

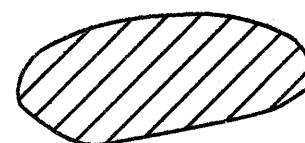
GENERAL NOTES

1. The scope of work for this project includes: removal of silt, debris and other material from bridge piers to provide clear waterways. The work includes accessing the site, clearing brush and weeds, cutting and removal of logs and other debris, and excavation and removal of mud, silt and debris. The work also includes traffic control, adhering to the conditions and restrictions of the Best Management Practices and Water Quality Monitoring Plan as cited on this sheet.
2. The Contractor is reminded of the requirements of Subsection 108.01 - Subletting of Contract, which requires him to perform work amounting to not less than 50 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.
3. The Contractor's attention is directed to the following Sections of the Special Provisions : Subsection 107.13 - Public Convenience and Safety; Subsection 107.21 - Contractor's Responsibility For Utility Property And Services; and Section 645 -Traffic Control.
4. The Contractor shall obtain a construction permit from the State's Highway District Engineer at 3060 Eiwa St., Room 205, Lihue, Kauai prior to commencement of work within State highway right-of-way.
5. 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.
6. All lanes shall be open to traffic during morning peak hours from 6:30 A.M. to 8:30 A.M., during afternoon peak hours from 3:30 P.M. to 6:00 P.M. and during off work hours. Only one lane of highway shall be closed at any other time. Failure of the Contractor to open all lanes of traffic during the times specified above, shall result in assessment of liquidated damages as specified in Section 108.08 of the Special Provisions.
7. Work involved in accessing the work sites shall be considered incidental to Removal of Silt and Debris. The Contractor shall be responsible for determining the appropriate methods of accessing each site. Contractor shall obtain permission from all private and/or public landowners adjacent to the work site prior to using or traversing the private properties.
8. The material removed shall become the property of the Contractor. The Contractor shall be responsible for the legal disposal of the material. Disposal of debris removed shall be considered incidental to Removal of Silt and Debris.
9. If material is disposed at a location other than the County dump, the Contractor shall provide a letter, from the legal owner of the property to the State, identifying the property, stating they are the legal owner and confirming that the Contractor has permission to use the site for disposal.
10. No material and/or equipment shall be stockpiled or otherwise stored within highway rights-of-way except at locations designated in writing and approved by the District Engineer.
11. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities and shall take all necessary precautions for the protection and for the 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 of Uniform Traffic Control Devices for Streets and Highways, Part VI - Traffic Control for Highway Construction and Maintenance Operations".
12. All regulatory, guide and construction signs and barricades shall be of high intensity reflective sheeting.

BEST MANAGEMENT PRACTICES

1. The following are the Best Management Practices for this specific project. If the Contractor elects to modify the pollution control methods, the Contractor shall submit to the Engineer three (3) sets of revised control plans for review and approval.
2. Care shall be taken to ensure that no debris, petroleum products, deleterious materials or wastes be allowed to fall, flow, leach or otherwise enter the water.
3. The Contractor shall not disrupt the migration or other movement of aquatic life inhabiting the water.
4. All work shall be done in a manner so as to confine and isolate the maintenance activities and to control and minimize turbidity within the smallest area possible. Silt curtains or other appropriate measures approved by the Engineer shall be used to minimize the spread of turbid water. Silt curtains or other appropriate containment devices shall be properly maintained throughout the entire period of in-water work and shall not be removed until the in-water work is completed and the affected area water quality has returned to its preconstruction condition.
5. The Contractor shall not operate any equipment from in the water. The Contractor shall not construct any causeways through the water.
6. Material removed or excavated, including entrapped water, shall not be allowed to re-enter the streams. Any material spilled on bridge decks or roadways shall be contained, collected and disposed of with the rest of the removed debris.
7. The material removed shall not be placed in any wet lands and water runoff from the material shall not flow to any stream or wet lands. Any disposal site other than the County dump is subject to the approval of the Engineer.
8. Fueling, repair and other activities with any potential to release pollutants shall occur far enough above any upper reaches of the water and in such a manner as to ensure that they have no effect on the river.
9. If a visible turbidity plume and/or floating petroleum products are observed outside of the containment area, the following measures shall be taken:
 - a. All in-water work shall cease.
 - b. The contractor shall inform the Engineer immediately.
 - c. The site shall be inspected to ascertain the source of the plume.
 - d. Control measures shall be refurbished, modified, and/or improved, eg., additional silt containment devices will be installed.
 - e. Work shall continue only after the plume or oil is no longer visible.
10. An individual, designated by the Contractor to be responsible for the Water Quality Monitoring Plan shown on this sheet, shall be on-site during debris removal operations. This individual shall conduct visual inspections, perform water quality sampling and other environmental monitoring as appropriate, and report all results to the Engineer on a weekly basis during the construction period.
11. The Contractor shall inform the Engineer at least three days in advance of the date of commencement of the in-water work.

LEGEND



Area Of Silt and Debris To Be Removed

Traffic Signs

WATER QUALITY MONITORING PLAN

1. PARAMETERS MEASURED:
Three water quality parameters may be altered as a result of the permitted activities: total suspended solids, dissolved oxygen and turbidity. Each of these parameters shall be measured prior to, during and after removal of debris.
2. MEASUREMENT LOCATIONS:
Separate sets of measurements shall be made at each site. Measurements shall be made on water samples obtained from locations 50 and 100 feet upstream and downstream from the centerline of the roadway in line with each pier where debris is to be removed.
3. MEASUREMENT PROCEDURE:
Measurements for the required parameters may be made in situ with standard field grade equipment or water samples may be collected and analyzed in the laboratory. Water samples shall be obtained by filling two 1-liter sample bottles at each measurement location. Weather, tide and/or stream flow data, wind direction, and time shall be noted in the measurement/sampling log.
4. MEASUREMENT FREQUENCY:
Pre-construction measurements shall be undertaken at each site on two days within the month prior to the start of in-water work at that site.

During debris removal, one measurement or sample shall be collected per day at each measurement location for each site throughout the removal period at that site.

Post-construction measurements/samples shall be undertaken for three days within the month following completion of in-water work for each site.
5. SAMPLE QUALITY ASSURANCE:
Water samples, shall be collected by filling two 1-liter sample bottles at each of the sampling locations. Each bottle shall be labeled with sample identification. The samples shall be sent or delivered to an approved lab for analysis on the day of collection by the Contractor or agent. A receipt of delivery, noting date, time and accepting person should be obtained by the permittee.

The laboratory shall enter analytical results, notes on instrument calibrations and other pertinent information in a notebook that shall be made available to inspection by the Engineer. The original data log book shall be kept by the testing lab or Contractor for a minimum of three years following completion of the project.
6. DATA REPORTING:
Copies of the data tables shall be sent to the Engineer
7. Water quality monitoring shall be considered incidental to Removal of Silt and Debris.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-03-97M	1997	3	8

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY Jim Tortorelli	Sept. 94
NOTE BOOK	TRACED BY	
Rel./Jim	DESIGNED BY	
Bridgegradyn	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GENERAL NOTES & LEGEND
KAUMUALII HIGHWAY & KUHIO HIGHWAY
SILT AND DEBRIS REMOVAL
WAIMEA, HANAPEPE, KALIHIWAI
AND KAPAA BRIDGES
Project No. HWY-K-03-97M
Date: May, 1997
SHEET No. 1 OF 1 SHEETS