

FED.ROAD DIST.NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	56A-03-00	2004	4	66

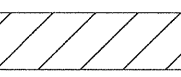
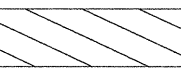

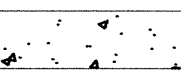






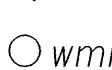

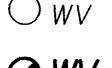
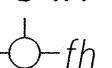
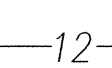
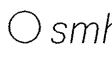






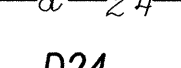


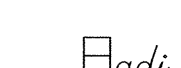

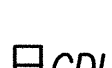
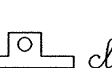




SEWER NOTES:

1. The Contractor shall notify the Division of Engineering seven (7) days prior to commencement of sewer work. In the event that any changes in alignment or grade for the proposed sewers are required due to unforeseen conflict with under-ground utilities, the Contractor shall immediately notify the Engineer and provide the Engineer the necessary data in order that the Engineer will be able to determine what changes in alignment or grade are required.
2. The underground pipes, cables or ductlines known to exist by the Engineer from his research 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.
3. The Contractor shall verify the location and invert of all existing utilities whether shown or not shown as required.
4. The Contractor shall be responsible to maintain existing sewage flow conditions until final connection is made. The Contractor shall provide all necessary by-passes, pumps, etc. to insure a continuous uninterrupted flow of sewage at all times. This work shall be considered incidental to pipe and structure installation.
5. The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify the State Department of Health and utilize appropriate sampling and analyzing procedures.
6. Crushed rock cradle shall be required for all sewer line, except in areas of unsuitable soils, the Owner's representative will determine the pipe support required.
7. Construction and installation of sewer lines and appurtenances shall be performed in accordance with the requirements of the "Standard Specification for Public Works Construction, Department of Public Works, County of Kauai," dated September 1986, and the "Standard Details for Public Works Construction, Department of Public Works, County of Kauai," dated September 1984.
8. Sewer pipe material shall be as indicated on the construction drawings.

WATER NOTES:

1. Adjust the existing valve boxes and the manhole frame/cover for the existing backpressure valve to the new finish grade.
2. Prior to commencing his operations, the Contractor shall contact the County of Kauai's Department of Water Operations Division (phone no. 245-5444) and make arrangements for the Department of Water personnel to "tone" for and mark the locations of existing valve boxes and manhole frame/covers, including ones that may have been inadvertently paved over on previous resurfacing projects. Approximate locations of valve boxes and manhole frame/cover that are to be raised to the new finished grade are noted on the plans.
3. It shall be the Contractor's responsibility to offset and record location of the valve boxes and manhole frame/cover as marked by the Department of Water for the purposes of adjusting to the new finish grade after completion of the paving operations. The Contractor shall preserve all offset stakes marking locations of the valve boxes and manhole frame/cover. If offset stakes are damaged or lost, it shall be the Contractor's sole responsibility to survey and re-stake the locations of the valve boxes and manhole frame/cover.

LEGEND:

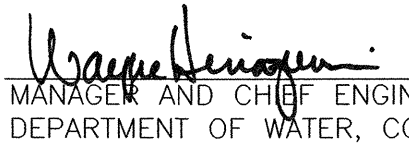
-  A.C. Pavement Overlay Areas
-  A.C. Pavement Reconstruction Areas
-  A.C. Pavement Demolition, Backfill and Grass
-  Concrete Pavement Construction Area
-  Existing Power Pole
-  Existing Steel Power Pole
-  Existing Electric Manhole
-  Adjusted Elec. MH Frame/Cover
-  Existing Telephone Manhole
-  Adjusted Tel. MH Frame/Cover
-  Existing Traffic Sign
-  New Traffic Sign
-  Existing Water Manhole
-  Adjusted Water MH Frame/Cover
-  Existing Water Vavle Box
-  Adjusted Water Valve Box
-  Existing Fire Hydrant
-  Existing Sewer Line
-  Existing Sewer Manhole
-  Existing Gate Post
-  Existng Metal Guardrail
-  New Metal Guardrail
-  Adjusted and/or Relocated Metal Guardrail
-  Existing Monument
-  Adjusted or Reconstructed Monument
-  Existing Drain Line
-  New Drain Line
-  Existing Storm Drain Manhole
-  Adjusted Storm Drain Manhole Frame/Cover
-  Existing Grated Drop Inlet
-  Adjusted Grated Drop Inlet and/or Replace existing Grate
-  New Grated Drop Inlet
-  Existing Catch Basin

ABBREVIATIONS:

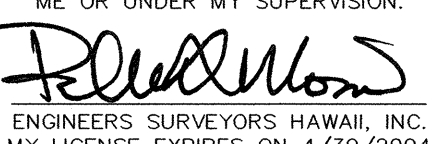
- A.C. - Asphalt Concrete
Elec. - Electric or Electrical
MH - Manhole
Min. - Minimum
Max. - Maximum
Shldr. - Shoulder
Pav't. - Pavement
Exist./EX - Existing
Rd. - Road
B - Baseline
Sta. - Station
Std. - Standard
Sht. - Sheet
E.P. - Edge Pavement
E.S. - Edge Shoulder
R/W - Right-of-Way
Typ. - Typical
KBR - Kapaa Bypass Road
Rt. - Right
Lt. - Left
RCP - Reinforced Concrete Pipe
LF - Linear Feet
Exc. - Excavation
CY - Cubic Yards
CL - Centerline
Approx. - Approximately
w/ - with
o/s - Offset
Inv. - Invert
Conc. - Concrete
C.L. - Chan Link
R - Radius
T - Tangent
Lc - Length of Curve
C - Chord (Curve Data)
M.L. - Match Line
P.C. - Point of Curvature
P.T. - Point of Tangency
BVC - Begin Vertical Curve
EVC - End Vertical Curve
VC - Vertical Curve
PI - Pont of Intersection
S - Slope
FG - Finish Grade
EG - Existing Grade
SF - Square Feet
EMB - Embankment
C - Cut (Cross Sections)
F - Fill
SFM - Sewer Force Main
TC - Top Curb
BC - Bottom Curb
Trans. - Transition

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
QUANTITIES BY	CHECKED BY	
No.		

APPROVED:


MANAGER AND CHIEF ENGINEER
DEPARTMENT OF WATER, COUNTY OF KAUAI



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

ENGINEERS SURVEYORS HAWAII, INC.
MY LICENSE EXPIRES ON 4/30/2004

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**SEWER NOTES, LEGEND
AND ABBREVIATIONS**

KUHIO HIGHWAY IMPROVEMENTS
Extension Of Temporary Kapaa Bypass Road
Project No. 56A-03-00

Scale: No Scale Date: Mar 2004
SHEET No. 3 OF 4 SHEETS