

THE CONTRACTOR SHALL PERFORM ALL APPLICABLE CONSTRUCTION WORK IN ACCORDANCE WITH THE STANDARD DETAILS ENTITLED "HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - 2005" AS AMENDED FOR THE STATE OF HAWAII.

FOR WORK WITHIN COUNTY RIGHTS-OF-WAY, ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986 AND STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU AND THE COUNTIES OF KAUAI, MAUI, AND HAWAII.

ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS SHALL BE CHECKED AND VERIFIED PRIOR TO THE START OF CONSTRUCTION, AND ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.

ALL EXISTING UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE PROTECTED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION, AND ANY DAMAGE TO THEM SHALL BE REPAIRED AND PAID FOR BY THE CONTRACTOR.

WHEN TRENCH EXCAVATION IS ADJACENT TO OR UNDER EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE-INS AND SETTLEMENT, AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNINGS TO FULLY PROTECT IT FROM DAMAGE.

THE CONTRACTOR SHALL RESTORE ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION TO ITS ORIGINAL OR BETTER CONDITION.

THE CONTRACTOR SHALL REPLACE ALL EXIST. ROADWAY STRIPING AND RAISED PAVEMENT MARKERS DAMAGED OR REMOVED DURING CONSTRUCTION, AT NO COST TO THE STATE.

THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS AND OTHER PROTECTIVE FACILITIES, WHICH SHALL CONFORM WITH THE "ADMINISTRATIVE RULES AND REGULATIONS GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS" ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI - TEMPORARY TRAFFIC CONTROL" AND ITS AMENDMENTS.

THE UNDERGROUND PIPES, CABLES OR DUCT LINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA.

NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW INTO EXISTING CITY DRAINAGE SYSTEMS OR ADJOINING PROPERTIES, STREETS, OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER QUALITY AND WATER POLLUTION CONTROL STANDARDS CONTAINED IN HAWAII ADMINISTRATIVE RULES, TITLE 11, CHAPTER 54, "WATER QUALITY STANDARDS", AND TITLE 11, CHAPTER 55, "WATER POLLUTION CONTROL", AS WELL AS CHAPTER 14 OF THE REVISED ORDINANCES OF HONOLULU, AS AMENDED. BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED AT ALL TIMES DURING CONSTRUCTION.

FOR WORK ON OAHU, THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, DEPARTMENT OF PLANNING AND PERMITTING AT 768-8084 TO ARRANGE FOR INSPECTIONAL SERVICES AND SUBMIT FOUR (4) SETS OF APPROVED CONSTRUCTION PLANS SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION WORK.

CONFINED SPACE
FOR ENTRY BY CITY PERSONNEL, INCLUDING INSPECTORS, INTO A PERMIT REQUIRED CONFINED SPACE AS DEFINED IN 29 CFR PART 1910.146(B), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING:

- ### CONSTRUCTION NOTES (CON'T)

14. PURSUANT TO CHAPTER 6E, HRS., IN THE EVENT ANY ARTIFACTS OR HUMAN REMAINS ARE UNCOVERED DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL IMMEDIATELY SUSPEND WORK AND NOTIFY THE HONOLULU POLICE DEPARTMENT, THE STATE DEPARTMENT OF LAND AND NATURAL RESOURCES—HISTORIC PRESERVATION DIVISION (692—8015). IN ADDITION, FOR WORK ON OAHU, FOR NON—CITY PROJECTS, THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEERING BRANCH, D.P.P. (768—8084).
15. FOR PROJECTS ABUTTING STATE HIGHWAYS' RIGHTS—OF—WAY, THE OWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL NOTIFY THE STATE DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION, OAHU DISTRICT, DRAINAGE DISCHARGE UNIT AT 831—6793 FOR AN ASSESSMENT OF STATE HIGHWAYS PERMIT REQUIREMENTS.
16. ALL SAWCUTTING WORK INCLUDING VACUUM OF SLURRY WORK SHALL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS.
17. WORK REQUIRED TO COMPLETE THE PROJECT BUT NOT ITEMIZED SPECIFICALLY IN THE PROPOSAL SHALL BE CONSIDERED INCIDENTAL AND SHALL NOT BE PAID SEPARATELY.

1. THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT FROM THE STATE'S HIGHWAY DISTRICT ENGINEER AT THE APPROPRIATE ADDRESS AS LISTED BELOW BEFORE PRIOR TO COMMENCEMENT OF WORK WITHIN STATE RIGHT-OF-WAY.

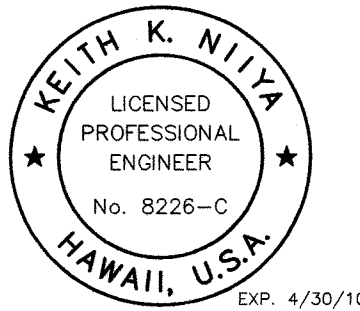
HAWAII DISTRICT: 50 MAKAA LA STREET, HILO, HAWAII; PHONE NO. 933-8866
KAUAI DISTRICT: 1720 HALEUKANA STREET, LHUE, KAUAI; PHONE NO. 241-3000
MAUI DISTRICT: 650 PALAPALA DRIVE, KAHULUI, MAUI; PHONE NO. 873-3535
OAHU DISTRICT: 727 KAKOI STREET, HONOLULU, OAHU; PHONE NO. 831-6703
2. CONSTRUCTION AND RESTORATION OF ALL EXISTING HIGHWAY FACILITIES WITHIN STATE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE CURRENT "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION-2005", AS AMENDED OF THE STATE OF HAWAII.
3. A MINIMUM OF ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. THE ENTIRE WIDTH OF PAVEMENT, INCLUDING THE PAVED SHOULDERS, MAY BE UTILIZED FOR TRAFFIC PURPOSES. ALL LANES SHALL BE OPEN TO TRAFFIC DURING THE PEAK PERIODS OF 6:00 AM TO 8:30 AM AND 3:30 PM TO 6:00 PM AND DURING NON-WORKING HOURS.
4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION AND FOR THE CONVENIENCE AND SAFETY OF PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES AND PRECAUTIONS TO BE TAKEN SHALL CONFORM WITH THE "ADMINISTRATIVE RULES OF HAWAII GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS" ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT U.S. FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS". IF LANE CLOSURES ARE REQUIRED DURING CONSTRUCTION, A TRAFFIC CONTROL PLAN SHALL BE INCORPORATED INTO THE CONSTRUCTION PLANS AND MUST BE APPROVED BY THE DIVISION PRIOR TO THE ISSUANCE OF THE PERMIT.
5. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN HIGHWAY RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING WRITING AND APPROVED BY THE DISTRICT ENGINEER.

- A COPY OF THE RESULTS SHALL BE SUBMITTED TO THE DISTRICT ENGINEER.

7. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADEQUATE, SAFE, NON-SKID BRIDGING MATERIAL OVER THE TRENCH, INCLUDING SHORING, WHEN TRENCHING IN PAVEMENT AREAS, TO HANDLE ALL TYPES OF VEHICULAR TRAFFIC.
8. EXISTING DRAINAGE SYSTEMS SHALL BE FUNCTIONAL AT ALL TIMES. LONGITUDINAL DRAINAGE ALONG THE HIGHWAY SHALL BE MAINTAINED.
9. PRIOR TO COMMENCING TRENCH EXCAVATION WORK, THE CONTRACTOR SHALL TAKE A PROFILE ALONG THE CENTERLINE OF THE PROPOSED UTILITY TRENCH. THIS INFORMATION SHALL BE USED IN THE VERIFICATION OF RESTORING THE ROADWAY TO ITS ORIGINAL CONDITION. A COPY OF THE PROFILE SHALL BE SUBMITTED TO THE DISTRICT ENGINEER.

1. INFORMATION REGARDING THE SITE OF THE WORK GIVEN ON THE DRAWINGS OR SPECIFICATIONS HAS BEEN OBTAINED BY THE ENGINEER AND IS BELIEVED TO BE REASONABLY CORRECT; HOWEVER, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SUCH INFORMATION. THE CONTRACTOR SHALL TONE THE AREA TO BE EXCAVATED TO ASCERTAIN THE LOCATION OF UNCHARTED UTILITIES.
2. ANY UTILITIES THAT THE CONTRACTOR ENCOUNTERS DURING THE PROGRESS OF THE WORK, SUCH AS TELEPHONE DUCTS, ELECTRIC DUCTS, WATER LINES, SEWER LINES, ELECTRIC LINES AND DRAINAGE PIPES, WHETHER SHOWN OR NOT ON THE CONTRACT PLANS, SHALL NOT BE DISTURBED OR DAMAGED UNLESS OTHERWISE INSTRUCTED IN THE PLANS AND SPECIFICATIONS.
3. IN THE EVENT THE UTILITIES ARE DAMAGED OR DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE HELD LIABLE FOR THE DAMAGED OR DISTURBED UTILITIES.
4. THE CONTRACTOR SHALL REPAIR THE DAMAGED OR DISTURBED UTILITIES TO THE EXISTING CONDITION AT NO COST TO THE OWNER. ANY DAMAGE CLAIMS DUE TO THE DISRUPTION OF SERVICE CAUSED BY THE UTILITIES BEING DAMAGED SHALL BE PAID BY THE CONTRACTOR, WHO SHALL SAVE HARMLESS THE OWNER AND ENGINEER FROM ALL SUITS, ACTIONS OR CLAIMS OF ANY CHARACTER BROUGHT ON ACCOUNT OF SUCH DAMAGES.
5. IN THE EVENT UTILITIES WHICH WERE NOT SHOWN ON THE PLANS AND SPECIFICATIONS ARE DAMAGED OR DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE HELD LIABLE. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND EXPOSE ALL UTILITY LINES PRIOR TO ANY EXCAVATION AND/OR INSTALLATION OF LINES.

AND AT	KIUC	KAUAI ISLAND UTILITY CO.
ASPHALT CONCRETE	LP	LIGHT POLE
BASELINE	MH	MANHOLE
CABLE TELEVISION	MECO	MAUI ELECTRIC CO.
CATCH BASIN	MON	MONUMENT
CENTERLINE	PAV'T	PAVEMENT
CLEAR	PL	PLACE
CONCRETE	R	PROPERTY LINE
CONTINUATION OR CONTINUOUS	PP	POWER POLE
DET.	RD.	ROAD
D.I.	ROW	RIGHT-OF-WAY
DRAIN INLET	SDMH	STORM DRAIN MANHOLE
DRAIN LINE	SHT.	SHEET
DRAIN MANHOLE	ST.	STREET
DWY. OR D/W	STA.	STATION
	STD.	STANDARD
	S/W	SIDEWALK
EACH	TBOX	TELEPHONE BOX
ELECTRIC HANDHOLE	TMH	TELEPHONE MANHOLE
ELECTRIC	TYF.	TYPICAL
ELEVATION		
ELEV. OR EL		
EXIST.		
EDGE OF PAVEMENT		
EP		
FH		
FT	UP	UTILITY POLE
FIRE HYDRANT		
FEET	WM	WATER METER
CA	WV	WATER VALVE
GUY ANCHOR		
GATE VALVE		
HT/HTCO		
HAWAIIAN TELEPHONE CO.		
HECO		
HAWAIIAN ELECTRIC CO.		
HELCO		
HAWAIIAN ELECTRIC LIGHT CO.		



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION AND
CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION

EXISTING

2006/CP-154

KAUAI ISLAND UTILITY ELECTRIC NOTES

1. These notes are not intended to be used in place of the Service Installation Manual, please refer to Service Installation Manual for all service issues.
2. Contractor shall contact Kauai Island Utility Cooperative ("KIUC") Construction Coordinator/Inspector prior to start of work on KIUC facilities and for scheduling site inspections. (Westside: 246-2323; Eastside: 822-4343)
3. Contractor shall contact KIUC's Distribution Planning Engineer at 246-2373 for design approvals, standard detail drawings, and any items not addressed in these notes or drawings.
4. All contractors entering KIUC facilities must be approved by KIUC and must have proper licensing and insurance coverage. Contact KIUC Legal Coordinator at 246-4369 for details.
5. All trenches and pullboxes must be inspected by KIUC prior to backfilling and concrete-encasing operations. For detailed trenching and backfilling requirements refer to KIUC's Service Installation Manual.
6. The Contractor shall provide a poly-line 200 lb. test line or equivalent as a pulling wire in all 1", 2", 3" & 4" conduits. In 5" and 6" conduits, the Contractor shall install Neptco WP1800 muletape as a pulling line.
7. All conduits, pullboxes, handholes, and manholes shall be cleaned and free from objectionable materials. Conduit ends shall be adequately covered until the conductor is installed the electric company. (Cover's shall be carlon plub with pull tab series P258 equivalent or better).
8. For all conduits other than services, refer to conduit schedule on drawings.
9. For all services where the conductor is 3/0 or less, the distance from KIUC's handhole and customer's meter is less than 125 feet and not crossing any driveways or roads the conduit shall be 2 inch schedule 40 PVC. For services greater than 125 feet but less than 150 feet contact KIUC planner for field verification and underground service requirements. Any deviations will require KIUC written approval.
10. Primary and secondary conduits for new line extentions shall be schedule 40 PVC (Carlon P#C Duct type DB equivalent or better). Under driveways and roadways, the conduits shall be encased in a minimum of 3 inch concrete jacket extending 12" outside the edge of pavement.
11. Schedule 80 PVC conduit may be substituted for the concrete encased schedule 40 PVC for service conduit only crossing under unpaved private driveways and under roadways from KIUC pole/handhole to customer's meter. If concrete driveway will be built over service conduit immediately after conduit is installed, then schedule 40 PVC may be used provided that it meets with rule no. 21.
12. All primary and secondary conduits which are crossing State and County roadways shall be schedule 40 PVC encased in a minimum 3 inch concrete jacket, which shall extend a minimum of 12 inches outside of the edge of pavement.

KAUAI ISLAND UTILITY ELECTRIC NOTES (CONT')

13. Electrical supply ducts, when installed near communication cables, shall be separated from communication duct systems and buried communication cables or conductors by not less than 3 inches of concrete or 12 inches of earth when paralleling or crossing.
14. Chairs shall be installed and spaced at a maximum of 5 feet separation when concrete encasing conduit.
15. All conduits shall enter boxes at 90 degree angles, or perpendicular and flush to the wall with bell ends to prevent cable damage.
16. 90 degree conduit bends shall be factory made with a minimum radius of 3 feet in trench runs.
17. Conduit bends exceeding 90 degrees will not be accepted.
18. A 36 inch minimum horizontal clearance shall be maintained when running KIUC conduits parallel to water and sewer lines. If clearance is less than 36 inches, KIUC conduit shall be concrete encased.
19. No foreign pullboxes, handholes, manholes, concrete slabs/boxes, structures, etc. are to be installed over KIUC facilities with the exception of HTCO, CATV or waterline conduit crossings. Such crossing must be approved by KIUC's Service Assurance Department and KIUC conduit to be concrete encased. Concrete encasement must be minimum of 3 inch encasement and extend a minimum of 1 foot beyond crossing conduit or pipe.
20. Yellow marker tape to be placed 1 foot above electrical conduits in the trench during backfilling. (E-Z code WBT 6 inch wide 4 mill Polyethylene Protect-A-Line warning tape NA-0708 "ELECTRIC LINE" in yellow, equivalent or better).
21. Unless otherwise noted, the top of all conduits shall be at a depth of 24 inches.
22. All handholes, pullboxes, and manholes shall be Walker Industries type or approved equal. Contact KIUC prior to ordering underground boxes for vendor approval. Customer to submit manufacturer's shop drawings if substituting from Walker Industries type.
23. Typically, the top of all new electrical utility boxes shall be 1 inch above finish grade, single phase transformer pad shall be 2 inches above finish grade, and three phase transformer pads shall be 4 inches above finish grade unless otherwise noted. (Special conditions may apply to sidewalks, roadways, etc., see specific location notation).
24. At no time shall cement motar, wood or any other material be used between pre-cast sections of KIUC pullboxes, handholes or manholes. The permanent installation of wooden wedges to level or raise the pre-cast sections shall not be permitted.
25. A minimum of 6 inches of #3 crushed rock backfill shall be placed loosely beneath the bottom section of handholes and pullboxes. Crushed rock or other foreign materials are not to be placed inside handholes and pullboxes.

MAUI ELECTRIC COMPANY NOTES

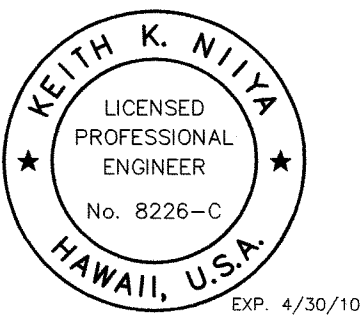
1. A Maui Electric Company standby man is required to be at the site at the time any non-MECO personnel will be breaking into or entering any facilities that contain energized utility company equipment or cables. Three working days advance notice is required by the Contractor for any inspection service or standby man.

NOTES FOR ENVIRONMENTAL PROTECTION

1. Environmental protection notes pertaining to air and water pollution shall be administered and monitored by the Dept. of Health (DOH).
2. The Contractor, at his own expense shall provide effective measures for the control of fugitive dust emissions from the project and surrounding areas caused by his operations. These measures shall meet the requirements of State Administrative Rules, DOH, Air Pollution Control (11-60.1).
3. All grading operations shall be performed in conformance iwth the applicable provdisions of the grading ordinance to prevent violation of the State Administrative Rules, DOH, Water Pollution Control and Water Quality Standards (11-54, 11-55) due to erosion and runoff to State waters.
4. Grub material, demolition wastes, and construction wastes shall be disposed of at an authorized site having a DOH Solid Waste Management Permit. Open burning is prohibited.

WATER POLLUTION AND EROSION CONTROL NOTES

1. The Contractor is reminded of the requirements of section 209 - Temporary Water Pollution Dust, and Erosion Control, in the Standard Specification. Section 209 describes but is not limited to: submittal requirements; scheduling of a water pollution and erosion control conference with the Engineer; Construction Requirements; method of measurement; and basis of payment.
2. The Contractor shall folow the guidelines in the "Best Management Practices Manual for Construction Sites in Honolulu", dated May 1999 in developing, installing and maintaining Best Management Practices (BMP) for the Project.
3. The Contractor shall follow the guidelines in the Honolulu's City and County "Rules Relating to Soil Erosion Standards and Guidelines" along with applicable soil erosion guidelines for projects on Maui, Lanai, Kauai, and Hawaii.
4. The Engineer may access liquidated damages of up to \$27,500 per day for non-compliance of each NPDES permit conditions. There is no maximum limit on the amount assessed per day.
5. The Engineer will deduct the cost from the progress payment for all citations received by the Department for non-compliance, or the Contractor shall reimburse the State for the full amount for the outstanding cost incurred by the State.
6. The Contractor shall obtain permits and/or licenses for the location of the equipment staging/storage area and provide a copy to the Engineer.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-1500(35)	2008	4	41

WATER POLLUTION AND EROSION CONTROL NOTES (CONT')

7. Erosion and Sediment Control Inspection and Maintenance Practices:
- a. All control measures shall be inspected at least once each week and within 24 hours of any rainfall event of 0.5 inches or greater within a 24 hour period.
- b. All measures shall be maintained in good working order. If repair is Necessary, it shall be initiated within 24 hours after the inspection.
- c. Existing catch basins shall be protected by a high-visibility geotextile sleeve filter.
- d. Temporary and permanent seeding and planting shall be inspected for base spots, washouts and healthy growth.
- e. A maintenance inspection report shall be promptly made after each inspection by the Contractor and a copy shall be submitted to the Engineer no later than one week from the date of the inspection.
- f. Include designated concrete washout area(s) in the water pllution, dust, and erosion control submittals.
- g. The Contractor shall submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- h. Personnel selected for the inspection and maintenance responsibilities shall receive training from the Contractor. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.
- i. The Contactor shall contain, remove, and dispose of slurry generated from saw cutting of pavement in accrodance with approved BMP practices, payment for confinement, removal and disposal of slurry shall be considered incidental to the various contract items.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES

TRAFFIC COUNTING STATIONS
AT VARIOUS LOCATIONS
F.A.P. NO. STP-1500(35)

Scale: NoneDate: June 2008

SHEET No. T-4 OF 7 SHEETS

WATER NOTES

- UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER SYSTEM FACILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE COUNTY OF KAUAI DEPARTMENT OF WATER (DOW), COUNTY OF HAWAII DEPARTMENT OF WATER SUPPLY (DWS), COUNTY OF MAUI DEPARTMENT OF WATER SUPPLY (DWS), CITY AND COUNTY OF HONOLULU BOARD OF WATER SUPPLY'S (BWS) "WATER SYSTEM STANDARDS" DATED 2002, THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", STANDARDS", VOLUME 3, DATED 1991, AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS. THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS" DO NOT APPLY TO COUNTY OF HAWAII DWS.
- ALL PLANS APPROVED BY THE BOARD/DEPARTMENT OF WATER SUPPLY'S 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/DEPARTMENT OF WATER SUPPLY.
- FOR WORK ON OAHU, THE CONTRACTOR SHALL NOTIFY THE CITY AND COUNTY OF HONOLULU BOARD OF WATER SUPPLY CAPITAL PROJECTS DIVISION, CONSTRUCTION SECTION IN WRITING, ONE WEEK PRIOR TO COMMENCING WORK ON THE WATER SYSTEM.
- FOR WORK ON MAUI, THE CONTRACTOR SHALL NOTIFY THE COUNTY OF MAUI, DEPARTMENT OF WATER SUPPLY, IN WRITING, ONE (1) WEEK PRIOR TO COMMENCEMENT OF WORK.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT ARE NOT GUARANTEED AS TO THE ACCURACY OF 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.
- RE-APPROVAL SHALL BE REQUIRED IF THIS PROJECT IS NOT UNDER CONSTRUCTION WITHIN A PERIOD OF TWO YEARS. FOR THE COUNTY OF HAWAII DEPARTMENT OF WATER SUPPLY, RE-APPROVAL SHALL BE REQUIRED IF THIS PROJECT IS NOT UNDER CONSTRUCTION WITHIN A PERIOD OF ONE YEAR.
- 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 THE BOARD/DEPARTMENT OF WATER SUPPLY APPROVAL) AND/OR MODIFYING HIS CONSTRUCTION METHOD.
- PRIOR TO ANY EXCAVATING, THE CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATION OF EXISTING WATER MAINS AND APPURTENANCES.
- THE CONTRACTOR SHALL ADJUST ALL MANHOLE FRAMES/VALVE BOXES/METER BOXES WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR "REFERENCING" THESE MANHOLES/VALVE BOXES/METER BOXES TO FACILITATE THE ADJUSTMENTS.
- CONTRACTOR SHALL CUT AND PLUG ALL EXISTING UNUSED LATERALS AT THE MAIN WHETHER OR NOT SHOWN ON THE PLANS. METER AND VALVE BOXES TO BE OR ALREADY ABANDONED SHALL BE DEMOLISHED OR REMOVED AND PROPERLY DISPOSED OF. THE DAMAGED AREA SHALL BE REPAIRED TO AN EQUAL OR BETTER CONDITION THAN THE IMMEDIATE AREA. ALL WORK SHALL BE DONE AT THE EXPENSE OF THE CONTRACTOR.
- FOR WORK ON HAWAII, UPON VERIFICATION AND APPROVAL, DWS SHALL CUT AND PLUG ALL EXISTING UNUSED LATERALS AT THE MAIN WHETHER OR NOT SHOWN ON THE PLANS. METER AND VALVE BOXES TO BE OR ALREADY ABANDONED SHALL BE DEMOLISHED OR REMOVED AND PROPERLY DISPOSED OF. THE DAMAGED AREA SHALL BE REPAIRED TO AN EQUAL OR BETTER CONDITION THAN THE IMMEDIATE AREA. ALL WORK SHALL BE DONE AT THE EXPENSE OF THE CONTRACTOR.
- AT THE ELECTRICAL/SIGNAL DUCTLINE 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.
- FOR WORK ON HAWAII, AT THE ELECTRICAL/SIGNAL DUCTLINE WATER CROSSINGS, ADJUST ALL ELECTRICAL/SIGNAL DUCTLINE ELEVATIONS TO MAINTAIN 18" VERTICAL CLEAR WITHOUT CONCRETE JACKET, 12" WITH CONCRETE JACKET OF OTHER UTILITY LINES FROM ALL WATERLINES AT NO COST TO THE COUNTY OF HAWAII DWS.
- MAINTAIN 3'-0" MIN. HORIZONTAL CLEAR SEPARATION BETWEEN ALL WATERLINE SYSTEMS AND NEAREST ELECTRICAL/SIGNAL DUCTLINES PARALLELING THE WATER SYSTEM AT NO COST OF TO THE BOARD OF WATER SUPPLY.
- FOR WORK ON HAWAII ISLAND, MAINTAIN 8'-0" MIN. HORIZONTAL CLEAR SEPARATION BETWEEN ALL WATERLINE SYSTEMS AND NEAREST ELECTRICAL/SIGNAL DUCTLINES PARALLELING THE WATER SYSTEM AT NO COST OF TO THE COUNTY OF HAWAII DWS.
- MAINTAIN A 3'-0" HORIZONTAL CLEAR SEPARATION BETWEEN STREET LIGHT/TRAFFIC SIGNAL, STANDARDS (INCLUDING ANY MODULAR UNITS) AND THE NEAREST WATER SYSTEM. CONTRACTOR SHALL FIELD VERIFY FOR ANY CONFLICTS AT EACH STREET/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 BOARD OF WATER SUPPLY.

WATER NOTES

- FOR WORK ON HAWAII ISLAND, MAINTAIN A 8'-0" HORIZONTAL CLEAR SEPARATION BETWEEN STREET LIGHT/TRAFFIC SIGNAL, STANDARDS (INCLUDING ANY MODULAR UNITS) AND THE NEAREST WATER SYSTEM. CONTRACTOR SHALL FIELD VERIFY FOR ANY CONFLICTS AT EACH STREET/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 COUNTY OF HAWAII DWS.
- 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.
- FOR WORK ON HAWAII ISLAND, THE CONTRACTOR SHALL INFORM THE COUNTY OF HAWAII DWS ENGINEER 72 HOURS PRIOR TO THE BEGINNING OF ANY WATERLINE WORK AND TWO WEEKS PRIOR TO ANY CONNECTION, CHLORINATION, SHUT-OFF OR RELOCATION WORK. THE CONTRACTOR SHALL SUBMIT FOUR (4) SETS OF APPROVED CONSTRUCTION PLANS ONE WEEK PRIOR TO COMMENCEMENT OF WORK.

SEWER NOTES


- FOR WORK ON OAHU, ALL SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY'S STANDARD SPECIFICATIONS, SEPT. 1986, THE DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS, SEPT. 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.
- FOR WORK IN MAUI COUNTY, ALL WASTEWATER LINES AND APPURTENANCES SHALL CONFORM TO THE STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, DATED SEPTEMBER 1984, OF THE DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL MANAGEMENT, COUNTY OF MAUI.
- FOR WORK IN MAUI COUNTY, BEFORE CONSTRUCTION COMMENCES, THE CONTRACTOR SHALL SCHEDULE AND DOCUMENT A PRE-CONSTRUCTION MEETING WITH ALL AGENCIES HAVING UTILITIES AFFECTED BY THE WORK.
- FOR WORK IN MAUI COUNTY, THE DEPARTMENT OF PUBLIC WORKS AND ENVIRON-
MENTAL MANAGEMENT HAS THE RIGHT TO STOP CONSTRUCTION, SHOULD ANY WORK BE FOUND CONTRARY TO THE APPROVED PLANS AND SPECIFICATIONS, OR DETRIMENTAL TO THE PUBLIC INTERESTS.
- FOR WORK IN MAUI COUNTY, THE CONTRACTOR SHALL NOTIFY THE WASTEWATER RECLAMATION DIVISION ONE (1) WEEK PRIOR TO CONNECTION TO ANY EXISTING WASTEWATER LINES.
- FOR WORK IN MAUI COUNTY, IF ANY EXCAVATION IS WITHIN FIVE (5) FEET OF AN EXISTING SEWER LINE A SITE SPECIFIC SPILL PREVENTION PLAN WILL BE REQUIRED TO BE SUBMITTED AND APPROVED BY MAUI COUNTY WASTEWATER RECLAMATION DIVISION PRIOR TO APPROVAL OF THE APPLICATION TO PERFORM WORK UPON THE STATE HIGHWAY PERMIT.
- THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS RESEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF THE FACILITIES, INCLUDING AND AFFECTING SEWER LINES, IN THE PRESENCE OF THE WASTEWATER INSPECTOR 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.
- MAINTAIN 3'-0" MIN. HORIZONTAL CLEAR SEPARATION BETWEEN ALL SEWER SYSTEM AND DUCTLINES, PULLBOXES AND HANDHOLES.
- MAINTAIN 5'-0" MIN. HORIZONTAL CLEAR SEPARATION BETWEEN STREET LIGHTING AND TRAFFIC SIGNAL STANDARDS (INCLUDING ANY MODULAR UNITS) AND NEAREST SEWER LINE SYSTEM. CONTRACTOR SHALL FIELD VERIFY FOR CONFLICTS AT EACH STREET LIGHTING AND TRAFFIC SIGNAL STANDARD LOCATION. WHERE CONFLICTS OCCUR, THE CONTRACTOR SHALL COORDINATE WITH PROJECT ENGINEER TO REVISE THE STREET LIGHTING AND TRAFFIC SIGNAL STANDARD TO PROVIDE THE REQUIRED CLEARANCES.
- AT THE ELECTRICAL/SIGNAL DUCTLINE SEWER CROSSINGS, ADJUST ALL ELECTRICAL/SIGNAL DUCTLINE ELEVATIONS TO MAINTAIN 24" VERTICAL CLEAR SEPARATION FROM ALL SEWER LINES AND LATERALS.
- ADJUST ALL UTILITY VALVE BOX FRAMES AND COVERS, WATER METER BOXES, MANHOLE FRAMES AND COVERS, STREET MONUMENT COVERS, ETC., TO NEW FINISH GRADE. COORDINATE WITH PRIVATE COMPANIES AND CITY AGENCIES FOR WORK ON EACH RESPECTIVE UTILITY.
- FOR SEWER MANHOLE (SMH) ADJUSTMENTS UPWARD LESS THAN 3", SEE STANDARD DETAIL S-25. FOR SMH ADJUSTMENTS UPWARD GREATER THAN 3" OR FOR ANY ADJUSTMENTS DOWNWARD, RECONSTRUCT SMH TOP FROM BELOW THE CONE SECTION.

WATER NOTES (COUNTY OF KAUAI)


- FOR WORK ON KAUAI, THE CONTRACTOR SHALL EXPOSE EXISTING WATER MAINS AT CROSSINGS WITH DUCTLINES TO VERIFY THEIR LOCATIONS AND DEPTH. HAND EXCAVATION SHALL BE UTILIZED WHEREVER AN EXISTING LIVE WATER MAIN IS BEING EXPOSED.
- FOR WORK ON KAUAI, ALL WATERLINE CROSSINGS AND MODIFICATIONS TO THE WATER FACILITIES SHALL BE INSPECTED BY THE DEPARTMENT OF WATER. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF WATER 48 HOURS IN ADVANCE.
- FOR WORK ON KAUAI, PRIOR TO COMMENCING HIS OPERATIONS, THE CONTRACTOR SHALL CONTACT THE COUNTY OF KAUAI'S DEPARTMENT OF WATER OPERATIONS DIVISION (PH. NO. 245-5444) AND MAKE ARRANGEMENTS FOR THE DEPARTMENT OF WATER TO "TONE" FOR AND MARK THE LOCATION OF THE EXISTING WATERLINE, VALVE BOXES AND MANHOLE FRAME/COVERS, INCLUDING ONES THAT MAY HAVE BEEN INADVERTENTLY PAVED OVER ON PREVIOUS RESURFACING PROJECTS.
- FOR WORK ON KAUAI, MAINTIAN 8'-0" MIN. HORIZONTAL CLEAR SEPARATION BETWEEN BETWEEN ALL WATERLINE SYSTEMS AND NEAREST ELECTRICAL/SIGNAL DUCTLINES PARALLELING THE WATER SYSTEM AT NO COST TO THE KAUAI DEPARTMENT OF WATER SUPPLY.
- FOR WORK ON KAUAI, MAINTAIN AN 8'-0" HORIZONTAL CLEAR SEPARATION BETWEEN STREET 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 DEPARTMENT OF WATER SUPPLY.
- FOR WORK ON KAUAI, WHENEVER A WATER MAIN CROSSES OVER OR UNDER A BURIED ELECTRICAL, TELEPHONE, OR CABLE LINE, THE ELECTRICAL LINE SHALL BE CONCRETE JACKETED. THE LENGTH OF THE JACKET REQUIRED FOR THE ELECTRICAL, TELEPHONE, OR CABLE LINE, THE ELECTRICAL LINE SHALL BE FIVE (5) L.F. OF REINFORCED CONCRETE JACKET ON BOTH SIDES OF CROSSING.
- FOR WORK ON KAUAI, MAINTAIN A 1'-6" VERTICAL CLEARANCE BETWEEN WATER MAINS AND OTHER UTILITIES. MINIMUM CLEARANCES SHALL BE MEASURED BETWEEN OUTER EDGES OR DIAMETERS OF THE UTILITIES. WHENEVER CONCRETE JACKETS ARE INVOLVED CLEARANCES SHALL BE TTOTAL CLEAR DISTANCE BETWEEN THE CONCRETE JACKET AND UTILITY CONCERNED.

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-1500(35)	2008	5	39


APPROVED:


MANAGER, DEPT. OF WATER SUPPLY
COUNTY OF HAWAII

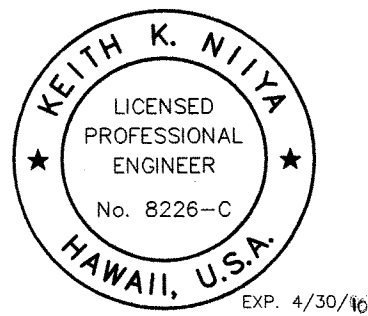
5/23/08
DATE



CHIEF, CAPITAL PROJECTS DIVISION, BWS
CITY AND COUNTY OF HONOLULU

5/16/08
DATE


MANAGER AND CHIEF ENGINEER
DEPARTMENT OF WATER, COUNTY OF KAUAI

5/14/08
DATE




THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION AND
CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES

TRAFFIC COUNTING STATIONS
AT VARIOUS LOCATIONS
F.A.P. NO. STP-1500(35)

SCALE: NONE DATE: MAY 2008

SHEET No. T-5 OF 7 SHEETS

CATV NOTES

1. THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL LICENSES AND PERMITS AND SHALL GIVE ALL NOTICES NECESSARY AND INCIDENT TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.
2. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTION NOT TO DAMAGE EXISTING CABLES OR DUCTS. ANY WORK INVOLVING EXISTING CABLES OR DUCTS SHALL BE DONE IN THE PRESENCE OF THE OCEANIC CABLE COMPANY INSPECTOR OR HIS REPRESENTATIVE.
3. THE CONTRACTOR SHALL NOTIFY THE OCEANIC CABLE COMPANY INSPECTOR 48 HOURS PRIOR TO THE START OF PULLBOX ADJUSTMENTS.
4. CONTRACTOR SHALL PROVIDE ALL MATERIALS AND FURNISH ALL LABOR AND EQUIPMENT NECESSARY TO RE-ADJUST THE PULLBOX HEIGHT.
5. THE LOCATION OF CATV FACILITIES SHOWN ON PLANS ARE FROM EXISTING RECORDS WITH VARYING DEGREES OF ACCURACY AS TO ITS ACTUAL FIXED LOCATION. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN CLOSE PROXIMITY OF CATV FACILITIES.
6. THE CONTRACTOR SHALL OBTAIN EXCAVATION PERMIT CLEARANCE FROM OCEANIC'S ENGINEERING SECTION LOCATED AT 200 AKAMAINUI ST., MILILANI TECH PARK
7. ANY WORK REQUIRED TO RELOCATE CATV FACILITIES SHALL BE DONE BY OCEANIC CABLE AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION REQUIREMENTS AND ASSOCIATED COSTS.
8. ANY DAMAGE TO OCEANIC'S FACILITIES SHALL BE REPORTED TO OCI'S REPAIR DISPATCH DEPARTMENT AT 625-8282 OR 625-8666.
9. AT NO TIME SHALL CEMENT MORTAR, WOOD, OR ANY OTHER MATERIAL BE USED BETWEEN PRECAST SECTIONS. LEVELING OR RAISING OF BOXES TO GRADE MUST BE DONE AT BRICKWORK SECTION USING CEMENT MORTAR. THE PERMANENT INSTALLATION OF WOODEN WEDGES TO ACCOMPLISH THIS PURPOSE WILL NOT BE ACCEPTED.
10. TRENCHING TO BE BY HAND DIGGING NEAR AND ACROSS EXISTING UTILITY LINES.
11. FOR UNDERGROUND CABLE LOCATING AND PARKING, FIVE WORKING DAYS ADVANCE NOTICE IS REQUIRED. THREE WORKING DAYS ADVANCE NOTICE IS REQUIRED FOR ANY INSPECTION BY A DESIGNATED REPRESENTATIVE. CONTRACTOR SHALL TAKE NECESSARY PRECAUTION NOT TO DAMAGE ANY EXISTING CABLES OR DUCTS. OCEANIC'S INSPECTOR OR DESIGNATED REPRESENTATIVE IS REQUIRED TO BE AT ANY JOB SITE WHENEVER

HAWAIIAN TELCOM NOTES

1. THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL LICENSES AND PERMITS AND SHALL GIVE ALL NOTICES NECESSARY AND INCIDENT TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.
2. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT AND TONING REQUEST FROM HAWAIIAN TELCOM'S EXCAVATION PERMIT STATION, LOCATED AT 3239 UALENA STREET, THIRD FLOOR, TWO WEEKS PRIOR TO THE START OF CONSTRUCTION. HOURS OF BUSINESS ARE 8:00 A.M. TO 11:00 A.M. AND 12:00 A.M. TO 3:30 P.M. MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS.
3. PRIOR TO THE EXCAVATION OF THE DUCTLINE, THE CONTRACTOR SHALL REQUEST HAWAIIAN TELCOM TO LOCATE EXISTING DUCTLINE WHEREVER REQUIRED. FOR UNDERGROUND CABLE LOCATING AND MARKING, FIVE (5) WORKING DAYS ADVANCE NOTICE IS REQUIRED. THREE (3) WORKING DAYS ADVANCE NOTICE IS REQUIRED FOR ANY INSPECTION BY A DESIGNATED REPRESENTATIVE.
4. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION AND SHALL MAINTAIN PROPER CLEARANCES WHENEVER CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY OF HAWAIIAN TELCOM FACILITIES. THE CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND SHALL BE LIABLE FOR ANY DAMAGES TO HAWAIIAN TELCOM FACILITIES. ANY DAMAGES SHALL BE REPORTED IMMEDIATELY TO HAWAIIAN TELCOM'S REPAIR SECTION AT #611 (24 HOURS) OR TO THE EXCAVATION PERMIT SECTION AT 840-1444 (NORMAL WORKING HOURS, MONDAY THROUGH FRIDAY, EXCEPT HOLIDAYS). AS A RESULT OF HIS OPERATIONS, ADJUSTMENTS TO THE NEW DUCTLINE ALIGNMENT, IF REQUIRED, SHALL BE MADE TO PROVIDE THE REQUIRED CLEARANCES.
5. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTION NOT TO DAMAGE EXISTING CABLES OR DUCTS. A HAWAIIAN TELCOM INSPECTOR OR DESIGNATED REPRESENTATIVE IS REQUIRED TO BE AT ANY JOB SITE WHENEVER THERE WILL BE A BREAKAGE INTO OR ENTRY INTO ANY STRUCTURE THAT CONTAINS HAWAIIAN TELCOM FACILITIES. TEMPORARY CABLE AND DUCT SUPPORTS SHALL BE PROVIDED WHEREVER NECESSARY.
6. THE CONTRACTOR SHALL NOTIFY HAWAIIAN TELCOM'S INSPECTOR OR DESIGNATED REPRESENTATIVE A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION, BRACING, OR BACKFILLING OF HAWAIIAN TELCOM'S STRUCTURES OR FACILITIES.
7. ALL APPLICABLE CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE "HAWAIIAN TELCOM STANDARD SPECIFICATIONS FOR PLACING UNDERGROUND TELEPHONE SYSTEMS" DATED MARCH 1999 AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS, AND ALL OTHER PERTINENT STANDARDS FOR TELEPHONE CONSTRUCTION. CONTRACTOR SHALL FAMILIARIZE HIS PERSONNEL BY OBTAINING APPLICABLE SPECIFICATIONS.

HAWAIIAN TELCOM NOTES, (CONT'D)

8. WHEN EXCAVATION IS ADJACENT TO OR BENEATH HAWAIIAN TELCOM'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 HAWAIIAN TELCOM'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 HAWAIIAN TELCOM'S STRUCTURES OR FACILITIES.
9. THE CONTRACTOR SHALL BRACE ALL POLES OR LIGHT STANDARDS NEAR THE NEW DUCTLINE, MANHOLE, OR HANDHOLE DURING HIS OPERATIONS.
10. THE CONTRACTOR SHALL SAW-CUT A.C. PAVEMENT AND CONCRETE GUTTER WHEREVER NEW MANHOLES, HANDHOLES, OR DUCTLINES ARE TO BE PLACED AND SHALL RESTORE TO EXISTING CONDITION OR BETTER.
11. THE CONTRACTOR SHALL COMPLY WITH THE POLICY ADOPTED BY THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU, CONCERNING THE REPLACEMENT OF CONCRETE SIDEWALKS AFTER EXCAVATION WORK.
12. THE UNDERGROUND PIPES, CABLES, OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. WHEREVER CONNECTIONS OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR THE NEW LINES.
13. 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.
14. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE COST FOR SUPPLEMENTARY MEASURES, WHICH WILL BE REQUIRED BY THE CITY AND COUNTY, SHALL BE BORNE BY THE CONTRACTOR.
15. THE CONTRACTOR SHALL PUMP ALL MANHOLES DRY DURING FINAL INSPECTION.
16. THE CONTRACTOR SHALL NOTIFY HAWAIIAN TELCOM INSPECTOR 24 HOURS PRIOR TO THE POURING OF CONCRETE OR BACKFILLING.
17. WHEN CONNECTING TO MANHOLE WALLS, ALL EXISTING REINFORCING BARS SHALL BE LEFT INTACT. DUCTS SHALL BE ADJUSTED IN THE FIELD IN ORDER TO CLEAR REINFORCING.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT ALL REQUIRED LINES AND GRADES AND SHALL PRESERVE ALL BENCH MARKS AND WORKING POINTS NECESSARY TO LAY OUT THE WORK CORRECTLY. THE NEW DUCTLINE SHALL BE ADJUSTED BY THE CONTRACTOR TO SUIT THE EXISTING CONDITIONS AND THE DETAILS AS DESCRIBED IN THE PLANS.
19. MINIMUM CONCRETE STRENGTH SHALL BE:
FOR DUCTLINE 2500 PSI AT 28 DAYS
FOR MANHOLE 3000 PSI AT 28 DAYS OR AS SPECIFIED IN DESIGN NOTES.
20. BENDS IN THE DUCT ALIGNMENT, DUE TO CHANGES IN GRADE SHALL HAVE A MINIMUM RADIUS OF 25 FEET. ALL 90 DEGREE C-BENDS AT A POLE OR AT THE BUILDING FLOOR SLAB PENETRATION, SHALL HAVE A BEND RADIUS OF TEN TIMES THE DIAMETER OF THE DUCT OR GREATER.
21. AFTER DUCTLINE HAS BEEN COMPLETED, A MANDREL WITH A SQUARE FRONT NOT LESS THAN 12" LONG AND HAVING A DIAMETER OF 1/4" LESS THAN THE INSIDE DIAMETER OF THE DUCT, SHALL BE PULLED THROUGH EACH DUCT AFTER WHICH A BRUSH WITH STIFF BRISTLES SHALL BE PULLED THROUGH TO MAKE CERTAIN THAT NO PARTICLES OF EARTH, SAND, OR GRAVEL HAVE BEEN LEFT INSIDE. DUCTS SHALL BE COMPLETELY DRY AND CLEAN.
22. ALL DUCTS AND CONDUITS SHALL HAVE AN 1800# POLYESTER MULE-TAPE (NEPTCO, WP1800P, VERIZON HAWAII MATERIAL CODE NO. 571154) INSTALLED THROUGHOUT ITS ENTIRE LENGTH. ALL DUCTS SHALL BE CAPPED TO PREVENT ENTRY OF FOREIGN MATERIAL DURING CONSTRUCTION AND AT THE COMPLETION OF INSTALLATION.
23. FOR COUNTY OF KAUAI, THE CONTRACTOR SHALL NOTIFY RICK RAMONES, HAWAIIAN TELCOM'S INSPECTOR AT 651-2260, SHOULD ANY HAWAIIAN TELCOM FACILITIES BE AFFECTED BY THE PROPOSED WORK.

CONSTRUCTION NOTES FOR GAS FACILITIES

1. 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.
2. WRITTEN CLEARANCES MUST BE OBTAINED FROM THE GAS COMPANY, MAPS AND RECORDS DEPARTMENT, 515 KAMAKEE STREET, AT LEAST FIVE (5) WORKING DAYS PRIOR TO STARTING EXCAVATION NEAR THESE GAS PIPELINES.
3. 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.

CONSTRUCTION NOTES FOR GAS FACILITIES (CON'T)

4. THE CONTRACTOR SHALL EXCAVATE AND BACKFILL AROUND GAS PIPELINES IN THE PRESENCE OF A REPRESENTATIVE OF THE GAS COMPANY. ALL BACKFILL WITHIN SIX INCHES OF ANY GAS PIPELINE SHALL BE SELECT CUSHION MATERIAL APPROVED BY THE GAS COMPANY.
5. FOR RELOCATION OF ANY GAS PIPELINE, THE CONTRACTOR SHALL NOTIFY THE GAS COMPANY FIVE (5) WORKING DAYS BEFORE STARTING WORK. THE TELEPHONE NUMBER IS 594-5574. 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 ITS CATHODIC PROTECTION DEVICES. THE TELEPHONE NUMBER IS 535-5933, 24 HOURS A DAY. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE TO THE GAS COMPANY FACILITIES. REPAIR WORK ON SUCH DAMAGE SHALL BE DONE BY THE GAS COMPANY WITH PAYMENT FOR THIS WORK TO BE BORNE BY THE CONTRACTOR.
7. MINIMUM VERTICAL AND HORIZONTAL CLEARANCE BETWEEN THE 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.
8. 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.

TRAFFIC NOTES FOR WORK IN CITY AND COUNTY OF HONOLULU STREETS OR HIGHWAYS:

1. A PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF TRANSPORTATION SERVICES BEFORE WORK ON ANY PORTION OF A PUBLIC STREET OR HIGHWAY MAY BEGIN. CONSTRUCTION TRAFFIC CONTROL PLANS APPROVED BY THE DEPARTMENT OF TRANSPORTATION SERVICES AND/OR THE DEPARTMENT OF PLANNING AND PERMITTING MUST BE PROVIDED WHEN APPLYING FOR THE PERMIT.
2. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN ALL NECESSARY SIGNS AND OTHER PROTECTIVE FACILITIES, WHICH SHALL CONFORM WITH THE "HAWAII ADMINISTRATION RULES GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS" ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT U.S. FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI - TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS."
3. WORK ON ANY CITY STREET AREA MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:30 A.M. TO 3:30 P.M., MONDAY THROUGH FRIDAY, UNLESS OTHERWISE PERMITTED BY THE DEPARTMENT OF TRANSPORTATION SERVICES.
4. DURING WORKING HOURS, THE CONTRACTOR SHALL PROVIDE FOR THROUGH TRAFFIC. DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPEN TO TRAFFIC.
5. AS REQUIRED BY THE DEPARTMENT OF TRANSPORTATION SERVICES, THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO CONTROL THE FLOW OF TRAFFIC.
6. WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION IN ACCORDANCE WITH ADAAG 4.1.1(4) AND 4.3, OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
7. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHTS-OF-WAY ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
8. THE CONTRACTOR SHALL REFERENCE, TO THE APPROVAL OF THE DEPARTMENT OF TRANSPORTATION SERVICES AND THE DEPARTMENT OF PLANNING AND PERMITTING, ALL EXISTING TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNS, POSTS, AND PAVEMENT MARKINGS DISTURBED BY HIS ACTIVITIES.
9. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PLANNING AND PERMITTING AT 768-8084 ONE (1) WEEK PRIOR TO ANY WORK TO BE DONE ON SIGNS, POSTS AND PAVEMENT MARKINGS.
10. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN STREET RIGHT-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY DEPARTMENT OF TRANSPORTATION SERVICES.
11. THE STATE DEPARTMENT OF TRANSPORTATION SHALL ENSURE THAT THE CONTRACTOR INSTALLS THE CONSTRUCTION TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MUTCD AND THE HAWAII ADMINISTRATION RULES AS SPECIFIED IN TRAFFIC NOTE #2.


FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-1500(35)	2008	6	39

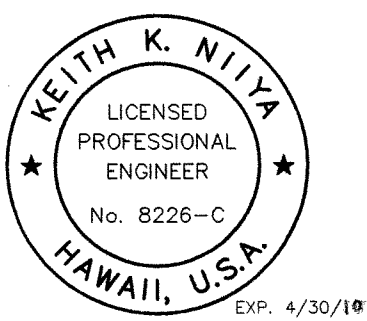
BEST MANAGEMENT PRACTICES NOTES


1. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL PROVIDE EFFECTIVE MEASURES FOR THE CONTROL OF FUGITIVE DUST EMISSIONS FROM THE PROJECT AND SURROUNDING AREAS CAUSED BY HIS OPERATIONS. THESE MEASURES SHALL MEET THE REQUIREMENTS OF STATE ADMINISTRATIVE RULES, DEPARTMENT OF HEALTH, AIR POLLUTION CONTROL (11-60.1).
2. ALL ~~GRADING~~ ^{CONSTRUCTION} OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE GRADING ORDINANCE TO PREVENT VIOLATION OF THE STATE ADMINISTRATIVE RULES, DEPARTMENT OF HEALTH, WATER POLLUTION CONTROL AND WATER QUALITY STANDARDS (11-54, 11-55) DUE TO EROSION AND RUN OFF TO STATE WATERS.
3. GRUB MATERIAL, DEMOLITION WASTES, AND CONSTRUCTION WASTES SHALL BE DISPOSED OF AT AN AUTHORIZED SITE HAVING A DEPARTMENT OF HEALTH SOLID WASTE MANAGEMENT PERMIT. OPEN BURNING IS PROHIBITED.
4. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO THAT EXCAVATION, EMBANKMENT, AND IMPORTED MATERIAL SHALL BE DAMPENED TO PREVENT DUST PROBLEMS.
5. ENVIRONMENTAL PROTECTION NOTES PERTAINING TO AIR AND WATER POLLUTION SHALL BE ADMINISTERED AND MONITORED BY THE DEPARTMENT OF HEALTH.
6. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM HIS WORK AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COST INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY THE CHIEF ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.
7. ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE.
8. TEMPORARY VEGETATIVE COVER SHALL BE PLANTED WITHIN A PERIOD OF 14 CALENDAR DAYS AFTER THE SITE HAS BEEN ~~GRADED OR~~ BARED OF VEGETATION OR IF FINAL GRADING OF THE SITE WILL BE SUSPENDED FOR MORE THAN 21 CALENDAR DAYS. TEMPORARY VEGETATIVE COVER SHALL CONSIST OF 40 LBS. COMMON RYE GRASS SEED PER ACRE, 400 LBS. PER ACRE OF 10-10-10 OR EQUIVALENT FERTILIZER WORKED INTO SEED BED BEFORE PLANTING. PLANTING AND MAINTENANCE OF GRASS SHALL CONFORM TO THE "STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION", SEPTEMBER 1994, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTY OF HONOLULU.
9. FOR EROSION CONTROL DETAILS SEE SHEET 28.

APPROVED

~~CHIEF, CIVIL ENGINEERING BRANCH,
DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU~~


CHIEF, TRAFFIC REVIEW BRANCH, DPP
CITY AND COUNTY OF HONOLULU
(FOR WORK WITHIN CITY ROW ONLY)




THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION AND
CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CONSTRUCTION NOTES	
<u>TRAFFIC COUNTING STATIONS</u> <u>AT VARIOUS LOCATIONS</u> <u>F.A.P. NO. STP-1500(35)</u>	
SCALE: NONE	DATE: 09-07-07
SHEET No. T-6 OF 6 SHEETS	

HAWAIIAN ELECTRIC COMPANY NOTES

1.

The location of (Hawaiian Electric Company's (HECO) 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 verify in the field the locations of the facilities and shall exercise proper care in excavating the area. The contractor shall be responsible for any damages to HECO's facilities whether shown on the plans or not.
2.

The Contractor shall comply with the State of Hawaii's Occupational Safety and Health laws and regulations, including without limitation, those related to working on or near exposed or energized electrical lines and equipment.
3.

The Contractor shall obtain an excavation permit from HECO's Technical Division (543-5654) located at 820 Ward Avenue, 4th Floor, two weeks prior to starting construction. Please refer to our request number at that time.
4.

State law requires that a worker and the longest object he or she may contact cannot come closer than a minimum radial clearance of 10 feet when working close to or under any overhead lines rated 50 kV and below. For each additional 1 kV above 50kV, an additional 0.4 inches shall be added to the 10-foot clearance requirement. The preceding information on line clearance requirements is provided as a convenience and it is the Contractor's responsibility to be informed of and comply with any revisions or amendments to the law.

Should the Contractor anticipate that his work will result in the need to encroach within the minimum required clearance at any time, the Contractor shall notify HECO at least four (4) weeks prior to the planned encroachment so that, if feasible, the necessary protections (e.g. relocate, de-energize, or blanket HECO lines) can be put in place. HECO's cost of safeguarding its lines will be charged to the contractor.

Contact HECO's Customer Installation Department at 543-7846 for assistance in identifying and safeguarding overhead power lines.

Refer to Section X of HECO's Electric Service Installation Manual for additional guidelines when working around HECO's facilities. A copy may be obtained from HECO's Customer Installations Department.

5.

A minimum clearance of 10 feet must be maintained when excavating around utility poles and/or their anchor system to prevent weakening or pole support line failure. Should work require excavating within 10 feet of a pole and/or its anchor system, the Contractor shall protect, support, secure, and take all other precautions to prevent damage to or leaning of these poles. The Contractor is responsible for all associated costs to brace, repair, or straighten poles. All means of structural support for the pole proposed by the contractor shall first be reviewed by HECO before implementation. For pole bracing instruction, the Contractor shall call the HECO Construction and Maintenance Dept., Customer and System Superintendent at 543-4223 a minimum of two (2) weeks in advance.
6.

The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines. HECO's existing electrical cables in the area are energized and will remain energized during construction. Only HECO personnel are to handle these cables and erect temporary guards to protect these cables from damage. The cost of HECO's assistance in providing proper support and protection of its underground lines will be charged to the Contractor. The Contractor shall exercise due care and precautions to avoid disturbing any energized cables and temporary guards and shall work cautiously at all times to avoid accidents.

HAWAIIAN ELECTRIC COMPANY NOTES (CON'T)

7.

When trench excavation is adjacent to or beneath HECO's 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-pinnings.

c.

Backfilling with proper backfill material including special thermal backfill where existing (refer to Engineering Department for Thermal Backfill Specifications).
8.

Any work required to relocate or modify HECO facilities shall be done by HECO, or by the Contractor under HECO's supervision. The Contractor shall be responsible for all coordination, and shall provide necessary support for HECO's work, which may include, but not be limited to, excavation and backfill, permits and traffic control, and restoration of pavement, sidewalks, and other facilities.

All costs associated with any relocation or modification (either temporary or permanent) for the convenience of the Contractor, or to enable the Contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations shall be borne by the Contractor.

9.

Any redesign or relocation of HECO's facilities not shown on the plans may be cause for lengthy delays. The Contractor acknowledges that HECO is not responsible for any delay or damage that may arise as a result of any conflicts discovered or identified with respect to the location or construction of HECO's electrical facilities in the field, regardless of whether the Contractor has met the requested minimum advance notices. In order to minimize any delay or impact arising from such conflicts, the Contractor shall notify HECO immediately upon discovery or identification of such conflict.
10.

The Contractor shall be responsible for the protection of all HECO surface and subsurface utilities and shall be responsible for any damages to HECO's facilities as a result of his operations. The Contractor shall immediately report such damages to HECO's trouble dispatcher at 548-7961. Repair work shall be done by HECO or by the Contractor under HECO's supervision. Costs for damages to HECO's facilities shall be borne by the Contractor.
11.

The Contractor may request HECO to provide an inspector to stand-by during construction near HECO's facilities. The cost of such inspection will be charged to the Contractor.

The Contractor shall call the HECO Construction and Maintenance Dept., Customer and System Superintendent at 543-4223 a minimum of 5 working days in advance to arrange for HECO stand-by personnel.

12.

The Contractor shall indemnify, defend and hold harmless HECO from and against all losses, damages, claims, and action, 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 the 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.
13.

Per HECO standards and requirements, Contractor shall notify HECO Engineer at 543-7785 at least four (4) weeks prior to construction coordination and to arrange for HECO personnel to install temporary guard or other protective measures over existing energized electrical cables prior to adjustment

DEPT. OF PUBLIC WORKS (COUNTY OF HAWAII)

1.

Except during actual working hours, all signs that do not pertain to the construction activity, such as "MEN WORKING" and "FLAGMAN AHEAD" shall be covered or laid down. However, all signs necessary for the safety of the public shall be maintained.
2.

Any pavement markings, structures, and appurtenances (within or outside of the contract zone limits) damaged and/or worn away under the permit shall be repainted or reconstructed as directed by the Dept. of Public Works (DPW).
3.

No trenching shall be left open for more than five (5) working days.
4.

Should trenching occur through an existing sidewalk, or should damages occur to the sidewalk as a result of any construction work, the following procedure shall be utilized to repair the sidewalk:

a.

All portland cement concrete to be removed shall first be cut with a concrete saw that has a diamond or carborundum abrasive wheel. Those cuts shall be made to a depth equal to at least one-fourth of the depth of the slab, or enough as is deemed necessary by the DPW, to permit breaking out the balance of the concrete without spalling off the exposed edges of the slab left in place.

b.

If any concrete block is touched, the whole block shall be removed and later replace, unless a minor variation is authorized by the DPW or its representative.

c.

Any damages to adjacent areas due to settlement or to any other effects whatsoever caused by the construction work shall be properly repaired and corrected.

d.

All other incidental work shall be satisfactorily performed to effect the proper restoration of the sidewalk area.

e.

Should damage to a sidewalk, curb and/or gutter occur at a location where a curb ramp should exist, or to any driveway that does not meet with the requirements of the Americans with Disabilities Act (ADA), repair work shall include the construction of a curb ramp, or reconstruction to the driveway such that the repair work complies with the ADA and meets with the approval of the DPW.

5.

The permittee shall maintain, to the satisfaction of the DPW, the area worked within the Government right-of-way including any repairs to pavement and shoulder damaged as a result of the installation work, for a period of one (1) year from the date of final inspection. The permittee shall undertake repairs expeditiously, whenever directed by the DPW during the maintenance period.

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP--1500(35)	2008	7	41

SOLID WASTE CONSTRUCTION NOTES

1.

Unless otherwise specified, the Contractor is responsible for the proper handling, storage and/or disposal of all waste generated by the construction including grubbing and excess excavated material and material brought to the County landfills will be subjected to the instituted tipping fee system, with no exceptions or exemptions.

2.

The Contractor, at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in conformance with the air pollution standards and regulations of the State Department of Health. The County of Kauai may require supplementary measures as necessary.

3.

The Contractor shall be responsible for the cleaning and removal of all silt and debris generated by his work and deposited and accumulated within downstream waterways, ditches and drain pipes and on public and private roadways. The Contractor agrees to reimburse the County of Kauai, County of Hawaii, County of Maui, and/or the City and County of Honolulu, the costs expended in performance of the above work if required for public health and safety, or made necessary by non-performance by the Contractor.

4.

The Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, markers, cones and other protective facilities and shall take all necessary precautions for the protection, convenience and safety of the public.

5.

The Contractor shall submit a noise pollution control plan when applying for a construction permit.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES

TRAFFIC COUNTING STATIONS
AT VARIOUS LOCATIONS
F.A.P. NO. STP-1500(35)

Scale: None Date: June 2008

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SHEET No. T-7 OF 7 SHEETS

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