STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IIAWAH	HAW.	H1H-01-97M	1997	2	26

STANDAF PLAN N	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
,		
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-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

07/01/86

Type A. B. C and D Catch Basin

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

STANDARD PLAN NO.	TITLE	DATE
TE-01 ●	Miscellaneous Sign Details	07/01/8
TE-02 ●	Galvanized Flanged Channel Sign Post Mounting	07/01/8
TE-03 ●	Galvanized Square Tube Sign Post Mounting	07/01/8
TE-04 ●	Regulatory Signs	r09/01/8
TE-05 ●	Warning Signs	07/01/8
TE-06 ●	Miscellaneous Signs	r11/03/8
TE-07	Reserved	07/01/8
TE-08 ●	Construction Signs	r09/01/8
TE-09 ●	Miscellaneous Intersection Signs	r03/06/8
TE-10	Reserved	07/01/8
TE-11 ●	Bike Route Sign and Supplementary Plates	07/01/8
TE-12 ·	State Route Marker and Auxiliary Markers	07/01/8
TE-13	Interstate Route Marker	07/01/8
TE-14 ·	State Route Marker and Border Detail for Guide Signs	07/01/8
TE-15	Route Marker Assemblies	07/01/8
TE-16 ●	Miscellaneous Reflector Markers	07/01/8
TE-17 ·	Type II Object Markers	07/01/8
TE-18	Mileposts	07/01/8
TE-19	Reserved	07/01/8
TE-20	Overhead Sign Supports	07/01/8
TE-21	Overhead Sign Support, Box Truss Type, Aluminum	07/01/8
TE-22	Foundation Details and Schedules	07/01/8
TE-23 ·	Supports for Ground Mounted Guide Sign	r11/03/89
TE-24	Breakaway Sign Supports for Ground Mounted Guide Signs	07/01/8
TE-25	Laminated Aluminum Sign Panels (Overhead)	07/01/8
TE-26	Laminated Aluminum Sign Panels (Ground Mounted)	07/01/8
TE-27	Solid Aluminum Extruded Sign Panel and Accessory Details	07/01/8
TE-28	Guide Signs Luminaire Mountings	07/01/8
TE-29 ·	Reserved	07/01/8
TE-30	Raised Pavement Markers and Striping	r05/09/9
TE-31 ●	Miscellaneous Pavement Markings	r05/09/9
TE-32 ●	Miscellaneous Pavement Markings	r05/09/9
TE-33 ●	Miscellaneous Pavement Markings	r11/03/8
TE-34	Reserved	07/01/80
TE-35 ●	Pavement Alphabets, Numbers & Symbols	07/01/8
TE-36 ●	Pavement Alphabets, Numbers & Symbols	07/01/80
TE-37 ·	Reserved	07/01/80
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 PLAN NO.	I 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
TE-68	Wheelchair Ramps	r07/18/94
TE-69 ·	Wheelchair Ramps	r07/18/94

NOTE:

STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A " ● " NEXT TO THE STANDARD PLAN NO. (FOR EXAMPLE: D-O7 ●)

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-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

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

07/18/94 | REVISED TE-68 & TE-69

DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION STANDARD PLANS SUMMARY

STATE OF HAWAII

INTERSTATE ROUTE H-1 AND MIDDLE STREET RESURFACING North King St. to Kamehameha Hwy.

Project No. H1H-01-97M

Date: Apr., 1997 SHEET No. 1 OF 1 SHEETS

GENERAL NOTES

- 1. The scope of work for this project consists of cold planing; resurfacing; drainage and guardrail improvements; and installing signs and pavement markings.
- 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 50 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 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.
- 7. 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.
- 8. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
- 9. 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.
- 10 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.
- 11. 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.
- 12. The contractor shall provide for access to and from all existing side streets at all times. The exception shall be closures off Ramp E and Ramp F.
- 13. For closure of Ramp E and Ramp F, in addition to signs and newspaper/radio announcements, the Contractor shall notify the Fire Department, Police Department and Emergency Ambulance Service seven (7) days prior to ramp closures. Any costs incurred with notification will be incidental to various contract items.
- 14. In the event of an emergency (eg. hurricane), the Contractor shall be prepared to open all closed ramps to traffic.

15.	All saw cutting work shall be considered incidental
, 0.	
	to Excavation for Reconstruction of Weakened
	Pavement Areas.

- 16. the Contractor shall provide safe passage for pedestrians at all times.
- 17. The Contractor shall clean existing culvert. Cleaning of culverts shall be paid for on a force account basis under Item. No. 603.5001 Cleaning Existing Culvert System.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR		
HAWAII	HAW.	H1H-01-97M	1997	3	26

LEGEND

	Cold Planing Areas
	Reconstruction Areas
	Resurfacing Limits
e	Existing Electrical Line
°j₽	Existing Joint Pole
$^{\circ}pp$	Existing Power Pole
°emh	Existing Electric Manhole
	Existing Telephone Line
$^{\circ}tp$	Existing Telephone Pole
° <i>tmħ</i>	Existing Telephone Manhole
AC	Existing Signal Corps Line
tv	Existing TV Cable
	Existing 12" Water Line
°wmħ	Existing Water Manhole
°av	Existing Water Air Valve
\circ_{wv}	Existing Water Valve Box
□wv	Existing Water Meter
-6-fh	Existing Fire Hydrant

Areas	—.4—12— Existing Sewer Line
n Areas	o _{smh} Existing Sewer Manhole
imits	—g 6 Existing 6" Gas Line
	°gv Existing Gas Valve Box
rical Line Pole	ogmh Existing Gas Manhole
er Pole	© _{mon.} Existing Monument
ric Manhole	d24 Existing 24" Drain Line
phone Line	°Admh Existing Storm Drain Manhole
phone Pole	[⊟] gdi Existing Grated Drop Inlet
phone Manhole	Existing Catch Basin
al Corps Line	b Existing Traffic Sign
`able 'ater Line	
r Manhole	Existing Highway Lighting Standard
r Air Valve	
r Valve Box	

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

INTERSTATE ROUTE H-1
AND MIDDLE STREET RESURFACING

North King St. to Kamehameha Hwy.

Project No. H1H-01-97M

Date: Feb., 1997

SHEET No. 1 OF 2 SHEETS

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 1985, as amended, of the Hawaii Highways Division, Department of Transportation, and the City and County of Honolulu Board of Water Supply's "WATER SYSTEMS STANDARDS" VOLUME 1, DATED 1985 THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION", VOLUME 2, DATED 1985 AND THE WATER SYSTEMS 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 be the responsibility of the Board of Water Supply.
- The existence and location of the underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to accuracy or the 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.
- 4. Re-approval shall be required if this project is not under construction within a period of two years.
- The Contractor shall notify the BWS Planning and Engineering Division, Construction Section, one week prior to commencing work on the water system.
- 6. The Contractor shall verify all existing service lateral locations whether shown or not shown on plans prior to commencing with any of the work and shall not assume that where no services are shown none exist.
- Any adjustments to the existing water system required during construction to meet requirements of BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board of Water Supply and the State.
- 8. Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
- 9. 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 measure necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method.
- 10. 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 and submit the probing data to BWS Construction Section. 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.

GAS FACILITIES NOTES

- 1. BHP 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 clearances must be obtained from BHP Gas Company at least five working days prior to starting excavation near these gas pipelines. Since gas line locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call BHP Gas Company at least five working days before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 594-5575 during business hours and 526-0066 after hours.
- 3. The Contractor shall excavate and backfill around gas pipelines in the presence of a BHP Gas Company representative. All backfill within six inches of any gas pipeline shall be select cushion material approved by BHP Gas Company.
- For relocation of any gas pipeline, the Contractor shall notify BHP 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 BHP Gas Company and paid for by the Contractor.
- 5. The Contractor shall notify BHP 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 BHP 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 BHP Gas Company.
- 7. The Contractor shall work in an expeditious manner in order to keep the uncovered gas pipeline exposed for as short a period of time as possible.

GTE HAWAIIAN TELEPHONE NOTES

- 1. 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 Facilities. Any damages shall be reported immediately to GTE Hawaiian Telephone Company's Repair Section #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, the Contractor shall provide GTE five working days advance noticeas required. Three working days advance notice is required for any inspection by a designated representative.
- The Contractor shall take necessary precaution not to damage any existing cable or conduits. Any work involving existing GTE Hawaiian Telephone cables or conduits, shall be done in the presence of a GTE Hawaiian Tel Inspector or designated representative.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL		TOTAL SHEETS
HAWAII	HAW.	H1H-01-97M	1997	4	26

HECO NOTES

- 1. 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).
- 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 our 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.
- 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.
- 6. 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.
- 7. Any damage to HECO's facilities will be reported immediately to HECO's Trouble Dispatcher at 543-7874.
- 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.
- The Contractor shall indemnify, defend and hold harmless HECO from and against all losses, damages, claims and actions, including but limited to reasonable attorney's fees and costs based upon or arising out of damage to property or injuries to persons, or other tortious acts caused or contributed to by Contractor or anyone acting under its direction or control or on its behalf; provided Contractor's indemnity shall not be applicable to any liability upon the sole negligence of HECO.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

<u>UTILITY NOTES</u>

AND MIDDLE STREET RESURFACING

North King St. to Kamehameha Hwy.

INTERSTATE ROUTE H-1

Project No. H1H-01-97M

SHEET No. 2 OF 2 SHEETS

Date: Feb., 1997

