

GENERAL NOTES

1. The scope of work for this project consists of slope protection (GRP & retaining walls); resurfacing and reconstructing existing shoulder pavement; upgrading/replacement of guardrails and end treatments; replacing existing galvanized steel light poles with aluminum poles; cleaning of catchbasin and drainlines; adjusting manholes and replacing existing utilities. This project starts in the vicinity of Mikiola Drive Mile Post (M.P.) 1.83 and ends in the vicinity of Kahinani Place Mile Post (M.P.) 2.18 on Mokapu Saddle Road.
2. The Contractor is reminded of the requirements of 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.
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 in writing, the Oahu Transit Services, Inc. Roads Supervision Office, 811 Middle St., Hon., HI 96819 (ph #848-4571) seven (7) days prior to any paving operations.
7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
8. The Contractor shall remove and dispose of all existing traffic tape prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to Asphalt Concrete Pavement, and will not be paid for separately.
9. All holes, depressions and wheel ruts shall be filled and compacted with Asphalt Concrete Pavement, Mix V prior to resurfacing. This work will be incidental to item 401.0400 - Asphalt Concrete Pavement, Mix No. IV.
10. The exact locations and limits or areas to be filled with leveling course shall be determined in the field by the Engineer.
11. Smooth riding connections shall be constructed at all limits of resurfacing, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.
12. 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.

12. The contractor shall provide for access to and from all existing side streets and driveways at all times.
13. All saw cutting work shall be considered incidental to Roadway Excavation.
14. Dressing of shoulders and sidewalk shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved areas adjacent to the shoulders and sidewalks with suitable excavated materials as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to the various contract items.
15. The Contractor shall clean, remove and dispose of any silt, trash, and vegetable growth from on and off-site existing culverts, gutters, swales and adjoining drainage structures within the project limits. This work shall be paid for under item 603.0100 - Clean Existing Drainage System.

SEWER NOTES

1. 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.
2. The Contractor shall notify the Inspection Section, Wastewater Branch, DDC, at 527-5842 or 523-4345 to arrange for inspection services and submit four (4) sets of approved construction plans seven days prior to commencement of sewer work. The Contractor shall pay for all inspection costs.
3. 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 shall exercise proper care in excavating the area. The Contractor shall be responsible and shall pay for all damaged utilities.
4. The Contractor shall be responsible for maintaining continuous sewer service to all affected areas during construction.
5. 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.
6. The Contractor shall maintain a minimum five (5) feet clear width between street lighting poles and sewer lines.

7. 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:

1. All safety equipment required by the confined space regulations applicable to all parties other than the construction industry, to include but not be limited to the following:
- A. Full body harness for up to two personnel
- B. Lifeline and associated clips
- C. Ingress/egress and fall protection equipment
- D. Two-way radios (walkie-talkies) if out of line-of-sight
- E. Emergency (escape) respirator (10 minute duration)
- F. Cellular telephone to call for emergency
- G. Continuous gas detector (calibrated) to measure oxygen, hydrogen sulfide, carbon monoxide and flammables (capable of monitoring at a distance at least 20-feet away)
- H. Personal multi-gas detector to be carried by inspector
2. Continuous forced air ventilation adequate to provide safe entry conditions.
3. One attendant/rescue personnel topside (two; if conditions warrant it).
8. For sewer manhole adjustments:
1. For SMH adjustments <3" upwards, see DPW Std. Det. S-25.
2. For SMH adjustments >3" upwards or any adjustment downward reconstruct SMH top from below the cone section.

WATER NOTES

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the Standard Specifications for Road and Bridge Construction, dated 1994, as amended, of the Hawaii Highways Division, Department of Transportation, 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.
2. All plans approved by the Board of Water Supply are based solely on the adequacy of the Water Supply. All other features of the water system, such as lines, grades, fittings, drainage, etc., and other features of improvements shall not be the responsibility of the Board of Water Supply.
3. The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of the work. The Contractor shall be responsible and pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65B-01-01M	2001	3	58

LEGEND

	Work Limits		Existing Sewer Line
	Existing Electrical Line		Existing Sewer Manhole
	New Electrical Line		Adjusted Sewer MH Frame/Cover
	Existing Joint Pole		Existing 6" Gas Line
	Existing Power Pole		Existing Gas Valve Box
	Existing Electric Manhole		Existing Gas Manhole
	Adjusted Elec. MH Frame/Cover		Existing Monument
	Existing Telephone Line		Existing 24" Drain Line
	Existing Telephone Pole		Existing Storm Drain Manhole
	Existing Telephone Manhole		Existing Grated Drop Inlet
	Adjusted Tele. MH Frame/Cover		Existing Drop Inlet
	Existing Signal Corps Line		Existing Catch Basin
	Existing TV Cable		Existing Traffic Sign
	Existing 12" Water Line		Existing Highway Lighting Standard
	Adjusted Water MH Frame/Cover		New Edge of Pavement
	Existing Water Manhole		New Edge of Shoulder
	Existing Water Air Valve		Existing Chain Link Fence
	Adjusted Water Air Valve		Existing Traffic Signal Pullbox
	Existing Water Valve Box		Adjusted Traffic Signal Pullbox
	Existing Water Meter		Existing Force Main
	Existing Fire Hydrant		Sewer Force Main
	Existing Edge of Pavement		Flow Line
	Existing Edge of Shoulder		Street Light
	Begin Work Area		Street Light Handhole
	End Work Area		Electric Handhole
			Telephone Pull Box
			Abandoned

Catherine R. Brungia  
for Leader, Maintenance Unit, BWS

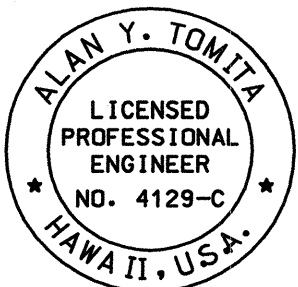
5/16/01

Date

J. Wapnelalamuna  
Chief, Wastewater Branch, DPP

5/15/01

Date



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.

Alan Y. Tomita

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

MOKAPU SADDLE ROAD SLOPE STABILITY  
Vicinity of Mikiola Dr. to Kahinani Place  
Project No. 65B-01-01M

Scale: None Date: May, 2001

SHEET No. 1 OF 2 SHEETS



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	65B-01-01M	2001	4	58

WATER NOTES CONT

4. 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 measure necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method at no additional cost to the State.
5. Re-approval shall be required if this project is not undertaken within a period of two years.
6. At the electrical/signal ductlines water crossings, adjust all electrical/signal ductline elevations to maintain 6" vertical clear separation from all water lines (12" clear for all electrical/signal ductline structures larger than 16") at no cost to the Board of Water Supply.
7. Maintain 3'-0" min. horizontal clear separation between all water line systems and nearest electrical/signal ductlines paralleling the water system at no cost to the Board of Water Supply.
8. The Contractor shall notify BWS Planning and Engineering Division, Construction Section in writing and submit four (4) sets of approved construction plans one week prior to commencing work on the water system. (Revised 6/98)
9. 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.
10. Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
11. The Contractor shall adjust all manholes frames/valve boxes and meter boxes within the resurfaced area. Prior to resurfacing, BWS will initially locate all water manholes/valve boxes and meter boxes that will require adjustments. The Contractor shall then be responsible for "referencing" these manholes/valve boxes and meter 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 referenceing shall be incidental and shall not be paid directly. Any additional request to BWS to again locate the manholes/valve boxes and meter boxes shall be done at the expense of the Contractor. (BWS will charge and bill the Contractor for all cost said additional work.)
12. 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.
13. Two-way blue reflective hydrant markers Type DB shall be installed or re-installed at all new fire hydrant locations. Contractor shall verify the exact location of hydrant markers with the nearest Honolulu Fire Department Battalion Chief.
14. Maintain 3'-0" minimum cover for all existing waterlines (18" minimum for service laterals) from new finish grade. The Contractor shall probe the waterlines 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.

15. Maintain 3'-0" min. 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 BWS.
16. The Contractor shall have existing water mains toned before construction of work in 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.
17. For cut-in connection to existing:  
All waterline construction requiring shutdown connection shall be scheduled for normal working hours at six (6) hours maximum downtime.
18. All sections of the water main requiring reinforced concrete jacketing shall be ductile iron pipe Class 52 with ductile iron fittings or concrete cylinder pipe and fittings.

Additional Notes for PVC Pipes and Fittings:

19. All polyvinyl chloride (PVC) pipe deflections shall be accomplished only by the use of special PVC deflection couplings. Deflection around curves shall be accomplished only by the use of PVC deflection couplings.
20. The Contractor shall furnish and install plastic lateral (PE tubing, 3 ft. maximum) after meters for all service lateral connections.

Additional Water Notes for PVC Fittings CL-150 PVC Pipe Sizes 4"-8":

21. All PVC fittings shall conform to American Water Works Association (AWWA) C-907. Ductile iron fittings shall be used for all types of fittings not specified in AWWA C-907.
22. Reaction block requirements for PVC fittings shall be the same for ductile iron fittings.
23. The use of hub clamps and set screws on PVC fittings is not approved.
24. Prior to the PVC fitting installation, the Contractor shall submit for approval by the BWS, the manufacturer's certification that all PVC fittings conform to AWWA C-907.

Waterline Improvements:

25. Test pressure shall be 150 psi.
26. The Contractor shall chlorinate the entire inside surface of each pipe and fitting with disinfection solution of 5 ounces of sodium hypochlorite mixed with 10 gallons of water. (For connection only)
27. Prior to installation, the Contractor shall submit for approval by Board of Water Supply, the manufacturer's certification that all cast iron (gray or ductile) fittings for the project conform in all respects to the Water System Standards, dated 1985.

28. Polygon shape for mechanical joint glands as described in AWWA standard C111 shall be "straight-sided" or an approved equal on a job to job basis.
29. Contractor shall cut and plug all existing unused laterals at the main whether or not shown on the plans. 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.
30. The Contractor/Developer shall obtain a NPDES permit prior to chlorination and/or dewatering. A copy of the permit shall be submitted to the Board of Water Supply, Planning and Engineering Division, Construction Section.
31. Pipe cushion shall be of high resistivity material. The Contractor shall submit a soil certification that high resistant cushion material has a resistivity greater than 5,000 ohm-cm. Remainder of the backfill material shall be as specified in Volume 1 of the Water System Standards. Pipe cushion and backfill material shall contain no hazardous substances above regulatory action levels including but not limited to lead, asbestos, mercury, chromium, cadmium, zinc, strontium, and polychlorinated biphenyls (PCB). (Revised/Added 8/28/96)
32. All ductile iron pipe, fittings and valves shall be wrapped with two layers of 8 mil. Polyethylene wrap.
33. Cleaning shall be by the use of "pigs" introduced into the pipeline and run completely through all installed pipelines and all branch lines for fire hydrants. "Pigging" of service laterals is not required. Bare foam "pigs" shall be used to swab piping clean as each length of the pipeline is installed. Each "pig" shall consist of a cylindrical piece of polyurethane foam with a density of 3-7 pounds per cubic foot and a vinyl-coated nose. Outside diameter of the "pig" shall be equal to 1-1/4 to 1-1/2 times the inside diameter of the pipe being installed. The length of the "pig" shall be 1-1/2 to 2 times its diameter. Prior to use, the "pig" shall be submerged in a chlorine solution of 1 oz. of 5% chlorine bleach in 5 gallons of water. "Pigging" of the pipeline shall be considered incidental to the installation of the new pipeline. (Revised 3/19/97)
34. Ball corp and ball stop shall be used in lieu of a corporation stop and stopcock, respectively. (Added 7/21/97)
35. Install 4 mil thick, non-metallic, blue colored, 6 inches wide warning tape over centerline of the pipe and below the base course along the entire length of trench. Tape should be marked with "CAUTION WATER LINE BURIED BELOW".

Additional Notes for PVC Pipes and Fittings:

36. Polyvinyl chloride (PVC) pipes shall be class 150. All ductile iron valves and metallic fittings shall be wrapped with two layers of 8 mil polyethylene wrap. No bending of polyvinyl chloride pipes shall be permitted. The installation of PVC pipe, according to the plans and specifications as bid on by the Contractor, may require additional design work, additional fittings and special couplings shall be considered incidental to the unit price bid in the proposal for PVC pipe. Any additional design work shall be the responsibility of the Contractor. Copper toning wire (No. 8 ga) shall be installed along the centerline of the entire length of the pipeline at 2'-6" maximum from finish grade. (For corrosion rating of 2 to 5 only.)

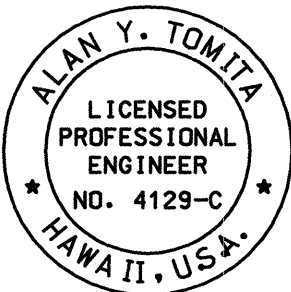
37. The Contractor shall follow the following revised chlorination and water sampling procedures:
- A. The following chlorination and water sample collection procedure shall apply to all water pipeline projects:
- Step 1: Chlorinate main by filling with water and introducing chlorine in sufficient quantity to obtain a minimum chlorine concentration of 50 parts per million. Leave chlorinated water in main overnight.
- Step 2: Flush main with fresh water until all chlorine has been flushed out as evidenced by the ortho-tolidine test, then collect a water sample while continuing to flush the main.
- Step 3: Repeat Steps 1 and 2. After collecting the second water sample, stop flushing and allow the water to stand in the main overnight.
- Step 4: Thoroughly flush the main with fresh water until all water that had been standing in the main overnight has been flushed out. Stop flushing and let the water stand in the main for one hour. Collect a water sample.
- B. The main is deemed acceptable and certified when (1) two consecutive water samples, collected 24 hours apart under steps 1 and 2, show no total and fecal coliform and less than 200 colony forming units (cfu) of total bacteria and (2) the sample of water held in the main for one hour, collected under step 4, also shows no total and fecal coliform and less than 200 cfu of total bacteria.
- C. Chlorination, flushing, sampling and testing will be extended should unsatisfactory results be encountered. Any sample that shows positive coliform presence or total bacteria greater than 200 cfu is unsatisfactory.
- D. Steps 1 and 2 may be repeated before collecting the one hour hold sample specified in Step 4. Repeating Steps 1 and 2 is recommended in the event samples show the presence of coliforms and/or increasing total bacterial results from one sample to the next.
- E. Water samples that show the presence of typical colonies, debris or results inconsistent with existing water are subject to reconfirmation. BWS reserves the right to request and test additional water samples in the interest of safeguarding public health and safety.

Approved:

*Catharine R. Dwyer*  
for Leader, Maintenance Unit, BWS DD

5/16/01

Date



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.

*Alan Y. Tomita*

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>GENERAL NOTES</b>	
MOKAPU SADDLE ROAD SLOPE STABILITY Vicinity of Mikiola Dr. to Kahinani Place Project No. 65B-01-01M	
Scale: None	Date: May, 2001
SHEET No. 2 OF 2 SHEETS	



WATER POLLUTION AND EROSION CONTROL NOTES:

A. GENERAL:

1. 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.
2. 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.
3. 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.
4. 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:

1. 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.

2. 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.

3. 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:

1. All control measures shall be inspected at least once each week and following any rainfall event of 0.5 inches or greater.
2. All measures shall be maintained in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.
3. Built-up sediment shall be removed from silt fence when it has reached one-third the height of the fence.
4. 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.
5. Temporary and permanent seeding and planting shall be inspected for bare spots, washouts and healthy growth.
6. A maintenance inspection report shall be made promptly after each inspection by the Contractor.
7. 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.
8. 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:

1. Materials Pollution Prevention Plan

a. 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	Fertilizers
Detergents	Petroleum Based Products
Paints (enamel and latex)	Cleaning Solvents
Metal Studs	Wood
Tar	Masonry Block

b. 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.

c. 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.

d. Products shall be kept in their original containers with the original manufacturer's label.

e. Substances shall not be mixed with one another unless recommended by the manufacturer.

f. Whenever possible, a product shall be used up completely before disposing of the container.

g. Manufacturer's recommendations for proper use and disposal shall be followed.

h. The Contractor shall conduct a daily inspection to ensure proper use and disposal of materials onsite.

2. Hazardous Material Pollution Prevention Plan

a. Products shall be kept in original containers unless they are not resealable.

b. Original labels and material safety data sheets (MSDS) shall be retained.

c. Surplus products shall be disposed of according to manufacturers' instructions or local and State recommended methods.

3. Onsite and Offsite Product Specific Plan

a. The following product specific practices shall be followed onsite:

1) 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.

2) 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.

3) 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.

4) 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.

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.

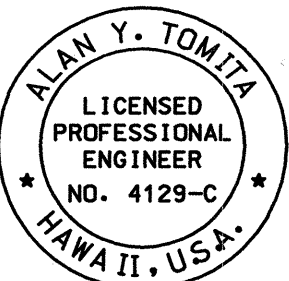
E. PERMIT REQUIREMENTS:

1. If a National Pollutant Discharge Elimination System (NPDES) Permit is required for Construction Activities of five acres or more, 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. If an NPDES Permit for Construction Dewatering is required, the Contractor shall be responsible to obtain the Permit from the Department of Health, Clean Water Branch.

3. 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
- b. NPDES Permit for Construction Dewatering
- c. NPDES Permit for Hydrotesting Waters
- d. Water Quality Certification
- e. Stream Channel Alteration Permit
- f. Section 404 Army Corps of Engineer Permit



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OR UNDER MY SUPERVISION.

Alan Y. Tomita

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
<b>WATER POLLUTION &amp; EROSION CONTROL NOTES</b>	
MOKAPU SADDLE ROAD SLOPE STABILITY Vicinity of Mikiola Dr. to Kahinani Place Project No. 65B-01-01M	
Scale: None	Date: May, 2001
SHEET No. 1 OF 1 SHEETS	