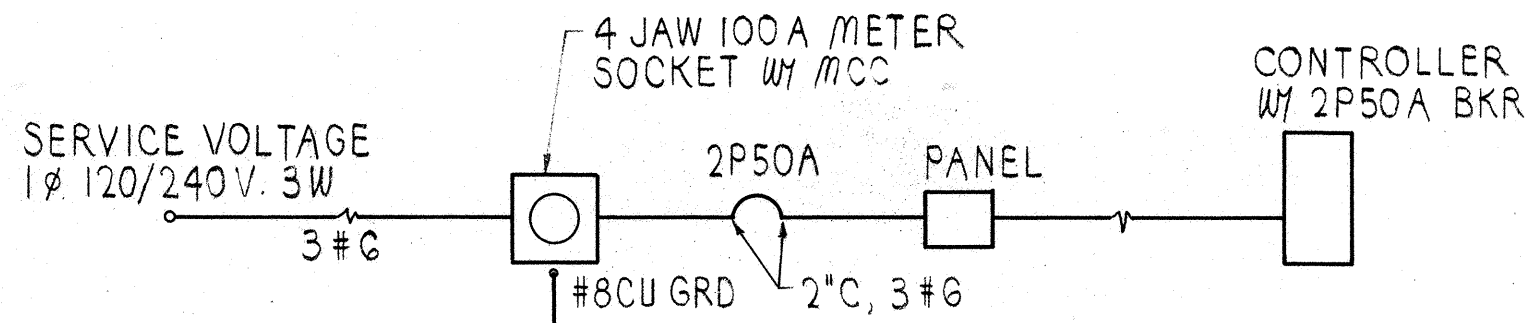


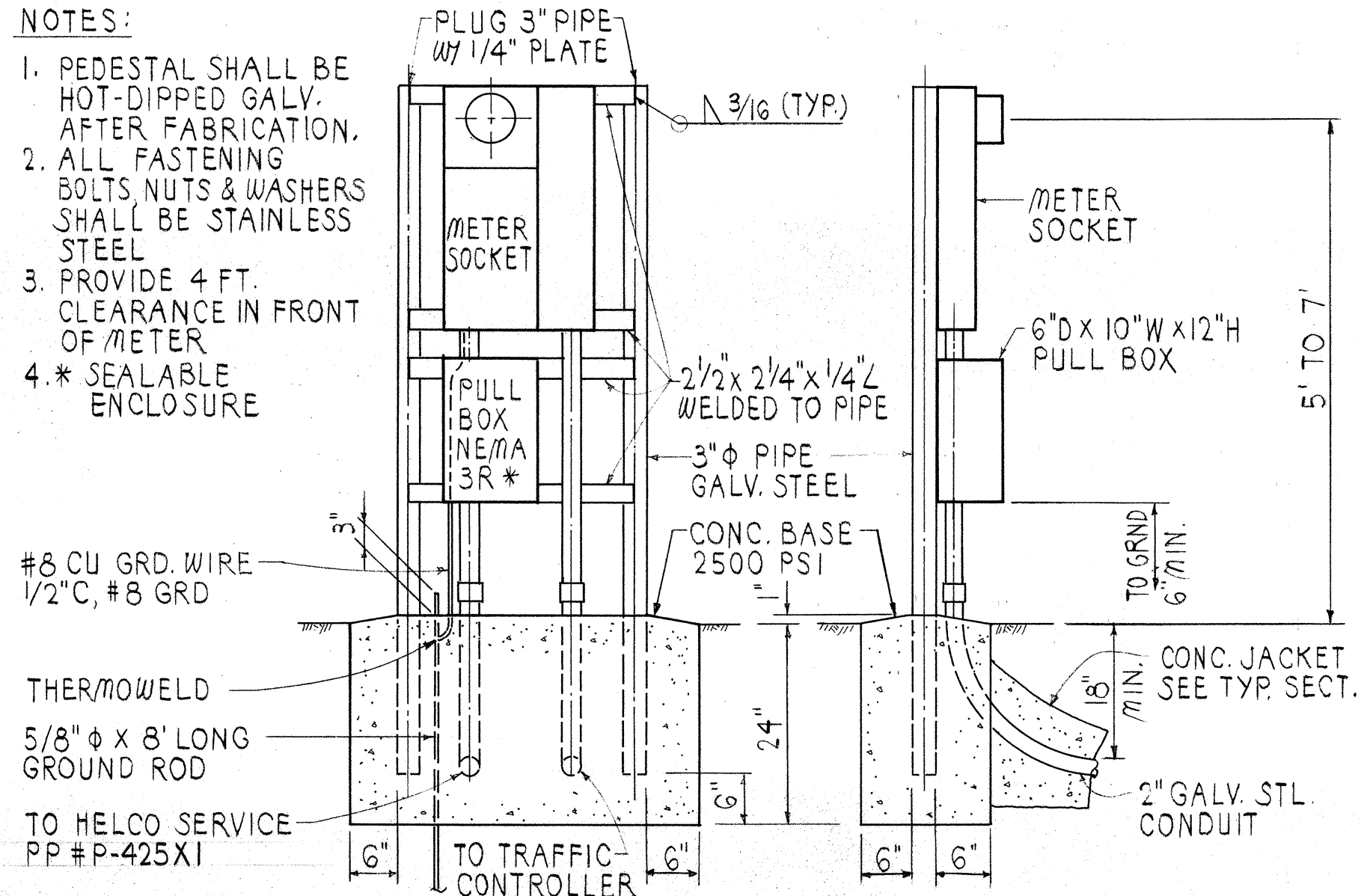
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-OII-1(19)	1992	3	6



ONE LINE DIAGRAM

NOTES:

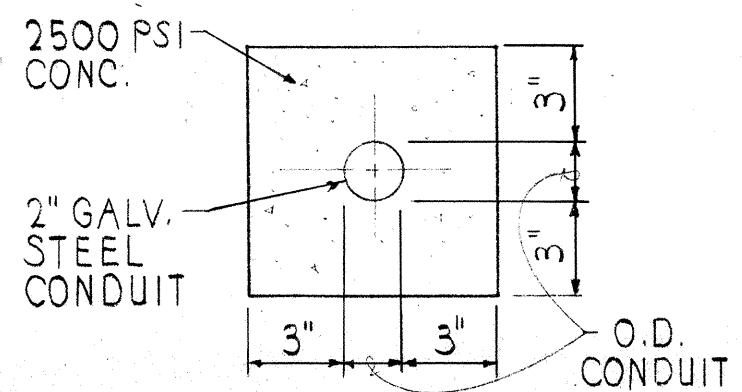
1. PEDESTAL SHALL BE HOT-DIPPED GALV. AFTER FABRICATION.
2. ALL FASTENING BOLTS, NUTS & WASHERS SHALL BE STAINLESS STEEL
3. PROVIDE 4 FT. CLEARANCE IN FRONT OF METER
4. * SEALABLE ENCLOSURE



FRONT ELEVATION SIDE ELEVATION
METER PEDESTAL FOR UNDERGROUND SERVICE
NOT TO SCALE

PANEL 120/240V 1Ø 3W NEMA 3R ENCLOSURE 50A LUGS ONLY LOAD CENTER w/DOOR BKR 1C10,000A					
CKT	DESCRIPTION	A Ø	B Ø	BKR	WIRE
1,3	TRAFFIC CONTROLLER	3.5	3.5	2P50A	G
2	PFB			1P	
4-8	PFB			5-1P	

PANEL SCHEDULE



CONC. JACKET TYP. SECTION
NOT TO SCALE

SERVICE DATA

1. SERVICE VOLTAGE: 1Ø, 120/240V, 3W
2. LOAD DATA: CONNECTED - 7 KVA
ESTIMATED DEMAND - 3 KVA
3. SERVICE CONDUCTORS: 3 #6 CU
4. METERING: METER STANDARD B5 RATE G
5. TYPE: UNDERGROUND
6. BILLING INFORMATION: HIGHWAYS DIVISION
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

ELECTRICAL NOTES

1. HAWAII ELECTRIC LIGHT CO. SHALL FURNISH AND INSTALL CABLE BETWEEN SECONDARY AND METER SOCKET.
2. CONTRACTOR SHALL MAKE ALL ELECTRICAL CONNECTIONS TO CONTROLLER, PROVIDE BREAKER, GROUND AND CONCRETE ENCASED 2\"/>
3. CONTRACTOR SHALL PROVIDE HELCO ONE WEEK ADVANCE NOTICE FOR ANY WORK BY HELCO.

CONSTRUCTION NOTES

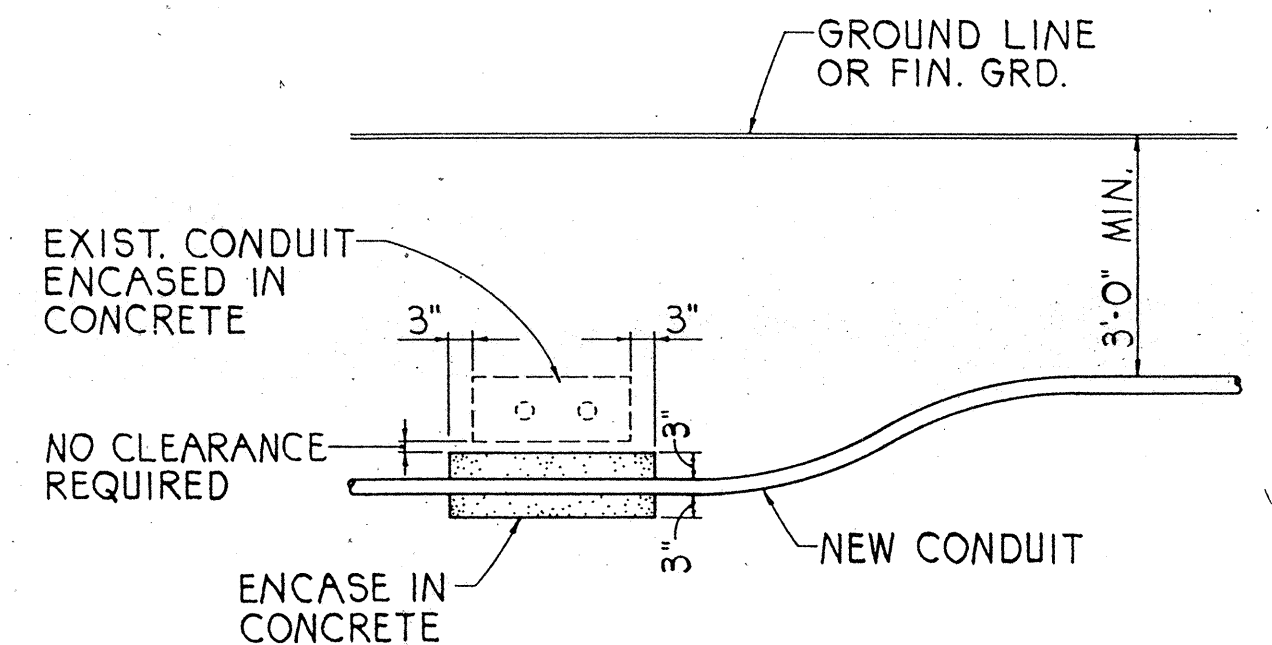
1. LOCATIONS OF EXISTING UNDERGROUND STRUCTURES AND UTILITIES SUCH AS PIPELINES, CONDUITS, CABLES, ETC., SHOWN ON PLANS ARE APPROXIMATE ONLY. IT IS NOT THE INTENT OF THESE PLANS TO SHOW THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES WITH THE RESPECTIVE OWNERS. EXISTING UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN COST.
2. THE LOCATIONS OF THE TRAFFIC SIGNAL STANDARDS, TRAFFIC SIGNAL STANDARDS WITH MAST-ARM, PEDESTRIAN PUSH BUTTONS, TRAFFIC CONTROLLER, PULLBOXES, CONDUITS AND LOOP DETECTORS SHALL BE STAKED OUT IN THE FIELD BY THE CONTRACTOR AND APPROVAL OF THE LOCATIONS SHALL BE OBTAINED FROM THE ENGINEER PRIOR TO CONSTRUCTION AND INSTALLATION.
3. ALL TRAFFIC SIGNAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", FEDERAL HIGHWAY ADMINISTRATION (1984) AND AMENDMENTS.
4. LOCATIONS OF TRAFFIC MARKINGS AND MARKERS (LANE LINES, STOP LINES, CROSSWALK, ETC.) SHOWN ON THE PLANS SHALL BE VERIFIED WITH THE ENGINEER PRIOR TO THE INSTALLATION OF THE TRAFFIC SIGNAL SYSTEM.
5. MAINTENANCE OF TRAFFIC THROUGH THE CONSTRUCTION AREA SHALL BE IN ACCORDANCE WITH PART VI OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", FEDERAL HIGHWAY ADMINISTRATION (1984) AND AS SPECIFIED IN THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ADEQUATE BARRICADES, BLINKERS, CONSTRUCTION SIGNS, ETC., FOR THE SAFETY OF THE MOTORING PUBLIC.
6. EXISTING STOP SIGN SHALL BE REMOVED AND RETURNED TO THE ENGINEER. COSTS SHALL BE INCIDENTAL TO OTHER ITEMS OF WORK.

TRAFFIC SIGNAL NOTES

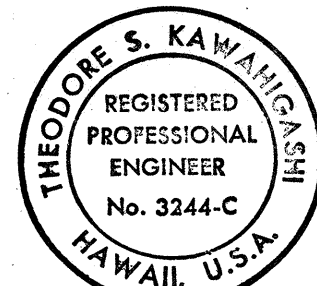
1. ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT SHALL BE COMPLETELY WIRED IN THE CABINET AND SHALL CONTROL THE TRAFFIC SIGNALS AS CALLED FOR ON THE PLANS.
2. SIGNAL INDICATIONS DURING CLEARANCE INTERVAL:
 - A. IF A SIGNAL IS G OR <G- AND WILL REMAIN G OR <G- DURING THE NEXT PHASE, IT SHALL BE G OR <G- DURING THE CLEARANCE INTERVAL.
 - B. IF A SIGNAL IS G OR <G- AND WILL BECOME R OR EXTINGUISHED DURING THE NEXT PHASE, IT SHALL BE Y OR <Y- DURING THE CLEARANCE INTERVAL.
 - C. IF A SIGNAL IS R AND WILL REMAIN R OR BECOMES G DURING THE NEXT PHASE, IT SHALL REMAIN R DURING THE CLEARANCE INTERVAL.
3. A SOLID #8 BARE COPPER WIRE SHALL BE PULLED WITH THE TRAFFIC CONTROL CABLE FOR EQUIPMENT GROUND. COST SHALL BE INCIDENTAL TO THE INSTALLATION OF THE CONTROL CABLE.
4. CONTRACTOR SHALL INSTALL METER SOCKET AND BREAKER AS SHOWN ON PLANS IN ACCORDANCE WITH HELCO REQUIREMENTS. METER SHALL BE MOUNTED BETWEEN 5' AND 7' ABOVE GROUND. METER SOCKETS SHALL BE 4-PRONG, COMPLETE WITH A MANUAL CIRCUIT CLOSING DEVICE.
5. CONDUITS, STANDARDS, CABLE AND CABINET LOCATIONS AS SHOWN ON THE PLANS ARE SCHEMATIC. THEY MAY BE MODIFIED BY THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER.
6. THE CONTRACTOR SHALL SPLICE ALL SIGNAL CONDUCTORS IN PULLBOX. NO SPLICES SHALL BE PERMITTED IN DETECTOR LEAD-IN CABLE.

LEGEND

- TS NEW TRAFFIC SIGNAL STANDARD
- STANDARD TRAFFIC AND PEDESTRIAN SIGNAL HEADS MOUNTED ON TYPE I SIGNAL STANDARD, HEIGHT = 10'
- TRAFFIC SIGNAL HEADS MOUNTED ON TYPE II SIGNAL STANDARD, ARM SPREAD SHOWN IS 24' AND DISTANCE BETWEEN SIGNAL HEADS IS 12'
- 12" RYG TRAFFIC SIGNAL HEAD
- 12" RY FIBER OPTIC TRAFFIC SIGNAL HEAD
- CONTROLLER CABINET
- TYPE "A" PULLBOX
- 2' X 3' PULLBOX
- TYPE "B" PULLBOX WITH MODIFIED COVER
- LOOP DETECTOR, SERIES-PARALLEL CONNECTED
- LOOP DETECTOR, SERIES CONNECTED
- PP POWER POLE
- WW WATER VALVE
- WM WATER METER
- DELETE EXISTING MARKINGS
- EXISTING MARKINGS
- NEW MARKINGS
- EXISTING UTILITY LINES AND SIZES AS INDICATED
- W = WATER



CONDUIT BY-PASS DETAIL
NOT TO SCALE



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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LEGEND AND NOTES

KUAKINI HIGHWAY
TRAFFIC SIGNAL SYSTEM
AT LAKE STREET
PROJECT NO. STP-OII-1(19)

SCALE: NONE DATE: AUG. 28, 1992
SHEET No. 1 OF 1 SHEETS