

DATE: 06/04/98
PLOT SCALE: 1" = 100'
FILE: PI-9810-03.dwg
Job No: 9810B

DATE: 06/04/98
PLOT SCALE: 1" = 100'
FILE: PI-9810-03.dwg
Job No: 9810B

DATE: 06/04/98
PLOT SCALE: 1" = 100'
FILE: PI-9810-03.dwg
Job No: 9810B

GENERAL NOTES

- The scope of work for this project consists of reconstructing H-1 Freeway, Palailai Interchange. Improvement consists of reconstructing pavement areas, drainage improvements, adjusting existing monuments and utilities, replacing guardrails within project area to new standards, installing pavement markers, striping and signage, and bridge repair work.
- The Contractor is reminded of the requirements of the Subsection 108.01 - Subletting of Contract, which requires him to perform work amounting to not less than 50 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.
- The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 107.13 - Public Convenience and Safety; Subsection 107.21 - Contractor's Responsibility for Utility Property and Services, and Section 645 - Traffic Control.
- At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic, unless otherwise noted.
- The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- The exact locations and limits or areas to be filled with leveling course, reconstructed and/or cold planed shall be determined in the field by the Engineer.
- The Contractor shall notify Oahu Transit Services, Inc. (OTS - TheBus contractor), Ed Sniffen (848-4571) or Lowell Tom (848-4578), two weeks prior to construction, informing them of location, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stops.
- The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
- The Contractor shall remove and dispose of all existing raised pavement markers and preformed pavement marking tape prior to the reconstruction work. This work shall be considered incidental to the Portland Cement Concrete Pavement, and will not be paid for separately.
- Smooth riding connections shall be constructed at all limits of resurfacing, including the beginning and end of the project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.
- Dressing of shoulders shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders as shown on the plans and/or as directed by the Engineer with Coral select borrow conforming to Subsection 703.23 - Aggregate for Dressing of Shoulders.
- Existing drainage systems will be functional at all times during construction. The Contractor is to furnish materials, equipment labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items.
- Earth swales shall be graded to drain. This work shall be considered incidental to the various contract items.
- The Contractor shall provide for access to and from all existing side streets and driveways at all times.
- All saw cutting work for demolition shall be considered incidental to Excavation. All saw cutting work for new PCC Pavement shall be considered incidental to PCC Pavement.

GENERAL NOTES (cont.)

- Construction and restoration of all existing highway facilities within the State's right-of-way shall be done in accordance with all applicable sections of the current STANDARD SPECIFICATIONS FOR ROAD, BRIDGE and PUBLIC WORKS CONSTRUCTION.
- Work may be performed only between the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday, except holidays, unless otherwise permitted by the Engineer. D.O.T. is in process of obtaining Noise Variance Permit to extend the allowable work hours and include night work.
- 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 public streets. All such protective facilities and precautions to be taken shall conform with the current U.S. D.O.T. Federal Highways Administration "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI - STANDARDS AND GUIDES FOR TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY AND INCIDENT MANAGEMENT OPERATIONS".
- No material and/or equipment shall be stockpiled or otherwise stored within highway right-of-way except at locations designated in writing and approved by the Engineer.
- The minimum pavement structure shall be as noted on the plans.
- The Contractor shall provide an adequate and safe non-skid bridging material, including shoring, over trenched pavement areas. The bridging shall be able to support all types of vehicular traffic. Contractor shall not use steel plates in areas where speed exceeds 35 M.P.H.
- All regulatory, guide, and construction signs and barricades shall have a high-intensity reflective background.
- Where pedestrian walkways exist, they shall be maintained in a safe and passable condition, or other facilities for pedestrians shall be provided. Passages between walkways at intersections shall likewise be provided.
- The Contractor shall exercise care when performing work in or adjacent to the State Highway right-of-way. Damages to existing facilities shall be immediately reported to the respective utility companies, and/or City or State agencies. The repair work shall be done at the Contractor's expense.
- The Contractor shall notify the State Highways' Highway Lighting and Traffic Signal Supervisor (837-8056), three (3) working days prior to commencing work.
- Traffic signals shall be kept operational during construction, and if deemed necessary by the District Engineer or his representative, a temporary vehicle detection device shall be installed. All work shall be done in accordance to the requirements of the Department of Transportation Services, City and County of Honolulu, and paid for by the Contractor.
- Existing concrete curb and gutters designated to remain, disturbed during pavement reconstruction shall be replaced by the Contractor. This work shall be considered incidental to Portland Cement Concrete Pavement and will not be paid for separately.

LEGEND

Existing	Propose	
		Concrete Pavement
		A.C. Pavement
		Concrete Sidewalk
		Metal Guardrail
		Monument
		Electrical Line
		Electrical Pole
		Electrical Box
		Signal Corps Line
		Water Line
		Water Meter
		Water Manhole
		Water Valve
		Drain Line
		Storm Drain Manhole
		Drain Inlet
		Catch Basin
		Gas Line
		Gas Valve
		Petroleum Fuel Line
		Sewer Line
		Sewer Manhole
		Signs
		Concrete Swales
		Right of Way
		Perforated Underdrain & Cleanout

LESTER H. FUKUDA
LICENSED PROFESSIONAL ENGINEER
No. 4908-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
BY:
DATE: 4/01/01

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

INTERSTATE ROUTE H-1
Palailai Interchange Reconstruction
F.A.I. Project No. IM-NH-H1-1(239)

Scale: As Noted Date: 4/01/01

SHEET NO. T3 OF 6 SHEETS

PM: JUN
OPER: LKH/EHL/PT/MAM*
REVISED: 12/08/00

DATE: 06/05/98
PLOT SCALE: 1" = 1'
FILE: PI-9810-04.dwg
JOB: 9810B

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DRAWN BY	DESIGNED BY	DESIGNED BY
NOTED BY	QUANTITIES BY	QUANTITIES BY
CHECKED BY	CHECKED BY	CHECKED BY
No.		

WATER NOTES

- Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND PUBLIC WORKS CONSTRUCTION, dated 1994, of the Hawaii Department of Transportation, Highways Division, and 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, and 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 on the water system, such as lines, grades, fittings, drainage, etc., and other features or 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 shall pay for all damages to the 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 under construction within a period of two years.
- The Contractor shall notify BWS Planning and Engineering Division, Construction Section at 527-5205, one week prior to commencing work on the water system.
- The Contractor shall verify all existing service lateral locations whether shown or not shown on the plans prior to commencing with any of the work and shall not assume that where no services are shown none exist.
- Any adjustments to the existing water system required during construction to meet requirements of BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board.
- The Contractor shall adjust all manhole frames/valve boxes within the reconstructed area. Prior to reconstruction, BWS will initially locate all water manholes/valve boxes that will require adjustments. The Contractor shall then be responsible for "referencing" these manholes/valve boxes to facilitate the adjustments. The cost for adjustments shall be made at their respective unit prices in the Bid based on the actual number adjusted. Cost for referencing shall be incidental and shall not be paid for directly. Any additional request to BWS to again locate the manholes/valve boxes shall be done at the expense of the Contractor. (BWS will charge and bill the Contractor for all cost for said additional work.)
- Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
- Maintain 3'-0" minimum cover for all existing waterlines (18" minimum for service laterals) from new finish grade. The Contractor shall probe the waterline and service laterals and submit the probing data to BWS Construction Section. Any adjustments to the existing water system to meet the minimum cover and the requirements of the BWS standards, whether shown on plans or not, shall be done by the Contractor at no cost to BWS.
- The Contractor shall have existing mains toned before construction of work in the vicinity of water mains, call the investigation section at 527-5296 for toning services. Guardrail post locations are to be kept to a minimum clear distance of 18 inches to any 2 1/2 inch water lines and meter boxes. No post driving will be allowed when post is to be installed closer than 3 feet from water main. Excavated areas shall be restored to their original conditions.

WATER NOTES (cont.)

- The Contractor shall notify BWS Construction Section (527-5205 or 5206) 60 days prior to construction at or near areas in conflict with BWS project (Job 99-41 Farrington Highway: 30 inch and 24 inch Transmission Mains - Phase I) to avoid delays and conflicts during construction. BWS shall not be liable for any delays due to Contractor's failure to coordinate the construction schedule for this project.

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.
- The Contractor shall notify the Inspection Section, Wastewater Branch, DPP at 527-5820 or 527-6241 to arrange for inspection services and submit three (3) sets of approved construction plans seven (7) days prior to commencement of sewer work. The Contractor shall pay for all inspection costs.
- 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 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.
- Confined Space
For entry by City personnel, including inspectors, into a permit required confined space in 29 CFR part 1910.146(b), the Contractor shall be responsible for providing:
 - All safety equipment required by the confined space regulations applicable to all parties other than the construction industry, to include, but not limited to, the following:
 - Full body harness for up to two personnel.
 - Lifeline and associated clips.
 - Ingress/egress and fall protection equipment.
 - Two-way radios (walkie-talkies) if out of line-of-sight.
 - Emergency (escape) respirator (10 minute duration).
 - Cellular telephone to call for emergency assistance.
 - Continuous gas detector (calibrated) to measure oxygen, hydrogen sulfide, carbon monoxide and flammables (capable of monitoring at a distance at least 20 feet away).
 - Personal multi-gas detector to be carried by inspector.
 - Continuous forced air ventilation adequate to provide safe entry conditions.
 - One attendant/rescue personnel topside (two, if conditions warrant it).

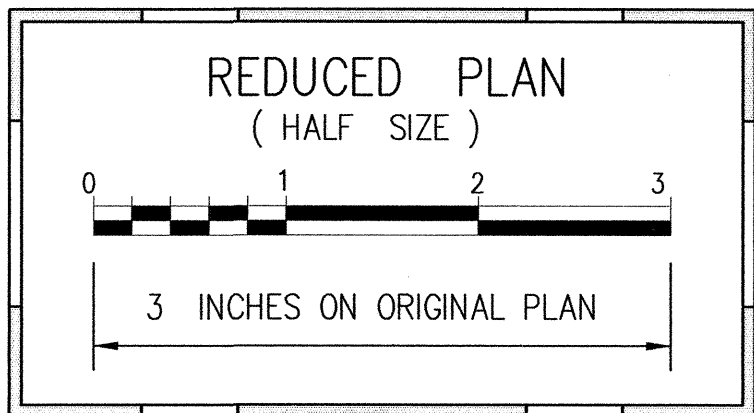
HAWAIIAN ELECTRIC COMPANY NOTES

- 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.

APPROVED BY:

Catharine R. Dungea
for CHIEF, PLANNING AND ENGINEERING DIVISION,
BOARD OF WATER SUPPLY, CITY & COUNTY OF HONOLULU

12/11/00
DATE



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-NH-H1-1(239)	2001	4	103

HECO NOTES (cont.)

- The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (HIOSH).
- The Contractor shall obtain an excavation permit from HECO's Mapping and Records Division located at 820 Ward Avenue, 4th Floor, two (2) weeks prior to starting construction. Please refer to our request number at that time. (Request No. 236771)
- For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HECO's Underground Division at 543-7345 a minimum of 72 hours in advance.
- When trench excavation is adjacent to or beneath 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-pinning.
- For pole bracing instructions, the Contractor shall call the HECO District Superintendent at (Koolau/261-6084, Waiau/543-4223, Ward/543-7745) 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 HECO facilities to enable the Contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations, these temporary relocation will be done by HECO, or by the Contractor under HECO's supervision, with all costs being borne by the Contractor.
- Any unforeseen conflict that 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 Contractor 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 543-7874.
- 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 save and hold harmless, indemnify, and defend HECO, its officers, employees, agents, and any contractor employed by HECO in connection with this project, from and against any and all suits, actions, and claims of every nature and kind which may be brought for or on account of any injury, death or damage arising or growing solely out of the negligence of the Contractor.

 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION BY: <i>Lester H. Fukuda</i> DATE: 12/6/00	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION UTILITY NOTES INTERSTATE ROUTE H-1 Palailai Interchange Reconstruction F.A.I. Project No. IM-NH-H1-1(239) Scale: As Noted Date: 4/1/01	
	SHEET NO. T4 OF 5 SHEETS	
	4	

HAWAIIAN TELEPHONE COMPANY NOTES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-NH-H1-1(239)	2001	5	103

1. The Contractor shall exercise extreme caution when the excavation and construction cross or are in close proximity to telephone facilities and maintain adequate clearance for his equipment while working close and/or under the overhead facilities.
2. For pole bracing instructions should field conditions and/or construction procedures require that poles be braced to facilitate construction, the Contractor shall call HTCO Operations Center at 831-4038 a minimum of 72 hours in advance. The Contractor shall obtain an excavation permit from HTCO Records Section (3rd Floor, 3239 Ualena Street) prior to start of construction.
3. Should it become necessary, any work required to relocate HTCO facilities shall be done by HTCO. The Contractor shall be responsible for all coordination and costs.
4. The Contractor shall report any damages to HTCO Dispatch Center at phone no. 611.
5. The Contractor shall be liable for any damages to HTCO facilities.
6. For field location of HTCO facilities after permit has been obtained, contact HTCO Dispatch Center a minimum of 72 hours in advance.
7. Should it become necessary to temporarily relocate any HTCO 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 HTCO or by the Contractor under HTCO's supervision, with all costs being borne by the Contractor.

ABBREVIATIONS

A.C.	Asphalt Concrete	O.C.	On Center
ARV	Air Relief Valve	O/S	Offset
BC	Bottom of Curb	OH	Overhead
B.V.C.	Beginning of Vertical Curve	P.C.	Point of Curvature
BL	Baseline	P.C.C.	Point of Compound Curve
BLVD.	Boulevard	P.I.V.C.	Point of Intersection of Vertical Curve
BOT	Bottom	P.R.C.	Point of Reverse Curve
C&C	City And County	P.T.	Point of Tangency
C.M.P.	Corrugated Metal Pipe	PAVT	Pavement
CB	Catch Basin	PCC	Portland Cement Concrete
Ch	Chord Length	PL	Property Line
C.O.	Cleanout	PROJ.	Project
CONC.	Concrete	R	Radius
COND.	Conduit	RD.	Road
D	Diameter	RFL	Reflector
D	Drain	RT.	Right
DI	Drain Inlet	S	Sewer
DIST.	District	S.E.	Superelevation
DTS	Department of Transportation Services	SDMH	Storm Drain Manhole
E	East	SL	Street Light
E.V.C.	End of Vertical Curve	SLB	Street Light Box
EL	Elevation	SMH	Sewer Manhole
ELEC	Electric	SN	Sign
ELEV.	Elevation	STA.	Station
EOH	Electrical Overhead	T	Top
EP	Edge of Pavement	T	Tangent
EUG	Underground Electric	TC	Top of Curb
EXIST.	Existing	TMH	Telephone Manhole
FED.	Federal	TP	Top
FT.	Feet	TS	Top Stem
G	Gas	TSL/TSLB	Traffic Signal Light/ Traffic Signal Light Box
GW	Guy Wire	TUG	Underground Telephone
H	Height	TW	Top of Wall
HAW.	Hawaii	TYP.	Typical
HECO.	Hawaiian Electric Company	UP	Utility Pole
HORIZ.	Horizontal	V.C.	Vertical Curve
ICV	Irrigation Control Valve	VERT.	Vertical
INV	Invert	W	Water
L.F.	Linear Feet	W/	With
Lc	Length of Curve	W/O	Without
LT.	Left	WIM	Weigh-In-Motion
MAX.	Maximum	WMH	Water Manhole
MH	Manhole	WV	Water Valve
MIN.	Minimum		
N	North		
NO.	Number		

CONSTRUCTION NOTES FOR 16" GAS TRANSMISSION LINE

1. The Gas Company 16-inch high pressure gas transmission line is plastic coated and cathodically protected. The Contractor shall be extremely careful when working near the gas pipeline.
2. Prior written clearance must be obtained from The Gas Company, Maps and Records Department, 515 Kamakee Street, at least five (5) working days before starting excavation near any of The Gas Company pipelines.
3. Since pipeline 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 existing gas lines. The telephone number is 1-800-227-2600.
4. The Contractor shall notify The Gas Company, Distribution Department (594-5556) 24 hours prior to excavating and backfilling any pipeline.
5. The Contractor shall have the sole responsibility to perform field verification, including hand digging methods.
6. The Contractor shall excavate and backfill around the pipeline in the presence of a representative of The Gas Company. All backfill within 12 inches of the pipeline shall be sand, man-made sand or select cushion material approved by The Gas Company.
7. Minimum horizontal and vertical clearance between gas pipeline and other pipelines, conduits, or other structures shall be 24 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 uncovered gas line exposure to a minimum.
9. The Contractor shall notify The Gas Company immediately after any damage has been caused to the existing gas pipelines, their coatings or their cathodic protection devices. The number to call is 594-5567 or 526-0066, 24 hours a day. The Contractor shall be liable for any damage to The Gas Company facilities. Repair work on this damage shall be performed by The Gas Company with payment for this work to be borne by the Contractor.

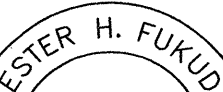
CHEVRON USA INC. NOTES

1. All work within Chevron USA Inc. fuel easment shall be in accordance with Chevron USA Inc. "GUIDELINES FOR WORK NEAR CHEVRON USA PIPELINES" (Form H-603). Call the Chevron Pipeline/Mooring Analyst at 682-2259 for information.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DRAWN BY		
TRACED BY		
NOTED BY		
QUANTITIES BY		
CHECKED BY		
10.		

DATE: 06/05/98
PLOT SCALE: 1 = 1
FILE: PL-9810-05.DWG
JOB NO: 9810B

PM: JUN
OPER: LKH/EHL/PT*/MAM
REVISED: 4/16/01

 <p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION</p> <p>BY: <u>Lester H. Fukuda</u></p> <p>DATE: <u>4/11/01</u></p>	<p>STATE OF HAWAII</p> <p>DEPARTMENT OF TRANSPORTATION</p> <p>HIGHWAYS DIVISION</p> <p><u>UTILITY NOTES</u></p> <p><u>INTERSTATE ROUTE H-1</u></p> <p><u>Palailai Interchange Reconstruction</u></p> <p><u>F.A.I. Project No. IM-NH-H1-1(239)</u></p> <p>Scale: As Noted</p> <p>Date: 4/01/01</p>
--	---

PM: JUN
OPER: PT/MAM*
REVISED: 4/23/01

DATE: 4/04/01
PLOT SCALE: 1" = 1
FILE: PT-9810-056.DWG
JOB NO.: 9810B

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
	NOTED BY	
NOTEBOOK	QUANTITIES BY	
	CHECKED BY	
	No.	

WATER POLLUTION AND EROSION CONTROL NOTES:

A. GENERAL:

- The Contractor is reminded of the requirements of Section 209 – Water Pollution and Erosion Control, in the "Hawaii Standard Specifications for Road, Bridge and Public Works Construction". 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.
- The Contractor shall follow the guidelines in the "Best Mangement Practices Manual for Construction Sites in Honolulu", dated May 1999 in developing, installing and maintaining the Best Management Practices (BMP) for the project.
- The Engineer may assess liquidated damages of up to \$25,000 for non-compliance of each BMP requirement and each requirement stated in Section 209, for every day of non-compliance. There is no maximum limit on the amount assessed per day.
- 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 of the outstanding cost incurred by the State.

B. WASTE DISPOSAL:

- Waste Materials
All waste materials shall be collected and stored in a securely lidded metal dumpster. The dumpster shall meet all local and State solid waste management regulations. All trash and construction debris from the site shall be deposited in the dumpster. The dumpster shall be emptied a minimum of twice per week or as often as is deemed necessary. No construction waste materials shall be buried onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Notices stating these practices shall be posted in the office trailer and the Contractor shall be responsible for seeing that these procedures are followed.
- Hazardous Waste
All hazardous waste materials shall be disposed of in the manner specified by local or State regulations or by the manufacturer. The Contractor's site personnel shall be instructed in these practices and shall be responsible for seeing that these practices are followed.
- Sanitary Waste
All sanitary waste shall be collected from the portable units a minimum of once per week, or as required.

C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

- All control measures shall be inspected at least once each week and following any rainfall event of 0.5 inches or greater.
- All measures shall be maintained in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.
- Built-up sediment shall be removed from silt fence when it has reached one-third the height of the fence.
- Silt screen or fence shall be inspected for depth of sediment, tears, to verify that the fabric is securely attached to the fence posts or concrete slab and to verify that the fence posts are firmly in the ground.
- Temporary and permanent seeding and planting shall be inspected for bare spots, washouts and healthy growth.
- A maintenance inspection report shall be made promptly after each inspection by the Contractor.
- The Contractor shall select a minimum of three personnel who shall be responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- 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.

WATER POLLUTION AND EROSION CONTROL NOTES CONTINUED:

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:

- Materials Pollution Prevention Plan
 - Applicable materials or substances listed below are expected to be present onsite during construction. Other materials and substances not listed below shall be added to the inventory.

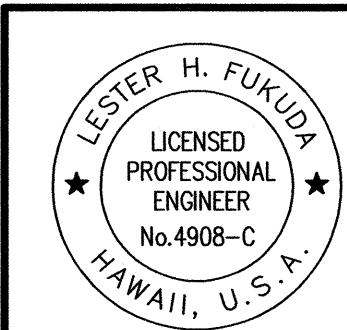
ConcreteFertilizers
DetergentsPetroleum Based Products
Paints (enamel and latex)Cleaning Solvents
Metal StudsWood
TarMasonry Block
 - Material Management Practices shall be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. An effort shall be made to store only enough product as is required to do the job.
 - All materials stored onsite shall be stored in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.
 - Products shall be kept in their original containers with the original manufacturer's label.
 - Substances shall not be mixed with one another unless recommended by the manufacturer.
 - Whenever possible, a product shall be used up completely before disposing of the container.
 - Manufacturer's recommendations for proper use and disposal shall be followed.
 - The Contractor shall conduct a daily inspection to ensure proper use and disposal of materials onsite.
- Hazardous Material Pollution Prevention Plan
 - Products shall be kept in original containers unless they are not resealable.
 - Original labels and material safety data sheets (MSDS) shall be retained.
 - Surplus products shall be disposed of according to manufacturers' instructions or local and State recommended methods.
- Onsite and Offsite Product Specific Plan
 - The following product specific practices shall be followed onsite:
 - Petroleum Based Products:
All onsite vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. Any asphalt substance used onsite shall be applied according to the manufacturer's recommendation.
 - Fertilizers:
Fertilizers used shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked into the soil to limit exposure to storm water. Storage shall be in a covered shed. The contents of any partially used bags of fertilizer shall be transferred to a sealable plastic bin to avoid spills.
 - Paints:
All containers shall be tightly sealed and stored when not required for use. Excess paint shall not be discharged to the highway drainage system but shall be properly disposed of according to manufacturers' instructions or State and local regulations.
 - Concrete Trucks:
Concrete trucks shall be allowed to wash out or drum wash water only at a designated site. Water shall not be discharged in the highway drainage system or waters of the United States. The Contractor shall contact Drinking Water Branch, Department of Health at 586-4258 to receive permission to designate a disposal site. The Contractor shall clean disposal site as required or as requested by the Owner's representative.

WATER POLLUTION AND EROSION CONTROL NOTES CONTINUED:

4. Spill Control Plan

- A spill prevention plan shall be posted to include measures to prevent and clean up each spill.
- The Contractor shall be the spill prevention and cleanup coordinator. The Contractor shall designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. The names of resopsible spill personnel shall be posted in the material storage area and in the office trailer onsite.
- Manufacturers' recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup shall be kept in the material storage area onsite.
- All spills shall be cleaned up immediately after discovery.
- The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic hazardous material shall be reported to the appropriate State or local government agency, regardless of the size.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-NH-H1-1(239)	2001	5A	103



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
BY: *Lester H. Fukuda*
DATE: *4/6/01*

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
UTILITY NOTES	
INTERSTATE ROUTE H-1	
Palailai Interchange Reconstruction	
F.A.I. Project No. IM-NH-H1-1(239)	
Scale: As Noted	Date: 4/01/01