

HECO NOTES

- 1. Location of HECO Facilities. The location of HECO'S overhead and under-ground facilities shown on the plans are from existing records with varying degrees of accuracy and are not guaranteed as shown. The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines and shall maintain adequate clearance when operating equipment within or under any overhead lines.
- 2. Compliance with DOSH. The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (DOSH).
- 3. Excavation Permit. The Contractor shall obtain an excavation permit from HECO's Mapping and Records Division located at 820 Ward Avenue, 4th floor, two weeks prior to starting construction. Please refer to our number at this time.
- 4. Underground Lines. For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HECO's Under-ground Division at 543-7345 a minimum of 72 hours in advance.
- 5. Excavations. When trench excavation is adjacent to or beneath our existing structures or facilities, the Contractor is responsible for:
a. Sheeting and bracing the excavation to prevent slides, cave-ins and settlements.
b. Protecting existing structures or facilities with beams, struts, or under-pinning.
- 6. Relocation of HECO Facilities. Any work required to relocate HECO facilities shall be done by HECO and the contractor shall be responsible for all coordination, and for costs if applicable.
- 7. Temporary Relocation of HECO Facilities. Should it become necessary to temporarily relocate any HECO facilities to enable the contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations, these temporary relocations will be done by HECO, or by the Contractor under HECO's supervision, with all costs being borne by the Contractor.
- 8. Damage to HECO Facilities. Any damage to HECO's facilities will be reported immediately to HECO's Trouble Dispatcher at Ph. 543-7874.
- 9. Liability for Damages. All HECO overhead and underground facilities shown on these plans or whose approximate locations within the project boundaries have been made known by any reasonable means at any time to the Contractor shall be protected at all times by the Contractor during construction. Costs for damages to HECO facilities may be borne by the Contractor. This repair work shall be done by HECO, or by the Contractor under HECO's supervision.

HTCO NOTES

- 1. Existing telephone facilities shown on these plans are approximate only. The Contractor shall verify their actual locations, dimensions & details and shall make adjustments as directed by HTCo.
- 2. Any damage to existing HTCo facilities shall be repaired by HTCo & paid for by the Contractor.
- 3. Contractor to contact HTCo Outside Plant Records Section at 3239 Ualena St. a minimum of 72 hours prior to start of excavation.

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 in the plans.
- 2. The Contractor shall install each meter socket & 50 Amp breaker on power pole as shown on the plans in accordance with HECO requirements. Meter shall be mounted between 5' & 7' above ground. Meter socket shall be 4-prong complete with a manual circuit closing device.

GENERAL NOTES

- 1. All construction work shall be done in accordance with these plans, all applicable sections of the Standard Specifications for Road and Bridge Construction, dated 1976, as amended, of the State Highways Division, Dept. of Transportation & the project's Special Provisions, unless otherwise specified.
- 2. All lanes shall be opened to traffic during the morning peak hours from 6:00 a.m. to 8:30 a.m. and during the afternoon peak hours from 3:00 p.m. to 5:30 p.m. and during off-work hours.
- 3. The Contractor shall provide, install & maintain all necessary signs, lights, flares, barricades, markers, cones & other protective facilities and shall take all necessary precautions for the protection & for the convenience & safety of public traffic. All such protective facilities & precautions to be taken shall conform with the "Rules and Regulations Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways, Part VI-Traffic Controls for Highway Construction and Maintenance Operations", dated 1988.
- 4. Full compensation for all additional materials & labor, not specifically shown or called for which are necessary to complete the construction of the project shall be considered incidental to the various contract items in the proposal & no additional compensation will be allowed therefor.
- 5. The Contractor shall remove all silt & 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.
- 6. 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 & Regulations of the State Department of Health.
- 7. All exposed areas shall be sodded or planted immediately after the grading work has been completed.

BWS NOTES

- 1. Unless otherwise specified, all materials & construction of water system facilities & appurtenances shall be in accordance with the "Standard Specifications For Road And Bridge Construction", dated 1985 & the "Approved Material List and Standard Details for Water System Construction", Vol. 2, dated 1985 & all subsequent amendments & additions.
- 2. All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, etc. and drainage and other features of improvements shall not be the responsibility of the Board of Water Supply.
- 3. The Contractor shall notify the Board of Water Supply in writing one week prior to commencing work on the water system.
- 4. The existence & location of underground utilities & structures as shown on the plans are from the latest available data but is not guaranteed 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.
- 5. Re-approval shall be required if this project is not under construction within a period of two years.
- 6. At the electrical/signal ductline water crossings, adjust all electrical/signal ductline elevation to maintain 6" vertical clear separation from all waterlines (12" clear for all electrical/signal ductline structures larger than 18") at no cost to the BWS.
- 7. Maintain 3'-0" min. horizontal clear separation between all water line systems and nearest electrical/signal ductlines paralleling the water system at no cost to the BWS.
- 8. Maintain 3'-0" min. horizontal clear separation between street light/traffic signal, standards (including any modular units) and the nearest water line system. Contractor shall field verify for any conflicts at each street light/traffic signal standard location. Where conflict occurs, the Contractor shall coordinate with the Project Engineer to revise the street light/traffic signal standard to provide the required clearances at no cost to the BWS.

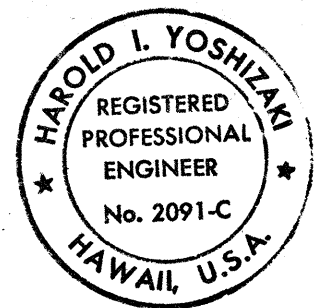
| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII | HAW. | 83F-02-91 | 1992 | 3 | 8 |

CONSTRUCTION NOTES

- 1. Locations of existing under ground structures & 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 & 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. Department of Transportation Services, City & County of Honolulu will assist the Engineer in construction inspection for the traffic signal system.
- 4. Work by the Dept. of Transportation Services, C&C of Honolulu:
a. Test controller & auxiliary equipment in cabinet.
b. Make all electrical equipment connections in field for signal system after the the system has been installed in place by the Contractor.
c. Final adjustment of traffic signal control equipment.
- 5. Removal of existing signs shall also include the removal of posts & foundations unless otherwise noted. All such materials shall be the property of the Contractor. Cost shall be incidental to other items of work.
- 6. 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.
- 7. Removal of pavement markings & stripings shall be done by the Contractor.
- 8. A solid #8 bare copper wire shall be pulled with the traffic signal control cable for equipment ground. Cost shall be incidental to the installation of the control cable.
- 9. Stop signs indicated to be removed shall be removed after the traffic signal system is operational.
- 10. Restoration of existing pavements & improvements unavoidably damaged shall be incidental to the various contract items. Restoration shall be to original or better condition.
- 11. All traffic signal work shall conform to the requirements of the Manual on Uniform Traffic Control Devices for Streets and Highways, Federal Highway Administration (1988) and amendments.
- 12. 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 (1988) 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.

APPROVED:

CHIEF, PLANNING & ENGINEERING, BWS DATE 9/10/91



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12th Avenue
Honolulu, Hawaii 96816

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES

KAHEKILI HIGHWAY TRAFFIC SIGNALS AT
AHUIMANU ROAD AND IMPROVEMENTS AT
AHOELELO ROAD INTERSECTION
PROJECT NO. 83F-02-91

DATE: SEPT. 1991

SHEET No. 1 OF 8 SHEETS