

ORIGINAL PLAN	DATE	_____

NOTE BOOK	DESIGNED BY	_____

QUANTITIES BY	CHECKED BY	_____

HAWAIIAN ELECTRIC COMPANY (HECO) NOTES

- The location of HECO's overhead and underground 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.
- The Contractor shall comply with the State of Hawaii's Occupational safety and Health Law (DOSH).
- The Contractor shall obtain an excavation permit from HECO's Technical Division (543-5654) located at 820 Ward Avenue, 4th floor, two (2) weeks prior to starting construction. Please refer to our request number at this time
- For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HECO's Underground Division at 543-7871 a minimum of 72 hours in advance.
- When trench excavation is adjacent to or beneath our existing structures or facilities, the Contractor is responsible for:
 - Sheeting and bracing the excavation to prevent slides, cave-ins, and settlements.
 - Protecting existing structures or facilities with beams, struts, or under-pinnings.
- For pole bracing instructions, The Contractor shall call the HECO District Superintendent at 543-4223 a minimum of 72 hours in advance.
- Any work required to relocate HECO facilities shall be done by HECO and the Contractor shall be responsible for all coordination, and for possible costs if applicable.
- Should it become necessary to temporarily relocate any of 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 borne by the Contractor.
- Any unforeseen conflict tha would result in the redesign or relocation (either temporary or permanent) of HECO's electrical facilities may be cause for lengthy delays. To avoid such delays, the Contracor must notify HECO of the conflict a minimum of 30 days prior to the start of construction.
- Any damage to HECO's facilities will be reported immediately to HECO's Trouble Dispatcher at 548-7961.
- All HECO overhead and underground facilities shall be protected at all times by the Contractor during construction. Costs for damages to HECO facilities shall be borne by the Contractor. This repair work shall be done by HECO, or by the Contractor under HECO's supervision.
- The Contractor shall indemnify, defend and hold harmless HECO from and against all losses, damages, claims and actions, including but not limited to reasonable attorney's fees and costs based upon or arising out of damage to property or injuries to persons, or other tortious acts caused or contributed to by Contractor or anyone acting under its direction or control or on its behalf; provided Contractor's indemnity shall not be applicable to any liability based upon the sole negligence of HECO.

SEWER NOTES

- All sewer construction shall be performed in accordance with the City's Standard Specifications, September 1986, the Department of Public Works Standard Details, September 1984, Current City Practices and Revised Ordinances of Honolulu, 1990 as amended, and the Design Standards of the Department of Wastewater Management Vol. 1, July 1993

SEWER NOTES - Cont.

- The Contractor shall notify the Wastewater Branch, Department of Planning and Permitting, 523-4429 to arrange for inspection services and submit four sets of approved construction plans seven days prior to commencement of sewer work. The Contractor shall pay for all inspections costs.
- The underground pipes, cables or ductlines known to exist by the Engineer from his research of records are indicated on the as-built plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavating the area. The Contractor shall be responsible and shall pay for all damaged utilities.
- The Contractor shall be responsible for maintaining continuous sewer service to all affected areas during construction.
- The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify the State Department of Health and utilize appropriate sampling and analyzing procedures. The Contractor shall be responsible for all public notification and press releases.

THE GAS COMPANY (GASCO) NOTES

- The Gas Company gas pipelines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipelines.
- Written clearances must be obtained from The Gas Company, Maps and Records Department, 515 Kamakee Street, at least five (5) working days before starting excavation near these gas pipelines.

Since gas line locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call USA North a minimum of two (2) working days before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 1-800-227-2600.
- The Contractor shall excavate and backfill around gas pipelines in the presence of The Gas Company representative. All backfill within six inches of any gas pipeline shall be select cushion material approved by The Gas Company.
- For relocation of any gas pipeline the Contractor shall notify The Gas Company five (5) working days before starting work. The Contractor shall provide the necessary excavation and backfill, obtain traffic permits and restore pavement, sidewalks, and other facilities. Any relocation of gas facilities shall be done by The Gas Company and paid for by the Contractor.
- The Contractor shall notify The Gas Company immediately after any damage has been caused to existing gas pipelines, coatings or their cathodic protection devices. Repair work on such damage shall be done by The Gas Company and paid for by the Contractor.
- Minimum vertical or horizontal clearance between gas pipelines and other pipelines, conduits, ductlines, or other facilities shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by The Gas Company.
- The Contractor shall work in an expeditious manner in order to keep the uncovered gas pipelines exposed for as short a period of time as possible.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-01	2002	4	35

BOARD OF WATER SUPPLY (BWS) NOTES

- Unless otherwise specified, all material and construction of water sysytem facilities and appurtenances shall be in accordance with the City and County of Honolulu Board of Water Supply's "Water System Standards" Volume 1, dated 1985, the "Approved Material List and Standard Details for Water System Construction", Volume 2, dated 1985, The "Water System External Corrosion Control Standards", Volume 3 , dated 1991 , and all subsequent amendments and additions.
- 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, drainage, etc., and other features of improvements shall not be the responsibility of the Board of Water Supply.
- 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 pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.
- The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees, and bends wherever there is a possibility of water line movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measures necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method.
- Re-approval shall be required if this project is not undertaken within a period of two years.
- At the electrical/signal ductlines water crossings, adjust all electrical/signal ductline elevations to maintain 6" vertical clear separation from all waterlines (12" clear for all electrical/signal ductline structures larger than 16") at no cost to the Board of Water Supply.
- Maintain 3'-0" min. horizontal clear separation between all waterline systems and nearest electrical/signal ductlines paralleling the water system at no cost to the Board of Water Supply.
- Maintain 3'-0" horizontal clear separation between sreet light/traffic signal, standards (including any modular units) and the nearest water system. Contractor shall field verify for any conflicts at each street light/traffic signal standard location. Where conflicts occur, 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.
- The Contractor shall notify BWS Planning and Engineering Division, Construction Section, one week prior to commencing work on the water system. Phone No. 527-5205.
- The Contractor shall verify all existing service lateral locations whether shown or not shown on plans prior to commencing with any of the work and shall not assume that where no services are shown none exist.
- Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
UTILITY NOTES
PALI HIGHWAY SAFETY IMPROVEMENTS
<u>School Street to Waikanaka Street</u>
<u>Project No. 61A-01-01</u>
Date: Jan. 2002

GTE HAWAIIAN TELEPHONE NOTES

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61A-01-01	2002	5	35

1.

The location of GTE Hawaiian Telephone Company's existing facilities are approximate only. The Contractor shall exercise extreme caution and shall maintain proper clearances whenever construction crosses or is in close proximity of GTE Hawaiian Telephone Company facilities. The Contractor shall verify their locations and shall be liable for any damages to GTE Hawaiian Telephone facilities. Any damages shall be reported immediately to GTE Hawaiian Telephone Company's Repair Section at #611 (24 hours) or to the Excavation Permit Section at 483-8085 (normal working hours, Monday through Friday, except Holidays).
2.

For underground cable locating and marking, five working days advance notice is required. For any inspection by a designated representative, three working days advance notice is required.
3.

The Contractor shall take necessary precaution not to damage any existing cables or conduits. Any work involving existing GTE Hawaiian Telephone Company cables or conduits, shall be done in the presence of a GTE Hawaiian Tel Inspector or designated representative.
4.

The Contractor shall obtain an excavation permit and toning request from GTE Hawaiian Telephone Company's Excavation Permit Section, located at 3239 Ualena, Street, Third Floor, two weeks prior to the start of construction. Hours of business is 7:00 a.m. to 10:30 a.m. and 11:30 a.m. to 3:00 p.m., Monday through Friday, except Holidays.
5.

The Contractor shall notify GTE Hawaiian Telephone Company's Inspector or designated representative a minimum of 72 hours prior to excavation, bracing or backfilling of GTE Hawaiian Telephone Company's structures or facilities.
6.

When excavation is adjacent to or beneath GTE Hawaiian Telephone Company's existing structures or facilities, the Contractor shall:

a)

Sheet and/or brace the excavation to prevent slides, cave-ins or settlements to ensure no movement to GTE Hawaiian Telephone Company's structures or facilities.

b)

Protect existing structures and/or facilities with beams, struts or underpinning while excavating beneath them to ensure no movement to GTE Hawaiian Telephone Company's Structure or facilities.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
EDITION	QUANTITIES BY	
N. CHANGE	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY NOTES

PALI HIGHWAY SAFETY IMPROVEMENTS

School Street to Waokanaka Street

Project No. 61A-01-01

Date: Jan. 2002

SHEET No. 2 OF 2 SHEETS