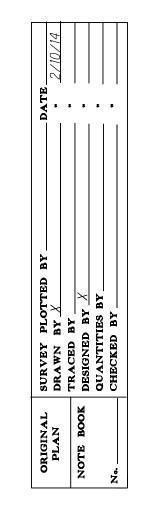
VV	ATER POLLUTION AND EROSION CONTROL
A.	GENERAL:
	See Special Provisions Section 209 - Water Pollution and E describes but is not limited to: submittal requirements; sch and erosion control conference with the Engineer; construct of measurement; and basis of payment. In addition, Appendi sources and corresponding BMPs used to mitigate the pollu
	Follow the guidelines in the current HDOT Construction Be Field Manual in developing, installing and maintaining the E (BMP) for the project. For any conflicting requirements bet applicable bid documents, the applicable bid documents will not be clearly described within the applicable bid documents the Engineer immediately for interpretation. For the purpos Note A.2, "applicable bid documents" include the construction specifications, Special Provisions, Permits, and the Storm V Plan (SWPPP) when applicable.
	Follow the guidelines in the Honolulu's City & County "Rule Standards and Guidelines" along with applicable Soil Erosic Maui, Molokai, Kauai, and Hawaii.
	The Engineer may assess liquidated damages of up to \$27 each BMP requirement and each requirement stated in Sect provisions, for every day of non-compliance. There is no ma assessed per day.
	The Engineer will deduct the cost from the progress paym by the Department for non-compliance, or the Contractor sh amount of the outstanding cost incurred by the State.
	If necessary, install a rain gage prior to any field work in site-specific best management practices. The rain gage sha inches of rainfall. Install the rain gage on the project sit rainfall from entering the gage opening. Do not install in may splash into rain gage. The rain gage installation shall begin field work until the rain gage is installed and site-sp are in-place.
	Submit Site-Specific BMP Plan to the Engineer along with Review Checklist within 30 calendar days of contract execu Checklist may be obtained from <u>http://www.stormwaterhawa</u>
B.	WASTE DISPOSAL:
	Waste Materials Collect and store all waste materials in a securely lidded r container with cover to keep rain out or loss of waste dur, shall meet all local and State solid waste management regu construction debris from the site in the dumpster. Empty th container is two-thirds full, whichever is sooner. Do not bu onsite. The Contractor's supervisory personnel shall be inst for waste disposal. Post notices stating these practices in bulletin board, or other accessible location acceptable to the responsible for seeing that these procedures are followed. Form for Construction Sites to the Engineer within 30 cale a copy of all the disposal receipts from the facility permitt receive solid waste to the Engineer monthly. This should al



FED. ROAD DIST. NO. STATE PRO	DJ. NO. FISCAL SHEET TOTAL YEAR NO. SHEETS
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Erosion Control. Section 209 heduling of a water pollution ction requirements; method *Tix A lists potential pollutant* utants.

est Management Practices Best Management Practices tween the Manual and govern. Should a requirement ts, the Contractor shall notify ses of clarification under on plans, standard Water Pollution Prevention

es Relating to Soil Erosion ion Guidelines for projects on

7,500 for non-compliance of ction 209 and special aximum limit on the amount

ment for all citations received hall reimburse the State for the full

including the installation of any all have a tolerance of at least 0.05 te in an area that will not deter a location where rain water I be stable and plumbed. Do not specific best management practices

a completed Site-Specific BMP ution. The Site-Specific BMP Review <u>aii.com</u>.

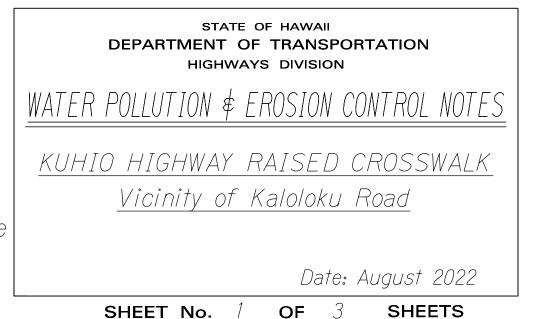
metal dumpster or roll off ring windy conditions. The dumpster ulations. Deposit all trash and the dumpster weekly or when the ary construction waste materials tructed regarding the correct procedure the office trailer, on a weatherproof ne Engineer. The Contractor shall be Submit the Solid Waste Disclosure endar days of contract execution. Provide ted by the Department of Health to Iso include documentation from any essed.

ified by local or State regulations and be instructed in these practices and llowed.

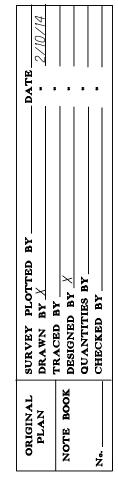
3. Sanitary Waste Collect all sanitary waste from the portable units a minimum of once per week, or as required. Position sanitary facilities where they are secure and will not be tipped over or knocked down.

C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

- 1. For projects with an NPDES Permit for Construction Activities, inspect at the following intervals. For construction areas discharging to nutrient or sediment impaired waters, inspect all control measures at least once each week and within 24 hours of any rainfall event of 0.25 inches or greater within a 24 hour period. For construction areas discharging to waters not impaired for nutrient or sediments, inspect all control measures weekly. Inspections are only required during the project's normal working hours. The discharge point water classification may be found in the SWPPP.
- 2. For projects without an NPDES Permit for Construction Activities, inspect all control measures weekly.
- 3. Maintain all erosion and sediment control measures in good working order. If repair is necessary, initiate repair immediately and complete by the close of the next work day if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance. When installation of a new erosion or sediment control or a significant repair is needed, install the new or modified control or complete the repair no later than 7 calendar days from the time of discovery. "Immediately" means the Contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day.
- 4. Remove built-up sediment from silt fence when it has reached one-third the height of the fence. Remove sediment from other perimeter sediment control devices when it has reached one-half the height of the device.
- 5. Inspect silt screen or fence 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. Inspect and verify the bottom of the silt screen is buried a minimum of 6 inches below the existing ground.
- 6. Inspect temporary and permanent seeding and planting for bare spots, washouts and healthy growth.
- 7. Complete and submit to the Engineer a maintenance inspection report within 24 hours after each inspection.
- 8. Provide a stabilized construction entrance at all points of exit onto paved roads to reduce vehicle tracking of sediments. Include stabilized construction entrance in the Water Pollution, Dust, and Erosion Control submittals. Minimum length should be 50 feet. Minimum width should be 30 feet. Minimum depth should be 12 inches or as recommended by the soils engineer and underlain with geo-textile fabric. If minimum dimensions cannot be met, provide other stabilization techniques that remove sediment prior to exit. Clean the paved street adjacent to the site entrance daily or as required to remove any excess mud, cold-planed materials, dirt or rock tracked from the site. Do not hose down the street without containing or vacuuming wash water. Cover dump trucks hauling material from the construction site with a tarpaulin. Remove sediment tracked onto the street, sidewalk, or other paved area by the end of the day in which the track-out occurs.
- 9. Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.
- 10. Submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- 11. 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.



WAT	TER POLLUTION AND E	ROSION CONTROL NO
	12. Contain, remove, and dispose accordance with approved B system or State waters.	e slurry generated from saw o MP practices. Do not allow di
	where earth-disturbing activ activities have permanently of construction site that will no disturbing activities have ten any area of the site that wi land will be idle) for a perior resume in the future. For co nutrients sediments, complete temporary or permanent cess discharging into nutrient or within 7 calendar days after	S Permit for Construction Act as upon completion of earth-divities have permanently or tem ceased when clearing and exc of include permanent structur mporarily ceased when clearing of 14 or more calendar day onstruction areas discharging e initial stabilization within 14 sation of earth-disturbing act sediment impaired waters, co r the temporary or permanent water at the discharge point i
	14. For projects without an NPL stabilization within 14 calence earth-disturbing activities.	DES Permit for Construction dar days after the temporary
	D. GOOD HOUSEKEEPING BEST	MANAGEMENT PRACTICES:
		n Plan Distances listed below are expe materials and substances not
	Concrete Detergents Paints (enamel and latex) Metal Studs Tar Fertilizers Petroleum Based Products	Cleaning Solvents Wood Masonry Block Herbicides and Pest Curing Compounds Adhesives
	exposure of materials and only enough product as is c. Store all materials stored containers and if possible d. Keep products in their orig e. Do not mix substances with f. Whenever possible, use a p	onsite in a neat, orderly mann under a roof or other enclosu ginal containers with the orig h one another unless recomme roduct up completely before d ommendations for proper use
	b. Retain original labels and Sheets (MSDS).	Prevention Plan containers unless they are not Safety Data Sheets (SDS), for ts according to manufacturers
	3. Onsite and Offsite Product S	Specific Plan c practices shall be followed
	reduce the chance of leaka	: for leaks and perform regular ge. Store petroleum products sphalt substances used onsite



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NOTES (Cont.):		FED. ROAD DIST. NO. STAT	PROJ. NO.	YEAR	NO.	TOTAL SHEETS
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aw cutting of pavement in						<u>ا</u> ـــــــــــ

ischarge into the drainage

tivities, immediately initiate isturbing activities for areas mporarily ceased. Earth-disturbing cavation within any area of the res has been completed. Earthing, grading, and excavation within ictures will not resume (i.e., the avs. but such activities will into waters not impaired for 14 calendar days after the tivities. For construction areas complete initial stabilization cessation of earth-disturbing may be found in the SWPPP.

Activities, complete initial or permanent cessation of

pected to be present onsite listed below shall be added

ticides

of spills or other accidental unoff. Make an effort to store

ner in their appropriate ure. ginal manufacturer's label. ended by the manufacturer.

disposing of the container. and disposal.

sposal of materials onsite.

ot resealable. prmerly Material Safety Data

rs' instructions and local and

onsite:

ar preventive maintenance to in tightly sealed containers which e according to the manufacturer's

b. Fertilizers:

Apply fertilizers used only in the minimum amounts recommended by the manufacturer and federal, state, and local requirements. Avoid applying just before a heavy rain event. Apply at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth. Once applied, work fertilizer into the soil to limit exposure to storm water. Do not apply to storm conveyance channels with flowing water. Storage shall be in a covered shed or in an area where fertilizer will not come into contact with precipitation or stormwater. Transfer the contents of any partially used bags of fertilizer to a sealable plastic bin to avoid spills.

c. Paints:

Seal and store all containers when not required for use. Do not discharge excess paint to the drainage system, sanitary sewer system, or State waters. Dispose properly according to manufacturers' instructions and State and local regulations.

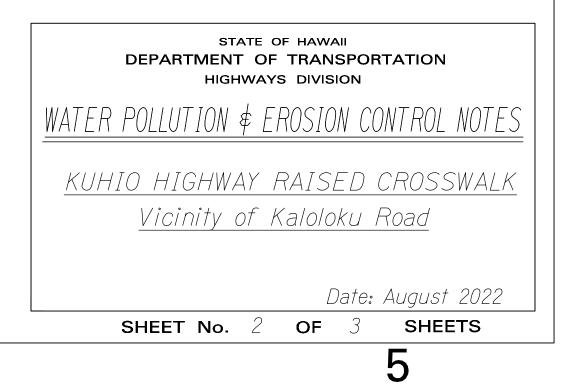
d. Concrete Trucks:

Washout or discharge concrete truck drum wash water only at a designated site as far as practicable from storm drain inlets or State waters. Do not discharge water in the drainage system or State waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the Engineer.

4. Spill Control Plan

a. Post a spill prevention plan to include measures to prevent and clean up each spill. b. The Contractor shall be the spill prevention and cleanup coordinator. 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. Post the names of responsible spill personnel in the material storage area on a weatherproof bulletin board or other accessible location acceptable to the Engineer and in the office trailer onsite.

- c. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.
- d. Keep ample materials and equipment necessary for spill cleanup in the material storage area onsite.
- e. Clean up all spills immediately after discovery.
- f. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- g. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, the Contractor shall notify the Engineer as soon as the Contractor has knowledge of the discharge. The Engineer will notify the National Response Center (NRC) at (800) 424-8802, the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital Operator at 247-2191 and the Clean Water Branch (DOH-CWB) via email at cleanwaterbranch@doh.hawaii.gov during non-business hours immediately. The Contractor shall also provide to the Engineer, within 7 calendar days of knowledge of the release, a description of the release, the circumstances leading to the release, and the date of the release. The Engineer will provide this information to the DOH-CWB. The Engineer will provide information to the NRC if requested.



ſ	WATER POLLUTION AND EROSION CONTROL NOT
	E. PERMIT REQUIREMENTS:
	1. A National Pollutant Discharge Elimination System (NPDES) Activities of one acre or more of disturbed area is required Contractor requires extra land disturbance, including stagin not covered by the NPDES Permit obtained by the State, the responsible for obtaining the required NPDES Construction this additional disturbed area. See Hawaii Administrative Re Appendix C for definition of land disturbance. The Contract to the applicable NPDES Permit documents on the bid packa
	a. Deadlines for initiating and completing initial stabilization b. Increased inspection frequency and installation of rain g c. Deadlines to initiate and complete repairs to BMPs d. Reporting requirements and corrective action reports
	2. Comply with all applicable State and Federal Permit conditi

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ORIGINAL PLAN	NOTE BOOK	Nº.

EROSION CONTROL NOTES (Cont.):		FED. ROAD DIST. NO. STATE PRO	J. NO. FISC. YEA		TOTAL SHEET
	F. SITE-SPECIFIC BMP REQUIREMENTS:	HAWAII HAW.	202	23 6	12
rge Elimination System (NPDES) Permit for Construction re of disturbed area is required for this project. If the and disturbance, including staging and storage areas, that is Permit obtained by the State, the Contractor shall be e required NPDES Construction Activities Permit to cover ea. See Hawaii Administrative Rules Chapter 11-55, f land disturbance. The Contractor's attention is directed rmit documents on the bid package compact disc. nd completing initial stabilization euency and installation of rain gage if applicable complete repairs to BMPs nd corrective action reports	Each BMP below is referenced to the corresponding section of the current HDOT Constru- Practices Field Manual and appropriate Supplemental Sheets. The Manual may be obtained Statewide Stormwater Management Program Website at <u>http://www.stormwaterhawaii.com/r</u> <u>and-consultants</u> under Construction Best Management Practices Field Manual. Supplemental <u>http://stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-p</u> under Concrete Curing and Irrigation Water. The requirements for Water Pollution, Dust, and Erosion Control submittals are included in the Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and app Provisions. A list of pollutant sources and corresponding BMP used to mitigate the polluta in Section 209 of the Special Provisions under Appendix A. Follow the requirements below:	from the HDOT <u>esources/contracto</u> BMP sheets are lo prevention-plan-swpp n Section 209 of plicable Special	r <u>s-</u> ocated at		
tate and Federal Permit conditions.	1. Protect all Drainage Inlets receiving runoff from disturbed areas (SC-2).				
	 2. Contain on-site runoff using Perimeter Sediment Controls a. SC-1 Silt Fence b. SC-5 Vegetated Filter Strips and Buffers c. SC-8 Compost Filter Berm d. SC-13 Sandbag Barrier e. SC-14 Brush or Rock Filter 3. Control offsite runoff from entering construction area a. EC-8 Run-On Diversion b. SC-6 Earth Dike c. SC-7 Temporary Drains and Swales 				
	 4. Incorporate applicable Site Management BMP a. SM-1 Employee Training b. SM-2 Material Delivery and Storage c. SM-3 Material Use d. SM-4 Protection of Stockpiles e. SM-6 Solid Waste Management f. SM-7 Sanitary/Septic Waste Management g. SM-9 Hazardous Waste Management h. SM-10 Spill Prevention and Control i. SM-11 Vehicle and Equipment Cleaning j. SM-12 Vehicle and Equipment Refueling l. SM-14 Scheduling m. SM-15 Location of Potential Sources of Sediment n. SM-16 Preservation of Existing Vegetation o. SM-18 Dust Control 				
	5. Contain pollutants within the Construction Staging/Storage Area BMP with applicable Perimeter Sediment Controls and Site Management BMP. Include a Stabilized Construct. Entrance/Exit (EC-2) for all areas which exit onto a paved street. Restrict vehicle acc to these points.				
	6. Manage Concrete Waste including installing a Concrete Washout Area (SM-5) and proper disposing of Concrete Curing Water (California Stormwater BMP Handbook NS-12 Concre				
	7. Remove saw cut slurry and hydrodemolition water from the site by vacuuming. Provide storm drain protection and/or perimeter sediment controls during saw cutting and hydrodemolition work.				
		DEPARTMENT	TE OF HAWAII OF TRANSPO VAYS DIVISION	RTATION	
		WATER POLLUTION &		ANTRAL N	INTES

Kuhio Highway Raised Crosswalk Vicnity of Kaloloku Road

> Date: August 2022 SHEET No. 3 OF 3 SHEETS

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