

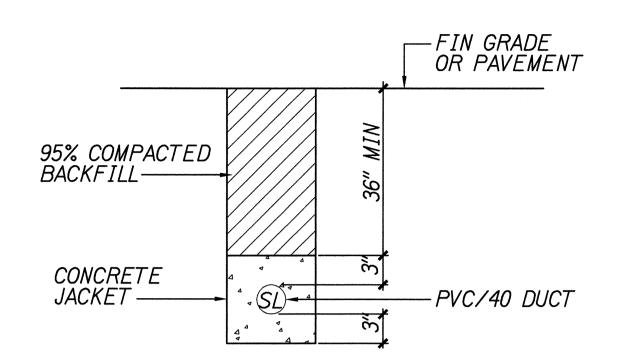
ELEVATION

NOTES:

SURVEY PLODRAWN BY TRACED BY DESIGNED BY QUANTITIES CHECKED BY

- 1. THIS ITEM PREFABRICATED BY WALKER INDUSTRIES AT MAUI CONCRETE AND AGGREGATE.
- 2. MECO SHALL PROVIDE 1"Øx36"x4" ANCHOR BOLTS (4 EACH) AS FURNISHED BY MANUFACTURER, PICK-UP BY CONTRACTOR AT MECO'S KAHULUI WAREHOUSE.
- 3. INSPECTION BY MECO INSPECTOR REQUIRED PRIOR TO FABRICATION OF FOOTING, CONTACT MECO INSPECTOR (PHONE: 871-8461).



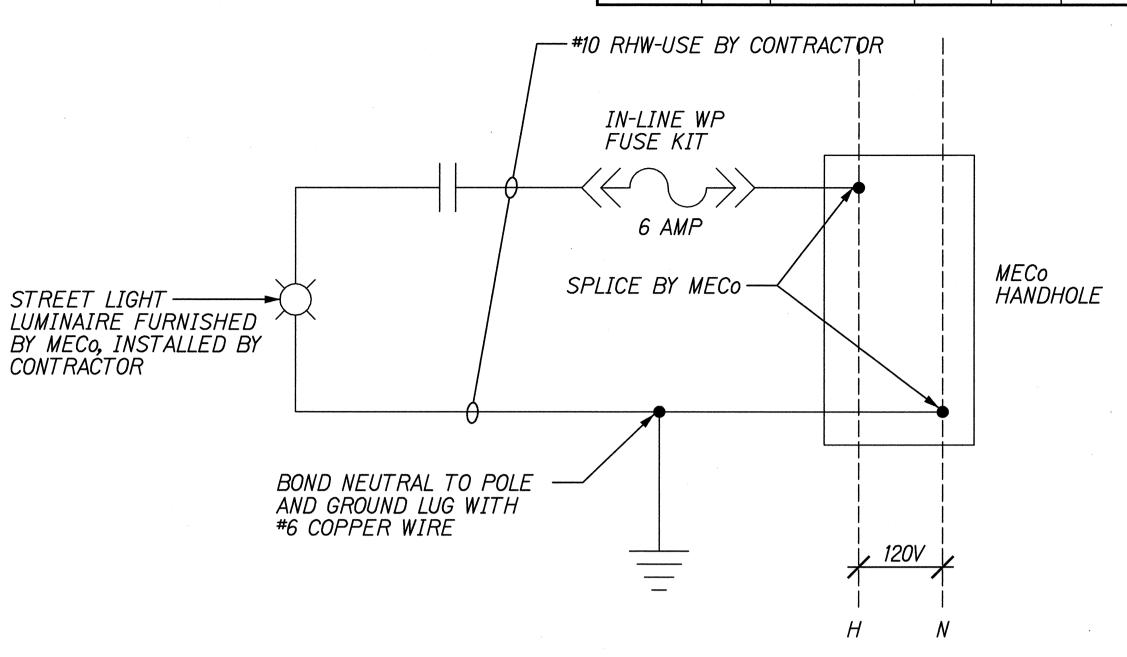




NOTE: COMBINE WITH TRAFFIC SIGNAL DUCTS
WHERE SHOWN ON SHEET 19.

CONSTRUCTION NOTES: STATE RIGHT-OF-WAY

- CONSTRUCTION AND RESTORATION OF ALL EXISTING HIGHWAY FACILITIES WITHIN STATE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE "STANDARD SPECIFICATIONS" FOR ROAD, BRIDGE, AND PUBLIC WORKS CONSTRUCTION", DATED 1994.
- 2. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR PROTECTION AND FOR THE CONVENIENCE AND SAFETY OF PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILI-TIES AND PRECAUTIONS TO BE TAKEN SHALL CONFORM WITH THE "ADMINISTRATIVE RULES OF HAWAII GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREET AND HIGHWAYS" ADOPTED BY THE HIGHWAY SAFETY COORDINATOR, AND THE U.S. FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI -TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS". IF LANE CLOSURES ARE REQUIRED DURING CONSTRUC-TION, A TRAFFIC CONTROL PLAN SHALL BE INCORPORATED INTO THE CONSTRUCTION PLANS AND MUST BE APPROVED BY THE ENGINEER PRIOR TO THE ISSUANCE OF THE PERMIT.
- 3. LONGITUDINAL DRAINAGE ALONG THE HIGHWAY SHALL BE MAINTAINED.
- 4. ALL SIGNS, PAVEMENT MARKINGS, STRIPING, GUARDRAILS, ETC., REMOVED OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
- 5. ALL REGULATORY, GUIDE AND CONSTRUCTION SIGNS AND BARRICADES SHALL BE OF HIGH INTENSITY REFLECTIVE SHEETING.
- 6. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN HIGHWAY RIGHT-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE DISTRICT ENGINEER.
- 7. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADEQUATE, SAFE BRIDGING MATERIAL OVER THE TRENCH, INCLUDING SHORING, WHEN TRENCHING IN PAVEMENT AREAS TO HANDLE ALL TYPES OF VEHICULAR TRAFFIC.
- 8. NO TRENCH SHALL BE OPENEED MORE THAN 50 FEET IN ADVANCE OF THE INSTALLED AND TESTED DUCT LINE. NO JUMPS OR SPACES WILL BE PERMITTED UNLESS APPROVED BY THE ENGINEER.



STREET LIGHT WIRING DIAGRAM FOR TYPE III TRAFFIC SIGNAL STANDARD

GENERAL NOTES:

1. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT ARE NOT GUARANTEED AS TO ACCURACY, OR THAT OTHER OBSTACLES MAY NOT BE ENCOUNTERED DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN THE CONSTRUCTION IS IN CLOSE PROXIMITY OF UNDERGROUND UTILITY FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO THE EXISTING UTILITIES.

TELEPHONE/ CATV LINES:

CONTRACTOR TO OBTAIN EXCAVATION CLEARANCE 3 WORKING DAYS PRIOR TO ANY EXCAVATION WORK. USE EXTREME CAUTION DURING EXCAVATION.

SEWER WATER LINES: CONTRACTOR TO CALL DWS, COUNTY OF MAUI FOR FIELD

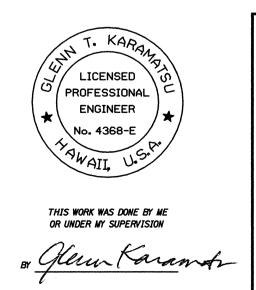
LOCATIONS OF WATER MAINS AND APPURTENANCES

A MINIMUM OF 48 HOURS BEFORE STARTING PROJECT EXCAVATION.

- 2. THE MINIMUM CLEARANCE BETWEEN FIRE HYDRANTS AND UTILITY POLES OR LIGHT STANDARDS SHALL BE 5'-0".
- 3. THE CONTRACTOR SHALL TRIM OR REMOVE ALL TREES, SHRUBS, BUSHES, ETC. ENCROACHING UPON THE NEWLY INSTALLED HIGHWAY LIGHTING STANDARDS. FOLIAGE SHALL BE TRIMMED SO AS NOT TO INTERFERE WITH THE LUMINAIRE'S LIGHT DISTRIBUTION PATTERN.
- 4. DESIGN ILLUMINATION LEVEL = 1.0 FOOTCANDLE AVERAGE MAINTAINED.

 DESIGN UNIFORMITY RATIO (AVE./MIN.) = 3:1 MAX.

 DESIGN MAINTENANCE FACTOR = 0.75.



STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

ICUMAY CTDEET I ICUTING MOTE

<u>HIGHWAY STREET LIGHTING NOTES</u>

HONOAPIILANI HIGHWAY

Installation of Traffic Signals at Napilihau Street

F.A. Project No. STP-030-1(33)

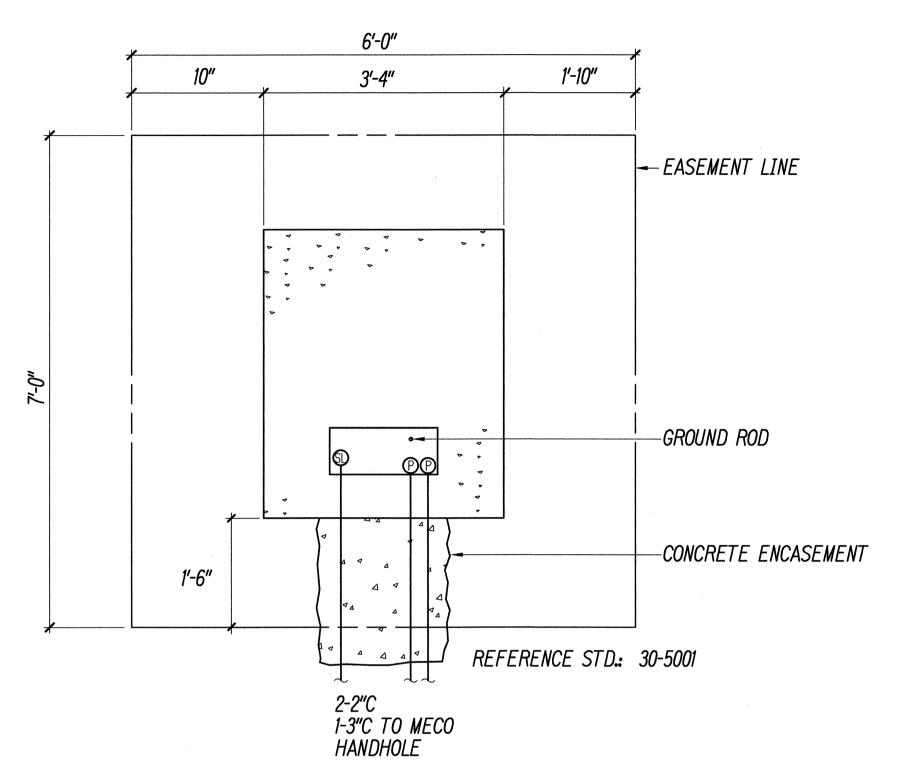
Scale: None

Date: Feb., 1999

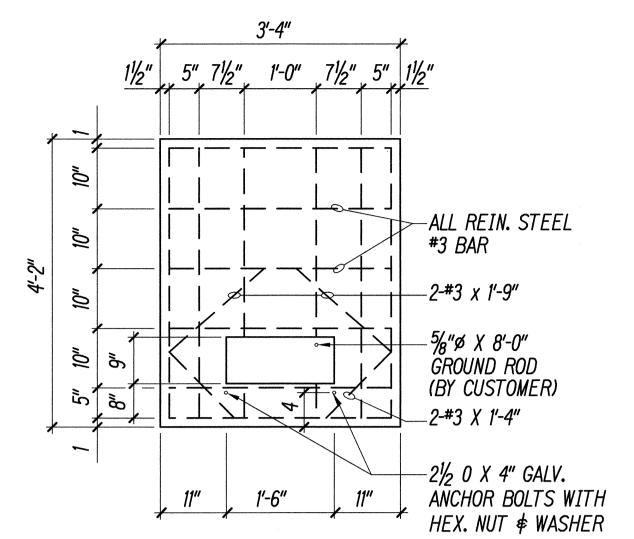
SHEETS

SHEET No. 2 OF 3

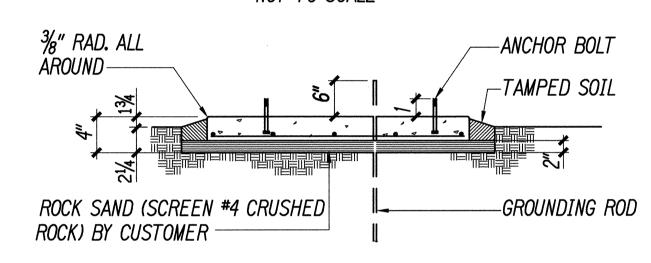
	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	HAWAII	HAW.	STP-030-1(33)	2000	29	29



TRANSFORMER PAD/CONDUIT LAYOUT NOT TO SCALE



PLAN PRECAST PAD NOT TO SCALE



ELEVATION NOT TO SCALE

TRANSFORMER PAD NOTES:

- 1. COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 3,000 P.S.I. AT 28 DAYS
- 2. TOP OF PAD SHALL BE SMOOTH, TRUE, LEVEL AND OTHER EXPOSED SURFACES SHALL BE SMOOTH AND FREE FROM DEFECTS.
- 3. CONCRETE SHALL BE CURED BY APPROVED METHOD (ASTM A15)
- 4. REINFORCING BARS SHALL BE CLEAN DEFORMED BARS.
- 5. PRECAST PAD MADE BY AMERON, MAUI.
- 6. ALL ITEMS SHALL BE FURNISHED IN PLACE COMPLETE BY CUSTOMER.
- 7. PAD SITE SHALL BE GRADED AND COMPACTED. COMPACTION SHALL MEET THE REQUIREMENTS OF THE COUNTY OF MAUI "STANDARD SPECIFICATIONS FOR COMPACTING SIDEWALK AREA." THE HIGHER FRONT OR SIDEWALK CORNER SHALL MATCH THE ADJACENT SIDEWALK GRADE. SLOPE SHALL BE TOWARDS THE SIDEWALK OR ROAD, NOT EXCEEDING 1/2" PER FOOT.
- 8. AREA SURROUNDING THE TRANSFORMER SITE SHALL BE SUFFICIENTLY GRADED OR A SUITABLE RETAINING WALL BUILT TO PREVENT FAILURE FILLING IN THE LOT.
- 9. AN AREA 3'-8" X 4'-6" AND 2" DEEP SHALL BE EXCAVATED AFTER COMPACTION. THIS AREA SHALL BE FILLED WITH THE 2" BASE MATERIAL AND COMPACTED (SEE ELEVATION).

PROFESSIONAL

THIS WORK WAS DONE BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

HIGHWAY STREET LIGHTING NOTES

HONOAPIILANI HIGHWAY Installation of Traffic Signals at Napilihau Street F.A. Project No. STP-030-1(33)

Date: Feb., 1999 SHEET No. 3 OF 3 SHEETS

By Gleun Karamot Scale: None