GENERAL NOTES:

- 1. The scope of work for this project consists of installation of drywells and restoration of existing pavement and bituminous curbs.
- 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 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 107.13 Public Convenience and Safety; Subsection 107.21 Contractor's Responsibility For Utility Property And Services; and Section 645 -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 be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- 6. The contractor shall provide for access to and from all existing side street at all times.
- 7. The contractor shall adhere to all the conditions of the Underground Injection Conctrol (UIC) permit for the subject project. Copies of the approved permit may be acquired from the Hawaii District Office at 50 Makaala St.
- 8. Installing pavement striping shall not be paid for separately, but shall be considered incidental to Item 627.1000 Restoration of Existing Pavement and Curb.
- 9. No section of incomplete guardrail, footing, and/or excavation shall be left unshielded at the end of each work day. Open sections shall be shielded by portable physical barriers. Furnishing, placing, maintaining, relocating and removal of physical barriers shall be considered incidental to the various contract items.
- 10. During work hours, open sections shall be delineated by placing Type II barricades with flashers @ 40' o.c. and traffic cones @ 10' o.c. between barricades. Furnishing, placing and maintaining barricades and cones shall be considered incidental to the various contract items.
- 11. Providing, transporting, placing, maintaining, relocating and removal of portable concrete barriers shall be considered incidental to the various contract items. See Section 645, TRAFFIC CONTROL DEVICES of the Special Provisions.
- 12. Install steady burn amber lamps on portable concrete barrier @ 20' o.c. Installing, maintaining and changing batteries of the Portable Mounted Steady Burn Amber Lamps shall be considered incidental to the various contract items.
- 13. End of portable concrete barriers shall be protected with inertial barriers. Typical layout will vary based on speed and Manufacturer's recommendations and Roadside Design Guide.

DRAINAGE NOTES:

- 1. Existing drainage systems will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow. The cost shall be incidental to the various Contract Items.
- 2. The Contractor shall verify the locations of all existing culverts and utilities in the field. Any existing culverts and utilities damaged during construction shall be repaired or replaced by the Contractor at his own expense.
- 3. For details of manhole rungs, see Standard Plan H-08.
- 4. Chamfer all exposed concrete edges 1".
- 5. Estimated Quantities for Item 627.1000 Restoration of Existing Pavement and Curb:

Plant Mix Asphalt
Concrete Base course = 5 tons
A.C. Pavement, Mix No. IV = 3 tons
Bituminous Curb = 10 L.F.

WATER NOTES:

- 1. All work shall be done according to the Water Systems Standards, State of Hawaii, Volumes 1 and 2, dated 1985, as amended.
- 2. The Contractor shall inform the D.W.S. Engineer 72 hours prior to the beginning of any waterline work and one week prior to any connection, chlorination, shut-off, or relocation.
- 3. All work and material furnished by the D.W.S. shall be paid for by the Contractor.
- 4. All existing waterline, waterline appurtenances and other utility locations shown on the plans are obtained from latest reliable sources. The Contractor shall be responsible to verify the exact location of all utilities in the field and shall bear all costs for damages done to them during the contract period.
- 5. All connections to existing waterlines shall be done by the Department of Water Supply. The Contractor shall provide all excavation, backfill, road repair, traffic control, etc.
- 6. Where water shut-off of more than 3 hours becomes necessary, the Contractor, at his own expense, shall provide a temporary bypass line, size of which shall be determined by the D.W.S. Engineer. The D.W.S. Engineer, also reserves the right to require bypass lines, regardless of the water shut-off period, if it is deemed necessary.
- 7. Minimum horizontal clearance between waterlines and other utilities shall be 8 feet, minimum vertical clearance between waterline and other utilities shall be 12 inches provided the other utility is concrete jacketed and 18 inches if no concrete jackets are used. In all applicable instances the waterlines shall be at a grade higher than other utilities.

FED. ROAD DIST. NO. STATE PROJ. NO. FISCAL SHEET NO. SHEETS HAWAII HAW. 11BC-02-01 2003 5 13

GEOTECHNICAL NOTES:

- 1. A geotechnical engineering report entitled "Geotechnical Engineering Exploration, Substrata Exploration, Mamalahoa Hwy., Misc. Drainage Improv. Vicinity of Hookena, Island of Hawaii" dated January 4, 2002 has been prepared by Geolabs, Inc. A copy of the report is on file at the office of the Engineer for review by the Contractor.
- 2. For boring locations, see Sheet 6.
- 3. The information presented in the logs of borings depict the subsurface conditions encountered at that specified location and at the time of the field exploration only. Variations of subsoil conditions from those depicted in the logs of borings may occur between and beyond the borings.
- 4. The penetration resistance shown on the logs of borings indicate the number of blows required for the specific sampler type used. The blow counts may need to be factored to obtain the Standard Penetration Test (SPT) blow counts.
- 5. The data given is for general information only. Bidders shall examine the site and the boring data and draw their own conclusions therefrom as to the character of materials to be encountered. The Engineer will not assume responsibility for variations of subsoil quality or conditions other than at the boring locations shown and at the time the borings were taken.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES

MAMALAHOA HIGHWAY

Miscellaneous Drainage Improvements

Vicinity of Hookena Project No.: 11BC-02-01

Scale: None Date: Feb, 2002



- Hydraulic Design Section