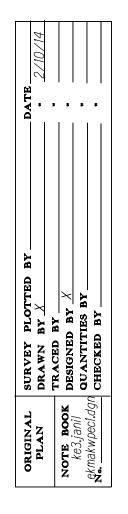
V	VATER POLLUTION AND EROSION CONTROL
	GENERAL: See Special Provisions Section 209 - Water Pollution and E describes but is not limited to: submittal requirements; sch and erosion control conference with the Engineer; construct of measurement; and basis of payment. In addition, Append sources and corresponding BMPs used to mitigate the poll
2.	Follow the guidelines in the current HDOT Construction B Field Manual in developing, installing and maintaining the u (BMP) for the project. For any conflicting requirements be 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 Plan (SWPPP) when applicable.
3.	Follow the guidelines in the Honolulu's City & County "Rule Standards and Guidelines" along with applicable Soil Erosi Maui, Molokai, Kauai, and Hawaii.
4.	The Engineer may assess liquidated damages of up to \$2 each BMP requirement and each requirement stated in Sec provisions, for every day of non-compliance. There is no ma assessed per day.
5.	The Engineer will deduct the cost from the progress payn by the Department for non-compliance, or the Contractor sh amount of the outstanding cost incurred by the State.
6.	If necessary, install a rain gage prior to any field work is site-specific best management practices. The rain gage sha inches of rainfall. Install the rain gage on the project si rainfall from entering the gage opening. Do not install in may splash into rain gage. The rain gage installation sha begin field work until the rain gage is installed and site-s are in-place.
7.	Submit Site-Specific BMP Plan to the Engineer along with Review Checklist within 30 calendar days of contract exec Checklist may be obtained from <u>http://www.stormwaterhaw</u>
	WASTE DISPOSAL: Waste Materials Collect and store all waste materials in a securely lidded 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 is container is two-thirds full, whichever is sooner. Do not bu onsite. The Contractor's supervisory personnel shall be ins 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 cal a copy of all the disposal receipts from the facility permit receive solid waste to the Engineer monthly. This should a intermediary facility where solid waste is handled or proce
2.	Hazardous Waste Dispose all hazardous waste materials in the manner spec by the manufacturer. The Contractor's site personnel shall shall be responsible for seeing that these practices are fo



DL NOTES:		FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		HAWAII	HAW.	STP-0700(086)	2021	4	17
nd Erosion Control. Section 209 scheduling of a water pollution truction requirements; method endix A lists potential pollutant pollutants.	3. Sanitary Waste Collect all sanitary waste from the portable units a minimum of once per week, or as r Position sanitary facilities where they are secure and will not be tipped over or knocke C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:	1					
n Best Management Practices ne Best Management Practices between the Manual and will govern. Should a requirement	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 a rainfall event of 0.25 inches or greater within a 24 hour period. For construction area	iny					

nts, the Contractor shall notify oses of clarification under ion plans, standard Water Pollution Prevention

les Relating to Soil Erosion ion Guidelines for projects on

27,500 for non-compliance of ection 209 and special naximum limit on the amount

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

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

a completed Site-Specific BMP cution. The Site-Specific BMP Review vaii.com.

metal dumpster or roll off ring windy conditions. The dumpster nulations. Deposit all trash and the dumpster weekly or when the ury construction waste materials structed regarding the correct procedure the office trailer, on a weatherproof he Engineer. The Contractor shall be Submit the Solid Waste Disclosure lendar days of contract execution. Provide tted by the Department of Health to also include documentation from any cessed.

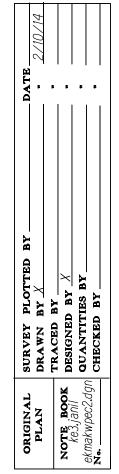
cified by local or State regulations and be instructed in these practices and ollowed.

- 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 Federal-Aid Project No. STP-0700(086) practices necessary for keeping the erosion and sediment controls used onsite in good working order.

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION WATER POLLUTION & EROSION CONTROL NOTES GUARDRAIL ∉ SHOULDER IMPROVEMENTS AT VARIOUS LOCATIONS, PART 6 Date: May 2021 **OF** 3 SHEETS SHEET No. 1

4

WA	TER POLLUTION A	ND EROSIC	DN CONTROL NOT
	12. Contain, remove, and c accordance with appro system or State water	oved BMP prac	
	13. For projects with an stabilizing exposed so where earth-disturbing activities have perman construction site that disturbing activities h any area of the site t land will be idle) for resume in the future. nutrients sediments, c temporary or permanen discharging into nutri within 7 calendar days activities. Classificatio	nil areas upon g activities have pently ceased w will not incluc hat will not in For construct omplete initial nt cessation of ent or sediments s after the ter	completion of earth-diver permanently or tem when clearing and exce the permanent structur or more calendar day ion areas discharging stabilization within 14 f earth-disturbing act of impaired waters, co of permanent
	14. For projects without stabilization within 14 earth-disturbing activi	calendar days	
	D. GOOD HOUSEKEEPING	BEST MANAG	GEMENT PRACTICES:
	1. Materials Pollution Pre a. Applicable materials during construction. to the inventory.	or substances	listed below are expe s and substances not
	Concrete Detergents Paints (enamel and la Metal Studs Tar Fertilizers Petroleum Based Pro		Cleaning Solvents Wood Masonry Block Herbicides and Pest Curing Compounds Adhesives
	only enough product c. Store all materials s	s and substand as is required stored onsite in ssible under a eir original con es with one ar se a product L 's recommenda	ces to storm water ru to do the job. n a neat, orderly mani roof or other enclosu ntainers with the orig nother unless recomme up completely before d tions for proper use
	2. Hazardous Material Po a. Keep products in ori b. Retain original labels Sheets (MSDS). c. Dispose of surplus p State regulations.	ginal container s and Safety L	rs unless they are noi Data Sheets (SDS), foi
	3. Onsite and Offsite Pro The following product of		
	reduce the chance of	nicles for leaks Fleakage. Store	s and perform regula e petroleum products ubstances used onsite



					FIGGAL	SHEET	
DTES (Cont.):		FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	NO.	TOTA SHEE
cutting of pavement in discharge into the drainage	b. Fertilizers: Apply fertilizers used only in the minimum amounts recommended by the manufacture	Hawaii er and	HAW.	STP-0700(086)	2021	5	17
Activities, immediately initiate -disturbing activities for areas emporarily ceased. Earth-disturbing xcavation within any area of the fures has been completed. Earth- ring, grading, and excavation within ructures will not resume (i.e., the days, but such activities will	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 coinci 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 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 b to avoid spills.	ide 1 or in					
ing into waters not impaired for 14 calendar days after the activities. For construction areas complete initial stabilization ent cessation of earth-disturbing	c. Paints: Seal and store all containers when not required for use. Do not discharge excess pa to the drainage system, sanitary sewer system, or State waters. Dispose properly acc to manufacturers' instructions and State and local regulations.						
t may be found in the SWPPP.	d. Concrete Trucks:						
on Activities, complete initial ry or permanent cessation of	Washout or discharge concrete truck drum wash water only at a designated site as practicable from storm drain inlets or State waters. Do not discharge water in the system or State waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the Engineer.	drainage					

pected to be present onsite listed below shall be added

ticides

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

nner in their appropriate sure. ginal manufacturer's label. nended by the manufacturer.

disposing of the container. and disposal.

sposal of materials onsite.

ot resealable. prmerly Material Safety Data

rs' instructions and local and

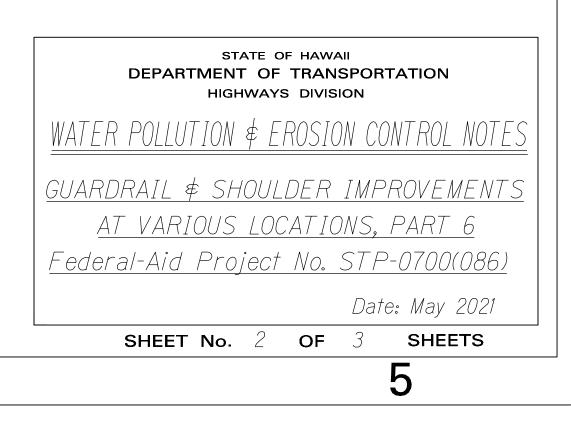
onsite:

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

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 <u>cleanwaterbranch@doh.hawaii.gov</u> 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.



_						
	WAT	ER POLL	ITION AN	d erosic	DN CONTRO	DL NOT
	E	. PERMIT RI	Equirement	-S:		
	1.	plans is 0.4 of the distu the Contract SWPPP tem definition of required NF	7 acres not i rbed area ar for shall obta plate. See Ha f land distur	including Con nd the Contra ain the NPDE waii Adminis bance. The C uction Activity	for this proj ntractor Staging S Constructio strative Rules Contractor shau ies Permit and to:	ng and S and Stor n Activit, Chapter I be res,
		b. Increased c. Deadlines	ו inspection ו to initiate a	requency and nd complete	eting initial st d installation repairs to BM ctive action re,	of rain g 'Ps
	2	Comply with	all applicab	le State and	Federal Perm	nit condit

OTES (Cont.):		FED. ROAD DIST. NO.	STATE FED. AID PROJ. NO.	FISCAL SHEE YEAR NO	
OTL O (COTT.)		HAWAII	нам. STP-0700(08		
ased on the construction d Storage areas. If the total Storage area is one acre or greater, ivities Permit using HDOT's latest ter 11-55, Appendix C for the responsible for obtaining the plying with the requirements of ation in gage if applicable	F. SITE-SPECIFIC BMP REQUIREMENTS: Each BMP below is referenced to the corresponding section of the current HDO Practices Field Manual and appropriate Supplemental Sheets. The Manual may be Statewide Stormwater Management Program Website at <u>http://www.stormwaterha</u> <u>and-consultants</u> under Construction Best Management Practices Field Manual. Su at <u>http://stormwaterhawaii.com/resources/contractors-and-consultants/storm-wat</u> under Concrete Curing and Irrigation Water. The requirements for Water Pollution, Dust, and Erosion Control submittals are the Hawaii Standard Specifications for Road and Bridge Construction dated 200 Provisions. A list of pollutant sources and corresponding BMP used to mitigate in Section 209 of the Special Provisions under Appendix A.	e obtained from th <u>waii.com/resource</u> pplemental BMP s ter-pollutionpreven included in Section 5 and applicable	he HDOT <u>es/contractors-</u> sheets are located <u>ntion-plan-swppp/</u> on 209 of Special		
	Follow the requirements below:				
	1. Protect all Drainage Inlets receiving runoff from disturbed areas (SC-2).				
nditions.	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-13 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 ap Perimeter Sediment Controls and Site Management BMP. Include a Stabilized Entrance/Exit (EC-2) for all areas which exit onto a paved street. Restrict v to these points.	Construction			
	6. Manage Concrete Waste including installing a Concrete Washout Area (SM-5) a disposing of Concrete Curing Water (California Stormwater BMP Handbook NS [.]		ng).		
	7. Remove saw cut slurry and hydrodemolition water from the site by vacuuming. storm drain protection and/or perimeter sediment controls during saw cutting hydrodemolition work.				
		<u>GUAR</u>	SHEET No. 3	ANSPORTATION DIVISION SION CONTROL ER IMPROVE TIONS, PART	<u>NOTES</u> <u>MENTS</u> <u>6</u> (086) 2021
				6	