

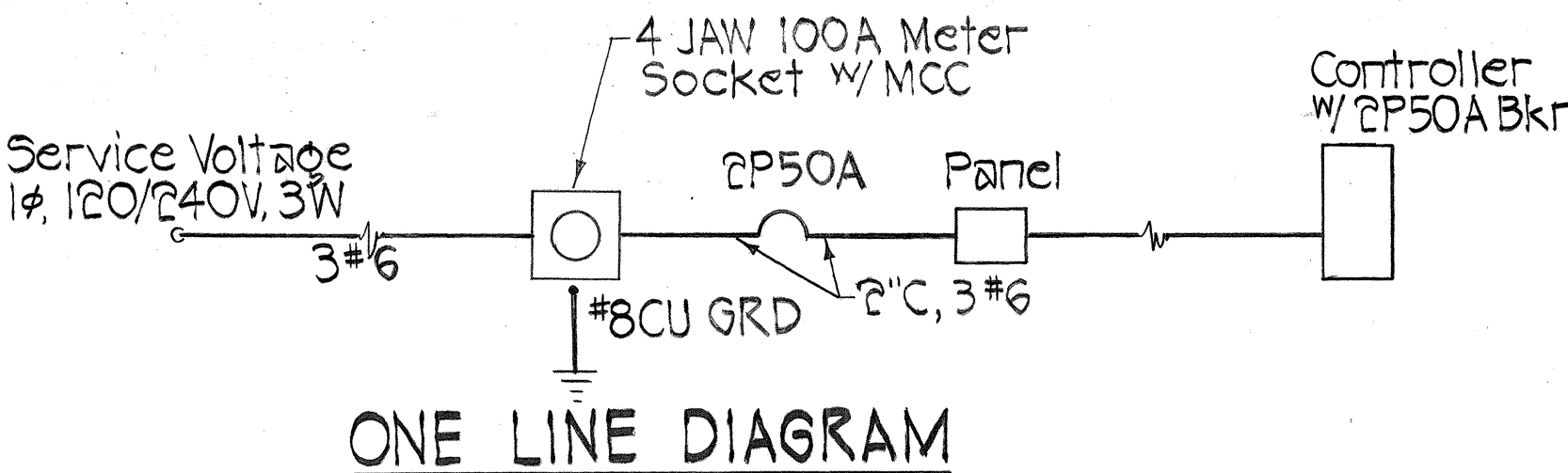
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	11A-01-89	1989	3	6

TRAFFIC SIGNAL NOTES

1. All traffic signal equipment shall be completely wired in the cabinet & shall control the traffic signals as called for in the plans.
2. The Contractor shall furnish a 50 ampere circuit breaker.
3. Traffic Signal Standards shall be located 5 feet clear from edge of roadway pavement unless otherwise noted or directed by the Engineer.
4. The loop detector amplifier units furnished for this project shall be capable of operating the loop detector configurations shown on the plans.
5. Minimum controller cabinet size shall be 48" high x 30" wide x 16" deep.
6. A solid #8 copper wire shall be pulled with the traffic control cable for equipment ground. Cost shall be incidental to installation of the control cable.
7. The Controller furnished shall be a 2-8 Phase Controller.
8. Should any defect be encountered during the warranty period, the manufacturer will be notified & he shall promptly correct such defect. Service call (by factory qualified representative) during the warranty period for repairs or other maintenance shall be answered within 24 hours and shall be done at no expense whatsoever to the state. All repairs shall be done as soon as possible.

CONSTRUCTION NOTES

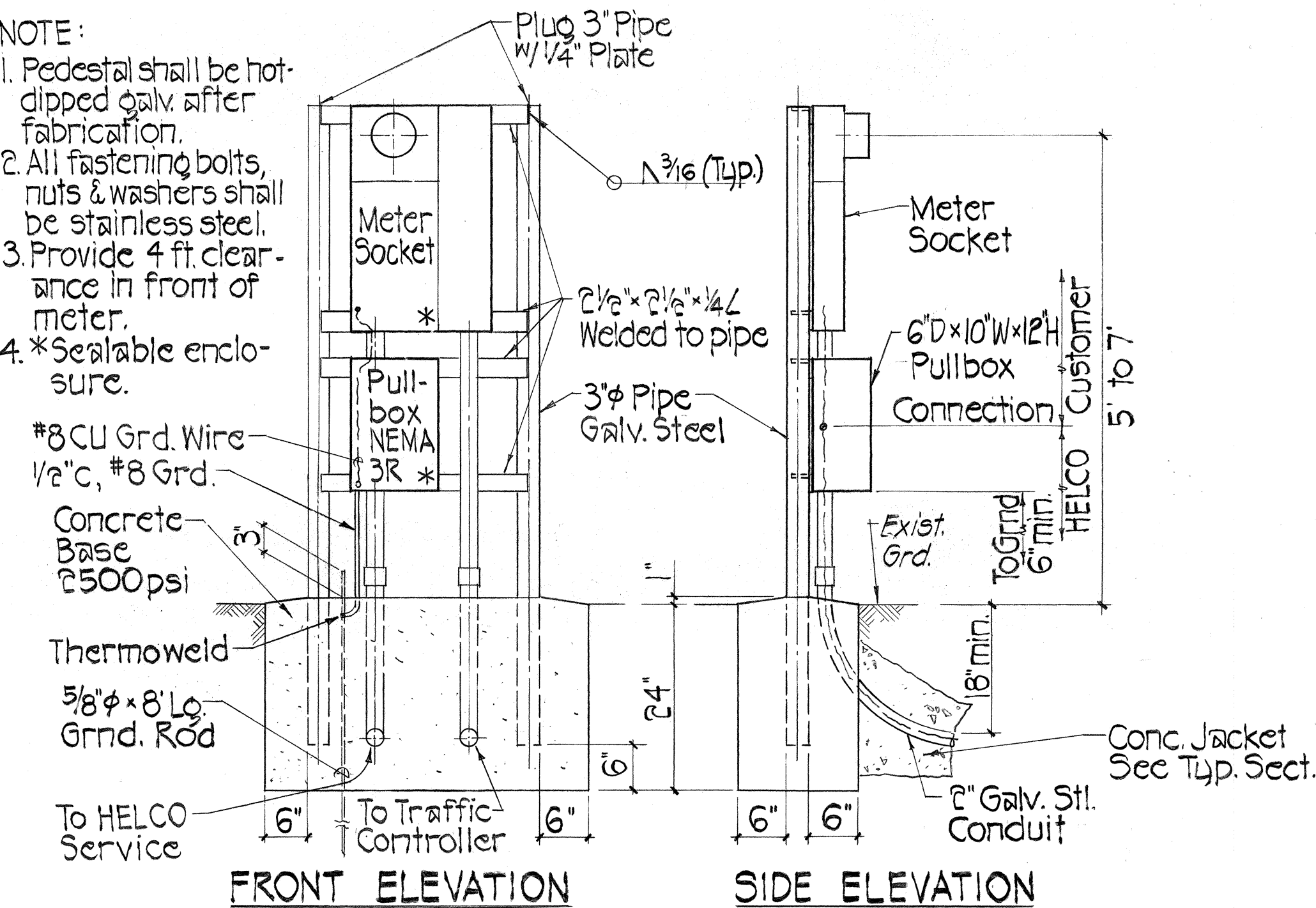
1. Locations of existing underground structures and utilities, such as pipelines, conduits, cables, etc. shown on plans are approximate only. It is not the intent of these plans to show the exact location of all underground utilities and structures. It is the responsibility of the Contractor to verify 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, barriers & loop detectors shall be staked out in the field by Contractor & approval of the locations obtained from the Engineer prior to construction & installation.
3. Locations of traffic markings & markers (lane lines, stop lines, pavement arrows, etc.) shown on the plans shall be verified by the Contractor with the Engineer prior to installation of the traffic signal system.
4. Removal of pavement markings & stripings shall be done by the Contractor.
5. Stop signs indicated to be removed shall be removed after the traffic signal system is operational.
6. Restoration of existing pavements & improvements unavoidably damaged shall be incidental to the various contract items. Restoration shall be to original or better condition.
7. 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.
8. 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 & maintain adequate barricades, blinkers, construction signs, etc. for the safety of the motoring public.
9. Removal of existing signs shall also include the removal of posts & foundations unless otherwise noted. All such materials shall be the property of the State and shall be delivered by the Contractor to the State Highway's base yard designated by the Engineer. Cost shall be incidental to other items of work.



ONE LINE DIAGRAM

NOTE:

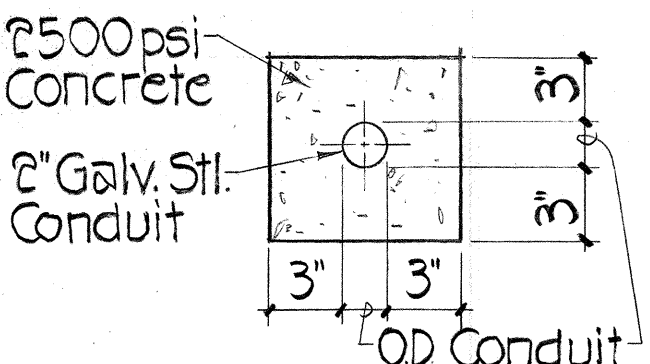
1. Pedestal shall be hot-dipped galv. after fabrication.
2. All fastening bolts, nuts & washers shall be stainless steel.
3. Provide 4 ft. clearance in front of meter.
4. *Sealable enclosure.



METER PEDESTAL FOR UNDERGROUND SERVICE
Not to Scale

PANEL 120/240V 1P 3W NEMA 3R ENCLOSURE 50A LUGS ONLY LOAD CENTER W/DOOR BKR IC=10,000A					
CKT	DESCRIPTION	A	B	BKR	WIRE
1,3	TRAFFIC CONTROLLER	3.5	3.5	2P50A	6
2	PFB			1P	
4-8	PFB			5-1P	

PANEL SCHEDULE



CONC. JACKET TYP. SECT.
Not to Scale

LEGEND

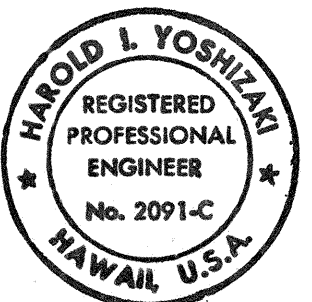
- [C] New Traffic Signal Controller
- [X] New Type "A" Pullbox
- [] New Type "B" Pullbox
- [M] New Type "B" Pullbox with Modified Cover
- [~] New Traffic Signal Conduits & Cables
- [>] New 12" Traffic Signal Head
- [>] New Pedestrian Signal Head
- [>] New Type II Traffic Signal Standard with Mast Arm & Length. Signal Head as specified
- [>] New Type I Traffic Signal Standard, Height = 10 Ft.
- [] New Loop Detector
- [] New Regulatory, Warning or Guide Sign
- [] Existing Regulatory, Warning or Guide Sign
- [] Existing Pavement Markers
- [] New Pavement Stripe
- [] Existing Pavement Stripe
- [>] New Pavement Arrow
- [PP] Existing Power Pole & Overhead Power Line
- [L-24"] Existing Drain Line & Size

SERVICE DATA

1. Service Voltage: 120, 120/240V, 3W
2. Load Data: Connected - 7 KVA
Estimated Demand - 3KVA
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" galv. stl. conduit.
3. Contractor shall provide HELCO one week advance notice for any work by HELCO.



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
Harold I. Yoshizaki

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES & LEGEND

KUAKINI HIGHWAY TRAFFIC SIGNALS
AT KAMEHAMEHA III ROAD

PROJECT NO. 11A-01-89

DATE: APRIL 4, 1989

SHEET No. 1 OF 1 SHEETS