

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 36C-01-09 | 2010        | 3         | 10           |

GENERAL NOTES

- The scope of work for this project consists of excavating; installing drainage culverts and bed course material; constructing drainage structures; backfilling; and grading earth swale.
- The Contractor is reminded of the requirements of Subsection 105.16 - Subcontracts, 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.
- The Contractor's attention is directed to the following Sections: Subsection 104.11 - Utilities and Services; Subsection 107.06 - Contractor Duty Regarding Public Convenience; and Section 645 - Work Zone Traffic Control.
- 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 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.
- The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
- 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.
- 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 asphalt concrete and will not be paid for separately.
- 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 bulk of work or the various contract items and will not be paid for separately.
- 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.
- All saw cutting work shall be considered incidental to Roadway Excavation or Asphalt Concrete or Various Contract Items or their respective bid items.
- Prior to placement of new aggregate subbase course, the existing subbase shall be compacted to a relative compaction greater than or equal to 95%.

- 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."
- The Contractor shall provide and maintain for access to and from all existing driveways , sidewalks and ADA access routes, and side streets and cross streets at all times. This work shall be considered incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
- 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 curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
- The Contractor shall replace all existing raised pavement markers, thermoplastic line markings, traffic tapes, and epoxy adhesives removed or damaged in construction of drainage systems. This work shall be considered incidental to Asphalt Concrete Pavement, Mix No. IV and will not be paid for separately.
- 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. If use of location is approved by the engineer, the Contractor shall obtain a permit to use the property within the highway right-of-way from the Maui District Office at telephone no. 873-3535.
- The Contractor is advised of the requirements of Subsection 107.01 - Insurance Requirements, which requires that the State of Hawaii, its officers and employees, and the County of Maui, its officers and employees, shall be as additional insureds under these coverages.

DRAINAGE NOTES

- 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 any culvert work or the various contract items and will not be paid for separately.
- The Contractor shall verify the locations of all existing culverts in the field. Any existing culverts damaged during construction shall be repaired or replaced by the Contractor at his own expense.
- Earth swale shall be graded to drain. This work shall be considered incidental to various contract items.
- For added reinforcing around culverts at new drainage structures, see Standard Plan H-06.
- For details of 24-inch culvert trench restoration, see Sheet No. H3.
- Culvert connection to existing box culvert shall be considered incidental to various contract items and will not be paid for separately.
- Existing waterline shall be concrete jacketed if the vertical clearance to the new drain line is less than 12". Concrete jacket shall be paid for on a force account basis according to Item No. 503.1000 Concrete Jacket for Waterline.

LEGEND

- w—12— Existing 12" Water Line
- W—12— New 12" Water Line
- <sub>wmh</sub> Existing Water Manhole
- ◐<sub>wmh</sub> Adjusted Water MH Frame/Cover
- <sub>wmh</sub> New Water Manhole
- <sub>av</sub> Existing Water Air Valve
- ◐<sub>av</sub> Adjusted Water Air Valve
- <sub>av</sub> New Water Air Valve
- <sub>wrv</sub> Existing Water Valve Box
- ◐<sub>wrv</sub> Adjusted Water Valve Box
- <sub>wrv</sub> New Water Valve Box
- ◐<sub>wm</sub> Existing Water Meter
- ◐<sub>wm</sub> Adjusted Water Meter
- ◐<sub>wm</sub> New Water Meter
- <sub>fh</sub> Existing Fire Hydrant
- ◐<sub>mon</sub> Existing Monument
- ◐<sub>mon</sub> Adjusted Monument
- ◐<sub>mon</sub> New Monument
- d--24--- Existing 24" Drain Line
- ◐<sub>sdmh</sub> Existing Storm Drain Manhole
- ◐<sub>sdmh</sub> Adjusted Storm Drain MH Frame/Cover
- <sub>sdmh</sub> New Storm Drain Manhole
- ◐<sub>gdi</sub> Existing Grated Drop Inlet
- ◐<sub>cb</sub> Existing Catch Basin
- ◐<sub>sign</sub> Existing Traffic Sign
- ◐<sub>hl</sub> Existing Highway Lighting Standard
- ◐<sub>hlpb</sub> Existing Highway Lighting Pullbox
- ◐<sub>jp</sub> Existing Joint Pole
- ◐<sub>pp</sub> Existing Power Pole
- ◐<sub>tp</sub> Existing Telephone Pole

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**GENERAL NOTES AND LEGEND**  
HANA HIGHWAY DRAINAGE IMPROVEMENTS  
Vicinity of Ulumalu Road  
Project No. 36C-01-09  
Date: April, 2010  
SHEET No. 1 OF 1 SHEETS

|               |                   |      |
|---------------|-------------------|------|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| DESIGNED BY   | DRAWN BY          |      |
| DESIGNED BY   | DRAWN BY          |      |
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