

STANDARD PLANS SUMMARY

|                        |       |                       |                |              |                 |
|------------------------|-------|-----------------------|----------------|--------------|-----------------|
| FED. ROAD<br>DIST. NO. | STATE | FED. AID<br>PROJ. NO. | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
| HAWAII                 | HAW.  | STP-099-1(20)         | 1999           | 2            | 44              |

| STANDARD<br>PLAN NO. | TITLE  | DATE      |
|----------------------|--|-----------|
| B-01                 | Notes and Miscellaneous Details                      | 07/01/86  |
| B-02                 |  |           |
| B-03                 | Typical Structure Excavation and Backfill Pay Limits | 07/01/86  |
| B-04                 |  |           |
| B-05                 |  |           |
| B-06                 | Concrete Box Girder                                  | 07/01/86  |
| B-07                 | Concrete Box Girder                                  | 07/01/86  |
| B-08                 | Concrete Box Girder                                  | 07/01/86  |
| B-09                 |  |           |
| B-10                 |  |           |
| B-11                 |  |           |
| B-12                 | Prestressed Concrete Piles                           | r07/16/90 |
| B-13                 | Prestressed Concrete Piles                           | r07/16/90 |
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|------|--|-----------|
| D-01 | Chain Link Fence With Toprail                        | r03/06/87 |
| D-02 | Chain Link Fence Without Toprail                     | r07/26/90 |
| D-03 | Wire Fence With Metal Posts                          | 07/01/86  |
| D-04 | Typical Details of Curbs and/or Gutters              | 07/01/86  |
| D-05 | Typical Details of Reinforced Concrete Drop Driveway | 07/01/86  |
| D-06 | Centerline and Reference Survey Monument             | 07/01/86  |
| D-07 | Street Survey Monument                               | 07/01/86  |
| D-08 | Landscaping Shrub and Tree Planting                  | 07/01/86  |
| D-09 | Field Office   | 07/01/86  |
| D-10 | Field Office   | 07/01/86  |
| D-11 | Project Site Laboratory                              | 07/01/86  |
| D-12 | Project Site Laboratory                              | 07/01/86  |
| D-13 | Field Office & Project Site Laboratory               | 07/01/86  |
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|------|---|-----------|
| H-01 | Type A, B, C and D Catch Basin                | 07/01/86  |
| H-02 | Type A1, B1, C1 and D1 Catch Basin            | 07/01/86  |
| H-03 | Type A2, B2, C2 and D2 Catch Basin            | 07/01/86  |
| H-04 | Typical Reinforcing Details for Catch Basins  | 07/01/86  |
| H-05 | Type A, B and C Storm Drain Manhole           | 07/01/86  |
| H-06 | Type D and E Storm Drain Manhole              | 07/01/86  |
| H-07 | Type F Storm Drain Manhole                    | 07/01/86  |
| H-08 | Catch Basin and Manhole Casting               | 07/01/86  |
| H-09 | Type A-9 and A-9P Frames and Grates           | 07/01/86  |
| H-10 | Type A-9B Frames and Grates                   | 07/01/86  |
| H-11 | Type 61614 and 61214 Grated Drop Inlet        | 07/01/86  |
| H-12 | Type 61616 Grated Drop Inlet                  | 07/01/86  |
| H-13 | 61214, 61614 & 61616 Steel Frames and Grates  | 07/01/86  |
| H-14 | 61214B Steel Frame and Grates                 | 07/01/86  |
| H-15 | 61614B Steel Frame and Grates                 | 07/01/86  |
| H-16 | Concrete and Cement Rubble Masonry Structures | r10/16/90 |
| H-17 | Inlet Structures                              | r10/16/90 |
| H-18 | Flared End Section for Culverts               | 07/01/86  |
| H-19 | Outlet Structures                             | r02/15/91 |
| H-20 | Concrete Spillway Inlet                       | 07/01/86  |
| H-21 | 18" Slotted C.M.P. Drain                      | 07/01/86  |
| H-22 | C.M.P. Coupling Details Standard Joint        | r10/16/90 |
| H-23 | Hat Shaped Coupling Band                      | r10/16/90 |
|      |   |           |
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| STANDARD<br>PLAN NO. | TITLE  | DATE      |
|----------------------|--|-----------|
| TE-01                | Miscellaneous Sign Details                               | 07/01/86  |
| TE-02                | Galvanized Flanged Channel Sign Post Mounting            | 07/01/86  |
| TE-03                | Galvanized Square Tube Sign Post Mounting                | 07/01/86  |
| TE-04                | Regulatory Signs   | r09/01/87 |
| TE-05                | Warning Signs  | 07/01/86  |
| TE-06                | Miscellaneous Signs                                      | r11/03/89 |
| TE-07                | Reserved   | 07/01/86  |
| TE-08                | Construction Signs                                       | r09/01/87 |
| TE-09                | Miscellaneous Intersection Signs                         | r03/06/87 |
| TE-10                | Reserved   | 07/01/86  |
| TE-11                | Bike Route Sign and Supplementary Plates                 | 07/01/86  |
| TE-12                | State Route Marker and Auxiliary Markers                 | 07/01/86  |
| TE-13                | Interstate Route Marker                                  | 07/01/86  |
| TE-14                | State Route Marker and Border Detail for Guide Signs     | 07/01/86  |
| TE-15                | Route Marker Assemblies                                  | 07/01/86  |
| TE-16                | Miscellaneous Reflector Markers                          | 07/01/86  |
| TE-17                | Type II Object Markers                                   | 07/01/86  |
| TE-18                | Mileposts  | 07/01/86  |
| TE-19                | Reserved   | 07/01/86  |
| TE-20                | Overhead Sign Supports                                   | 07/01/86  |
| TE-21                | Overhead Sign Support, Box Truss Type, Aluminum          | 07/01/86  |
| TE-22                | Foundation Details and Schedules                         | 07/01/86  |
| TE-23                | Supports for Ground Mounted Guide Sign                   | r11/03/89 |
| TE-24                | Breakaway Sign Supports for Ground Mounted Guide Signs   | 07/01/86  |
| TE-25                | Laminated Aluminum Sign Panels (Overhead)                | 07/01/86  |
| TE-26                | Laminated Aluminum Sign Panels (Ground Mounted)          | 07/01/86  |
| TE-27                | Solid Aluminum Extruded Sign Panel and Accessory Details | 07/01/86  |
| TE-28                | Guide Signs Luminaire Mountings                          | 07/01/86  |
| TE-29                | Reserved   | 07/01/86  |
| TE-30                | Raised Pavement Markers and Striping                     | r05/09/90 |
| TE-31                | Miscellaneous Pavement Markings                          | r05/09/90 |
| TE-32                | Miscellaneous Pavement Markings                          | r05/09/90 |
| TE-33                | Miscellaneous Pavement Markings                          | r11/03/89 |
| TE-34                | Reserved   | 07/01/86  |
| TE-35                | Pavement Alphabets, Numbers & Symbols                    | 07/01/86  |
| TE-36                | Pavement Alphabets, Numbers & Symbols                    | 07/01/86  |
| TE-37                | Reserved   | 07/01/86  |
| TE-38                | Traffic Signal System, Miscellaneous Details             | r11/03/89 |
| TE-39                | Traffic Signal System, Miscellaneous Details             | 07/01/86  |
| TE-40                | Loop Detectors   | r11/03/89 |
| TE-41                | Pullboxes  | 07/01/86  |
| TE-42                | Type III Traffic Signal Standard                         | 07/01/86  |
| TE-43                | Concrete Pullbox (2' x 3')                               | 07/01/86  |
| TE-44                | Reserved   | 07/01/86  |

| STANDARD<br>PLAN NO. | TITLE   | DATE      |
|----------------------|---|-----------|
| TE-45                | Reserved  | 07/01/86  |
| TE-46                | Reserved  | 07/01/86  |
| TE-47                | Reserved  | 07/01/86  |
| TE-48                | Reserved  | 07/01/86  |
| TE-49                | Reserved  | 07/01/86  |
| TE-50                | Metal Guardrail   | r03/06/87 |
| TE-51                | Metal Guardrail   | r09/01/87 |
| TE-52                | Metal Guardrail with Rubrail  | r11/03/89 |
| TE-53                | Metal Guardrail with Rubrail at Obstruction                             | r09/01/87 |
| TE-54                | Beam Type Guardrail with Rubrail at Obstruction (Shoulder Installation) | r11/03/89 |
| TE-55                | Metal Guardrail Connection to Concrete Barrier                          | r11/03/89 |
| TE-56                | Concrete Barrier Transition   | 07/01/86  |
| TE-57                | Guardrail Type 3, Thrie Beam  | r11/03/89 |
| TE-57A               | Guardrail Type 3, Modified Thrie Beam                                   | 11/03/89  |
| TE-58                | Approach End Flare, One & Two Way Roadway                               | 07/01/86  |
| TE-59                | Trailing End Flare, One & Two Way Roadway                               | r11/03/89 |
| TE-60                | Anchor Block Details  | 07/01/86  |
| TE-61                | Breakaway Cable Terminal (BCT)  | r11/03/89 |
| TE-62                | Breakaway Cable Terminal (BCT)  | r09/01/87 |
| TE-63                | Guardrail Type 4 (Rigid Barrier)  | r09/01/87 |
| TE-64                | Portable Concrete Barrier   | r11/03/89 |
| TE-65                | Guardrail Type 4, Miscellaneous   | r09/01/87 |
| TE-66                | Barricades  | 07/01/86  |
| TE-67                | Delineation & Pavement Markings at Bridges                              | 07/01/86  |
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NOTE:  
STANDARD PLANS APPLICABLE TO THIS  
PROJECT ARE INDICATED BY A " ● "  
NEXT TO THE STANDARD PLAN NO.  
(FOR EXAMPLE: D-07 ● )

|               |         |
|---------------|---------|
| DESIGNED BY   | DATE    |
| DRAWN BY      | 3/30/99 |
| CHECKED BY    |         |
| NOTED BY      |         |
| QUANTITIES BY |         |
| REVISIONS     |         |

|          |  |
|----------|--|
| 02/15/91 | REVISED H-19   |
| 10/16/90 | REVISED H-16, H-17, H-22 & H-23  |
| 07/26/90 | REVISED D-02   |
| 07/16/90 | REVISED B-12, B-13   |
| 05/09/90 | REVISED TE-30, TE-31 & TE-32   |
| 11/03/89 | REVISED TE-06, TE-23, TE-30, TE-31, TE-32, TE-33, TE-38, TE-40, TE-52, TE-54, TE-55, TE-57, TE-59, TE-61, TE-64, TE-68 & TE-69, ADDED TE-57A |
| 09/01/87 | REVISED TE-04, TE-06, TE-08, TE-32, TE-51, TE-53, TE-54, TE-55, TE-57, TE-59, TE-62, TE-63, TE-65 & TE-69                                    |
| 03/06/87 | REVISED D-01, TE-09, TE-40, TE-50, TE-51, TE-57, TE-59, TE-61, TE-63 & TE-64   |
| DATE     | REVISION   |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**STANDARD PLANS SUMMARY**  
**KAMEHAMEHA HIGHWAY PEDESTRIAN**  
**ACCESSIBLE ROUTE IMPROVEMENTS**  
**Acacia Road to Honomanu Street**  
**Fed. Aid Project No. STP-099-1(20)**  
Date: March 1999  
SHEET No. 1 OF 1 SHEETS



| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | STP-099-1(20)      | 1999        | 3         | 44           |

GENERAL NOTES

- The scope of work for this project consists of constructing and reconstructing curb ramps, sidewalks and medians; adjusting utility manholes and pull boxes; installing new traffic signal pull boxes, conduits and pedestrian push buttons; relocating signs and pavement markings; upgrading bridge railings; installing guardrails and bicycle railing; and trimming and removing trees.
- 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 or termination of contract.
- 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.
- 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 of curb ramp and sidewalk installation or reconstruction, utility adjustments and traffic signal facility relocation or installation shall be determined in the field by the Engineer.
- The Contractor shall notify in writing, the Oahu Transit Services, Inc. Roads Supervision Office, 811 Middle St., Hon., HI 96819 (ph. #848-4571) seven (7) days prior to any paving operations.
- The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
- Smooth riding connections shall be constructed at all limits of new sidewalk construction 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.
- Dressing of shoulder, sidewalk and bus turnout 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.
- 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.
- The Contractor shall provide for safe access to and from all existing side streets at all times.
- All saw cutting work shall be considered incidental to various contract items.

- Joint poles on the south side of the highway will be removed by HECO. Undergrounding of utilities, joint pole removal and installation of new highway lighting poles (by HECO) may be occurring concurrently with this project. The Contractor should coordinate work with HECO and its Contractor.
- The Contractor shall insure a 34" minimum clear width, excluding curb, at a point obstacle (not exceeding 24"), at existing sidewalk areas. The Contractor shall insure a minimum clear width of 36", at a point obstacle, at new sidewalk areas.
- The Contractor shall exercise extreme caution when installing fence and guardrail posts in close proximity to existing underground utilities.
- A 60" by 60" or larger passing space shall be located at reasonable intervals, not to exceed 200 feet, as shown on the plans. A T-intersection of two walks, is an acceptable passing space.

- The plans depict existing conditions at the time of design. Other construction in the area may have altered the existing conditions and may require adjustments to the plans, as well as necessitate additional construction/reconstruction of sidewalks and curb ramps. The aforementioned increase in work shall be considered incidental to the various contract items.
- The Contractor shall have existing utility lines toned prior to installing guardrails in the vicinity of the utility lines. If the proposed guardrail posts are within 3 feet of the utility lines, the Contractor shall excavate and expose the utility line to determine alignment and depth. The Contractor shall install guardrails in these areas by acceptable methods other than driving, such as hand digging to prevent damages to the existing utility lines.
- The cable television, electric and telephone handholes called out on Plan Sheet No. 18 are to be adjusted and paid for by Hawaiian Electric Company.

LEGEND

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Reconstruction Areas

Leveling Areas

Cold Planing Areas

Resurfacing Limits

Existing Electrical Line

Existing Joint Pole

Existing Power Pole

Existing Electric Manhole

Existing Electric Handhole

Existing Electric Handhole to be Adjusted

Existing AT&amp;T Line

Existing AT&amp;T Manhole

Existing Telephone Line

Existing Telephone Pole

Existing Telephone Manhole

Existing Telephone Manhole to be Adjusted

Existing Telephone Pull Box

Existing Telephone Handhole to be Adjusted

Existing 12" Water Line

Existing Water Manhole

Existing Water Valve Box

Existing Water Meter

Existing Water Meter to be Adjusted

Existing Water Air Valve

Existing Fire Hydrant

Existing Sewer Line

Existing Sewer Manhole

Existing Sewer Manhole to be Adjusted

Existing 10" Oil Line

Existing 6" Gas Line

Existing Gas Valve Box

Existing Gas Manhole

Existing 24" Drain Line

Existing 6" Force Main Line

Existing Storm Drain Manhole

Existing Grated Drop Inlet

Existing Catch Basin

Existing Monument

Existing Traffic Sign With 1 Post

Existing Traffic Sign With 2 Posts

Existing Single Metal Guardrail

New Single Metal Guardrail

New 4' Chain Link Fence

Existing Loop Detector

Existing Traffic Signal Pull Box

Existing Traffic Signal Pull Box to be Adjusted

New Traffic Signal Pull Box to be Installed by Others

Existing Traffic Signal Pole

Existing Highway Lighting Standard

New Highway Lighting Standard to be Installed by Others

New Highway Lighting Standard Pull Box to be Installed by Others

Existing Cable Television Handhole

Existing Cable Television Handhole to be Adjusted

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

KAMEHAMEHA HIGHWAY PEDESTRIAN  
ACCESSIBLE ROUTE IMPROVEMENTS  
Acacia Road to Honomanu Street  
Fed. Aid Project No. STP-099-1(20)

Date: March 1999

SHEET No. 1 OF 1 SHEETS



| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | STP-099-1(20)      | 1999        | 4         | 44           |

WATER NOTES

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, dated 1994, as amended, of the Hawaii Highways Division, Department of Transportation, and the City and County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS "VOLUME 1, DATED 1985, THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION", VOLUME 2, DATED 1985, AND THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 1991, and all subsequent amendments and additions.
2. All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, drainage, etc., and other features of improvements shall not be the responsibility of the Board of Water Supply.
3. The Contractor shall notify BWS Planning and Engineering Division, Construction Section, one week prior to commencing work on the water system.
4. The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy of encountering of other obstacles during the course of the work. The Contractor shall be responsible and pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.
5. Re-approval shall be required if this project is not under construction within a period of two years.
6. The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees, and bends wherever there is a possibility of water line movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measures necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method at no cost to the State.
7. Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
8. The Contractor shall adjust all manhole frames/valve boxes within the resurfaced area. Prior to resurfacing, BWS will initially locate all water manholes/valve boxes that will require adjustments. The Contractor shall then be responsible for "referencing" these manholes/valve boxes to facilitate the adjustments. The cost for adjustments shall be made at their respective unit prices in the Bid based on the actual number adjusted. Cost for referencing shall be incidental and shall not be paid directly. Any additional request to BWS to again locate the manholes/valve boxes shall be done at the expense of the Contractor. (BWS will charge and bill the Contractor for all cost of said additional work.)
9. Maintain 3'-0" minimum cover for all existing waterlines (18" minimum for service laterals) from new finish grade. The Contractor shall probe the waterline and service laterals (at no cost to the State) and submit the probing data to BWS Construction Section via the State. Any adjustments to the existing water system to meet the minimum cover and the requirements of the BWS standards, whether shown on plans or not, shall be done by the Contractor at no cost to BWS and the State.

HECO NOTES

1. The location of HECO's overhead and underground 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 from HECO's Mapping and Records Division located at 820 Ward Avenue, 4th floor, two weeks prior to starting construction. Please refer to HECO's request number at that time.
4. For verification of underground lines or for assistance in supporting and protecting these lines, The Contractor shall call HECO's Underground Division at 543-7345 a minimum of 72 hours in advance.
5. When trench excavation is adjacent to or beneath HECO's existing structures or facilities, the Contractor is responsible for:
  - a) Sheet piling and bracing the excavation to prevent slides, cave-ins, and settlements.
  - b) Protecting existing structures or facilities with beams, struts, or under-pinnings.
6. For pole bracing instructions, the Contractor shall call the HECO District Superintendent at (Koolau 261-6084, Waiau 543-4223, Ward 543-7745) a minimum of 72 hours in advance.
7. Any work required to relocate HECO facilities shall be done by HECO and the Contractor shall be responsible for all coordination, and for possible costs if applicable.
8. Should it become necessary to temporarily relocate any of HECO facilities to enable the Contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations, these temporary relocations will be done by HECO, or by the Contractor under HECO's supervision, with all costs borne by the Contractor.
9. Any unforeseen conflict that would result in the redesign or relocation (either temporary or permanent) of HECO's electrical facilities may be cause for lengthy delays. To avoid such delays, the Contractor must notify HECO of the conflict a minimum of 30 days prior to the start of construction.
10. Any damage to HECO's facilities will be reported immediately to HECO's Trouble Dispatcher at 543-7874.
11. All HECO overhead and underground facilities shall be protected at all times by the Contractor during construction. Costs for damages to HECO facilities shall be borne by the Contractor. This repair work shall be done by HECO, or by the Contractor under HECO's supervision.
12. The Contractor shall save and hold harmless, indemnify, and defend HECO, its officers, employees, agents, and any contractor employee by HECO in connection with this project, from and against any and all suits, actions, and claims of every nature and kind which may be brought for or on account of any injury, death, or damage, arising or growing solely out of the negligence of the Contractor.

|               |                   |         |
|---------------|-------------------|---------|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE    |
| dd3/ymg       | J. Matuszewska    | 2/20/99 |
| NA/Kendg02    | DESIGNED BY       |         |
|               | QUANTITIES BY     |         |
|               | CHECKED BY        |         |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

UTILITY NOTES

KAMEHAMEHA HIGHWAY PEDESTRIAN  
ACCESSIBLE ROUTE IMPROVEMENTS  
Acacia Road to Honomanu Street  
Fed. Aid Project No. STP-099-1(20)

Date: March 1999

SHEET No. 1 OF 2 SHEETS



THE GAS COMPANY NOTES

Gas Facilities (General Notes)

1. The Gas Company gas pipelines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipelines.
2. Written clearance must be obtained from The Gas Company at least five working days prior to starting excavation near these gas pipelines.
3. The Contractor shall excavate and backfill around gas pipelines in the presence of a The Gas Company representative. All backfill within six inches of any gas pipeline shall be select cushion material approved by the Gas Company.
4. For relocation of any gas pipeline, the Contractor shall notify The Gas Company five working days before starting work. The Contractor shall provide the necessary excavation and backfill, obtain traffic permits, and restore pavement, sidewalks, and other facilities. Any relocation of gas facilities shall be done by The Gas Company and paid for by the Contractor.
5. The Contractor shall notify The Gas Company immediately after any damage has been caused to existing gas pipelines, coatings, or its cathodic protection devices. Repair work on such damage shall be done by The Gas Company and paid for by the Contractor.
6. Minimum vertical and horizontal clearance between the gas pipelines and other pipelines, conduits, ductlines, or other facilities shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by The Gas Company.
7. The Contractor shall work in an expeditious manner in order to deep the uncovered gas pipelines exposed for as short a period of tinme as possible.

16-Inch Gas Transmission Line (Line Specific Notes)

1. The Gas Company 16-inch high pressure gas transmission line is plastic coated and cathodically protected. The Contractor shall be extremely careful when working near the gas pipeline.
2. Prior written clearance must be obtained from The Gas Company Maps and Records Department, 515 Kamakee Street, at least five working days before starting excavation near any of The Gas Company pipelines.
3. Since pipeline locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call The Gas Company, a minimum of five working days before starting excavation to arrange for field location of existing gas lines. The telephone number is 594-5575 during business hours, and 526-0066 after hours.
4. The Contractor shall notify The Gas Company, Distribution Department (594-5556) 24 hours prior to excavating and backfilling any pipeline.
5. The Contractor shall have the sole responsibility to perform field verification, including hand digging methods.
6. The Contractor shall excavate and backfill around the pipeline in the presence of a representative of The Gas Company. All backfill within 12 inches of the pipeline shall be sand, mansand or select cushion material approved by The Gas Company.
7. Minimum vertical and horizontal clearance between gas pipeline and other pipelines, conduits, or other structures shall be 24 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by The Gas Company.
8. The Contractor shall work in an expeditious manner in order to keep uncovered gas line exposure to a minimum.
9. The Contractor shall notify The Gas Company immediately after any damage has been caused to the existing gas pipelines, their coatings or their cathodic protection devices. The number to call is 594-5567 or 526-0066, 24 hours a day. The Contractor shall be liable for any damage to The Gas Company facilities. Repair work on this damage shall be performed by The Gas Company with payment for this work to be borne by the Contractor.

AT&T NOTES

1. The location of AT&T's underground facilities as shown on the plans are from records of varying degrees of accuracy and are not guaranteed as shown. The Contractor shall exercise extreme caution when the excavation and construction crosses or is in close proximity to underground fiber optic facilities. Any damage to the existing underground facilities shall be paid for by the Contractor.
2. This project involves work that will impact AT&T's fiber optic communications cable. Please call 455-1010 48 hours prior to the start of work, to arrange for exact cable location.
3. Whenever a Contractor is working over or near the AT&T cable, an AT&T technician must be on site.

GTE HAWAIIAN TELEPHONE NOTES

1. The location of GTE Hawaiian Telephone Company's existing facilities are approximate only. The Contractor shall exercise extreme caution and shall maintain proper clearances whenever construction crosses or is in close proximity of GTE Hawaiian Telephone Company facilities. The Contractor shall verify their locations and shall be liable for any damages to GTE Hawaiian Telephone Company facilities. Any damages shall be reported immediately to GTE Hawaiian Telephone Company's Repair Section at #611 (24 hours) or to the Excavation Permit Section at 483-8085 (normal working hours, Monday through Friday, except Holidays).
2. For underground cable locating and marking, five working days advance notice is required. Three working days advance notice is required for any inspection by a designated representative.
3. The Contractor shall take necessary precaution not to damage any existing cables or conduits. Any work involving existing GTE Hawaiian Telephone Company cables or conduits, shall be done in the presence of a GTE Hawaiian Tel Inspector or designated representative.
4. The Contractor shall obtain an excavation permit and toning request from GTE Hawaiian Telephone Company's Excavation Permit Section, located at 3239 Ualena Street, Third Floor, two weeks prior to the start of construction. Hours of business is 7:00 am to 10:30 am and 11:30 am to 3:00 pm, Monday through Friday, except Holidays.
5. The Contractor shall notify GTE Hawaiian Telephone Company's Inspector or designated representative a minimum of 72 hours prior to excavation, bracing or backfilling of GTE Hawaiian Telephone Company's structures or facilities.
6. When excavation is adjacent to or beneath GTE Hawaiian Telephone Company's existing structures or facilities, the Contractor shall:
  - a) Sheet and/or brace the excavation to prevent slides, cave-ins or settlements to ensure no movement to GTE Hawaiian Telephone Company's structures or facilities.
  - b) Protect existing structures and/or facilites with beams, struts or underpinning while excavating beneath them to ensure no movement to GTE Hawaiian Telephone Company's structures or facilities.

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | STP-099-1(20)      | 1999        | 5         | 44           |

|               |          |
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| ORIGINAL PLAN | DATE     |
| NOTE BOOK     | 12/30/98 |
| dd3/ymc       |          |
| QUANTITIES BY |          |
| CHECKED BY    |          |

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| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |
| UTILITY NOTES  |
| KAMEHAMEHA HIGHWAY PEDESTRIAN<br>ACCESSIBLE ROUTE IMPROVEMENTS       |
| Acacia Road to Honomanu Street                                       |
| Fed. Aid Project No. STP-099-1(20)                                   |
| Date: March 1999   |
| SHEET No. 2 OF 2 SHEETS  |