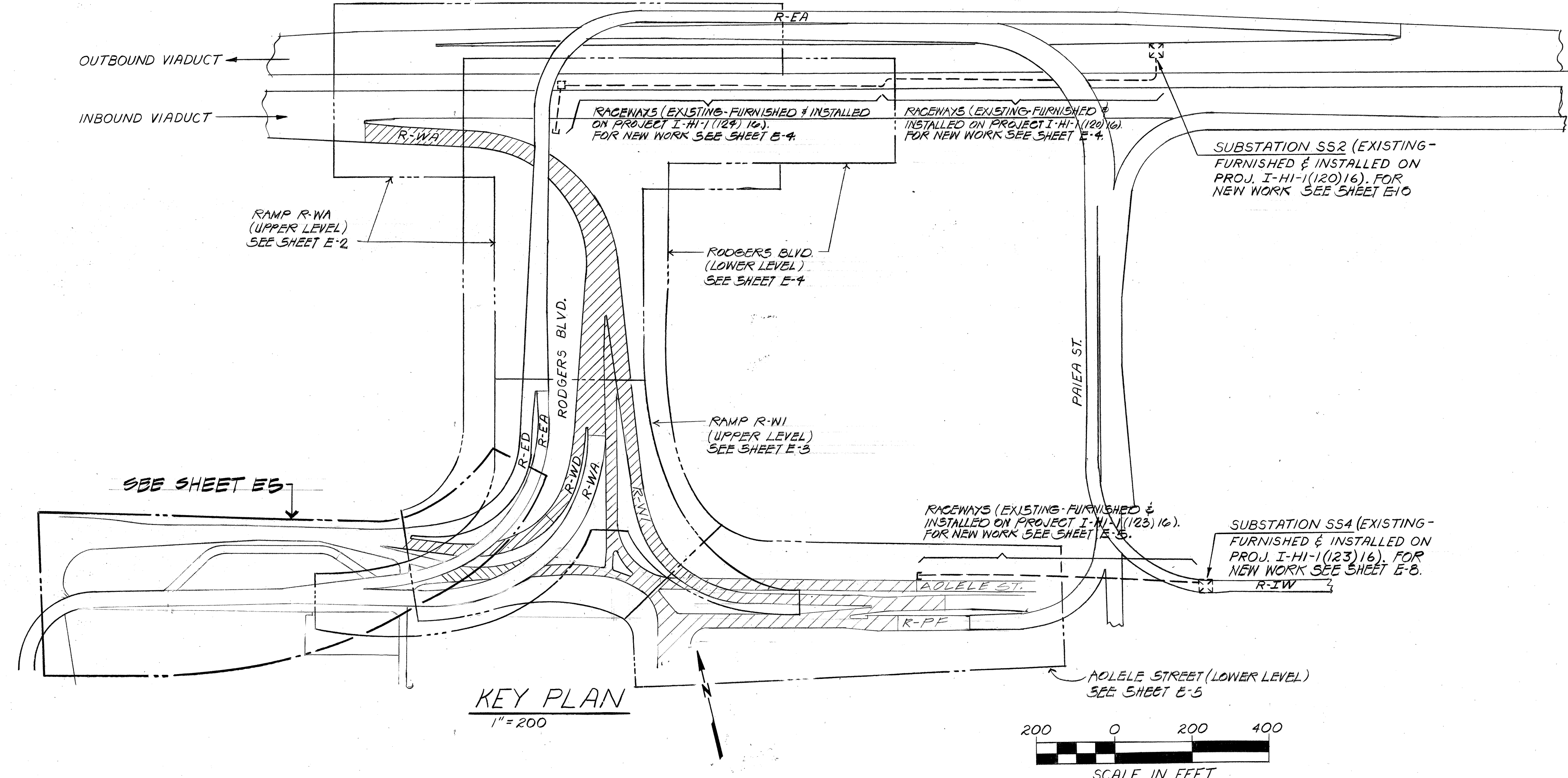


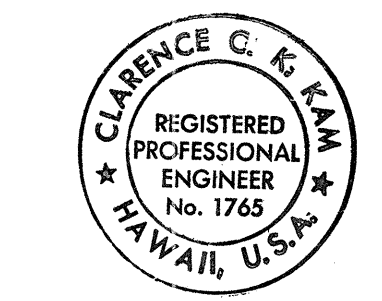
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(146)16	1979	84	283



- NOTES:
- ALL NON-CURRENT CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT & RACEWAYS SHALL BE GROUNDED. ALL NON-METALLIC CONDUIT RUNS SHALL BE PROVIDED WITH A #8 AWG, 600V, TW (GREEN) GROUNDING CONDUCTOR.
 - ALL CONDUITS EMBEDDED IN CONCRETE STRUCTURES & PASSING THROUGH AN EXPANSION JOINT SHALL BE INSTALLED WITH EXPANSION COUPLINGS. THE CROSSING OF EXPANSION JOINTS SHALL BE AT A RIGHT ANGLE TO THE JOINT.

LEGEND

	SUBSTATION, EXISTING
	CONDUIT, CONCRETE ENCASED, BELOW GRADE
	CONDUIT, DIRECT BURIAL
	CONDUIT, EMBEDDED IN CONCRETE STRUCTURE
	CAPPED CONDUIT
	PULL BOX, FOR BURIED CONDUIT SYSTEM, STANDARD TYPE "B"
	JUNCTION BOX, 8' x 8' x 4' DEEP
	EMERGENCY COMMUNICATION PULL BOX
	SIGN, ILLUMINATED
	DETAIL INDICATOR: TOP HALF - DETAIL NO. BOTTOM HALF - SHEET NO.
	METER, EXISTING
	TRANSFORMER, EXISTING
	METERING CURRENT TRANSFORMER, EXISTING
	MOLDED CASE CIRCUIT BREAKER
	RAIL MOUNTED LUMINAIRE, CONTINUOUS ROW OF 8'-0" UNITS, 200 MA. FLUORESCENT, 277V, TYPE "T1"
	RAIL MOUNTED LUMINAIRE, CONTINUOUS ROW OF 8'-0" UNITS, 430 MA. FLUORESCENT, 277V, TYPE "T2"
	POLE MOUNTED LUMINAIRE, 30' MOUNTING HEIGHT, 250W. HIGH PRESS. SODIUM LAMP, 480V, TYPE "R"
	POLE MOUNTED LUMINAIRE, 30' MOUNTING HEIGHT, 250W. WARM DELUXE WHITE MERCURY VAPOR, 480V, TYPE "R1"
	WALL MOUNTED LUMINAIRE, 15' MOUNTING HEIGHT, 250W. HIGH PRESS. SODIUM LAMP, 480V, TYPE "N1"
	WALL MOUNTED LUMINAIRE, 15' MOUNTING HEIGHT, 250W. WARM DELUXE WHITE MERCURY VAPOR, 480V, TYPE "N2"
	POLE MOUNTED LUMINAIRE, 30' MOUNTING HEIGHT, DOUBLE ARM, 2-250W HIGH PRESSURE SODIUM LAMP, 480V, TYPE "15"



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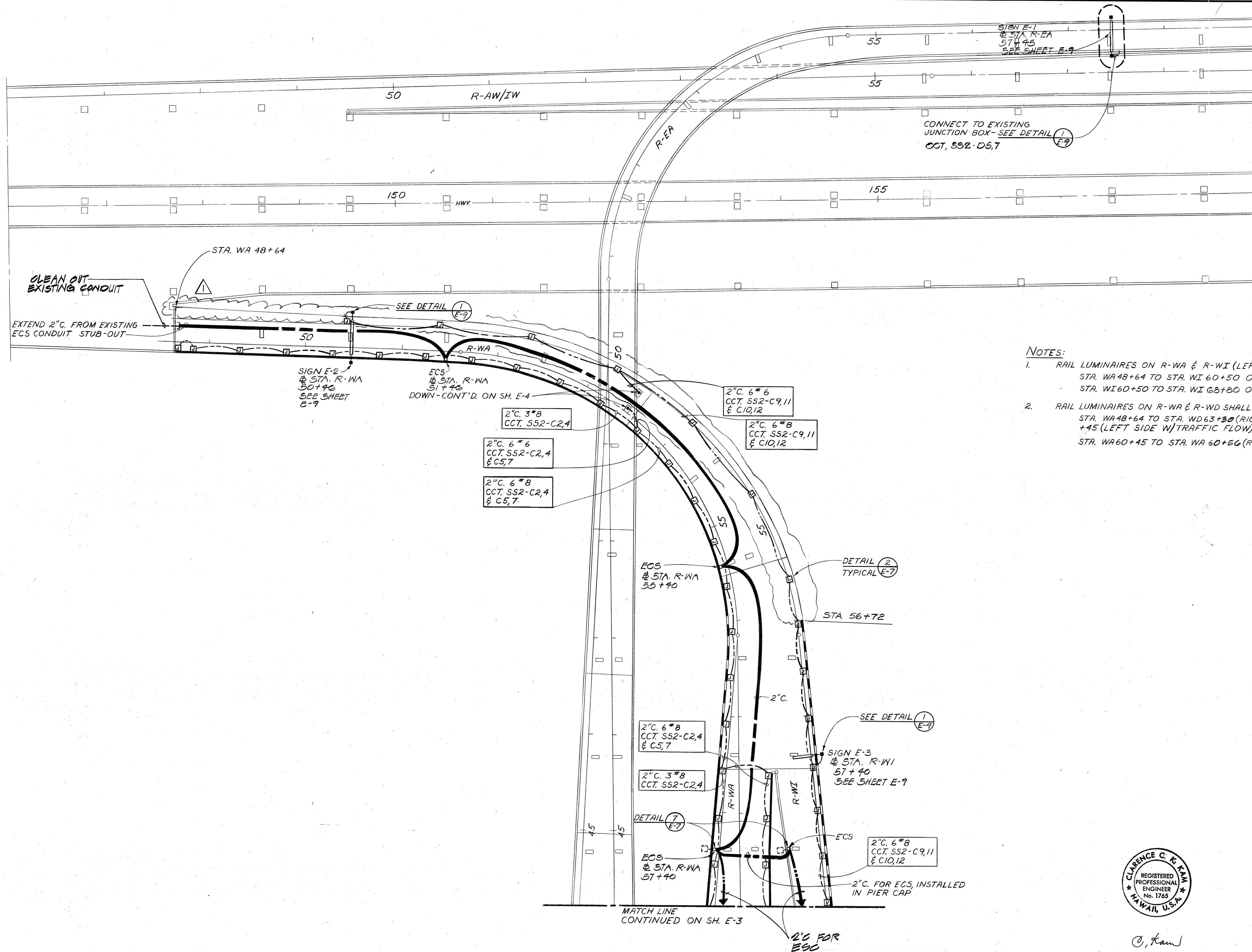
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY LIGHTING
KEY PLAN, LEGEND AND NOTES

AIRPORT INTERCHANGE
FAI PROJ. NO. I-HI-1(146) 16
SCALE: AS NOTED DATE: JUNE 1, 1979

SHEET No. 1 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(146)16	1979	85	283



- NOTES:
- RAIL LUMINAIRES ON R-WA & R-WI (LEFT SIDE W/TRAFFIC FLOW) SHALL BE CONNECTED AS FOLLOWS:
 STA. WA48+64 TO STA. WI 60+50 ON CCT. SS2-C9,11.
 STA. WI60+50 TO STA. WI 68+80 ON CCT. SS2-C10,12 (SEE SHEET E-3).
 - RAIL LUMINAIRES ON R-WA & R-WD SHALL BE CONNECTED AS FOLLOWS:
 STA. WA48+64 TO STA. WD63+80 (RIGHT SIDE W/TRAFFIC FLOW) & STA. WA57+60 TO STA. WA60+45 (LEFT SIDE W/TRAFFIC FLOW) ON CCT. SS2-C2,4.
 STA. WA60+45 TO STA. WA 60+EG (RIGHT SIDE W/TRAFFIC FLOW) ON CCT. SS2-C5,7 (SEE SH. E-3).

E-2

NO.	DATE	REMARKS
1	11/29/79	DELETED RAIL LIGHTS

REVISIONS

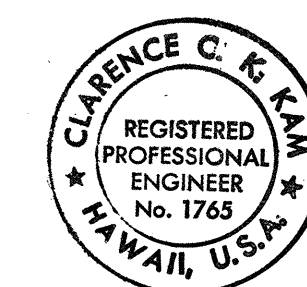
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY LIGHTING
RAMPS

AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(146) 16

SCALE: 1"=50'-0" DATE: JUNE 1, 1979

SHEET No. 2 OF 10 SHEETS

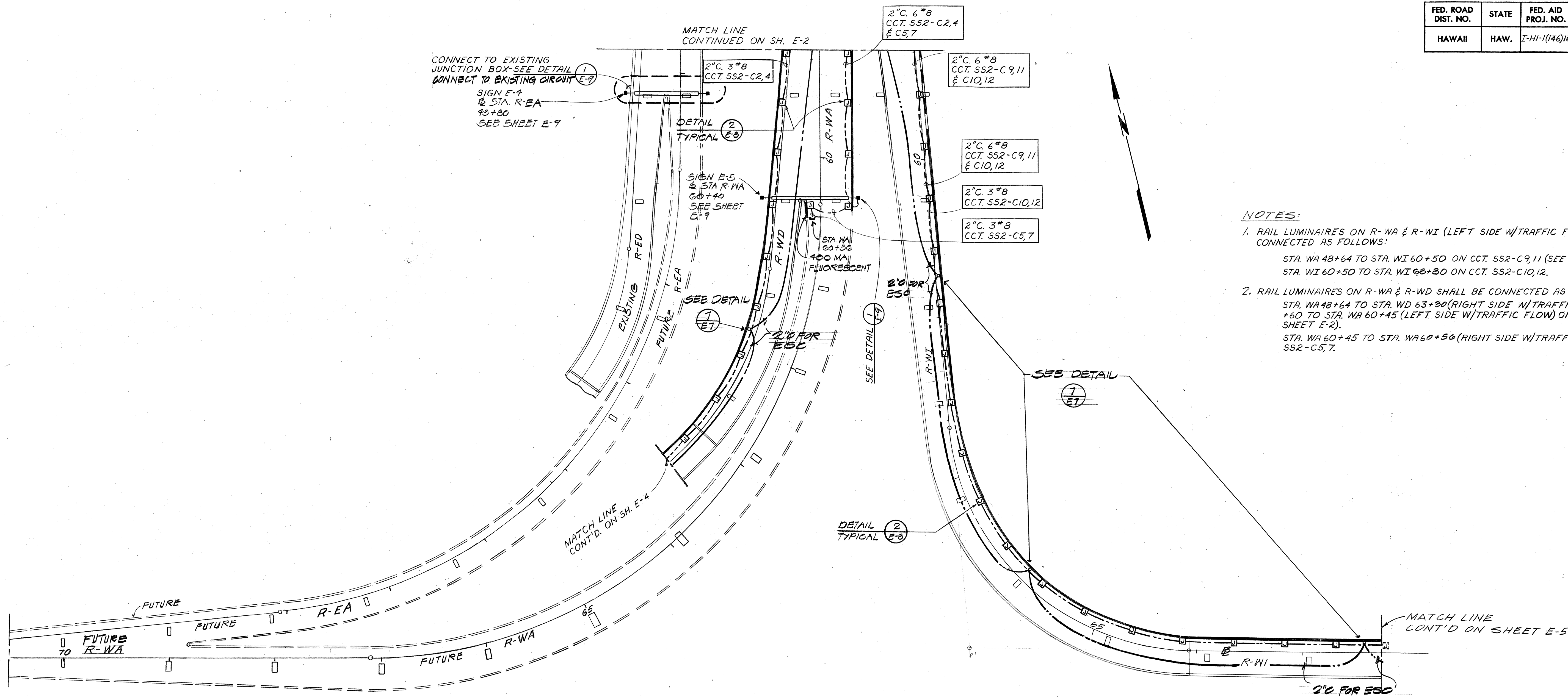


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ADD85

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(146)16	1979	86	283



- NOTES:
1. RAIL LUMINAIRES ON R-WA & R-WI (LEFT SIDE W/TRAFFIC FLOW) SHALL BE CONNECTED AS FOLLOWS:
 STA. WA 48+64 TO STA. WI 60+50 ON CCT. SS2-C9,11 (SEE SHEET E-2).
 STA. WI 60+50 TO STA. WI 68+80 ON CCT. SS2-C10,12.
 2. RAIL LUMINAIRES ON R-WA & R-WD SHALL BE CONNECTED AS FOLLOWS:
 STA. WA 48+64 TO STA. WD 63+30 (RIGHT SIDE W/TRAFFIC FLOW) & STA. WA 57+60 TO STA. WA 60+45 (LEFT SIDE W/TRAFFIC FLOW) ON CCT. SS2-C2,4 (SEE SHEET E-2).
 STA. WA 60+45 TO STA. WA 60+56 (RIGHT SIDE W/TRAFFIC FLOW) ON CCT. SS2-C5,7.



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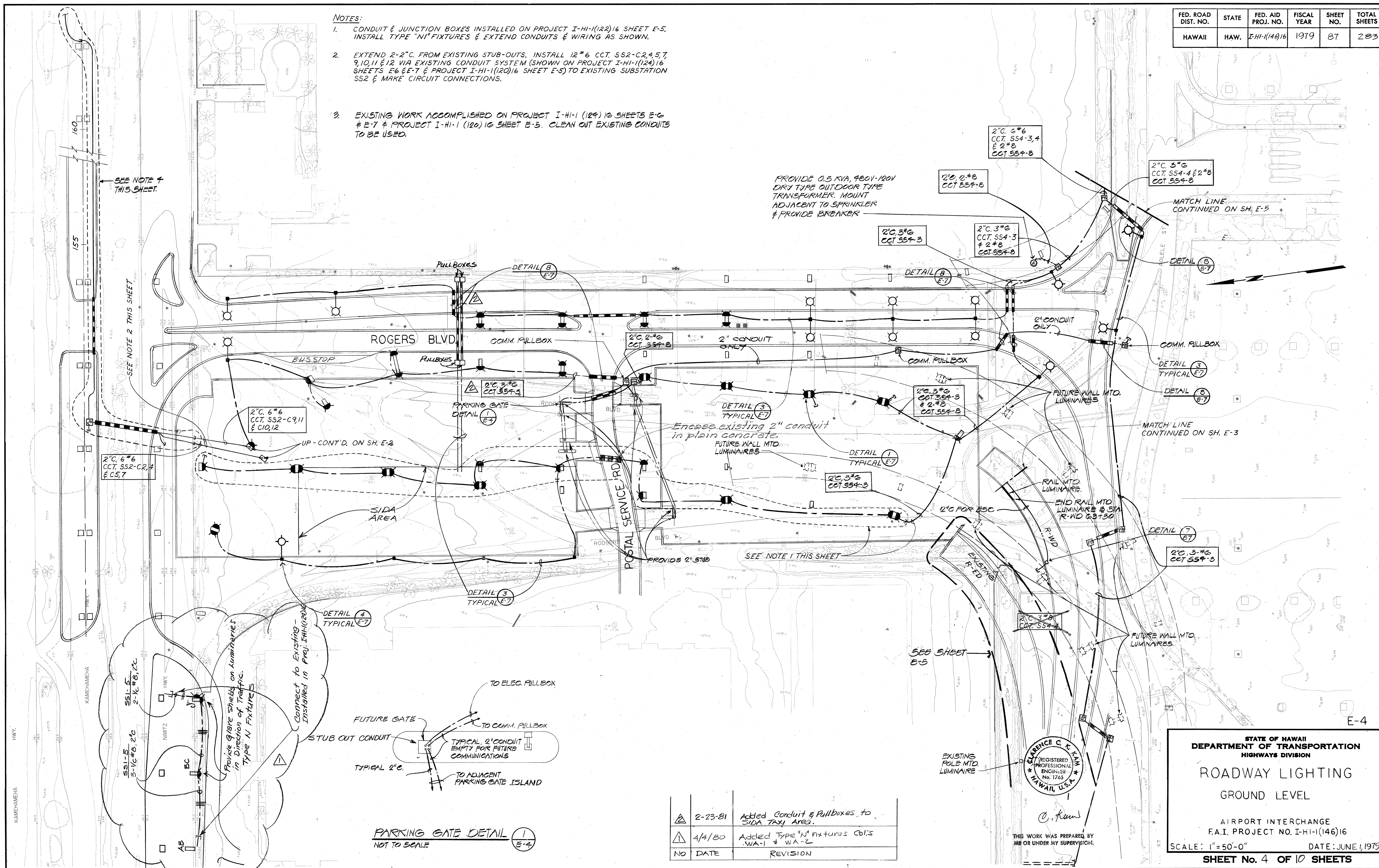
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
 ROADWAY LIGHTING
 RAMPS
 AIRPORT INTERCHANGE
 F.A.I. PROJECT NO. I-HI-1(146)16
 SCALE: 1"=50'-0"

DATE: JUNE 1, 1979
 SHEET No. 3 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IHI-1(146)16	1979	87	283

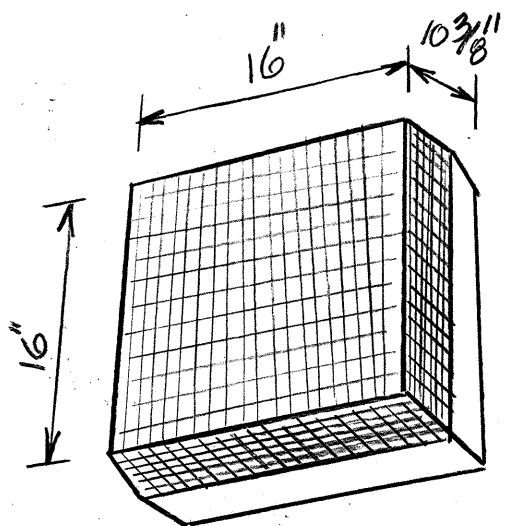
NOTES:

- CONDUIT & JUNCTION BOXES INSTALLED ON PROJECT IHI-1(122)16 SHEET E-5. INSTALL TYPE "N" FIXTURES & EXTEND CONDUITS & WIRING AS SHOWN.
- EXTEND 2-2" C. FROM EXISTING STUB-OUTS. INSTALL 12" 6 CCT. SS2-C2,4,5,7, 9,10,11 & 12 VIA EXISTING CONDUIT SYSTEM (SHOWN ON PROJECT IHI-1(124)16 SHEETS E-6 & E-7 & PROJECT IHI-1(120)16 SHEET E-5) TO EXISTING SUBSTATION SS2 & MAKE CIRCUIT CONNECTIONS.
- EXISTING WORK ACCOMPLISHED ON PROJECT IHI-1 (124) 16 SHEETS E-6 & E-7 & PROJECT IHI-1 (120) 16 SHEET E-5. CLEAN OUT EXISTING CONDUITS TO BE USED.

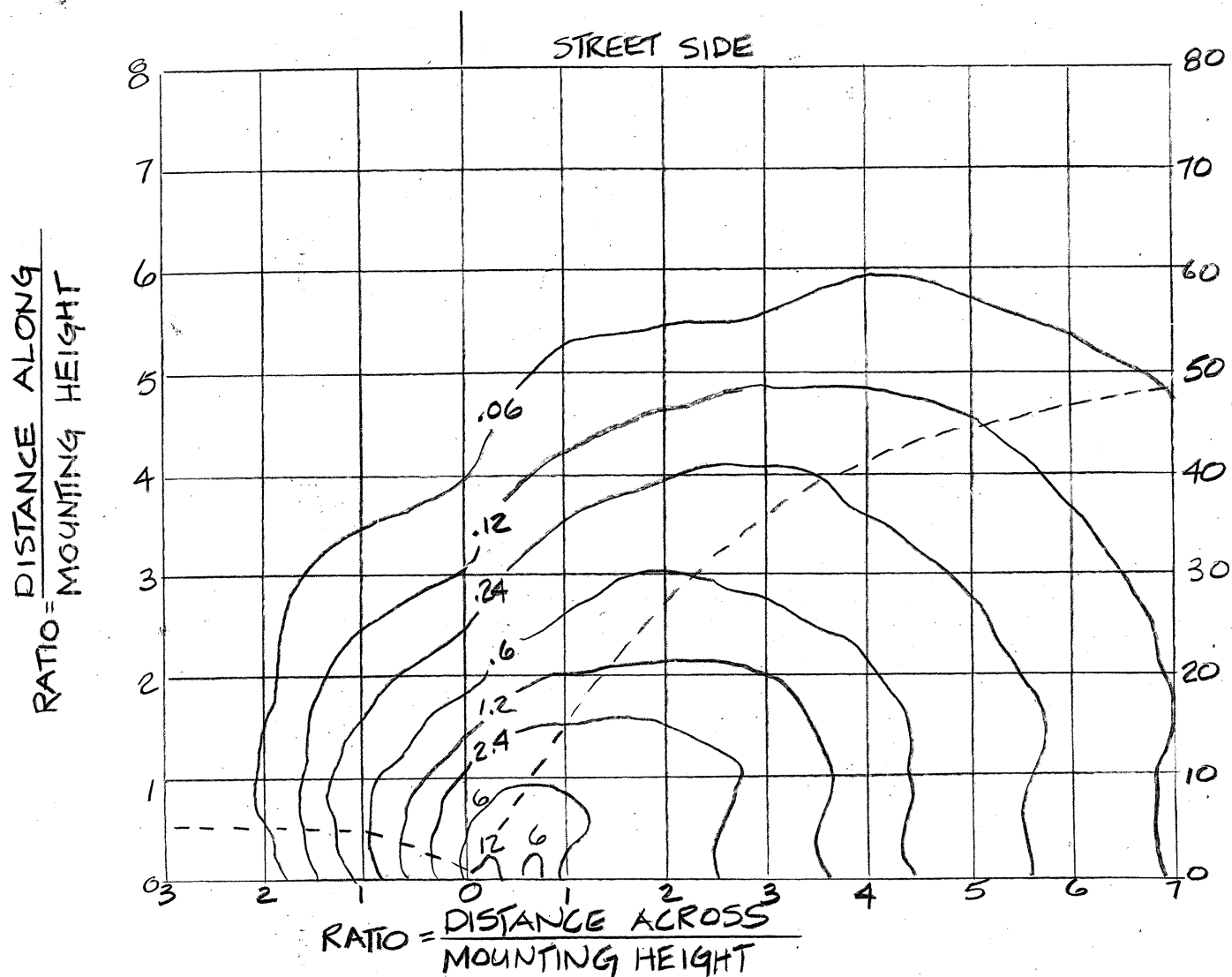


NO	DATE	REVISION
1	2-23-81	Added Conduit & Pullboxes to SIDA TAXI AREA.
2	4/4/80	Added Type "N" fixtures Col's WA-1 & WA-2

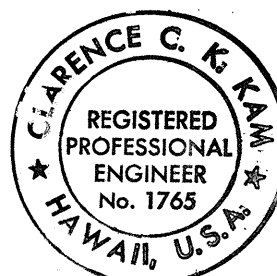
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(146)16	1979	89	283



TYPE "N" FIXTURE 
WALL MOUNTED LUMINAIRE
MOUNTING HEIGHT : 15'
WATTAGE : 250 W
LAMP : LU-250 HIGH PRESSURE SODIUM
LUMENS @ INITIAL : 30000 LUMENS
SHIELDED ONE SIDE



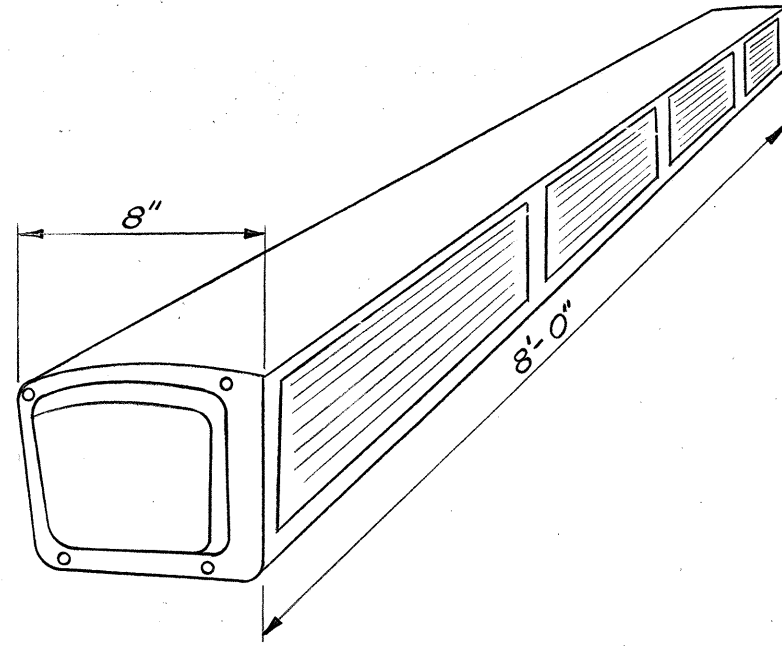
ISOFOOTCANDLE DIAGRAM



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY LIGHTING
DETAILS
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(146)16
SCALE: NONE
SHEET No. 8 OF 10 SHEETS

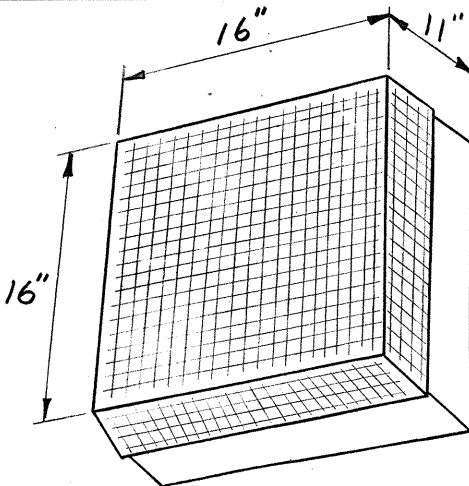
DATE: JUNE 1, 1979



TYPE "T1"
GUARDRAIL MOUNTED
MOUNTING HEIGHT: APPROX. 33" TO 4'
WATTAGE: 200 MA, 6.9 W/FT. = 55 W
LAMP: FLUORESCENT, FA 96-T12/CW/HO-30°
HORIZONTAL FOOTCANDLES ON PAVEMENT
FIXTURES WITH 200 MA. BALLAST,
CONTINUOUS ROW, ONE SIDE.

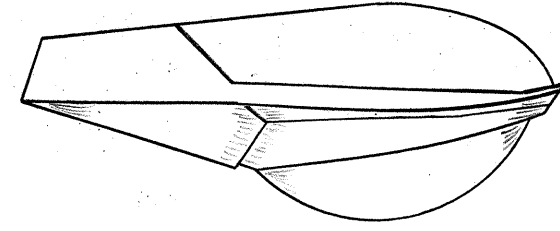
TYPE "T2"
GUARDRAIL MOUNTED
MOUNTING HEIGHT: APPROX. 33" TO 4'
WATTAGE: 430 MA, 11.6 W/FT. = 93 W
LAMP: FLUORESCENT, FA 96-T12/CW/HO-30°
HORIZONTAL FOOTCANDLES ON PAVEMENT
FIXTURES WITH 430 MA. BALLAST,
CONTINUOUS ROW, ONE SIDE.

	4-4-80	Added Type "N" Fixture to be used at WA-1 & WA-2 only
No	DATE	REVISION



TYPE "N1"
WALL MOUNTED LUMINAIRE
MOUNTING HEIGHT: 15'
WATTAGE: 250 W
LAMP: LU250BD (HIGH PRESS. SODIUM)
LUMENS (INITIAL): 25,500
ISOFOOTCANDLE DIAGRAM

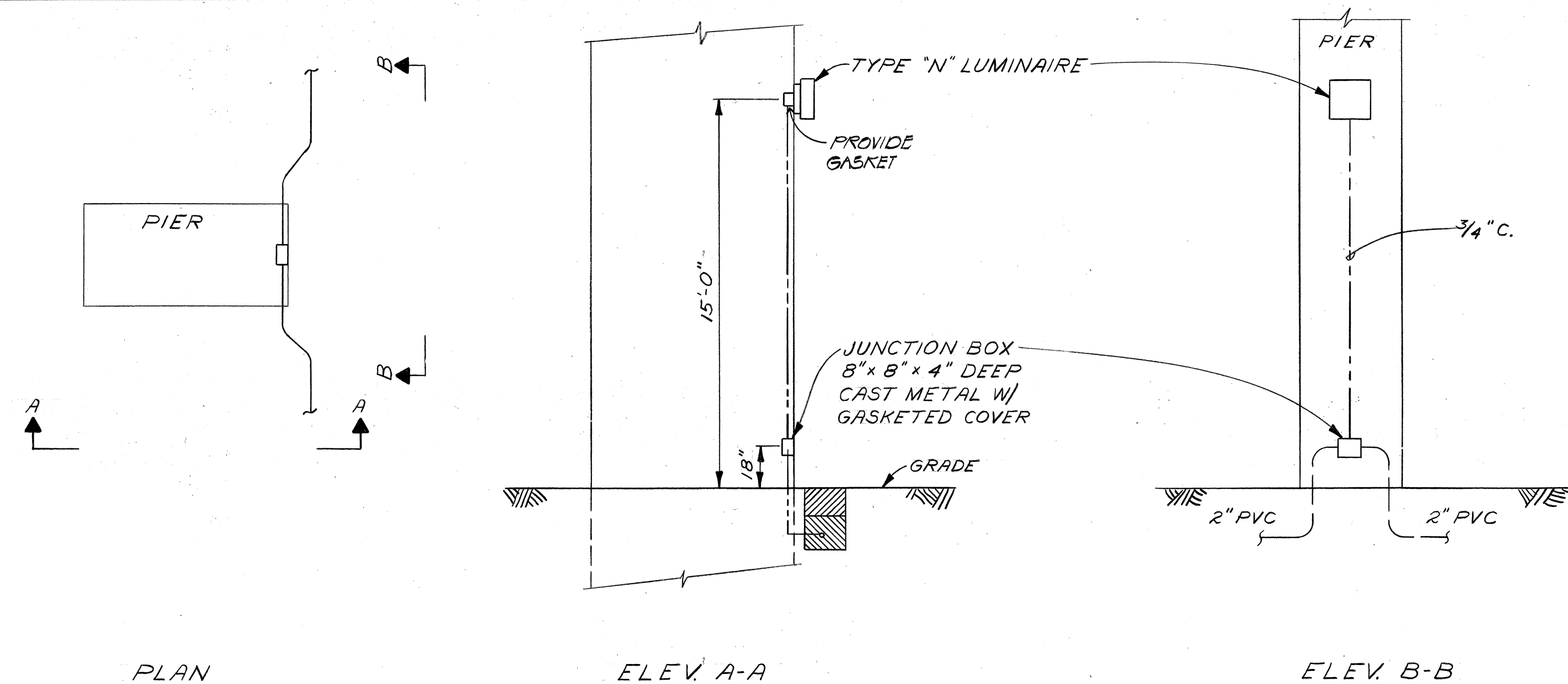
TYPE "N2"
WALL MOUNTED LUMINAIRE
MOUNTING HEIGHT: 15'
WATTAGE: 250 W
LAMP: H37KC-250/WDX (WARM DELUXE WHITE MERCURY)
LUMENS (INITIAL): 9,500
ISOFOOTCANDLE DIAGRAM



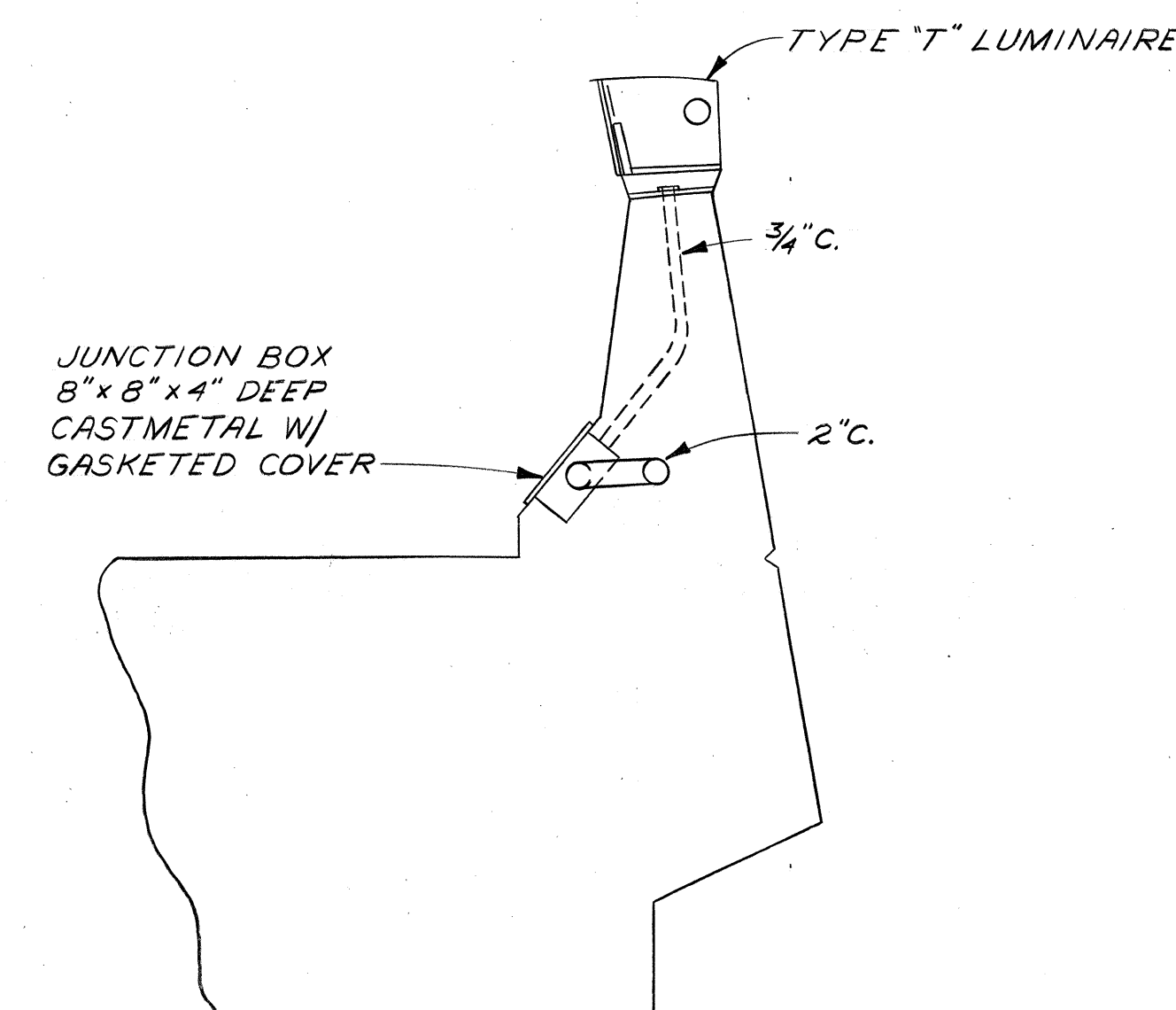
TYPE "R"
POLE MOUNTED LUMINAIRE
MOUNTING HEIGHT: 30'
WATTAGE: 250 W
LAMP: LU250BD (HIGH PRESS. SODIUM)
LUMENS (INITIAL): 27,500
ISOFOOTCANDLE DIAGRAM

TYPE "R1"
POLE MOUNTED LUMINAIRE
MOUNTING HEIGHT: 30'
WATTAGE: 250 W
LAMP: H37KC-250/WDX (WARM DELUXE WHITE MERCURY)
LUMENS (INITIAL): 9,500
ISOFOOTCANDLE DIAGRAM

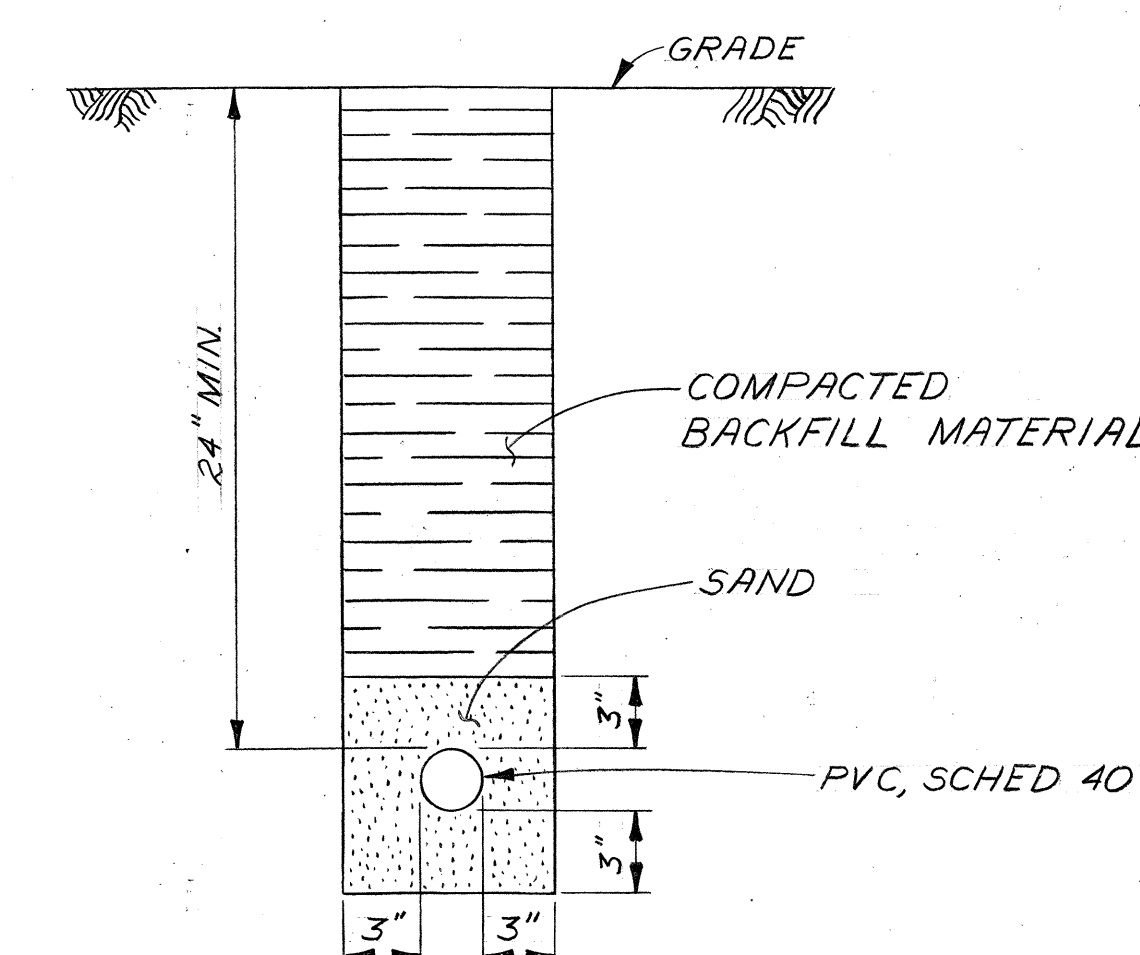
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(146)16	1979	90	203



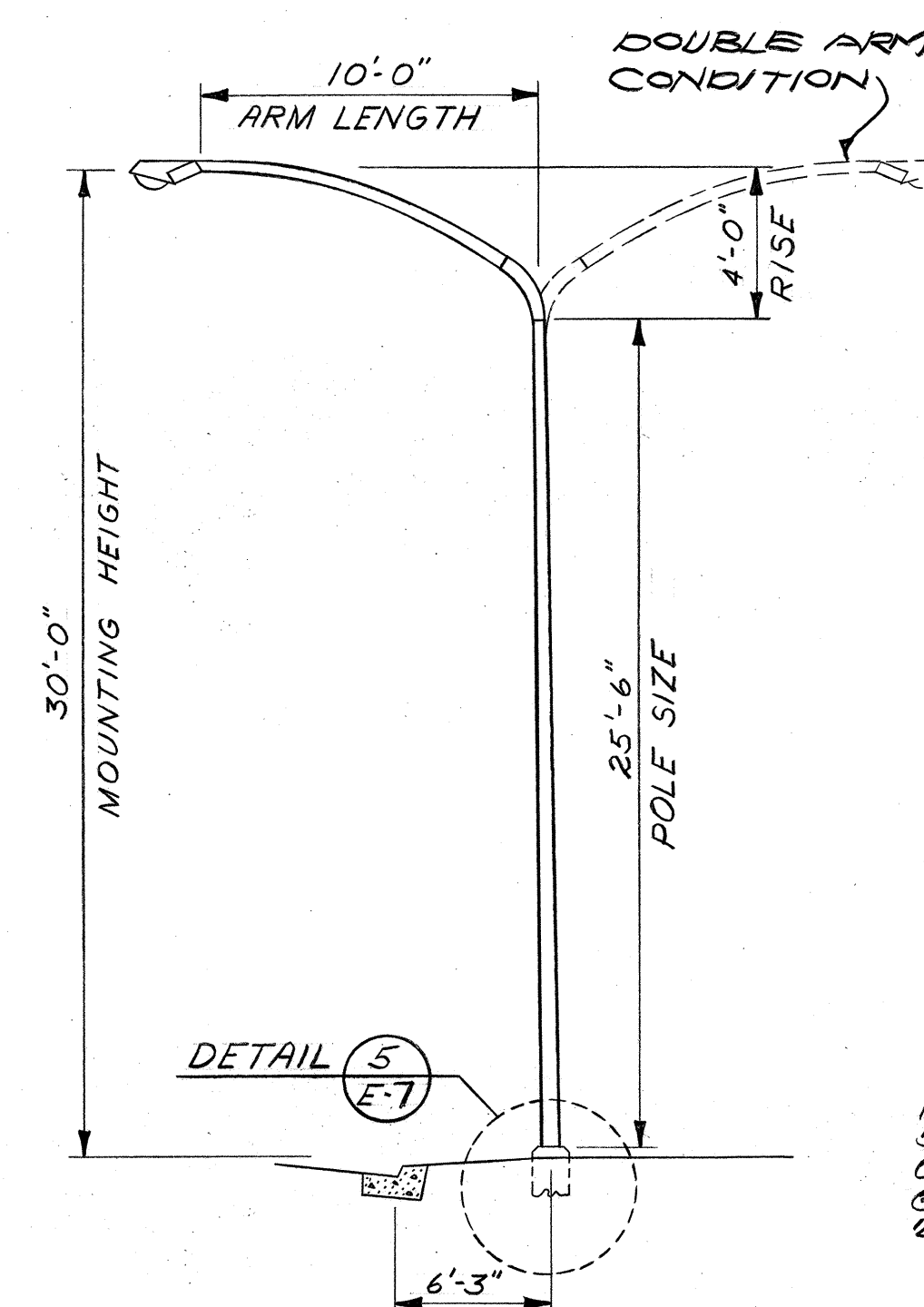
TYPE 'N' FIXTURE MOUNTING DETAIL (1)
1/4" = 1'-0" E-7



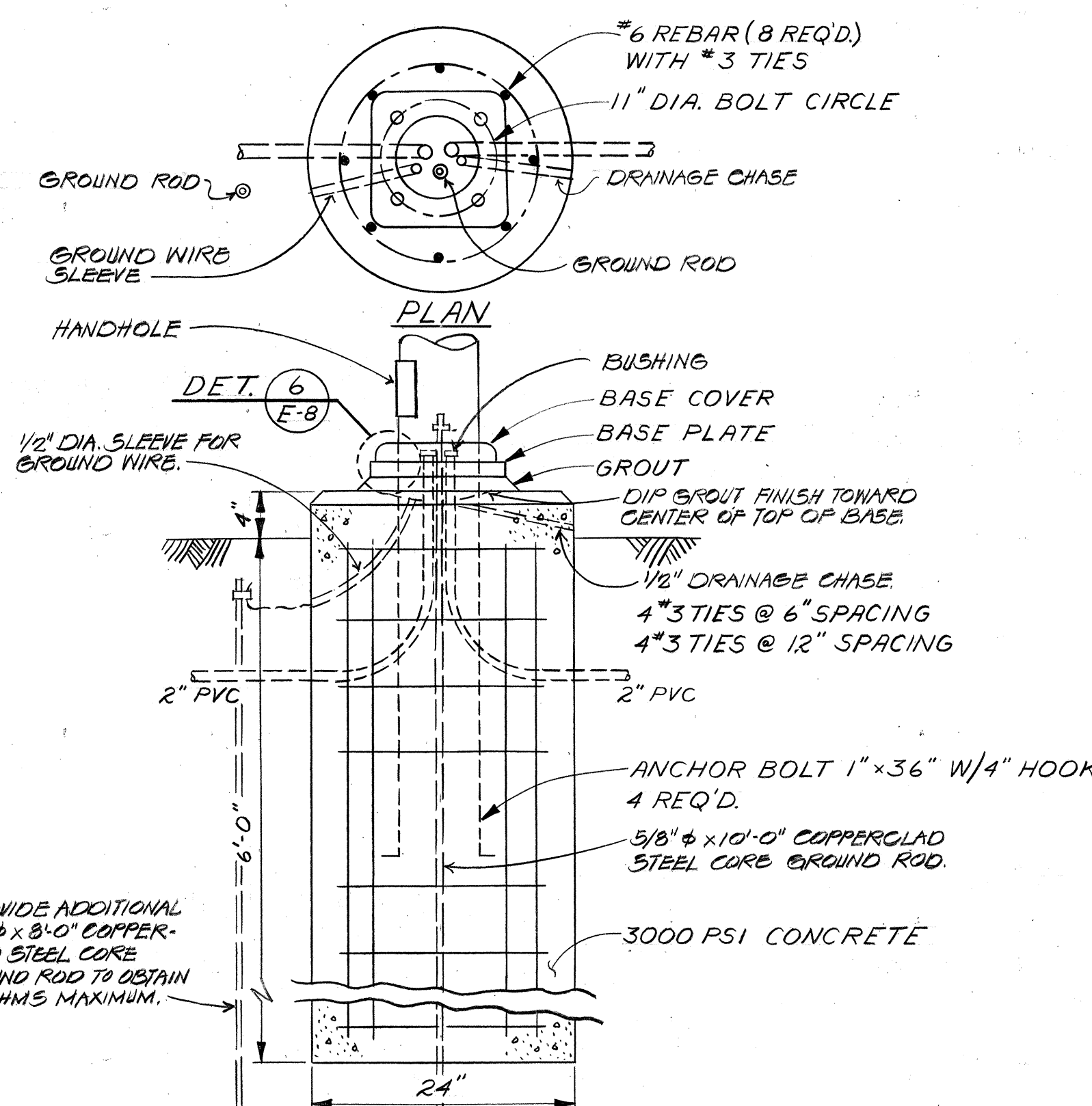
RAIL MOUNTED LIGHT DETAIL (2)
3/4" = 1'-0" E-7



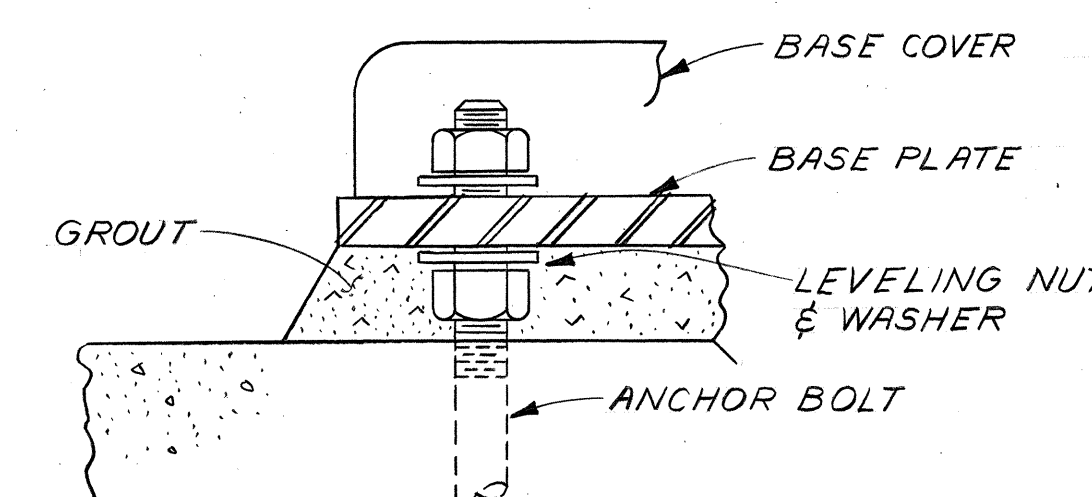
DIRECT BURIAL CONDUIT DET. (3)
1 1/2" = 1'-0" E-7



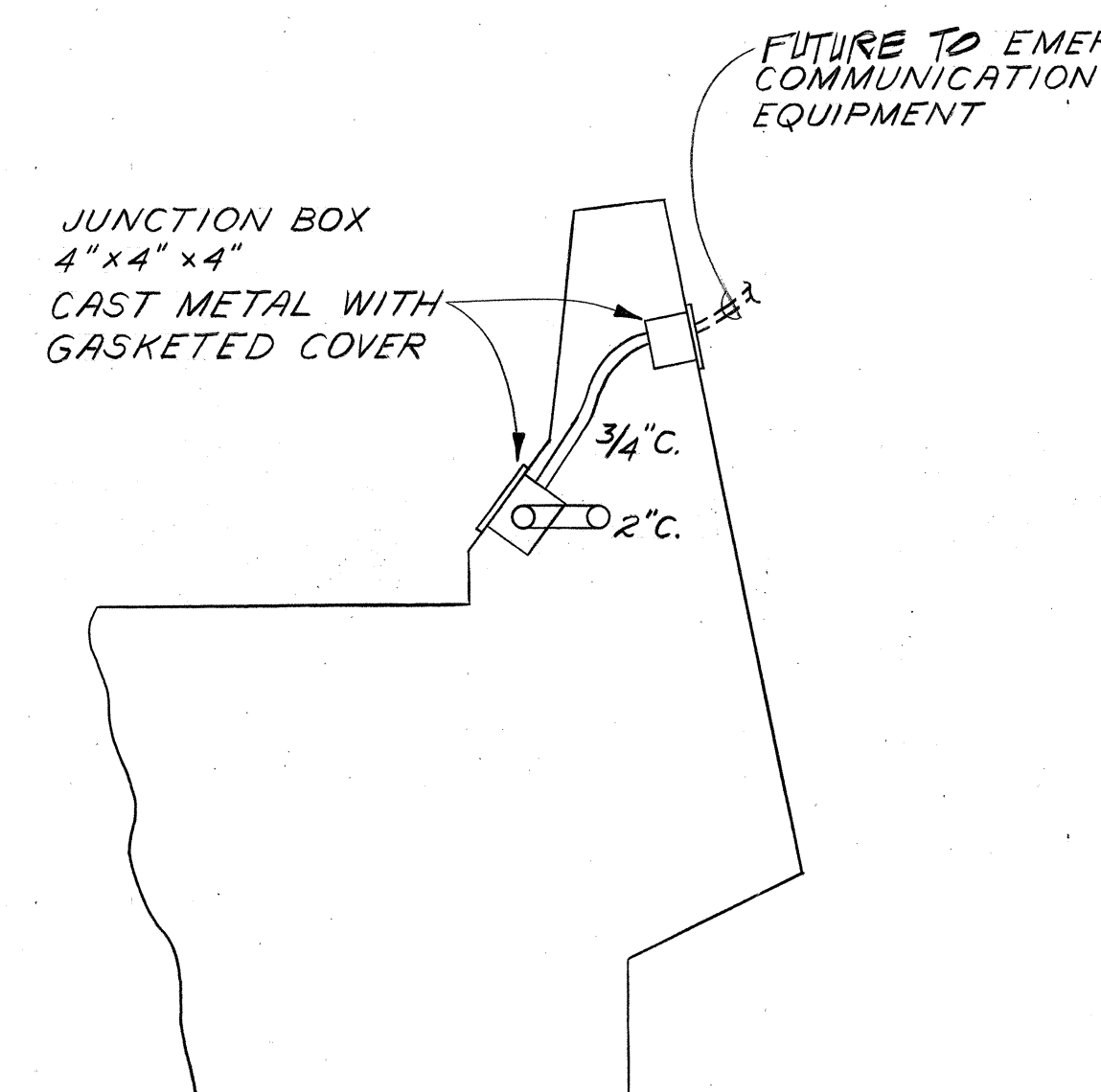
POLE DETAIL (4)
NOT TO SCALE E-7



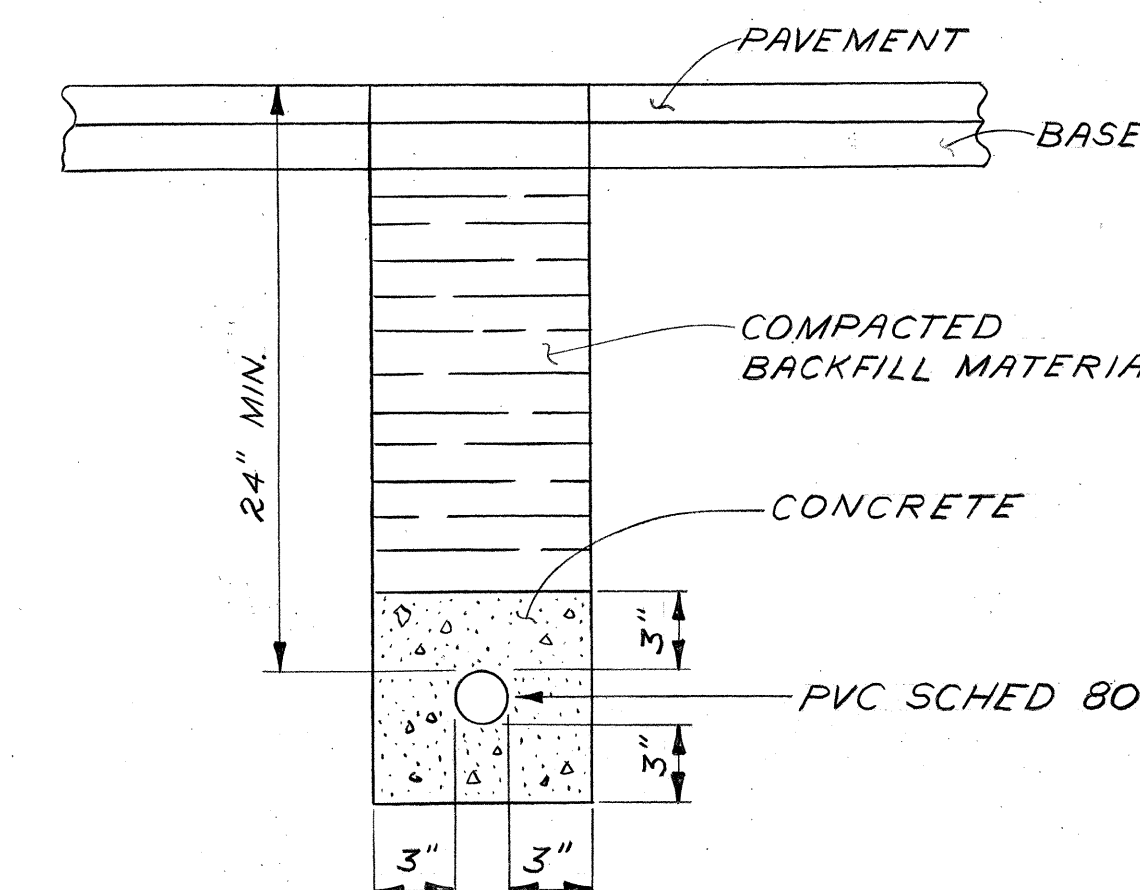
POLE BASE DETAIL (5)
1" = 1'-0" E-7



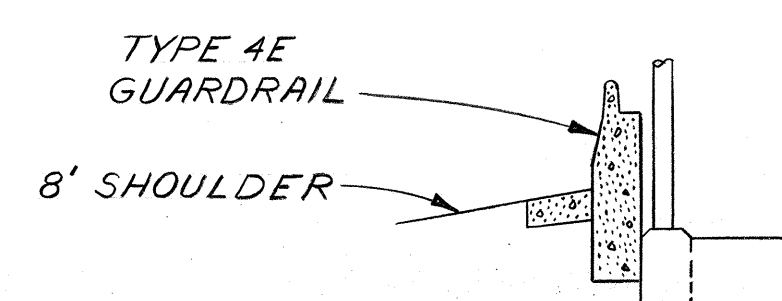
DETAIL (6)
3" = 1'-0" E-7



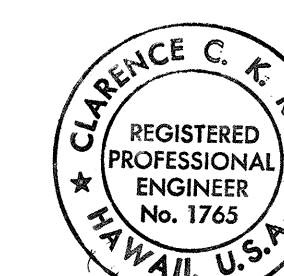
EMER. COMM. SYSTEM DETAIL (7)
3/4" = 1'-0" E-7



CONCRETE ENCASED CONDUIT DETAIL (8)
1 1/2" = 1'-0" E-7



POLE DETAIL (4A)
NOT TO SCALE E-7



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

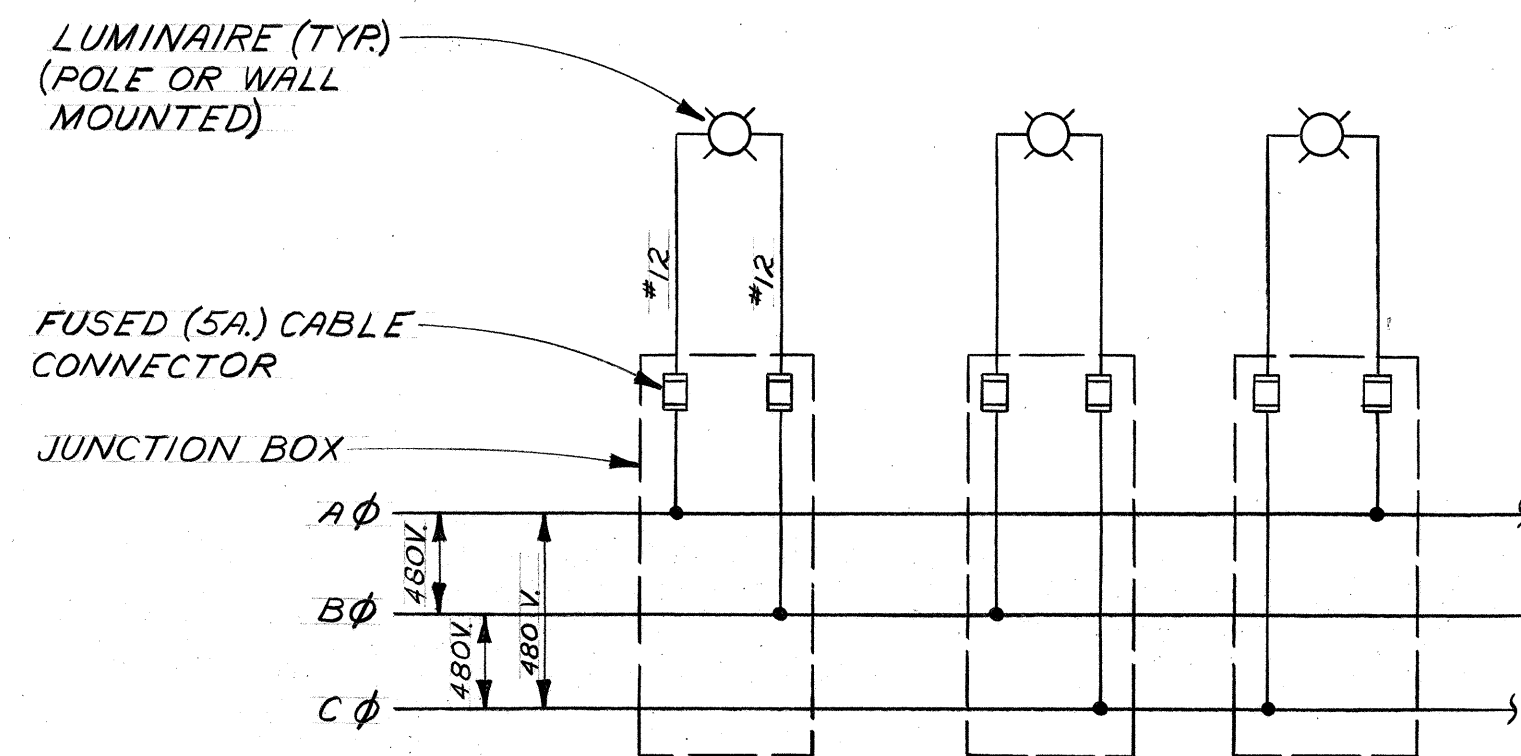
ROADWAY LIGHTING
DETAILS

AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(146)16

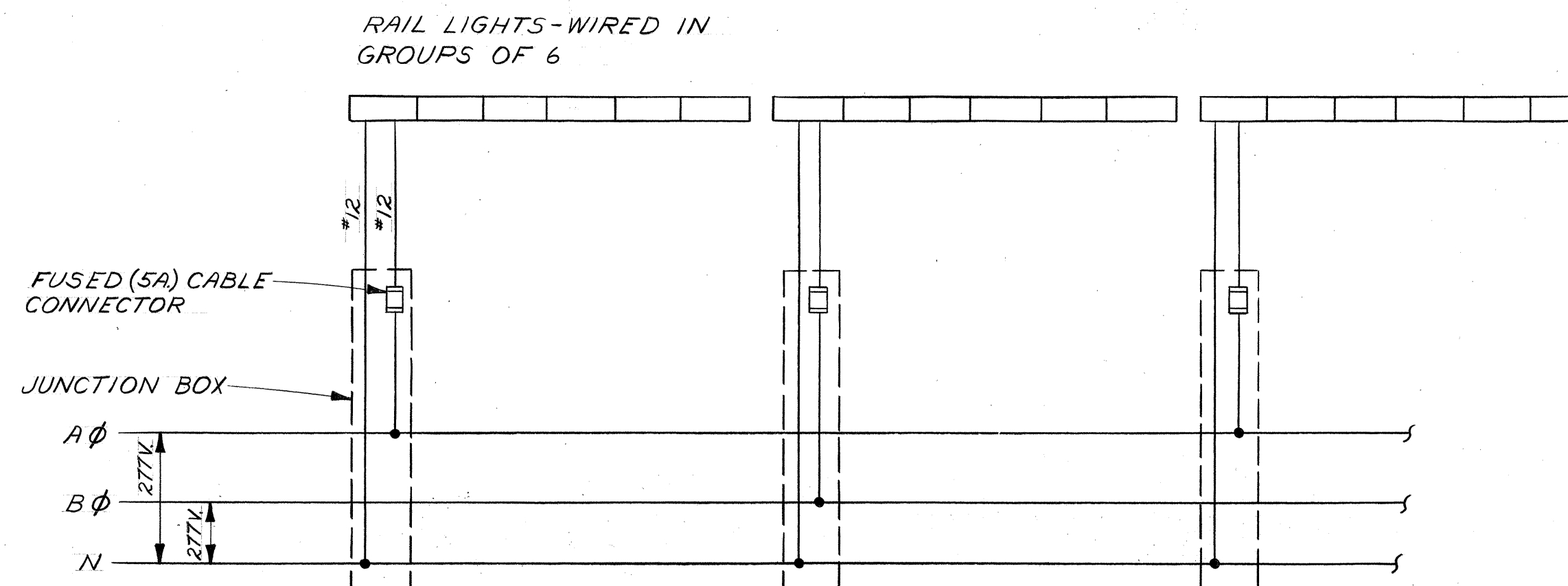
SCALE: AS SHOWN DATE: JUNE 1, 1979

SHEET No. 7 OF 10 SHEETS

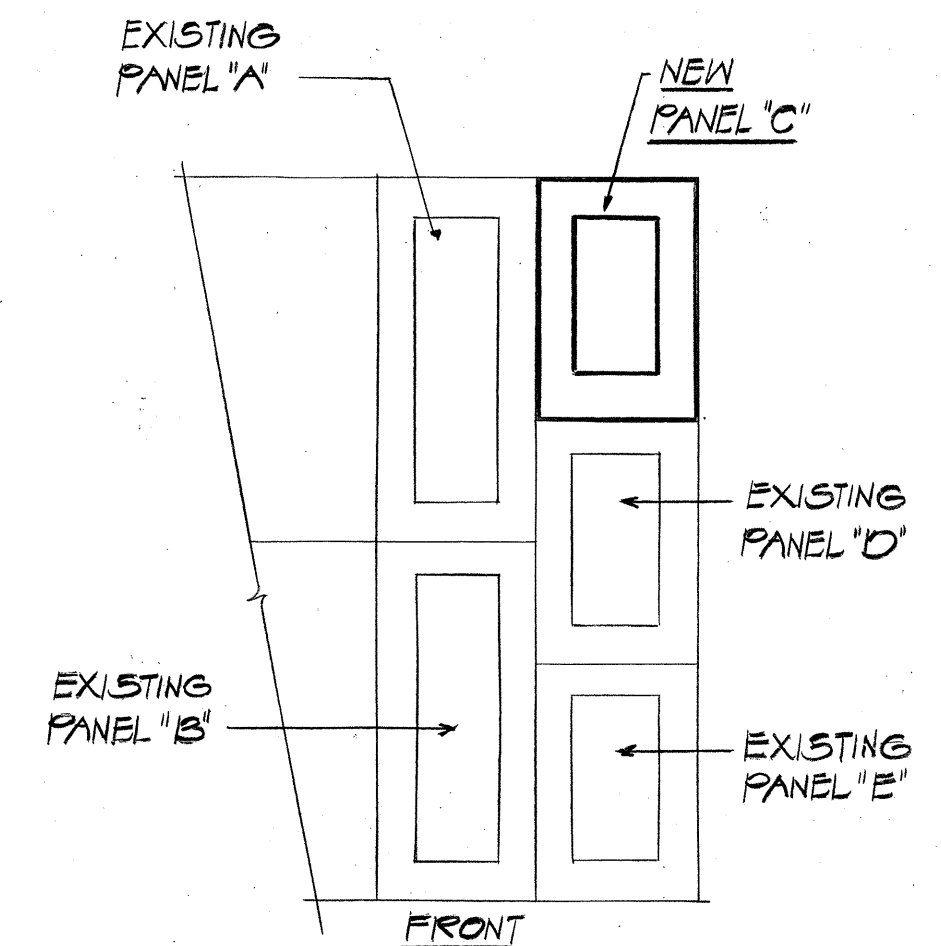
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(146)16	1979	91	283



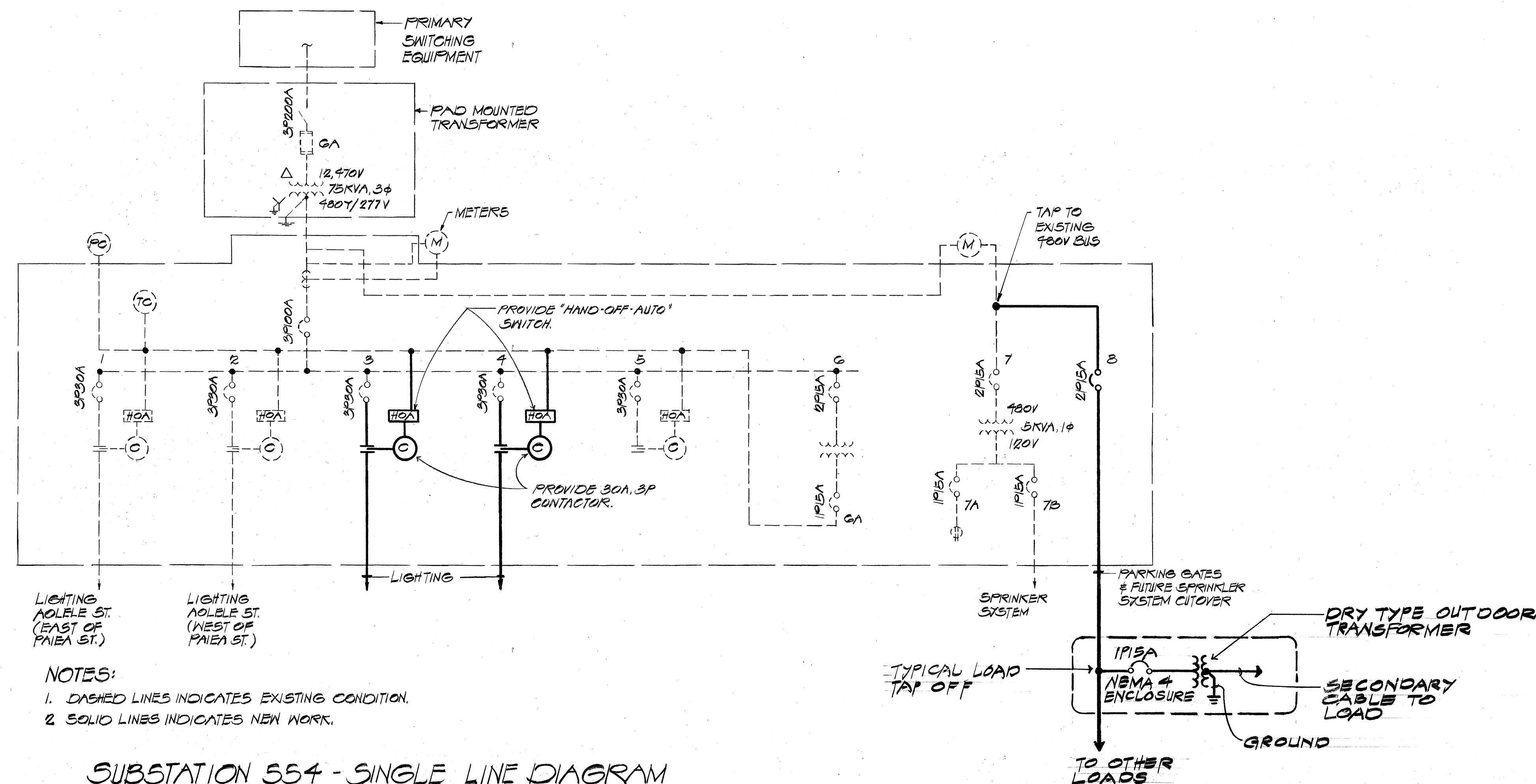
ROADWAY LUMINAIRE CONNECTION DIAGRAM



RAIL LIGHT CONNECTION DIAGRAM

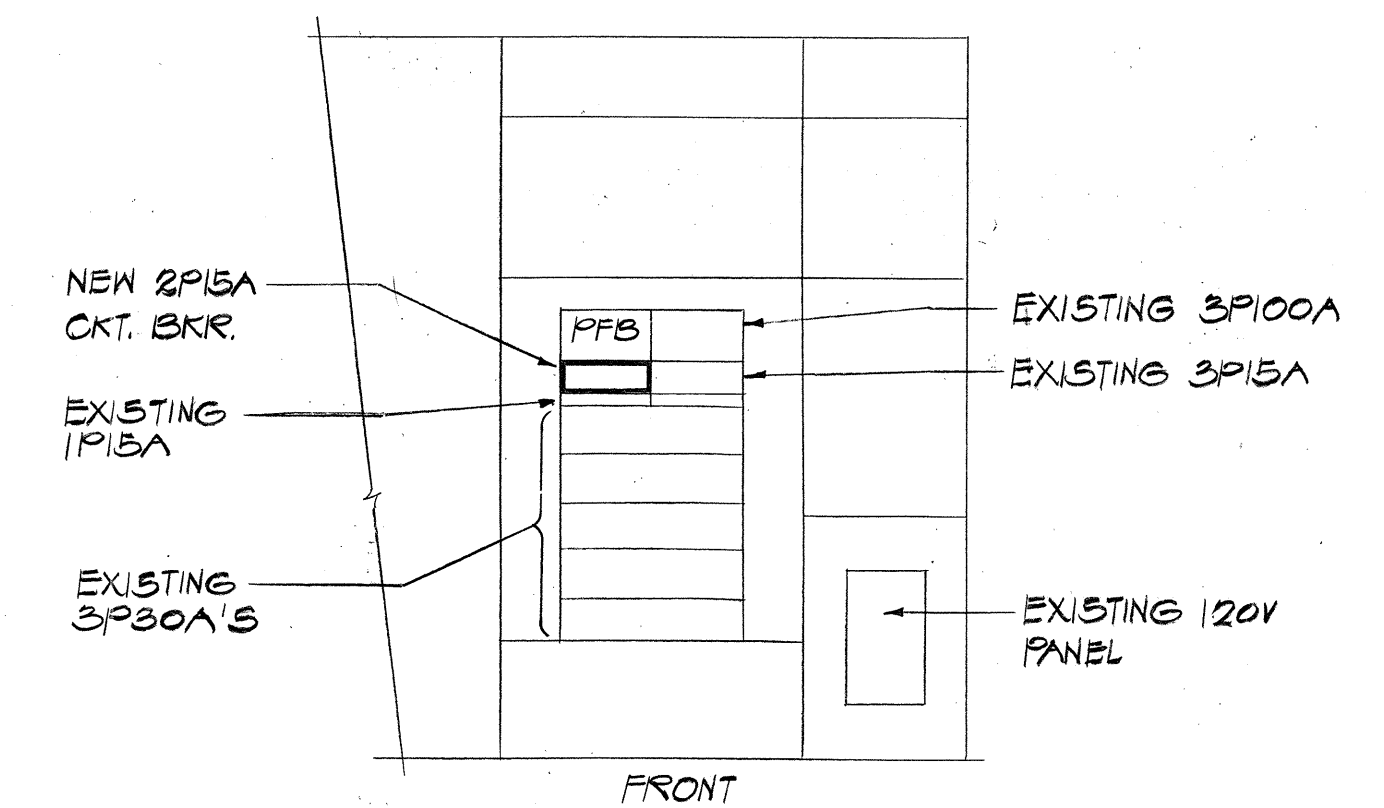


PARTIAL ELEVATION
SUBSTATION SS2
NOT TO SCALE

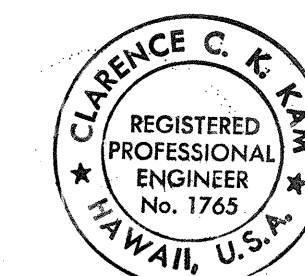


- NOTES:
1. DASHED LINES INDICATES EXISTING CONDITION.
 2. SOLID LINES INDICATES NEW WORK.

SUBSTATION SS4 - SINGLE LINE DIAGRAM
NOT TO SCALE



PARTIAL ELEVATION
SUBSTATION SS4
NOT TO SCALE

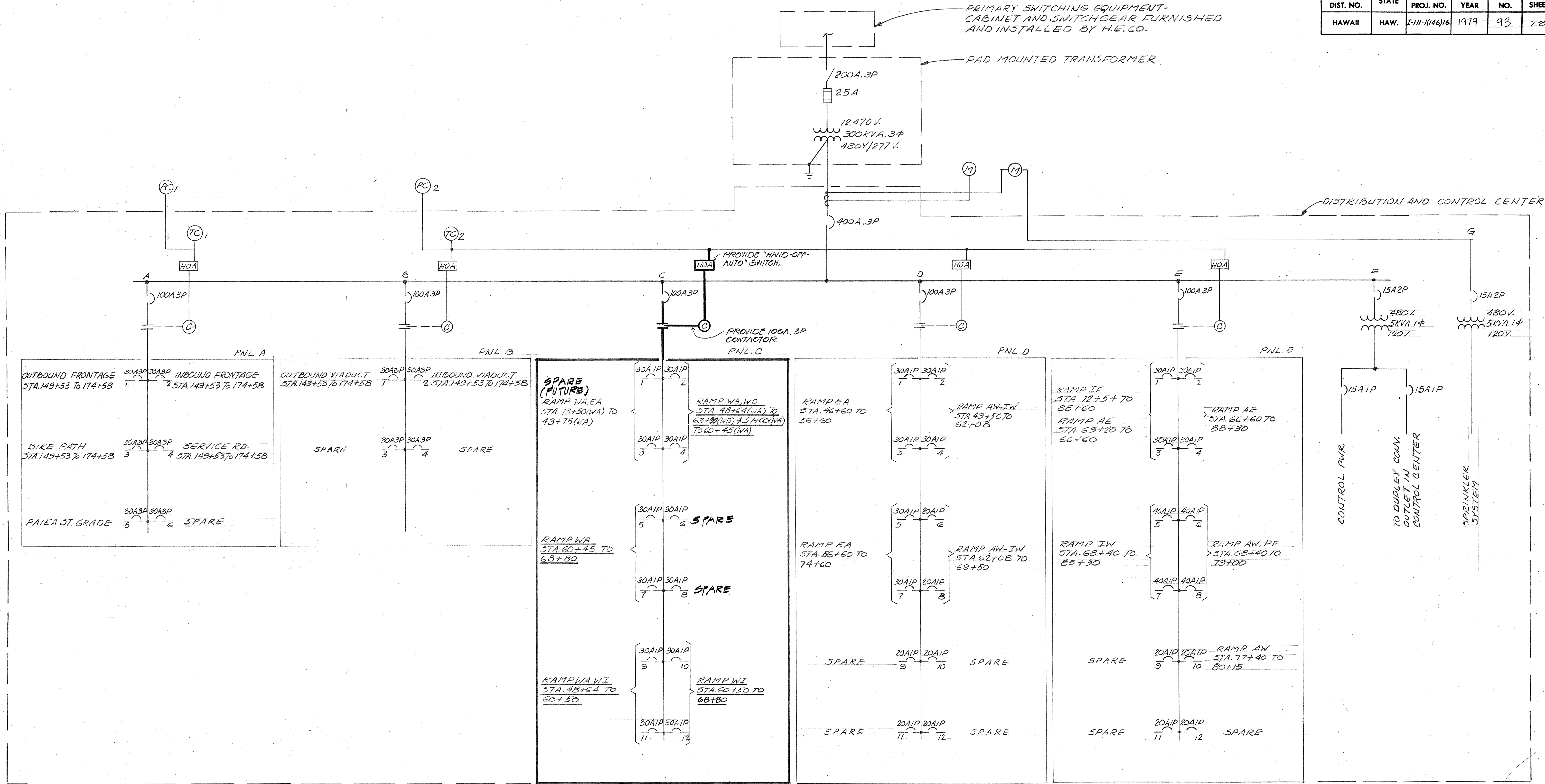


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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY LIGHTING
DIAGRAMS
AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1(146)16
SCALE: NONE
DATE: JUNE 1, 1979
SHEET No. 8 OF 10 SHEETS

E-8

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(146)16	1979	93	283



CIRCUIT DESIGNATION SCHEME

CCT. NO. SS2-C3 (TYPICAL)

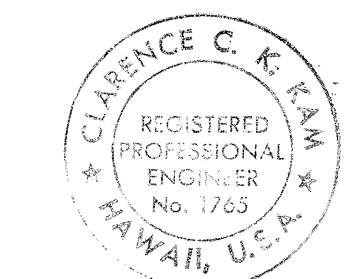
SUBSTATION

FEEDER

BRANCH CCT.

NOTES

1. SUBSTATION SS2 IS EXISTING FROM A PREVIOUS CONTRACT. PANEL C SHALL BE FURNISHED AND INSTALLED ON THIS CONTRACT. WIRING FOR THOSE BRANCH CIRCUITS INDICATED BY UNDERLINING SHALL BE INSTALLED ON THIS CONTRACT.



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY LIGHTING
SINGLE LINE DIAGRAM

AIRPORT INTERCHANGE
EAL PROJECT NO. I-HI-1(146)16

SCALE: NONE DATE: JUNE 1, 1979

SHEET No. 10 OF 10 SHEETS