

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | HSIP-7413(2) | 2011 | ADD. 4 | 29 |

GENERAL NOTES

1. The scope of work for this project consists of a new traffic signal system and construct roadway improvements at the intersection.
2. The Contractor is reminded of the requirements of Subsection 108.01 - Subletting of Contract, which requires him to perform work to not less than 30 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 107.06 - Contractor Duty Regarding Public Convenience; Subsection 107.12 - Protection of Persons and Property; and Section 645 - Work Zone Traffic Control.
4. 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.
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 tone for the exact locations and depths of all underground facilities, either shown on or omitted from the plans, in areas where work, such as the placement of sign posts, traffic signal conduits, etc. may affect these properties. Toning shall be considered incidental to the various contract items and will not be paid for separately. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
6. The Contractor shall notify the Oahu Transit Services, Inc., Road Supervision Office, 811 Middle Street, Honolulu, Hawaii 96819 (Telephone Number 848-4571), two (2) weeks prior to construction, informing them of location, scope of work, and dates of lane(s) closure(s) and name of highway. (For Oahu projects only. For other islands, check with your local bus company.)
7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
8. The Contractor shall obtain a Community Noise permit from the State Department of Health, Noise and Radiation Branch, 591 Ala Moana Boulevard, Room 136, Honolulu, Hawaii 96813-2498; Telephone No. 586-4700. This shall be considered incidental to various contract items and will not be paid for separately.
9. The Contractor shall indemnify and 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, to the satisfaction of the Engineer.
10. Existing drainage system will be functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items and will not be paid for separately.
11. Earth swale shall be graded to drain. This work shall be considered incidental to various contract items.
12. Smooth riding connections shall be constructed at all limits of project, including the beginning and end of project, connecting approaches, side streets, walkways and driveways as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to various contract items and will not be paid for separately.
13. 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 various contract items and will not be paid for separately.
14. Removal and disposal of existing curb and gutter, curb, sidewalk and asphalt concrete pavement, curb, sidewalk and any debris shall be considered incidental to their respective bid items.
15. All saw cutting work shall be considered incidental to various contract items and will not be paid for separately.
16. Prior to placement of new aggregate subbase course, the existing subbase shall be compacted to a relative compaction greater than or equal to 95%.
17. The top of the Plant Mix Glassphalt Concrete Base Course prior to placement of the new A.C. Pavement, Mix No. IV shall comply with the ten-foot straight edge requirement. The variation of the surface from a straight edge with two contacts with the surface, shall not exceed 3/16."
18. Concrete sidewalk shall be reinforced with 6x6 W1.4xW1.4 welded wire fabric.
19. Dressing of sidewalk shall consist of clearing and grubbing, grading, reshaping and compacting with suitable material the area adjacent to the improvement as shown on the plans and/or as directed by the Engineer and shall be considered incidental to Sidewalk.
20. All curbing angle points within the curb ramps shall be rounded with R=6."
21. New Shoulder/Sidewalk adjacent to the New Bike Lane shall be paid for under their respective bid items. New Asphalt Concrete Sidewalk shall be paid for under Item No. 635.0100 - Hot Mix Asphalt Sidewalks.
22. All guardrail post shall be 8.0 feet long. (Normal length is 6.0 feet.
23. The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks and ADA access routes complying with ADAAG Section 4.3, and side streets and cross streets at all times. This work shall be considered incidental to various contract items and will not be paid for separately.
24. The Contractor shall provide and maintain a temporary pedestrian-safe and easily accessible route or detour with barricades in or near the work zone. This temporary route or detour shall be paved at least an inch of Asphalt Concrete Pavement, Mix No V or steel and/or wood planks and shall be American With Disabilities Act (ADA) compliant (This is only applicable if existing surface is dirt and/or if existing surface is non-ADA compliant.) This work shall be incidental to various contract items and will not be paid for separately.
25. Provide smooth transition where new sidewalk construction meets the existing grade or sidewalk. Transition shall not be steeper than 2% cross and longitudinal slopes and not less 6.0 feet long or as specified on the plans. This work shall be considered incidental to various contract items and will not be paid for separately.
26. The Contractor shall remove and dispose of all existing raised pavement markers, thermoplastic line markings, traffic tapes, and epoxy adhesives prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to various contract items and will not be paid for separately.
27. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designed in writing and approved by the Engineer.
28. The Contractor shall notify (As Current) of Hawaiian Telcom at Telephone No. 733-5600, 10 working days prior to excavation of existing sidewalk and curb ramp in the vicinity of the pay phone on Name of Highway. The Contractor shall again notify (As Current) 10 working days prior to pouring of concrete in order for the utility company to install their relocated ductline.

| | |
|---------------|------|
| DESIGNED BY | DATE |
| TRACED BY | |
| DESIGNED BY | |
| QUANTIFIED BY | |
| CHECKED BY | |

| | |
|---|--|
| 9/12/11 | Revised Title Block Federal Aid Project Number |
| DATE | REVISION |
| STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GENERAL NOTES & LEGEND LILIHA STREET Traffic Signal at Kukui Street Federal Aid Project No. HSIP-7413(2) Date: December 2010 SHEET No. 1 OF 2 SHEETS | |

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | HSIP-7413(2) | 2011 | ADD. 5 | 29 |

LEGEND

-  Reconstruction Areas
-  Leveling Areas
-  Cold Planing Areas
-  Resurfacing Limits
-  Existing Electrical Line
-  New Electrical Line
-  Existing Joint Pole
-  Existing Power Pole
-  Existing Electric Manhole
-  Adjusted Elec. MH Frame/Cover
-  New Electric Manhole
-  Existing Telephone Line
-  New Telephone Line
-  Existing Telephone Pole
-  Existing Telephone Manhole
-  Adjusted Tele. MH Frame/Cover
-  New Telephone Manhole
-  Existing Signal Corps Line
-  New Signal Corps Line
-  Existing TV Cable
-  New TV Cable
-  Existing Sandwich Isles Communication Line
-  Existing 12" Water Line
-  New 12" Water Line
-  Existing Water Manhole
-  Adjusted Water MH Frame/Cover
-  New Water Manhole
-  Existing Water Air Valve
-  Adjusted Water Air Valve
-  New Water Air Valve
-  Existing Water Valve Box
-  Adjusted Water Valve Box
-  New Water Valve Box
-  Existing Water Meter
-  Adjusted Water Meter
-  New Water Meter
-  Existing Fire Hydrant
-  New Fire Hydrant
-  Existing Sewer Line
-  New 12" Sewer Line
-  Existing Sewer Manhole
-  Adjusted Sewer MH Frame/Cover
-  New Sewer Manhole
-  Existing 6" Gas Line
-  New 6" Gas Line
-  Existing Gas Valve Box
-  Adjusted Gas Valve Box
-  New Gas Valve Box
-  Existing Gas Manhole
-  Adjusted Gas MH Frame/Cover
-  New Gas Manhole
-  Existing Monument
-  Adjusted Monument
-  New Monument
-  Existing 24" Drain Line
-  New 24" RCP Drain Line
-  Existing Storm Drain Manhole
-  Adjusted Storm Drain MH Frame/Cover
-  New Storm Drain Manhole
-  Existing Grated Drop Inlet
-  Existing Catch Basin
-  Existing Traffic Sign
-  Existing Highway Lighting Standard
-  Existing Highway Lighting Pullbox
-  Existing Traffic Signal Pole
-  New Traffic Signal Pole
-  Existing Traffic Signal Pullbox
-  Adjusted Traffic Signal Pullbox
-  New Traffic Signal Pullbox
-  Existing Metal Guardrail
-  New Metal Guardrail

| | | |
|---------------|-------------------|------|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| NOTE BOOK | DESIGNED BY | |
| | QUANTITIES BY | |
| | CHECKED BY | |

| | |
|--|--|
| 9/12/11 | Revised Title Block Federal Aid Project Number |
| DATE | REVISION |
| STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION GENERAL NOTES & LEGEND LILIHA STREET Traffic Signal at Kukui Street Federal Aid Project No. HSIP-7413(2) Date: December 2010 | |

WATER POLLUTION AND EROSION CONTROL NOTES:

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | HSIP-7413(2) | 2011 | ADD. 5S-1 | 34 |

A. GENERAL:

1. See Section 209 - Temporary Water Pollution, Dust, and Erosion Control. 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. Effective October 1, 2008, follow the guidelines in the "State of Hawaii, Department of Transportation, Highways Division, Construction Best Management Practices Field Manual", dated January 2008 in developing, installing and maintaining the Best Management Practices (BMP) for the project.
3. Follow the guidelines in the Honolulu's City & County "Rules Relating to Soil Erosion Standards and Guidelines" along with applicable Soil Erosion Guidelines for projects on Maui, Molokai, Kauai, and Hawaii.
4. 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.
5. 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.
6. 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. 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**
Collect and store all waste materials in a securely lidded metal dumpster. The dumpster shall meet all local and State solid waste management regulations. Deposit all trash and construction debris from the site in the dumpster. Empty the dumpster a minimum of twice per week or as often as is deemed necessary. Do not bury construction waste materials onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Post notices stating these practices in the office trailer and the Contractor shall be responsible for seeing that these procedures are followed.
2. **Hazardous Waste**
Dispose all hazardous waste materials in the manner specified by local or State regulations and 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.
3. **Sanitary Waste**
Collect all sanitary waste from the portable units a minimum of once per week, or as required.

C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

1. Inspect all control measures at least once each week and within 24 hours of any rainfall event of 0.5 inches or greater within a 24 hour period.
2. Maintain all measures in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.
3. Remove built-up sediment from silt fence when it has reached one-third the height of the fence.
4. Inspect silt screen or fence 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. Inspect and verify the bottom of the silt screen is buried a minimum of 6 inches below the existing ground.

5. Inspect temporary and permanent seeding and planting for bare spots, washouts and healthy growth.
6. Make a maintenance inspection report promptly after each inspection. Submit a copy to the Engineer no later than one week from the date of the inspection.
7. Provide a stabilized construction entrance to reduce vehicle tracking of sediments. Include stabilized construction entrance in the Water Pollution, Dust, and Erosion Control submittals. Minimum length should be 50 feet. Minimum width should be 30 feet. Minimum depth should be 6 inches and underlain with geo-textile fabric. Clean the paved street adjacent to the site entrance daily or as required to remove any excess mud, cold planed materials, dirt or rock tracked from the site. Cover dump trucks hauling material from the construction site with a tarpaulin.
8. Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.
9. Submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
10. 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.
11. Contain, remove, and dispose slurry generated from saw cutting of pavement in accordance with approved BMP practices. Payment for confinement, removal, and disposal of slurry shall be considered incidental to the various contract items.

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 | Fertilizers |
| Detergents | Petroleum Based Products |
| Paints (enamel and latex) | Cleaning Solvents |
| Metal Studs | Wood |
| Tar | Masonry Block |
 - b. Use Material Management Practices to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. Make an effort to store only enough product as is required to do the job.
 - c. Store all materials stored onsite in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.
 - d. Keep products in their original containers with the original manufacturer's label.
 - e. Do not mix substances with one another unless recommended by the manufacturer.
 - f. Whenever possible, use a product up completely before disposing of the container.
 - g. Follow manufacturer's recommendations for proper use and disposal.
 - h. Conduct a daily inspection to ensure proper use and disposal of materials onsite.
2. **Hazardous Material Pollution Prevention Plan**
 - a. Keep products in original containers unless they are not resealable.
 - b. Retain original labels and material safety data sheets (MSDS).
 - c. Dispose of surplus products according to manufacturers' instructions and local and State regulations.

| | | |
|---------------|-------------|------|
| ORIGINAL PLAN | DESIGNED BY | DATE |
| REVISED BY | DESIGNED BY | DATE |
| TRACED BY | DESIGNED BY | DATE |
| NOTE BOOK | DESIGNED BY | DATE |
| QUANTITIES BY | DESIGNED BY | DATE |
| CHECKED BY | DESIGNED BY | DATE |

| | |
|---|--------------------------|
| 9/12/11 | Added Supplemental Sheet |
| DATE | REVISION |
| STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION | |
| WATER POLLUTION & EROSION | |
| CONTROL NOTES | |
| LILIHA STREET Traffic Signal at Kukui Street Federal Aid Project No. HSIP-7413(2) | |
| Scale: None | Date: December 2010 |
| SHEET No. 1 OF 2 SHEETS | |

WATER POLLUTION AND EROSION CONTROL NOTES: -Cont.

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | HSIP-7413(2) | 2011 | ADD. 5S-2 | 29 |

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES: -Cont.

3. Onsite and Offsite Product Specific Plan

The following product specific practices shall be followed onsite:

- a. **Petroleum Based Products:**
Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.
- b. **Fertilizers:**
Apply fertilizers used only in the minimum amounts recommended by the manufacturer. Once applied, work fertilizer into the soil to limit exposure to storm water. Storage shall be in a covered shed. Transfer the contents of any partially used bags of fertilizer to a sealable plastic bin to avoid spills.
- c. **Paints:**
Seal and store all containers when not required for use. Do not discharge excess paint to the highway drainage system. Dispose properly according to manufacturers' instructions or State and local regulations.
- d. **Concrete Trucks:**
Wash out or discharge concrete truck drum wash water only at a designated site. Do not discharge water in the highway drainage system or waters of the United States. Contact Drinking Water Branch, Department of Health at 586-4258 to receive permission to designate a disposal site. Clean disposal site as required or as requested by the Owner's representative.

4. Spill Control Plan

- a. Post a spill prevention plan to include measures to prevent and clean up each spill.
- b. The Contractor shall be the spill prevention and cleanup coordinator. 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. Post the names of responsible spill personnel in the material storage area and in the office trailer onsite.
- c. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.
- d. Keep materials and equipment necessary for spill cleanup in the material storage area onsite.
- e. Clean up all spills immediately after discovery.
- f. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- g. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size.

E. PERMIT REQUIREMENTS:

1. If a National Pollutant Discharge Elimination System (NPDES) Permit is required for Construction Activities of one acre or more, submit to the Engineer 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. 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
 - b. NPDES Permit for Construction Dewatering

| | |
|---------------|---------|
| ORIGINAL PLAN | DATE |
| DESIGNED BY | 3/13/08 |
| CHECKED BY | |
| NOTED BY | |
| QUANTITIES BY | |
| CHECKED BY | |

| | |
|---|--------------------------|
| 9/12/11 | Added Supplemental Sheet |
| DATE | REVISION |
| STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION | |
| WATER POLLUTION & EROSION | |
| CONTROL NOTES | |
| LILIHA STREET Traffic Signal at Kukui Street Federal Aid Project No. HSIP-7413(2) | |
| Scale: None | Date: December 2010 |
| SHEET No. 2 OF 2 SHEETS | |