

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
NOTE BOOK	CHECKED BY	
	No.	

GENERAL NOTES

- The project begins on Puunene Avenue at the intersection of Kuihelani Highway and Puunene Avenue, and stretches East to Mokulele Highway. The project continues South on Mokulele Highway and ends at approximate station 70+00 where a transition connection is made back to the existing highway. Improvements consist of removal of existing pavement and construction of new divided highway, relocating power and telephone poles and underground utilities, constructing drainage improvements, installing traffic signals, signs and pavement markings and landscaping, adjusting pull boxes, and manhole frames and covers.
- 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. Noncompliance with this Subsection may be grounds for rejection of bid.
- 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.
- The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction.
- 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.
- 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.
- Cold planed connections shall be constructed at all limits of resurfacing, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer. Exact locations shall be determined in the field by the Engineer. Payment for this work approaches, side streets and driveways as shown on the plans shall be considered incidental to Asphalt Concrete Pavement, Mix IV.
- Smooth riding connections shall be constructed at the beginning and end of the project and at all connecting approaches, side roads and driveways and as directed by the engineer.
- Dressing of shoulder and sidewalk 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. This work shall be considered incidental to the various contract items.
- All saw cutting work shall be considered incidental to various contract items of work.
- Existing drainage system shall 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.
- All construction signs shall be left in place until all construction items have been completed. The Contractor shall obtain prior approval from the Engineer to remove construction signs. This work shall not be paid for separately but shall be considered incidental to various contract items.
- The Contractor shall not leave more than 1 1/2" drop-offs at the edge of pavement at the end of each work day. This includes drop-offs at the centerline and at the other edges of travel lane.
- Existing guardrail appurtenances and existing signs and posts that will be removed and replaced shall be delivered to the D.O.T. Kahului Base yard in a reusable condition and stored according to the engineers directions. Payment for removal, storage and delivery shall be considered incidental to various guardrail and regulatory and warning sign pay items unless noted otherwise in the proposal.
- Street survey monuments shown on plans shall be verified in the field prior to any construction activity. Monuments that are shown on plans but are missing in the field shall be reestablished and reinstalled by the Contractor. Payment for this work shall be made under Item No. 613.0300, Adjusting Centerline Survey Monuments.
- Street survey monuments shall not be disturbed during cold planing and/or pavement reconstruction. Adjustments of these monuments shall be in accordance with applicable details as shown on the Standard Plans.
- Sign posts shall be square tube posts.
- Existing striping and markings must be referenced by the Contractor for future use. Installation of pavement markings shall not commence until the layout is approved by the Engineer.
- The Contractor shall provide for access to and from all existing side roads, driveways and streets at all times.

20. All Light Poles and Appurtenances Shall Meet the Design Requirements Of Standard Specifications For Structural Supports For Highway Signs, Luminaires and Traffic Signals, 1994 with 1998 and Interim Revisions.

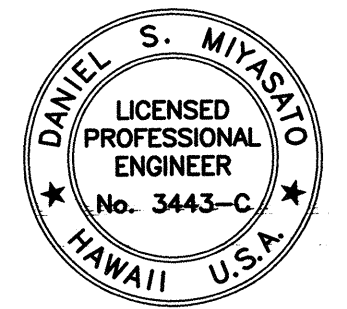
CONSTRUCTION NOTES
WITHIN COUNTY RIGHT-OF-WAY

- Contractor shall obtain permit to perform work on County highways from the Division of Land Use & Codes Administration two weeks prior to the commencement of work.
- Standard Detail Drawings and Standard Specifications of the Department of Public Works shall be included as part of the construction plans.
- All construction work shall strictly conform to the applicable sections of the 1994 Hawaii Standard Specifications for Road, Bridge, and Public Works Construction, and the September 1984 "Standard Details" for Public Works Construction of the Department of Public Works.
- If existing utilities, whether or not shown on plans, are damaged during construction, the contractor shall at his own expense be required to repair such utilities.
- Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, and other protective devices for the protection, safety and convenience of the public, according to the "Manual on Uniform Traffic Control Devices for Streets and Highways", 1988, and to the rules and regulations governing the use of traffic control devices at work sites on/or adjacent to public streets and highways adopted by the highway safety coordinator and the U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices for Highway Construction and Maintenance Operations" dated 1980.
- The Director of Public Works and/or the Director of the Department of Water Supply has the right to stop construction should any work be found contrary to the approved construction plan or detrimental to the public's interest.
- The contractor shall schedule a pre-construction meeting with the Land Use & Codes Administration five (5) days prior to commencement of construction.
- The contractor shall, at his own expense, 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 and County Grading Ordinance.
- The contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways and other areas. The cost incurred for any necessary remedial action ordered by the Director of Public Works shall be paid by the contractor.
- Construction debris and wastes shall be deposited at an appropriate work site. The contractor shall inform the Director of Public Works of the location of the disposal sites. The disposal site must fulfill the requirements of the Grading Ordinance.
- The contractor shall submits a microfilm copy and five (5) copies of the "As-Builts" drawings prior to the final approval of the improvements.
- If the clearance between a wastewater line and a new or existing waterline is eighteen inches (18") or less, the wastewater line shall be concrete-jacketed in accordance with the Standard Details of Public Works Construction dated September 1984.
- Should historic sites such as wall, platforms, pavements, or mounds, or remains such as artifacts burials, concentration of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find and the find shall be protected from further damage. The contractor and/or landowner shall immediately contact the State Historic Preservation Division (692-8015), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.
- Pursuant of Maui County Code Section 3.44.015(C), the County of Maui is not responsible for any park, roadway, easement (including but not limited to drainage, sewer, access, reclaimed water, or avigation easement), or any other interest in real property shown on this map or shown on these plans, unless the Maui County Council has accepted its dedication by a resolution approved by a majority of Council's Members at a regular or special meeting of the Maui County Council.

15. At the completion of construction, contractor shall submit to the engineer, survey coordinate and USGS Datum elevation information for all new, or replaced street and centerline survey monuments. The information shall be compiled by a land surveyor who is licensed to practice in the State of Hawaii and shall be submitted with a signed and sealed statement by the surveyor, certifying the correctness and accuracy of the information.

COMPACTION FOR
COUNTY RIGHT-OF-WAY

- Testing of materials shall be conducted by an approved independent testing agency in accordance with ASTM Standard Methods, or as specified by the Department of Public Works, Engineering Division, as follows:
 - Embankment/select borrow and subgrade materials: one (1) compaction test per 600 square yards per lift of material;
 - Aggregate sub-base course: one (1) compaction test per 400 square yards per lift of material; one (1) gradation and sand equivalent test per project;
 - Aggregate base course: one (1) compaction test per 300 square yards per lift of material; one (1) gradation and sand equivalent test per project;
 - Asphalt concrete pavement or asphalt treated base course; three (1) A.C. cores for thickness and density tests per project;
 - Trench backfill material: one (1) test for each 300 lineal feet of trench per lift of material.
- Contractor shall submit all testing reports including results to the County's inspection agency for review and approval prior to County's acceptance of work.
- The contractor shall be required to notify the County of any testing failures and correct each failure prior to proceeding to the next phase of construction.

  SATO & ASSOCIATES, INC. THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GENERAL NOTES <u>Puunene Avenue Widening</u> <u>Kuihelani Highway to Hansen Road</u> And <u>Mokulele Highway Widening</u> <u>Hansen Road to Vicinity of</u> <u>Cane Haul Road Crossing</u> Federal – Aid Project No. NH-A311(3) Scale: None Date: October 2001 SHEET No. 1 OF 3 SHEETS
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WATER POLLUTION AND EROSION CONTROL

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-A311(3)	2002	4	159

A. General:

- The Contractor is reminded of the requirements of Section 209 - Water Pollution and Erosion Control, in the "Hawaii Standard Specifications for Road, Bridge and Public Works Construction". 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.
- The Contractor shall comply with the requirements of the project's NPDES permit as outlined in the Dept. of Health's notice of general permit coverage letter dated September 25, 2001.
- 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.
- The Engineer may assess liquidated damages of up to \$25,000 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.
- 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.

B. Waste Disposal:

- 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.
- Hazardous Waste**
All hazardous waste materials shall be disposed of in the manner specified by local or State regulation 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**
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:

- All control measures shall be inspected at least once each week and following any rainfall event of 0.5 inches or greater.
- All measures shall be maintained in good working order. If repair is necessary, it shall be initiated within 24 hours after inspection.
- Built-up sediment shall be removed from silt fence when it has reached one-third the height of the fence.
- 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.
- Temporary and permanent seeding and planting shall be inspected for bare spots, washouts and healthy growth.
- A maintenance inspection report shall be made promptly after each inspection by the Contractor.
- 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.
- 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:

- Materials Pollution Prevention Plan**
 - 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 Blocks

- 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.
- 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.
- Products shall be kept in their original containers with the original manufacturer's label.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, a product shall be used up completely before disposing of the container.
- Manufacturer's recommendations for proper use and disposal shall be followed.
- The Contractor shall conduct a daily inspection to ensure proper use and disposal of materials onsite.

2. Hazardous Material Pollution Prevention Plan

- Products shall be kept in original containers unless they are not resealable.
- Original labels and material safety data sheets (MSDS) shall be retained.
- Surplus products shall be disposed of according to manufacturers' instructions or local and State recommended methods.

3. Onsite and Offsite Product Specific Plan

- The following product specific practices shall be followed onsite:
 - 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.
 - 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.
 - Paints:**
All containers shall be tightly sealed and stored when not required for use. Excess paint shall not discharged to the highway drainage system but shall be properly disposed of according to manufacturers' instructions or State and local regulations.
 - Concrete Trucks:**
Concrete trucks shall be allowed to wash out or drum wash water only at 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.
- 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.

Spill Control Plan

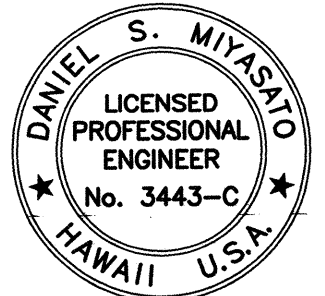
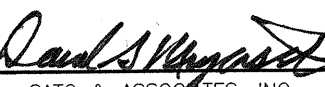
- A spill prevention plan shall be posted and adjusted to include a description and cause of each spill, measures to prevent and clean up each spill.
- The Contractor shall be the spill prevention and cleanup coordinator. The Contractor shall designate at least three site personnel who shall receive 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.
- 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.

- Materials and equipment necessary for spill cleanup shall be kept in the material storage area onsite.
- All spills shall be cleaned up immediately after discovery.
- The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic hazardous material shall be reported to the appropriate State or local government agency, regardless of the size.

E. Permit Requirements:

- A National Pollution Discharge Elimination System (NPDES) Permit for construction activities has been obtained for this project. The contractor shall comply with all conditions of the permit.
- If a NPDES permit for construction dewatering is required, the Contractor shall be responsible to obtain the permit from the Department of Health, Clean Water Branch.
- The Contractor shall comply with all applicable State and Federal permit conditions. Permits may include but are not limited to the following:
 - NPDES permit for construction activities
 - NPDES permit for construction dewatering

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