# ***Storm Water Pollution Prevention Plan (SWPPP)***

**Notice of General Permit Coverage (NGPC) File No. HNY-BHQV-TGVPR**
**Preparation Date May 2020**

## *Table of Contents*

## *7.0 Preface*

*The following documents are referenced throughout the SWPPP:*

1) *Hawaii Administrative Rules, Chapter 11-55*

2) *HDOT Construction Best Management Practices Field Manual*

3) *Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and applicable special provisions.*

4) *An Integrated Storm Water Management Approach and a Summary of Clear Water Diversion and Isolation Best Management Practices for Use in the State of Hawaii, by the Department of Transportation and Federal Highway Administration, Practitioners Guide (Practitioners Guide), April 2016 (Version 1, Draft)*

### *7.0.1 Notes for Contractor/HDOT Construction Personnel*

- *Items in red need to be updated by the Contractor once the project is awarded prior to construction. The Contractor shall be responsible for updating the SWPPP during construction.*

*Contractor Staging/Storage Areas*

- *HDOT has permitted all outfalls and disturbed potential Contractor Staging/Storage Areas within the project limits as identified in the project's Notice of Intent or NPDES Permit Application.*
- *The Contractor may use any disturbed area acceptable to the Engineer for Staging/Storage.*
- *Staging/Storage Areas outside disturbed areas or outside the project limits may require a new NPDES submittal. See permitting requirements in Section 209 of the Specifications and applicable Special Provisions.*

*Outfalls 1, 2, 3, and 4 discharge to nutrient or sediment impaired waters (West Mākaha Stream and Mākaha Stream). The following applies to construction areas discharging to these outfalls:*

1) *Construction BMPs shall be inspected weekly, and within 24 hours of any rainfall event of 0.25 inches or greater in a 24 hour period and daily during periods of prolonged rainfall. For more details see section 7.2.12 of this SWPPP.*
2) *Immediately initiate and complete stabilization within 7 calendar days on areas of the site in which earth-disturbing activities have temporarily or permanently ceased. For more details see section 7.2.10.2 of the SWPPP.*

## *7.2.1 Storm Water Team*

*The permittee shall assemble and oversee a "storm water team," which is responsible for the development of the SWPPP, any later modifications to it, and for compliance with the requirements in the Notice of General Permit Coverage (NGPC) or Individual NPDES permit. The SWPPP must identify the personnel (by name or position) that are part of the storm water team, as well as their individual responsibilities. Each member of the storm water team must have ready access to an electronic or paper copy of applicable portions of this permit, the most updated copy of the SWPPP, and other relevant documents or information that must be kept with the SWPPP.*

*The Contractor shall include their personnel information once the project is awarded.*

*1) Name: Henry Kennedy*

*Company: Department of Transportation, Highways Division*

*Position: HDOT Project Manager*

*Contact Number: (808) 692-7550*

*Responsibilities: Develop SWPPP during the design process and Authorized Representative*

*2) Name: Sergio George G. Abcede*
*Company: Department of Transportation, Highways Division*
*Position: HDOT Oahu District Engineer*
*Contact Number: (808) 831-6700 Ext. 126*
*Responsibilities: Oversee SWPPP during construction process*

*3) Name:*
*Company: Department of Transportation, Highways Division*
*Position: HDOT Construction Project Engineer*
*Contact Number: (808)xxx-xxxx*
*Responsibilities:*

*4) Name:*
*Company: Department of Transportation, Highways Division*
*Position: HDOT Construction Project Engineer*
*Contact Number: (808)xxx-xxxx*
*Responsibilities:*

*5) Name:*
*Company: Contractor*
*Position: Contractor Designated Representative*
*Contact Number: (808)xxx-xxxx*
*Responsibilities:*

*6) Name:*
*Company: Contractor*
*Position: Contractor*
*Contact Number: (808)xxx-xxxx*
*Responsibilities:*

*7) Name:* _____

*Company: Contractor* _____

*Position: Contractor* _____

*Contact Number: (808)xxx-xxxx* _____

*Responsibilities:* _____

*8) Name:* _____

*Company: Contractor* _____

*Position: Contractor* _____

*Contact Number: (808)xxx-xxxx* _____

*Responsibilities:* _____

## *7.2.2 Nature of Construction Activities Form C.6*

*What is the function of the construction activity (Please check all applicable activity(ies))?*
*☐ Residential ☐ Commercial ☐ Industrial ☒ Road Construction ☒ Linear Utility*
*☐ Other (please specify):* _____

*For construction site estimates, see NOI Form C, Section C.3.*

*What is being constructed? The HDOT, proposes to replace two existing wooden bridges along Farrington Highway, Route 93, between milepost markers number 13.95 and number 14.21 in Mākaha on the Wai'anae Coast of O'ahu. Farrington Highway is a two lane principal arterial with 11-foot lanes and 3-foot paved shoulders. Constructed in 1937, Mākaha Bridges No. 3 and 3A currently support two 11-foot lanes with a 2-foot shoulder on the makai side of the bridge and a 1-foot shoulder on the mauka side. Both bridges have been classified by HDOT as deficient and require replacement. Additionally, in 2006, Bridge No.3 sustained damage from a fire and necessitated emergency repairs and reinforcement of damaged portions. The replacement bridges will be designed to meet or exceed current State and Federal design standards.*

*The travelway along the new bridges will be 12 feet wide in each direction with 10 feet wide shoulders to accommodate pedestrians and bicyclists. The proposed project will require: construction of an approximately 1,200 foot long detour road; demolition of the existing wooden bridge structures; construction of temporary bridges; construction of the new bridges, channel slope protection and bridge appurtenances; relocation of utilities; restoration of the site; and, demobilization of construction equipment and materials.*

*The roadways that will be affected include the segment of Farrington Highway approaching the two bridges, the portion of the highway that adjoins the two bridges, and an approximately 150 foot long segment of Kili Drive that intersects Farrington Highway. The total area involved will be approximately 3.8 acres.*

*In order to meet current roadway design requirements, the proposed project will require the acquisition of additional areas on both the mauka and makai sides of the highway, extending beyond the current right-of-way to accommodate the increased bridge spans and structures necessary for embankment protection, channel widening and guardrail improvements.*

*Upon completion of construction, the proposed new bridges will provide modern structures that provide wider travelways with adequate shoulder areas, improved bridge railings, guardrails and end treatments that meet the requirements of American Association of State Highway and Transportation Officials (AASHTO), Federal Highway Administration (FHWA), and HDOT. In addition to eliminating increased maintenance costs associated with the existing wooden timber bridges the structures will provide sufficient flow capacity to accommodate the 100-year flood event without overtopping or negatively impacting upstream properties.*

*Describe the scope of work and major construction activities covered in this NOI, including baseyards and staging areas. Include only project areas where the locations of impervious structures are known; project areas where the final grades are known; and work areas that will be performed by one (1) general contractor. A separate NOI will be required for all other project areas. (Note: Per Section 209 of the specifications and applicable special provisions, the maximum surface area of earth material which may be exposed at any time is 300,000 square feet.)*

*The replacement of the Bridges No. 3 and 3A and maintenance work will be completed through phased construction and demolition. Construction methods include constructing a temporary by-pass road using asphalt or other HDOT approved material; constructing a temporary bridge structure using pre-fabricated bridge structural elements; relocating utilities and bus stops to the temporary road; demolishing the existing bridges and structures; constructing replacement bridges with pre-cast or cast-in-place concrete for the bridge abutments, wing walls and main structure; and installing deck planting and performing concrete surfacing. Concrete will be used to protect the foundations of the bridge abutments and piers. Rip rap will be used upstream to protect from scour and erosion. Reinforced concrete will be used to reconstruct the existing concrete apron at Bridge No. 3. To accommodate the larger openings for the bridge structures, areas around the bridges will be excavated. After construction of the new bridges is complete and traffic is rerouted, the temporary road and bridge structures will be demolished and*

*properly removed. The replacement bridges will have travelway widths of 12 feet in each direction and 10-foot wide shoulders to accommodate pedestrians and bicyclists. Structural controls such as silt fences, berms, filter mats or other similar controls shall be placed around the cleared surfaces and staging areas to prevent sediment in storm water runoff from leaving the sites. The proposed project phasing is outlined below:*

*Pre-Demolition Phase*
*Erosion and sediment control measures will be installed during this phase. Activities will involve construction of a by-pass road and temporary bridge and culvert structures to route traffic from the north and south approach ends of Farrington Highway around the work area. The by-pass road will accommodate a tie-in or connector with Kili Drive where it would normally intersect with Farrington Highway, between the two bridges. The by-pass road and connector with Kili Drive will be located on the seaward edge of the Farrington Highway ROW, roughly adjacent to the existing bridges.*

*In addition to routing traffic onto the by-pass road, the relocation of utilities and existing bus stops outside of the work area will be necessary. Two bus stops located on the mauka and makai sides of Farrington Highway will be temporarily relocated.*

*Affected utilities located within the Farrington Highway ROW to be relocated include:*

- *An existing 8-inch water line presently attached to the existing bridges;*
- *Utility poles providing communications, power and highway lighting;*
- *Manholes, pullboxes and ductlines serving telecommunications functions;*
- *Drainage culverts and swales; and*
- *All other affected water laterals.*

*The temporary relocated underground utilities (i.e. water line, fiber-optic cable, etc.) will be attached to the temporary bridge spanning West Mākaha Stream (Bridge No. 3A site) and therefore will not impact the nearby wetland. The temporary relocated underground utilities will be installed under the streambed crossing Mākaha Stream (Bridge No. 3 site). After construction, all relocated utilities will be restored and attached to the new bridges, and the temporary lines dismantled and removed.*

*Construction Phase 1*
*Additional erosion and sediment control measures will be installed during this phase. The existing bridges and related appurtenant structures will then be demolished and construction of replacement Bridge No. 3A and the mauka half of Bridge No. 3 will commence. Additionally, the approach ends connecting the new bridges to Farrington Highway will be constructed. Drilled*

*shafts will be used to support the abutment foundations of both bridges and the center pier foundation for Bridge No. 3.*

*Other accessory structural elements will be constructed using either pre-cast or cast in place for the bridge abutments, wing walls, and main bridge structures. Concrete will be used to protect the foundations of the bridge abutments and piers to resist scour. Reinforced concrete will be used to reconstruct the existing concrete apron and center pier at Bridge No. 3.*

*This phase will continue with construction of embankments and resurfacing of the remaining areas to tie in the new bridges with Farrington Highway and Kili Drive. Installation of guardrails and end treatments, reflector markers, and pavement markers and striping will then be done. Once this is completed, traffic from the temporary by-pass road will be rerouted back to Farrington Highway and the temporary by-pass road and bridge will be demolished and removed.*

*Construction Phase 2*
*Phase 2 of the project will involve completing all remaining work necessary to integrate the new bridges with the existing Farrington Highway. The makai half of Bridge No. 3 will be constructed. Other work will involve the excavation of the remaining ROW on the makai side of the bridges in order to accommodate the larger openings of the bridge structures.*

*Work in this phase will also involve excavation activities mauka of Bridge No. 3 for the Mākaha Stream realignment. Construction of channel slope (stream bank) protection approximately 150 feet upstream of Bridge No. 3 using rip-rap or similar treatment will be necessary to protect the widened stream channel and the new bridge from scour and erosion from storm flows.*

*Demobilization, Site Restoration and Clean-up Phase*
*Upon completion of work and site inspection by the HDOT the contractor will clean-up the site and remove all construction equipment, temporary structures (e.g., barriers and signage), and personnel from the job site. Any materials that cannot be further reused or recycled will be properly disposed of at an appropriate refuse facility (PVT Landfill in Nānākuli)*

*Items and facilities within the project area that have been removed or displaced for construction purposes will be repaired and/or replaced by the contractor. These items will include rock or tile walls, fencing, vegetation, and ground surfaces. Residential driveways affected by construction will also be restored.*

*There is an existing hyper-saline pond (muliwai) at the Bridge 3A location. The adjacent banks along the length of the muliwai comprises mainly of Pickleweed (Batis maritima). Further upstream the pickleweed intermixes with buffelgrass and Guinea grass. To prevent negative impacts to the salt-marsh wetland, the portion closest to the Bridge No. 3A work area may be sectioned off using sheet piling or other appropriate measures to isolate the work area and prevent construction activities from directly impacting the muliwai. All disturbed areas will be stabilized prior to removal of sheet piling (or similar) erosion control measures.*

*On-site staging areas will be used as designated areas where vehicles, supplies and construction equipment are positioned for access and use during the construction process. The locations of the staging and storage areas may be changed by the Contractor depending on his construction means and methods. Equipment may include, but is not limited to: bulldozers, excavators, drilling rig, loaders, grader, compaction rollers, backhoe, cranes, trucks delivering supplies, pneumatic hand-operated tools, dewatering pumps, asphaltic rock products and fill material, and related construction materials which will include the following: concrete and shotcrete, asphaltic Concrete, precast structures, pipes, paints (enamel and latex), cleaning solvents, rebar, plastic liner material, fertilizer, wood, tar, masonry block, steel sheet piles, rocks/boulders, sandbags, soil fill material, and aggregate and rip-rap material.*

*The locations of the staging and storage areas may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer the locations of his staging and storage areas once the project is awarded for review and acceptance.*

## *7.2.3 Emergency Related Projects*

☒ *Not Applicable*

☐ *Applicable (If this box is checked, provide additional information as described below)*

*If conducting earth-disturbing activities in response to a public emergency (see section 1.3.), the permittee shall document the cause of the public emergency (e.g., natural disaster, extreme flooding conditions, etc.), information substantiating its occurrence (e.g., state disaster declaration or similar state declaration), and a description of the construction necessary to reestablish effected public services. The declaration of emergency or imminent threat to public health is required to be from the state governor or the director. See Attachment H for additional information.*

## *7.2.4 Identification of Prime Contractor and Other Site Contractors*

*The SWPPP must include a list of both the prime contractor and all other contractors (e.g., sub-contractors) who will be engaged in construction activities at the site, and the areas of the site over which each contractor has control. List prime contractor and sub-contractors below and attach map showing areas of control in* ***Attachment A. Complete and attach a Subcontractor Certification/Agreement in Attachment D.***

| | |
|---|---|
| *(General Contractor Company Name) The general contractor information will be submitted at least 30 calendar days before the start of construction activities.* | |
| *(General Contractor Contact Person Name)* | |
| *(General Contractor Mailing Address)* | |
| *(General Contractor Mailing City)* | *(General Contractor Mailing State and Zip* |
| *(General Contractor Telephone Number)* | |
| *(General Contractor Email Address)* | |

| | |
|---|---|
| *(Sub-Contractor #1 Company Name, as needed)* | |
| *(Sub-Contractor Contact Person Name)* | |
| *(Sub-Contractor Mailing Address)* | |
| *(Sub-Contractor Mailing City)* | *(Sub-Contractor Mailing State and Zip Code)* |
| *(Sub-Contractor Telephone Number)* | |
| *(Sub-Contractor Email Address)* | |

| | |
|---|---|
| *(Sub-Contractor #2 Company Name, as needed)* | |
| *(Sub-Contractor Contact Person Name)* | |
| *(Sub-Contractor Mailing Address)* | |
| *(Sub-Contractor Mailing City)* | *(Sub-Contractor Mailing State and Zip Code)* |
| *(Sub-Contractor Telephone Number)* | |
| *(Sub-Contractor Email Address)* | |

| | |
|---|---|
| *(Sub-Contractor #3 Company Name, as needed)* | |
| *(Sub-Contractor Contact Person Name)* | |
| *(Sub-Contractor Mailing Address)* | |
| *(Sub-Contractor Mailing City)* | *(Sub-Contractor Mailing State and Zip Code)* |
| *(Sub-Contractor Telephone Number)* | |
| *(Sub-Contractor Email Address)* | |

❑ *Attach maps showing areas of Contractor/Subcontractor Control in Attachment A.*

❑ *Complete and attach a Subcontractor Certification/Agreement in Attachment D.*

## *7.2.5 Sequence and Estimated Dates of Construction Activities*

*In Attachment C, attach the proposed construction schedule which shall include, at a minimum:*
*The Contractor shall submit to the Engineer an update of the dates once the project is awarded for inclusion in the SWPPP.*

☒ *Installation of storm water control measures, and when they will be made operational, including an explanation of how the sequence and schedule for installation of storm water control measures complies with section 5.1.1.3.1. and of any departures from manufacturer specifications pursuant to section 5.1.1.3.2., including removal procedures of the storm water control measures after construction has ceased.*

☒ *Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization.*

☒ *Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site.*

☒ *Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which the permittee is subject to in section 5.2.1.*

☒ *Removal of temporary storm water conveyances/channels and other storm water control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.*

## 7.2.6.1 Property Boundary Maps

*Boundaries of the property and of the locations where construction activities will occur. Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A.*

a. *Legal boundaries of the project.* *See NOI, Form C, Section C.8*

b. *Locations where earth-disturbing activities will occur, noting any sequencing of construction activities.* *See NOI, Form C, Section C.8*

c. *Pre-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). Note areas of steep slopes (15% or greater in grade).* *See NOI, Form C, Section C.8*

d. *During-Construction Topography (after major grading activities) including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows) Note areas of steep slopes (15% or greater in grade).* *See NOI, Form C, Section C.8*

e. *Post-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). Note areas of steep slopes (15% or greater in grade).* *See NOI, Form C, Section C.8*

f. *Locations where sediment, soil, or other construction materials will be stockpiled 7.2.6.1c.* *See SWPPP Attachment A. Stockpile locations may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer for his review and acceptance the locations of stockpiles once the project is awarded and will be included in the SWPPP. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to stockpile areas during construction for inclusion in the SWPPP.*

g. *Locations of any contaminated soil or contaminated soil stockpiles 7.2.6.1d.* *No areas of contaminated soil are expected to be encountered in the area. If any areas are encountered, the locations will be included in the SWPPP.*

h. *Locations of any crossings of state waters 7.2.6.1e.* *Mākaha Stream and West Mākaha Stream are shown in NOI Form C, Attachment A-1.*

i. *Designated points on the site where vehicles will exit onto paved roads 7.2.6.1f.* *See SWPPP Attachment A. Stabilized entrance locations may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer the locations of stabilized entrances once the project is awarded for his review and acceptance and will be included in the SWPPP. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to stabilized entrances during construction for inclusion in the SWPPP.*

j. *Location(s) of impervious structures (including buildings, roads, parking lots, etc.) after construction is completed 7.2.6.1g. See NOI, Form C, Section C.8*

k. *Locations of construction support activity areas covered by this permit 7.2.6.1h. See SWPPP Attachment A. The locations of the staging and storage areas may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer the locations of his staging and storage areas for his review and acceptance once the project is awarded. The Contractor shall submit to the Engineer any updates/changes to staging and storage areas during construction for his review and acceptance and inclusion in the SWPPP.*

## *7.2.6.2 to 7.2.6.8 State Waters and BMP Maps*

*Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A.*

*Please reference which maps account for the features listed below.*

a. *Locations of all state waters, including wetlands, that exist within or in the immediate vicinity of the site and indicate which waterbodies are listed as impaired 7.2.6.2. See NOI, Form C, Section C.8*

b. *The boundary lines of any natural buffers provided consistent with section 5.1.2.1.1, 7.2.6.3. Natural buffers are not feasible on Farrington Highway in the vicinity of Mākaha Stream and West Mākaha Stream. See Section 7.2.9*

c. *Topography of the site, existing vegetative cover (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of storm water onto, over, and from the site property before and after major grading activities 7.2.6.4. See NOI, Form C, Section C.8*

d. *Storm water discharge locations, including: a) Locations of any storm drain inlets on the site and in the immediate vicinity of the site to receive storm water runoff from the project; See NOI, Form C, Section C.8*

*and b) Locations where storm water will be discharged to state waters (including wetlands) 7.2.6.5. See NOI, Form C, Section C.8*

e. *Locations of all potential pollutant-generating activities identified in section 7.2.7, 7.2.6.6. See SWPPP Attachment A (Construction Activity BMP Map – See Attachment A-1 Erosion and Sediment Control Plan Sheets)*

f. *Locations of storm water control measures 7.2.6.7. See SWPPP Attachment A. The Contractor may change the locations of storm water control measures by construction activity and construction sequence depending on his construction means and methods. The Contractor shall submit changes to the Engineer for his review and acceptance once the project is awarded. The Contractor shall submit a separate map for each phase of construction which*

changes the drainage pattern. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to storm water control measures during construction for inclusion in the SWPPP. (For maps by Construction Activity and Construction Sequence see Attachment A-1 Erosion and Sediment Control Plan Sheets)

g. Locations where chemicals will be used and stored 7.2.6.8. For locations where chemicals will be used, see SWPPP Attachment A Construction Activity BMP Map. The table below shows possible chemicals which may be used on site and which construction activity they are associated with. The locations where chemicals may be used and stored may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to locations where chemicals will be used and stored during construction for inclusion in the SWPPP.

| ***Chemical*** | ***Location*** | ***Major Construction Activity*** |
|---|---|---|
| *Hydraulic oils/ fluids* | • *Vehicle Refueling area*<br>• *Leaks from broken hoses on equipment*<br>• *Vehicles shall be maintained off site. If a maintenance area is necessary on-site, the Contractor shall submit to the Engineer the locations and BMPs for his review and acceptance for inclusion in the SWPPP.* | *Roadway Demolition and Construction, Landscaping* |
| *Antifreeze/Coolants* | • *Vehicle Refueling area*<br>• *Leaks from broken hoses on equipment*<br>• *Vehicles shall be maintained off site. If a maintenance area is necessary on-site, the Contractor shall submit to the Engineer the locations and BMPs for his review and acceptance for inclusion in the SWPPP.* | *Roadway Demolition and Construction, Landscaping* |
| *Glue, Adhesives* | • *Roadway construction* | *Roadway Demolition and Construction* |
| *Concrete Curing Compounds/ Form Release Oils* | • *Roadway construction involving concrete* | *Roadway Demolition and Construction* |
| *Pesticides* | • *Landscaping areas* | *Landscaping* |
| *Herbicides* | • *Landscaping areas* | *Landscaping* |

| | | |
|---|---|---|
| *Insecticides* | • *Landscaping areas* | *Landscaping* |
| *Fertilizers* | • *Landscaping areas* | *Landscaping* |

## *7.2.7 Construction Site Pollutants*

*For each pollutant-generating activity, an inventory of pollutants or pollutant constituents (e.g., sediment, fertilizers and/or pesticides, paints, solvents, fuels) associated with that activity, which could be exposed to rainfall and could be discharged from the construction site. The Contractor shall take into account where potential spills and leaks could occur that contribute pollutants to storm water discharges. The Contractor shall also document for the Engineer's review and acceptance any departures from the manufacturer's specifications for applying fertilizers containing nitrogen and phosphorus, as required in Section 5.3.5.1 under Attachment H.*

*All solid waste shall be disposed of at DOH, Solid and Hazardous Waste Branch (SHWB), Solid Waste Section (SWS) permitted facilities. If not, contact the SHWB-SWS at (808) 586-4226 as additional permits may be required.*

| ***Source/Material*** | ***Description of How Potential Pollutant Source will be Prevented from Discharging with Storm Water Runoff*** | ***Major Construction Activity*** |
|---|---|---|
| *Construction debris, green waste, general litter* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Soil erosion from the disturbed areas* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |

| | | |
|---|---|---|
| *Sediment from soil stockpiles* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Emulsified asphalt or prime/tack coat* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Materials associated with painting, such as paint and paint wash solvent* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Industrial chemicals, fertilizers, and/or pesticides* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Metals and Building Materials* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Existing Pollution Sources* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Other (Contaminated Soil)* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |

## *7.2.8 –Sources of Non-Storm Water*

*The SWPPP must also identify all sources of non-storm water and information, including, but not limited to, the design, installation, and maintenance of the control measures to prevent its discharge.*

*All solid waste shall be disposed of at DOH, Solid and Hazardous Waste Branch (SHWB), Solid Waste Section (SWS) permitted facilities. If not, the Contractor shall contact the SHWB-SWS at (808) 586-4226 and notify the Engineer for his agreement the disposal locations. Additional permits may be required.*

| ***Source*** | ***Description of How Potential Non-Storm Water Pollution Source will not be Discharged to State Waters*** | ***Major Construction Activity*** |
|---|---|---|
| *Dust Control Water* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Concrete Truck Wash Water* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Sediment Track Out* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Irrigation Water* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Hydrotesting Effluent* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |

| Source | Description of How Potential Non-Storm Water Pollution Source will not be Discharged to State Waters | Major Construction Activity |
|---|---|---|
| *Dewatering Effluent* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Saw-cutting Slurry* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Concrete Curing Water* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Plaster Waste Water* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Water-Jet Wash Water* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |
| *Sanitary/Septic Waste* | • *See Section 7.2.10 for Site Specific BMPs* | *Roadway Demolition and Construction, Landscaping* |

## *7.2.9 –Buffer Documentation*

*If required to comply with section 5.1.2.1. because a state water is located within 50 feet of the project's earth disturbances, describe which compliance alternative has been selected for the site, and comply with any additional requirements to provide documentation in Section 5.1.2.1.*

*Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas. Use velocity dissipation devices if necessary to prevent erosion caused by storm water within the buffer. Ensure all discharges are first treated by erosion and sediment controls. Note: Buffer compliance requirements must be maintained until construction on the area discharging to the buffer is complete, and the area is restored and stabilized (as applicable).*

☐ *Option 1*

*Provide and maintain a 50-foot undisturbed natural buffer and sediment control.*
*Note: If the earth disturbances are located 50 feet or further from a state water and have installed sediment control, then the permittee has complied with this alternative. If the buffer is located outside State Highways Right of Way, include written permission from the owner of the land in SWPPP Attachment H.*

*Width of Buffer*_____*feet*

☐ *Option 2*

*Provide and maintain an undisturbed natural buffer that is less than 50 feet and double sediment control (e.g., double perimeter control) spaced a minimum of 5 feet apart.*

*Width of Buffer*_____*feet*

☒ *Option 3*

*If it is infeasible to provide and maintain an undisturbed natural buffer of any size, the permittee shall provide and maintain double sediment control (e.g., perimeter control) spaced a minimum of 5 feet apart and complete stabilization within 7 calendar days of the temporary or permanent cessation of earth-disturbing activities.* *See Exceptions below.*

☐ *Exception 1*

*There is no discharge of storm water to state waters through the area between the site and any state waters located within 50 feet of the site, the permittee is not required to comply with the requirements in this section. This includes situations where control measures have been implemented, such as a berm or other barrier, that will prevent such discharges.*

☒ *Exception 2*

*For "linear construction projects" where "linear construction projects" means the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area, the permittee is not required to comply with the requirements in this section if site constraints (e.g., limited right-of-way) prevent the permittee from meeting any of the compliance alternatives in section 5.1.2.1.1., provided that, to the extent practicable, the permittee limit disturbances within 50 feet of state waters and/or the permittee provide erosion and sediment controls to treat storm water discharges from earth disturbances within 50 feet of the state water. The permittee shall also document below the rationale as to why it is infeasible to comply with the requirements in section 5.1.2.1.1., and describe any buffer width retained and/or erosion and sediment controls installed below.*

*Mākaha Bridge No. 3 crosses Mākaha Stream and Mākaha Bridge No. 3A crosses West Mākaha Stream. Construction methods include constructing a temporary by-pass road using asphalt or other HDOT approved material; constructing a temporary bridge structure using pre-fabricated bridge structural elements; relocating utilities and bus stops to the temporary road; demolishing the existing bridges and structures; constructing replacement bridges with pre-cast or cast-in-place concrete for the bridge abutments, wing walls and main structure; and installing deck planting and performing concrete surfacing. Concrete will be used to protect the foundations of the bridge abutments and piers. Rip rap will be used upstream to protect from scour and erosion. Reinforced concrete will be used to reconstruct the existing concrete apron at Bridge No. 3. To accommodate the larger openings for the bridge structures, areas around the bridges will be excavated. After construction of the new bridges is complete and traffic is rerouted, the temporary road and bridge structures will be demolished and properly removed. The replacement bridges will have travelway widths of 12 feet in each direction and 10-foot wide shoulders to accommodate pedestrians and bicyclists. Structural controls such as silt fences, berms, filter mats or other similar controls shall be placed around the cleared surfaces and staging areas to prevent sediment in storm water runoff from leaving the sites. The in-water work in and bridge work over Mākaha Stream and West Mākaha Stream is covered by the Army Corps 404 permit. Disturbance will be limited to that required to complete the project and erosion and sediment BMPs applied.*

☒ *Exception 3*

*The following disturbances within 50 feet of a state water are exempt from the requirements in this Part: construction approved under a CWA 404 permit; or construction of a water-dependent structure or water access area (e.g., pier, boat ramp, trail).*

*The excavation work within Mākaha Stream and West Mākaha Stream, reconstruction of Mākaha Bridge No. 3 and Mākaha Bridge No. 3A and associated in-water work is covered by the Army Corps 404 permit.*

*The permittee shall document in the SWPPP if any of the above disturbances will occur within the buffer area on the site below.*
*N/A*

## *7.2.10 Storm Water Control Measures*

*Please refer to Hawaii Department of Transportation Construction Best Management Practices Field Manual dated January 2008 and Supplemental Sheets. For any conflicting requirements between the Manual and applicable bid documents, the applicable bid documents will govern. Should a requirement not be clearly described within the applicable bid documents, the Contractor shall notify the Engineer immediately for interpretation. For the purposes of clarification under "applicable bid documents" include the construction plans, standard specifications, Special Provisions, Permits, and the SWPPP.*

### *BMP Details*

*Complete the table below. Note: Bold text in the table are requirements of HAR 11-55. The Designer will provide an installation detail of all proposed BMPs (From HDOT Construction BMP Field Manual) identified in Section 7.2.6.7, including the proposed BMPs that will be used to mitigate the potential pollutants identified in Sections 7.2.7 and 7.2.8. Attach the details and design calculations, if applicable, in SWPPP Attachment A(7.2.10.1a). The Contractor shall include the specific product sheets (e.g. Tru-Dam or Gutter Buddy, etc.) and any changes to the proposed BMPs above for the Engineer's review and acceptance.*

*Check the appropriate boxes below verifying the following requirements are met. If not applicable indicate on the blank lines below (7.2.10.1):*

☒ *The specific perimeter sediment controls will be installed and made operational prior to conducting earth-disturbing activities in any given portion of the site that will receive storm water from earth-disturbing activities are described below (7.2.10.1b). See below. Perimeter sediment control devices will be made operational.*

☒ *If contaminated soil exists on-site, control measures will be taken to either prevent the contact of storm water with the contaminated soil, including any contaminated soil stockpiles, or prevent the discharge of any storm water runoff which has contacted contaminated soil or any contaminated soil stockpiles are described below (7.210.1.c). N/A Soil contamination is not*

*anticipated on site. The Contractor shall add the BMP measures and locations if any contamination is found on-site for the Engineer's review and acceptance.*

☒ *For exit points on the site (or any areas which exit onto a paved street), stabilization techniques and any additional controls that are planned to remove sediment prior to vehicle exit consistent with Section 5.1.2.3 will be taken and are described below (7.2.10.1d). Stabilized entrance locations may be changed by the Contractor depending on his construction means and methods. The Contractor shall submit to the Engineer for his review and acceptance the locations of stabilized entrances once the project is awarded for inclusion in the SWPPP. The Contractor shall submit to the Engineer for his review and acceptance any updates/changes to stabilized entrances during construction for inclusion in the SWPPP.*

☒ *The project is linear, and the use of perimeter controls on portions of the site is impracticable for the following reasons (7.2.10.1e): The limits of the site (State Highways Right of Way) often include connections to C&C of Honolulu roadways, other HDOT roadways, and private driveways. Installing sediment controls in these areas would not be possible without closing vehicle traffic. Drain Inlets receiving runoff from disturbed areas will be protected in lieu of perimeter sediment control.*

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| *Construction debris, green waste, general litter* | • *Separate contaminated clean up materials from construction and demolition (C&D) wastes.*<br>• ***Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes.***<br>• *Inspect construction waste and recycling areas regularly.*<br>• *Schedule solid waste collection regularly.*<br>• *Schedule recycling activities based on construction/demolition phases.*<br>• *Empty waste containers weekly or when they are two-thirds full, whichever is sooner.*<br>• ***Do not allow containers to overflow. Clean up immediately if they do.***<br>• ***On work days, clean up and dispose of waste in designated waste containers.***<br>• *Cover dumpster or trash receptacle with impermeable cover at the end of the workday.*<br>• *See Solid Waste Management Section SM-6 for additional requirements.*<br>• *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.*<br>• *The Contractor shall submit for the Engineer's review and acceptance and SWPPP inclusion a Litter Management Plan.* | *See Solid Waste Management Section SM-6. Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.*<br>*Contractor to include Litter Management plan in Appendix G or use the included plan once the project is awarded.* |
| *Materials associated with the operation* | • *Use off-site wash racks, repair and maintenance facilities, and* | *See Vehicle and Equipment Cleaning,* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| *and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage* | *fueling sites when practical.*<br>• ***Designate bermed wash area if cleaning on site is necessary.***<br>• ***Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks.***<br>• ***Provide an ample supply of readily available spill cleanup materials.***<br>• ***Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.***<br>• ***Do not clean surfaces or spills by hosing the area down.***<br>• ***Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.***<br>• *Inspect on-site vehicles and equipment regularly and immediately repair leaks.*<br>• *Regularly inspect fueling areas and storage tanks.*<br>• *Train employees on proper maintenance and spill practices and procedures and fueling and cleanup procedures.*<br>• ***Store diesel fuel, oil, hydraulic fluid, or other petroleum products or other chemicals in water-tight containers and provide cover or secondary containment.***<br>• *Do not remove original product labels and* ***comply with manufacturer's labels for proper disposal.***<br>• *Dispose of containers only after all the product has been used.*<br>• ***Dispose of or recycle oil or oily*** | *Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13, and Material Delivery, Storage and Material Use Sections SM-2 and SM-3, and* ***Spill Prevention and Control SM-10.*** |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | ***wastes according to Federal, State, and Local requirements.***<br>• ***Store soaps, detergents, or solvents under cover or other means to prevent contact with rainwater.***<br>• *See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13 and Material Use Section SM-3 for additional requirements.* | |
| *Soil erosion from the disturbed areas* | • *Provide Soil Stabilization, Slope Protection, Storm Drain Inlet Protection SC-2, Perimeter Controls and Sediment Barriers, Sediment Basins and Detention Ponds, Check Dams SC-9 ,Level Spreader SC-10, Paving Operations SM-19, Construction Road Stabilization EC-1, Controlling Storm Water Flowing Onto and Through the Project, Post-Construction BMPs, and Non-Structural BMPs (Employee Training SM-1, Scheduling SM-14, Location of Potential Sources of Sediment SM-15, Preservation of Existing Vegetation SM-16)* **.**<br>• ***Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas defined in the SWPPP.***<br>• ***Preserve native topsoil where practicable.***<br>• ***In areas where vegetative stabilization will occur, restrict vehicle/equipment use in areas to avoid soil compaction or condition soil to promote vegetative growth.***<br>• ***For Storm Drain Inlet*** | *Soil Stabilization*<br>1. *SM-21 Topsoil Management*<br>2. *EC-5 Seeding and Planting*<br>3. *EC-6 Mulching*<br>4. *EC-7 Geotextiles and Mats*<br><br>*Slope Protection*<br>1. *EC-5 Seeding and Planting*<br>2. *EC-6 Mulching*<br>3. *EC-7 Geotextiles and Mats*<br>4. *EC-9 Slope Roughening, Terracing, and Rounding*<br>5. *SC-11 Slope Drains and Subsurface Drains*<br>6. *SC-12 Top and Toe of Slope Diversion* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | ***Protection, clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised.***<br>• ***Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same day in which it is found or by the end of the following work day if removal by the same day is not feasible.***<br>• ***Sediment basins shall be designed and maintained in accordance with HAR 11-55.***<br>• ***Minimize disturbance on steep slopes (Greater than 15% in grade).***<br>• ***If disturbance of steep slopes are unavoidable, phase disturbances and use stabilization techniques designed for steep grades.***<br>• ***For temporary drains and swales use velocity dissipation devices within and at the outlet to minimize erosive flow velocities.*** | *Ditches and Berms*<br><br>*SC-2 Storm Drain Inlet Protection*<br><br>*Perimeter Controls and Sediment Barriers*<br>1. *SC-1 Silt Fence*<br>2. *SC-5 Vegetated Filter Strips and Buffers*<br>3. *SC-8 Compost Filter Berm*<br>4. *SC-13 Sandbag Barrier*<br>5. *SC-14 Brush or Rock Filter*<br><br>*Sediment Basins and Detention Ponds*<br>1. *SC-15 Sediment Trap*<br>2. *SC-16 Sediment Basin*<br><br>*SC-9 Check Dams*<br><br>*SC-10 Level Spreader*<br><br>*SM-19 Paving Operations*<br><br>*EC-1 Construction Road Stabilization*<br><br>*Controlling Storm Water Flowing onto and Through the Project* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | | 1. *EC-8 Run-On Diversion*<br>2. *SC-6 Earth Dike*<br>3. *SC-7 Temporary Drains and Swales*<br><br>*Post Construction BMPs*<br>1. *EC-4 Flared Culvert End Sections*<br>2. *SC-3 Rip-Rap and Gabion Inflow Protection*<br>3. *SC-4 Outlet Protection and Velocity Dissipation Devices*<br>4. *SM-21 Topsoil Management*<br><br>*Non-Structural BMPs*<br>1. *SM-1 Employee Training*<br>2. *SM-14 Scheduling*<br>3. *SM-15 Location of Potential Sources of Sediment*<br>4. *SM-16 Preservation of Existing Vegetation* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| *Sediment from soil stockpiles* | • *Locate stockpiles a minimum of 50 feet or as far as practicable from concentrated runoff* ***or outside of any natural buffers identified on the SWPPP****.*<br>• *Place bagged materials on pallets and under cover.*<br>• *Provide physical diversion to protect stockpiles from concentrated runoff.*<br>• ***Cover stockpiles with plastic or comparable material when practicable.***<br>• ***Place silt fence, fiber filtration tubes, or straw wattles around stockpiles.***<br>• ***Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or state water.***<br>• ***Unless infeasible, contain and securely protect stockpiles from the wind.***<br>• *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.*<br>• *See Protection of Stockpiles Section SM-4 for additional requirements.* | *See Protection of Stockpiles Section SM-4. Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable. Note: Stockpiles include soil or sediment material stored for multiple days awaiting transportation for disposal.* |
| *Emulsified asphalt or prime/tack coat* | • *Provide training for employees and contractors on proper material delivery and storage practices and procedures.*<br>• *Restrict paving operations during wet weather to prevent paving materials from being discharged.*<br>• *Use asphalt emulsions such as* | *See Material Delivery and Storage Section SM-2* ***and Material Use Section SM-3****, Paving Operations Section SM-19, Protect Storm Drain Inlets SC-2, and Perimeter Sediment* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | *prime coat when possible.*<br>• *Protect drain inlet structures and manholes during application of tack coat, seal coat, slurry seal, and fog seal.*<br>• ***Keep ample supplies of drip pans and absorbent materials on site.***<br>• *Inspect inlet protection devices.*<br>• *See Material Delivery and Storage Section SM-2 and Paving Operations Section SM-19 for additional requirements.*<br>• *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.* | *Controls where applicable.* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| *Materials associated with painting, such as paint and paint wash solvent* | • *Hazardous chemicals shall be well-labeled and stored in original containers.*<br>• ***Keep ample supply of cleanup materials on site.***<br>• *Dispose container only after all of the product has been used.*<br>• *Remove as much paint from brushes on painted surface.*<br>• *Rinse from water-based paints shall be discharged into the sanitary sewer system where possible. If not,* ***direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.***<br>• ***Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.***<br>• ***Do not dump liquid wastes into the storm drainage system.***<br>• *Filter and re-use solvents and thinners.*<br>• *Dispose of oil-based paints and residue as a hazardous waste.*<br>• *Ensure collection, removal, and disposal of hazardous waste complies with regulations.*<br>• ***Immediately clean up spills and leaks.***<br>• *Properly store paints, solvents, and epoxy compounds.*<br>• *Properly store and dispose waste materials generated from painting and structure repair and construction activities.* | *See Material Delivery and Storage Section SM-2, Material Use Section SM-3, Hazardous Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-20, Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | • *Mix paints in a covered and contained area when possible to minimize adverse impacts from spills.*<br>• *Do not apply traffic paint or thermoplastic if rain is forecasted.*<br>• *See Material Delivery and Storage Section SM-2, Material Use SM-3, Waste Management, Hazardous Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-20 for additional requirements.*<br>• *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.* | |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| *Industrial chemicals, fertilizers, and/or pesticides* | • *Hazardous chemicals shall be well-labeled and stored in original containers.*<br>• ***Keep ample supply of cleanup materials on site.***<br>• ***Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.***<br>• ***Do not clean surfaces or spills by hosing the area down.***<br>• ***Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.***<br>• *Dispose container only after all of the product has been used.*<br>• *Retain a complete set of safety data sheets (formerly MSDS) on site.*<br>• ***Store industrial chemicals in water-tight containers and provide either cover or secondary containment.***<br>• ***Provide cover when storing fertilizers or pesticides to prevent these chemicals from coming into contact with rainwater.***<br>• *Restrict amount of pesticide prepared to quantity necessary for the current application.*<br>• ***Do not apply fertilizers or pesticides during or just before a rain event.***<br>• ***Do not apply to stormwater conveyance channels with flowing water***<br>• ***Comply with fertilizer and pesticide manufacturer's recommended usage and disposal instructions. Document*** | *See Material Delivery and Storage Section SM-2, Material Use Section SM-3, and Hazardous Waste Management Section SM-9, and* ***Spill Prevention and Control SM-10*** |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | ***departures from manufacturer's specifications in Attachment H.***<br>• ***Apply fertilizers 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.***<br>• ***Follow federal, state, and local laws regarding fertilizer application.***<br>• ***Do not dispose of toxic liquid wastes (solvents, used oils, and paints) or chemicals (additives, acids, and curing compounds) in dumpsters allocated for construction debris.***<br>• ***Ensure collection, removal, and disposal of hazardous waste complies with regulations. Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.***<br>• *See Material Delivery and Storage Section SM2, Material Use SM-3, and Waste Management, Hazardous Waste Management Section SM-9 for additional requirements.* | |
| *Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)* | • *Do not dispose of toxic materials in dumpsters allocated for construction debris.*<br>• ***Ensure collection, removal, and disposal of hazardous waste complies with regulations.***<br>• ***Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.***<br>• *Segregate and recycle wastes from vehicle/equipment* | *See Hazardous Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | *maintenance activities such as used oil or oil filters, greases, cleaning solutions, antifreeze, automotive batteries, and hydraulic and transmission fluids.*<br>• ***Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, and local requirements.***<br>• ***All containers stored outside shall be kept away from surface waters and within appropriately-sized secondary containment (e.g., spill berms, decks, spill containment pallets). Provide cover if possible.***<br>• ***Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.***<br>• ***Do not clean surfaces or spills by hosing the area down.***<br>• ***Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.***<br>• ***Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements.***<br>• *See Hazardous Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and* | |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | *Equipment Maintenance SM-12 for additional requirements.* | |
| *Metals and Building Materials* | • *Inspect construction waste and recycling areas regularly.*<br>• *Schedule solid waste collection regularly.*<br>• ***If building materials or metals are stored on site (such as rebar) store under cover under tarps or in containers.***<br>• *Minimize the amount of material stored on site.*<br>• ***Do not stockpile uncovered metals or other building materials in close proximity to discharge points.***<br>• *See Solid Waste Management Section SM-6 for additional requirements.* | *See Solid Waste Management Section SM-6* |
| *Contaminated Soil* | • *See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Waste Management Section SM-9 for additional requirements.*<br>• ***At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets.*** | *See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Waste Management Section SM-9* |
| *Fugitive Dust Control and Dust Control Water* | • *Do not over spray water for dust control purposes which will result in runoff from the area.*<br>• ***Apply water as conditions require.***<br>• *Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed.*<br>• *Minimize exposed areas through the schedule of construction* | *See Dust Control Section SM-18, Fugitive Dust Control Plan, and DOH Clean Air Branch Fugitive Dust Fact Sheet in Appendix H* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | *activities.*<br>• *Utilize vegetation, mulching, sprinkling, and stone/gravel layering to quickly stabilize exposed soil.*<br>• *Direct construction vehicle traffic to stabilized roadways.*<br>• *Cover dump trucks hauling material from the site with a tarpaulin.*<br>• *See Dust Control Section SM-18 for additional requirements.* | |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| *Concrete Truck Wash Water* | • *Disposal of concrete truck wash water via percolation is prohibited.*<br>• *Wash concrete-coated vehicles or equipment off-site or in the designated wash area.*<br>• *Locate on-site wash area a minimum of 50 feet away* ***or as far as practicable*** *from storm drain inlets, open drainage facilities, or water bodies.*<br>• *Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set.*<br>• ***Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation.***<br>• *The temporary pit shall be lined with plastic to prevent seepage of wash water into the ground.*<br>• *Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin.*<br>• ***Do not dump liquid wastes into storm drainage system.***<br>• ***Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards.***<br>• *See Waste Management, Concrete Waste Management Section SM-5 for additional requirements.* | *See Waste Management, Concrete Waste Management Section SM-5* |
| *Sediment Track-Out* | • ***Include Stabilized Construction Entrance at all points that exit onto paved roads.***<br>• *A sediment trapping device is required if a wash rack is used in conjunction with the stabilized* | *See Stabilized Construction Entrance Section EC-2* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | *construction entrance/exit.*<br>• *The pavement shall not be cleaned by washing down the street.*<br>• *If sweeping is ineffective or it is necessary to wash the streets, wash water must be contained either by construction of a sump, diverting the water to an acceptable disposal area, or vacuuming the wash water.*<br>• *Use BMPs for adjacent drainage structures.*<br>• ***Remove sediment tracked onto the street by the end of the day in which the track-out occurs.***<br>• ***Restrict vehicle use to properly designated exit points.***<br>• *Include additional BMPs that remove sediment prior to exit when minimum dimensions can not be met.*<br>• *See Stabilized Construction Entrance Section EC-2 for additional requirements.* | |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| *Irrigation Water* | • *Consider irrigation requirements.*<br>• *Where possible, avoid species which require irrigation.*<br>• *Design timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system.*<br>• *See Seeding and Planting Section EC-5 and California Stormwater BMP Handbook SD-12 Efficient Irrigation included in SWPPP Attachment A for additional requirements.* | *See Seeding and Planting Section EC-5 and California Stormwater BMP Handbook SD-12 Efficient Irrigation* |
| *Hydrotesting Effluent* | • *If work includes removing, relocation or installing waterlines, and Contractor elects to flush waterline or discharge hydrotesting effluent into State waters or drainage systems, the Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form F application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Hydrotesting Activities if necessary. Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.* | *Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.* |
| *Dewatering Effluent* | • *If excavation or backfilling operations require dewatering, and Contractor elects to discharge dewatering effluent into State waters or existing drainage systems, Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form G application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Dewatering Activities if* | *See Dewatering Operations SM-17. Site specific BMPs will be included in the NOI/NPDES Permit Form G submittal.* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | *necessary. See Site Planning and General Practices, Dewatering Operations Section SM-17 for additional requirements.* | |
| *Saw-cutting Slurry* | • *Saw cut slurry shall be removed from the site by vacuuming.*<br>• *Provide storm drain protection during saw cutting. See Paving Operations Section SM-19 for additional requirements.*<br>• *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.* | *See Paving Operations Section SM-19, Storm Drain Inlet Protection SC-2, Perimeter sediment controls where applicable* |
| *Concrete Curing Water* | • *Avoid overspraying of curing compounds.*<br>• *Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.*<br>• *See California Stormwater BMP Handbook NS-12 Concrete Curing included in SWPPP Attachment A for additional requirements.* | *See California Stormwater BMP Handbook NS-12 Concrete Curing* |
| *Plaster Waste Water* | • ***Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.***<br>• ***Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.***<br>• *Any significant residual materials remaining on the ground after the completion of construction shall be removed and properly disposed. If the residual materials contaminate the soil, then the contaminated soil shall also be* | *See Material Delivery and Storage Section SM-2, Material Use Section SM-3, and Hazardous Waste Management Section SM-9* |

| ***Pollutant Source*** | ***Appropriate Site-Specific BMP to be Implemented*** | ***BMP Requirements*** |
|---|---|---|
| | *removed and properly disposed of.*<br>• ***Plaster waste water shall not be allowed to flow into drainage structures or State waters.***<br>• *See Material Delivery and Storage Section SM-2, Material Use SM-3, and Hazardous Waste Management Section SM-9 for additional requirements.* | |
| *Water-Jet Wash Water* | • *For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical.*<br>• *See Vehicle and Equipment Cleaning Section SM-11 for additional information.*<br>• *For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters.* | *See Vehicle and Equipment Cleaning Section SM-11* |
| *Sanitary/Septic Waste* | • *Locate Sanitary facilities in a convenient place away from drainage facilities.*<br>• ***Position sanitary facilities so they are secure and will not be tipped over or knocked down.***<br>• *Wastewater shall not be discharged to the ground or buried.*<br>• *A licensed service provider shall maintain sanitary/septic facilities in good working order.*<br>• *Schedule regular waste collection by a licensed transporter.*<br>• *See Sanitary/Septic Waste Section SM-7 for additional requirements.* | *See Sanitary/Septic Waste Section SM-7.* |

## *7.2.10.2 – Stabilization Practices*

*Describe the specific vegetative and/or non-vegetative practices that will be used to comply with the requirements in HAR 11-55, section 5.2., including if the permittee will be complying with the stabilization deadlines specified in HAR 11-55, section 5.2.1.3.2. Document the circumstances that prevent the permittee from meeting the deadlines specified in sections 5.2.1.1. and/or 5.2.1.2.*

*The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this SWPPP section, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased (5.2.1.1).*

*For the purposes of this SWPPP section, any of the following types of activities constitutes initiation of stabilization (5.2.1.1):*

*a) Prepping the soil for vegetative or non-vegetative stabilization;*
*b) Applying mulch or other non-vegetative product to the exposed area;*
*c) Seeding or planting the exposed area;*
*d) Starting any of the activities in a) – c) on a portion of the area to be stabilized, but not on the entire area; and*
*e) Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing initial stabilization activities.*

*For the purposes of this SWPPP section, any of the following types of activities constitutes completion of initial stabilization activities (5.2.1.1):*

*a) For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or*
*b) For non-vegetative stabilization, the installation or application of all such non-vegetative measures.*

*If the Contractor is unable to meet the deadlines above due to circumstances beyond the Contractor's control, and the Contractor is using vegetative cover for temporary or permanent stabilization, the Contractor may comply with the following stabilization deadlines instead as agreed to by the Engineer (5.2.1.3.1 ):*

*5.2.1.3.1.1.*
*Immediately initiate, and complete within 7 calendar days, the installation of temporary non-vegetative stabilization measures to prevent erosion;*

*5.2.1.3.1.2.*
*Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site; and*

*5.2.1.3.1.3.*
*The Contractor shall notify and provide documentation to the Engineer the circumstances that prevent the Contractor from meeting the deadlines required in sections 5.2.1.1. and/or 5.2.1.2. and the schedule the Contractor will follow for initiating and completing initial stabilization and as agreed to by the Engineer. Include this information in the SWPPP below.*

*The Contractor shall follow the applicable requirements of the specifications and special provisions including Sections 209, 619 and 641.*

*Final Stabilization*
*To be considered adequately stabilized, the permittee shall meet the criteria below depending on the type of cover the permittee is using, either vegetative or non-vegetative.*

*5.2.2.1. Vegetative stabilization.*

*5.2.2.1.1.1.*
*If the permittee is vegetatively stabilizing any exposed portion of the site through the use of seed or planted vegetation, the permittee shall provide established uniform vegetation (e.g., evenly distributed without large bare areas), which provides 70 percent or more of the density of coverage that was provided by vegetation prior to commencing earth-disturbing activities. The permittee should avoid the use of invasive species; (HDOT requires 98% coverage for permanent hydromulch per specification and special provision sections 619 and 641.) The Designer needs to meet the 70% requirement above when designing plantings and ground cover which do not involve hydromulch. If the Designer uses a soil test to determine amounts, rates, and type of fertilizer, and the amount and rate is not consistent with manufacturer's specifications, the Designer should document this in the SWPPP in Attachment H.*

*5.2.2.1.1.2.*
*For final stabilization, vegetative cover must be perennial; and*

*5.2.2.1.1.3.*
*Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or planted area, the Contractor shall install non-vegetative erosion controls that provide cover (e.g., mulch, rolled erosion control products) to the area while vegetation is becoming established.*

*5.2.2.2. Non-Vegetative Stabilization.*
*If the permittee is using non-vegetative controls to stabilize exposed portions of the site, or if the Contractor is using such controls to temporarily protect areas that are being vegetatively stabilized, the Contractor shall provide effective non-vegetative cover.*

*The stabilization schedule for this project is:*
*Outfalls 1, 2, 3, and 4 discharge to nutrient or sediment impaired waters (West Mākaha Stream and Mākaha Stream). The following applies to construction areas discharging to these outfalls:*

> *Immediately initiate and complete stabilization within 7 calendar days on areas of the site in which earth-disturbing activities have temporarily or permanently ceased.*

*All areas of soil disturbance will be stabilized or overlaid with Asphalt Concrete or concrete. West Mākaha Stream and Mākaha Stream are impaired waters for Turbidity. HDOT will be complying with the deadlines in 5.2.1.3.2, with completion of initial plantings/stabilization within 7 calendar days of completion of prepping the soil for planting. Mulch will be applied to the exposed areas.*

*The Contractor shall notify the Engineer for his agreement if any stabilization practices or timetables to complete stated above will not be followed and document the reasons in the SWPPP below.*

*The deadlines for initiating and completing stabilization in sections 5.2.1.1. and/or 5.2.1.2. cannot be met because of the following (Note: Document location(s,)reasons, and schedule) N/A*

## *7.2.10.3 – Post Construction Measures*

*Descriptions of measures that will minimize the discharge of pollutants via storm water discharges after construction operations have been finished. Examples include: open, vegetated swales and natural depressions; structures for storm water retention, detention, or recycle; velocity dissipation devices to be placed at the outfalls of detention structures or along with the length of outfall channels; and other appropriate measures. All projects require post construction BMPs to minimize the discharge of pollutants via storm water discharges after construction operations have been finished. Examples include: open, vegetated swales and natural depressions; structures for storm water retention, detention, or recycle; velocity dissipation devices to be placed at the outfalls of detention structures or along with the length of outfall channels; and other appropriate measures. All projects require post-construction BMPs to minimize the discharges of pollutants via storm water discharges after construction operations have finished.*

*Following the reconstruction of the Mākaha Bridge No. 3 and Mākaha Bridge No. 3A storm water discharges are not expected to generate significant concentrations of runoff that would adversely affect surrounding or coastal ecosystems. Storm water will sheet-flow off the bridge surface and percolate into adjacent groundcover areas.*

## *7.2.11.1 – Spill Prevention and Response Procedures*

*The SWPPP must describe procedures that the permittee will follow to prevent and respond to spills and leaks consistent with section 5.3., including:*

*a. Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks; and*

*b. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies 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 consistent with section 5.3.4. and 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 post contact information in locations that are readily accessible and available.*

*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 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, the Clean Water Branch (DOH-CWB) via email at cleanwaterbranch@doh.hawaii.gov during non-business hours immediately, and the Engineer. 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. State and local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies (HAR 11-55 5.3.4). The Contractor shall submit to the Engineer information necessary to complete the reporting requirements.*

☒ *The Spill Prevention and Response Procedures are included in SWPPP Attachment F.*
*The Contractor shall update the Spill Prevention and Response Procedures in the SWPPP once the project is awarded for the Engineer's review and acceptance.*

## *7.2.11.2 – Waste Management Procedures*

*The SWPPP must describe procedures for how the permittee will handle and dispose of all wastes generated at the site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.*

☒ *The Waste Management Procedures are included in SWPPP Attachment G.*

*The Contractor shall update the Waste Management Procedures in the SWPPP once the project is awarded for the Engineer's review and acceptance.*

## *7.2.12 – Procedures for Inspection, Maintenance, and Corrective Action*

*The SWPPP must describe the procedures the permittee will follow for maintaining the storm water control measures, conducting site inspections, and, where necessary, taking corrective actions, in accordance with section 5.1.1.4., section 5.3.2., section 9, and section 10 of the permit. The following information must also be included in the SWPPP:*

*a. Personnel responsible for conducting inspections: Field Office Engineer and/or Inspector, and Contractor Representatives. Field Office Engineer and/or Inspector, and Contractor Representatives will be included in the SWPPP once the contract is awarded.*

*Qualifications: HDOT construction staff and HDOT Contractors attend Stormwater BMP Classes annually. Contractor representatives selected for the inspection and maintenance responsibilities shall receive training from the Contractor. The Contractor's Representatives shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order. The Contractor's Representative(s) inspecting the site shall be knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact storm water quality, and the skills to assess the effectiveness of any storm water controls selected and installed to meet the requirements of this permit.*

*b. The inspection schedule the permittee will be as follows, which is based on whether the site is subject to section 9.1.2. or section 9.1.3., and whether the site qualifies for any of the allowances for reduced inspection frequencies in 9.1.4. If the permittee will be conducting inspections in accordance with the inspection schedule in section 9.1.2.a. or section 9.1.2.b., the location of the rain gauge on the site or the address of the weather station the permittee will be using to obtain rainfall data;*

*Describe the inspection schedules and procedures you have developed for the site. Include the maintenance requirements for each BMP (e.g., level of sediment buildup allowed):*
*All Construction BMPs shall be inspected weekly, and within 24 hours of any rainfall event of 0.25 inches or greater in a 24 hour period. The Contractor shall submit a copy of the SWPPP Inspection and Maintenance Report Form to the Engineer within 24 hours of the inspection.*

*Maintenance requirements for specific BMPs are included in the HDOT Construction BMP Field Manual. The Contractor shall initiate work to fix the problem immediately after discovering the problem, and complete such work 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. In this section, 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. When installation of a new pollution prevention control or a significant repair is needed, the Contractor shall install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, the Contractor shall provide notice to the Engineer and document why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document the schedule for installing the storm water control(s) and making it operational as soon as practicable after the 7 calendar day timeframe and as agreed to by the Engineer. Where these actions result in changes to any of the pollution prevention controls or procedures documented in the SWPPP, modify the SWPPP accordingly. The Contractor will attach product specific maintenance practices in the SWPPP once the project is awarded.*

*c. Use the Corrective Action Report Form for any the following (10.2.1 and 10.4.1):*

- *A required storm water control was never installed, was installed incorrectly, or not in accordance with the requirements in HAR sections 5 and/or 6.*
- *The Contractor/Engineer becomes aware that the storm water controls installed and being maintained are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in HAR section 6.1.*
- *One of the prohibited discharges below is occurring or has occurred:*
    - *Wastewater from washout of concrete*
    - *Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials*
    - *Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance*
    - *Soaps, solvents, or detergents used in vehicle and equipment washing*
    - *Toxic or hazardous substances from a spill or other release*

- *Corrective actions required by the Department of Health or EPA*

***Note: Corrective actions must be included with the monthly compliance report in Attachment J.***

*d. Any inspection or maintenance checklists or other forms that will be used.*

☒ *The Inspection Report Form provided in SWPPP Attachment E will be used.*

☒ *The Corrective Action Report Form in Attachment E2 will be used for projects on Oahu.*

## *7.2.13 – Staff Training*

*The SWPPP must include documentation that the required personnel were trained in accordance with the following:*

*Prior to the commencement of earth-disturbing activities or pollutant-generating activities, whichever occurs first, the permittee shall ensure that the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements:*

*a. Personnel who are responsible for the design, installation, maintenance, and/or repair of storm water controls (including pollution prevention measures);*

*b. Personnel who are responsible for the application and storage of chemicals (if applicable);*

*c. Personnel who are responsible for conducting inspections as required in Part 4.1.1; and*

*d. Personnel who are responsible for taking corrective actions as required in Part 5.*

*The Contractor is responsible for ensuring that all activities on the site comply with the requirements of this permit. The Contractor is not required to provide or document formal training for subcontractors or other outside service providers, but must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform.*

*At a minimum, personnel must be trained to understand the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):*
*a. The location of all storm water controls on the site required by this permit, and how they are to be maintained;*

*b. The proper procedures to follow with respect to the permit's pollution prevention requirements; and*
*c. When and how to conduct inspections, record applicable findings, and take corrective actions.*

***The Engineer will discuss the roles and responsibilities of HDOT and the Contractor in the SWPPP during the Water Pollution, Dust, and Erosion Control Meeting.***

☒ *The Contractor Certification is included in Attachment B.*

## *7.2.14 – Documentation of Compliance with Safe Drinking Water Act Underground Injection Control (UIC) Requirements for Certain Subsurface Storm Water Controls*

*Document any contact with the DOH Safe Drinking Water Branch if any of the following storm water controls are used at the site:*

❑ *Infiltration trenches (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);*

❑ *Commercially manufactured precast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate storm water flow;*

❑ *Drywells, seepage pits, or improved sinkholes (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).*

*If any of the boxes above are checked, attach documentation in SWPPP Attachment H.*

*These devices are not part of the design plans. If the Contractor elects to install any of these devices for erosion control purposes, the Contractor shall attach the necessary documentation once the project is awarded.*

## *7.2.15 –Other State, Federal, or County Permits*

*Include in SWPPP Attachment H any of the following permits or approvals:*

❑ *Attach the Drainage System Owner(s) Approval to Discharge, in Attachment* N/A.

❑ *Check this box if the Certifying Person is responsible for the overall operation and maintenance of the Separate Drainage System and approves of the storm water discharge into their drainage system.* N/A

*County-approved Erosion and Sediment Control Plan and/or Grading Permit*

a. *Is a County-approved Erosion and Sediment Control Plan and/or Grading Permit, where applicable for the activity and schedule for implementing each control, required?*
   ☑ *Yes. Please complete Section b below and skip Section c.*
   ❑ *No. Please complete Section c below and skip Section b.*

b. *Is a copy County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, attached?*
   ❑ *Yes, see Attachment* _____
   ☑ *No, the County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, will be submitted at least 30 calendar days before the start of construction activities.*

c. *Please select and complete at least one (1) of the following items to demonstrate that a County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, is not required.*
   ❑ *See Attachment* _____ *for the County written determination.*
   ❑ *Provide the County contact person information (Name, Department, Phone Number, and Date Contacted):* _____
   ❑ *Other (specify):* _____

☒ *Department of the Army Permit (Section 404) and Section 401 Water Quality Certification:*
*If the project requires work in, above, under or adjacent to State waters, please contact the Army Corps of Engineers (COE) Regulatory Branch at (808) 438-9258 regarding their permitting requirements. Provide a copy of the COE permitting jurisdictional determination (JD) or the JD with COE Person's Name, Phone Number, and Date Contacted.*
Department of the Army File No. POH-2006-00310. The project is exempted from obtaining a Section 401 Water Quality Certification (WQC), as provided by Senate Bill 1016 SD1 HD1 (expires June 30, 2022). The project will follow the HDOT Streamlined 404/WQC process and provisionally approved Standard Operating Procedures (SOPs) outlined in the Integrated Storm Water Management Approach and Summary of Clear Water Diversion and Isolation Best Management Practices (Practitioners Guide). The Practitioners Guide details DOH-CWB pre-approved BMP practices. The Contractor will implement their Means and Methods (including installation of BMPs/Clear Water Diversions) following the pre-approved BMP

practices in the Practitioners Guide. Any contractor proposed BMPs not detailed in the Practitioners Guide would be submitted to DOH-CWB for review and acceptance prior to the start of construction activities.

☒ *List other permits below (No copy necessary in Attachment H)*

NPDES NOI G (Dewatering Activities); National Environmental Policy Act (NEPA) Categorical Exclusion (May 22, 2019); Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) pursuant to its Chapter 343, Hawaii Revised Statutes (May 23, 2011; since that time however, the project became exempt per Senate Bill 1016 SD1 HD1). Special Management Permit (Resolution 11-282); U. S. Coast Guard Clearance (obtained); Section 106, National Historic Preservation Act, Consultation (completed); Section 7, Endangered Species Act, Consultation (completed); Section 4(f) Department of Transportation Act, Consultation (completed); Stream Channel Alteration Permit (exempt per Senate Bill 1016 SD1 HD1); HDOT Plan Review (pending); Grading Permit (pending); Coastal Zone Management Federal Consistency Review (obtained).

## *7.2.16 –Other Information As Requested by the Director*

☒ *Does DOH require any additional information per section 7.2.16? If so attach in Attachment H.*

N/A

## 7.2.17 Certification of the CWB SWPPP

*The certifying person and duly authorized representative shall meet the requirements of Hawaii Administrative Rules 11-55, Appendix A, Section 15.*

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

*Signature:* _____ *Date:* Jun 24, 2020

*Person Name:* Jade T. Butay

*Person Position Title:* Director of Transportation

*Person Company or Agency:* Department of Transportation, Highways Division

*Department:* Department of Transportation, Highways Division

*Division:* Department of Transportation, Highways Division

*Phone Number:* (808) 587-2150 *Fax No.:* (808) 587-2167

*Person Email:* Jade.Butay@hawaii.gov

## 7.2.18 Post-Authorization Additions to the SWPPP

*After the issuance of the NGPC include the following documents as part of the SWPPP in Attachment K:*

*a. A copy of the NOI submitted to the department along with any correspondence exchanged between HDOT and DOH related to coverage under this permit;*

*b. A copy of the NGPC and all attachments included with the NGPC (an electronic copy easily available to the storm water team is acceptable)*

## 7.4 Required SWPPP Modifications

*Modify the SWPPP, including the site map(s), in response to any of the following conditions:*

*7.4.1.1.*
*Whenever new contractors become active in construction activities on the site, or changes are made to the construction plans, storm water control measures, pollution prevention measures, or other activities at the site that are no longer accurately reflected in the SWPPP. This includes changes made in response to corrective actions triggered under section 10.*

*7.4.1.2.*
*To reflect areas on the site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;*

*7.4.1.3.*
*If inspections or investigations by site staff, or by local, state, or federal officials determine that SWPPP modifications are necessary for compliance with this permit;*

*7.4.1.4.*
*Where DOH determines it is necessary to impose additional requirements on the discharge, the following must be included in the SWPPP:*

*a. A copy of any correspondence describing such requirements; and*
*b. A description of the storm water control measures that will be used to meet such requirements.*

*7.4.1.5.*
*To reflect any revisions to applicable federal, state, and local requirements that affect the storm water control measures implemented at the site; and*

*7.4.2. Deadlines for SWPPP modifications.*
*The permittee shall complete required revisions to the SWPPP within 7 calendar days following the occurrence of any of the conditions listed in section 7.4.1.*

*7.4.3. SWPPP modification records.*
*The permittee shall maintain records showing the dates of all SWPPP modifications. The records must include a signature of the person authorizing each change (see section 7.2.17), date, and a brief summary of all changes. Log all changes and include relevant attachments in Attachment L.*

*7.4.4. Certification requirements.*
*All modifications made to the SWPPP consistent with section 7.4. must be certified, signed, and dated by the Certifying Person that meets the requirements in section 15 of appendix A, chapter 11-55 or the duly authorized representative that meets the requirements of 11-55-07(b). (See section 7.2.17)*

*7.4.5. Required notice to other contractors.*
*Upon determining that a modification to the SWPPP is required, if there are multiple contractors covered under this permit, the Contractor shall immediately notify any contractors who may be impacted by the change to the SWPPP.*

## *13.0 Monthly Compliance Report Submittal Requirements*

*Submit to the Engineer a monthly compliance report, which shall include but is not limited to information as required in the NGPC, any updates to NOI information already on file with DOH, and any incidences of non-compliance and corrective actions. Submit this information within 2 working days of the end of the month. The monthly compliance report shall be kept on-site and available by the end of the next business day when requested by DOH.*

☒ *HDOT's form in Attachment E4 will be used for projects on Oahu.*