

GENERAL NOTES

1. The scope of work for this project consists of but not limited to the demolition and removal of the upper portion of the existing CRM retaining wall and guardrail and installation of retaining wall with a tieback system and guardrail.
2. The Contractor is reminded of the requirements of Subsection 108.01 - Subletting of of Contract, which requires him to perform work amounting to not less than 30 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.
3. 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.
4. 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.
5. 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.
6. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
7. Existing drainage system 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.
8. The Contractor shall provide for access to and from all existing side streets at all times.
9. All work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other various contract items and shall not be paid for separately.
10. The exact locations and limits or areas to be demolished and reconstructed shall be determined in the field by the Engineer.
11. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designated in writing and approved by the Engineer. If use of location is approved by the Engineer, the Contractor shall obtain a permit to use the property within the highway right-of-way from the Kauai District Office at telephone no. 241-3000.
12. All lanes shall be open to traffic during morning peak hours from 6:30 A.M. to 8:30 A.M., during afternoon peak hours from 3:30 P.M. to 6:00 P.M. and during off work hours. Only one lane of highway shall be closed at any other time. Failure of the Contractor to open all lanes of traffic during the times specified above shall result in ~~assessment of liquidated damages as specified in Section 108.08~~ **assessment** of the Special Provisions.

Assessment of Rental Fees as Specified in Section 108.10

VERIZON HAWAII INC GENERAL NOTES

1. The location of Verizon Hawaii, Inc existing facilities are approximate only. The Contractor shall exercise extreme caution and shall maintain proper clearances whenever construction crosses or is in close proximity of Verizon Hawaii, Inc facilities. The Contractor shall verify their locations and shall be liable for any damages to Verizon Hawaii, Inc facilities. Any damages shall be reported immediately to Verizon Hawaii, Inc repair section at #611 (24 hours) or to the excavation permit section at 246-3205 (normal working hours, Monday through Friday, except holidays.)
2. When excavation is adjacent to or beneath Verizon Hawaii Inc'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 Verizon Hawaii Inc's structures or facilities.
 - B) Protect existing structures and/or facilities with beams, struts or underpinning while excavation beneath them to ensure no movement to Verizon Hawaii Inc's structures or facilities.

KAUAI ISLAND UTILITY COOPERATIVE NOTES:

1. A Utility Co. Standby Man is required to be at the site at the time any Non-Utility Co. Personnel will be entering into or working within the vicinity of any facilities that contain energized Utility Co. equipment or cables.
2. A minimum of 15 feet radial clearance is required when working within vicinity of energized overhead electrical facilities.
3. Three working days advance notice is required by the Utility Co. for any inspection service or standby man.

Call KIUC - 246-8200

WATER NOTES

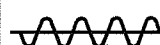
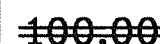
1. The Contractor shall contact the Department of Water Supply in the event that any water line is found during construction.

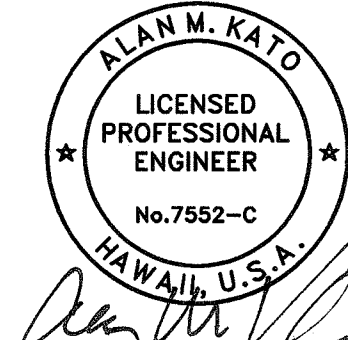
TOPOGRAPHIC SURVEY NOTES:

1. Topographic survey work was completed by ground surveys conducted by Esaki Surveying & Mapping, Inc. Survey map entitled "Topographic Map showing Portion of Kuamoo Road, Wailua Homesteads, 1st Series, Wailua, Kauai, Hawaii, Tax Map Key: (4)4-2-03: Por. 8", date of survey: August 13 and 30, 2004.
2. Elevations are referred to Mean Sea Level.
3. Written dimensions take precedence over scaled dimensions.
4. North arrow referred to True North.
5. All elevations and distances are in feet.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-02	2005	3	25

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

EXPIRATION DATE OF THE LICENSE (4/30/10)	
	
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CONSTRUCTION NOTES	
KUAMOO ROAD RETAINING WALL IN THE VICINITY OF M.P. 11 PROJECT NO. 580A-01-02	
SCALE: NONE	DATE: SEPT 2005
SHEET No. 1 OF 3 SHEETS	

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-02	2005	4	25

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 Special Provisions. 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 \$27,500 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. The bottom of the silt screen shall be inspected and verified that it is buried a minimum of 6 inches below the existing 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.

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.

Concrete
Detergents
Paints (enamel and latex)
Metal Studs
Tar

Fertilizers
Petroleum Based Products
Cleaning Solvents
Wood
Masonry 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 substances 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.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
No.		

	EXPIRATION DATE OF THE LICENSE (4/30/06)
<div>ALAN M. KATO LICENSED PROFESSIONAL ENGINEER NO. 7552-C HAWAII, U.S.A. <i>Alan M. Kato</i> THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION</div>	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CONSTRUCTION NOTES	
KUAMOO ROAD RETAINING WALL IN THE VICINITY OF M.P. 11 PROJECT NO. 580A-01-02	
SCALE: NONE	DATE: SEPT 2005
SHEET NO. 2 OF 3 SHEETS	

WATER POLLUTION AND EROSION CONTROL NOTES: -Cont.

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES: -Cont.

4) Concrete Trucks:

Concrete trucks shall be allowed to wash out or discharge 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.

Not
necessary
per DOH

b. Offsite Vehicle Tracking:

A stabilized construction entrance shall be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance shall be cleaned daily or as required to remove any excess mud, cold planed materials, dirt or rock tracked from the site. Dump trucks hauling material from the construction site shall be covered with a tarpaulin.

4. Spill Control Plan

a. A spill prevention plan shall be posted to include measures to prevent and clean up each spill.

b. 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 responsible spill personnel shall be posted in the material storage area and in the office trailer onsite.

c. 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.

d. Materials and equipment necessary for spill cleanup shall be kept in the material storage area onsite.

e. All spills shall be cleaned up immediately after discovery.

f. The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

g. Spills of toxic hazardous material shall be reported to the appropriate State or local government agency, regardless of the size.

E. PERMIT REQUIREMENTS:

1. If a National Pollutant Discharge Elimination System (NPDES) Permit is required for Construction Activities, the Contractor shall submit to the Engineer four sets of the Water Pollution and Erosion Control Submittals as detailed in Subsection 209.04 of the specifications.

2. The Contractor shall comply with all applicable State and Federal Permit conditions. Permits may include but are not limited to the following:

a. NPDES Permit for Construction Activities





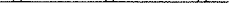

GENERAL NOTES FOR TRAFFIC CONTROL:

- The Contractor shall make minor adjustments at intersection, driveways bridges, structures, etc., to fit field conditions
- Cones or delineators shall be extended to a point where they are visible to approaching traffic
- Traffic control devices shall be installed such that the sign or device farthest from the work area shall be placed first. The others shall then be placed progressively toward the work area.
- Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered. All signs shall be restored upon completion of the work.
- Flaggers and/or police officers shall be in sight of each other or in direct communication at all times
- All traffic lanes shall be minimum or 10 feet wide.
- The backs of all signs used for traffic control shall be appropriately covered to preclude the display of inapplicable sign message (i.e., when signs have messages on both faces).
- At the end of each days work or as soon as the work is completed, the Contractor shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation.
- Replace permanent pavement markings and traffic signs upon completion of each phase of work.
- Cones shall be 28" in height with reflective striping.
- Restore traffic back to regular travelway lanes during non-working hours.
- Any and all existing signage and striping damaged by the Contractor during construction shall be replaced at his expense.
- All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
- All work zone traffic control devices shall comply with the "Statewide Guideline for Work Zone Traffic Control Devices" dated September 13 , 2000.

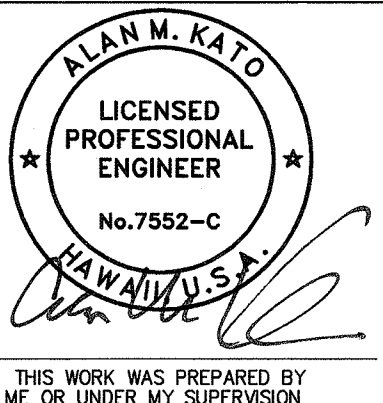
ABBREVIATIONS:

@	At
AC	Asphalt Concrete
BL	Base Line
bm	Beam
CL	Center Line
CONC	Concrete
CONT.	Continuous
CRM	Concrete Rubble Masonry
DIA.	Diameter
Ea	Each
EP	Edge of Pavement
E.W.	Each Way
EXIST	Existing
Fin. Gr	Finished Grade
GW	Guy Wire
MAX.	Maximum
MIN.	Minimum
No.	Number
O.C.	On Center
OM	Object Marker
Pav't	Pavement
PC	Point of Curvature
PP	Power Pole
PT	Point of Tangency
R	Radius
RD	Road
RM	Reflector Marker
ROW	Right-Of-Way
Sht.	Sheet
STA	Station
Term.	Terminal
TYP	Typical

LEGEND:

	<i>Existing Signs</i>
	
	<i>Demolish</i>
	<i>Existing Guardrail</i>
	<i>Existing Rock Wall</i>
	<i>Existing Grade</i>

LEGEND FOR AS-BUILT POSTINGS	
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES

KUAMOO ROAD RETAINING WALL
IN THE VICINITY OF M.P. 11
PROJECT NO. 580A-01-02

SCALE: NONE DATE: SEPT 2005

SHEET No. 3 OF 3 SHEETS