# STANDARD PLANS SUMMARY

STANDAR PLAN NO	TITI E	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-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
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
	61214B Steel Frame and Grates	07/01/86
H-14	61614B Steel Frame and Grates	07/01/86
H-14 H-15		r10/16/90
H-14 H-15 H-16	Concrete and Cement Rubble Masonry Structures	
H-14 H-15 H-16 H-17	Inlet Structures	r10/16/90
H-14 H-15 H-16 H-17 H-18	Inlet Structures Flared End Section for Culverts	r10/16/90 07/01/86
H-14 H-15 H-16 H-17 H-18 H-19	Inlet Structures Flared End Section for Culverts Outlet Structures	r10/16/90 07/01/86 r02/15/91
H-14 H-15 H-16 H-17 H-18 H-19	Inlet Structures Flared End Section for Culverts Outlet Structures Concrete Spillway Inlet	r10/16/90 07/01/86 r02/15/91 07/01/86
H-14 H-15 H-16 H-17 H-18 H-19 H-20	Inlet Structures Flared End Section for Culverts Outlet Structures Concrete Spillway Inlet 18" Slotted C.M.P. Drain	r10/16/90 07/01/86 r02/15/91 07/01/86
H-14 H-15 H-16 H-17 H-18 H-19	Inlet Structures Flared End Section for Culverts Outlet Structures Concrete Spillway Inlet	r10/16/90 07/01/86 r02/15/91

STANDARD 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

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
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STANDARD 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
TE-68	Wheelchair Ramps	r11/03/89
TE-69	Wheelchair Ramps	r11/03/89

NOTE:

STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A " • " NEXT TO THE STANDARD PLAN NO. (FOR EXAMPLE:  $D-07 \bullet$ )

02/15/91 10/16/90 07/26/90 07/16/90 05/09/90 11/03/89 09/01/87	REVISED H-19 REVISED H-16,H-17, H-22 & H-23 REVISED D-02 REVISED B-12,B-13 REVISED TE-30,TE-31 & TE-32 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 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 PLAN SUMMARY

NIMITZ HIGHWAY RESURFACING RODGERS BOULEVARD TO AHUA STREET FED. AID PROJECT NO. STP-092-1(24)

Scale: None

Date: Aug. 2, 1999 SHEET No. C-1 OF 57 SHEETS

### GENERAL NOTES

- 1. The scope of work consists of resurfacing pavement areas; reconstructing weakened pavement areas; adjusting manhole/ valve frames and covers; installing loop detectors and pavement markings and reconstruct curb ramps.
- 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 reconstructed and 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. The Contractor shall remove and dispose of all existing raised pavement markers and traffic tapes prior to resurfacing of pavement area. This work shall be considered incidental to Asphalt Concrete Pavement, Mix No. IV and will not be paid for separately.
- 10. 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.
- 11. The Contractor may furnish Plant Mix Asphalt Concrete Base Course or Recycled Asphalt Concrete Base Course instead of Plant Mix Glassphalt Concrete Base Course if necessary. (Refer to Subsection 312.03—Construction Requirements.)
- 12. In cold-planing the pavement over or around the utility structure, the Contractor shall exercise care not to damage any portion of the structure especially the slab, joints, drain pipes or reinforcement. Any damage to the structure during the cold-planing operations shall be repaired by the Contractor at his own expense. Repair work shall be as directed by the Engineer.
- 13. 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 várious contract items.
- 14. The contractor shall provide for access to and from all existing side streets at all times.
- 15. All saw cutting work shall be considered incidental to Excavation for Reconstruction of Weakened Pavement Areas.
- 16. Bikepath access shall be continuously accessible to pedestrians and bikes during construction. Contractor shall provide safe detour or passage around work area.

### COLD PLANING NOTES:

- 1. All saw cutting work shall be considered incidental to Cold Planing and will not be paid for separately.
- 2. Exposure of existing aggregate base is possible when Cold Planing deeper than 8 1/4 inches. (Refer to typical sections for existing pavement structure.) The Contractor shall pave over exposed existing aggregate base with new Base Course at the end of each day, as follows (unless otherwise noted):
  - The contractor shall compact the existing aggregate base in accordance with Section 304-Aggregate Base Course. This preparation work shall be considered incidental to the new Base Course, and will not be paid for separately.
- 3. The vertical pavement drop-off shall not exceed 2 inches for longitudinal and 3 inches for transverse. If a vertical pavement drop-off exists at the end of each day's cold cold planing and paving, the Contractor shall provide a wedge with a 50°:1° minimum transition taper for transverse drop-off and no steeper than 6.1 for longitudinal drop-off, as approved by the Engineer. This work shall be considered incidental to Cold Planing.
- 4. The Contractor shall lower manholes prior to Cold Planing, backfill with hot mix and re-adjust after final paving. Lowering, backfilling and readjustment of manholes shall be considered incidental to Asphalt Concrete Mix No. IV
- 5. The Contractor shall remove asphalt concrete from existing gutters and swales and shall exercise caution in doing so. The Contractor shall be held liable for any damage caused to the gutters by this removal. This work shall be considered incidental to Cold Planing.

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DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	STP-092-1(24)	2000	3	57

## LEGEND (CONT.)

	LLGLIVD (COIVI.)
— — e — —	Existing Electrical Line
°pp	Existing Power Pole
° emh	Existing Electrical Manhole
<sup>∅</sup> EMH	Adjusted Electrical Manhole
— — t — —	Existing Telephone Line
° tmh	Existing Telephone Manhole
<sup>∅</sup> TMH	Adjusted Telephone Manhole
— —w6— —	Existing Water Line & Size
° wmh	Existing Water Manhole
∞ <sub>WMH</sub>	Adjusted Water MH Frame/Cover
o <sub>wv</sub>	Existing Water Valve Box
-⇔ <sub>fh</sub>	Existing Fire Hydrant
— —s8— —	Existing Sewer Line & Size
°smh	Existing Sewer Manhole
<sup>©</sup> SMH	Adjusted Sewer MH Frame/Cover
g4	Existing Gas Line & Size
$^{\circ}gv$	Existing Gas Valve Box
∞ <sub>GV</sub>	Adjusted Gas Valve Box
©mon.	Existing Monument
<sup>⊚</sup> MON.	Adjusted Monument
====d18====	Existing Drain Line & Size
°sdmh	Existing Storm Drain Manhole
<i>∞SDMH</i>	Adjusted Storm Drain Manhole
$\square_{gdi}$	Existing Grated Drain Inlet
<u>cb</u>	Existing Catch Basin
þ	Existing Traffic Sign
Ŷ	Existing Highway Lighting Standard
o <i>ts</i>	Existing Traffic Signal Post
□ tspb	Existing Traffic Signal Pullbox
$\Box\Box\Box Id$	Existing Loop Detector
	Existing Magnetic Detector
ccmh	Existing Communication Cable Manhole (Army or Navy)

## **LEGEND**

Resurfacing Limits

Reconstruction Areas, Type I

Reconstruction Areas, Type II Cold Planing and Resurfacing Areas, Type I

Cold Planing and Resurfacing Areas, Type II

New or Reconstructed Curb Ramps New ADA Accessible Ramp

E.P. Edge of Pavement

E.S. Edge of Sidewalk

# **GENERAL NOTES**

LICENSED PROFESSIONAL

NO. 5309-C

MAWAII, U.S.A

Existing Irrigation Manhole

AND LEGEND NIMITZ HIGHWAY RESURFACING RODGERS BOULEVARD TO AHUA STREET FED. AID PROJECT NO. STP-092-1(24)

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

Existing Irrigation Lline & Size (State)

Scale: As Noted

Date: Aug. 2, 1999 SHEET No. C-2 OF 57 SHEETS

### **WATER NOTES:**

- 1. Unless otherwise specified, all materials and constrcution 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 & County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS" Volume 1, dated 1985 the "APPROVED MATERIAL AND STANDARD DTEAILS 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.
- 3. The existence and location of the underground utilities and structures as shown on the plans are from the latest avialable 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.
- 5. 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.
- 7. 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 the the Board of Water Supply and the State.
- 8. Prior to any Excavation, 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, trees, and bends wherever 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 block (with BWS approval) and/or modifying his construction method.
- 10. Maintain 3'-0" minimum cover for all existing waterlines (18 inches minimum for services 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. 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. Prior written clearances must be obtained from The Gas Company Maps and Records department, 515 Kamakee Street, at least five (5) 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 USA North a minimum of two (2) working days before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 1-800-227-2600.
- 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 (5) 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 keep the uncovered gas pipeline exposed for as short a period of time as possible.

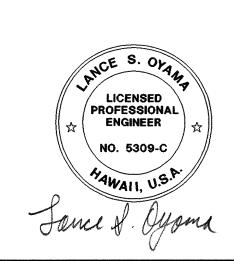
### GTE HAWAIIAN TELEPHONE NOTES:

- 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 No. 611 (24 Hours) or to the Excavation Permit Section at 483–8085 (normal working hours, Monday through Friday, except Holiday).
- 2. For underground cable locating and marking, the Contractor shall provide GTE five working days advance notice as 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 cable or coduits. 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.

	ROAD r. no.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
НА	WAII	HAW.	STP-092-1(24)	2000	4	57

### HECO NOTES:

- 1. The Contractor shall exercise extreme caution whenever construction crosses or is in 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 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.
- 5. Should it become necessary to temporarily relocate any or 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.
- 8 All HECO overhead and underground facilities shall be protected at all time by the Contractor during construction. Cost 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.
- 9. The Contractor shall indemnify, defend and hold harmless HECO 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 damage to property or 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

#### UTILITY NOTES

NIMITZ HIGHWAY RESURFACING RODGERS BOULEVARD TO AHUA STREET FED. AID PROJECT NO. STP-092-1(24)

Scale: As Noted

Date: Aug. 2, 1999