

GENERAL NOTES:

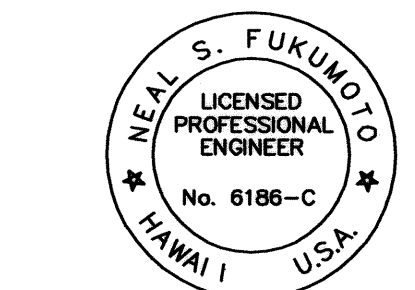
1. The scope of work for this project includes, but is not limited to, reconstruction of weakened pavement and shoulders; installation and resetting of guardrail; replacing guardrail end treatments; gabion walls; installing traffic signs and pavement markings.
2. The Contractor's attention is directed to the following Sections of the Standard Specification Section 107 - Legal Relations and Responsibility to Public, Subsection 104.11 - Utilities And Services; and Section 645 - Work Zone Traffic Control.
3. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
4. The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
5. Existing drainage system will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items.
6. The Contractor shall provide for safe and accessible pedestrian passage and for free and safe vehicular access to and from all existing side streets and driveways at all times.
7. All saw cutting work shall be considered incidental to the various contract items.
8. The location of overhead and underground facilities shown on the plans are from existing records with varying degrees of accuracy and are not guaranteed as shown. The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines and shall maintain adequate clearance when operating equipment within or under any overhead lines.
9. The Contractor shall exercise extreme caution when the excavation and construction crosses or is in close proximity of underground telephone and signal cable facilities and shall maintain adequate clearance for his equipment while working close to and/or under overhead facilities. Any damages to the existing underground facilities shall be repaired and paid for by the Contractor.
10. For field location of Verizon Facilities, contact Verizon Outside Plant Engineering Section, a minimum of 72 hours in advance, prior to start of excavation.
11. When excavation is adjacent to existing structures or facilities, the Contractor is responsible for properly sheeting and bracing the excavation and stabilizing the existing ground to render it safe and secure from possible slides, cave-ins, and settlement, and facilities with beams, struts, or underpinning to fully protect it from damage. This work shall be considered incidental to various contract items.

12. The Contractor shall survey and stake out the State Highway right-of-way and install all appurtenances associated with the project within the State right-of-way or construction parcels as shown in the plans.
13. The Contractor is advised that in addition to other contractors working in the same areas, various utility companies (or their contractors) may be performing work within the project area. The Contractor is to coordinate all work with other contractors in the area and to coordinate the design. In case of unreasonable conflict among contractors regarding access or work sites, the Engineer will make the final determination of priorities.
14. The term "Engineer for the Utility Companies" shall also mean his delegated Representative and/or the Utilities' Inspectors of Record.
15. When excavating near utility poles, the Contractor shall protect, support, secure and take all other precautions to prevent damage to or leaning of these poles. The Contractor is responsible for all costs associated to repair and/or straighten pole.
16. Where pedestrian walkways exist, they shall be maintained in a safe and passable condition, or other facilities for pedestrians shall be provided. Passages between walkways at intersections shall likewise be provided at all times.
17. The Contractor at his own expense, shall keep the project area and surrounding area free from dust nuisance. The work shall be in conformance with the Air Pollution Control Standards and Regulations of the State Department of Health.
18. The Contractor shall be solely responsible for the protection of adjacent properties, utilities and existing structures from damages due to construction. Repairing any damage shall be at the Contractor's own expense, and to the satisfaction of the Engineer.
19. Removal and disposal of any debris shall be considered incidental to their respective bid items. The Contractor shall clean and remove any accumulation of aggregates along the roadside within 10 feet of the edge of pavement. This work shall be considered incidental to the various contract items and will not be paid for separately.
20. All holes, depressions and wheel ruts shall be filled and compacted with asphalt concrete, Mix V, prior to resurfacing. This work shall be considered incidental to various contract items and will not be paid for separately.
21. Smooth riding connections shall be constructed at all limits of surfacing.
22. Trimming and dressing of shoulder shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by the Engineer. Suitable materials shall include materials from roadway excavation, including topsoil, and if necessary, additional materials from borrow outside the limits of the right of way. This work shall be considered incidental to various contract items.

23. Contractor shall adjust all existing manholes, valve boxes, street monuments, frames and covers, etc., as necessary. Adjustments shall not be measured for payment but shall be considered incidental to various items of work in the proposal.
24. After completion of paving, the Contractor and the Engineer will test for, and determine ponding areas (i.e. low spots within the paved area). It shall be the responsibility of the Contractor to correct and resurface and/or repair all such ponding areas.
25. Construction and restoration of all existing highway facilities within State right-of-way shall be done in accordance with all applicable section of the 1994 Standard Specifications for Road, Bridge and Public Works Construction, and the Specifications for Installation of Miscellaneous Improvements within State Highways of the State Highway Division.
26. Lane closures will be permitted only from 8:30 a.m. to 3:30 p.m.
27. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities, and shall take necessary precautions for the protection, convenience, and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways", adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI - Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations" and NCHRP 350.
28. The Contractor shall be required to provide adequate, safe, non-skid bridging material over any trench, including shoring, when trenching in pavement areas to handle all types of vehicular traffic. The use of steel plates shall not be used in the freeway travelway.
29. All regulatory, guide and construction signs and barricades shall be high intensity selective sheeting.
30. Stop work and contact the State Historic Site Office, at 933-0482 immediately should any unidentified archaeological site or remains (such as artifacts, shells, bones, charcoal deposits, road or coral alignments, pavings or walls) be encountered during construction.
31. All signs, pavement markings, striping, etc. removed or damaged by the Contractor shall be replaced by the Contractor at no additional cost to the State.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	250A-01-06M	2009	3	55

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
NO.	_____



This work was prepared by me or under my supervision.  
Exp. 04-30-10  
*Neil S. Fukunaga*  
Wesley R. Segawa & Associates, Inc.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**GENERAL NOTES**  
KOHALA MOUNTAIN ROAD PAVEMENT REPAIRS  
Waiaka Junction toward Hawi  
Project No. 250A-01-06M  
Date: April 2009



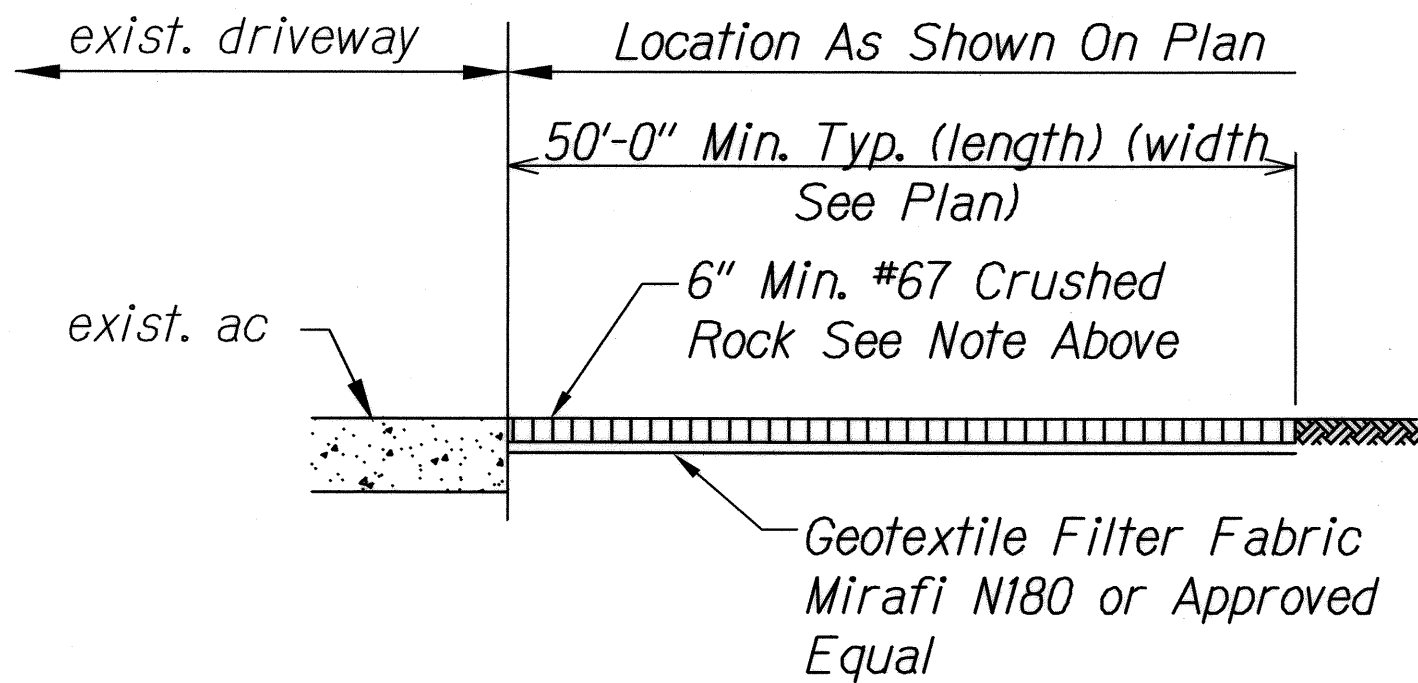
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HAWAII	HAW.	250A-01-06M	2009	4	55

GRADING NOTES

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 (DPW) 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 DPW 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. Fill on slopes steeper than 5:1 shall be keyed.
7. The Contractor shall inform the DPW 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 at any time 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 p.m. M-F
9. Fills shall be compacted to 90 percent of its maximum dry density per ASTM D-1557 test.
10. The Contractor shall remove all vegetation before placing fills on natural ground surface.
11. Estimated earthwork quantities do not include allowances for shrinkage, compaction, and other losses.
12. The contractor is responsible for verifying all earthwork quantities and field conditions.

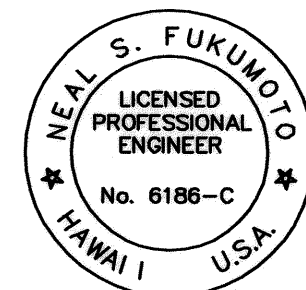
EROSION CONTROL NOTES

1. The Contractor shall install Dandy Bag II, or approved equal, in all drywells and grated inlets and construction ingress/egress as soon as practicable.
2. Best Management Practices (BMP's) shall not be removed until all permanent erosion controls are in place and established.
3. At the end of grading operations, existing drywells and grated inlets surrounding the project site shall be inspected and any accumulated sediment and debris found in the drain structures shall be removed.
4. Dandy Bag II as manufactured by Dandy Projects, inc., or approved equal, shall be installed in all drywells and grated inlets upon their construction, and shall remain in place until construction is complete and all exposed areas stabilized. Dandy Bag II, or approved equal, to be maintained by the Contractor per manufacturer's recommendations.



STABILIZED CONSTRUCTION  
ENTRANCE DETAIL  
NO SCALE

DATE	_____
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CHECKED BY	_____
IN.	_____



This work was prepared by me  
or under my supervision.  
Exp. 04-30-10

*Neil S. Fukunaga*  
Wesley R. Segawa & Associates, Inc.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES

KOHALA MOUNTAIN ROAD PAVEMENT REPAIRS

Waiaka Junction toward Hawi

Project No. 250A-01-06M

Date: April 2009

SHEET No. 2 OF 2 SHEETS



WATER POLLUTION AND EROSION CONTROL NOTES:

A. GENERAL:

- 1. The Contractor is reminded of the requirements of Section 209 - Water Pollution and Erosion Control, in the Special Provisions. Section 209 describes but is not limited to: submittal requirements; scheduling of a water pollution and erosion control conference with the Engineer; construction requirements; method of measurement; and basis of payment.
- 2. The Contractor shall follow the guidelines in the "Best Management Practices Manual for Construction Sites in Honolulu", dated May 1999 in developing, installing and maintaining the Best Management Practices (BMP) for the project.
- 3. The Contractor shall follow the guidelines in the Honolulu's City & County "Rules for Soil Erosion Standards and Guidelines" for all projects on Oahu. Use applicable Soil Erosion Guidelines for projects on Maui, Molokai Kauai, and Hawaii. The Engineer may assess liquidated damages of up to \$27,500 for non-compliance of each BMP requirement and each requirement stated in Section 209, for every day of non-compliance. There is no maximum limit on the amount assessed per day.
- 4. The Engineer will deduct the cost from the progress payment for all citations received by the Department for non-compliance, or the Contractor shall reimburse the State for the full amount of the outstanding cost incurred by the State.
- 5. For projects that require an NPDES Permit from the Department of Health, install a rain gage prior to any field work including the installation of any site-specific best management practices.
- 6. The rain gage shall have a tolerance of at least 0.05 inches of rainfall, and have an opening of at least one-inch in diameter. Install the rain gage on the project site in an area that will not deter rainfall from entering the gage opening. The rain gage installation shall be stable and plumbed. Do not begin field work until the rain gage is installed and site-specific best management practices are in-place.

B. WASTE DISPOSAL:

- 1. Waste Materials  
All waste materials shall be collected and stored in a securely lidded metal dumpster. The dumpster shall meet all local and State solid waste management regulations. All trash and construction debris from the site shall be deposited in the dumpster. The dumpster shall be emptied a minimum of twice per week or as often as is deemed necessary. No construction waste materials shall be buried onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Notices stating these practices shall be posted in the office trailer and the Contractor shall be responsible for seeing that these procedures are followed.
- 2. Hazardous Waste  
All hazardous waste materials shall be disposed of in the manner specified by local or State regulations or by the manufacturer. The Contractor's site personnel shall be instructed in these practices and shall be responsible for seeing that these practices are followed.

Sanitary Waste

- 3. All sanitary waste shall be collected from the portable units a minimum of once per week, or as required.

C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

- 1. All control measures shall be inspected at least once each week and following any rainfall event of 0.5 inches or greater.
- 2. All measures shall be maintained in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.
- 3. Built-up sediment shall be removed from silt fence when it has reached one-third the height of the fence.
- 4. Silt screen or fence shall be inspected for depth of sediment, tears, to verify that the fabric is securely attached to the fence posts or concrete slab and to verify that the fence posts are firmly in the ground. The bottom of the silt screen shall be inspected and verified that it is buried a minimum of 6 inches below the existing ground.
- 5. Temporary and permanent seeding and planting shall be inspected for bare spots, washouts and healthy growth.
- 6. A maintenance inspection report shall be made promptly after each inspection by the Contractor.
- 7. The Contractor shall select a minimum of three personnel who shall be responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- 8. Personnel selected for the inspection and maintenance responsibilities shall receive training from the Contractor. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:

- 1. Materials Pollution Prevention Plan
  - a. Applicable materials or substances listed below are expected to be present onsite during construction. Other materials and substances not listed below shall be added to the inventory.

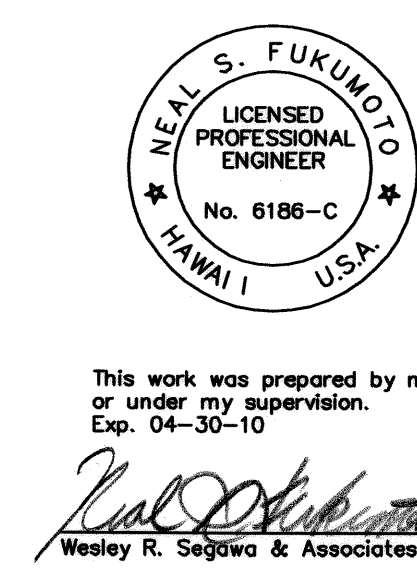
Concrete  
Detergents  
Paints (enamel and latex)  
Metal Studs  
Tar

Fertilizers  
Petroleum Based Products  
Cleaning Solvents  
Wood  
Masonry Block
  - b. Material Management Practices shall be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. An effort shall be made to store only enough product as is required to do the job.
  - c. All materials stored onsite shall be stored in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.
  - d. Products shall be kept in their original containers with the original manufacturer's label.
  - e. Substances shall not be mixed with one another unless recommended by the manufacturer.
  - f. Whenever possible, a product shall be used up completely before disposing of the container.
  - g. Manufacturer's recommendations for proper use and disposal shall be followed.
  - h. The Contractor shall conduct a daily inspection to ensure proper use and disposal of materials onsite.

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- 2. Hazardous Material Pollution Prevention Plan
  - a. Products shall be kept in original containers unless they are not resealable.
  - b. Original labels and material safety data sheets (MSDS) shall be retained.
  - c. Surplus products shall be disposed of according to manufacturers' instructions or local and State recommended methods.
- 3. Onsite and Offsite Product Specific Plan
  - a. The following product specific practices shall be followed onsite:
    - 1) Petroleum Based Products:  
All onsite vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used onsite shall be applied according to the manufacturer's recommendation.
    - 2) Fertilizers:  
Fertilizers used shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked into the soil to limit exposure to storm water. Storage shall be in a covered shed. The contents of any partially used bags of fertilizer shall be transferred to a sealable plastic bin to avoid spills.

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
NOTE BOOK	_____
CHECKED BY	_____

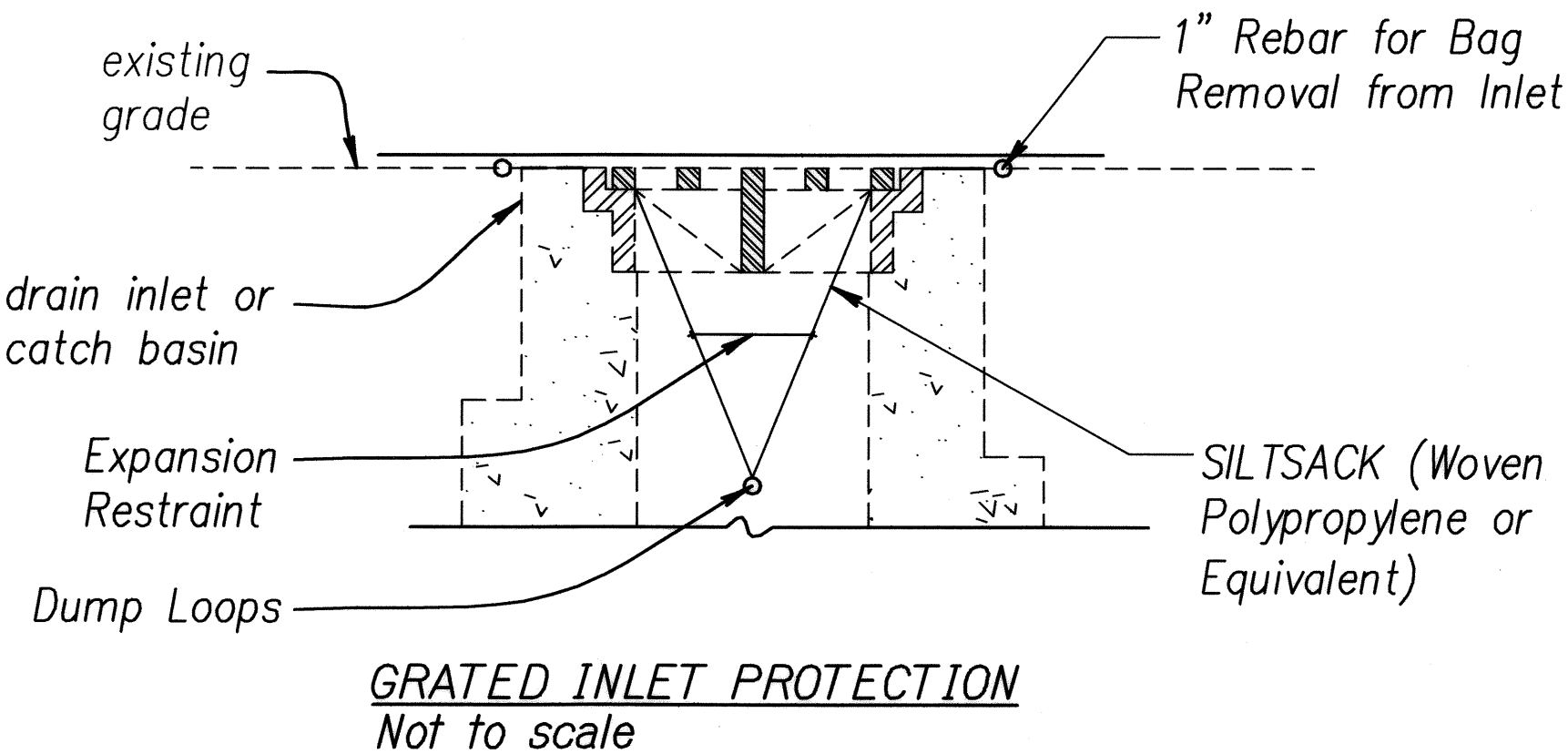
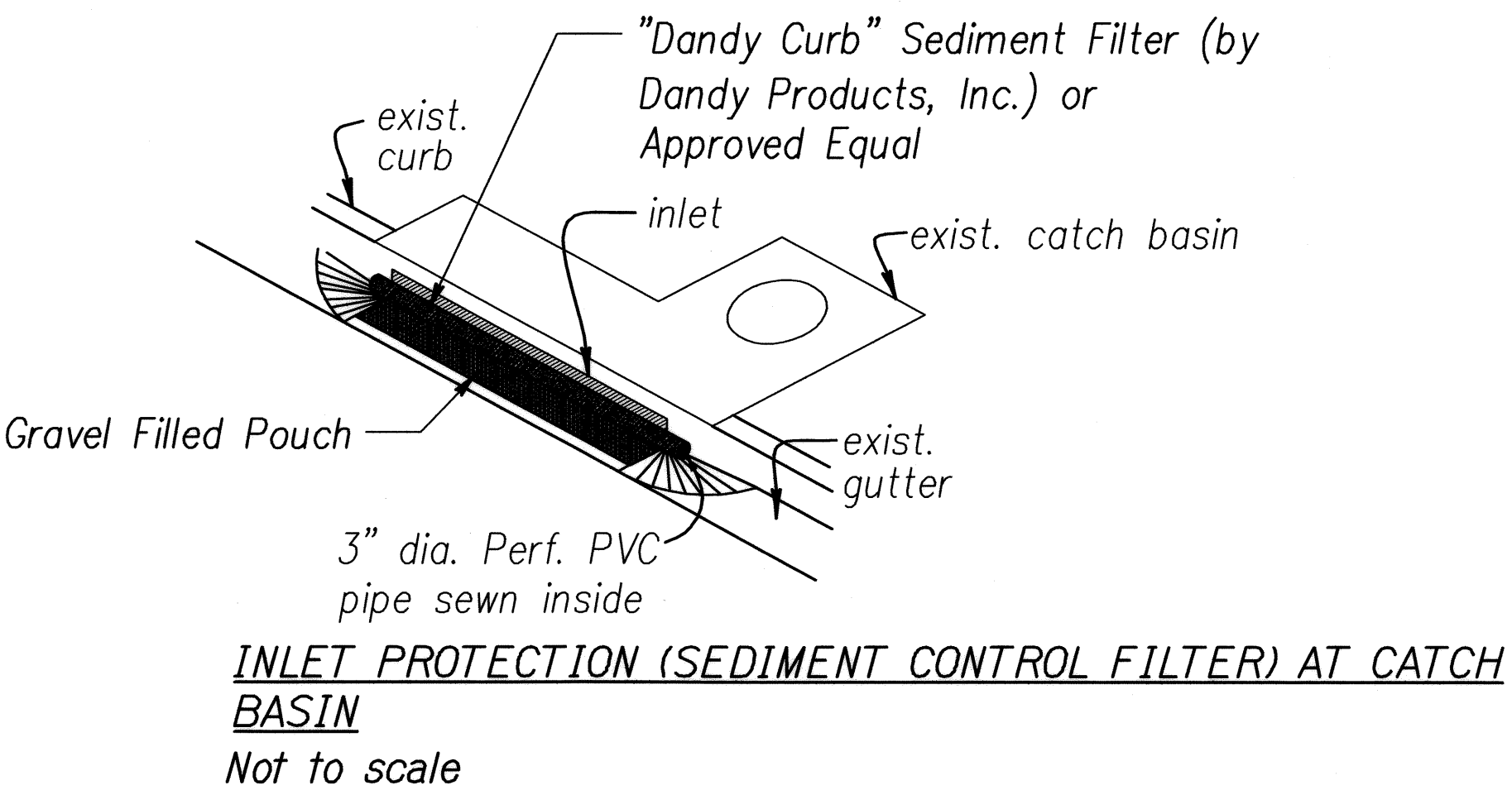


STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**WATER POLLUTION & EROSION CONTROL NOTES**  
KOHALA MOUNTAIN ROAD PAVEMENT REPAIRS  
Waiake Junction toward Hawi  
Project No. 250A-01-06M  
Date: April 2009

WATER POLLUTION AND EROSION CONTROL NOTES: – Cont.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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- a. The following product specific practices shall be followed onsite: -Cont.
- 3) **Paints:** All containers shall be tightly sealed and stored when not required for use. Excess paint shall not be discharged to the highway drainage system but shall be properly disposed of according to manufacturers' instructions or State and local regulations.
- 4) **Concrete Trucks:** Concrete trucks shall be allowed to wash out or discharge drumwash water only at a designated site. Water shall not be discharged in the highway drainage system or waters of the United States. The Contractor shall contact Drinking Water Branch, Department of Health at 586-4258 to receive permission to designate a disposal site. The Contractor shall clean disposal site as required or as requested by the Owner's representative.
- b. **Offsite Vehicle Tracking:**  
A stabilized construction entrance shall be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance shall be cleaned daily or as required to remove any excess mud, cold planed materials, dirt or rock tracked from the site. Dump trucks hauling material from the construction site shall be covered with a tarpaulin.
4. **Spill Control Plan**
- a. A spill prevention plan shall be posted to include measures to prevent and clean up each spill.
- b. The Contractor shall be the spill prevention and cleanup coordinator. The Contractor shall designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel shall be posted in the material storage area and in the office trailer onsite.
- c. Manufacturers' recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the location of the information and cleanup supplies.
- d. Materials and equipment necessary for spill cleanup shall be kept in the material storage area onsite.
- e. All spills shall be cleaned up immediately after discovery.
- f. The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- g. Spills of toxic hazardous material shall be reported to the appropriate State or local government agency, regardless of the size.



E. PERMIT REQUIREMENTS:

1. A National Pollutant Discharge Elimination System (NPDES) Permit for Construction Activities is required for this project. The Contractor shall submit to the Engineer 6 (six) sets of the Water Pollution and Erosion Control Submittals as detailed in Subsection 209.03 of the specifications.
2. If an NPDES Permit for Construction Dewatering is required, the Contractor shall be responsible to obtain the Permit from the Department of Health, Clean Water Branch.
3. The Contractor shall comply with all applicable State and Federal Permit conditions. Permits may include but are not limited to the following:
- a. NPDES Permit for Construction Activities

ORIGINAL PLAN	DATE
REVISION	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
NOTED BY	DATE
DATE	

NEIL S. FUKUNOTO  
LICENSED PROFESSIONAL ENGINEER  
No. 6186-C  
HAWAII U.S.A.

This work was prepared by me or under my supervision.  
Exp. 04-30-10  
*Wesley R. Segawa*  
Wesley R. Segawa & Associates, Inc.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
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**WATER POLLUTION & EROSION CONTROL NOTES**  
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