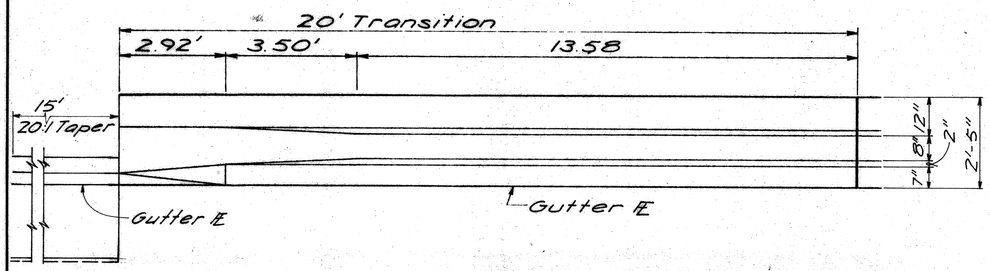
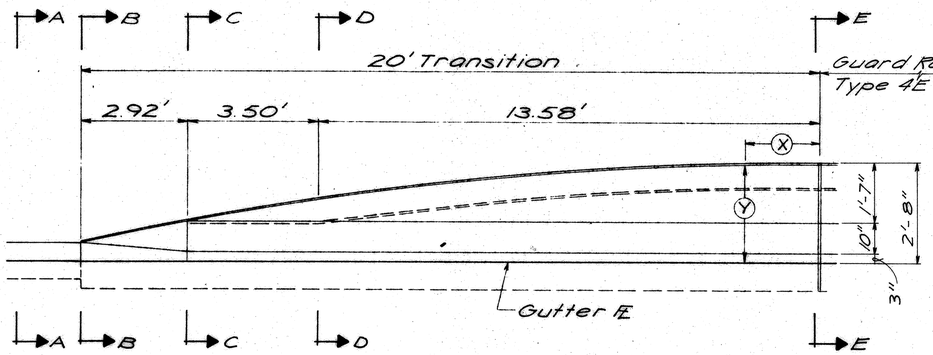
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-I(122):16	1977	28	181

GUARD RAIL, TYPE 4E



PLAN VIEW

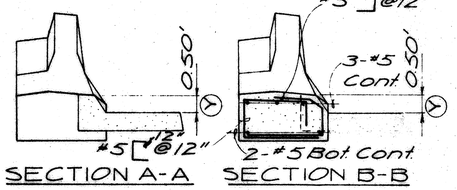


ELEVATION

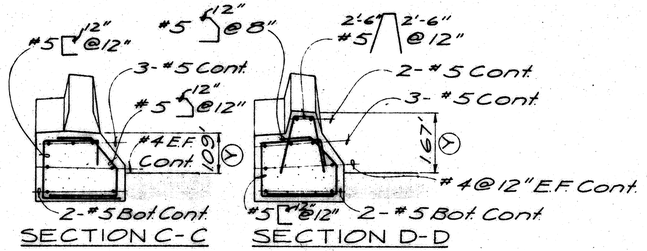
20' TRANSITION SECTION

SCALE: 1/2" = 1'-0"

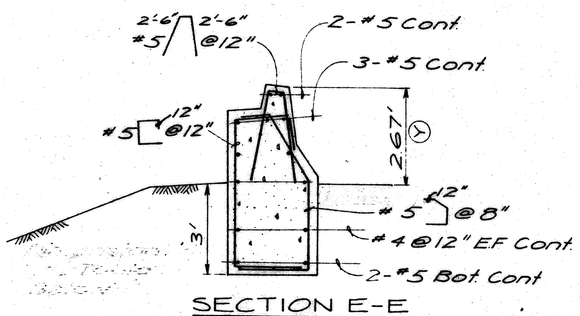
HEIGHT OF TRANSITION	
X	Y
0	2.67'
1'	2.66'
2'	2.65'
3'	2.62'
4'	2.58'
5'	2.53'
6'	2.47'
7'	2.40'
8'	2.32'
9'	2.23'
10'	2.13'
11'	2.01'
12'	1.89'
13'	1.75'
13.58'	1.67'
14'	1.61'
15'	1.45'
16'	1.28'
17'	1.10'
17.08'	1.09'
18'	0.91'
19'	0.71'
20'	0.50'



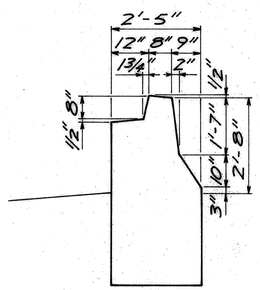
SECTION A-A SECTION B-B



SECTION C-C SECTION D-D



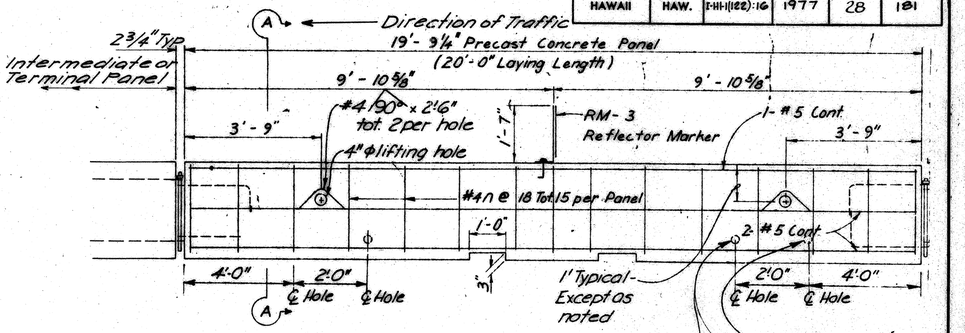
SECTION E-E



END VIEW

NO.	DATE	REVISION
1	8-18-77	Underground Portion of Guard Rail, Type 4E changed from 1'-6" to 3'-0"

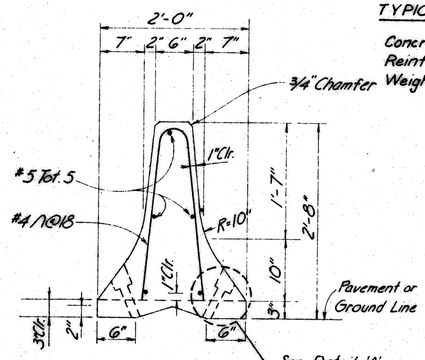
PORTABLE CONC. GUARD RAIL



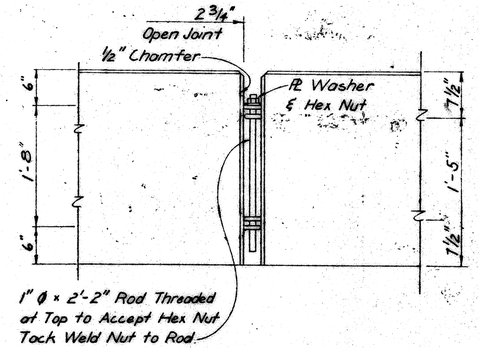
TYPICAL INTERMEDIATE PANEL

Concrete: 19.3 c.y. per Panel
Reinf.: 169 lbs. per Panel
Weight: 3.9 tons per Panel

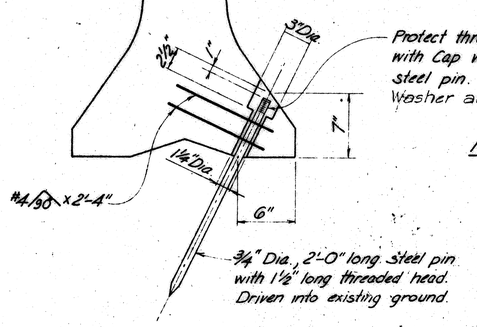
ELEVATION
Scale: 1/2" = 1'-0"



SECTION "A-A"
GROUND INSTALLATION (Typical)



EXISTING PIN CONNECTION DETAIL
Scale: 1" = 1'-0"



DETAIL A - GROUND ANCHORAGE
Scale: 1 1/2" = 1'-0"

Notes:

1. All bolts to have cut washers unless otherwise noted.
2. Construct asphalt concrete or mortar base where needed for proper sitting of Guard Rail on Exist. pavement and use aggregate base material on unpaved areas.
3. Construction of base shall not be paid separately but shall be considered incidental to "Reset Portable Concrete Guard Rail."
4. Portable Conc. Guard Rail shall be cut as necessary or add lengths cast to fit end stations as directed. Incidental to Portable Conc. Guard Rail.

EDWARD C. STEVENSON
REGISTERED PROFESSIONAL ENGINEER
No. 3299
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPECIAL DETAILS
GUARD RAIL, TYPE 4E
PORTABLE CONC. GUARD RAIL

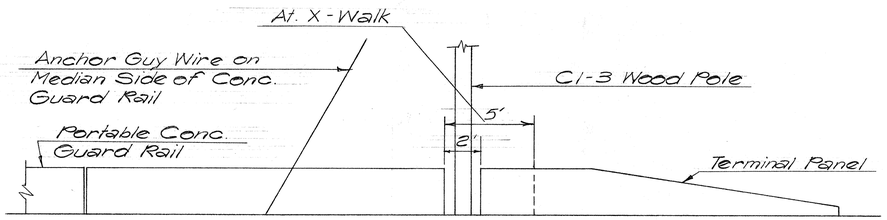
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(122):16

SCALE: AS SHOWN DATE: FEB. 1, 1977

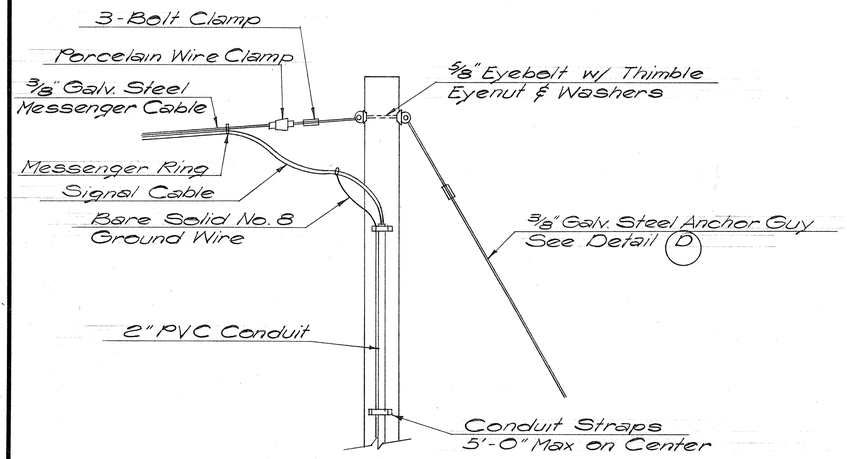
SHEET No. 1 OF 1 SHEETS

ADD 28

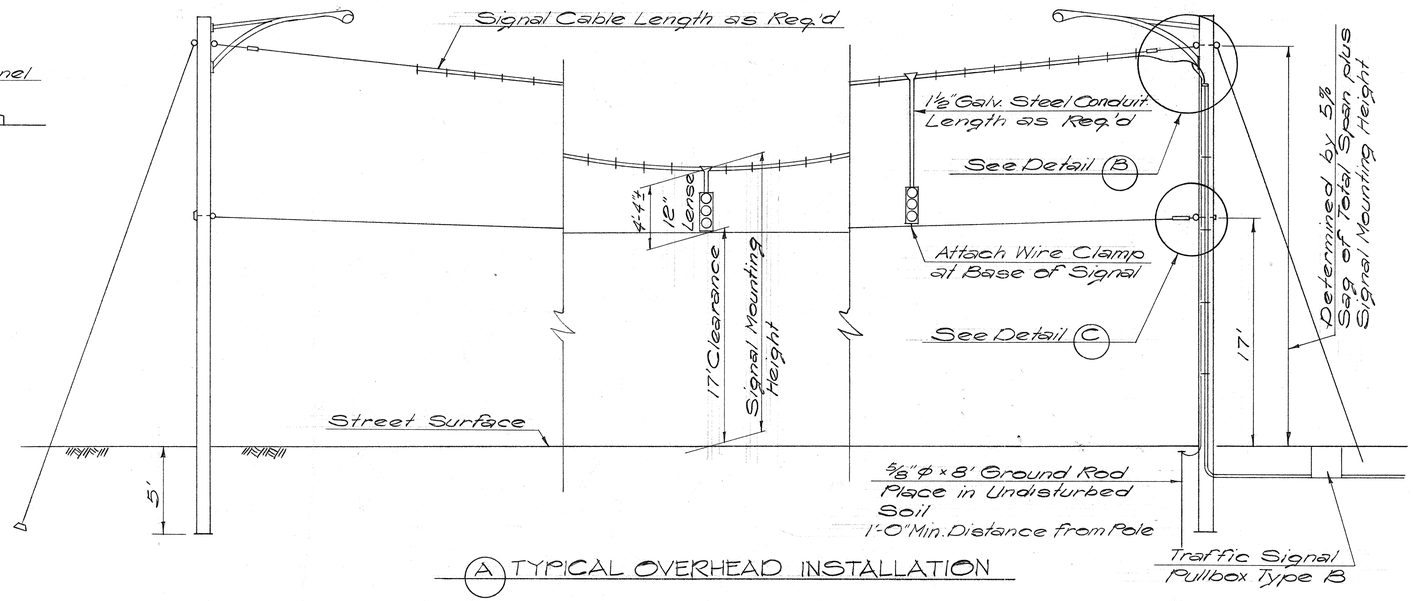
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-I(122)16	1977	29	181



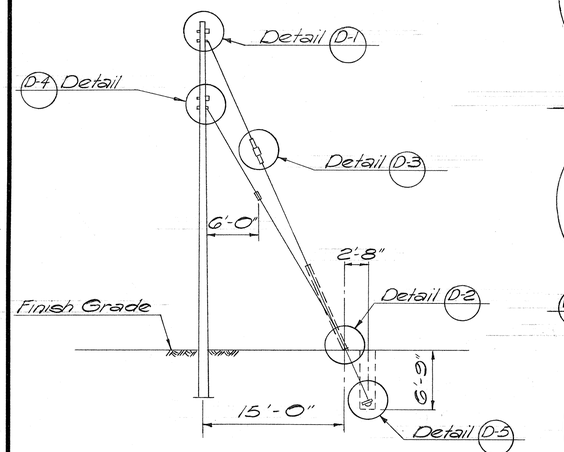
SIGNAL POLE IN MEDIAN STRIP



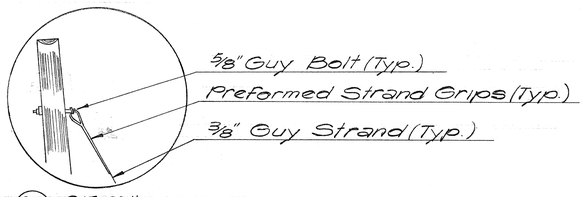
(B) TRAFIC SIGNAL POLE DETAIL



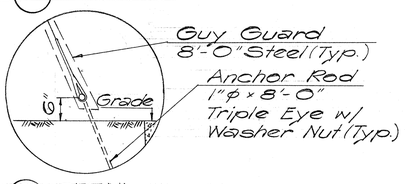
(A) TYPICAL OVERHEAD INSTALLATION



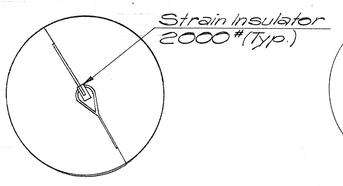
(D) TYPICAL ANCHOR AND GUYING DETAL
No Scale



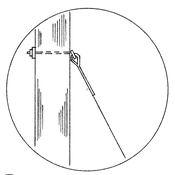
(D-1) DETAIL



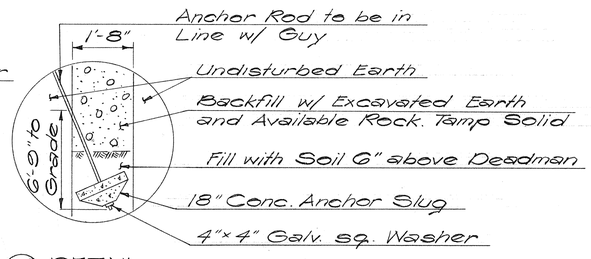
(D-2) DETAIL



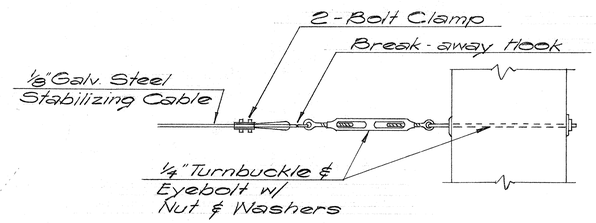
(D-3) DETAIL



(D-4) DETAIL



(D-5) DETAIL



(C) STABILIZER CABLE DETAIL

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

EDWARD C. STEVENSON REGISTERED PROFESSIONAL ENGINEER No. 3299 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR SIGNAL DETAILS

AIRPORT INTERCHANGE
F.A.I. PROJ. I-HI-I(122):16

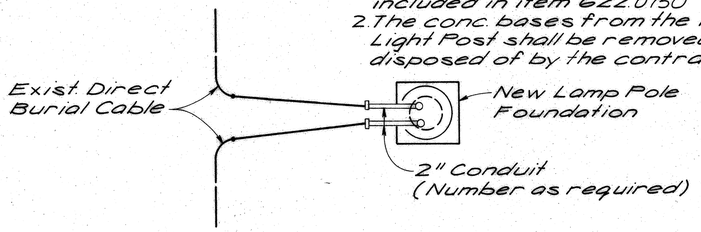
SCALE: NONE DATE: FEB 1, 1977

SHEET No. 1 OF 1 SHEETS

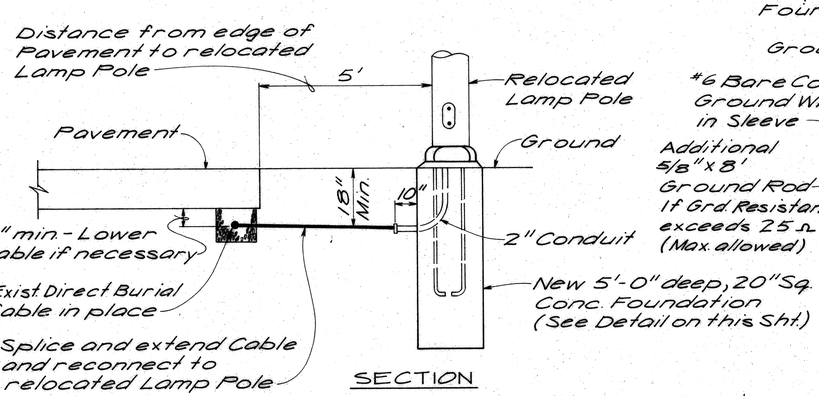
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-(122):16	1977	30	131

NOTES:

1. Relocation of Light Poles included in item 622.0750
2. The conc. bases from the relocated Light Post shall be removed and disposed of by the contractor.

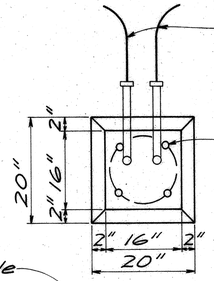


PLAN

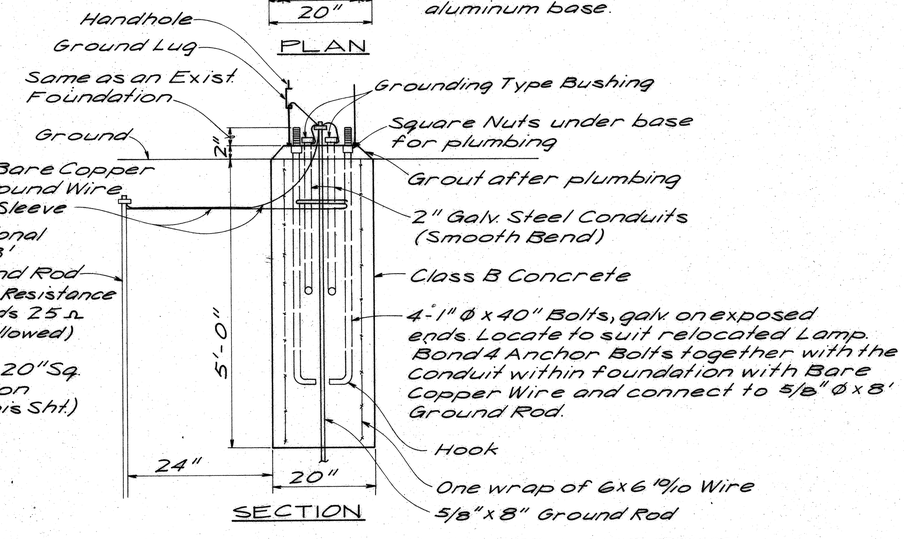


SECTION

LAMP POLE RELOCATION DETAIL
NO SCALE



PLAN



SECTION

CONC. BASE FOR RELOCATED LAMP POLE
NO SCALE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

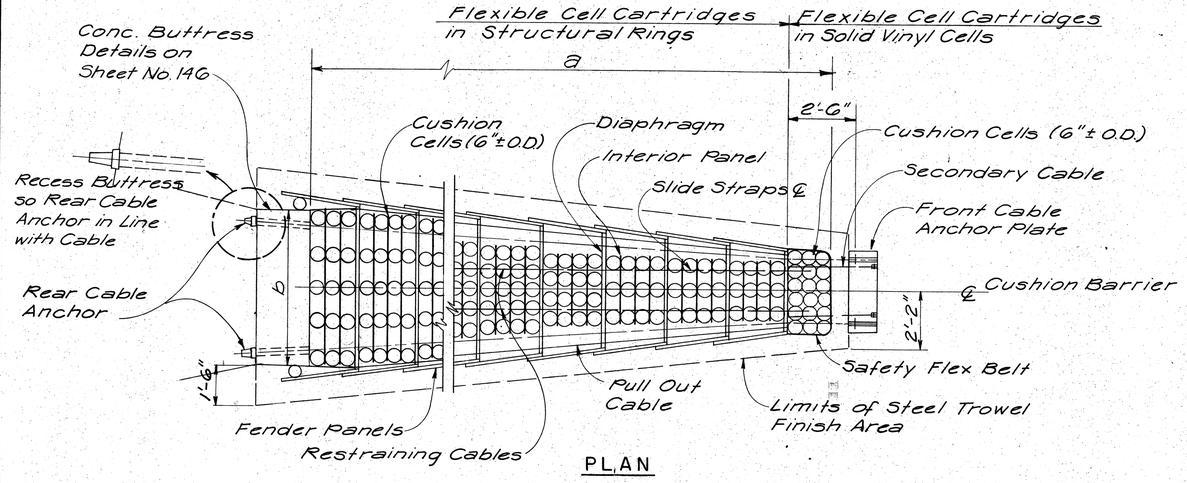
RODGERS BLVD DETOUR
LIGHT POLE RELOCATION

AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(122):16

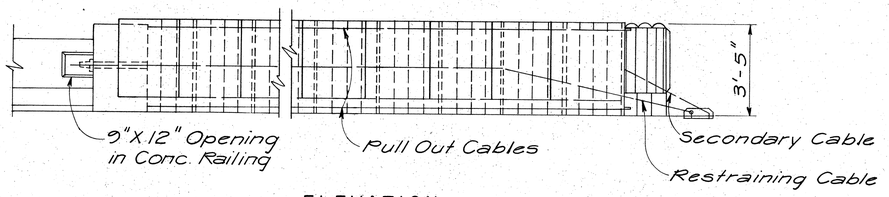
SCALE: AS SHOWN DATE: FEB. 1, 1977

SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(122):16	1977	31	181



PLAN



ELEVATION

CUSHION BARRIER LAYOUT

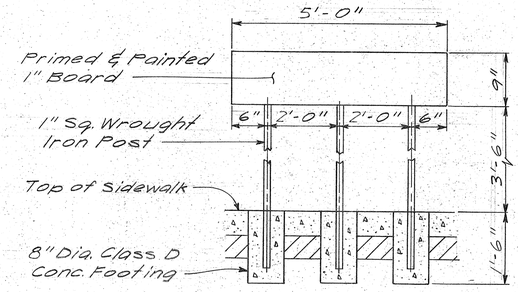
SCALE : 3/8" = 1'-0"

	UNITS	LOCATION	a	b
	8-Bay	R-ED Sta. 43+80.24	18'-11½"	5'-2"
*	10-Bay	R-ED Sta. 74+63.57	23'-5½	7'-6"

* Anchor bolts for Front Cable Anchor Plate shall be furnished to Contractor for Project I-HI-1(121):16 for installation.

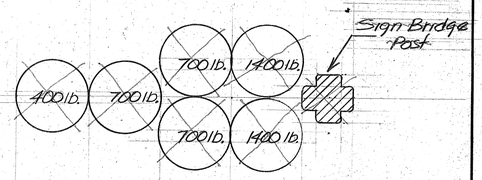
NOTES:

1. Steel trowel finish area shall be in one plane.
2. The Contractor shall verify all dimensions.
3. Front cable anchorage mounting straps and concrete anchor bolts shall be incidental to cushion barrier and not be paid for separately.
4. All structural steel shall be galvanized after fabrication.
5. The installation of the concrete anchor bolts to secure front cable anchor plate shall not reduce the area of reinforcing steel in the concrete deck below the allowable design limits.
6. Front end anchorage details and buttress connection details shall be as recommended by the manufacturer.



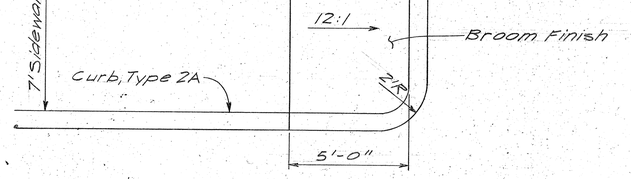
GUARD POST DETAIL

NOT TO SCALE



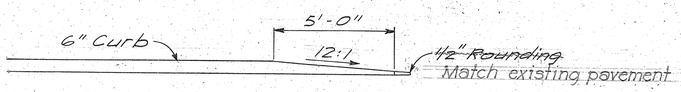
INERTIAL BARRIER AT SIGN BRIDGE POSTS

Note: Level installation site and install barriers as recommended by Manufacturer.



PLAN

SCALE: 1" = 3'-0"



ELEVATION

SCALE: 1" = 3'-0"

WHEEL CHAIR RAMP

(Rt. of Sta. 17+29.16 Rodgers P.L. ℄)

Note: Construction cost of Guard Rail and Wheel Chair Ramp shall be incidental to pay item 608.0100, Plain Concrete Sidewalk

NO.	DATE	REVISION
~~2~~	~~7-12-78~~	~~Added Inertial Barrier Detail~~
1	10-12-77	Added Guard Post and Wheel Chair Ramp Details

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Edward C. Hirata

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CUSHION BARRIER, GUARD POST, & WHEEL CHAIR RAMP

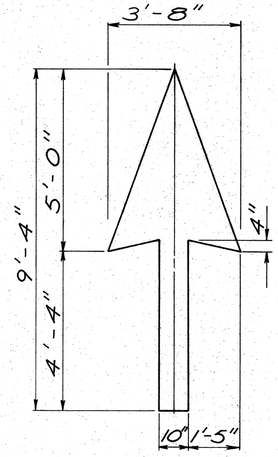
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(122):16

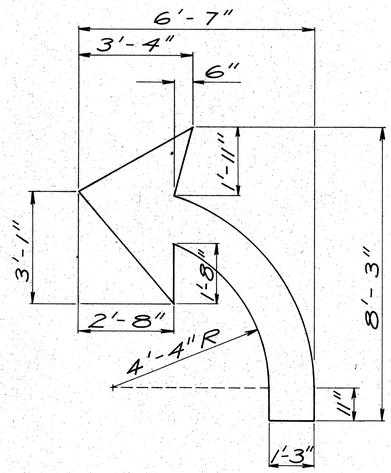
SCALE: AS SHOWN DATE: FEB. 1, 1977

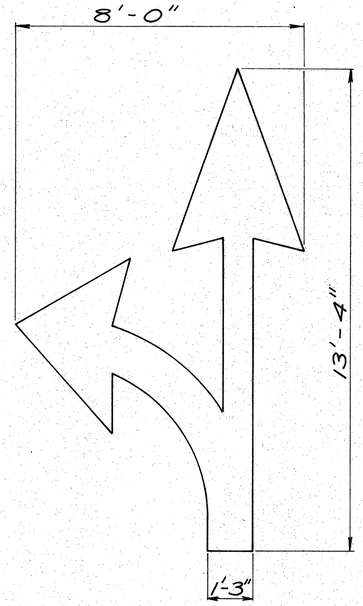
SHEET No. 1 OF 1 SHEETS

CO 31

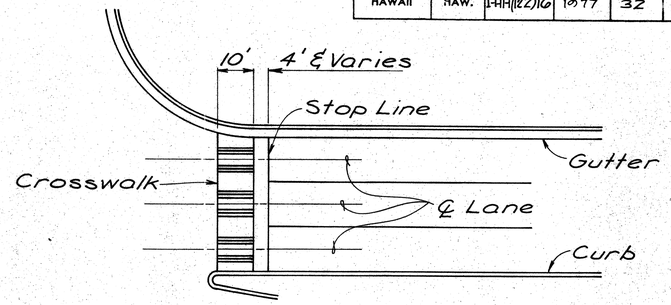
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI(122)16	1977	32	181

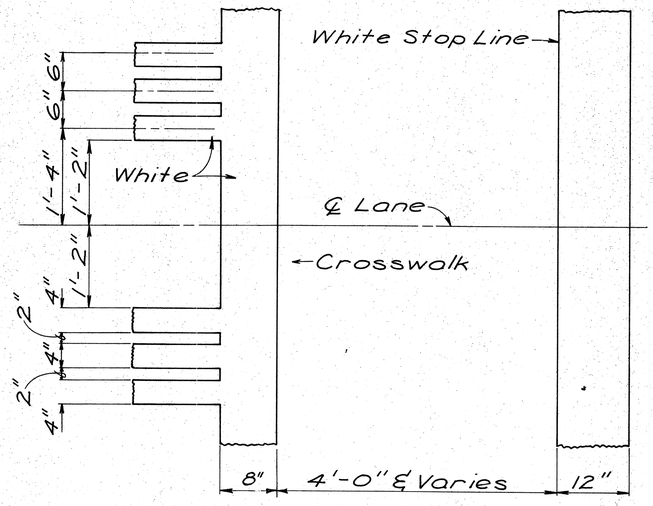




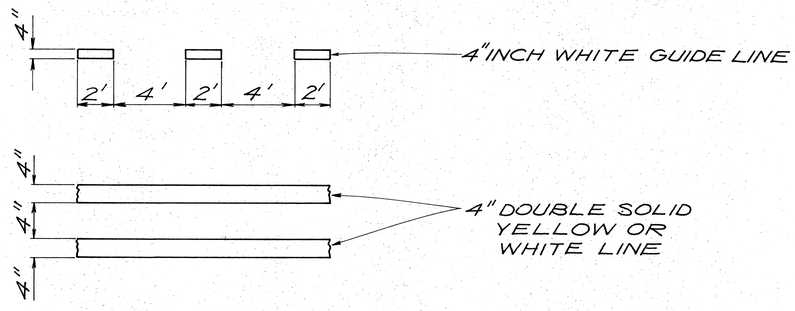


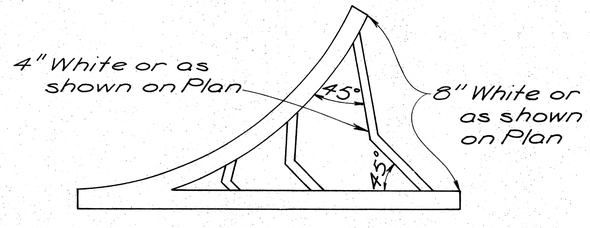
PAVEMENT ARROWS
SCALE: 1/2" = 1'-0"





CROSSWALK & STOP LINE DETAIL
NOT TO SCALE





MISCELLANEOUS PAINTED STRIPES
NOT TO SCALE

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

EDWARD C. STEVENSON
REGISTERED PROFESSIONAL ENGINEER
No. 3299
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAINT STRIPE DETAILS

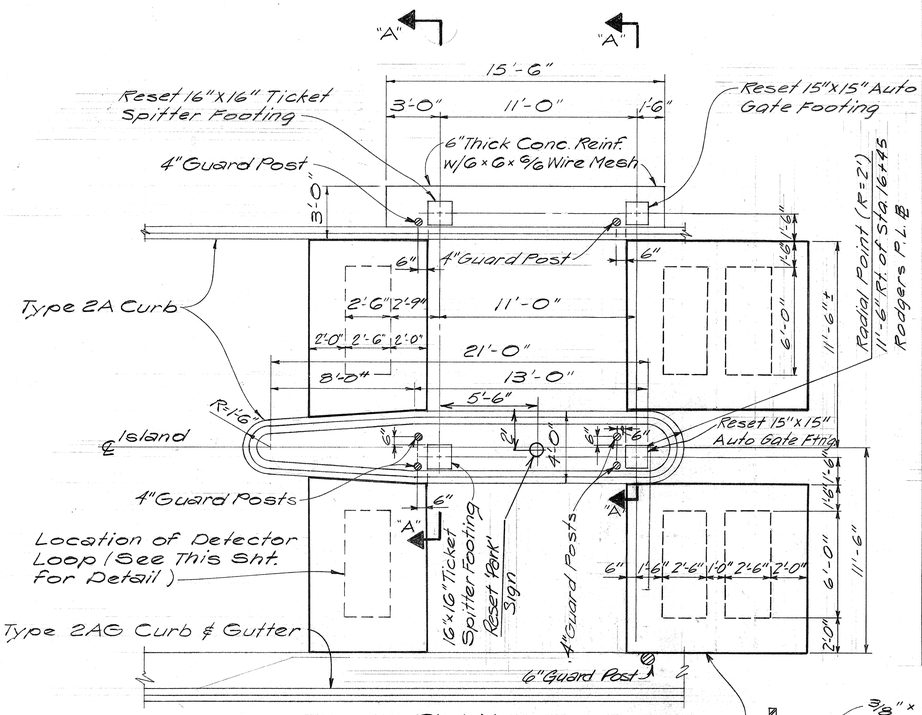
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(122):16

SCALE: AS SHOWN DATE: MAY 1, 1977

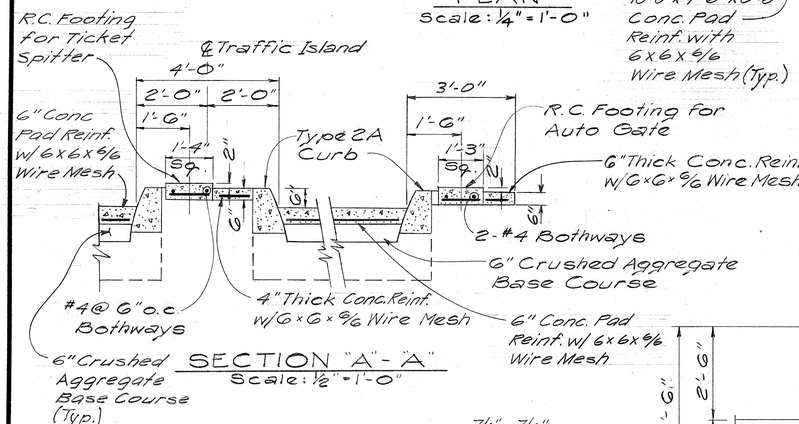
SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-(122)16	1977	33	181

NO.	DATE	REVISION
1	11-1-77	Relocated & increased Cast Iron Guard Posts. Added Conc. Pads at Loop Detectors.
2	11-29-77	Added 2 more Loop Detectors
3	8-14-77	Added 6" Guard Post.

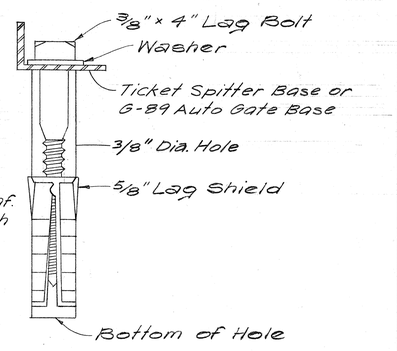


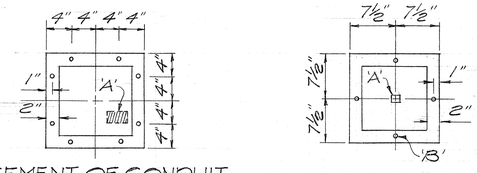
PLAN
Scale: 1/4" = 1'-0"



SECTION "A"-"A"
Scale: 1/2" = 1'-0"

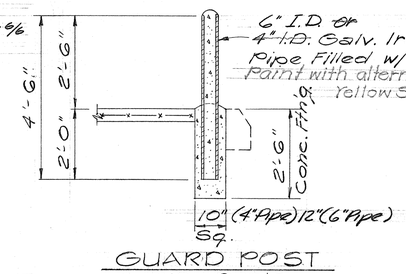
10'-0"x9'-6"x0'-6" Conc. Pad Reinf. with 6x6x6/6 Wire Mesh (Typ.)





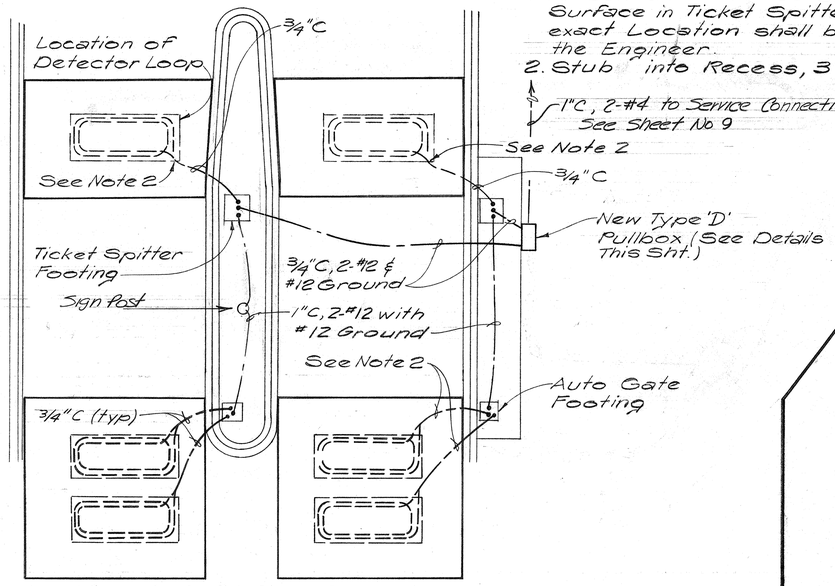
PLACEMENT OF CONDUIT FOR TICKET SPITTER
Scale: 1" = 1'-0"

PLACEMENT OF CONDUIT FOR AUTO GATE
Scale: 1" = 1'-0"

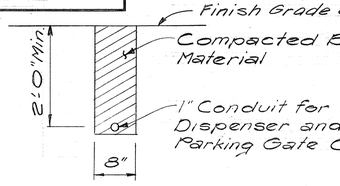


GUARD POST
NO Scale

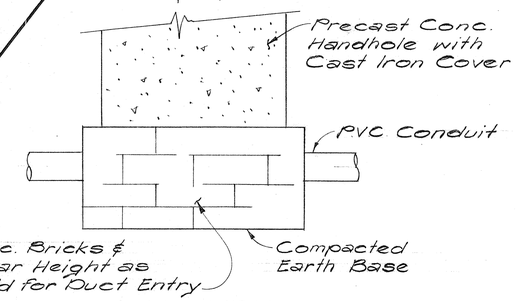
NOTES:
1. All Conduits shall be stubbed 2" above Surface in Ticket Spitter & Auto Gate exact Location shall be verified with the Engineer.
2. Stub " into Recess, 3" below Surface



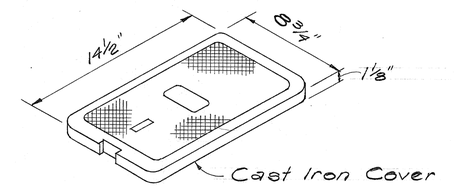
DETAIL ELECTRICAL PLAN
PARKING LOT ENTRANCE
No Scale



DUCT SECTION
No Scale

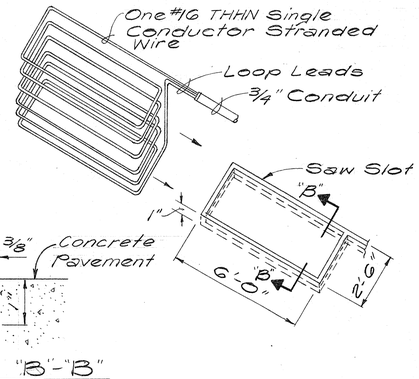


ELEVATION



CAST IRON COVER

TYPE 'D' PULLBOX
HC & D Type 'B' Meter Box or Equivalent Except for Cover as shown
No Scale



SECTION "B"-"B"
DETECTOR LOOP & SAW SLOT
No Scale

TYPICAL LAYOUT FOR LOOP
Saw Slot 3/8" Wide x 1" Deep. Make Rectangular Shape to specified Loop Dimensions plus Slot for Lead Conduit. Grout with No. 202 Wheatherban Sealant, a product of 3M Co., or equal.

NOTES:
1. Loop Leads are limited to 100 Feet.
2. Loop Leads must have Four(4) Twist per Foot.
3. Loop must have Six(6) Turns.
4. Loop & Loop Leads must be located at least 18" from any Electrical Power Service or Runs.
5. Loop Leads must be in separate Conduit between Loop and Amplifier. They must not share Conduit with other wiring or Leads from other Loops.
6. Use #16 THHN Single Conductor Stranded Wire.

CAUTION: Do not fracture wire installation. Loop shorted to ground will cause detector malfunction. When placing wire in slot, do not use screwdriver or other sharp tools.

TICKET DISPENSER ASSEMBLY

NOTE: 'A' = Conduit Area - Stub 2" above Surface.
'B' = All Holes 1/2" Dia., use 4 of 8 Holes in Ticket Spitter Base.

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

EDWARD C. STEVENSON
REGISTERED PROFESSIONAL ENGINEER
No. 3299
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

RESET PARKING GATE ASSEMBLY

AIRPORT INTERCHANGE
F. A. I. PROJ. NO. I-HI-I(122):16

SCALE: AS SHOWN DATE: MAY 1, 1977

SHEET No. 1 OF 1 SHEETS

C033