GENERAL NOTES:

- The scope of work for this project consists of repair and upgrade existing guardrails, add flashing beacons, repair and replace drainage structures, repair and replace roadway pavements and provide maintenance of shoulders and embankments.
- 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.
- 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.
- 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.
- All necessary permits shall be obtained by the Contractor at his own cost.
- The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (DOSH).
- 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.
- The exact locations and limits or areas to be filled with leveling course, reconstructed and cold planed shall be determined in the field by the Engineer.
- A minimum of 36 inches clear width and 80 inches headroom clearance height shall be provided along walkways.
- 10. The surface of an accessible route shall comply with the latest "American with Disabilities Act Accessibility Guidelines."
- 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.
- Smooth riding 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.
- 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.
- Earth swale shall be graded to drain. This work shall be considered incidental to the various contract items.
- 15. The contractor shall provide for access to and from all existing side streets, driveways, walkways, etc. at all times.
- 16. All saw cutting work shall be considered incidental to various contract items.
- The Contractor shall install RM-5 Markers at all existing and New Guardrail within the project limits. RM-5 Markers shall be installed at a maximum 50' o.c.

WATER NOTES:

- The Contractor shall notify the Department of Water Supply (DWS) in writing and by phone (270-7340) one (1) week prior to commencement of work.
- All materials used and method of construction of water system facilities shall be in accordance with the latest revisions of DWS Standards. Contractor shall obtain the latest revisions of the DWS Standard Details before commencing construction.
- The exact depth and location of existing waterlines, service laterals and other utilities are not known. It shall be the Contractor's responsibility to locate same prior to trenching for the new waterline. The cost of lowering, relocating or adjustingexisting waterlines, service laterals and other utilities shall be considered incidentalto the cost of the new waterline unless noted otherwise and will not be paid for separately.
- Concrete for reaction blocks and anchor blocks shall be DWS Class 2500.
- The maximum distance between valve nut and top of manhole cover shall be three (3) feet.
- The Contractor shall submit a materials list to DWS for approval prior to construction.
- Connection to DWS system:
 - a. The Contractor shall verify the exact location, depth, type, and condition of the existing line before ordering materials for the hook-up. He shall, however, check with DWS before excavating for verification purposes. He shall be responsible for furnishing all necessary fittings and other materials required for the hook-up.
 - b. Whenever feasible, Mechanical Joint Fittings shall be used.
 - c. Authorized DWS personnel will make the final connection to the existing line. The Contractor shall be responsible for all costs incurred by DWS for said work including the cost of pressure testing.
 - d. The Contractor shall be responsible for furnishing all material, equipment and labor for chlorination, trench excavation, backfilling, paving, and other work necessary to complete the hook-up as directed by and to the satisfaction of DWS.
- Minimum cover over water main 6" diameter or larger shall be 3'-0". Minimum cover for 4" diameter shall be 2'-6". Minimum cover for diameters less than 4" shall be 1'-6".
- All buried metals shall be wrapped with Poly-Wrap. For Ductile Iron pipe installation, Poly-Wrap shall be required.
- 10. All nuts and bolts shall be painted with asphaltic paint.
- 11. The Contractor shall submit two sets of Record Drawings via a consultant prior to acceptance of the water system.
- 12. The Contractor shall be responsible to verify the exact depth and location of existing waterlines in the project area prior to commencement of work and shall meet with the Department of Water Supply personnel out in the field to help locate the existing waterlines in the project area if necessary.
- Maintain a minimum of three (3) feet clear horizontal separation between existing waterlines and installed utilities.
- 14. Maintain a minimum of six (6) inches clear vertical separation between existing waterlines and installed utilities at all crossings.
- Any installed utility crossing an existing waterline shall be concrete jacketed a minimum of five (5) feet on both sides of the crossing.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
 HAWAII	HAW.	340CD-01-02M	2002	ADD. 3	43

LEGEND:

----e-- Existing Electrical Line

Existing Joint Pole

Existing Power Pole

Existing Electric Manhole

Existing Electric Manhole Existing Highway Lighting Standard

Existing Telephone Pole

Existing Telephone Manhole

——w12— Existing 12" Water Line

°_{Urmh} Existing Water Manhole

°_{U/1/} Existing Water Valve Box

Existing Water Meter

——A12— Existing Sewer Line

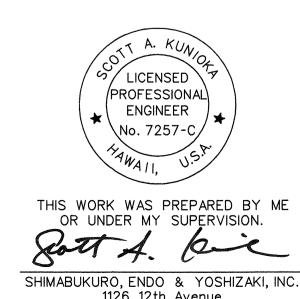
° Amh Existing Sewer Manhole

——d24— Existing 24" Drain Line OAdmh Existing Storm Drain Manhole

□ qdi Existing Grated Drop Inlet

Existing Catch Basin

Existing Traffic Sign ©_{mon.} Existing Monument



Added Water Notes 6/17/02 Revisions

> STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND LEGEND

Kahekili Hwy. Repairs and Maintenance Waiehu Beach Road to Camp Maluhia Project No. 340CD-01-02M

Scale: As Shown

Date: March 21, 2002

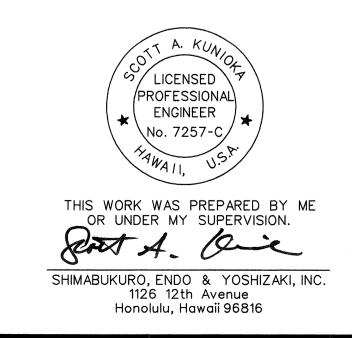
SHEET No. 1 OF 2 SHEETS

SURVEY
DRAWN I
TRACED
DESIGNED
QUANTIT

MECO NOTES:

- The location of MECO's surface 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.
- 2. The Contractor shall comply with the State of Hawaii's Occupational Safety and Health law (DOSH).
- 3. The Contractor shall obtain an excavation permit form MECO's Techincal Division (871-2390) located at 210 W. Kamehameha Avenue, two (2) weeks prior to starting construction. Please refer to our request number at that time.
- For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call MECO's Underground Division at 871-2390 a minimum of 72 hours in advance.
- When trench excavation is adjacent to or beneath our existing structures or facilities, the Contractor is responsible for:
 - a. Sheeting and bracing the excavation to prevent slides, cave-ins and settlements.
 - b. Protecting existing structures or facilities with beams, struts or underpinning.
- For pole bracing instructions, the Contractor shall call MECO at 871-2390 a minimum of 72 hours in advance.
- 7. Any work required to relocate MECO facilities shall be done by MECO and the Confractor shall be responsible for all coordination, and for possible costs if applicable.
- Should it become necessary to temporarily relocate any of MECO facilities to enable the Contractor to perform his work in a safe and expeditious manner in fullfilling his contract obligations, these temporary relocations will be done by MECO or by the Contractor under MECO's supervision with all costs borne by the Contractor.
- Any damage to MECO's facilities will be reported immediately to MECO's Trouble Dispatcher at 871-7777.
- All MECO overhead and underground facilities shall be protected at all times by the Contractor during construction. Costs for damages to MECO facilities shall be borne by the Contractor. This repair work shall be done by MECO or by the Contractor under MECO's supervision.
- Any unforeseen conflict that would result in the redesign or relocation (either temporary or permanent) of MECO's electrical facilities may be cause for lengthy delays. To avoid such delays, the Contractor must notify MECO of the conflict a minimum of 30 days prior to the start of construction.
- The Contractor shall indemnify, defend and hold harmless MECO from and against all losses, damages, claims, and actions including but not limited to reasonable attorney's fees and costs based upon or arising out of cause or contributed to by the Contractor or anyone acting under its direction or control or on its behalf, provided Contractor's indemnity shall not be applicable to any liability based upon the sole negligence of MECO.

FED. ROAD DIST. NO. FISCAL SHEET YEAR NO. STATE PROJ. NO. HAW. 340CD-01-02M 2002 ADD. 3A 43



6/17/02 New Sheet Revisions

> STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

MECO NOTES

Kahekili Hwy. Repairs and Maintenance Waiehu Beach Road to Camp Maluhia Project No. 340CD-01-02M

Scale: As Shown

Date: June 17 2002 SHEET No. 2 OF 2 SHEETS

ADD. 3A

