

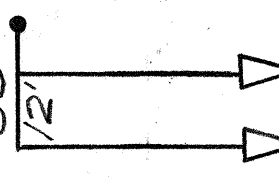
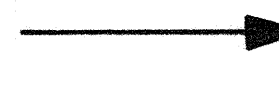









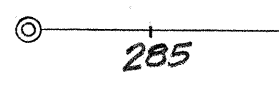
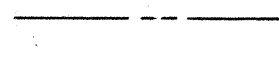
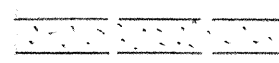
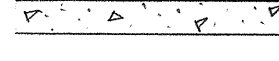





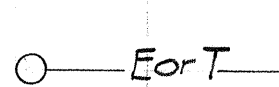
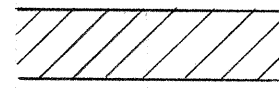
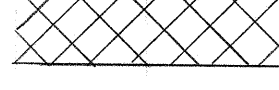
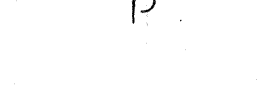


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(20)	1974	2	18

LEGEND

TRAFFIC SIGNALS

-  Standard Vehicle and Pedestrian Signal Heads mounted on Type I (Pedestal Type) Signal Standard, Height = 10'
-  Pedestrian Signal Head mounted on Type I (Pedestal Type) Signal Standard, Height = 10'
-  Standard Vehicle Signal Heads mounted on Type II-B (Mast-Arm Type) Signal Standard; Arm Spread shown 30' and Distance between Signal Heads shown 12 feet.
-  12" Programmed Visibility Vehicle Signal Head
-  Pedestrian Push-Button with Pedestrian instruction Sign (R10-4a) on 2 1/2" galv. steel pipe standard
-  Traffic Signal Pull-Box (Type "A" shown)
-  Traffic Signal Controller, Cabinet & Auxiliary Controller Equip't
-  Traffic Detector and Designation (Type indicated)
-  Traffic Signal conduit with cables (See Plan for No. & Size)

ROADWAY

-  Existing Curb
-  New curb
-  Existing Man., Base line and Station
-  Property line
-  Existing concrete sidewalk
-  New concrete sidewalk
-  Honolulu Gas line (4") and Manhole
-  Sewer line (30") and Manhole
-  Water line (24") and Manhole
-  Drain line (24") and Manhole
-  Existing Street light on Standard (Std.) or Power Pole (P.P.)
-  Electric Power or Telephone Pole
-  Electric or Telephone line and Manhole
-  New Asphalt concrete pavement
-  Asphalt concrete resurfacing
-  Existing Traffic Sign
-  New or relocated Traffic Sign

CONSTRUCTION NOTES

A. TRAFFIC SIGNALS

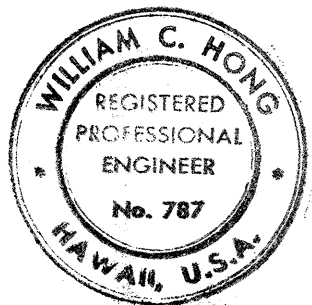
- Locations of existing underground structures and utilities, such as pipe lines, conduits, cables etc., shown on Plans are approximate only. It is not the intent of these Plans to show the exact location of all underground utilities & structures. It is the responsibility of the Contractor to verify 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.
- Locations of Traffic Markings & Markers (Lane lines, Stop lines, Cross-walks, etc.) shown on the Plans shall be verified by the Contractor with the Engineer prior to the installation of the Traffic Signal System.
- The locations of the Traffic Signal Standards, Traffic Signal Standards with Mast-Arm, Pedestrian Push Buttons, Traffic Controllers, Pull-Boxes, Conduits and Traffic Detectors shall be staked out in the Field by the Contractor, and approval of the locations obtained from the Engineer prior to Construction and Installation.
- All Traffic Signal Work shall conform to the Requirements of the "Manual on Uniform Traffic Control Devices for Streets & Highways", Federal Highway Administration (1971)
- Construction inspection for Signal System will be under Department of Transportation Services, City & County of Honolulu.
- Work by the Dept. of Transportation Services, City & County of Honolulu (See Specifications for Details)
 - Assemble & Connect controller and Auxiliary Equipment in Cabinet.
 - Make all electrical connections in Field for Signal System after the System has been installed in place by the Contractor
 - Mask and adjustment all programmed visibility Traffic Signal Heads.
 - Final Adjustment of Traffic Signal Control Equipment

B. PAVEMENT MARKINGS

- Removal of Pavement Markings shall be done by Contractor

C. GASCO, INC.

- The Gasco, Inc. gas pipe lines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipe lines.
- The Contractor shall call Gasco, Inc. a minimum of 48 hours before starting excavation to arrange for field location of all existing gas pipe lines. The telephone number is 548-2126 during business hours, and 548-2123 after hours. The Contractor shall excavate and backfill around gas pipe lines in the presence of a Gasco, Inc. representative. All backfill within six inches of gas pipe line shall be select cushion material approved by Gasco, Inc.
- For relocation of any gas pipe line, the Contractor shall notify Gasco, Inc. five working days before starting work. The Contractor shall provide the necessary excavation and backfill, arrange for traffic permits and restore sidewalk pavement or other facilities.
- The Contractor shall notify Gasco, Inc. immediately after any damage has been caused to existing gas pipe lines, their coatings or their cathodic protection devices. Repair work on this damage shall be done by Gasco, Inc. with payment for this work to be borne by the Contractor.
- Minimum vertical or horizontal clearance between gas pipe lines and other pipe lines, conduits, or ductlines shall be 12 inches. Adequate support & protection for gas pipe lines exposed in the trench shall be provided. Such support and protection shall be approved by Gasco, Inc.
- The Contractor shall work in an expeditious manner in order to keep uncovered gas pipe lines exposed for as short a period of time as possible.



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
William C. Hong

APPROVED:

Cy Noham
Deputy Traffic Director

8/29/74
Date

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LEGEND AND CONSTRUCTION NOTES	
INTERSECTION IMPROVEMENTS	
Fed. Aid Proj. No. F-061-1(20)	
Scale: As shown	Date: Sept. 1974
SHEET No. 1 OF 1 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-061-1(20)	1974	3	18

D. GENERAL

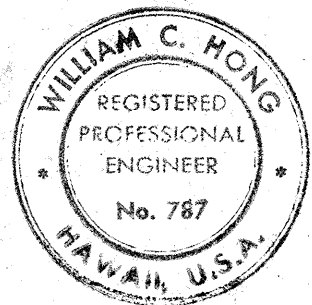
1. All grading work shall conform to Chapter 23, Revised Ordinances of Honolulu 1969, as amended. (Ordinance No. 3968)
2. The Contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways & other areas. The costs incurred for any necessary remedial action by the Chief Engineer shall be payable by the Contractor.
3. The Contractor, at his own expense, shall keep the project area and surrounding area free from dust nuisance. The work shall be in conformance with the air pollution control standards and regulations of the State Department of Health.
4. All grading operations shall be performed in conformance with the applicable provisions of the Water Pollution Control and Water Quality Standards contained in the Public Health Regulations, State Department of Health, on Water Pollution Control and Water Quality Standards.
5. All construction work shall be done in accordance with the Standard Detail, February 1973, and the Standard Specifications for Public Works Construction, November 1968, of the Department of Public Works, City and County of Honolulu.
6. Street lights shall be installed in accordance with Ordinance 1638, as amended by Ordinance 1770, 3035, 2875 and 3357.
7. All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor unless specified on the plans to be abandoned. Any damages caused by the Contractor shall be repaired & paid for by the Contractor.
8. Wherever connections to existing utilities are shown on the plans, the Contractor shall expose the existing lines prior to excavation of the main trenches to verify their locations and depths.
9. Street name signs shall be installed in accordance with the Standards of the Department of Transportation Services. In lieu of the standard embossed signs, reflectorized street name signs and sign brackets identical to that presently used by the Department of Transportation Services may be installed.
10. Utilities shall be installed pursuant to Ordinance No. 2875 (Underground utilities)

E. WATER

1. Unless otherwise specified, all materials & construction of water system facilities and appurtenances shall be in accordance with the Standard Specifications for Road and Bridge Construction, dated 1969, as amended, of the Hawaii Highways Division, Department of Transportation.
2. Prior to excavating for new drain, sewer and other utility lines, the Contractor shall verify in the field the location of existing water mains & appurtenances. Where the installation of new drain, sewer or other utility lines are to cross over or under existing water mains, the Contractor shall expose the existing water mains prior to trenching. Excavation around water mains shall be done by hand.
3. Items indicated as "relocated" on the plans shall be removed, cleaned, painted and reinstalled at the new location by the Contractor unless otherwise specified.
4. Asterisk (*) indicates work to be performed by Board of Water Supply. Materials to be furnished by the Contractor unless specified as "relocate."
5. The minimum clearance between fire hydrants and utility poles or light standards shall be 3.0 feet.
6. The Contractor shall notify the Board of Water Supply in writing one week prior to commencing work on the main.
7. Approval by the Board of Water Supply is based solely on the adequacy of the water supply. Discrepancies, if any, of alignments, grades, fittings, etc. shall be the responsibility of the Engineer who prepared the plans.
8. The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of the work. The Contractor shall be responsible and shall pay for all damages to existing utilities.

APPROVED (For General Notes only)

William Z. H. Long 8/29/74
Asst. Chief, Div of Engineering P.S. Date
Dept. of Public Works
City & County of Honolulu



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION

William C. Hong

APPROVED (for Water Notes only)

L. H. H. H. 9/2/74
Assistant Chief Engineer - BWS Date
(Water)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES

INTERSECTION IMPROVEMENTS
Fed. Aid Proj. No. F-061-1(20)

Date: Oct. 1974

SHEET NO. 1 OF 1 SHEETS