## BEST MANAGEMENT PRACTICES - NOTES

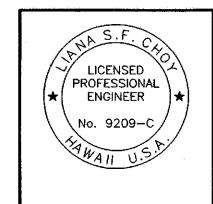
- Best Management Practices (BMP) presented on the BMP Plan are for suggestion only. The purpose of BMPs is to prevent the discharge of pollutants, resulting from sediment laden storm water runoff, into receiving water. Soil particles resulting from land disturbing activities, shall be prevented from entering any water of Hawaii. For this reason, the Contractor shall develop a Site-Specific Best Management Practices Plan for the project and obtain its approval by both DOH and the HDOT or his representative prior to the commencement of construction activities. Erosion and Sediment Control shall be in compliance with all provisions described in Section 209 - Water Pollution and Erosion Control, and the "Construction Best Management Practices Field Manual", dated January
- 2. If the Contractor has a staging/stockpile area located outside of the project limits, he shall be responsible to obtain and pay for any required land use and/or environmental permits prior to the use of these areas.
- The Contractor shall coordinate and schedule any work activities within the shoreline or marine environment with the HDOT Engineer to allow adequate 16. time for surveying of the work area and possible relocation of coral colonies or micro-invertebrates found that will be impacted by the work.
- The Contractor shall install silt fences, diversion berms, sand bags, drain inlet protection/catch basin filters, stabilized construction ingress/egress features, and other methods as required as soon as practicable prior to commencement of construction work for sediment runoff control. The Contractor shall maintain these erosion control measures as required to ensure their effectiveness.
- Storm drain inlet protection must be used throughout the jobsite and areas outside the jobsite where construction activity may track sediment onto paved areas. Storm drain inlet protection múst bé placed at storm drains, drop inlets, curb inlets or wherever runoff may occur. As the project progresses, inlet protection may have to be added as determined by HDOT or his representative.
- The Contractor shall adjust distances as necessary to ensure effectiveness of gravel bag barriers and silt fence.
- 7. The Contractor shall provide silt fence and stabilized construction entrance for each ingress/egress point unless authorized otherwise by the HDOT or his representative. Should the Contractor require ingress or egress other than that shown in detail on the plan sheet, the Contractor shall be responsible to obtain all necessary approvals.
- Measures to control erosion and other pollutants shall be in place before any earthwork or demolition is initiated.
- Slope and exposed area shall be watered, mulched, sodded or planted as soon as backfill and final grading has been established in order to control dust, erosion and sedimentation. Planting shall not be delayed until all backfilling and final grading has been completed. Backfilling shall 24. Fueling trucks shall be used to refuel vehicles and heavy equipment at be continuous and any area within which work has been interrupted or delayed shall be stabilized. Unless indicated otherwise on the plans or in the specifications, payment for planting or grassing required under this item (other than that specified for landscaping) shall not be paid for directly but shall be considered incidental to and included in the price bid for excavation and embankment or other relevant bid item.
- At the end of earthwork operations, existing inlets and manholes surrounding the project site shall be inspected and any accumulated sediment and debris found in the structures shall be removed. Flushing into the inlets and manholes is not permitted.

- 11. Temporary BMPs shall not be removed until all permanent erosion controls are in place and established.
- 12. Any backfilled or exposed areas which will be left idle for fourteen (14) calendar days or more shall be mulched or stabilized.
- 13. Washing down of construction equipment and vehicles and wash out of concrete truck drums on site is prohibited. Wash water from wash downs shall not be discharged into drainage systems nor water courses.
- 14. The Contractor shall provide required information to the HDOT or his representative and DOH for discharges of storm water associated with construction activity within thirty (30) days of contract execution in accordance with Section 209.
- 15. The Contractor shall use the appropriate BMPs, as required or shown on the erosion control plan sheet and described in the Construction Best Management Practices Field Manual for runoff control, to the approval of the HDOT or his representative and DOH.
- The Contractor shall be responsible for any precaution for the health and safety of his/her employees at the project where contaminated water or other hazardous materials are present at the project site.
- Within the erosion and sediment control plan the Contractor shall establish an approved monitoring plan to verify this requirement. The site-specific BMP plan should be referred to frequently during project work and revised when site conditions or information changes. Site housecleaning to prevent indiscriminate storage of construction materials or waste is a requirement tasked or charged to the Contractor.
- 18. Mechanized equipment and construction materials shall be clean, uncontaminated, and free of deleterious substances, including toxic chemicals and clay-coated material.
- . Contractor shall be responsible for coordination of removal and disposal activities of hazardous waste in accordance with all federal, state and local regulations.
- 20. Weekly sweeps shall be conducted at all construction entrances and exits. However, if sediment build up is heavy, daily sweeps shall be conducted. Residual asphalt or concrete produced during the job shall be immediately swept, contained and managed.
- 21. Concrete washouts shall be generated in the staging areas of the jobsite. Washout areas shall be lined with geotextile fabric or plastic sheeting or contained in approved washout bins.
- 22. Saw cutting waste shall be vacuumed with a shop vacuum.
- 23. Water trucks shall be circulated throughout the jobsite.
- the project location. Fueling trucks shall also store and dispense other required lubricants and fuels. In an event the fueling truck remains at the project site, the truck shall be positioned in a safe environment clear from vehicular and operational traffic.
- 25. If necessary, absorbent pads and drip pans shall be placed under the equipment.
- 26. Litter shall be picked up and disposed of on a daily basis.
- 27. Portable toilets shall be placed throughout the jobsite.

## GRADING NOTES:

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HÁW.	200A-01-10	2012	9	0

- 1. All grading work shall conform to Chapter 10 of the Hawaii County Code. Should a grading permit be required, no work shall commence until the Department of Public Works (D.P.W. approves a Grading Permit.
- 2. The Contractor shall remove all silt and debris deposited in drainage facilities, roadways and other areas resulting from his work. The costs incurred for any necessary remedial action by the D.P.W. shall be payable by the Contractor.
- 3. The Contractor, at his own expense, shall keep the project and surrounding areas free from dust nuisances. The work shall be in conformance with the Air Pollution Control Rules of the State Department of Health, Har 11-60.1, Fugitive Dust.
- 4. All grading operations shall be performed in conformance with the applicable provisions of the Hawaii Administrative Rules, Title 11, Chapter 55, Water Pollution Control and Chapter 54, Water Quality Standards, and to the Erosion and Sedimentation Control Standards and Guidelines of the Department of Public Works, County of Hawaii.
- 5. The Contractor shall sod or plant all slopes and exposed areas immediately after the grading work has been completed.
- 6. Fills on slopes steeper than 5:1 shall be keyed.
- 7. The Contractor shall inform the D.P.W. of the location of the disposal and/or borrow site(s) required for this project when an application for a grading permit is made. The disposal and/or borrow site(s) must also fulfill the requirements of the Grading Ordinance.
- 8. No grading work shall be done on Saturdays, Sundays and Holidays anytime without prior approval from the Department of Public Works. Grading work on normal working days shall be between the hours of 7:00 a.m. to 3:30
- 9. Fills shall be compacted to 90 percent (90%) of maximum density per ASTM 0-1557 test.
- 10. The Contractor shall remove all vegetation before placing fills on natural ground surface.



C-6

4/30/2016

Scale:

EXPIRATION DATE O

THIS WORK WAS PREPARED BY

ME OR UNDER MY SUPERVISION.

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

BEST MANAGEMENT PRACTICES & GRADING NOTES

MAUNA KEA MAINTENANCE BASEYARD Saddle Road

Project No. 200A-01-10 Date: September, 2015

SHEET No. 6 OF X SHEETS

