

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	98A-01-98	1999	3	23

ABBREVIATIONS:

<i>abn</i> , ABN	Abandoned
<i>B</i>	Baseline
B.V.	Bottom vertical
BWS	Board of Water Supply
<i>cb</i> , CB	Catch basin
<i>cc</i> , CC	Communications cable
<i>C</i>	Centerline
cl.	Class
clr.	Clear
CMU	Concrete masonry unit
conc.	Concrete
CRM	Cement rubble masonry
<i>catv</i> , CATV	Cable television
<i>d</i> , D	Drainline
DI	Ductile iron
DIA., ϕ	Diameter
<i>e</i> , E	Electric
EHH	Electric handhole
Elev.	Elevation
EMH	Electric manhole
EP	Electric pole
EPB	Electric pullbox
FA	Fire alarm
FH	Fire hydrant
FLR.	Floor
<i>g</i> , G	Gas
G.L.	Gas line
GMH	Gas manhole
GV	Gate valve
HECO	Hawaiian Electric Company
HH	Handhole
Ht.	Height
HTCO	Hawaiian Telephone Company
MH	Manhole
M/N	Water meter number
O.C.	On center
PB	Pullbox
PCC	Portland cement concrete
PVI	Point of intersection of vertical curve
RC	Reinforced concrete
R/W	Right-Of-Way
<i>s</i> , S	Sewer
SDMH, sdmh	Storm drain manhole
<i>sl</i> , SL	Street lighting
SLP	Street light pole
SMH	Sewer manhole
S/N	Water service number
Sta.	Station
<i>t</i> , T	Telephone
T & B	Top & bottom
<i>tbur</i> , TBUR	Buried telephone cable
THH	Telephone handhole
TMH	Telephone manhole
<i>ts</i> , TS	Traffic signal
TSP	Traffic signal pole
T.V.	Top vertical
V.C.	Vertical curve
<i>w</i> , W	Water
W.L.	Water line
WM	Water meter
WMH	Water manhole
WP	Working pressure
2W x 5H	2 wide x 5 high

LEGEND:

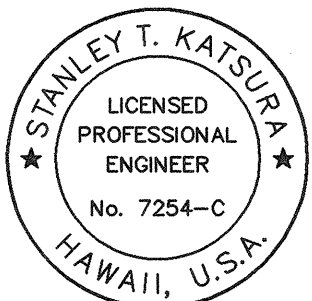
EXISTING	PROPOSED	
		Facilities to be: removed, demolished, abandoned, or relocated when new lines are in service
		Facilities abandoned in place
		Right-Of-Way line, property line
		Right-Of-Way line, property line
		No record of utility line elevation available
		Utility pole, Street Light Pole
		Drain line (direction of flow)
		Water line (6" dia.)
		Sewer line (8" dia.)
		Gas line (4" dia.)
		Electric line
		Telephone line
		Cable television line
		Manhole (body & cover)
		Pullbox or water meter box
		Gate valve, Bends
		Fire hydrant
		Reinforced concrete jacket

GENERAL NOTES:

- The scope of work for this project consists of traffic signal system upgrades; replacing traffic signal standards and curb ramps; installing traffic signal conduits and traffic signal heads; modifying drainage catch basins; installing temporary traffic signal system; and installing signs and pavement markings.
- 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 104.04 - Maintenance of Traffic; 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.
- 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.
- The Contractor shall provide for access to and from all existing side streets at all times.
- All saw cutting work shall not be measured or paid for separately, but shall be considered incidental to various contract items.

GENERAL NOTES (CON'T):

- All existing sign post(s) to remain within the sidewalk area shall meet the minimum clear width of 36 inches from the sidewalk edge. Where necessary, the existing sign post(s) shall be relocated to meet the minimum clear width. This work shall not be paid for separately but shall be considered incidental to the various signing items.
- The Contractor shall verify the presence of existing aerial utilities which may conflict with construction activities and shall coordinate with the utility company for temporary relocation, as necessary.
- The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavating the area.
- When the existing utility is in conflict with the proposed utility, the Contractor shall notify the Engineer. The Engineer will determine if relocation is necessary.
- Whenever connection of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines to verify their locations and depths prior to excavation for the new lines.
- All existing utilities whether or not shown on plan, shall be protected at all times during construction unless otherwise noted, and any damage to them shall be repaired and paid for by the Contractor. Personal injury resulting from contact with the existing utilities shall be the Contractor's responsibility.
- When excavating near walls, fences, utility poles, traffic signal poles, and other improvements, the Contractor shall protect, support, secure and take all other precautions to prevent damaging these improvements.
- MATERIALS:
A. All reinforcing steel shall be ASTM designation A615 Grade 40, unless noted.
B. All concrete shall be Class B, unless otherwise noted.
- Utility structures are referenced by station and offset to the centerline of the structure body, unless otherwise noted on plan.
- Surfaces of existing concrete against which concrete is to be placed shall be thoroughly cleaned of surface laitance and other material foreign to concrete.
- The spacing between ducts of different sizes shall be in accordance with the spacing requirements of the larger duct. For spacing requirements between different utility systems, see "Title-VI Public Utilities Commission, Rules for Construction of Underground Electric and Communication Systems, General Order No. 10".
- Topsoil within work area shall be removed, stockpiled, and reused for restoration of landscaping (payment incidental to various contract items).
- Where utility service connections penetrate existing walls, restore wall to satisfaction of the Engineer. Payment for restoration of wall shall be considered incidental to various contract items.
- Existing pullboxes, handholes, and manholes which are below finish grade shall be covered with steel plates (with skid resistant surface) until the existing facilities are removed or demolished in accordance with Section 202 of the Specifications (Payment for steel-plating shall be considered incidental to various contract items).
- Steel plates for covering trenches shall have skid resistant surface.



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

Stanley T. Katsura

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
ABBREVIATIONS, LEGEND & GENERAL NOTES	
VINEYARD BOULEVARD TRAFFIC SIGNAL UPGRADE AT NUUANU AVENUE PROJECT NO. 98A-01-98	
SCALE: NONE	DATE: JANUARY 1999
SHEET NO. GN1 OF 1 SHEETS	