

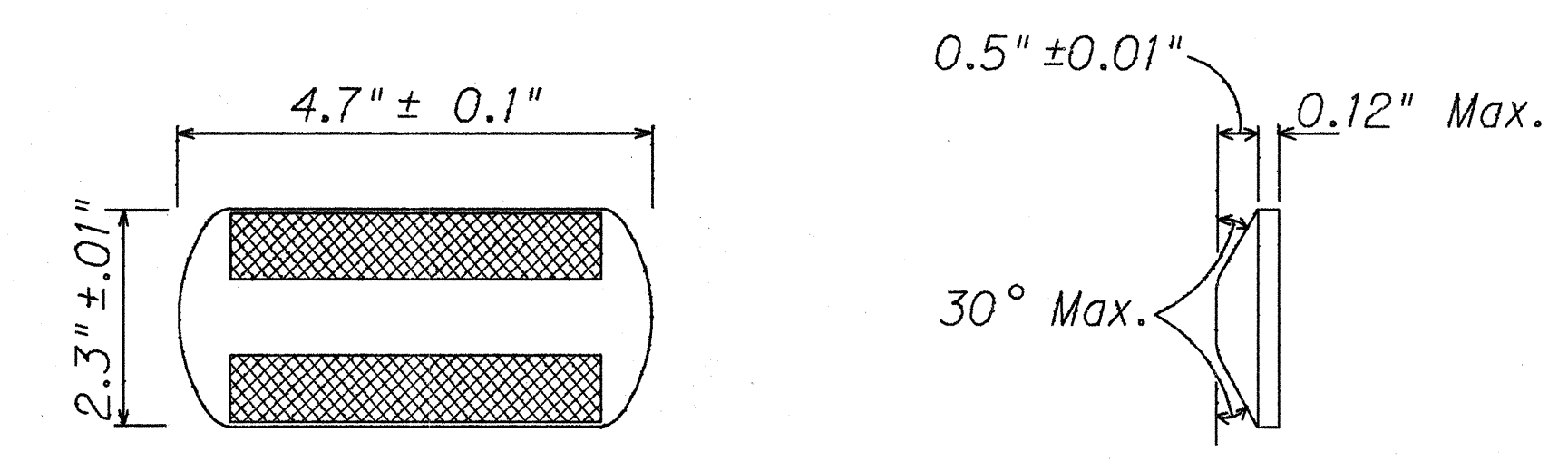
FED. ROAD DIST. NO.	STATE	FED-ND PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-90M	1990	16	34

**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 at 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)
- New 6'x6' Loop Detector Centered in Lane
- Existing Traffic Signal Pullbox

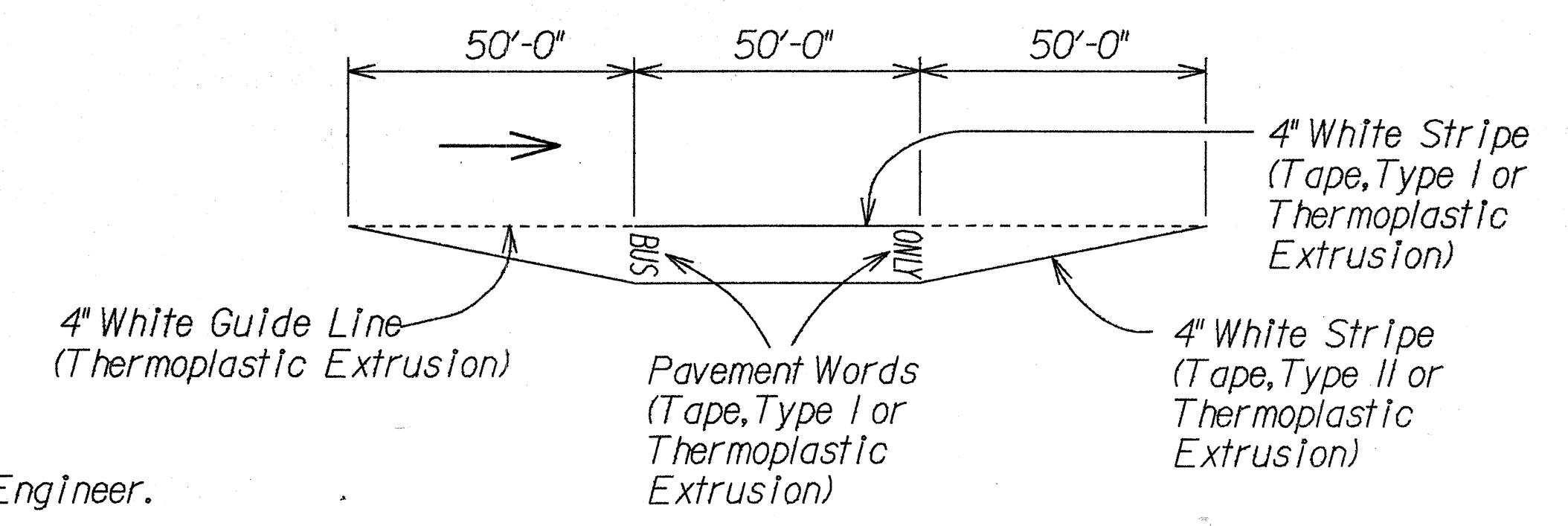
**NOTES**

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 this sheet. 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. 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.
7. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
8. All pavement striping shall be as noted on the Legend or plans.
9. 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.
10. 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.
11. The Contractor shall notify the Traffic Signal Branch, Dept. of Transportation Services, City & County of Honolulu, 2 weeks prior to commencing any work on the loop detector work.
12. Dept. of Transportation Services, City & County of Honolulu, will assist the Engineer in construction inspection for the loop detector work.
13. The exact locations of the new loop detectors shall be determined in the field by the Engineer.
14. Removal and disposal of existing bituminous curb as designated on the plans, will not be paid for separately but shall be considered incidental to Bituminous Curb.

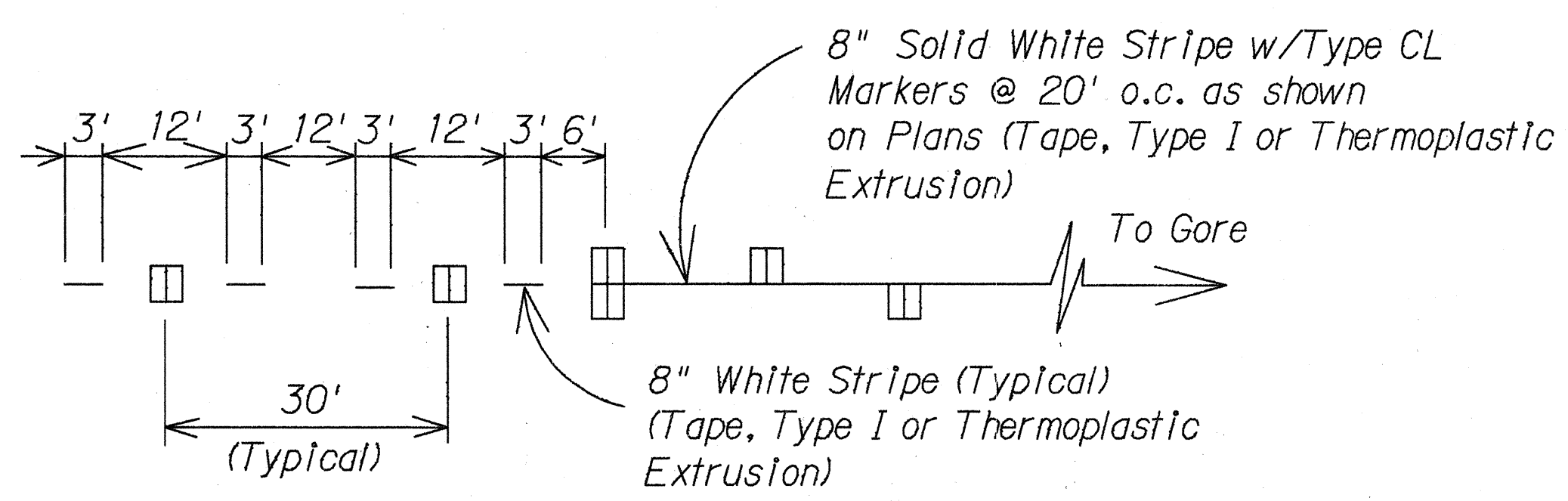


TYPE CL  
Red-Clear Reflective Marker  
or  
TYPE DL  
Two-Way Yellow Reflective Marker  
or  
TYPE HL  
One-Way Yellow Reflective Marker

**RAISED PAVEMENT MARKER DETAILS**  
Not to Scale



**TYPICAL BUS BAY STRIPING**  
Not to Scale



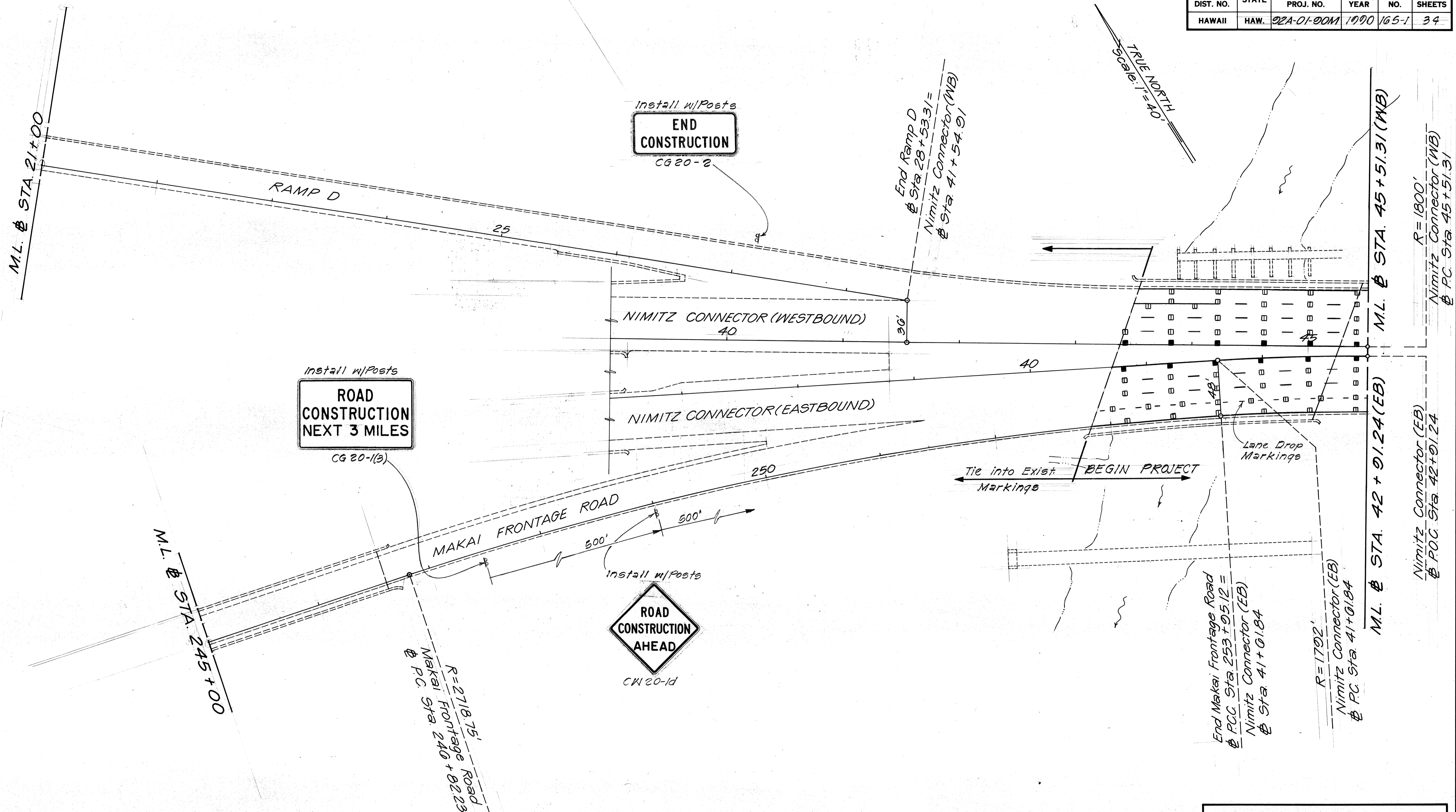
**LANE DROP MARKING**  
Not to Scale

Bike Lane Marking (See Detail on Sht. T14)

SURVEY PLOTTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 TRACED BY: \_\_\_\_\_  
 NOTE BOOK DESIGNED BY: \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**PAVEMENT MARKING**  
**LEGEND, DETAILS & NOTES**  
 NIMITZ HIGHWAY RESURFACING  
 SAND ISLAND ACCESS RD TO KEAWE ST  
 PROJECT NO. 92A-01-90M  
 Scale: As Shown Date: May, 1990  
 SHEET No. 11 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1990	165-1	34



SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

DATE	REVISION
10/11/90	Added sheet to accommodate increased scope of work.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**

NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd. to Keawe St.  
PROJECT No. 02A-01-00M

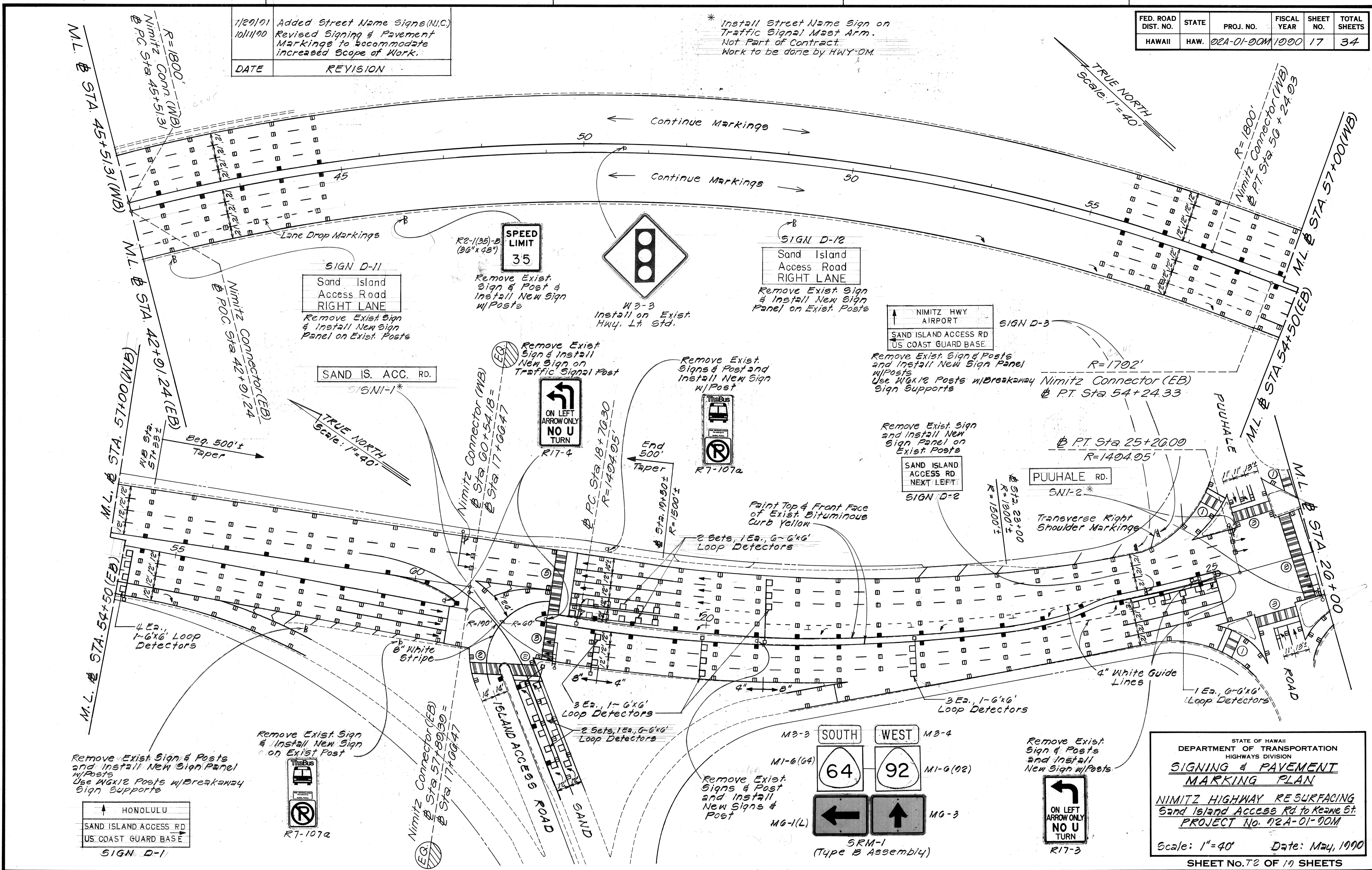
Scale: 1" = 40'      Date: May, 1990

SHEET No. 71-A OF 10 SHEETS

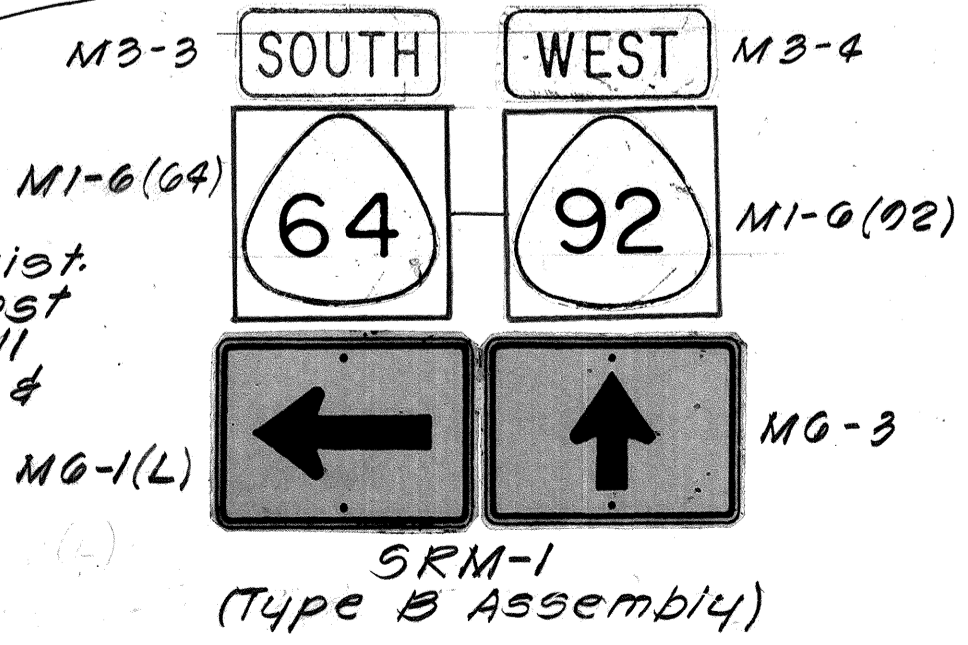
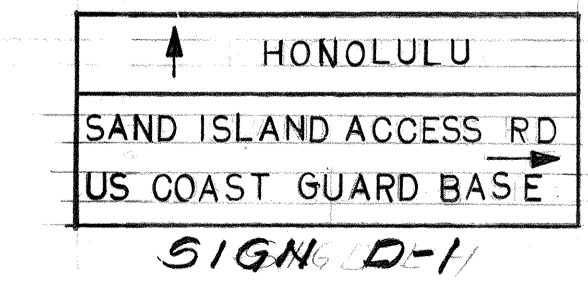
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1990	17	34

DATE	REVISION
1/20/91	Added Street Name Signs (N.I.C.)
10/11/90	Revised Signing & Pavement Markings to accommodate increased Scope of Work.

\* Install Street Name Sign on Traffic Signal Mast Arm.  
Not Part of Contract.  
Work to be done by HWY-0M.



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



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**

NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd to Keane St.  
PROJECT No. 02A-01-00M

Scale: 1"=40' Date: May, 1990

SHEET No. 17 OF 19 SHEETS

ORIGINAL PLAN	DATE
TRACED BY	
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
No.	

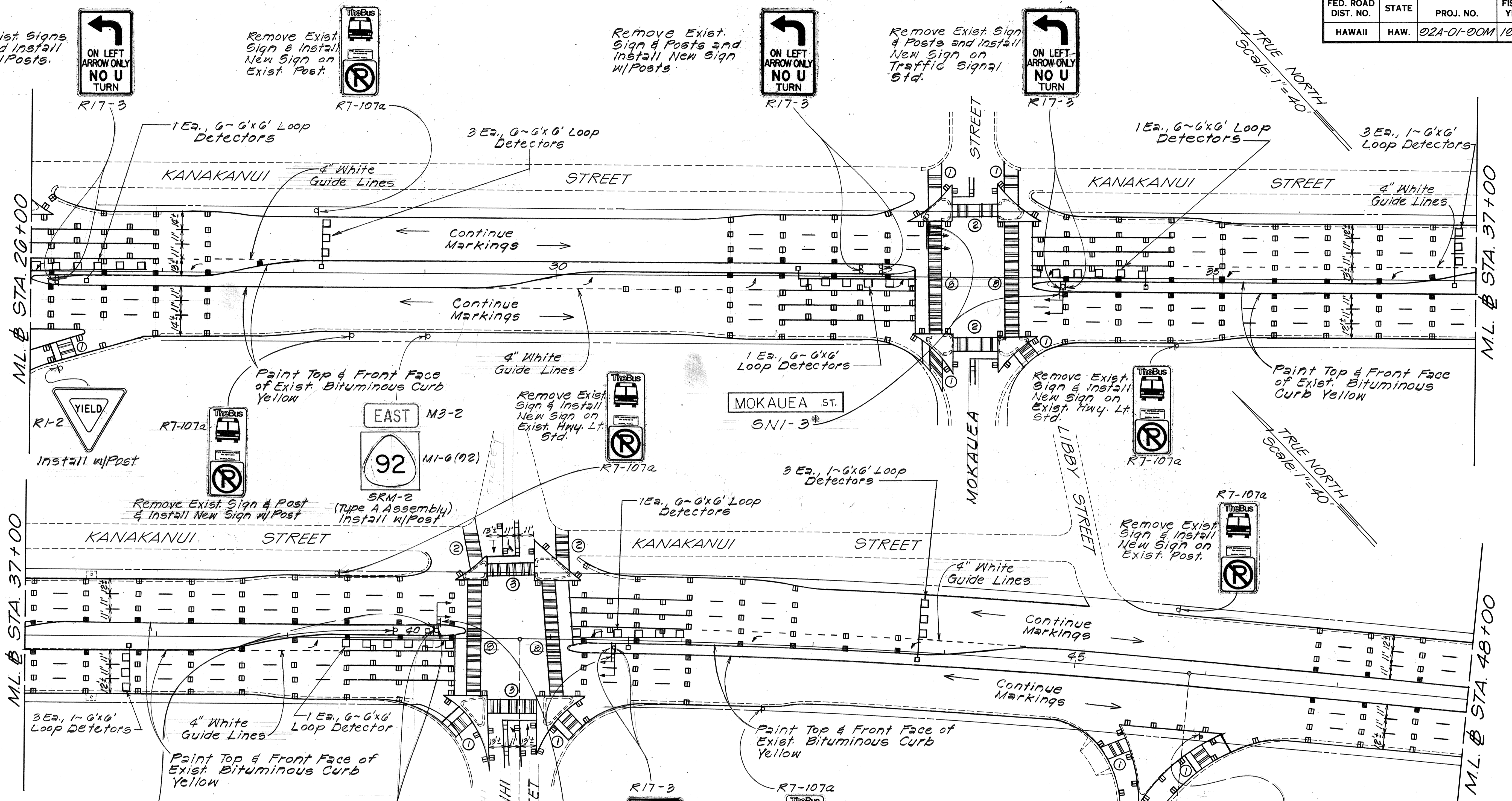
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1990	18	34

Remove Exist Signs & Posts and Install New Sign w/Posts.

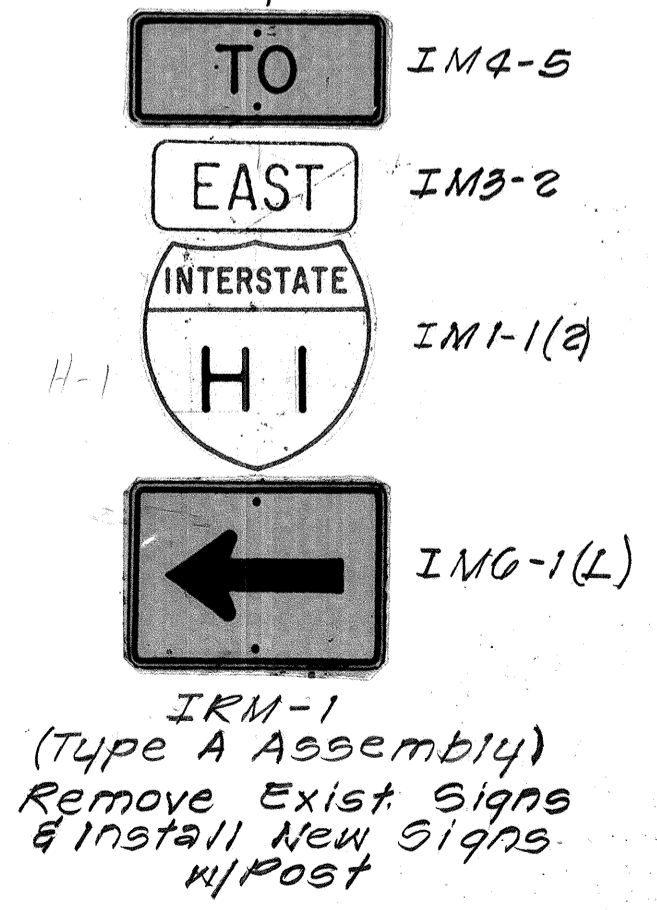
Remove Exist Sign & Install New Sign on Exist Post.

Remove Exist Sign & Posts and Install New Sign w/Posts.

Remove Exist Sign & Posts and Install New Sign on Traffic Signal Std.



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



Remove Exist Sign & Posts and Install New Sign on Exist Traffic Signal Std.

Remove Exist Sign & Posts and Install New Sign on Traffic Signal Std.

Remove Exist Sign & Install New Sign on Exist Hwy. Lt. Std.

Remove Exist Signs & Post

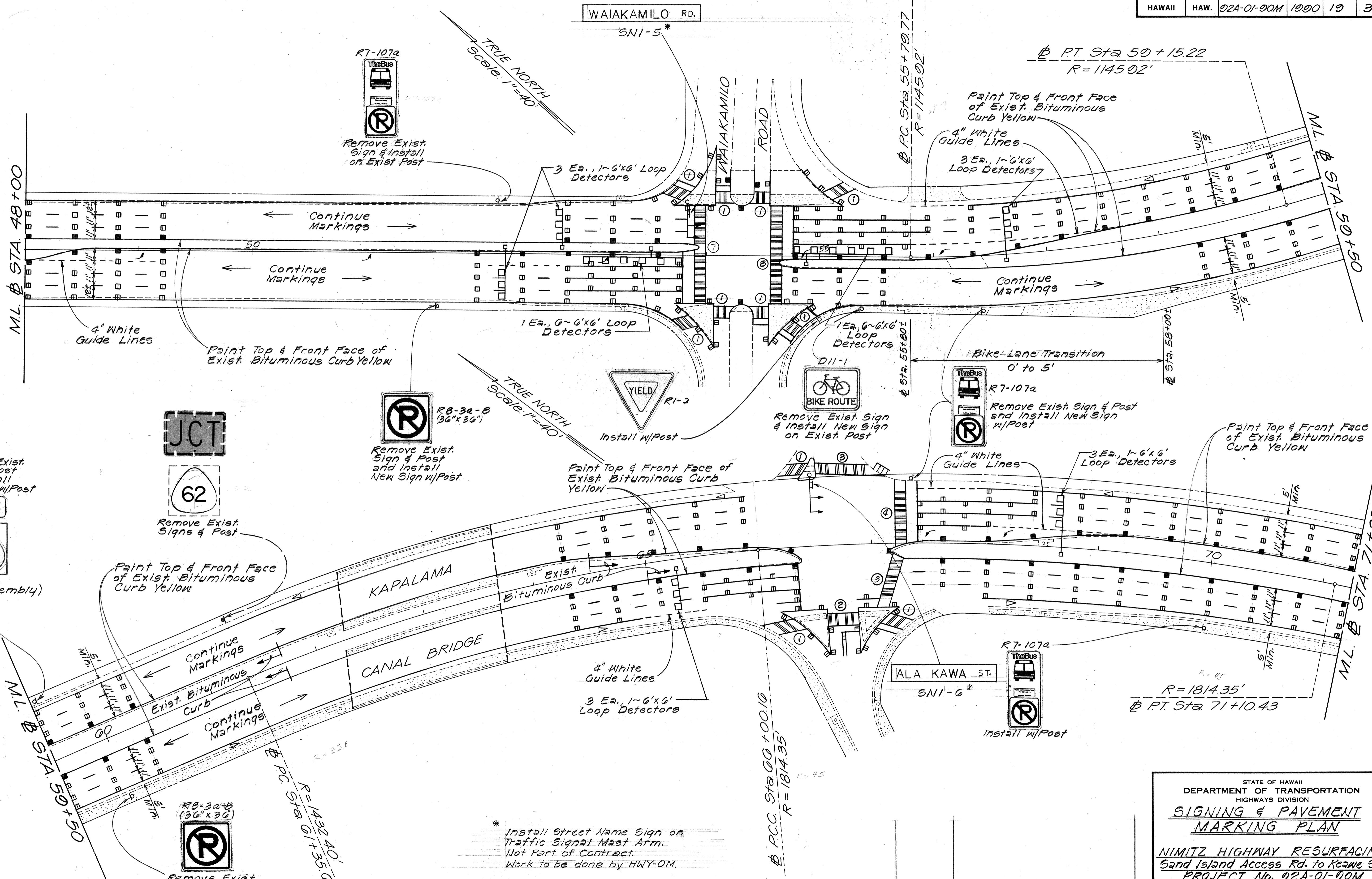
DATE	REVISION
1/29/91	Added Street Name Sign (N.I.C.)

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**SIGNING & PAYEMENT MARKING PLAN**  
NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd. to Keawe St.  
PROJECT No. 02A-01-00M

\* Install Street Name Sign on Traffic Signal Mast Arm.  
Not Part of Contract.  
Work to be done by HWY-OM.

Scale: 1"=40' Date: May, 1990  
SHEET No. 18 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1990	19	34



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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**

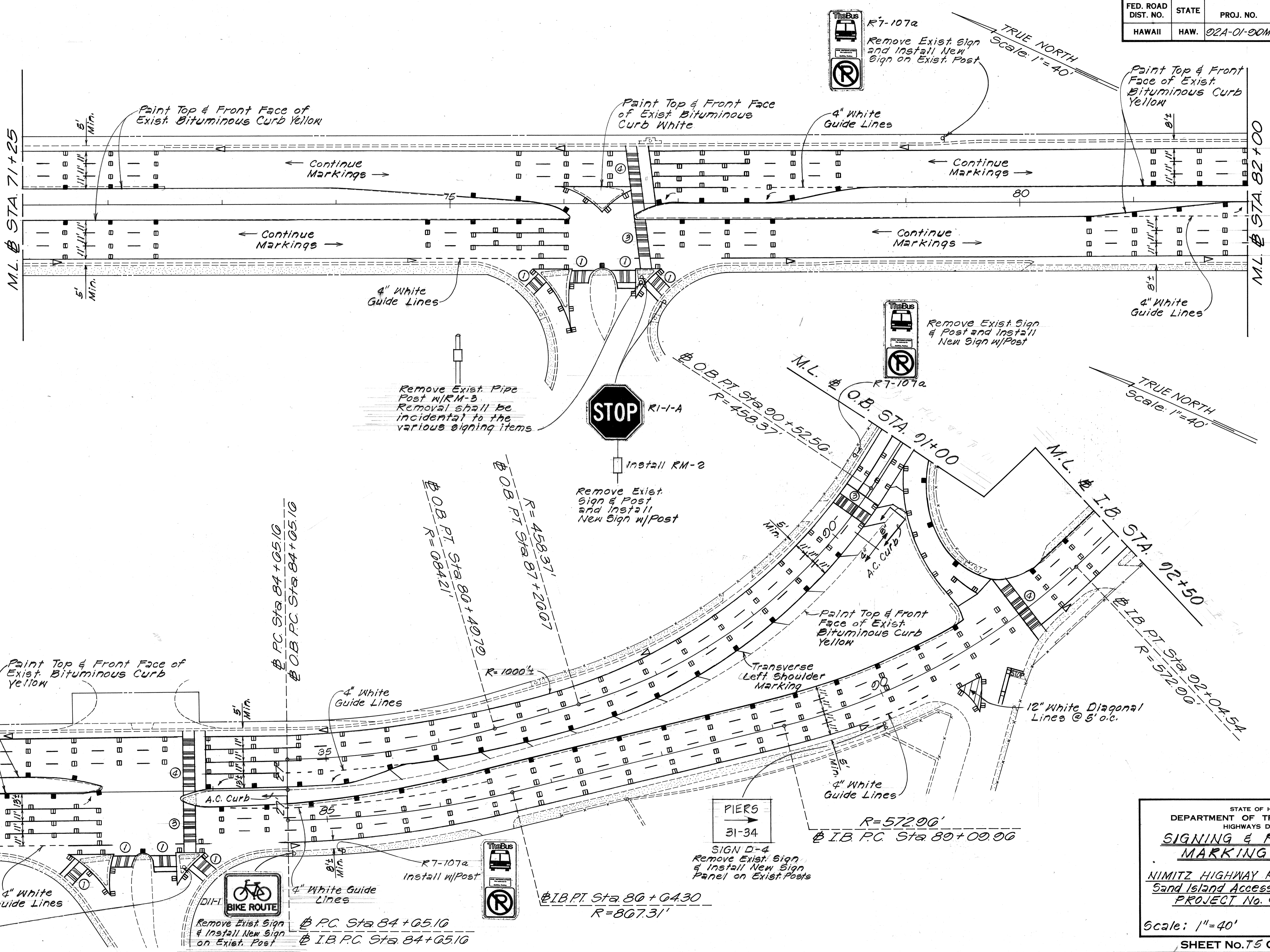
NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd. to Keawe St.  
PROJECT No. 02A-01-00M

Scale: 1"=40'      Date: May, 1990

SHEET No. 74 OF 19 SHEETS

DATE	REVISION
1/29/01	Added Street Name Signs(NIC)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1000	20	34



R7-107a  
 Remove Exist. Sign and Install New Sign on Exist. Post

R7-107a  
 Remove Exist. Sign & Post and Install New Sign w/Post

RI-1-A  
 Install RM-2  
 Remove Exist. Sign & Post and Install New Sign w/Post

RI-1-A  
 Install RM-2  
 Remove Exist. Sign & Post and Install New Sign w/Post

R7-107a  
 Install w/Post

PIERS  
 31-34  
 SIGN D-4  
 Remove Exist. Sign & Install New Sign Panel on Exist. Posts

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
NO.	_____

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

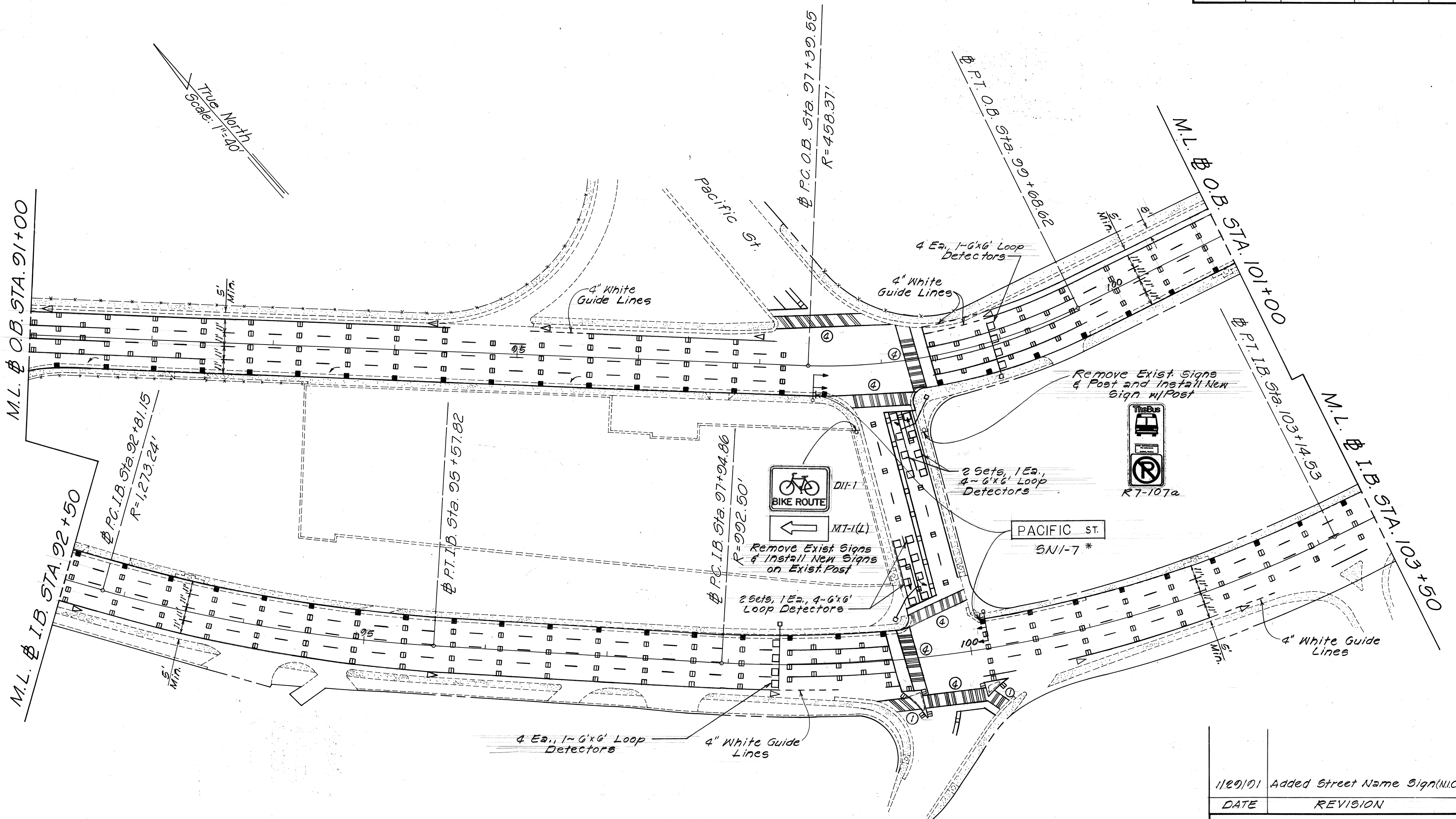
**SIGNING & PAYEMENT  
 MARKING PLAN**

NIMITZ HIGHWAY RESURFACING  
 Sand Island Access Rd. to Keawe St.  
 PROJECT No. 02A-01-00M

Scale: 1"=40'      Date: May, 1990

SHEET No. 75 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-90M	1990	21	34



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

\* Install Street Name Sign on Traffic Signal Mast Arm.  
Not Part of Contract.  
Work to be done by HWY-OM.

11/29/91	Added Street Name Sign(NIC.)
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAYEMENT  
MARKING PLAN**

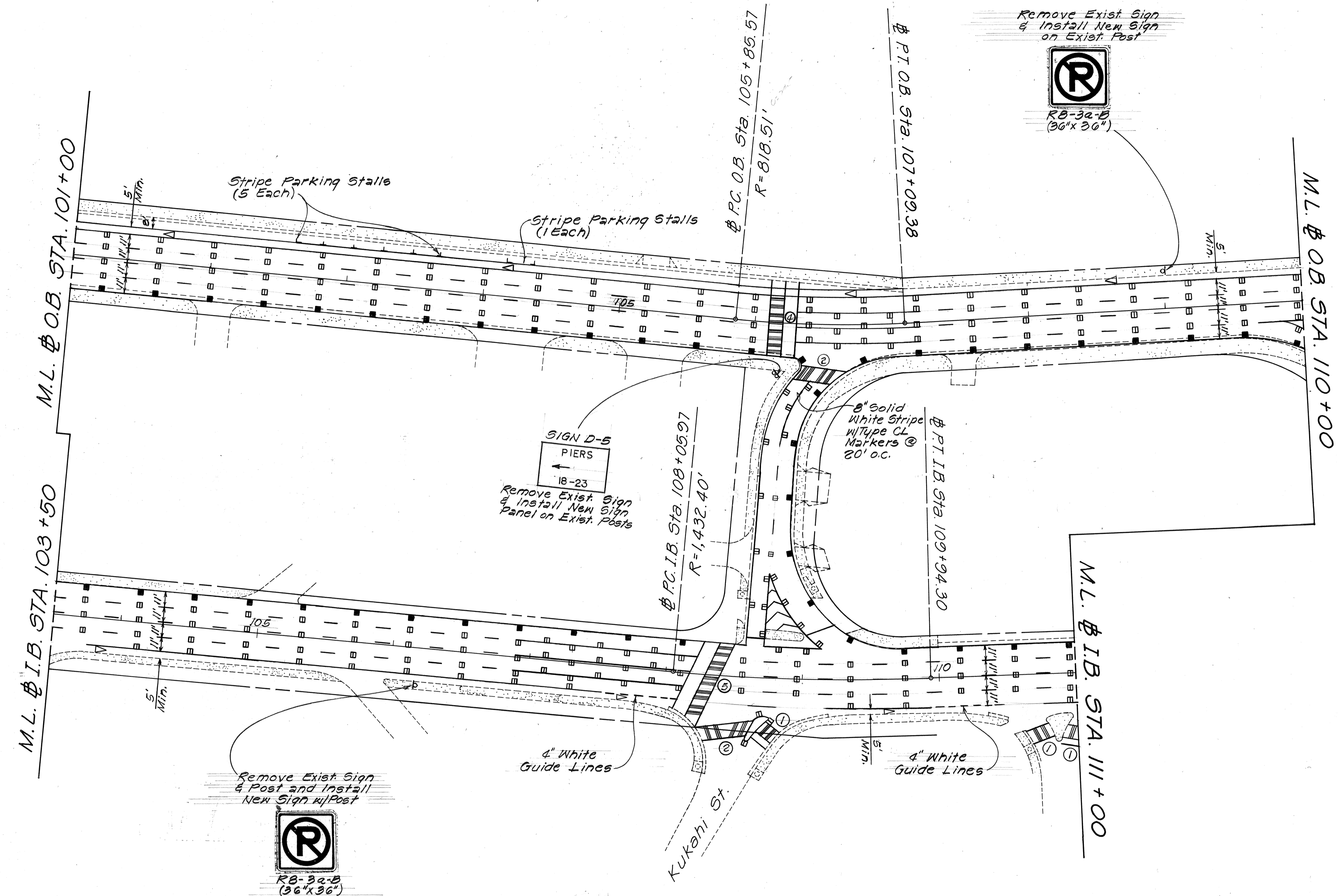
NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd. to Keawe St.  
PROJECT No. 02A-01-90M

Scale: 1"=40'      Date: May, 1990

SHEET No. 26 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1990	22	34

True North  
Scale: 1"=40'



DESIGNED BY	DATE
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

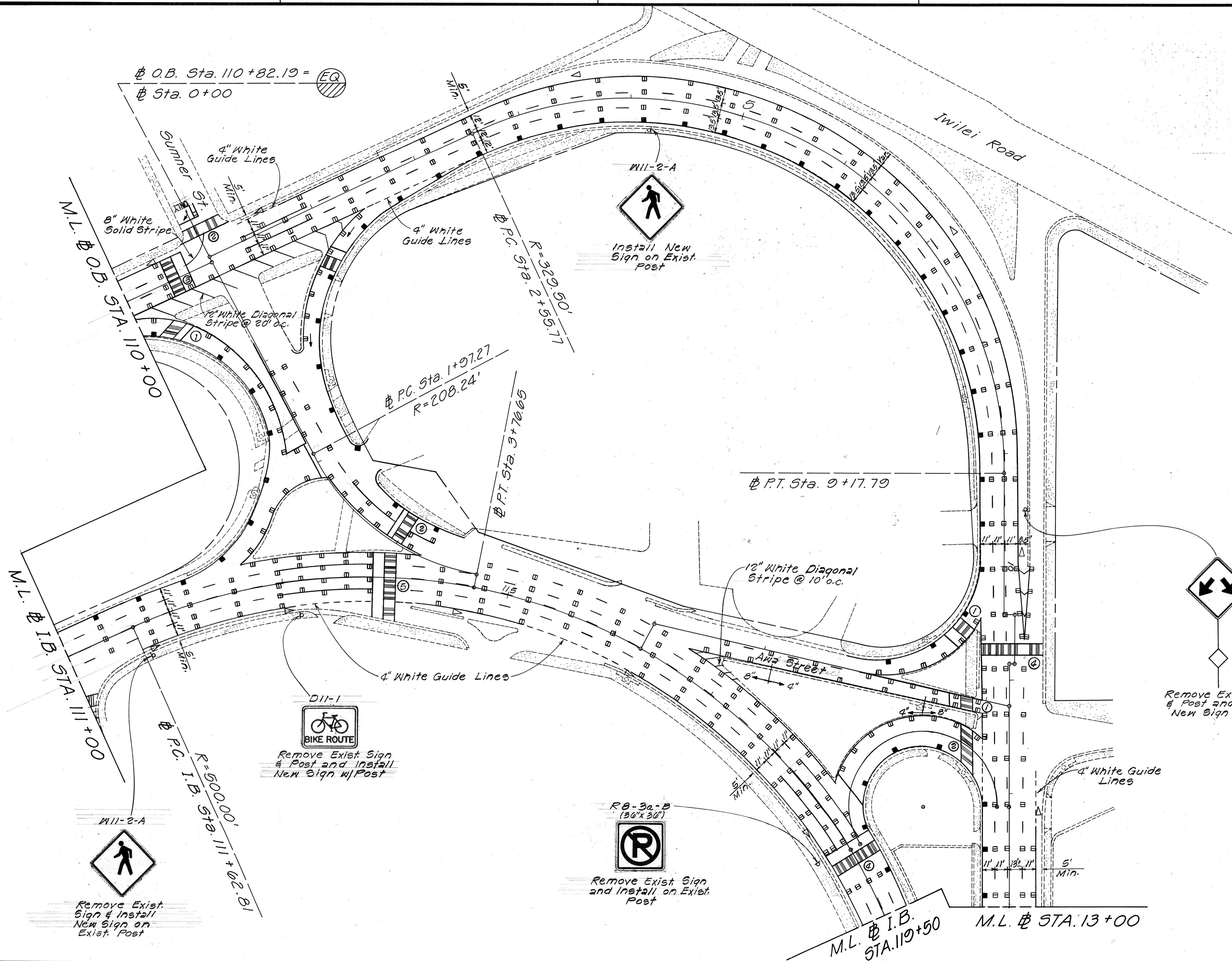
**SIGNING & PAYEMENT  
MARKING PLAN**

NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd. to Keawe St.  
PROJECT No. 02A-01-00M

Scale: 1"=40'      Date: May, 1990

SHEET No. 77 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1990	23	34



True North  
Scale: 1"=40'

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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**

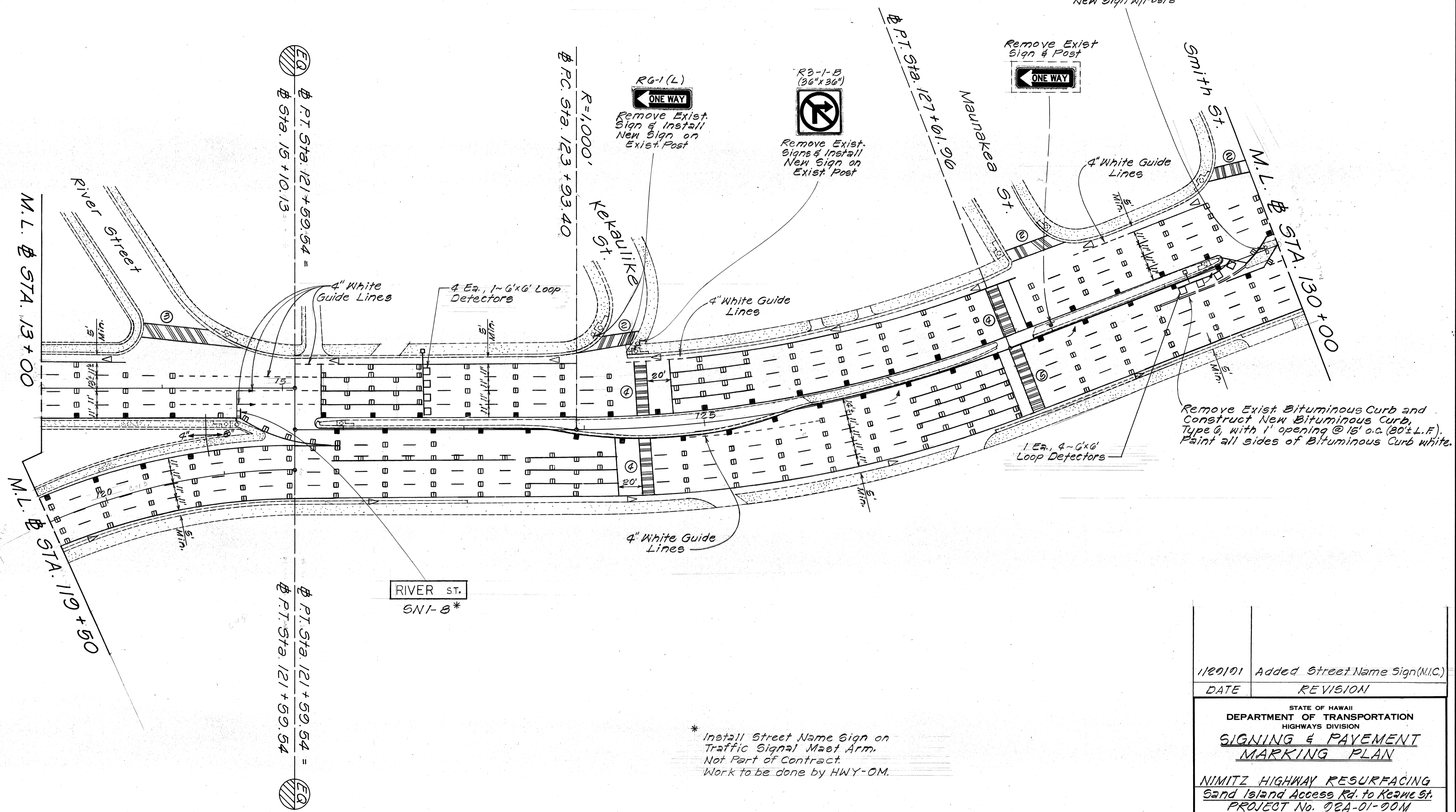
NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd. to Keawe St.  
PROJECT No. 02A-01-00M

Scale: 1"=40'    Date: May, 1990

SHEET No. 23 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1990	24	34

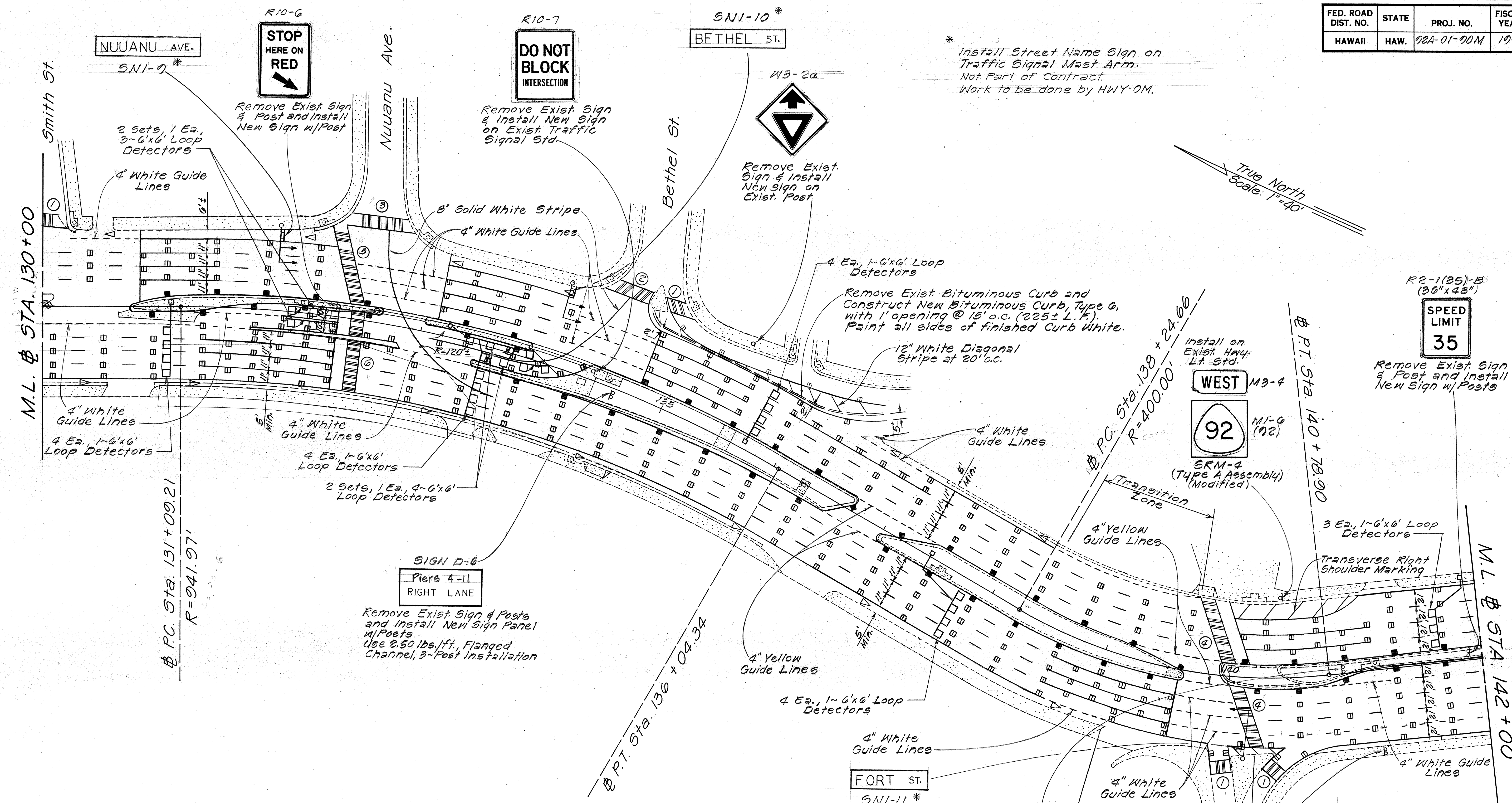
True North  
Scale: 1"=40'



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

1120101	Added Street Name Sign (N.I.C.)
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>SIGNING &amp; PAYEMENT MARKING PLAN</b>	
NIMITZ HIGHWAY RESURFACING Sand Island Access Rd. to Keawe St. PROJECT No. 02A-01-00M	
Scale: 1"=40'	Date: May, 1990
SHEET No. 24 OF 19 SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1990	25	34



\* Install Street Name Sign on Traffic Signal Mast Arm.  
Not Part of Contract.  
Work to be done by HWY-0M.

R2-1(35)-B  
(36"x48")  
**SPEED LIMIT 35**  
Remove Exist. Sign & Post and Install New Sign w/ Posts

Install on Exist. Hwy. Lt. Std.  
**WEST**  
**92**  
SRM-4  
(Type A Assembly)  
(Modified)

**SIGN D-6**  
PIERS 4-11  
RIGHT LANE  
Remove Exist. Sign & Posts and Install New Sign Panel w/ Posts  
Use 2.50 lbs./ft., Flanged Channel, 3-Post Installation

**SIGN D-8**  
ALOHA TOWER  
PIERS 4-11  
PASSENGER TERMINAL  
Remove Exist. Sign & Posts and Install New Sign Panel w/ Posts  
Use 4.00 lbs./ft., Flanged Channel, 3-Post Installation

**SIGN D-7**  
DOWNTOWN  
VIA  
BISHOP ST  
LEFT LANE ONLY  
Remove Exist. Sign & Posts and Install New Sign Panel w/ Posts  
Use 4.00 lbs./ft., Flanged Channel, 3-Post Installation

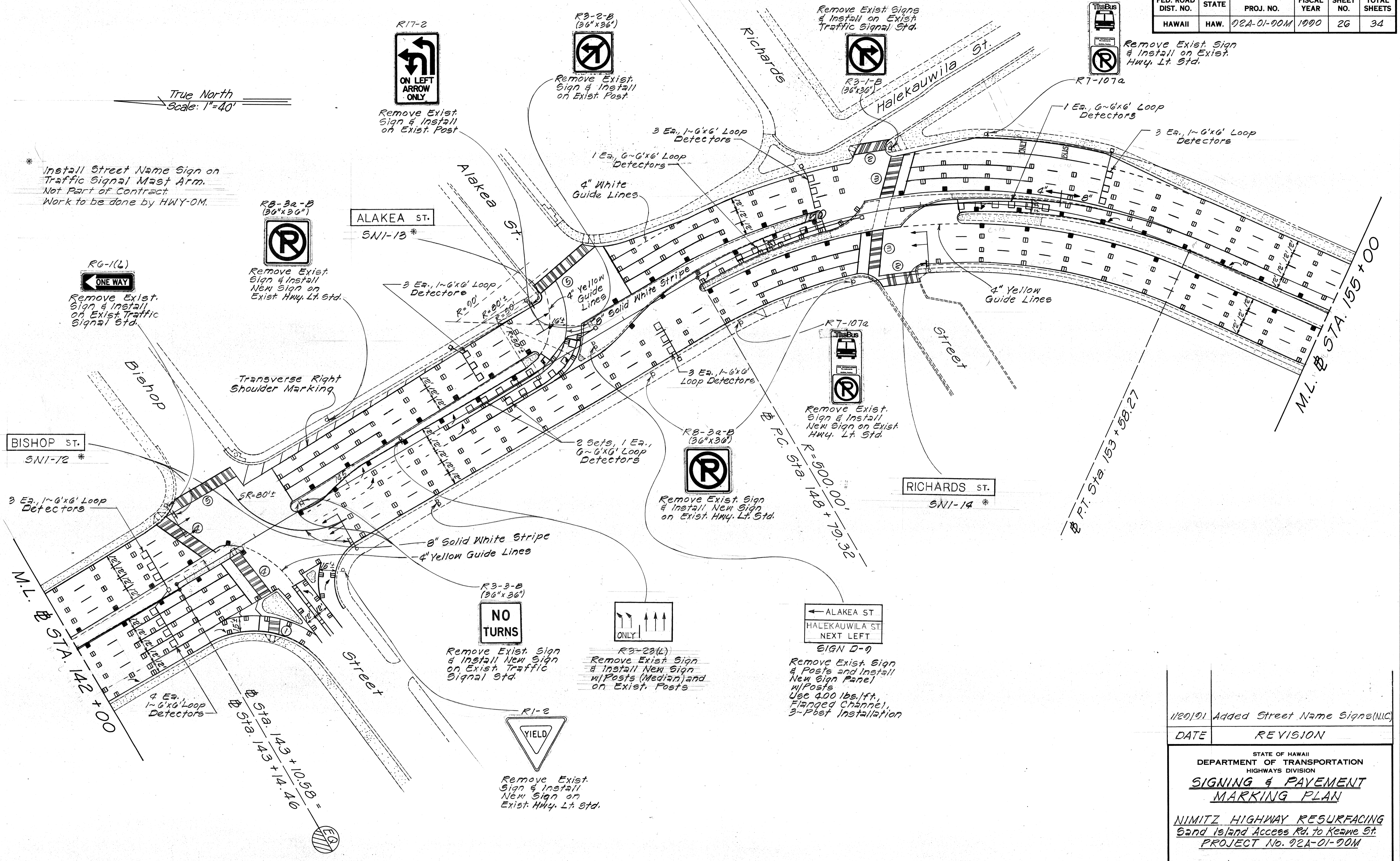
11/20/01	Added Sheet Name Signs (N.I.C.)
10/17/90	Replaced YIELD AHEAD Sign w/ Yield Ahead Symbol Sign.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>SIGNING &amp; PAVEMENT MARKING PLAN</b>	
NIMITZ HIGHWAY RESURFACING Sand Island Access Rd. to Keane St. PROJECT No. 02A-01-00M	
Scale: 1" = 40'      Date: May, 1990	
SHEET No. 110 OF 19 SHEETS	

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	02A-01-00M	1990	26	34

True North  
Scale: 1"=40'

\* Install Street Name Sign on Traffic Signal Mast Arm.  
Not Part of Contract  
Work to be done by HWY-OM.

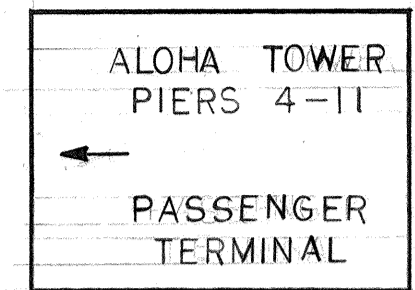


SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
NO.	

11/20/91	Added Street Name Signs(NIC)
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**SIGNING & PAYEMENT  
MARKING PLAN**  
NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd. to Keane St.  
PROJECT No. 02A-01-00M  
Scale: 1"=40' Date: May, 1990  
SHEET No. 711 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-00M	1990	27	34



SIGN D-10  
Remove Exist. Sign & Posts and Install New Sign Panel w/ Posts Use 4.00 lbs. lft. Flanged Channel, 3-Post Installation



Remove Exist. Signs & Install New Sign on Exist. Hwy. Lt. Std.

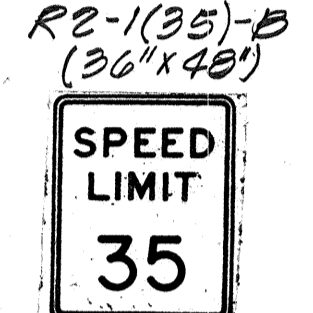


W1-4(R)-B (36"x36")

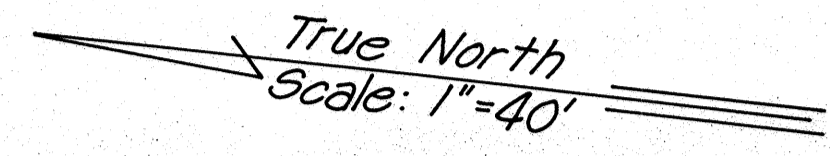


R8-3a-B (36"x36")

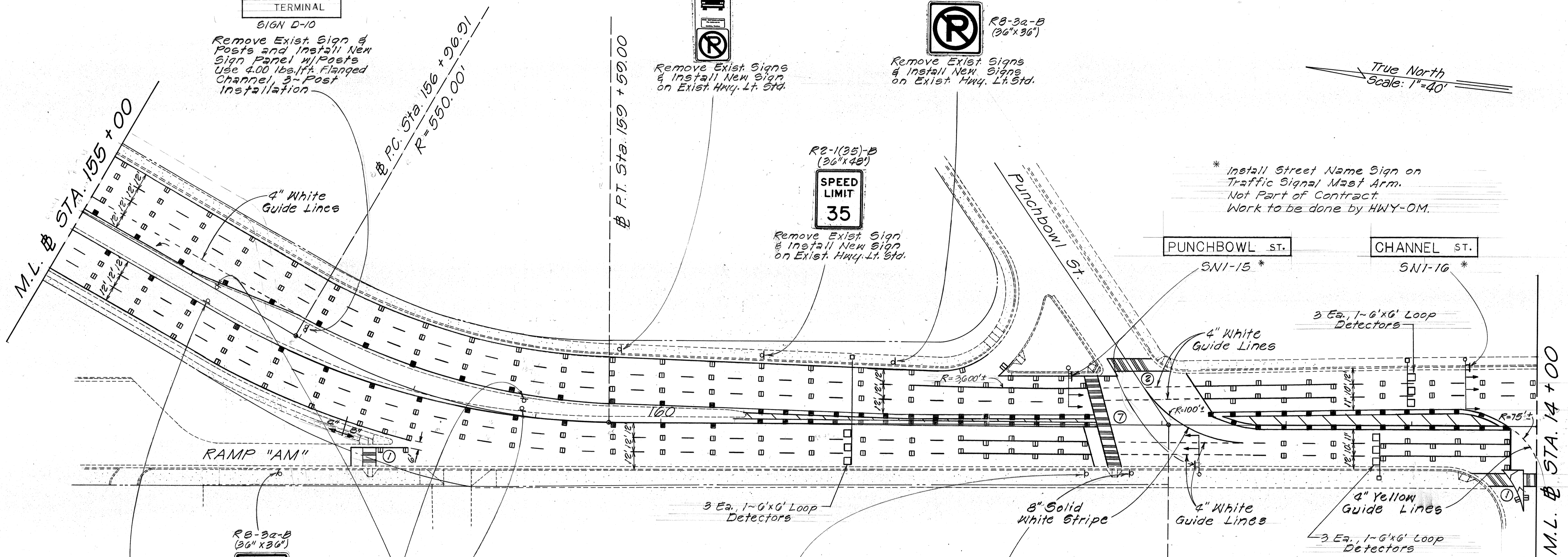
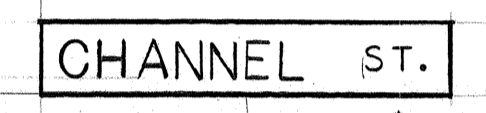
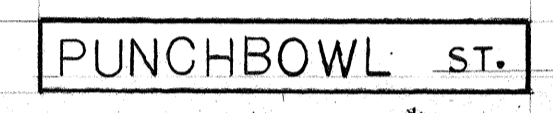
Remove Exist. Signs & Install New Signs on Exist. Hwy. Lt. Std.



Remove Exist. Sign & Install New Sign on Exist. Hwy. Lt. Std.



\* Install Street Name Sign on Traffic Signal Mast Arm. Not Part of Contract. Work to be done by HWY-OM.



Remove Exist. Sign & Install New Sign on Exist. Hwy. Lt. Std.



R9-3a-B (30"x30")



R9-3b(L)

Remove Exist. Signs & Install New Signs on Exist. Post



R9-3a-B (30"x30")



R9-3b(R)



Remove Exist. Sign & Post and Install New Sign w/post



R8-3a-B (36"x36")



R7-20a

Remove Exist. Sign & Install New Signs on Exist. Traffic Signal Std.

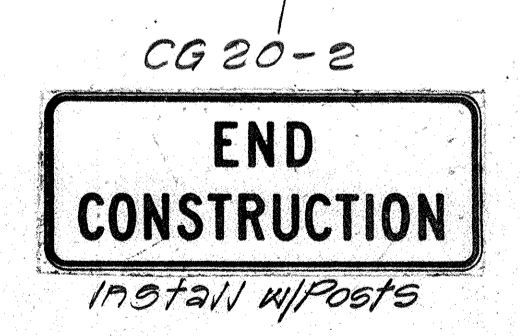
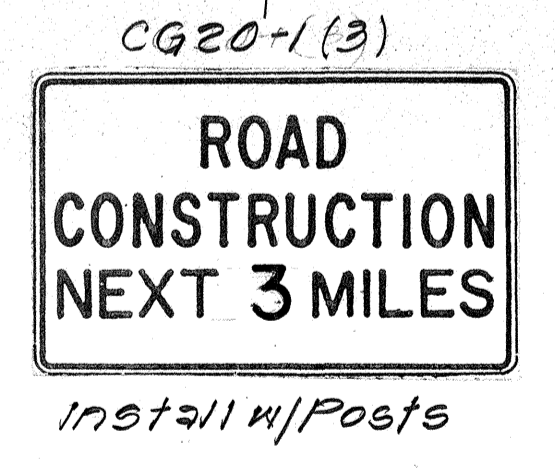
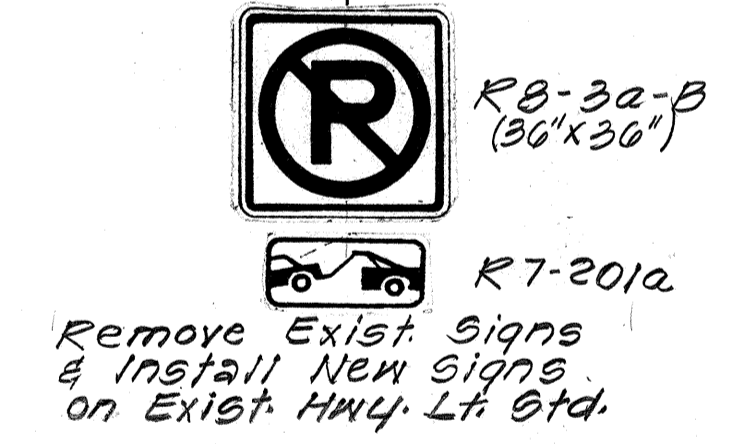
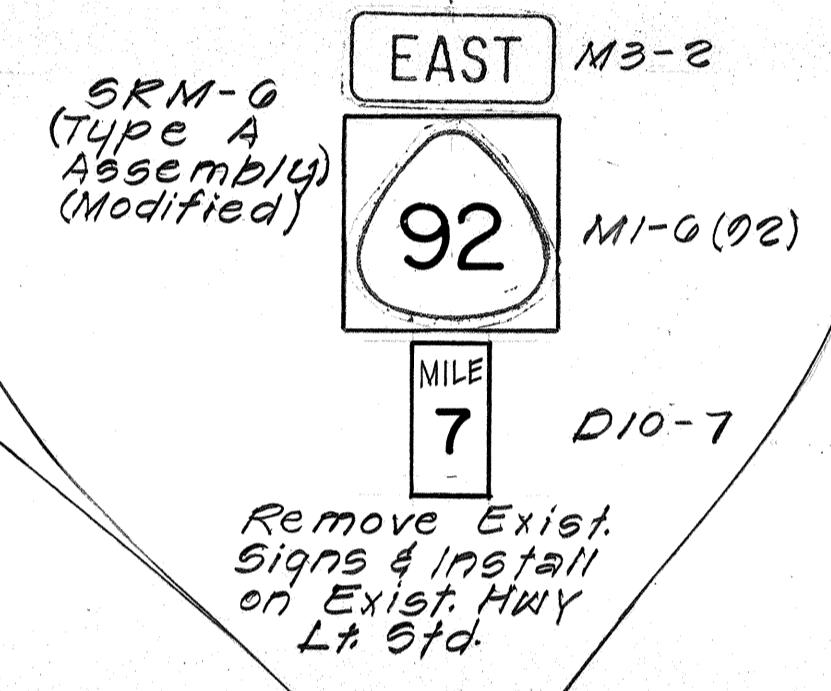
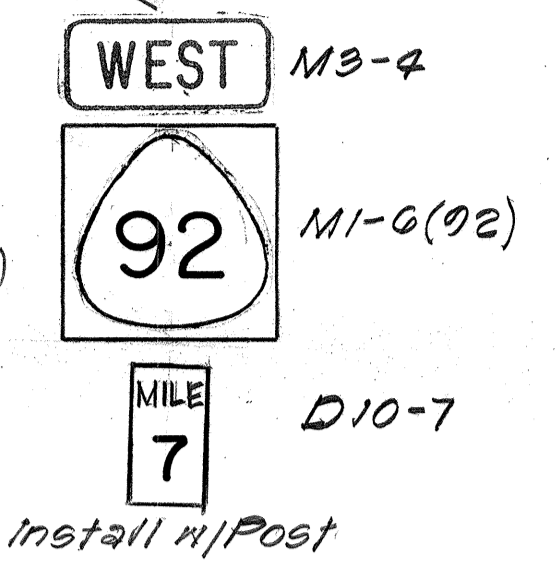
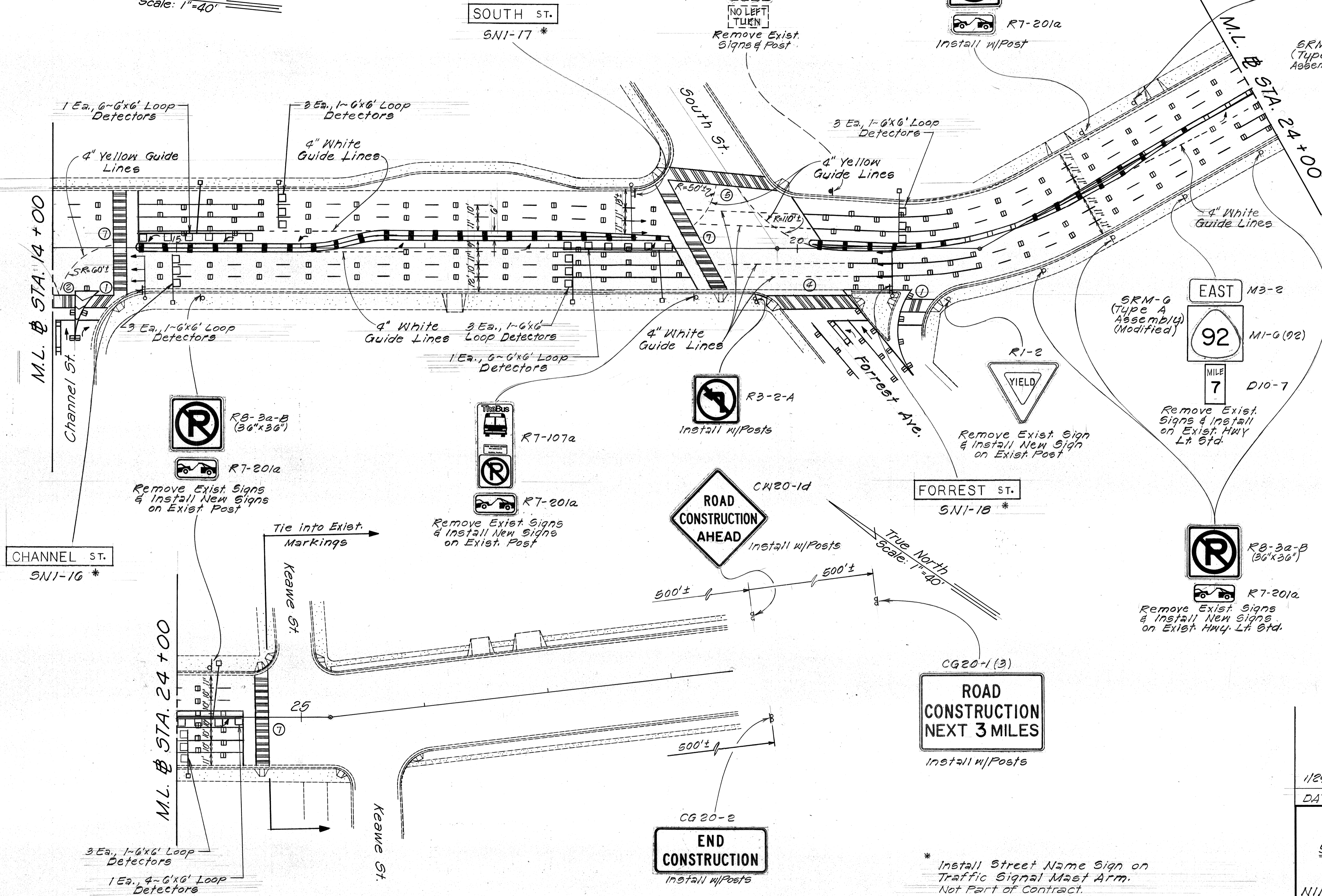
SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
NO.	

1/20/91	Added Street Name Sign (NIC)
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**SIGNING & PAYEMENT  
MARKING PLAN**  
NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd. to Keawe St.  
PROJECT No. 92A-01-00M  
Scale: 1"=40' Date: May, 1990  
SHEET No. 27 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-90M	1990	28	34

True North  
Scale: 1"=40'

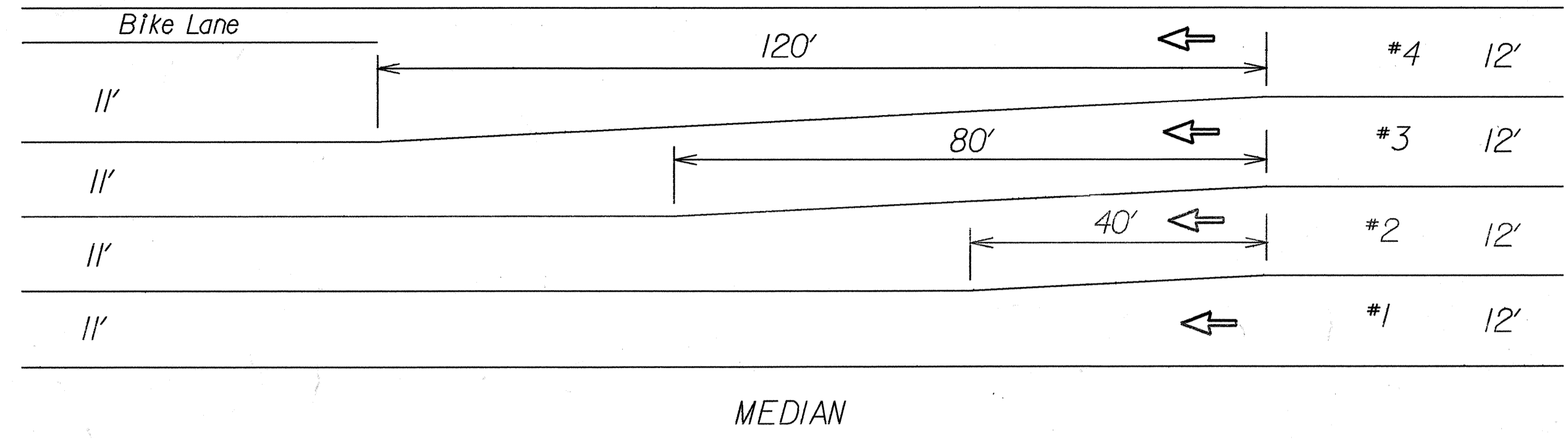


\* Install Street Name Sign on Traffic Signal Mast Arm.  
Not Part of Contract.  
Work to be done by HWY-OM.

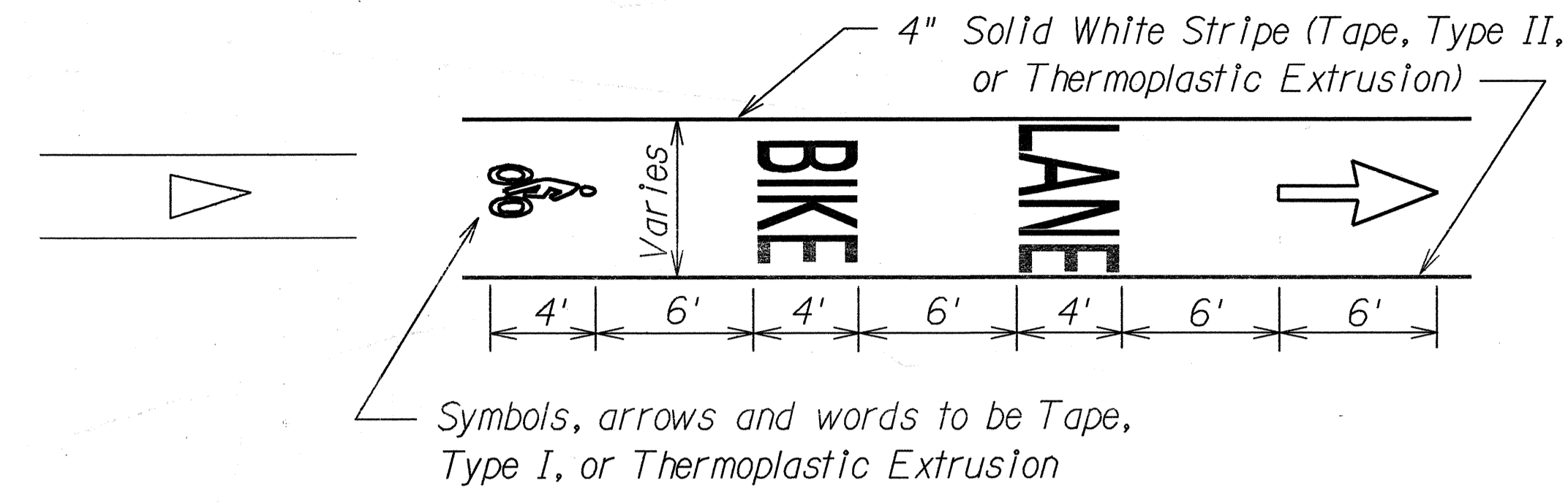
DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

1/20/91	Added Street Name Signs(N.I.C)
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>SIGNING &amp; PAVEMENT MARKING PLAN</b>	
NIMITZ HIGHWAY RESURFACING Sand Island Access Rd. to Keawe St. PROJECT No. 92A-01-90M	
Scale: 1"=40'	Date: May, 1990
SHEET No. 713 OF 19 SHEETS	

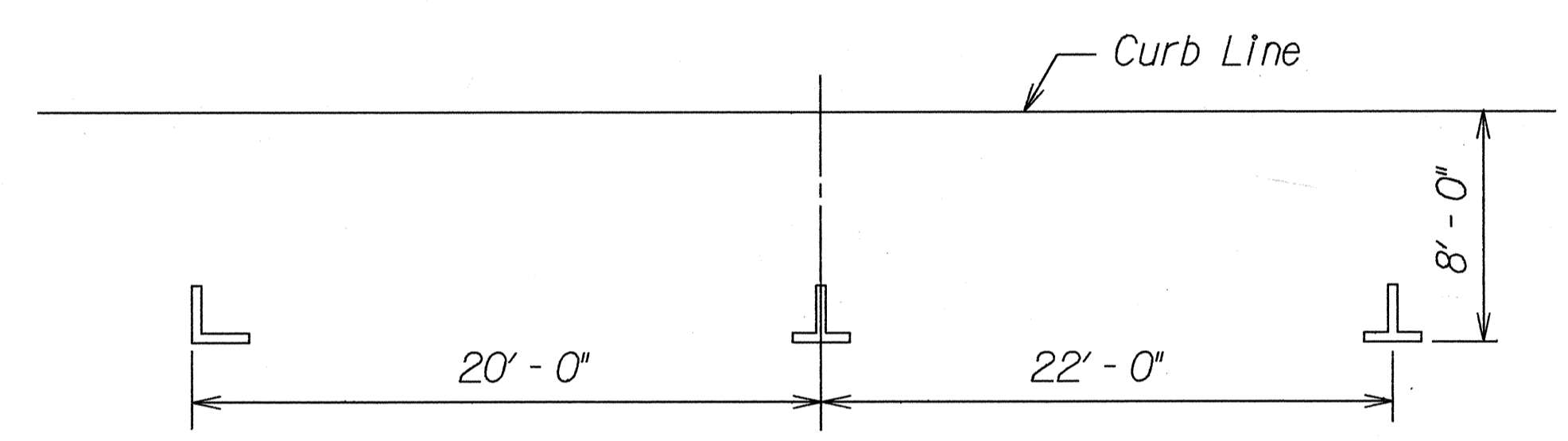
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-90M	1990	29	34



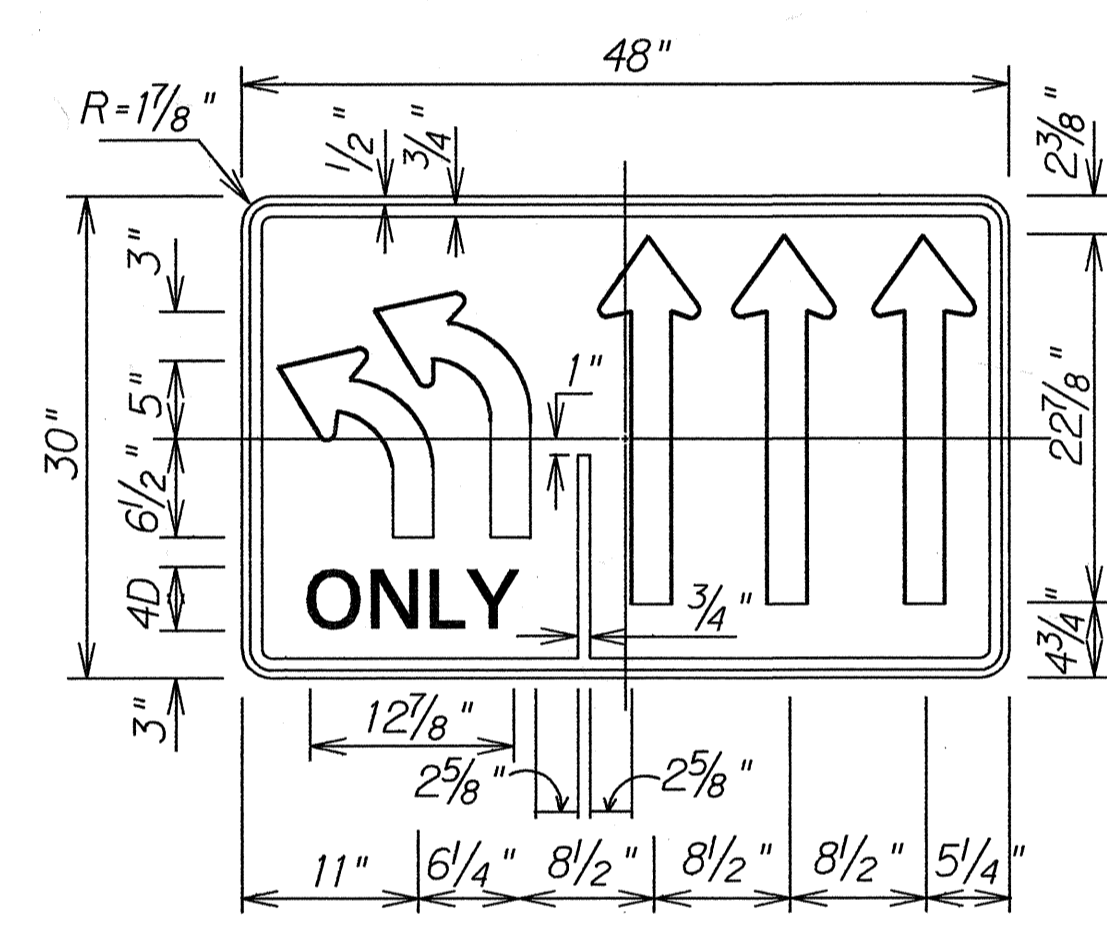
**TRANSITION ZONE DETAIL**  
Not to Scale



**BIKE LANE MARKING**  
Scale: 3/16" = 1'-0"

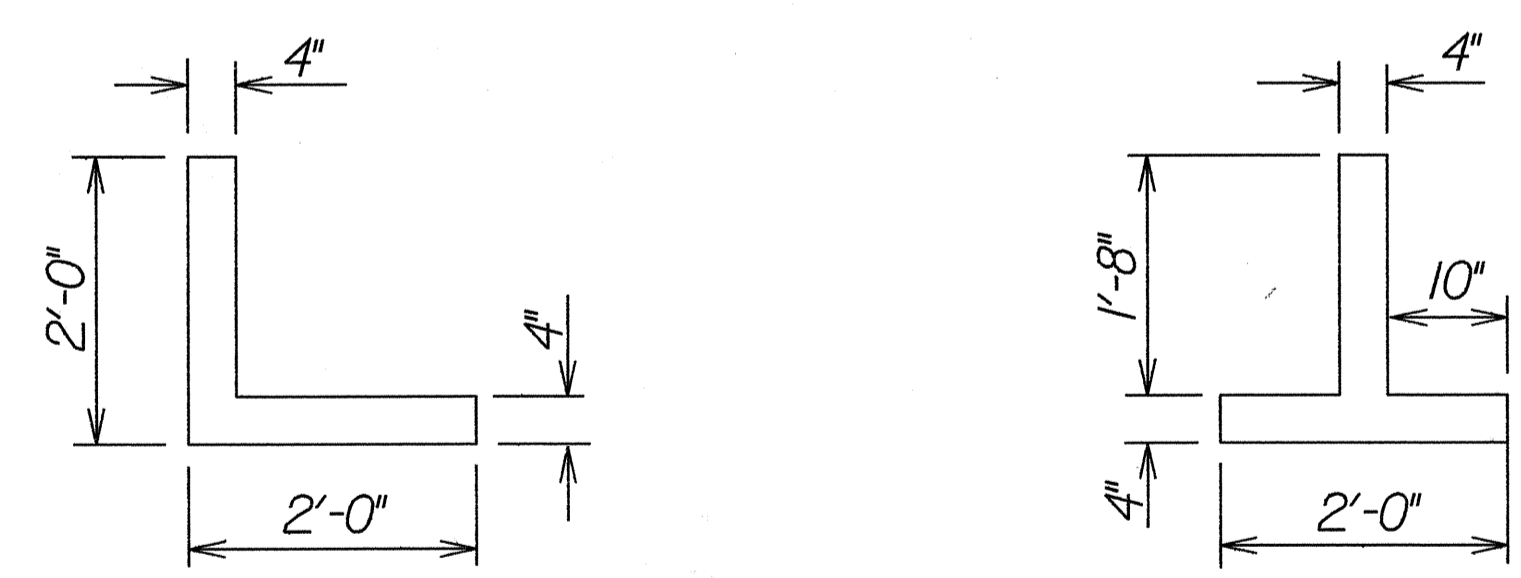


**PARKING SPACE LIMITS**  
Scale: 3/16" = 1'-0"



**SIGN R3-23(L)**  
Scale: 1" = 1'-0"

NOTE:  
1. Sign R3-23(L) is a variation of Sign R3-8.  
Plate and arrow details shall conform to Sign R3-8.



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

**TYPICAL PARKING SPACE MARKINGS**

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

10-17-90	Revised Parking Space Limits Detail.
DATE	REVISION

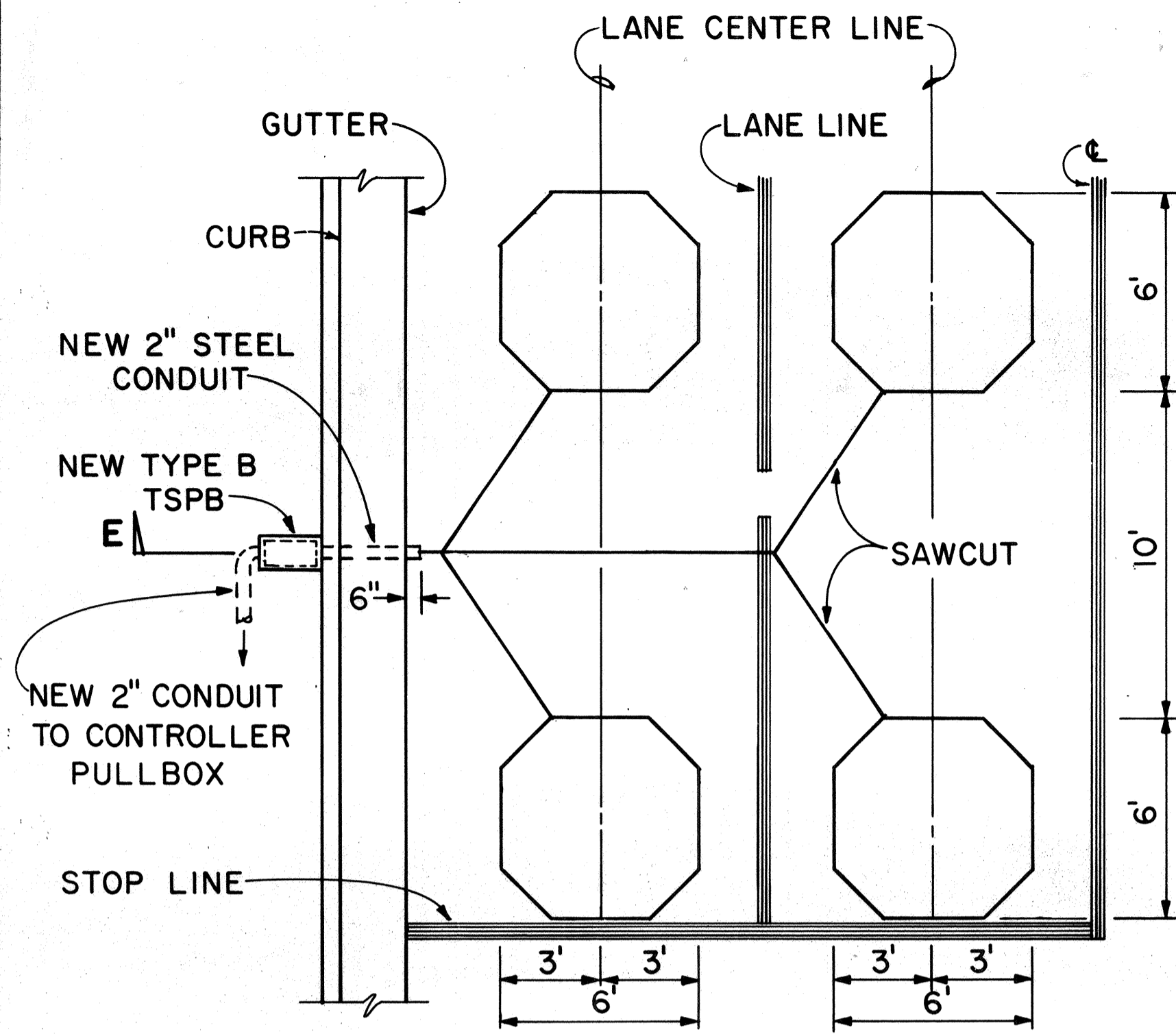
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**MISCELLANEOUS DETAILS**

NIMITZ HIGHWAY RESURFACING  
SAND ISLAND ACCESS RD. TO KEAWE ST.  
PROJECT NO. 92A-01-90M

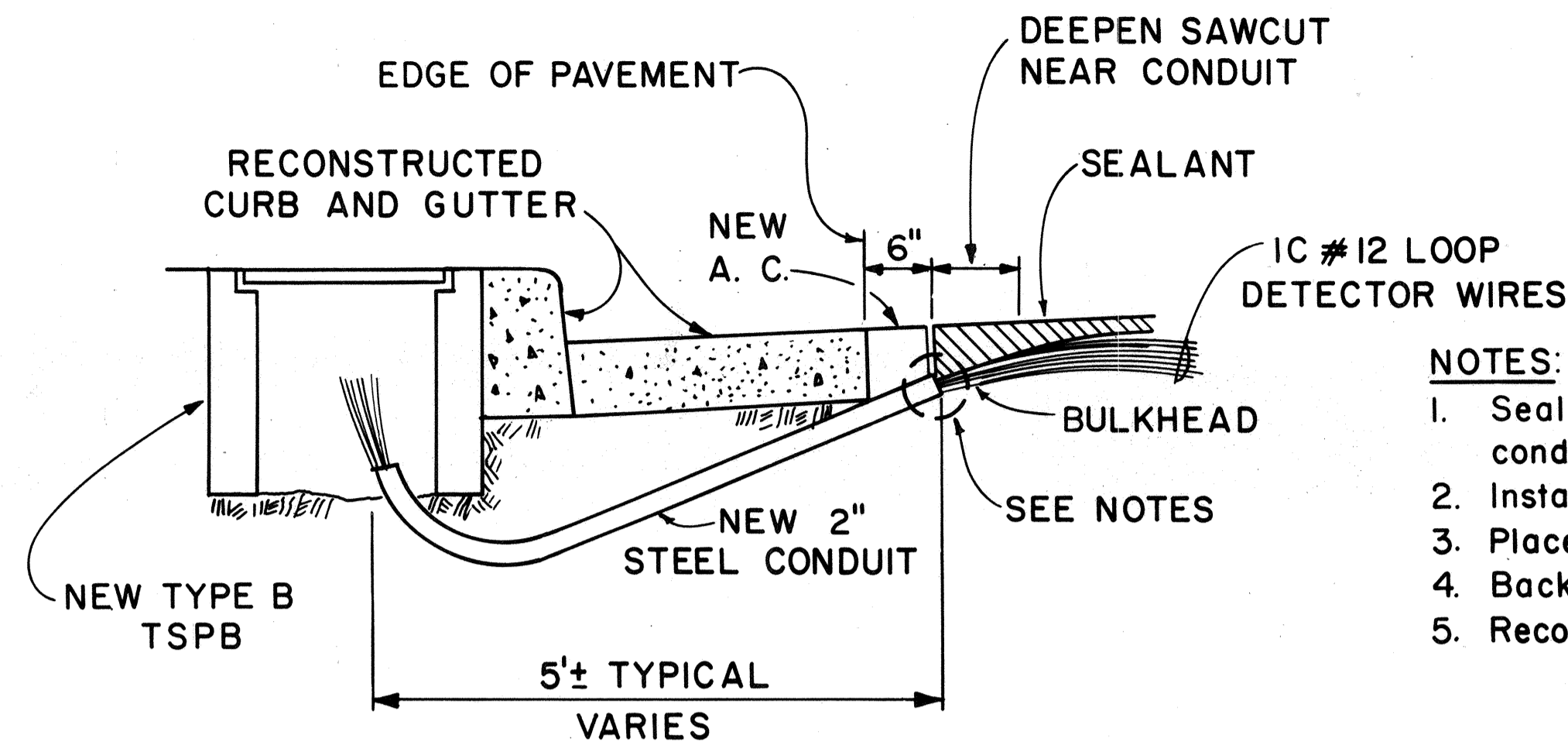
Scale: As Shown Date: May, 1990  
SHEET No. T14 OF 19 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-90M	1990	30	34



NOTE: Add one pair of loops for each additional lane

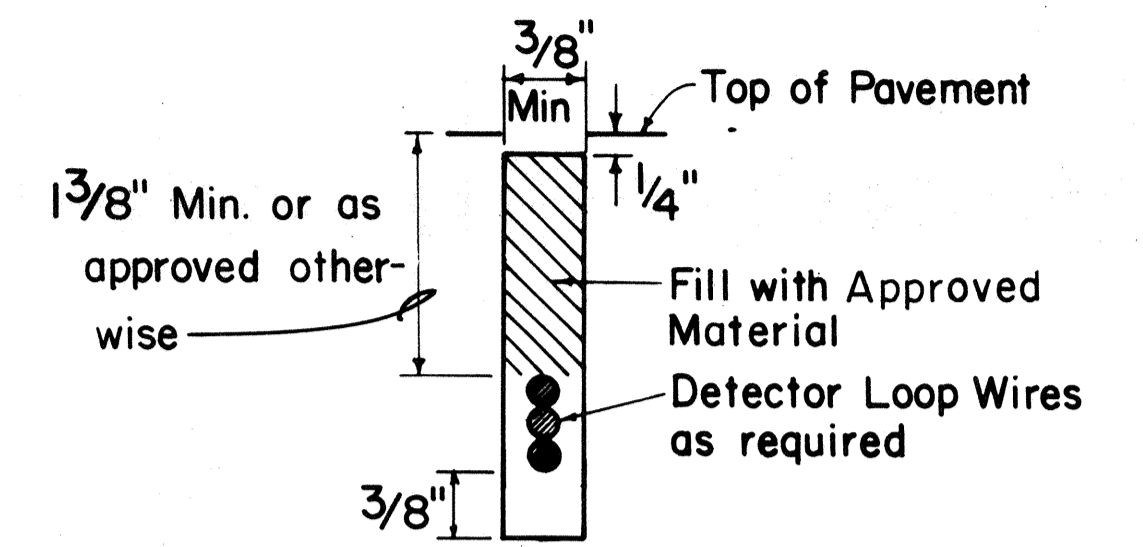
**TYPICAL LAYOUT AT STOPLINES**



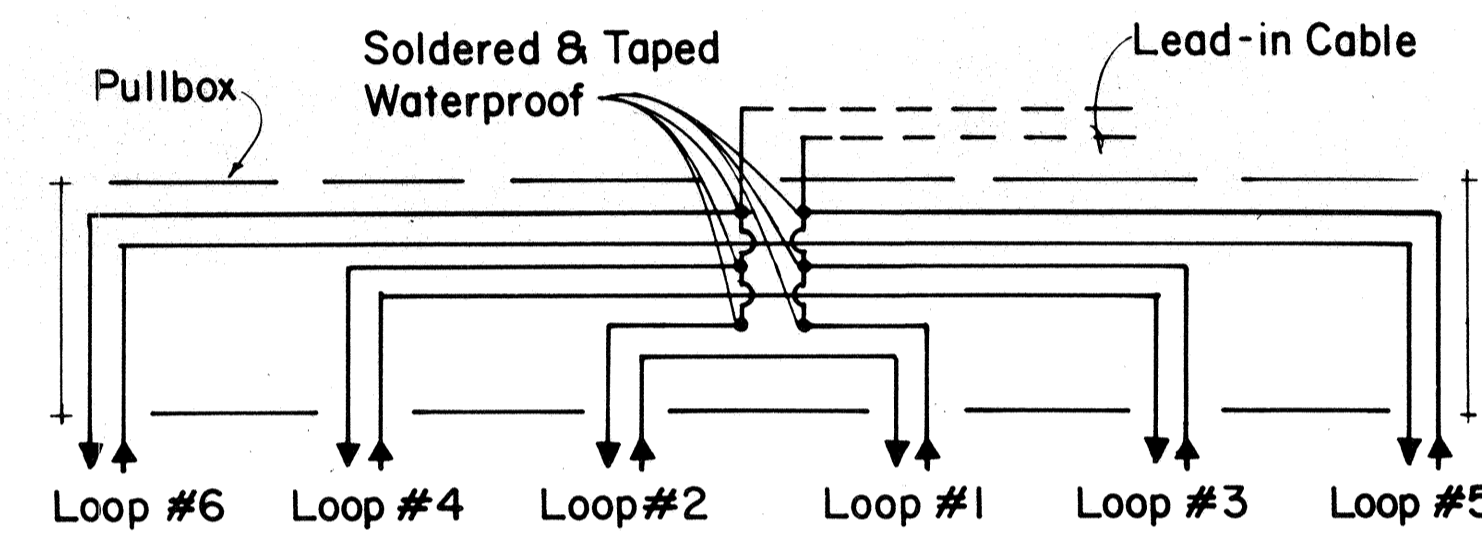
**SECTION E**

**NOTES:**

1. Seal roadway end of conduit after installation of conductors
2. Install bulkhead across conduit trench
3. Place approved sealant in sawcut
4. Backfill over conduit with new A.C.
5. Reconstruct curb and gutter as required



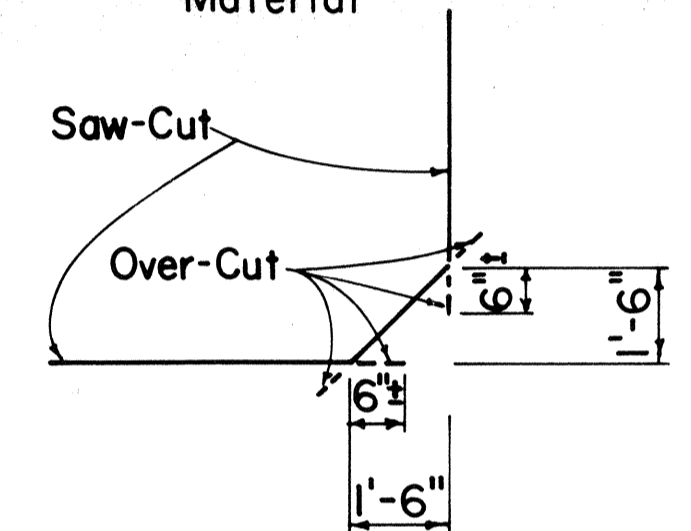
**DETECTOR LOOP SAW-CUT SECTION A (TYPICAL)**



**DETAIL "A"**

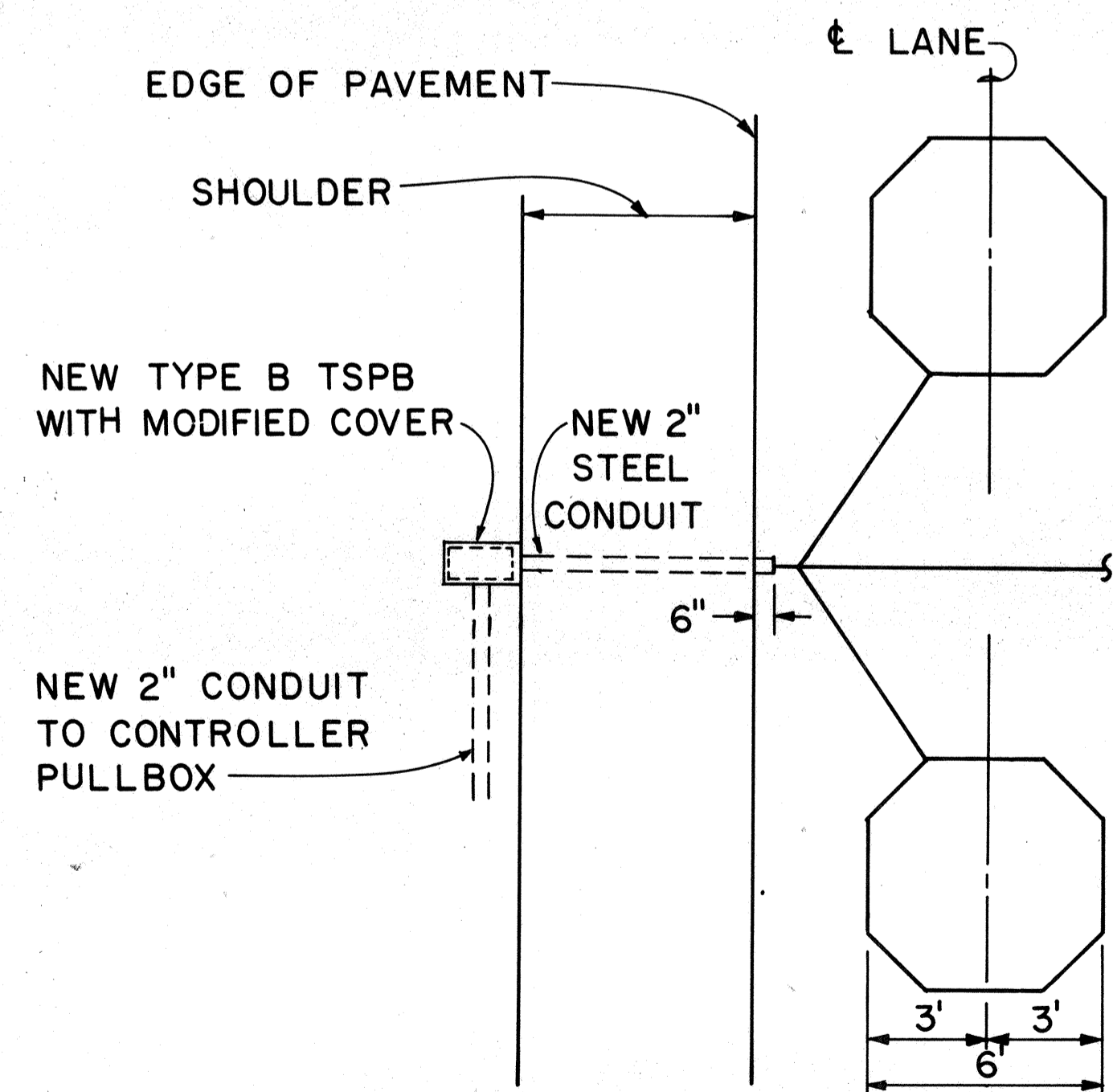
**TYPICAL SERIES-PARALLEL LOOP CONNECTION**

Note: Back-Fill Over-Cuts with Approved Material

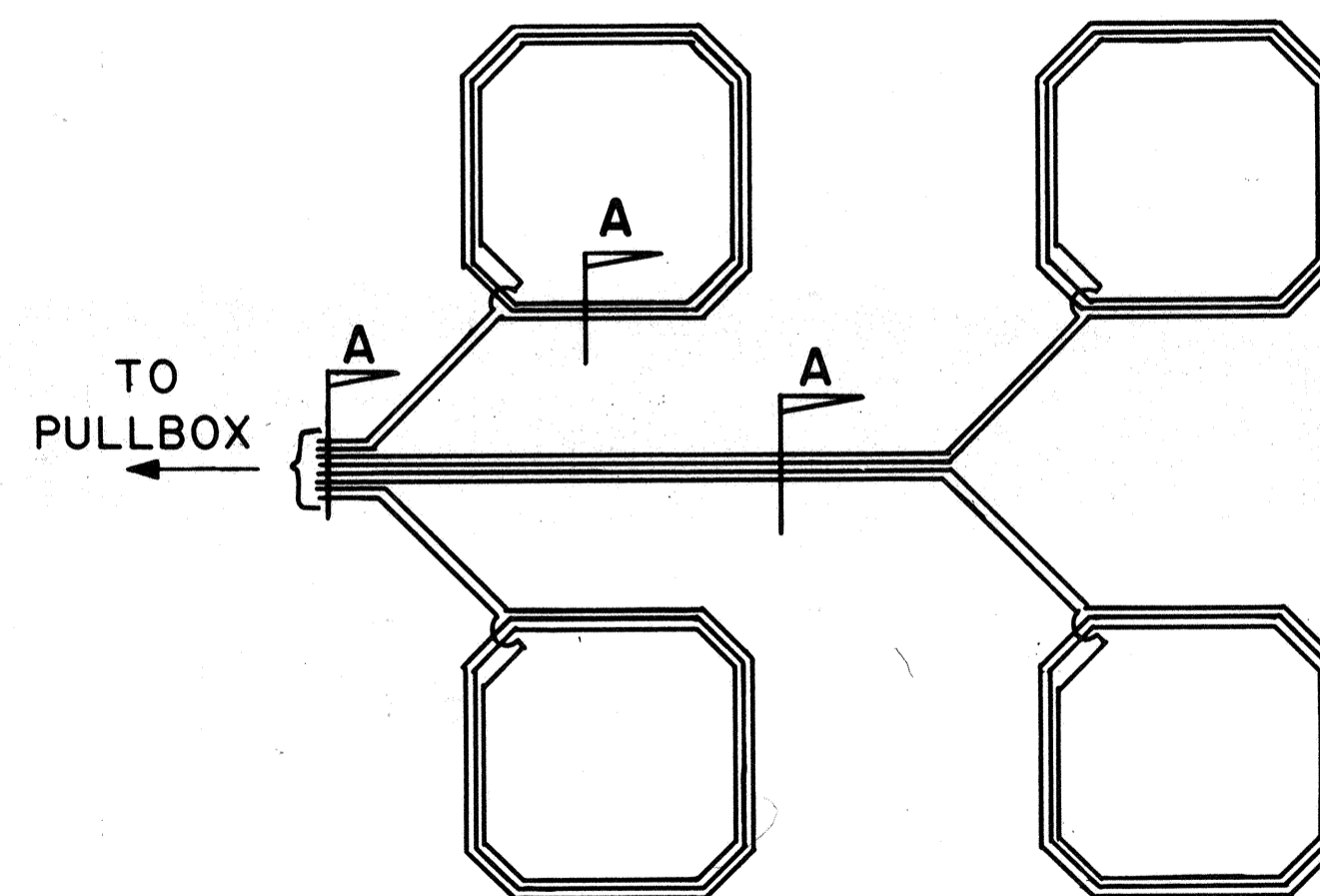


**DETAIL "B"**

**SAW-CUT AT CORNERS**

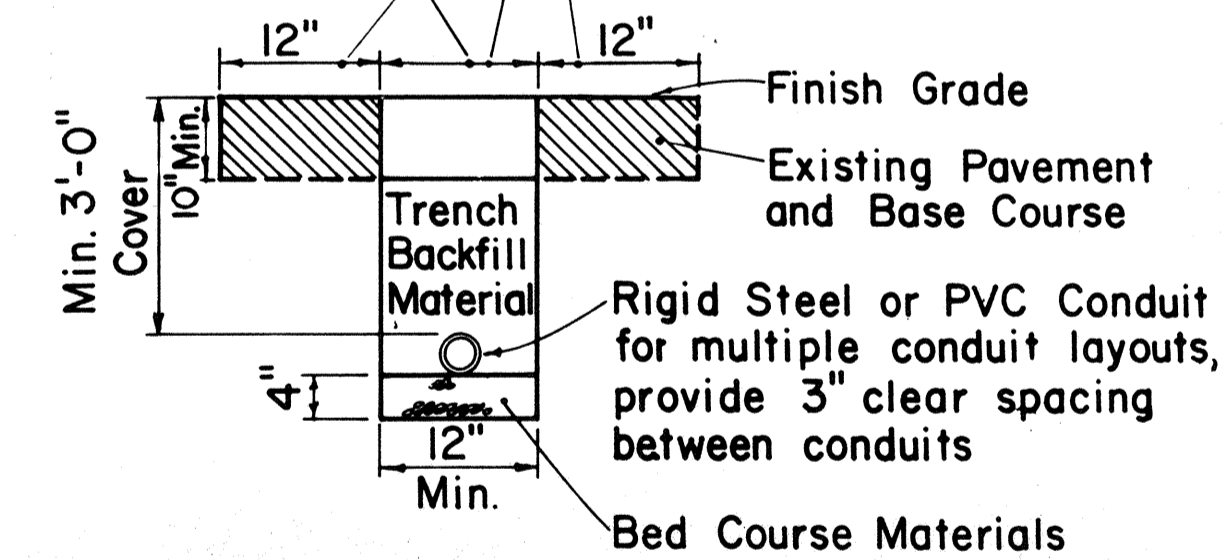


**TYPICAL LAYOUT AT SHOULDER AREAS**



**WIRING DIAGRAM**

If grassed area, provide 6" thick top soil & sod  
If paved area, reconstruct Pavement or Sidewalk. Saw-cut existing paved areas prior to excavation.



**TYPICAL TRENCH SECTION FOR CONDUIT**

**NOTE:**

1. All conduits under roadways shall be steel or PVC schedule 80.

DATE	REVISION	APPD.
11/3/89	Revised Detector Loop Typical Layouts, Wiring Diagram and Sawcut Section and Details.	RK
1/9/87	Revised Detector Loop Saw-Cut Fill Material and Typical Trench Section for Conduit Min. Cover.	E.T.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**LOOP DETECTOR DETAILS**

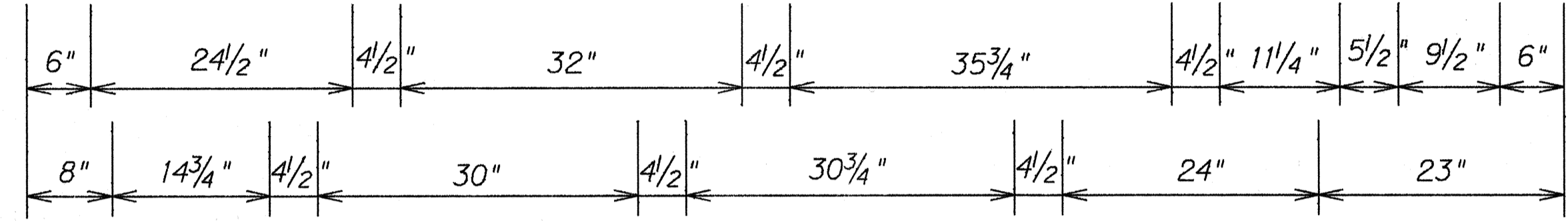
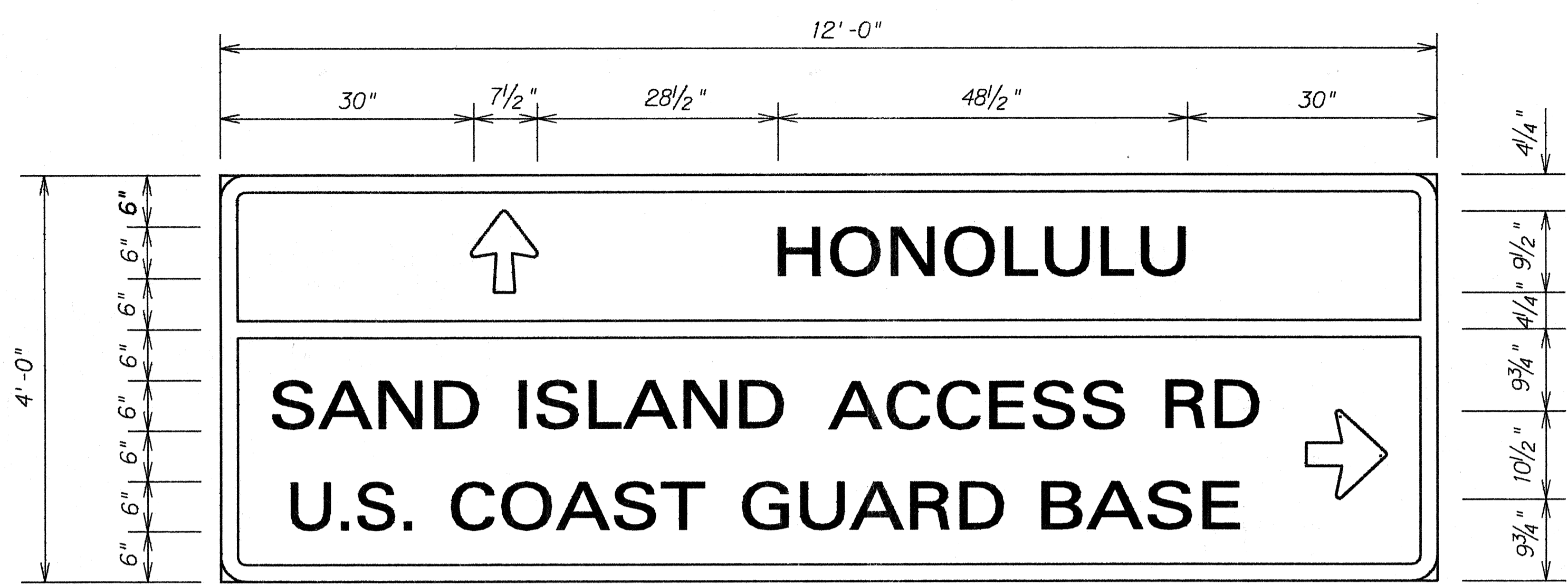
*NIMITZ HIGHWAY RESURFACING  
Sand Island Access Rd. to Keawe St.  
PROJECT No. 92A-01-90M*

Not to Scale Date: May, 1990

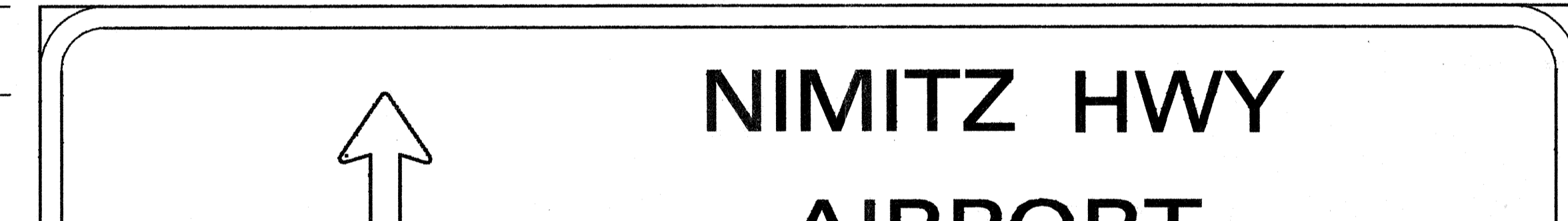
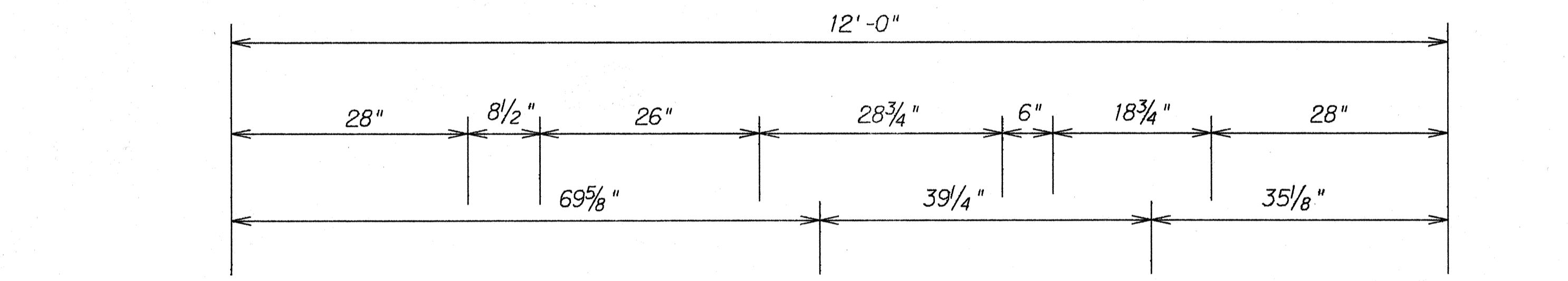
SHEET No. 715 OF 10 SHEETS

DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
NOTE BOOK NO. \_\_\_\_\_

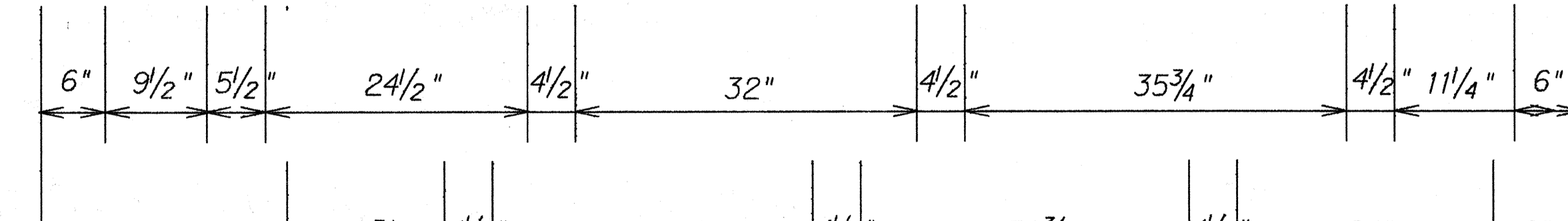
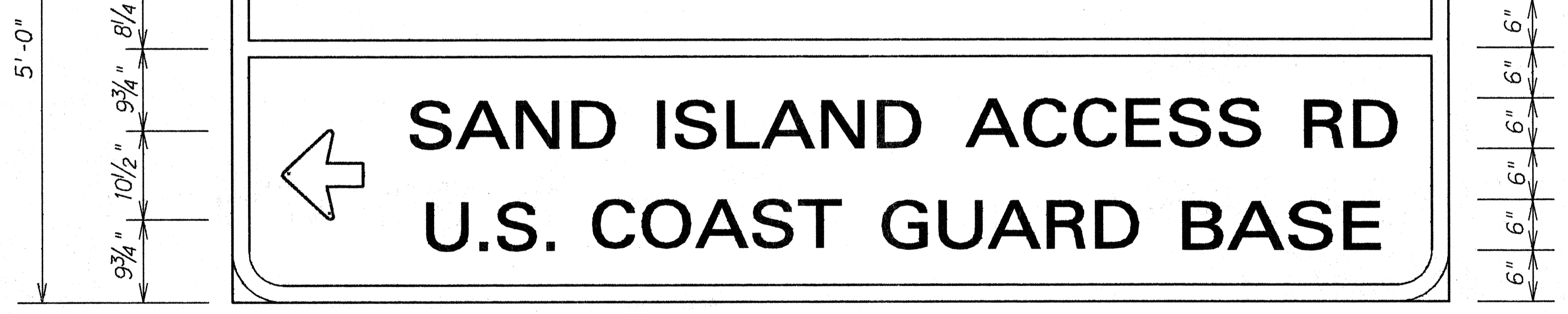
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-90M	1990	31	34



**SIGN D-1**



**SIGN D-3**



**GENERAL NOTES**

- The Contractor shall verify the locations and dimensions of existing Sign Panels, supports, and framing.
- 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 letter.
- Interstate Route Marker Symbols shall conform to details shown on the plans and as specified in the MUTCD.
- All signs shall conform to Section 621 of the 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 shield 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.
- 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.



**SIGN D-2**

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGN PANEL LAYOUT & NOTES**

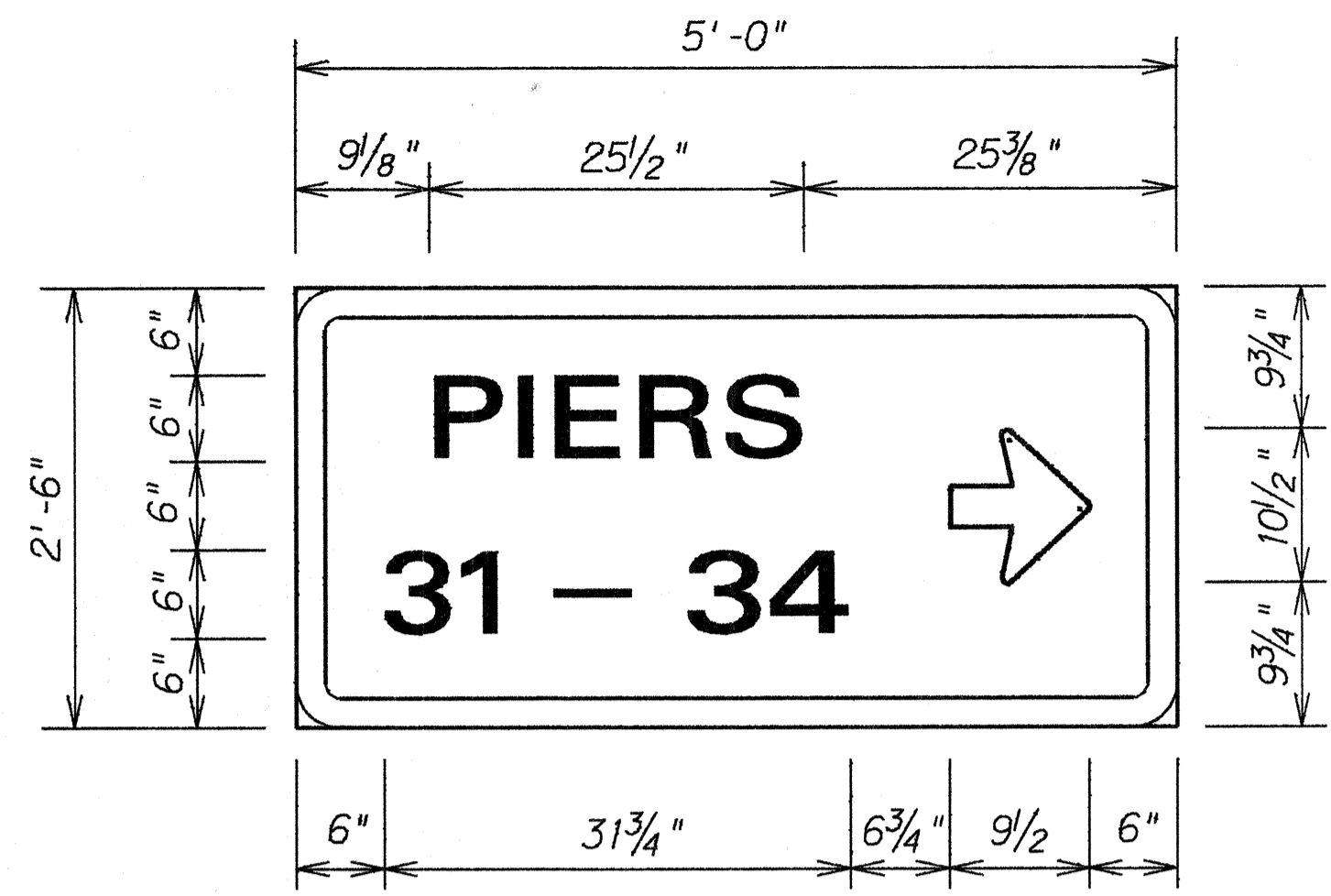
NIMITZ HIGHWAY RESURFACING  
SAND ISLAND ACCESS RD TO KEAWE ST  
PROJECT NO. 92A-01-90M

Scale: 1" = 1'-0"      Date: May, 1990

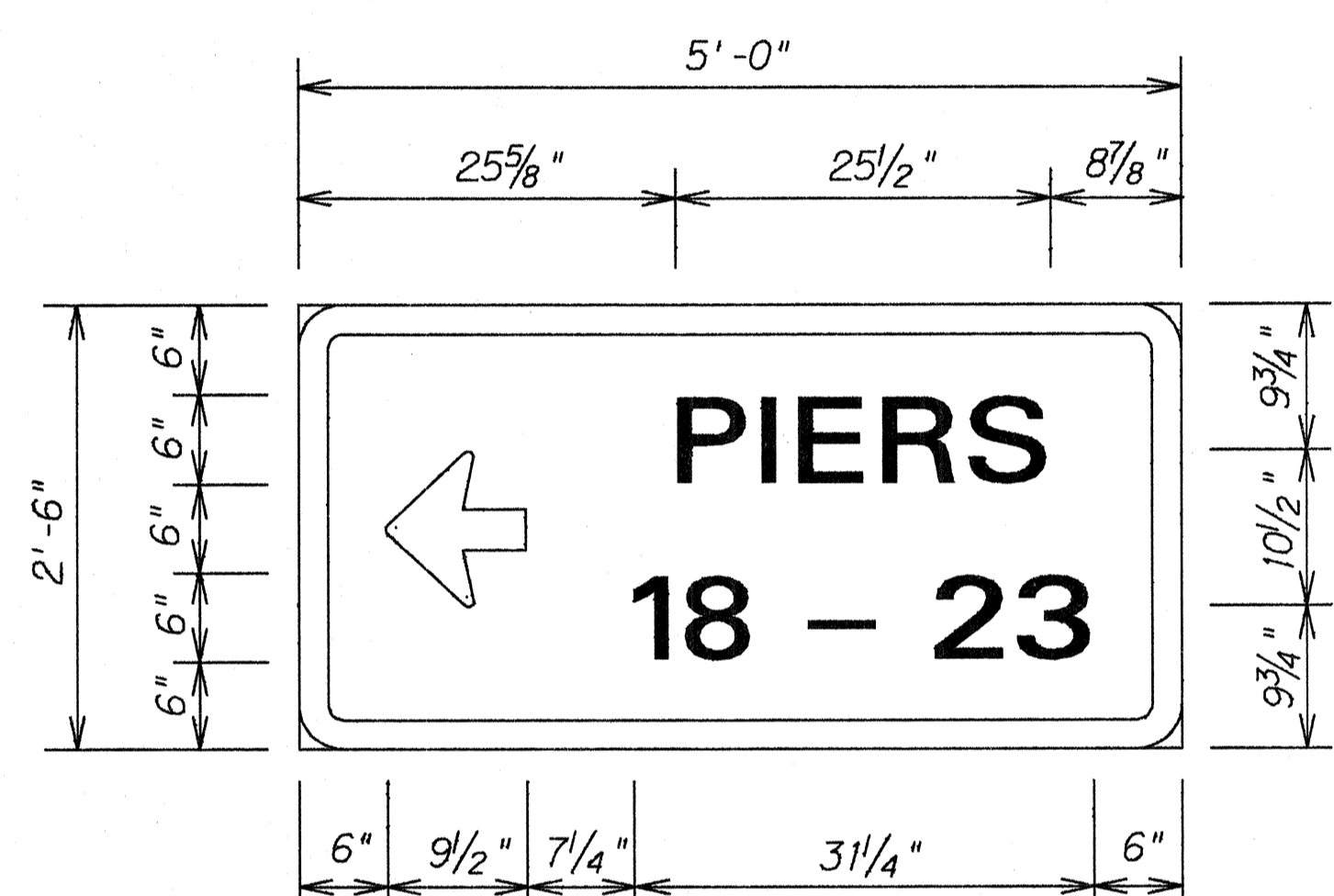
SHEET No. 716 OF 19 SHEETS

ORIGINAL PLAN  
DATE  
DRAWN BY  
CHECKED BY  
NOTED BY  
NO. \_\_\_\_\_

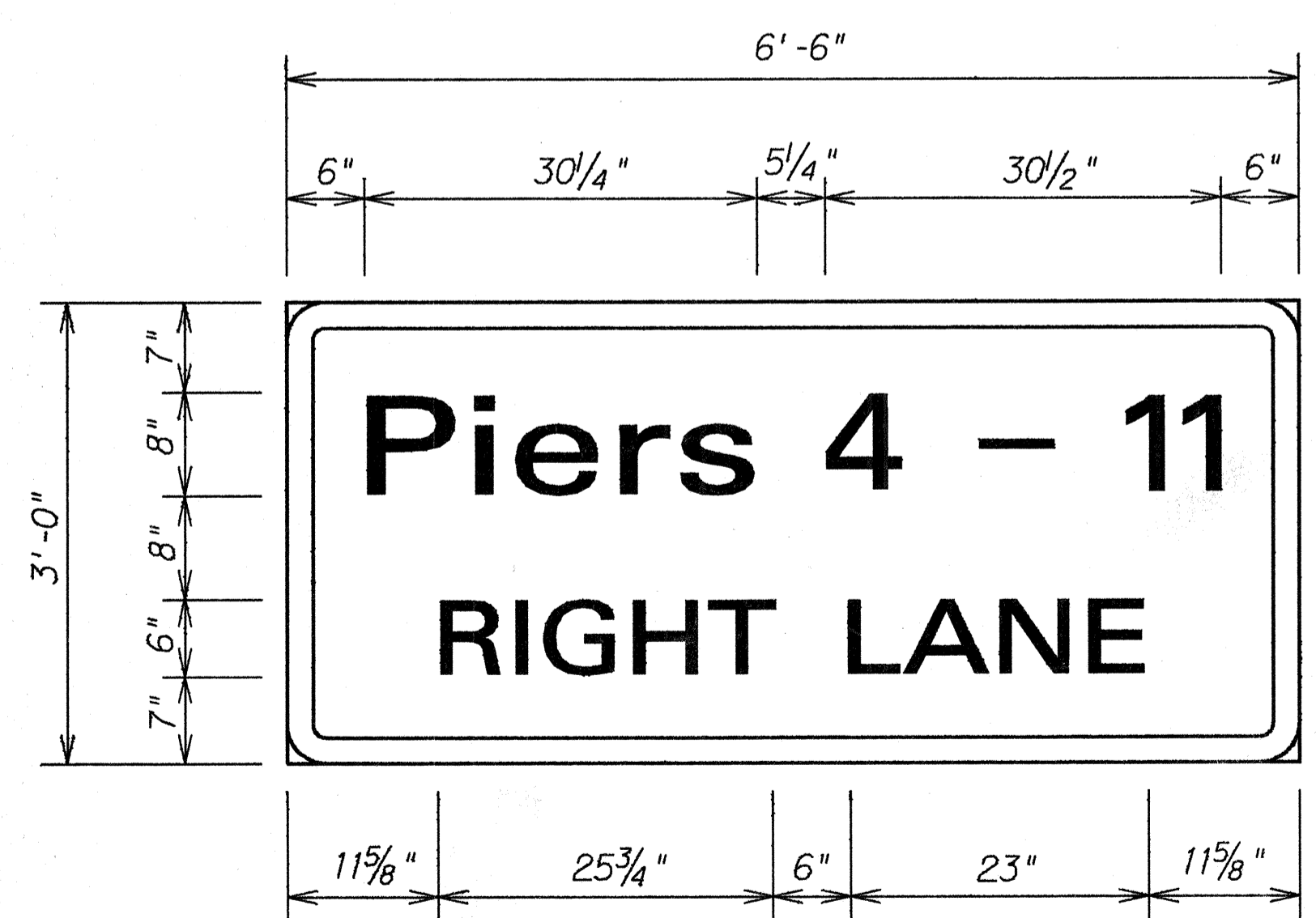
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-90M	1990	32	34



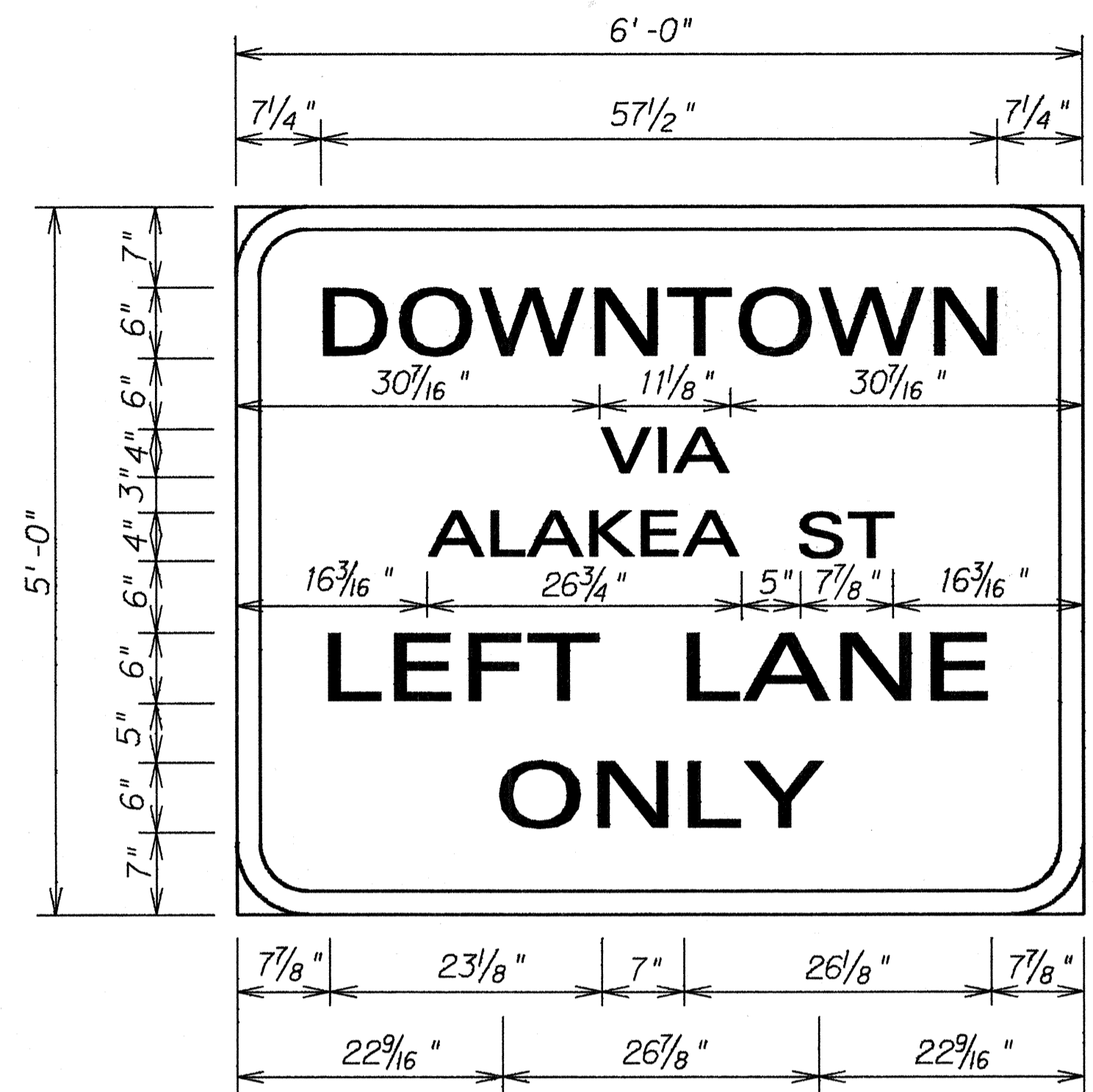
SIGN D-4



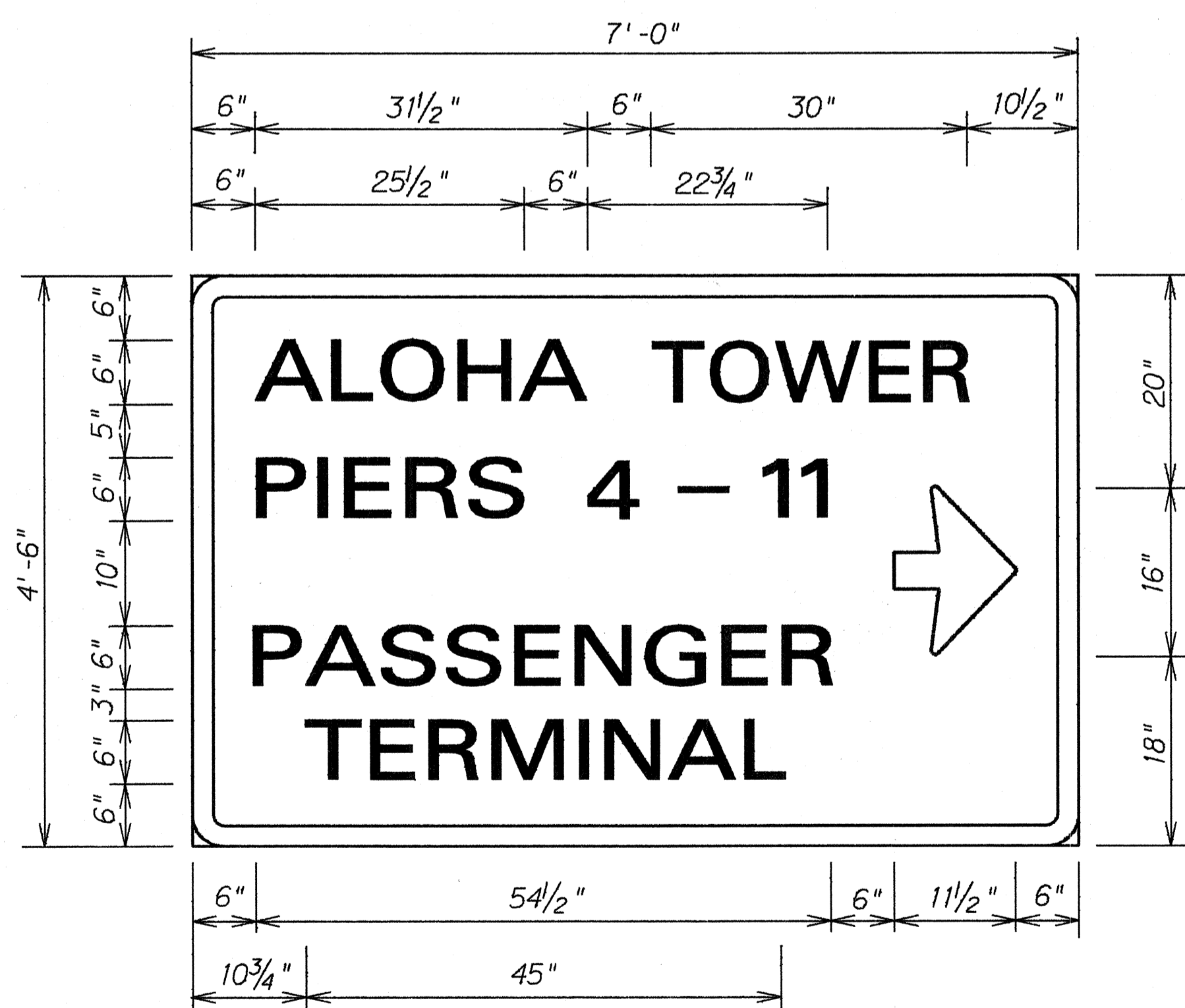
SIGN D-5



SIGN D-6



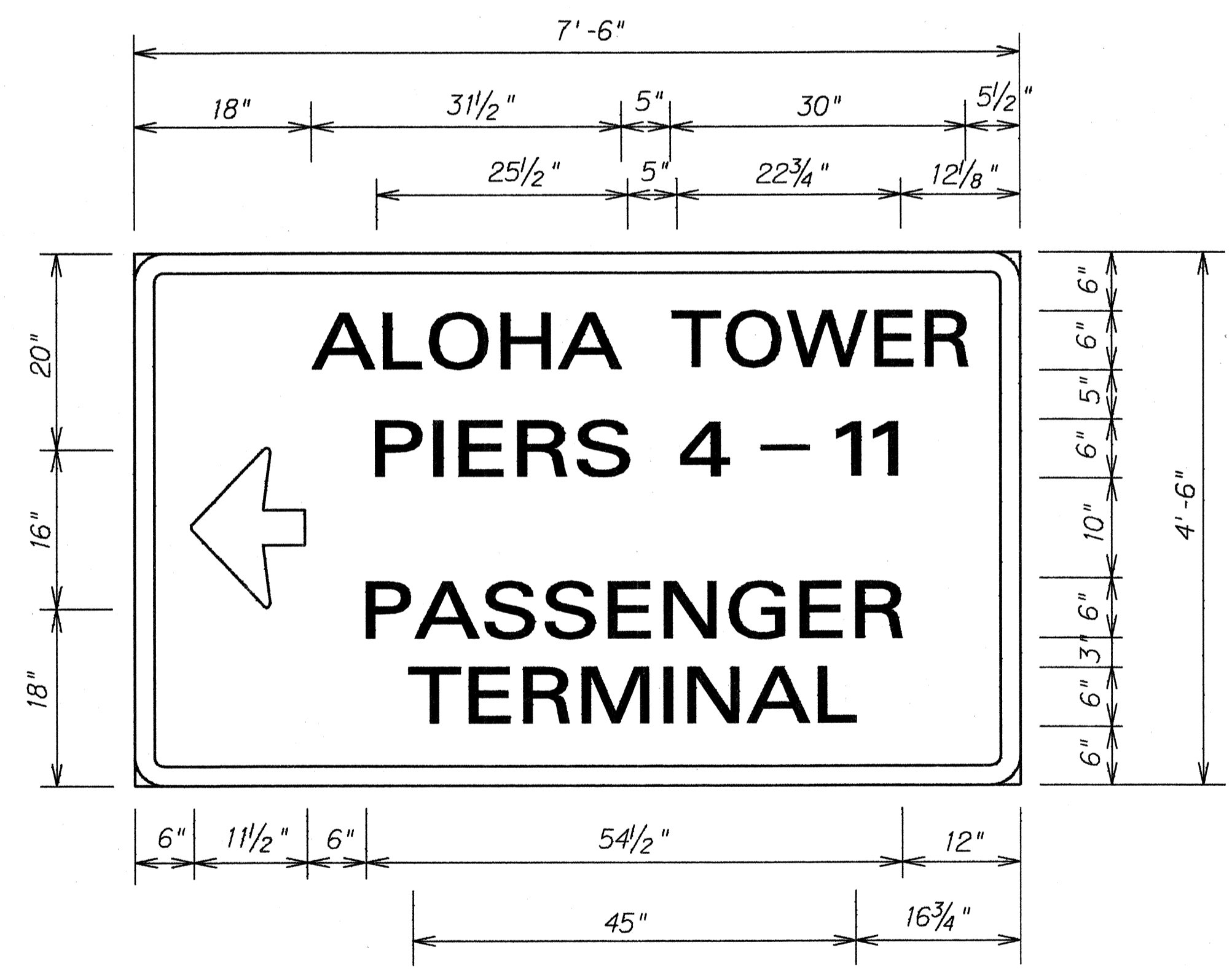
SIGN D-7



SIGN D-8



SIGN D-9



SIGN D-10

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**SIGN PANEL LAYOUT**  
NIMITZ HIGHWAY RESURFACING  
SAND ISLAND ACCESS RD TO KEAWE ST  
PROJECT NO 92A-01-90M  
Scale: 1" = 1'-0" Date: May, 1990  
SHEET No. 117 OF 19 SHEETS

DATE: \_\_\_\_\_  
SURVEY PLATTED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
NOTE BOOK NO. \_\_\_\_\_

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-90M	1990	33	34

### PAVEMENT MARKING SUMMARY

DESCRIPTION	QUANTITY
<b>PAVEMENT MARKERS</b>	
TYPE A .....	6,644 EA.
TYPE CL .....	3,667 EA.
TYPE DL .....	40 EA.
TYPE HL .....	915 EA.
TYPE J .....	—
<b>TAPE - TYPE I OR THERMOPLASTIC EXTRUSION</b>	
4-INCH PAVEMENT STRIPE (WHITE) .....	2,500 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) .....	—
8-INCH PAVEMENT STRIPE (WHITE) .....	16,170 L.F.
12-INCH PAVEMENT STRIPE (WHITE) .....	—
12-INCH PAVEMENT STRIPE (YELLOW) .....	—
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) .....	650 L.F.
PAVEMENT ARROW .....	97 EA.
PAVEMENT WORD .....	5 EA.
PARKING SPACE .....	6 EA.
BIKE LANE SYMBOLS, ARROWS & WORDS .....	75 EA.
<b>TAPE - TYPE II OR THERMOPLASTIC EXTRUSION</b>	
4-INCH PAVEMENT STRIPE (WHITE) .....	29,585 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) .....	31,585 L.F.
8-INCH PAVEMENT STRIPE (WHITE) .....	9,200 L.F.
12-INCH PAVEMENT STRIPE (WHITE) .....	1,100 L.F.
12-INCH PAVEMENT STRIPE (YELLOW) .....	350 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) .....	2,500 L.F.
<b>THERMOPLASTIC EXTRUSION</b>	
4-INCH PAVEMENT STRIPE (WHITE) .....	6,000 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) .....	850 L.F.
8-INCH PAVEMENT STRIPE (WHITE) .....	—
12-INCH PAVEMENT STRIPE (WHITE) .....	3,400 L.F.
CROSSWALK MARKINGS .....	343 LANE
<b>PAINT</b>	
BITUMINOUS CURB, TYPE 6 (WHITE) .....	450 L.F.
BITUMINOUS CURB, TYPE 6 (YELLOW) .....	12,200 L.F.

### DESTINATION SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	SIZE	OVERLAY AREA (SQ. FT.)	NEW PANEL AREA (SQ. FT.)		
					W/O POST	W/POST	
D-1	I.B. STA. 56+40± RT.	↑ HONOLULU SAND ISLAND ACCESS RD → U.S. COAST GUARD BASE	12'-0" x 4'-0"			48.00	
D-2	STA. 24+30± RT.	SAND ISLAND ACCESS RD NEXT LEFT	6'-0" x 4'-0"		24.00		
D-3	STA. 24+50± RT.	↑ NIMITZ HWY AIRPORT ← SAND ISLAND ACCESS RD U.S. COAST GUARD BASE	12'-0" x 5'-0"			60.00	
D-4	I.B. STA. 89+95± RT.	PIERS 31 - 34 →	5'-0" x 2'-6"		12.50		
D-5	O.B. STA. 106+20± RT.	PIERS 18 - 23 ←	5'-0" x 2'-6"		12.50		
D-6	STA. 134+60±	Piers 4 - 11 RIGHT LANE	6'-6" x 3'-0"			19.50	
D-7	STA. 140+90±	DOWNTOWN VIA BISHOP ST LEFT LANE ONLY	6'-0" x 5'-0"			30.00	
D-8	STA. 141+20±	ALOHA TOWER PIERS 4 - 11 → PASSENGER TERMINAL	7'-0" x 4'-6"			31.50	
D-9	STA. 147+65±	← ALAKEA ST HALEKAUWILA ST NEXT LEFT	7'-6" x 4'-0"			30.00	
D-10	STA. 157+00±	ALOHA TOWER PIERS 4 - 11 ← PASSENGER TERMINAL	7'-6" x 4'-6"			33.75	
D-11	I.B. STA. 43+15 ± RT.	Sand Island Access Road RIGHT LANE	8'-0" x 4'-0"		32.00		
D-12	I.B. STA. 49+15 ± RT.	Sand Island Access Road RIGHT LANE	8'-0" x 4'-0"		32.00		
TOTAL						113.00	252.75



D-11 & D-12

Scale: 1" = 1'-0"

### MILEPOST SUMMARY

NAME	MESSAGE	W/POST	W/O POST
D10-4(7)	MILE 7		2
TOTAL			2

10-11-90

Revised Pavement Marking and Destination Sign Summaries and added sign panel D-11 & D-12 layout to accommodate increased scope of work.

DATE

REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**MISCELLANEOUS SUMMARIES &  
SIGN PANEL LAYOUT**

**NIMITZ HIGHWAY RESURFACING  
SAND ISLAND ACCESS RD. TO KEAWE ST.  
PROJECT NO. 92A-01-90M**

Scale: As Shown      Date: May, 1990

SHEET No. 718 OF 19 SHEETS

ORIGINAL PLAN  
 DRAWN BY  
 TRACED BY  
 DESIGNED BY  
 QUANTITIES BY  
 CHECKED BY  
 DATE

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-90M	1990	34	34

TRAFFIC SIGN SUMMARY

SIGN NO.	MESSAGE	QUANTITY			
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.	
		W/POST	W/O POST	W/POST	W/O POST
R1-1-A	STOP	3			
R1-2	YIELD	2	2		
R2-1(35)-B	SPEED LIMIT 35			2	1
R3-1-B	NO RIGHT TURN SYMBOL		2		
R3-2-A	NO LEFT TURN SYMBOL			1	
R3-2-B	NO LEFT TURN SYMBOL		1		
R3-3-B	NO TURNS		2		
R3-23(L)	LANE-USE CONTROL SIGN SYMBOL			1	1
R6-1(L)	ONE WAY		3		
R7-107a	TheBus SYMBOL	9	12		
R7-201a	TOW AWAY ZONE SYMBOL		8		
R8-3a-B	NO PARKING SYMBOL	3	14		
R9-3a-B	NO PEDESTRIAN CROSSING SYMBOL		4		
R9-3b(L)	← USE CROSSWALK		2		
R9-3b(R)	USE → CROSSWALK		2		
R10-6	STOP HERE ON RED ↘	1			
R10-7	DO NOT BLOCK INTERSECTION		1		
R17-1	↙ ON LEFT ARROW ONLY			1	
R17-2	↘ ON LEFT ARROW ONLY				1
R17-3	↙ ON LEFT ARROW ONLY NO U TURN			6	8
W1-4(R)-B	REVERSE CURVE SYMBOL		1		
W3-2a	YIELD AHEAD SYMBOL		1		
W3-3	SIGNAL AHEAD SYMBOL		1		
W11-2-A	PEDESTRIAN CROSSING SYMBOL		2		
W12-1-A	↙ ↘	1			
D11-1	BIKE ROUTE	1	3		
M7-1(L)	←		1		
TOTAL		20	62	11	11

ROUTE MARKER SUMMARY

SIGN ASSEMBLY	LOCATION	SIGN NO. AND MESSAGE	TYPE A ASSEMBLY		TYPE B ASSEMBLY	
			W/POST	W/O POST	W/POST	W/O POST
IRM-1	STA. 39+80±	IM4-5 TO IM3-2 EAST IM1-1(2) HI IM6-1(L) ←	1			
SRM-1	STA. 20+50±	M3-3 MI-6(64) SOUTH 64 M6-1(L) M3-4 ← WEST M1-6(92) M6-3 92 ↑			1	
SRM-2	STA. 29+00± RT.	M3-2 EAST M1-6(92) 92	1			
SRM-3	STA. 59+50± LT.	M3-4 WEST M1-6(92) 92	1			
SRM-4	STA. 140+50± LT.	M3-4 WEST M1-6(92) 92		1		
SRM-5	STA. 23+10± LT.	M3-4 WEST M1-6(92) 92	1			
SRM-6	STA. 23+10± RT.	M3-2 EAST M1-6(92) 92		1		
TOTAL			4	2	1	

CONSTRUCTION SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	W/POST	W/O POST
CG20-1(3)	MAKAI FRONTAGE ROAD STA. 244+00 ± RT.	ROAD CONSTRUCTION NEXT 3 MILES	1	
CG20-2	RAMP D STA. 27+15 ± LT.	END CONSTRUCTION	1	
CW20-1d	MAKAI FRONTAGE ROAD STA. 249+00 ± RT.	ROAD CONSTRUCTION AHEAD	1	
CW20-1d	NIMITZ HWY STA. 30+00± LT.	ROAD CONSTRUCTION AHEAD	1	
CG20-2	NIMITZ HWY STA. 30+00± RT.	END CONSTRUCTION	1	
CG20-1(3)	NIMITZ HWY STA. 35+00± LT.	ROAD CONSTRUCTION NEXT 3 MILES	1	
TOTAL			6	

REFLECTOR MARKER SUMMARY

TYPE	QUANTITY					
	W/O POST		W/FLEXIBLE POST		W/STEEL POST	
	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE
RM-9	1					
RM-2	2					

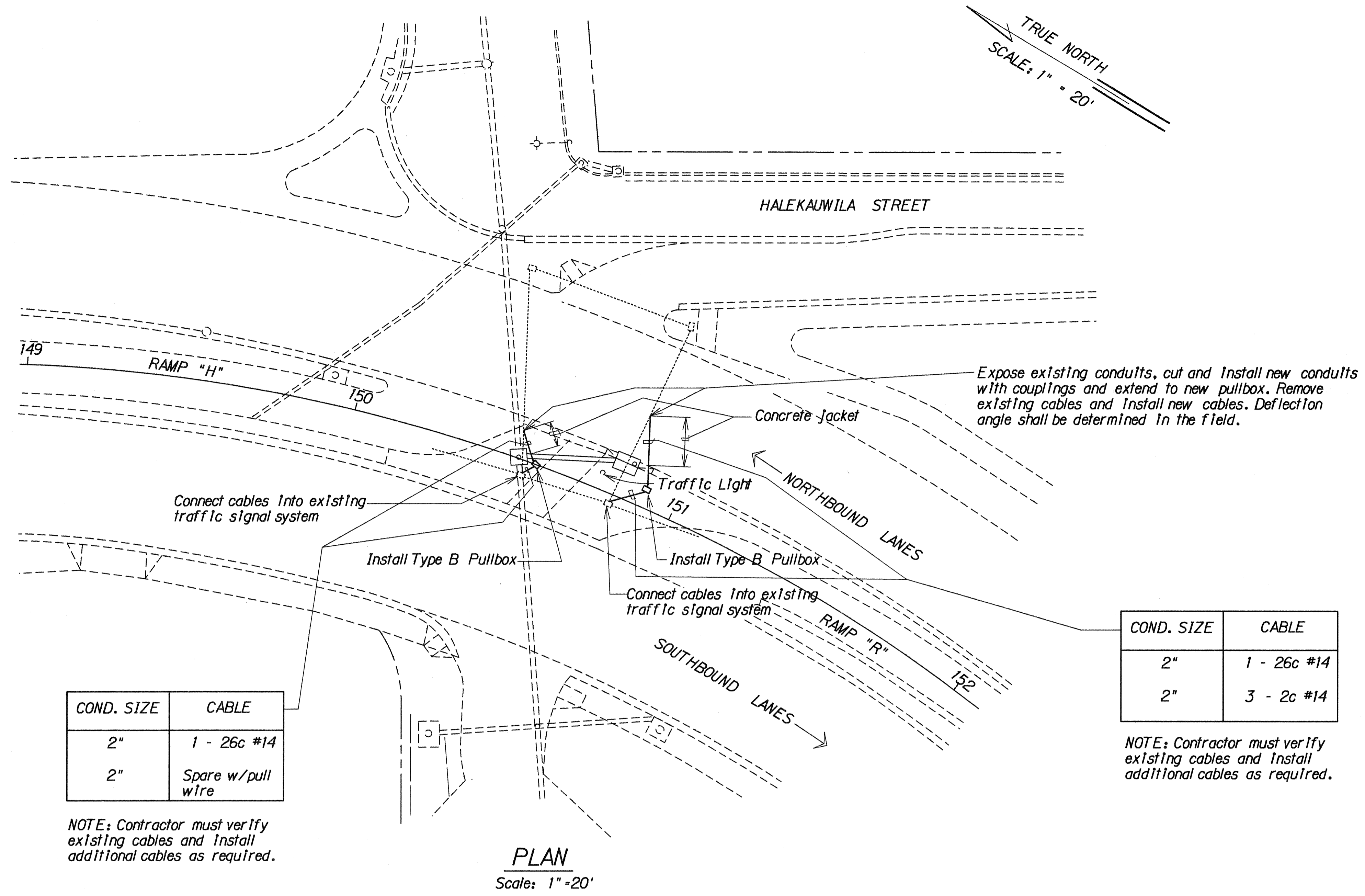
10-11-90 Replaced Traffic Sign No. W3-2-A with W3-2a.  
Revised Traffic Sign and Construction Sign  
Summaries to accommodate Increased scope of work.  
DATE REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**MISCELLANEOUS SUMMARIES**  
NIMITZ HIGHWAY RESURFACING  
SAND ISLAND ACCESS RD. TO KEAWE ST.  
PROJECT NO. 92A-01-90M  
Date: May, 1990  
SHEET No. T19 OF 19 SHEETS

SURVEY PLOTTED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 QUANTITIES BY \_\_\_\_\_  
 ORIGINAL PLAN \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-01-90M	1990	C.O. 34 S-1	34

TRUE NORTH  
SCALE: 1" = 20'



- TRAFFIC SIGNAL NOTES:**
1. All splicing shall be done in the pullboxes.
  2. The Contractor shall clean and/or repair the existing traffic signal pullboxes to be used prior to installing conduits and cables. This work will not be paid for separately but shall be considered incidental to the various contract items.
  3. The Contractor shall notify the Traffic Signal Branch, Department of Transportation Services, City & County of Honolulu, 3 working days prior to commencing any work on the traffic signal system. (Telephone No. 527-5007)
  4. Department of Transportation Services, City & County of Honolulu will assist the Engineer in construction inspection for the traffic signal system.
  5. The traffic signals shall be kept operational during construction. Any relocation required shall be approved by the Electrical & Maintenance Services Division, Department of Transportation Services, and paid for by the Contractor.
  6. The Contractor shall be responsible for any damages to existing traffic signal facilities, including the traffic signal interconnect system, and any and all damages to these facilities shall be repaired by the Contractor at his cost in accordance with the requirements of the City & County of Honolulu.

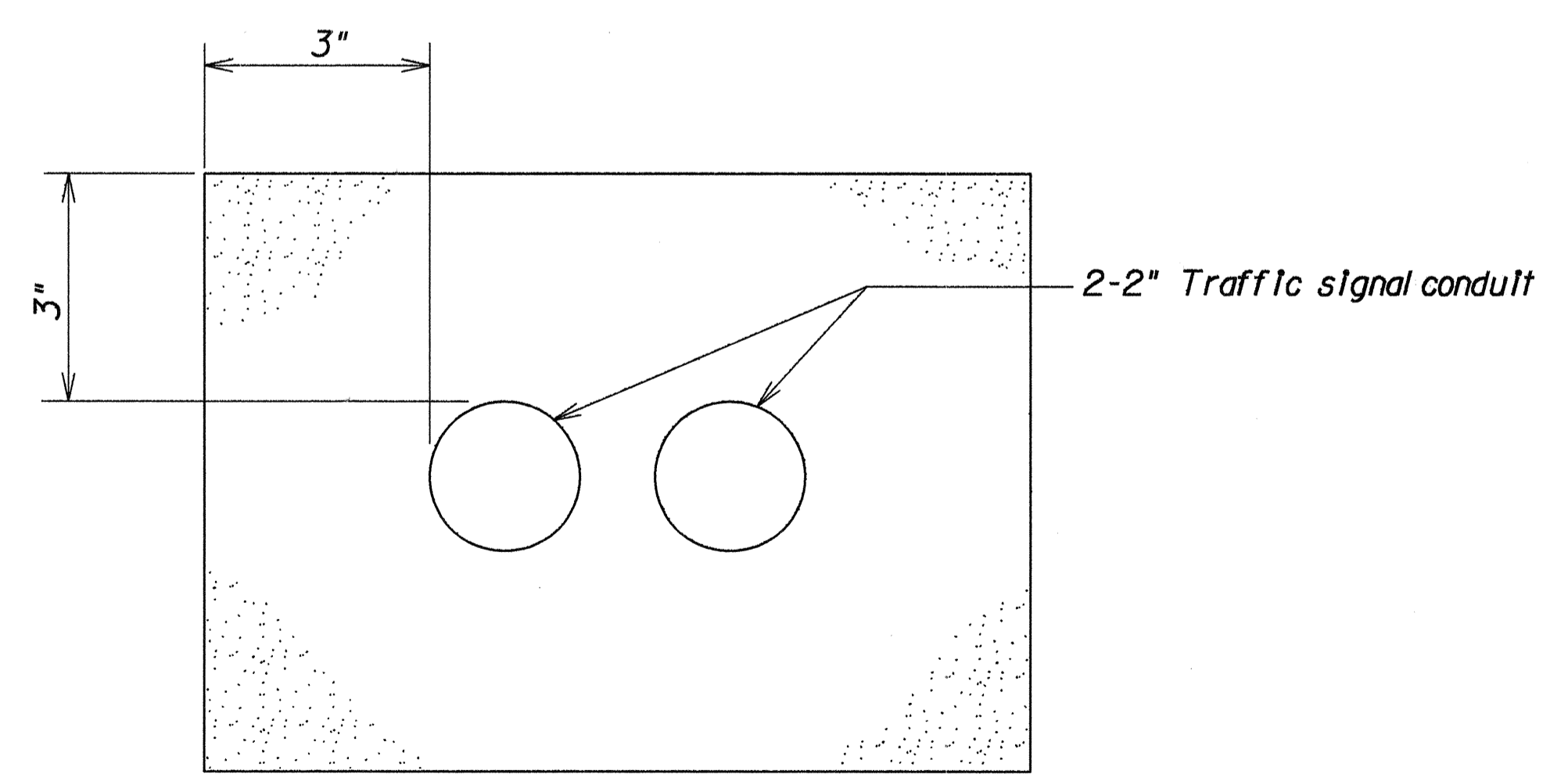
COND. SIZE	CABLE
2"	1 - 26c #14
2"	Spare w/pull wire

NOTE: Contractor must verify existing cables and install additional cables as required.

COND. SIZE	CABLE
2"	1 - 26c #14
2"	3 - 2c #14

NOTE: Contractor must verify existing cables and install additional cables as required.

**PLAN**  
Scale: 1" = 20'



**DETAIL OF CONCRETE JACKET**  
Scale: Half Size

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

01/21/92	Sheet added to contract plans to show adjustment to conduit and cables for traffic signal system.
DATE	REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TRAFFIC SIGNAL PLAN**  
Nimitz Hwy. Ala Moana Blvd.  
Resurfacing  
(Sand Island Access Rd. to Keawe St.)  
Proj. No. 92A-01-90M

Scale: As Noted Date: Jan. 1992  
SHEET No. T19A OF 19 SHEETS