FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HI E-01-07M	2007	4	20

WATER POLLUTION AND EROSION CONTROL NOTES

A. GENERAL:

1. The Contractor is reminded of the requirements of Section 209 - Temporary Water Pollution, Dust, and Erosion Control. 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 measurements; and basis of payment.

2. The Contractor shall follow the guidelines in the "Best Management 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 Contractor shall follow the guidelines in the Honolulu's City & County "Rules for Soil Erosion Standards and Guidelines" for all projects on Oahu. Use applicable Soil Erosion Guidelines for projects on Maui, Molokai, Kauai, and Hawaii.

4. The Engineer may assess liquidated damages of up to $27,500 for noncompliance 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.

5. The Engineer will deduct the cost form 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.

6. For projects that require an NPDES Permit from the Department of Health, install a rain gage prior to any field work including the installation of any site-specific best management practices. The rain gage shall have a tolerance of at least 0.05 inches of rainfall, and have an opening of at least one-inch in diameter. Install the rain gage on the project site in an area that will not deter rainfall from entering the gage opening. The rain gage installation shall be stable and plumbed. Do not begin field work until the rain gage is installed and site-specific best management practices are in-place.

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 one 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 by 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. The bottom of the silt screen shall be inspected and verified that it is buried a minimum of 6 inches below the existing ground.

C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES (CONT.):

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 material 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 product shall be disposed of according to manufacturer's 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:
Fertilizer 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 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.

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.

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

DAVID K. FUJIWARA
LICENSED PROFESSIONAL ENGINEER
NO. 8104-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

David K. Fujiwara 4-30-08
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION AND EROSION CONTROL NOTES

Repair of Mauka Span of Mahiko Street Pedestrian Overpass
Project No. HI E-01-07M

Scale: None Date: Nov. 2006

SHEET No. G1.3 OF 3 SHEETS