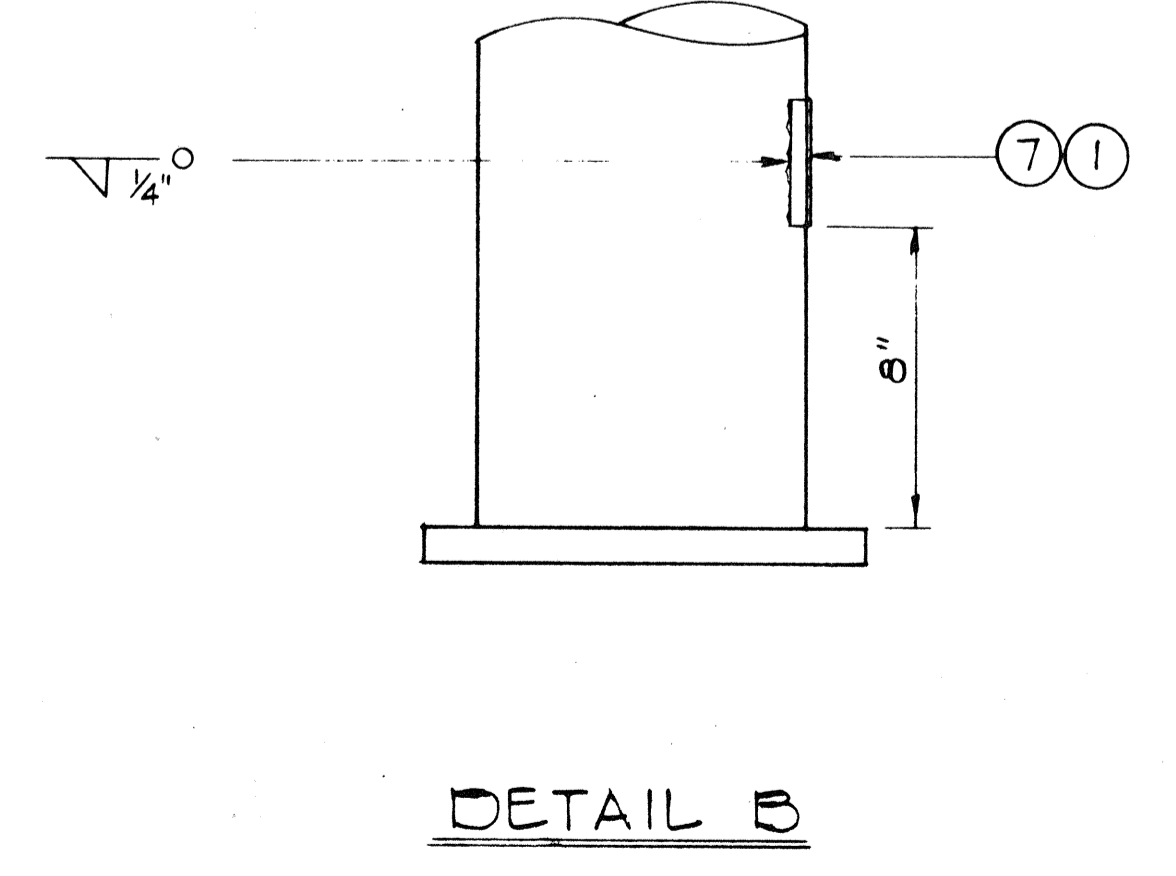
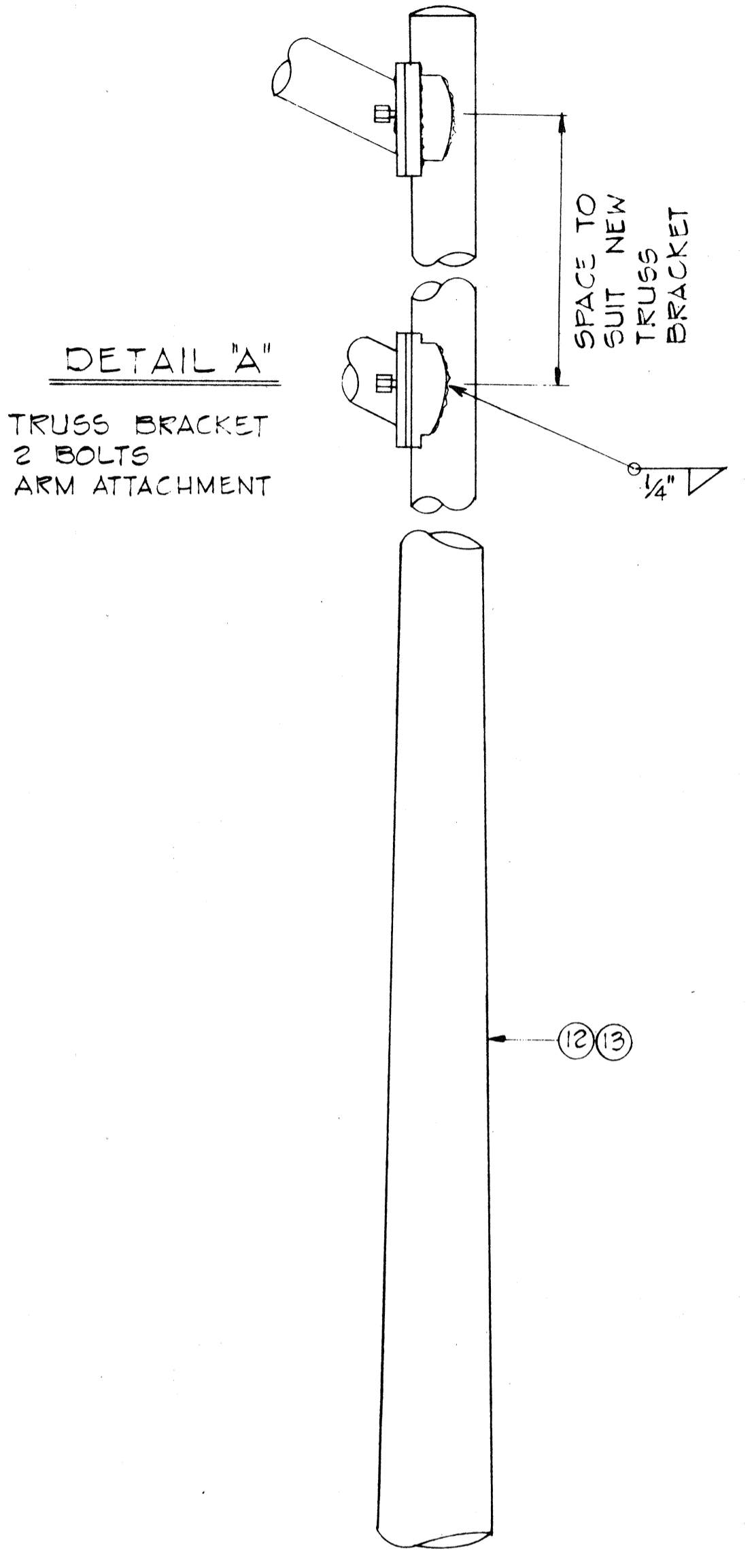
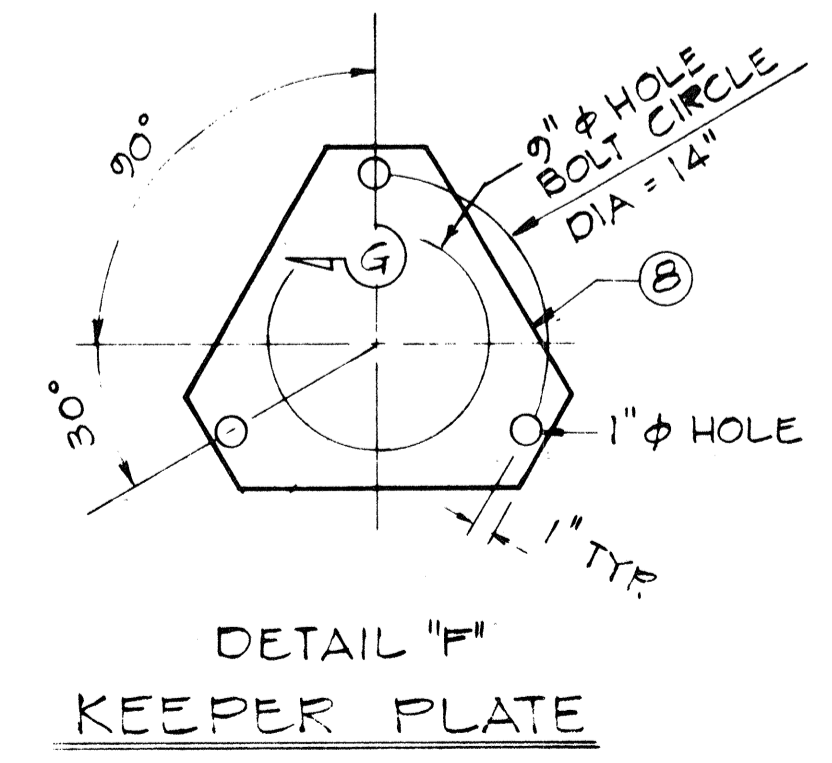
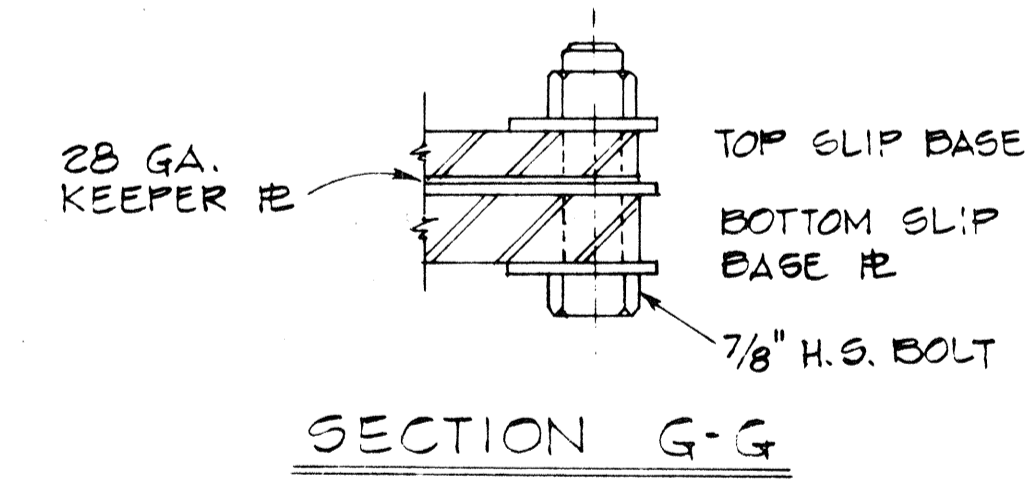
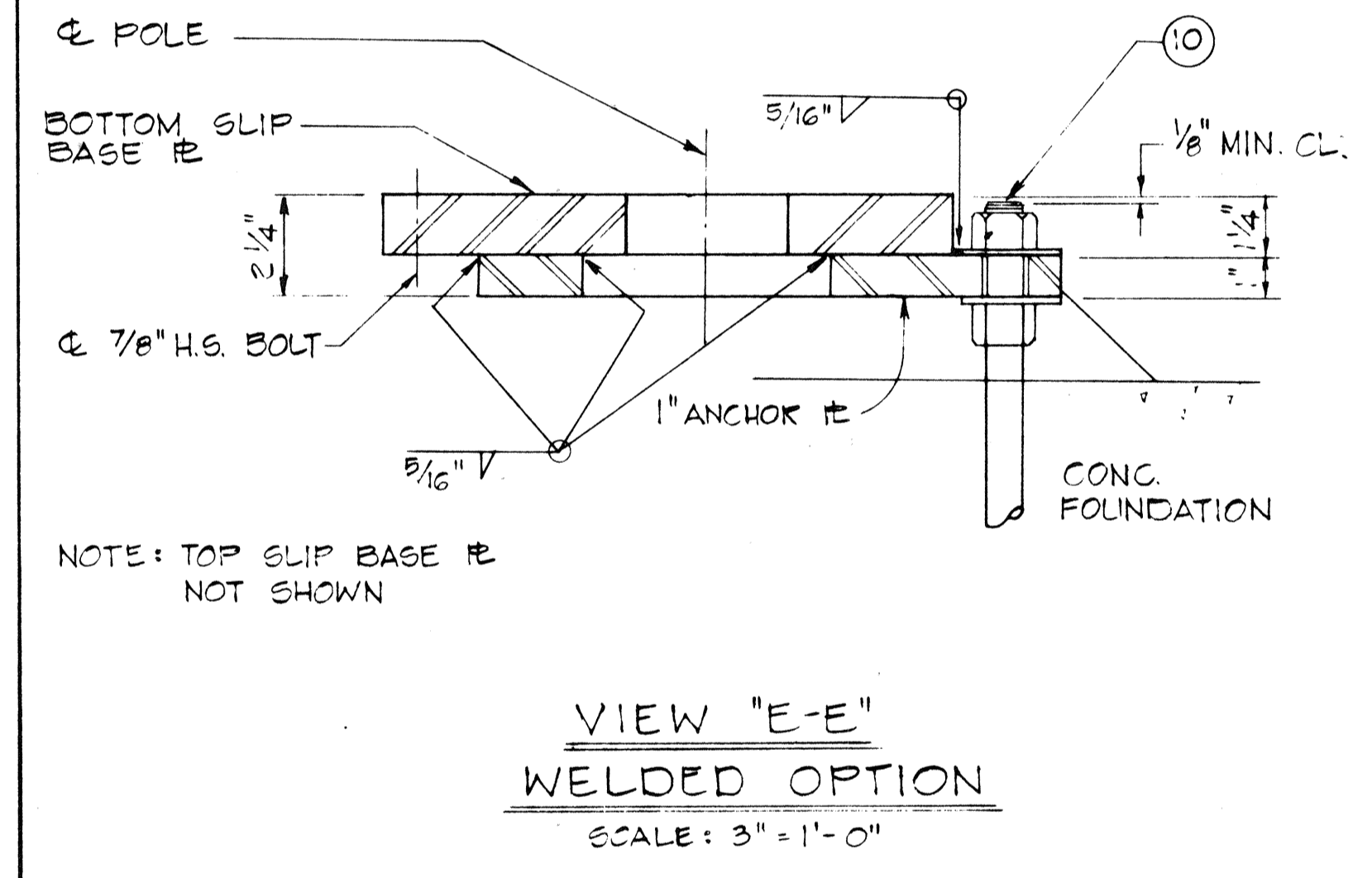
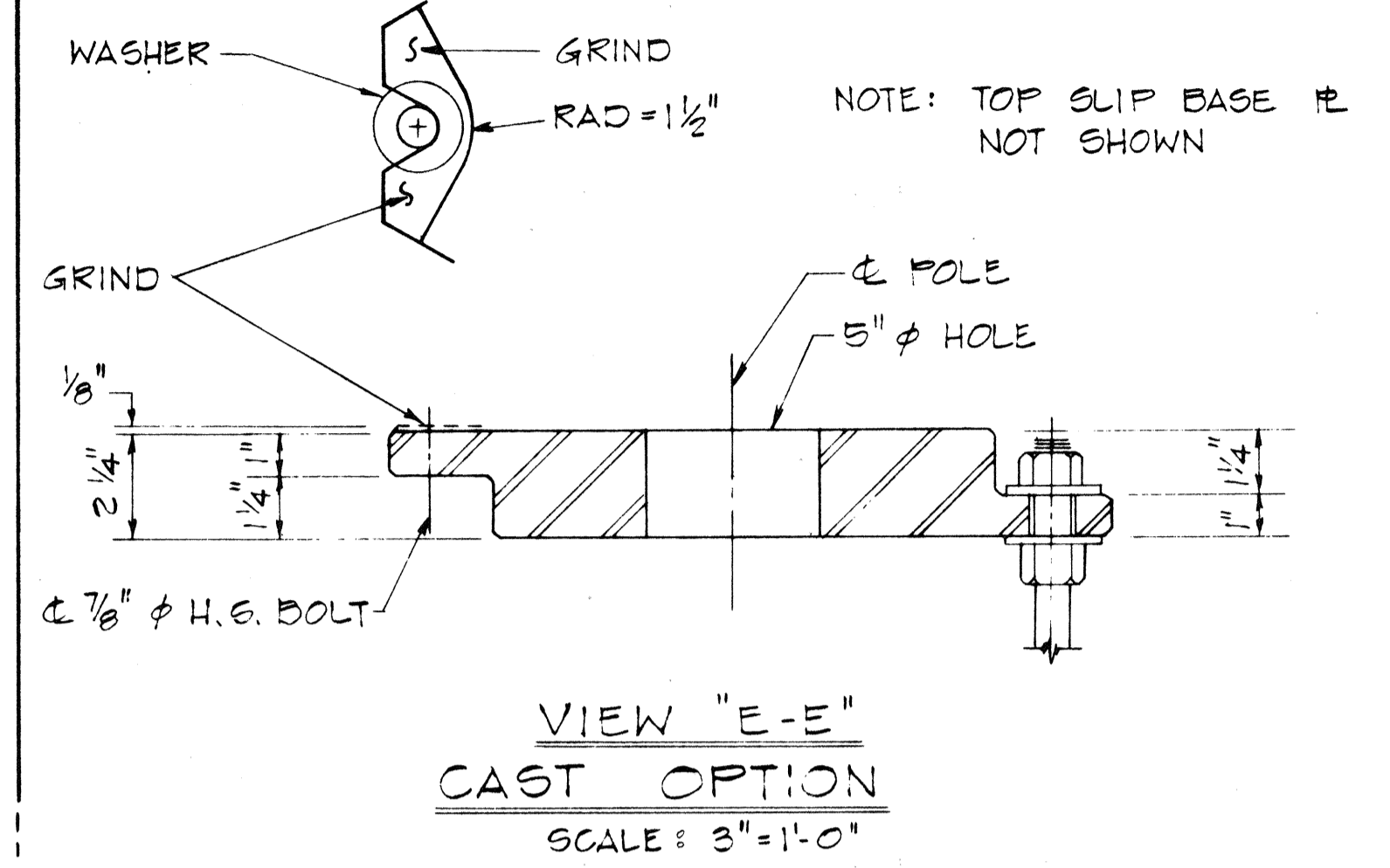
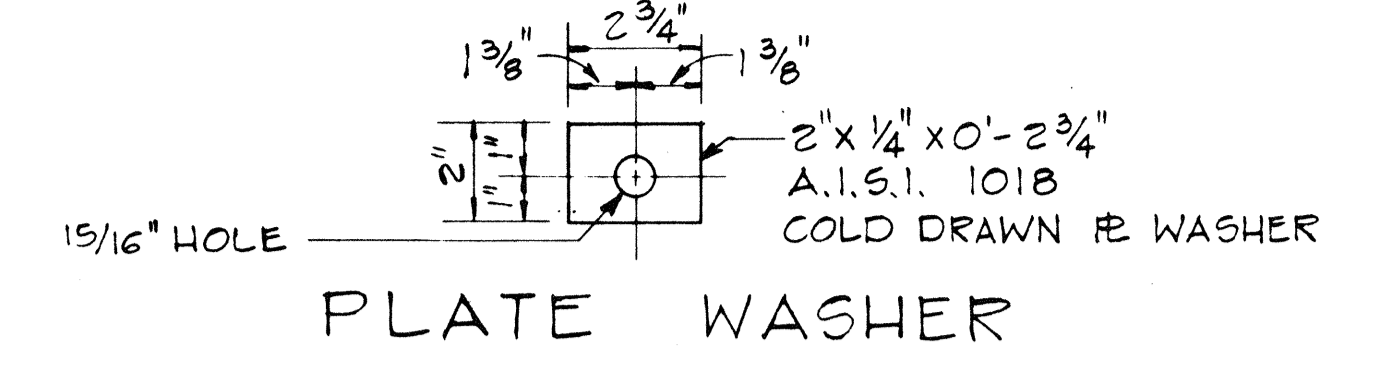
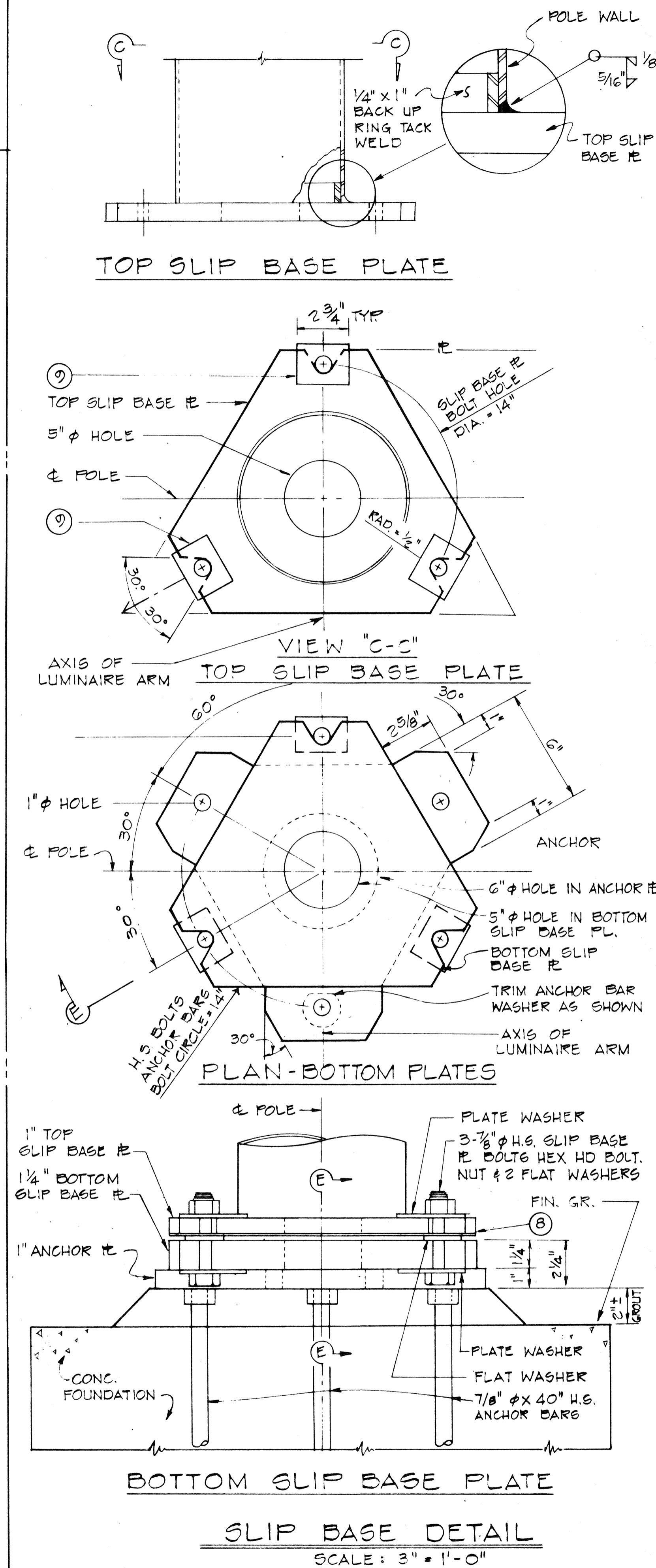
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**HIGHWAY LIGHTING  
SLIP BASE POLE**

INTERSTATE RTE. H2 HOV LANES, P.H.I  
WAIPIO I.C. TO WAIAWA I.C.  
F.A.I. Project No. 1B-H2-1(26)

Scale: As Shown      Date: Sept. 1990

**SHEET NO. E3 OF 4 SHEETS**



SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
NO.	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	66	107

NOTES

EXPRESSWAY (E) AND DESTINATION (D) SIGN 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. Details of Type C, Type D and Type H Markers on Standard Plan Nos. TE-30, TE-31 and TE-32 shall be deleted and replaced with details of Type CL, Type DL and Type HL Markers as shown on Sheet No. T2. All references to Type C, Type D and Type H Markers in the plans shall mean Type CL, Type DL and Type HL Markers.
5. Final locations of all signs shall be approved by the Engineer prior to any installation work.
6. All pavement striping shall be as noted on the legend or plans.
7. 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.
8. Backing for all new Regulatory and Warning Signs shall not be spliced.
9. Interstate Route Marker Symbols shall conform to details shown on the plans and as specified in the MUTCD.
10. 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 Streets and Highways" (MUTCD)
  - b. "Standard Highway Signs."
  - c. "Standard Alphabets for Highway Signs."
11. Borders, messages, arrows, symbols and shields shall conform to details as shown on the plans and as specified in the MUTCD.
12. Sign messages shall be as indicated on the plan.
13. 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.
14. 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.
15. 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.
16. Removal of Existing Delineators and Posts shall be considered incidental to the various signing items.
17. 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.

1. The Contractor shall verify the locations and dimensions of existing Sign Panels and supports.
2. The clearance between the highest point on the pavement and the lowest point on the overhead sign luminaires shall be 17 feet minimum.
3. New sign panels shall be laminated aluminum or extruded aluminum.
4. Letter Size:
  - a. When letters are all uppercase, use series "E"
  - b. When initial uppercase letter is used in conjunction with lowercase letters, use series "E"(M) for uppercase
5. 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.
6. Installing existing Exit Number Sign Panels will not be paid separately, but shall be considered incidental to Item No. 621.0200 - Panel for Destination Sign.
7. Existing sign panels shall be carefully removed and securely installed as shown on the plans. Chipped or bent signs caused by his operations shall be replaced at his expense.
8. The Contractor shall store all existing Overhead Destination signs that are to be reused at a suitable location or as directed by the Engineer.

DATE	.....
SURVEY PLOTTED BY	.....
DRAWN BY	.....
DESIGNED BY	.....
CHECKED BY	.....
NOTE BOOK	.....
NO.	.....

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

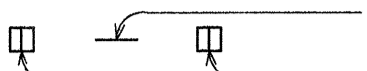
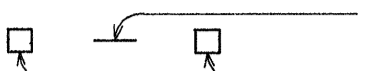
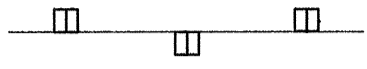
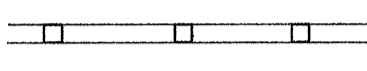


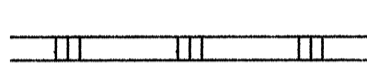

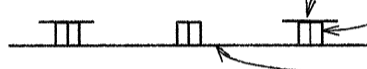

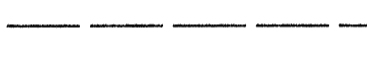
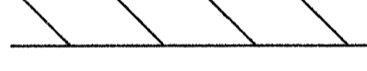
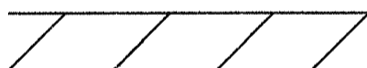
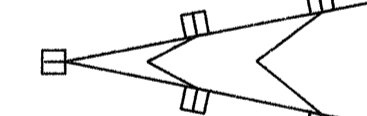
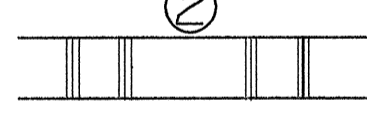

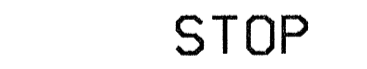


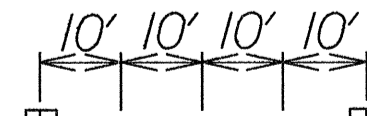
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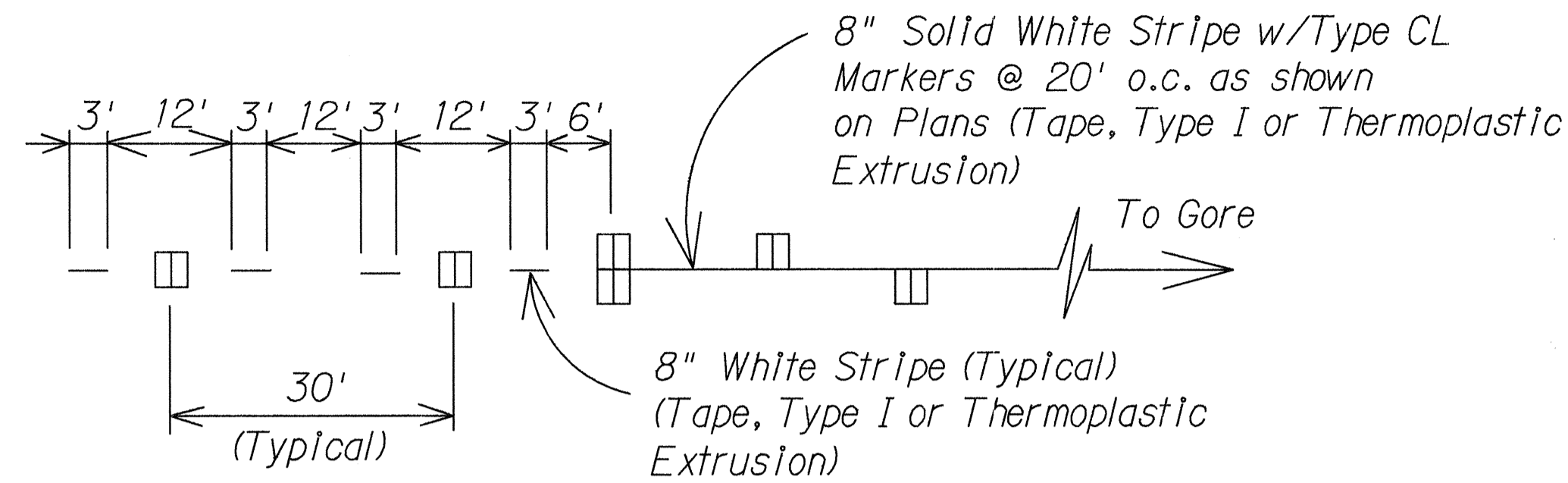
INTERSTATE RTE. H-2 HOV LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Project No. IR-H2-1(26)

Date: September 1990

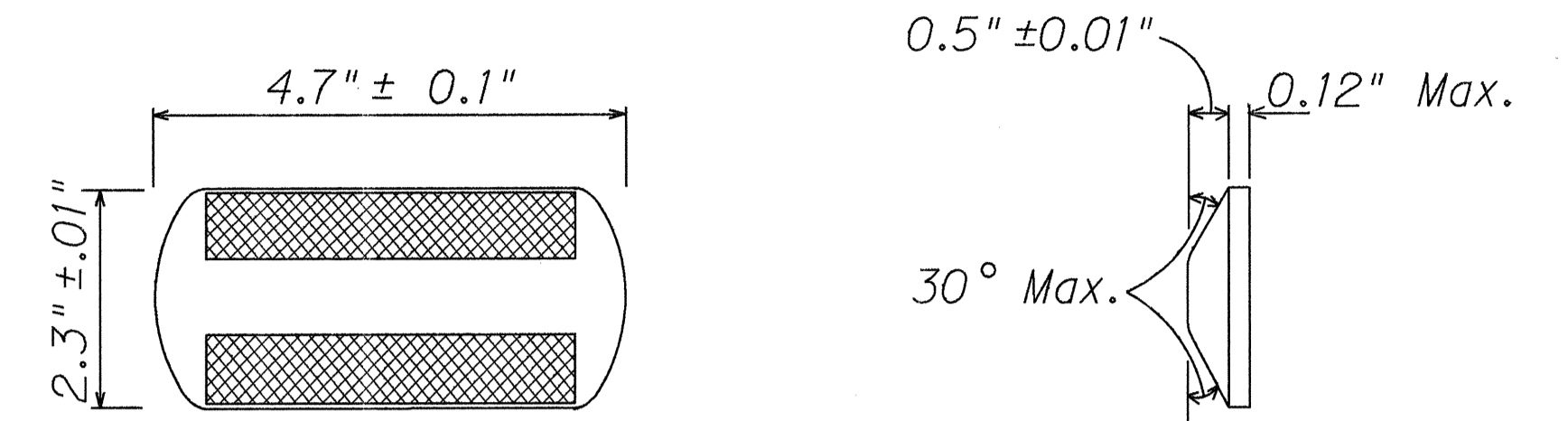
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	67	107

**LEGEND**

-  4 each Type A Raised Pavement Markers  
Type CL Raised Pavement Markers @ 40'-0" o.c.
-  4 each Type J Raised Pavement Markers  
Type DL Raised Pavement Markers @ 40'-0" o.c.
-  8" White Stripe with Type CL Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  4" Double Solid Yellow with Type DL Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  4" Double Solid Yellow Stripes with Type HL Raised Pavement Markers @ 20'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" Yellow Edge Stripe with Type HL Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" Double Solid White Stripes with Type CL 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 CL Raised Pavement Markers @ 20'-0" o.c.  
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)
-  4" or 8" White Edge Stripe with Type CL Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" White Guide Lines (Thermoplastic Extrusion)
-  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. (Thermoplastic Extrusion)
-  Pavement Arrow (Tape, Type I or Thermoplastic Extrusion)
-  Pavement Word (Tape, Type I or Thermoplastic Extrusion)
-  4 Each Type J Raised Pavement Markers  
Type DL Raised Pavement Markers @ 40'-0" o.c.  
Type HL 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 CL Markers @ 40'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)



**LANE DROP MARKING**  
Not to Scale



**RAISED PAVEMENT MARKER DETAILS**  
Not to Scale

TYPE CL  
Red-Clear Reflective Marker  
or  
TYPE DL  
Two-Way Yellow Reflective Marker  
or  
TYPE HL  
One-Way Yellow Reflective Marker

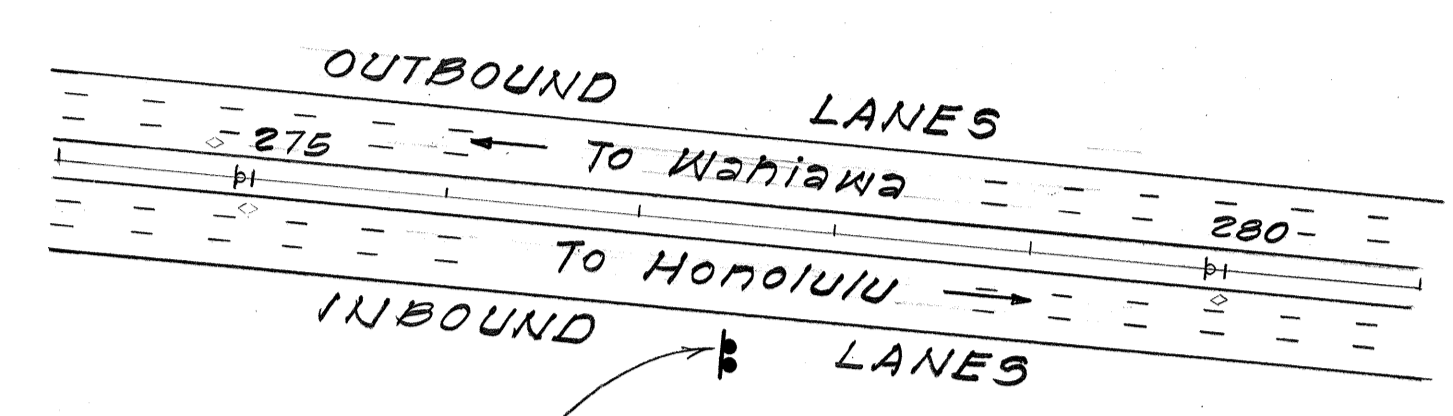
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 DRAWN BY \_\_\_\_\_  
 TRACED BY \_\_\_\_\_  
 DESIGNED BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 No. \_\_\_\_\_

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**PAVEMENT MARKING**  
**LEGEND, DETAILS & NOTES**  
 INTERSTATE RTE. H-2 HOV LANES, PH. I  
 Waipio I.C. to Waialua I.C.  
 F.A.I. Project No. IR-H2-1(26)  
 Scale: As Shown Date: September 1990  
 SHEET No. T2 OF 18 SHEETS

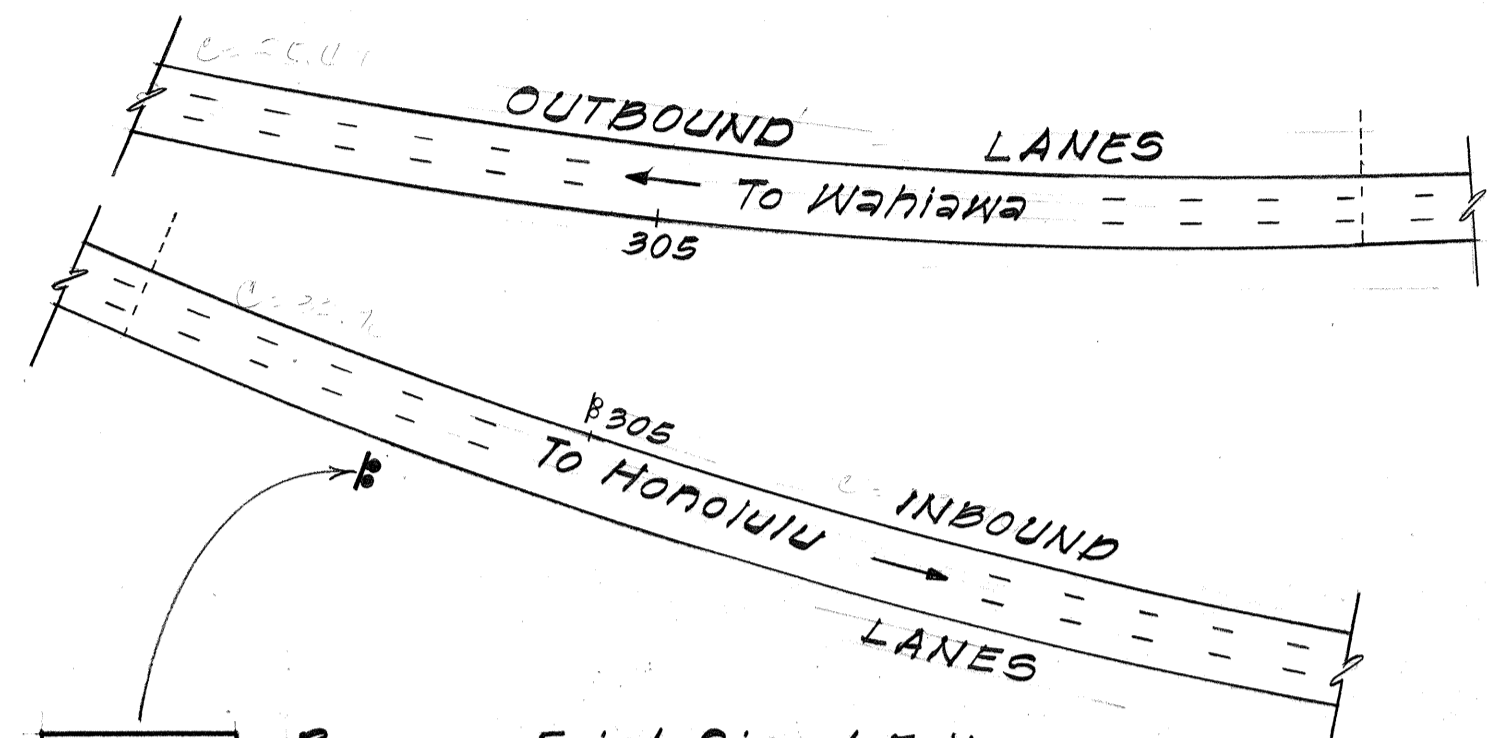
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-42-1(20)	1991	68	107

TRUE NORTH  
Scale: 1"=100'

TRUE NORTH  
Scale: 1"=100'

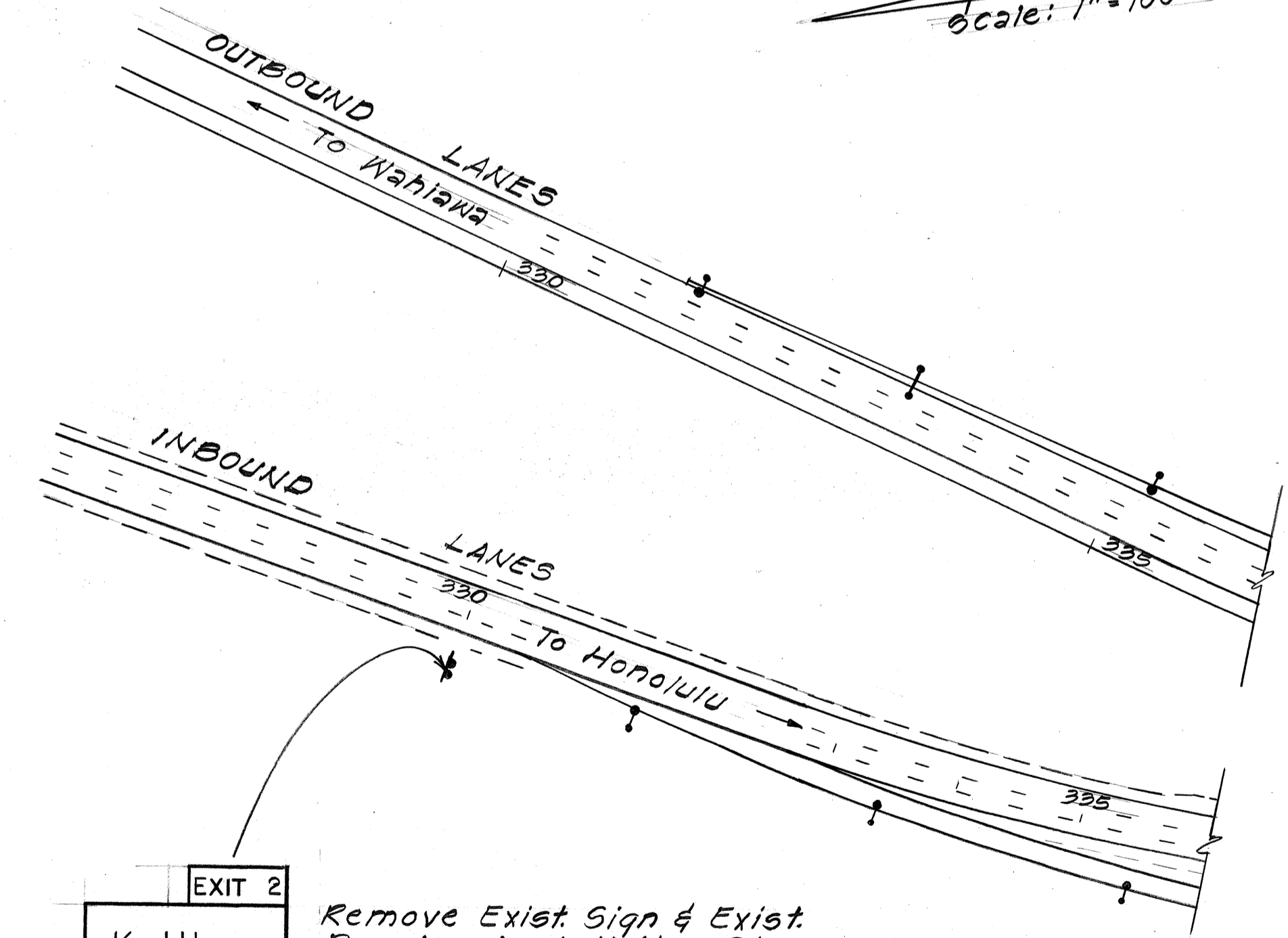


EXIT 2  
Ka Uka Blvd  
1 MILE  
D-10  
I.B. # STA. 277+50 RT.  
Remove Exist Sign & Exit Panels & Posts. Reuse Exist Posts w/ New Type III Footings and Install New Sign & Exist Exit Sign Panels.



EXIT 2  
Ka Uka Blvd  
1/2 MILE  
D-11  
I.B. # STA. 304+00 RT.  
Remove Exist Sign & Exit Panels & Posts. Reuse Exist Posts w/ New Type III Footings and Install New Sign & Exist Exit Sign Panels.

TRUE NORTH  
Scale: 1"=100'



EXIT 2  
Ka Uka Blvd  
D-12  
I.B. # STA. 330+00 RT.  
Remove Exist Sign & Exist Panels. Install New Sign & Exist Exit Panels on Exist Posts.

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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING, PAVEMENT MARKING  
& LIGHTING PLAN**

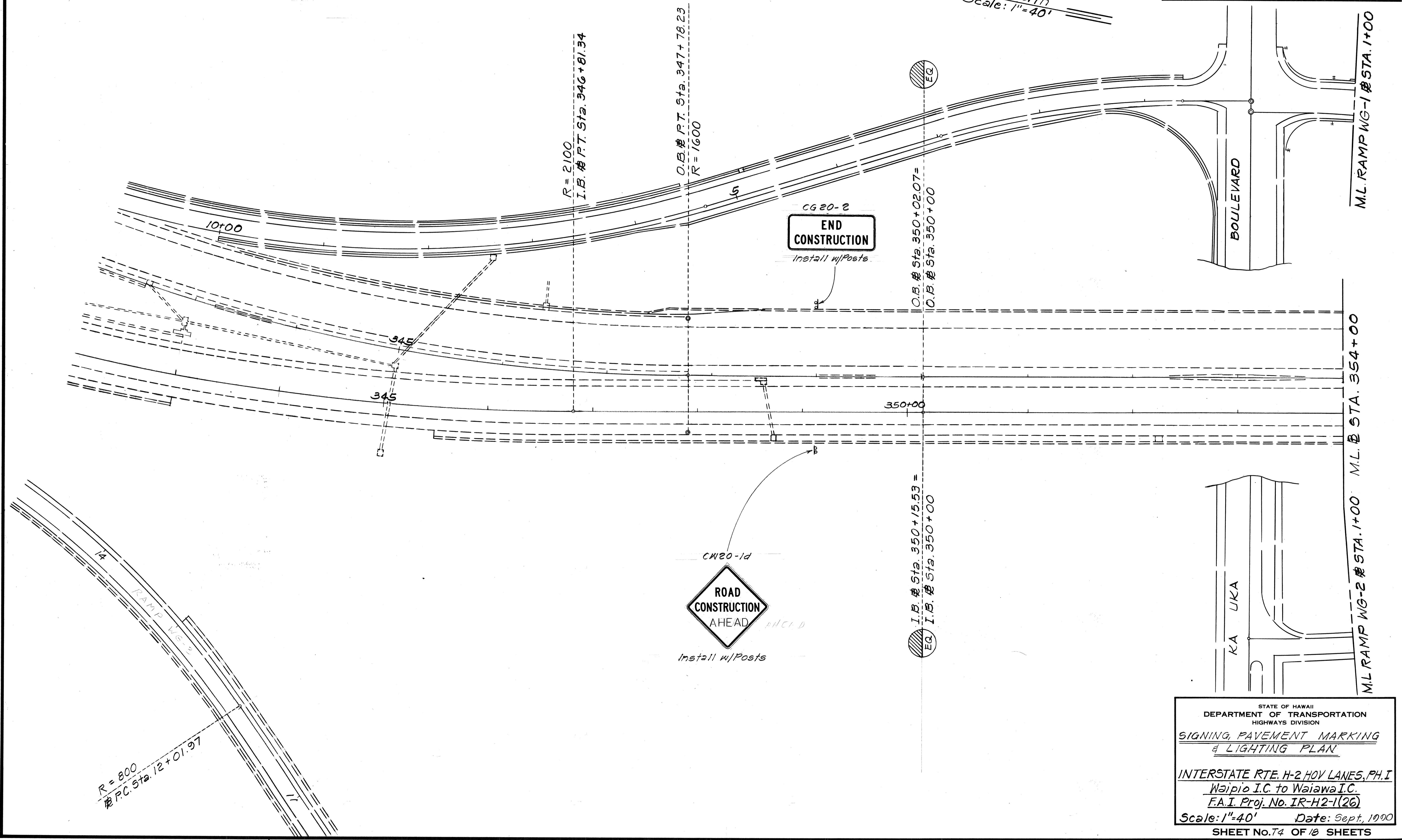
INTERSTATE RTE H-2 HOV LANES, PH.2  
Maipio I.C. to Waiaiw I.C.  
F.A.I. Proj. No. IR-42-1(20)

Scale: 1"=100' Date: Sept, 1990

SHEET No. 73 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	69	107

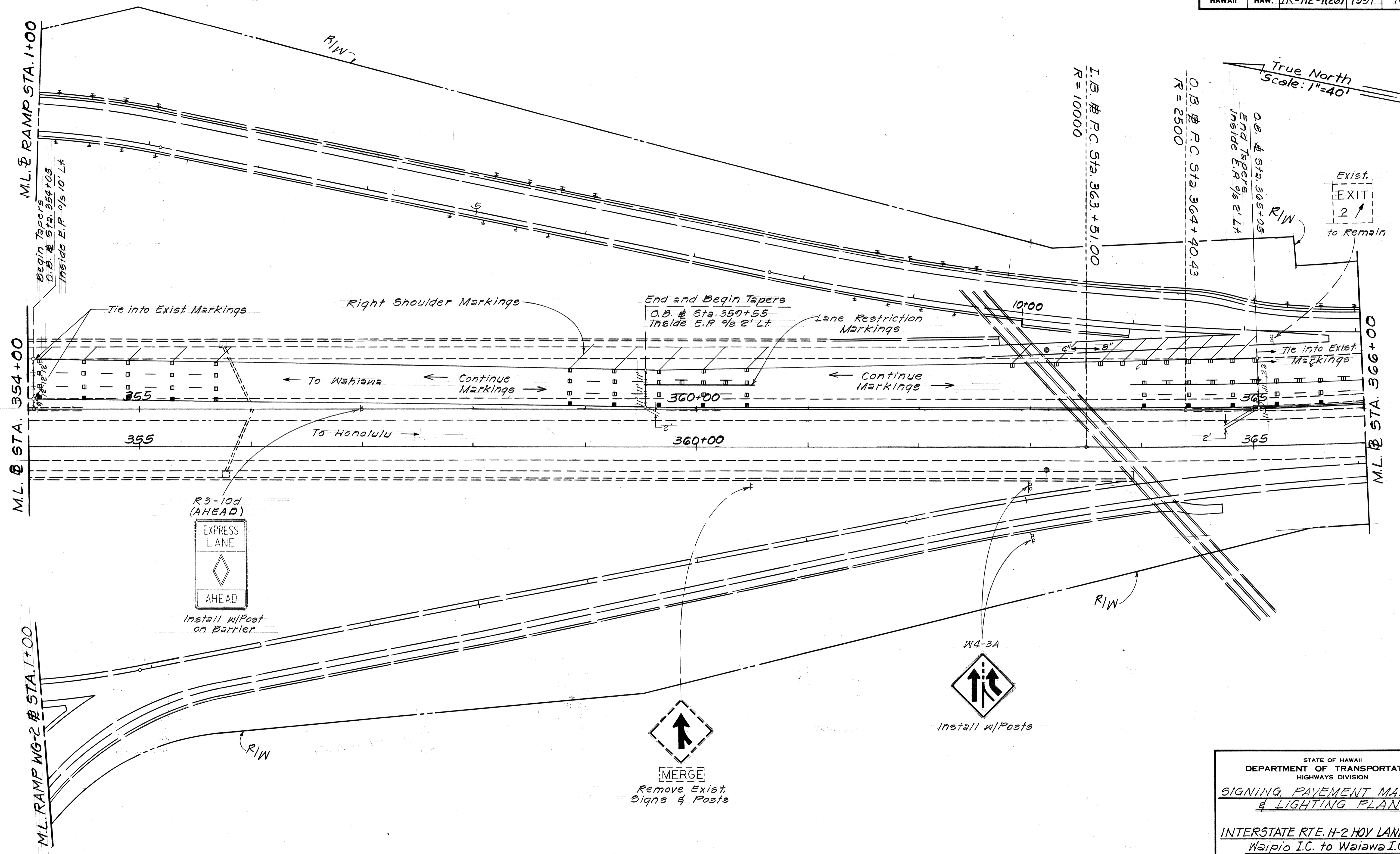
True North  
Scale: 1"=40'



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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**SIGNING, PAVEMENT MARKING  
& LIGHTING PLAN**  
INTERSTATE RTE. H-2 HOV LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Proj. No. IR-H2-1(26)  
Scale: 1"=40' Date: Sept, 1990  
SHEET No. 74 OF 18 SHEETS

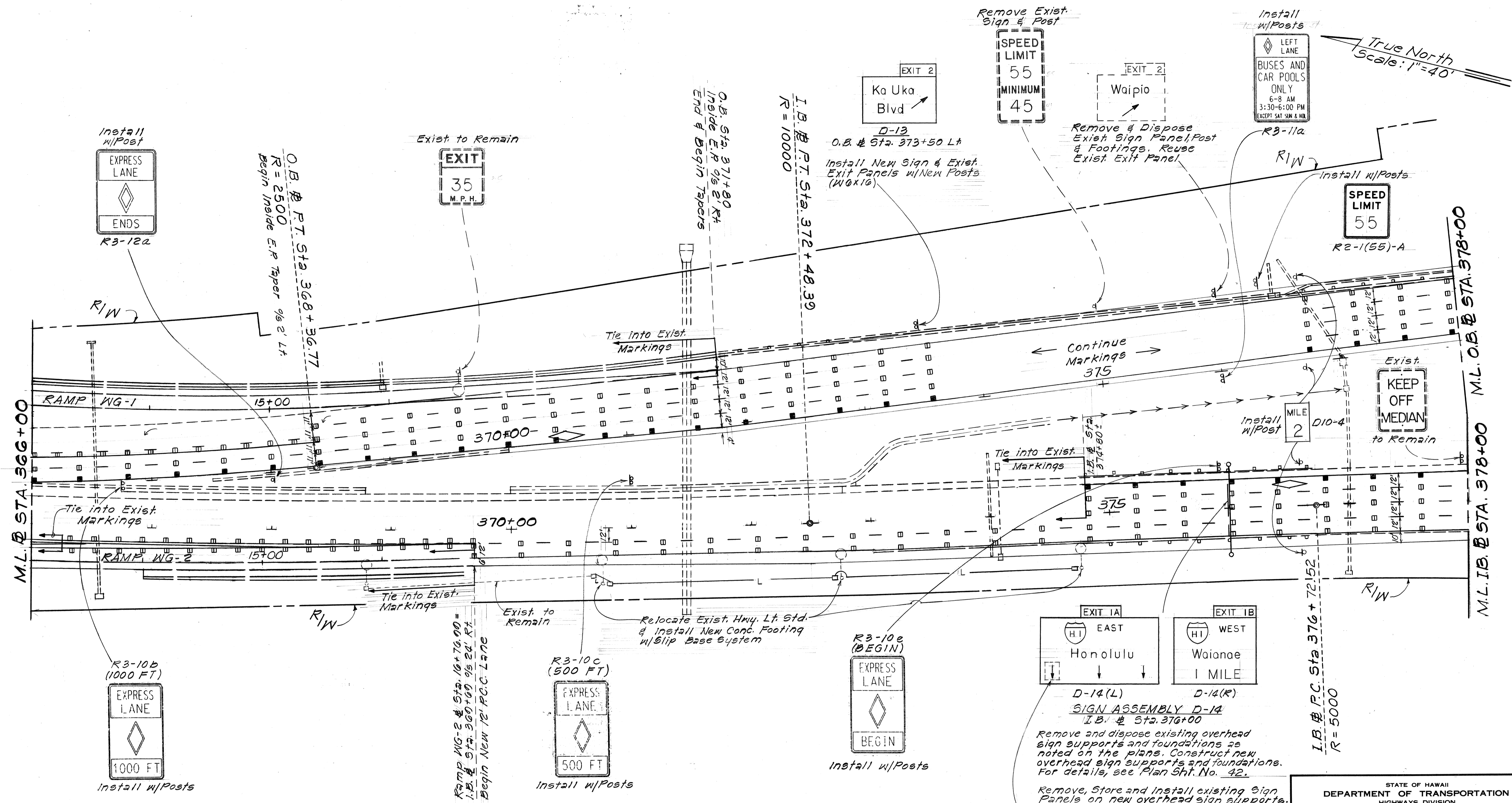
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	70	107



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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**SIGNING, PAVEMENT MARKING  
& LIGHTING PLAN**  
INTERSTATE RTE. H-2 HOV LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Proj. No. IR-H2-1(26)  
Scale: 1"=40' Date: Sept, 1990  
SHEET NO. 75 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	71	107



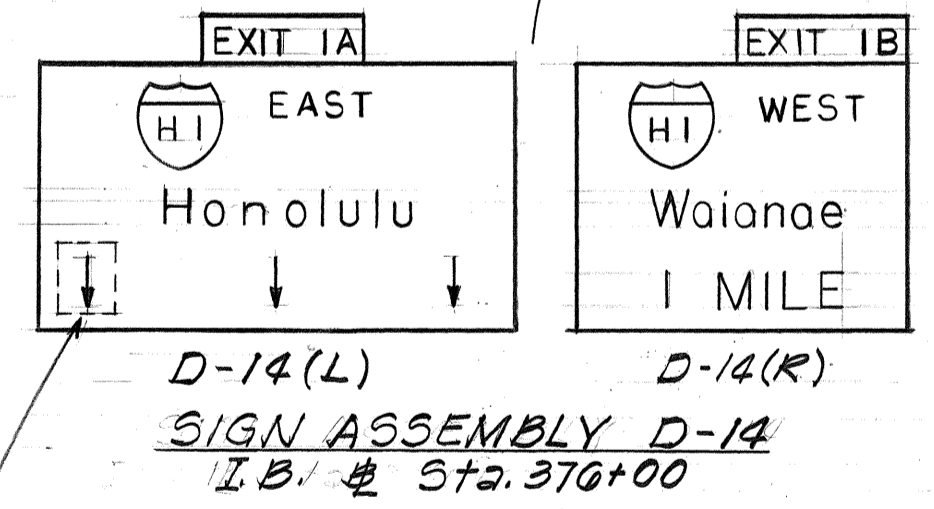
SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN NO.	
NOTE BOOK NO.	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING, PAVEMENT MARKING & LIGHTING PLAN**

INTERSTATE RTE. H-2 HOV LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Proj. No. IR-H2-1(26)

Scale: 1"=40' Date: Sept, 1990  
SHEET No. 70 OF 18 SHEETS



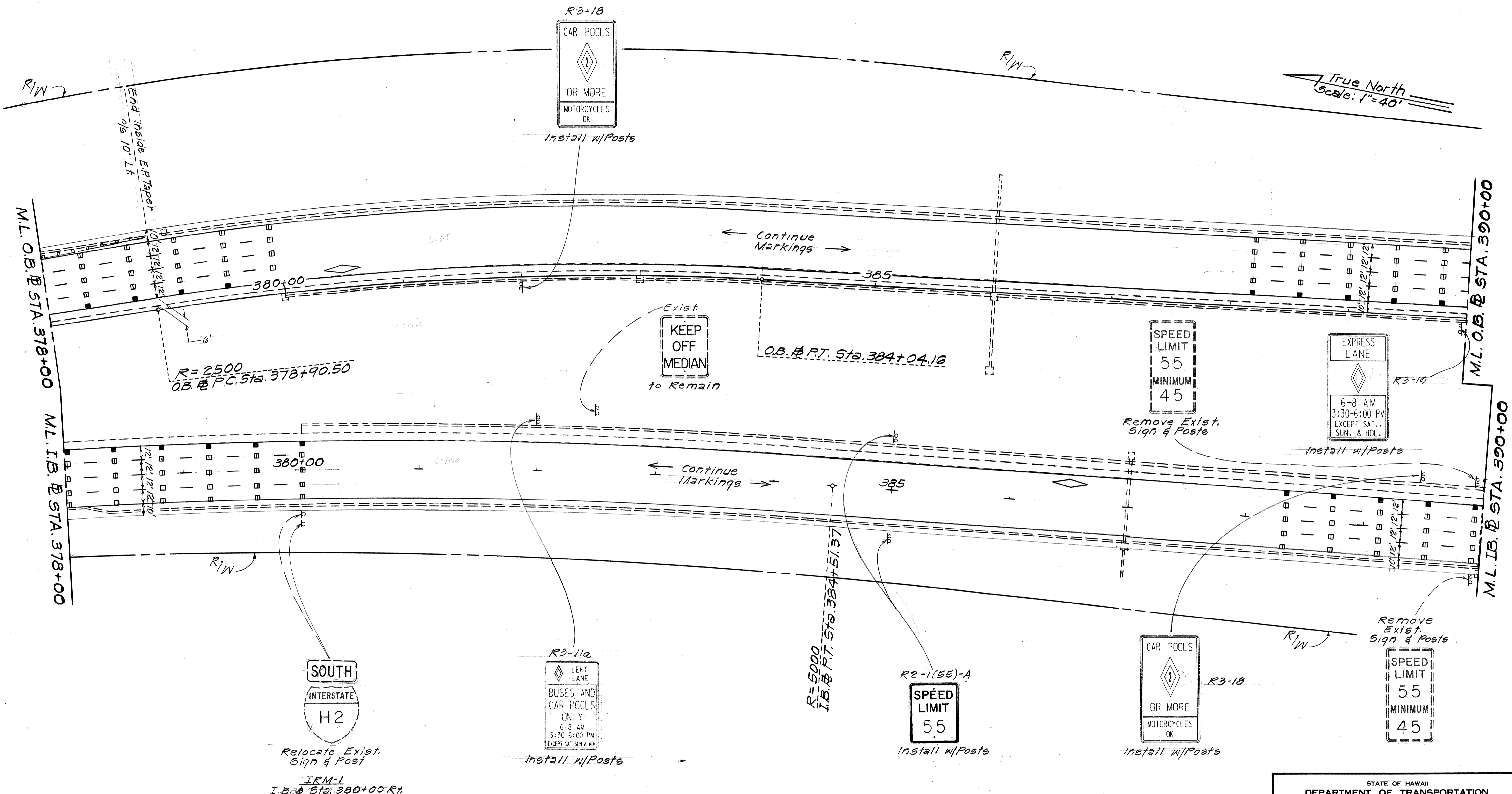
Remove and dispose existing overhead sign supports and foundations as noted on the plans. Construct new overhead sign supports and foundations. For details, see Plan Sht. No. 42.

Remove, Store and Install existing Sign Panels on new overhead sign supports. For frame layout, see Sht. No. T14.

Remove existing panel covering down arrow. This work will not be paid for separately, but shall be considered incidental to the various signing items.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	72	107

True North  
Scale: 1"=40'



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

**SOUTH INTERSTATE H2**  
Relocate Exist. Sign & Post  
IRM-1  
I.B. Sta. 380+00 R#

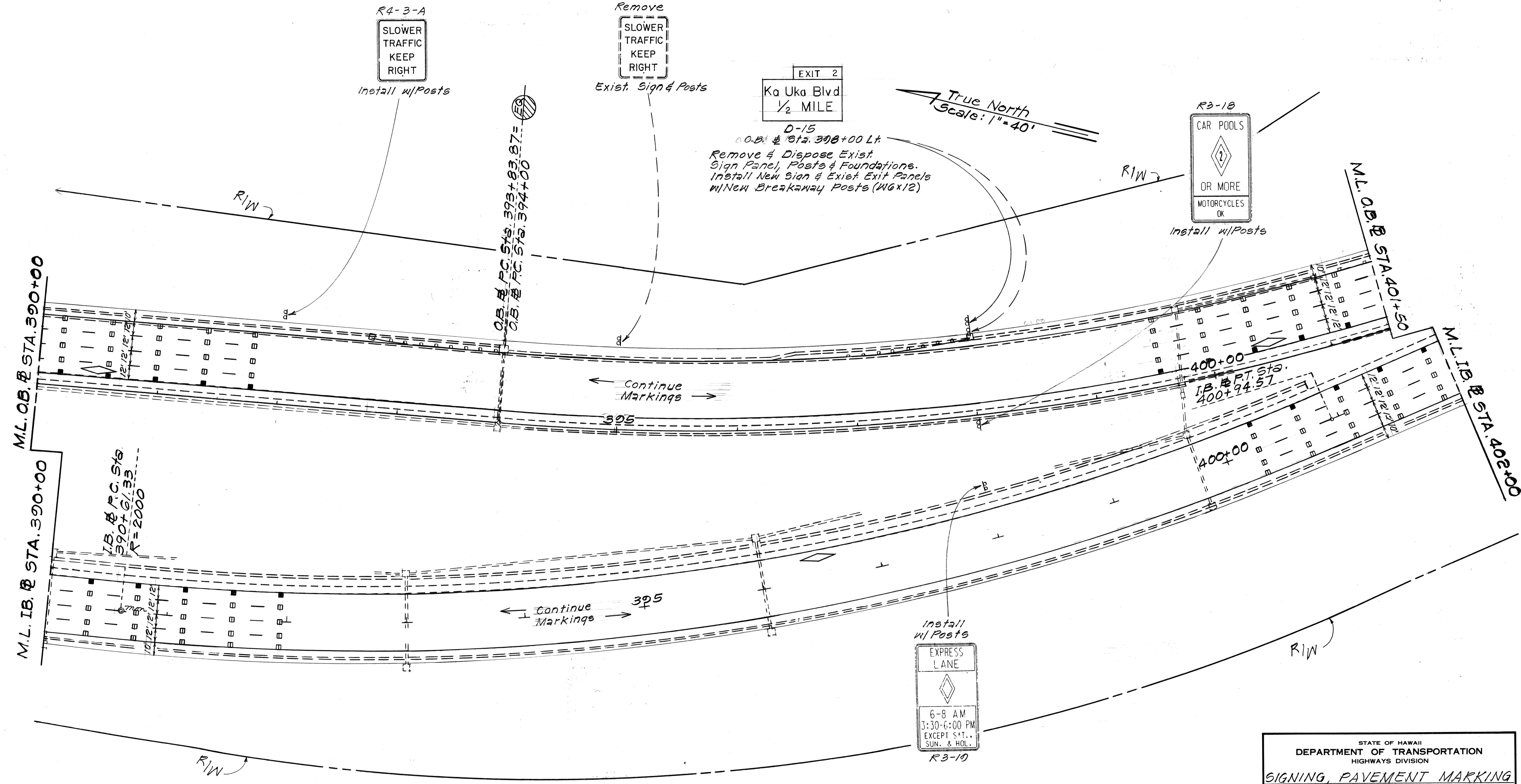
R3-11a  
LEFT LANE  
BUSES AND CAR POOLS ONLY  
6-8 AM  
3:30-6:00 PM  
EXCEPT SAT. SUN. & HO.  
Install w/Posts

R2-1(55)-A  
SPEED LIMIT 5.5  
Install w/Posts

R3-18  
CAR POOLS  
OR MORE  
MOTORCYCLES OK  
Install w/Posts

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**SIGNING, PAVEMENT MARKING & LIGHTING PLAN**  
INTERSTATE RTE. H-2 HOY LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Proj. No. IR-H2-1(26)  
Scale: 1"=40' Date: Sept, 1990  
SHEET No. 77 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	73	107

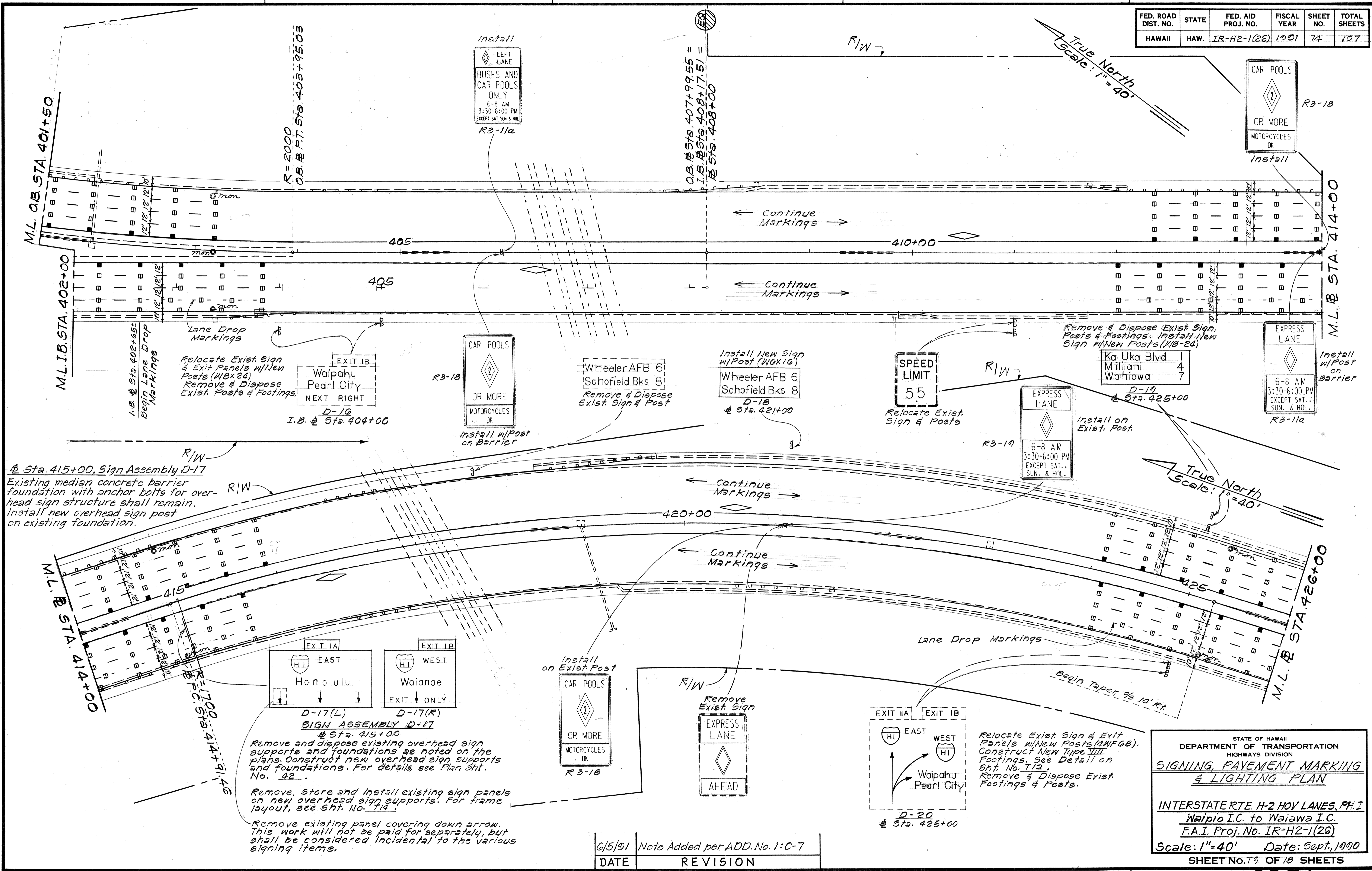


SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**SIGNING, PAVEMENT MARKING  
& LIGHTING PLAN**  
INTERSTATE RTE. H-2 HOV LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Proj. No. IR-H2-1(26)  
Scale: 1"=40' Date: Sept, 1990  
SHEET No. 73 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	74	107

True North  
Scale: 1"=40'



# Sta. 415+00, Sign Assembly D-17  
Existing median concrete barrier foundation with anchor bolts for overhead sign structure shall remain. Install new overhead sign post on existing foundation.

**SIGN ASSEMBLY D-17**  
# Sta. 415+00  
Remove and dispose existing overhead sign supports and foundations as noted on the plans. Construct new overhead sign supports and foundations. For details see Plan Sht. No. 42.  
Remove, store and install existing sign panels on new overhead sign supports. For frame layout, see Sht. No. 714.  
Remove existing panel covering down arrow. This work will not be paid for separately, but shall be considered incidental to the various signing items.

DATE	REVISION
6/5/91	Note Added per ADD. No. 1:C-7

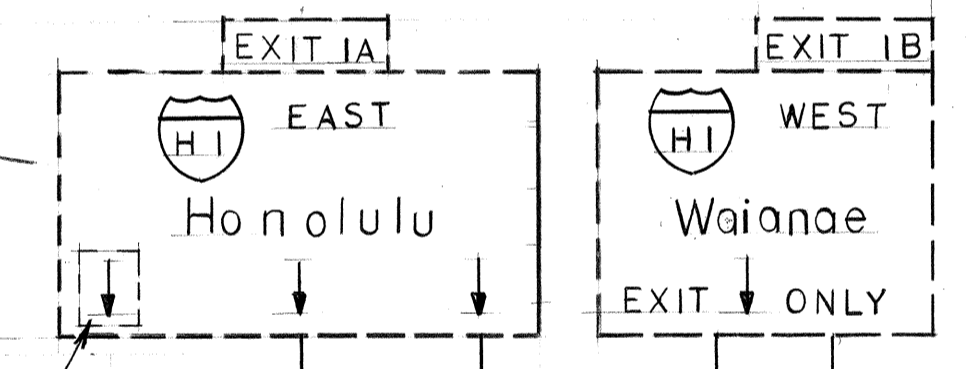
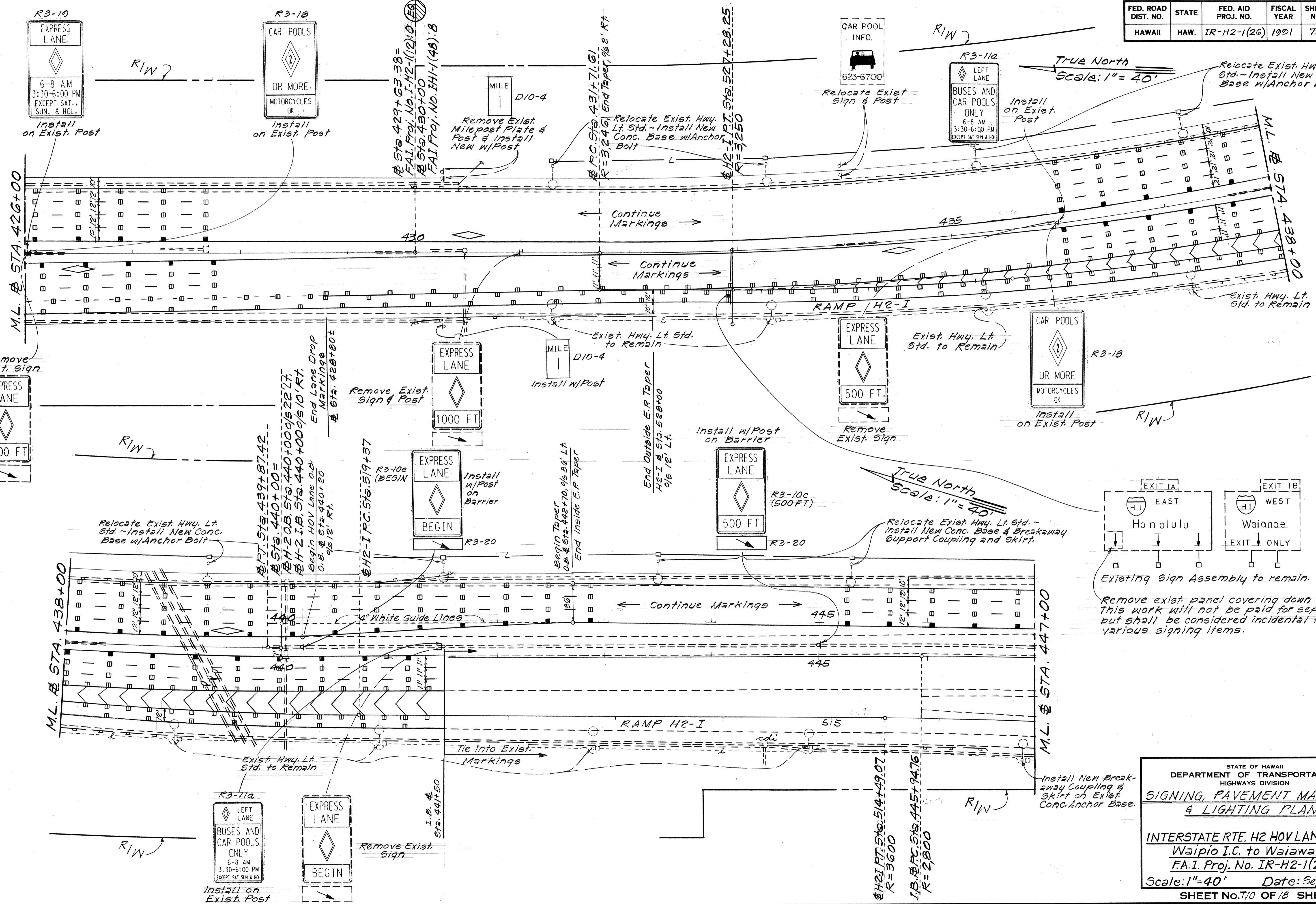
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING, PAYMENT MARKING & LIGHTING PLAN**

INTERSTATE RTE. H-2 HOV LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Proj. No. IR-H2-1(26)  
Scale: 1"=40' Date: Sept, 1990  
SHEET No. 74 OF 10 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	75	107



Remove exist panel covering down arrow. This work will not be paid for separately, but shall be considered incidental to the various signing items.

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**SIGNING, PAVEMENT MARKING & LIGHTING PLAN**  
 INTERSTATE RTE. H2 HOV LANES, PH. I  
 Waipio I.C. to Waiawa I.C.  
 F.A.I. Proj. No. IR-H2-1(26)  
 Scale: 1"=40' Date: Sept, 1990  
 SHEET No. 75 OF 107 SHEETS

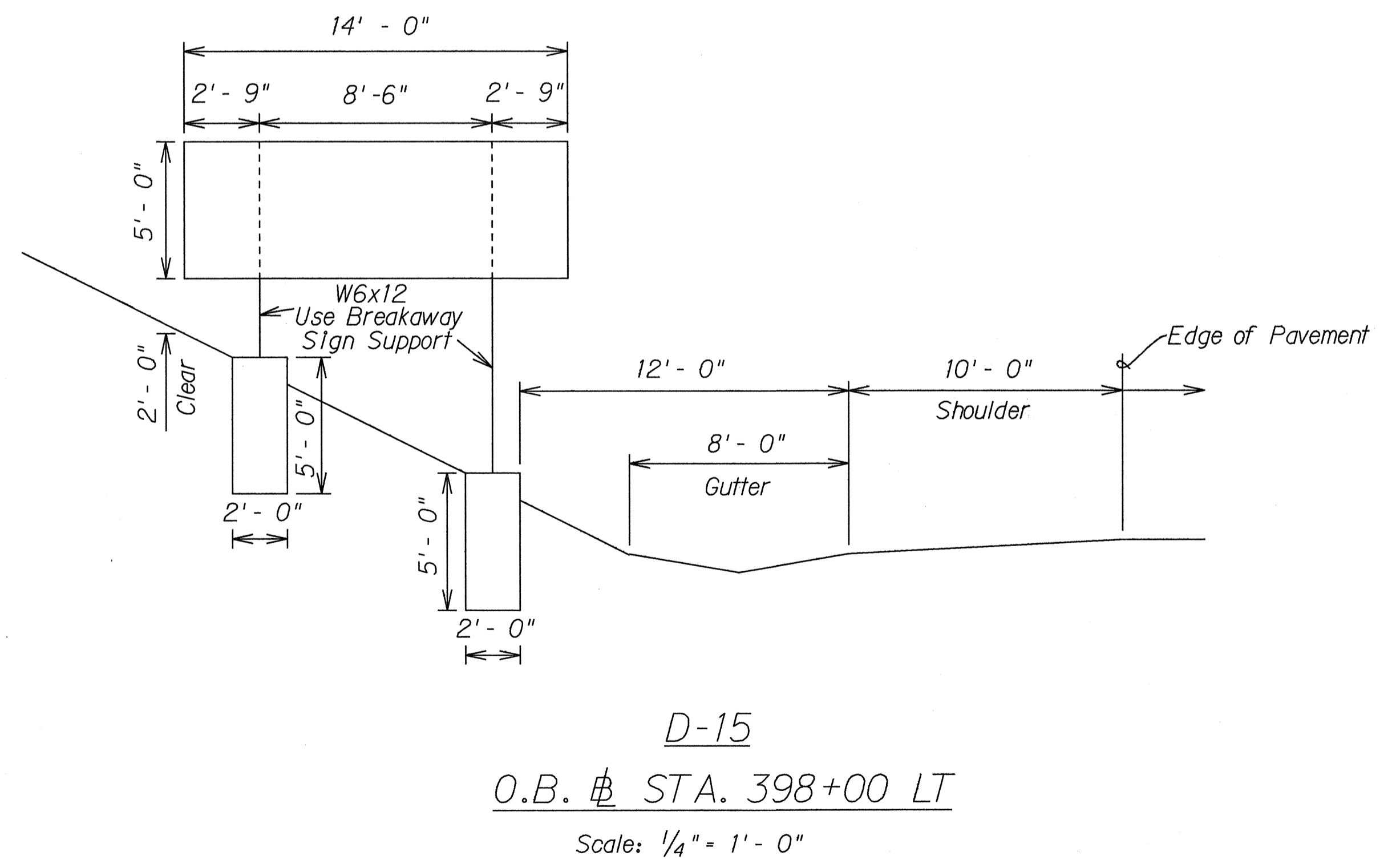
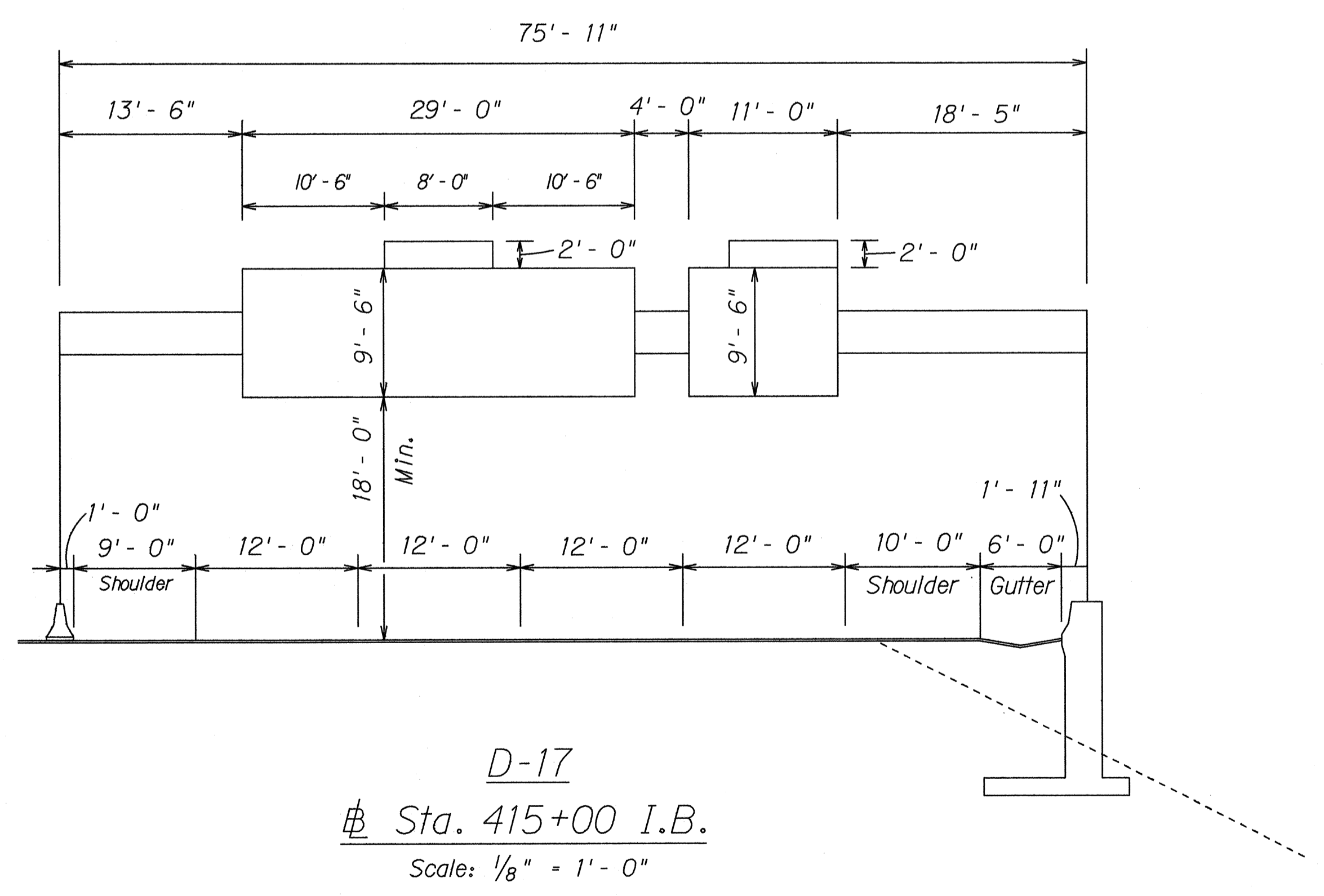
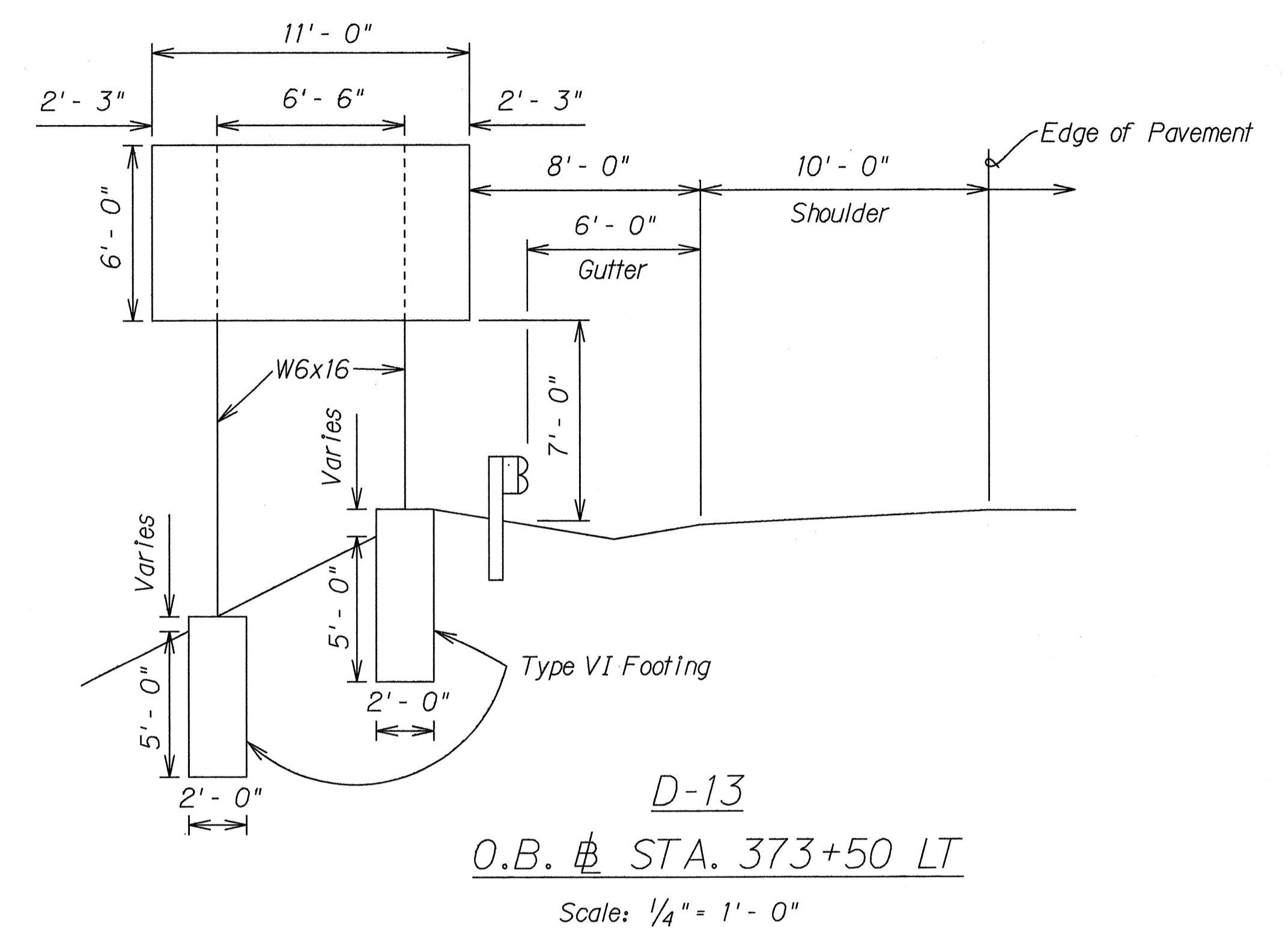
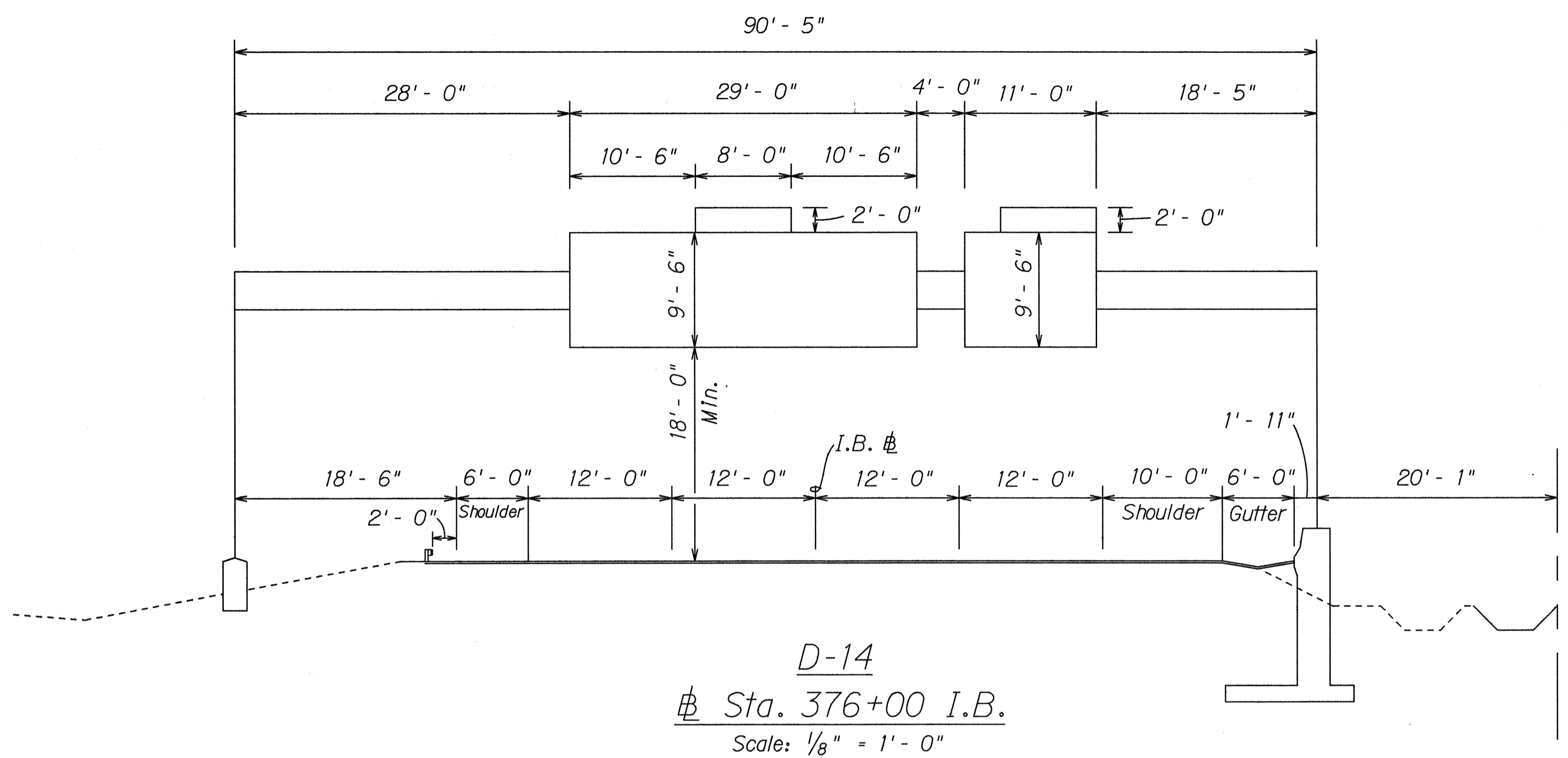
DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
CHECKED BY	
No.	







FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	79	107

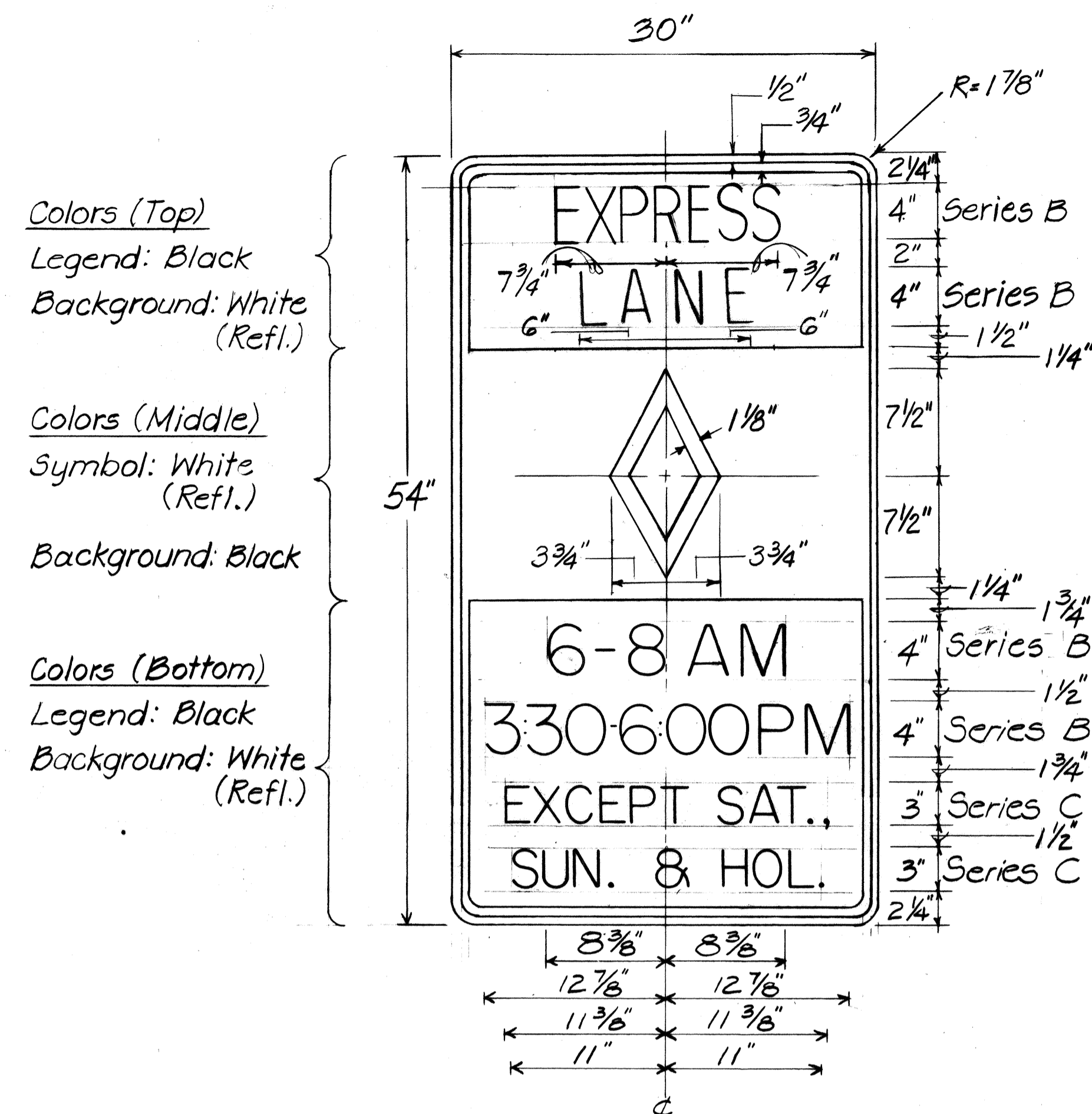


SURVEY PLOTTED BY: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 ORIGINAL PLAN: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 No. \_\_\_\_\_

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**FRAME LAYOUT**  
 INTERSTATE RTE. H-2 HOV LANES, PH. I  
 Waipio I.C. to Waipua I.C.  
 F.A.I. Project No. IR-H2-1(26)  
 Scale: As Shown Date: Sept. 1990  
 SHEET No. T14 OF 18 SHEETS

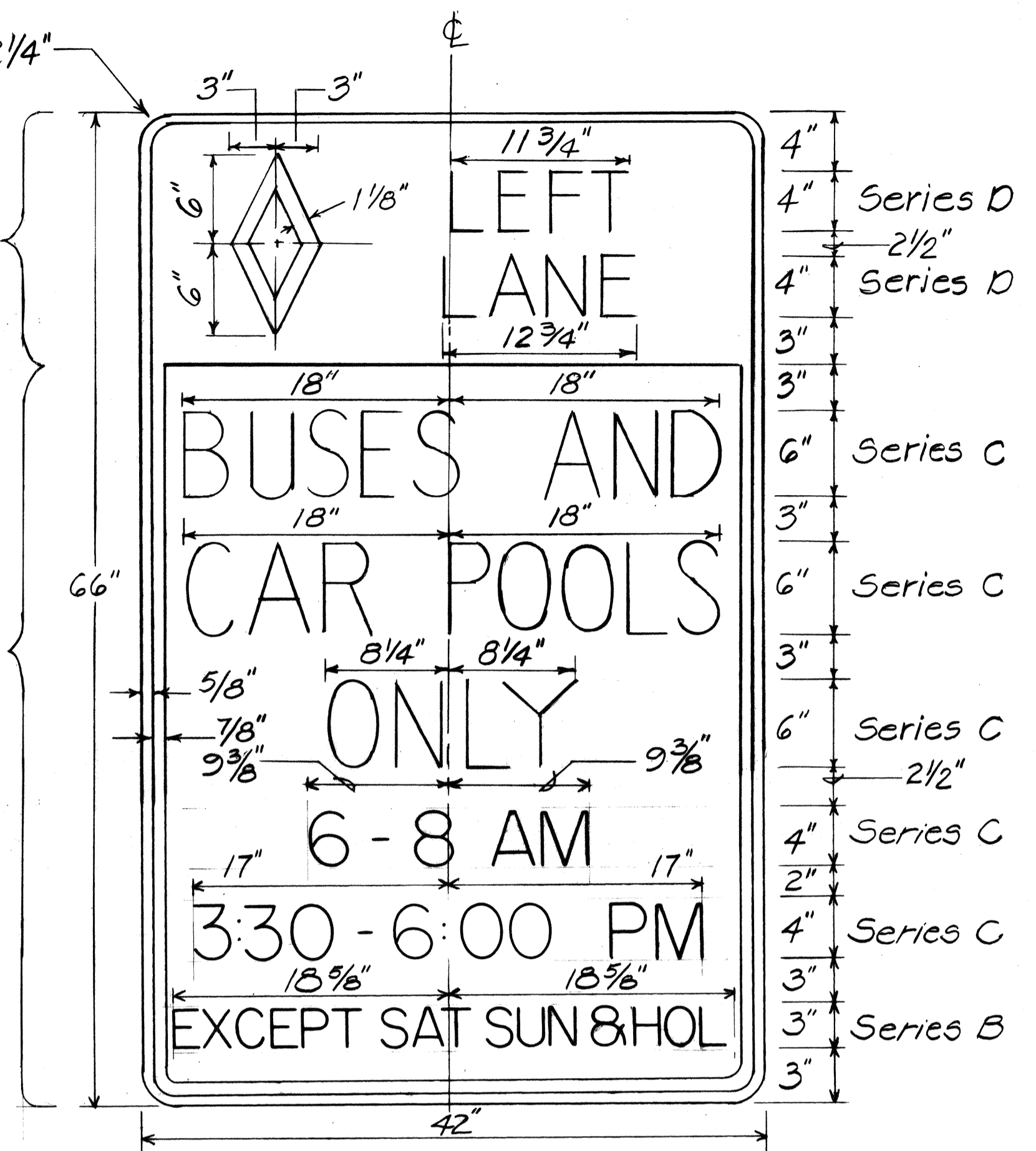


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1R-H2-1(26)	1991	81	107

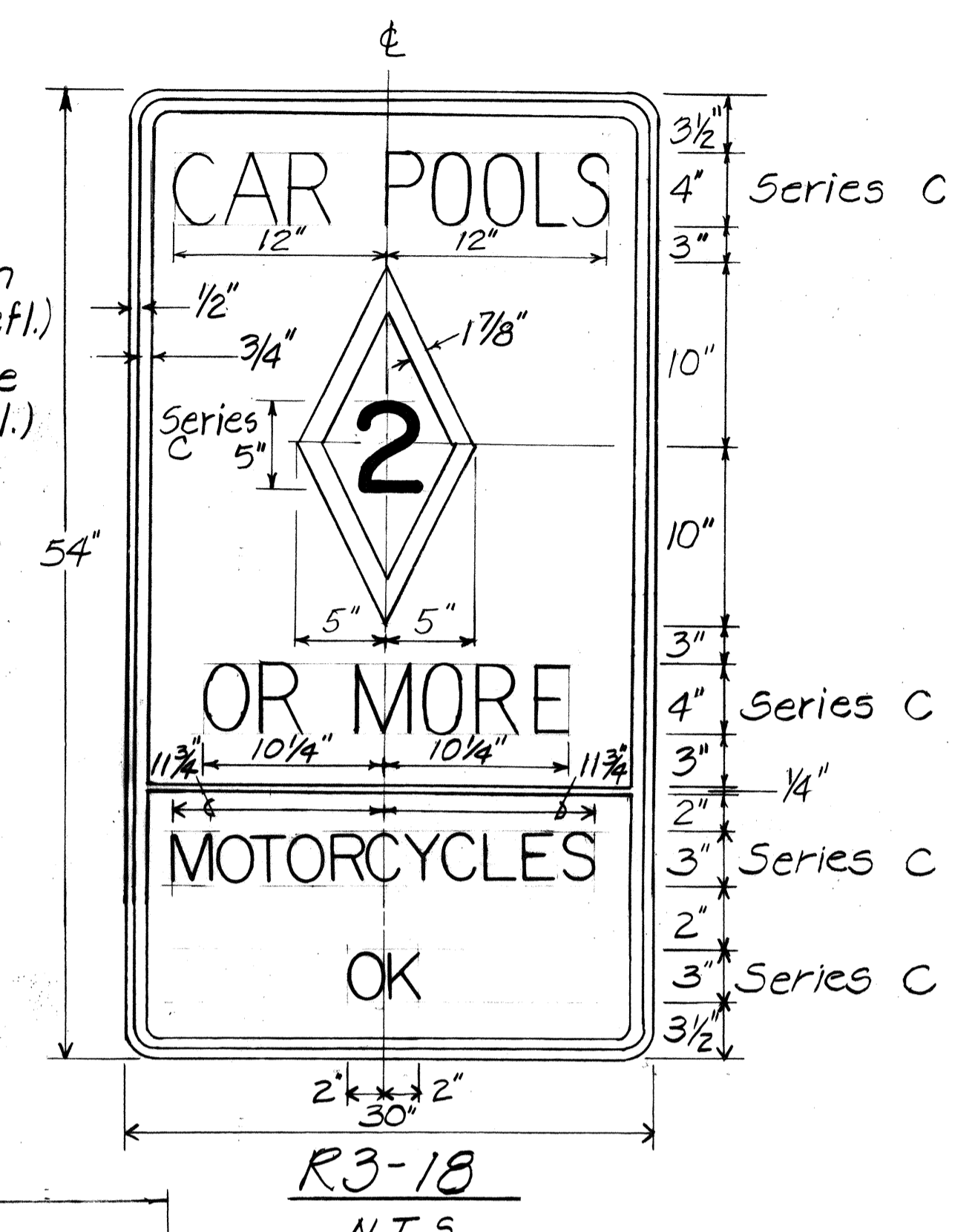


Colors (Top)  
Legend: White (Refl.)  
Symbol: White (Refl.)  
on Black  
Background: Black

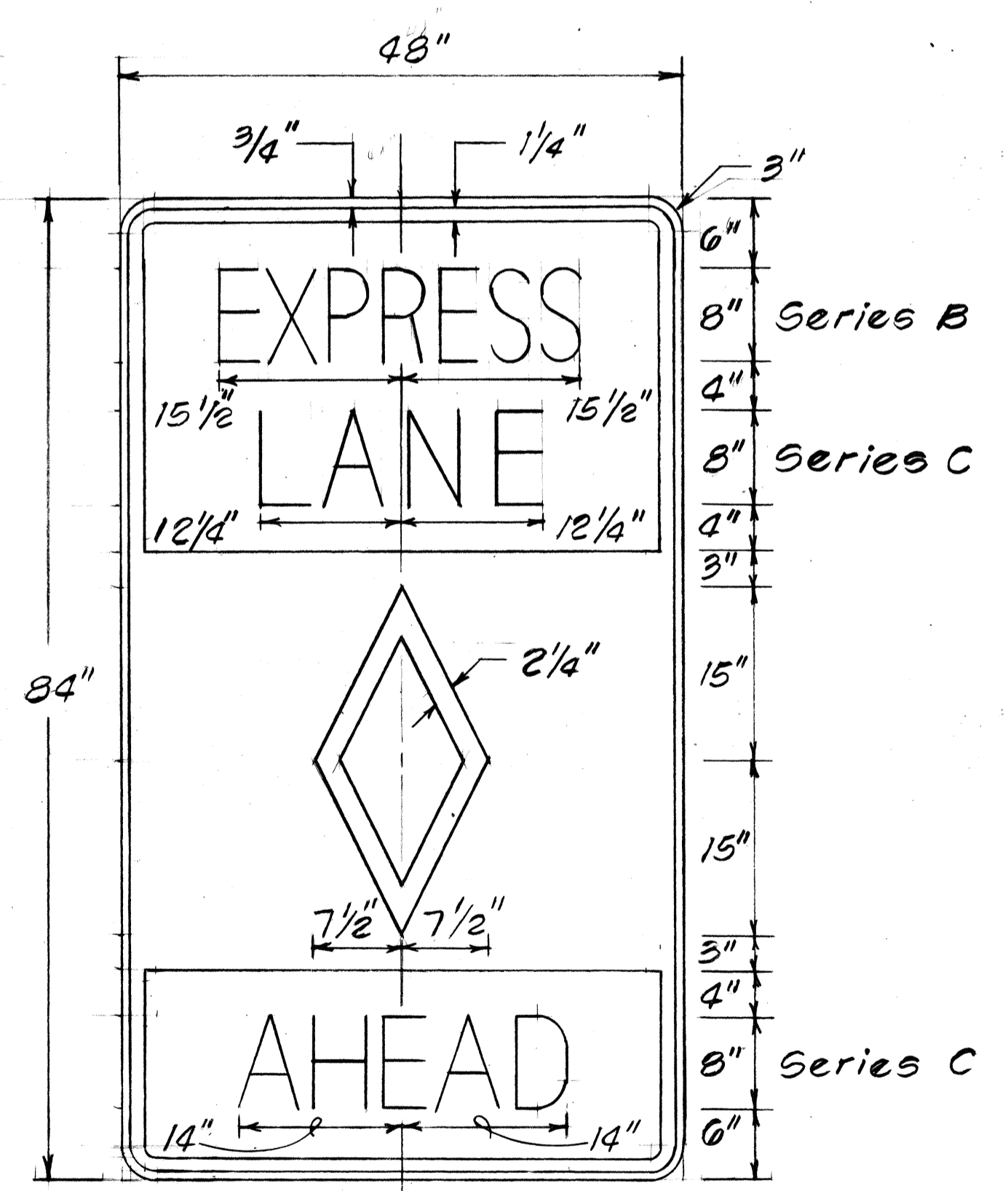
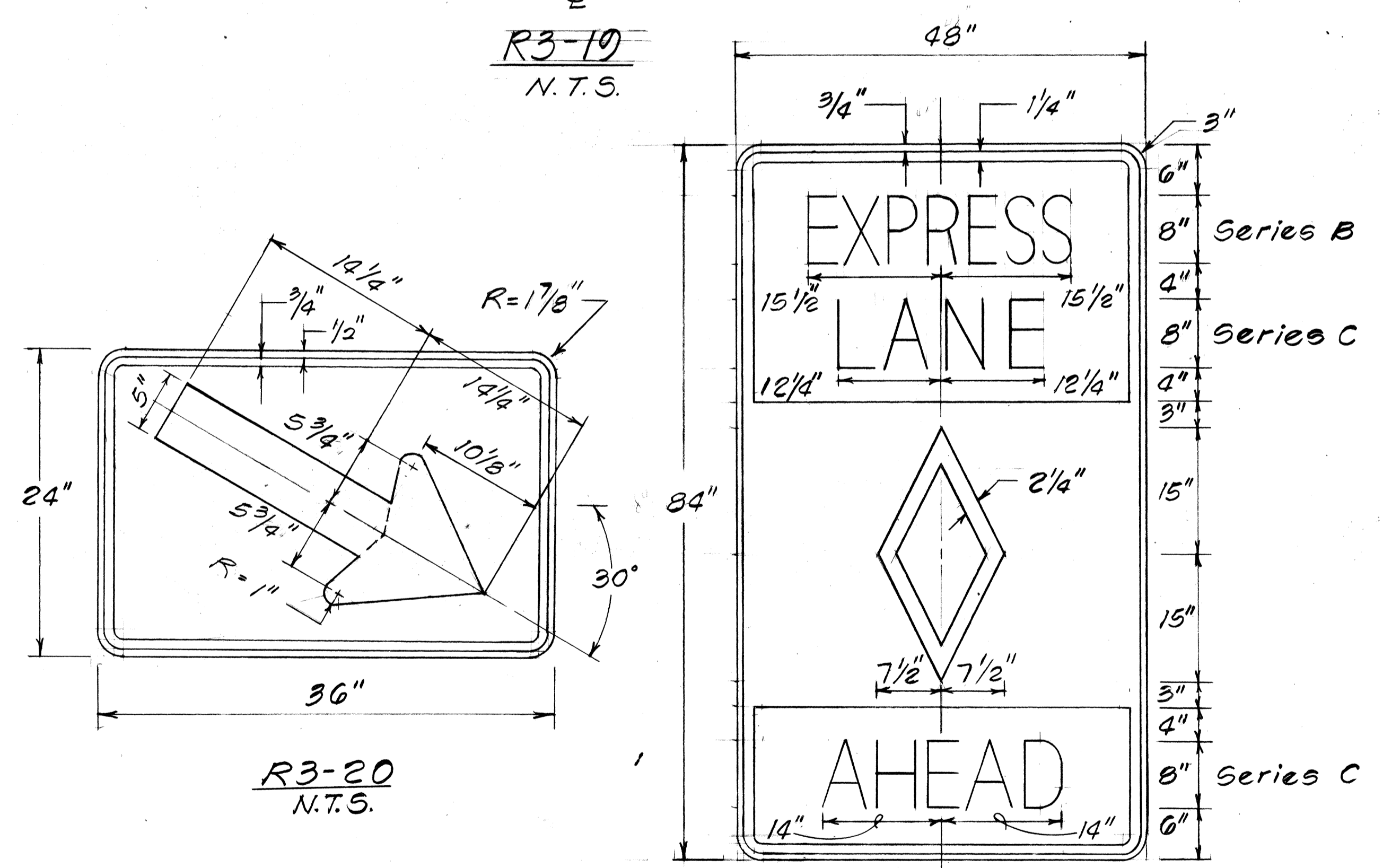
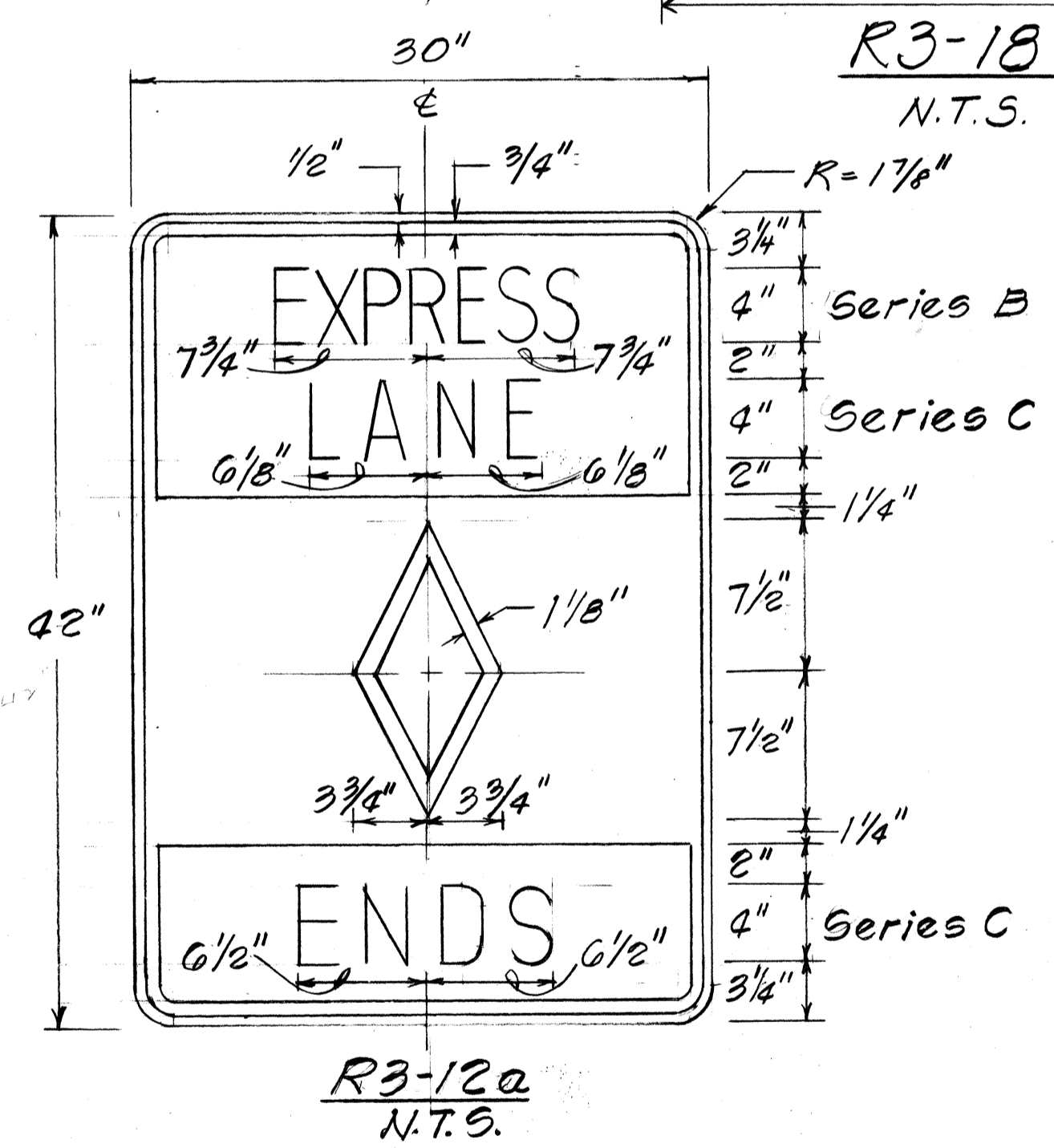
Colors (Bottom)  
Legend: Black  
Background: White (Refl.)



Colors  
Legend: Black  
Number: Black  
Symbol: Black on White (Refl.)  
Background: White (Refl.)



NOTE: For R3-10 Series Signs, Suffixes a, b, c, d, and e are as Follows:  
a - 1500 FT. b - 1000 FT.  
c - 500 FT. d - AHEAD  
e - BEGIN



DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
No.	_____

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**HOV SIGNING NOTES**  
& DETAILS  
INTERSTATE RTE H-2 HOV LANES, PHI  
Waipio I.C. to Waianae I.C.  
F.A.I. PROJ. NO. 1R-H2-1(26)  
Scale: As Shown Date: \_\_\_\_\_  
SHEET No. 716 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	82	107

### DESTINATION SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	SIZE	OVERLAY AREA (SQ. FT.)	NEW PANEL AREA (SQ. FT.)	
					W/O POST	W/POST
D-10	Ⓜ STA. 277+50 RT.	Ka Uka Blvd 1 MILE	14'-0" x 5'-0"			70.00
D-11	Ⓜ STA. 304+00 RT.	Ka Uka Blvd 1/2 MILE	14'-0" x 5'-0"			70.00
D-12	I.B. Ⓜ STA. 330+00 RT.	Ka Uka Blvd ↗	11'-0" x 6'-0"		66.00	
D-13	O.B. Ⓜ STA. 373+50 LT.	Ka Uka Blvd ↗	11'-0" x 6'-0"			66.00
D-15	O.B. Ⓜ STA. 398+00 LT.	Ka Uka Blvd 1/2 MILE	14'-0" x 5'-0"			70.00
D-18	Ⓜ STA. 421+00 LT.	Wheeler AFB 6 Schofield Bks 8	18'-0" x 6'-0"			108.00
D-19	Ⓜ STA. 425+00 LT.	Ka Uka Blvd 1 Mililani 4 Wahiawa 7	16'-0" x 8'-0"			128.00
TOTAL					66.00	512.00

### CONSTRUCTION SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	W/POST(S)	W/O POST
CG20-2	Ⓜ STA. 349+00 LT.	END CONSTRUCTION	1	
CW20-1d	Ⓜ STA. 349+00 RT.	ROAD CONSTRUCTION AHEAD	1	
CG20-2	I.B. Ⓜ STA. 452+00 LT.	END CONSTRUCTION	1	
CG20-2	H2-I STA. 508+00 LT.	END CONSTRUCTION	1	
CW20-1d	O.B. Ⓜ STA. 456+00 LT.	ROAD CONSTRUCTION AHEAD	1	
CW20-1d	H2-O STA. 508+00 LT.	ROAD CONSTRUCTION AHEAD	1	
TOTAL			6	

### PAVEMENT MARKING SUMMARY

DESCRIPTION	QUANTITY
<b>PAVEMENT MARKERS</b>	
TYPE A .....	4,600 EA.
TYPE CL .....	1,820 EA.
TYPE DL .....	
TYPE HL .....	380 EA.
TYPE J .....	
<b>TAPE - TYPE I OR THERMOPLASTIC EXTRUSION</b>	
4-INCH PAVEMENT STRIPE (WHITE) .....	885 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) .....	
8-INCH PAVEMENT STRIPE (WHITE) .....	2,925 L.F.
12-INCH PAVEMENT STRIPE (WHITE) .....	
12-INCH PAVEMENT STRIPE (YELLOW) .....	
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) .....	
PAVEMENT ARROW .....	4 EA.
PAVEMENT DIAMOND .....	15 EA.
<b>TAPE - TYPE II OR THERMOPLASTIC EXTRUSION</b>	
4-INCH PAVEMENT STRIPE (WHITE) .....	15,975 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) .....	16,305 L.F.
8-INCH PAVEMENT STRIPE (WHITE) .....	2,750 L.F.
12-INCH PAVEMENT STRIPE (WHITE) .....	1,595 L.F.
12-INCH PAVEMENT STRIPE (YELLOW) .....	
<b>THERMOPLASTIC EXTRUSION</b>	
4-INCH PAVEMENT STRIPE (WHITE) .....	265 L.F.
8-INCH PAVEMENT STRIPE (WHITE) .....	
12-INCH PAVEMENT STRIPE (WHITE) .....	
CROSSWALK MARKINGS .....	

### 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
W4-3-A	Ⓜ			2	
R2-1(55)-A	SPEED LIMIT 55			3	
R4-3-A	SLOWER TRAFFIC KEEP RIGHT			1	
TOTAL				6	

### MILEPOST MARKER SUMMARY

M.P. NO.	LOCATION	QUANTITY	
		W/POST	W/O POST
2	O.B. Ⓜ STA. 376+70 ± LT. & RT.	2	
2	I.B. Ⓜ STA. 376+70 ± LT. & RT.	2	
2	Ⓜ STA. 430+25 ± LT. & RT.	2	
TOTAL		6	

SURVEY PLOTTED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 DESIGNED BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 ORIGINAL PLAN \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 QUANTITIES BY \_\_\_\_\_  
 No. \_\_\_\_\_

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

### MISCELLANEOUS SUMMARIES

INTERSTATE RTE. H-2 HOV LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Project No. IR-H2-1(26)

Date: September 1990

SHEET No. T17 OF 18 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H2-1(26)	1991	83	107

**EXPRESS LANE SIGN SUMMARY**

SIGN NO.	LOCATION	QUANTITY					
		10 SQ. FT. OR LESS			GREATER THAN 10 SQ. FT.		
		W/POST	W/O POST	OTHERS	W/POST	W/O POST	OTHERS*
R3-10d	I.B. $\frac{1}{2}$ STA. 357+00 LT.						1
R3-10b	I.B. $\frac{1}{2}$ STA. 366+75 LT.				1		
R3-12a	O.B. $\frac{1}{2}$ STA. 368+00 RT.	1					
R3-10c	I.B. $\frac{1}{2}$ STA. 371+00 LT.				1		
R3-10e	I.B. $\frac{1}{2}$ STA. 375+90 LT.				1		
R3-11a	O.B. $\frac{1}{2}$ STA. 376+00 RT.				1		
R3-18	O.B. $\frac{1}{2}$ STA. 382+00 RT.				1		
R3-11a	I.B. $\frac{1}{2}$ STA. 382+00 LT.				1		
R3-18	I.B. $\frac{1}{2}$ STA. 389+50 LT.				1		
R3-19	O.B. $\frac{1}{2}$ STA. 390+00 RT.				1		
R3-18	O.B. $\frac{1}{2}$ STA. 398+00 RT.				1		
R3-19	I.B. $\frac{1}{2}$ STA. 398+00 LT.				1		
R3-18	O.B. $\frac{1}{2}$ STA. 406+00						1
R3-11a	O.B. $\frac{1}{2}$ STA. 406+00					1	
R3-11a & R3-18	$\frac{1}{2}$ STA. 414+00						1
R3-18 & R3-19	$\frac{1}{2}$ STA. 421+00					1	
R3-19 & R3-18	$\frac{1}{2}$ STA. 426+00					1	
R3-18 & R3-11a	$\frac{1}{2}$ STA. 436+00					1	
R3-10e & R3-20	O.B. $\frac{1}{2}$ STA. 440+20 RT.		1				1
R3-11a	I.B. $\frac{1}{2}$ STA. 441+50 LT.					1	
R3-10c & R3-20	O.B. $\frac{1}{2}$ STA. 445+00 RT.		1				1
R3-10b & R3-20	O.B. $\frac{1}{2}$ STA. 450+00 RT.		1		1		
R3-10d	RAMP H2-0 $\frac{1}{2}$ STA. 508+40 LT.					1	
R3-10d	O.B. $\frac{1}{2}$ STA. 457+00 RT.					1	
<b>TOTAL</b>		<b>1</b>	<b>3</b>		<b>11</b>	<b>11</b>	<b>5</b>

\* Concrete Barrier

ORIGINAL PLAN	DATE
HEAVY PLOTTED BY	
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
NO.	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**HOV SIGN SUMMARY**

INTERSTATE RTE. H-2 HOV LANES, PH. I  
Waipio I.C. to Waiawa I.C.  
F.A.I. Project No. IR-H2-1(26)

Date: September 1990