#### GENERAL CONSTRUCTION NOTES

- 1. THIS PROJECT CONSISTS OF ROADWAY WIDENING, GRADING, ASPHALTIC CONCRETE PAVEMENT, TRAFFIC SIGNAL, INSTALLING DRAINAGE FACILITIES, AND PAVEMENT STRIPING, MARKING, AND SIGNING.
- 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 107.11 PUBLIC CONVENIENCE AND SAFETY. SUBSECTION 107.20 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES. SECTION 645 WORK ZONE TRAFFIC CONTROL.
- 4. ALL CONSTRUCTION WORK SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION", DATED 1994, AS AMENDED, DEPARTMENT OF TRANSPORTATION STATE OF HAWAII; THE "STANDARD PLANS", DATED 1986, AS AMENDED, OF THE STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION; THE "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION", DATED SEPTEMBER 1984, AS AMENDED, OF THE DEPARTMENT OF PUBLIC WORKS, CITY AND COUNTIES OF THE STATE OF HAWAII, AND THE CONSTRUCTION DRAWINGS AND STANDARD SPECIFICATIONS PREPARED FOR THIS PROJECT.
- 5. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, AND SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF SAME IN THE EVENT OF DAMAGES DUE TO HIS CONSTRUCTION PRACTICES.
- 6. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND TO THE SATISFACTION OF THE ENGINEER.
- 7. ALL CONSTRUCTION WORK ALONG THE ROADWAY SHALL BE DONE BETWEEN THE HOURS OF 8:30 AM TO 4:00 PM. CONSTRUCTION WORK MUST BE CLEAR FROM ROADWAY BY 3:30 PM. CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN TO THE ENGINEER.
- 8. WHEN TRENCH EXCAVATION IS ADJACENT TO OR UNDER EXISTING STRUCTURES OF FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE—INS AND SETTLEMENT, AND PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING TO FULLY PROTECT IT FROM DAMAGE.
- 9. DURING NON-WORKING HOURS NO CONSTRUCTION EQUIPMENT SHALL BE PARKED WITHIN THE ROAD RIGHT-OF-WAY IN SUCH A MANNER THAT THE EQUIPMENT WILL OBSTRUCT THE NORMAL MOVEMENT AND SIGHT DISTANCE OF THE DRIVING MOTORIST
- 10. EXCEPT DURING ACTUAL WORKING HOURS, ALL SIGNS WHICH DO NOT PERTAIN TO THE CONSTRUCTION ACTIVITY, SUCH AS "MEN WORKING" AND "FLAGMEN AHEAD" SHALL BE COVERED OR LAID DOWN. HOWEVER, ALL SIGNS NECESSARY FOR THE SAFETY OF THE PUBLIC SHALL BE MAINTAINED.
- 11. THE CONTRACTOR SHALL EMPLOY A HAWAII LICENSED PROFESSIONAL LAND SURVEYOR TO PERFORM ALL CONSTRUCTION STAKEOUTS, THE COST OF WHICH SHALL BE BORNE BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR, AND PAY FOR ALL TEMPORARY UTILITIES REQUIRED FOR HIS WORK.
- 13. THE EXISTENCE AND LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THESE MAPS ARE FROM AVAILABLE DATA AND ARE FOR REFERENCE ONLY. NO GUARANTEE IS MADE AS TO THEIR CORRECTNESS AND/OR COMPLETENESS.
- 14. SMOOTH RIDING CONNECTIONS SHALL BE CONSTRUCTED AT ALL LIMITS OF PAVEMENT WORK INCLUDING THE BEGINNING AND END OF PROJECT, SIDE STREETS AND DRIVEWAYS AS SHOWN ON THE PLANS AND/OR AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS AND WILL NOT BE PAID FOR SEPARATELY.
- 15. EXISTING SIGNS AND POSTS THAT WILL BE REMOVED AND REPLACED SHALL BE DELIVERED TO THE MAUI DISTRICT BASEYARD AS DIRECTED BY THE ENGINEER. PAYMENT FOR REMOVAL, STORAGE AND DELIVERY SHALL BE CONSIDERED INCIDENTAL TO VARIOUS REGULATORY AND WARNING SIGNS PAY ITEMS.
- 16. EXISTING DRAINAGE SYSTEM WILL BE FUNCTIONAL AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR IS TO FURNISH MATERIALS, EQUIPMENT, LABOR, TOOLS AND INCIDENTALS NECESSARY TO ACCOMPLISH MAINTENANCE OF FLOW, THE COST OF WHICH SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS, AND WILL NOT BE PAID FOR SEPARATELY.
- 17. NO VERTICAL PAVEMENT DROP-OFF SHALL BE PERMITTED DURING NON-WORKING HOURS. CONTRACTOR SHALL SCHEDULE HIS WORK TO IMMEDIATELY PAVE COLD PLANED SURFACES WITHIN THE SAME DAY. IN CASE OF EMERGENCIES, THE CONTRACTOR SHALL PROVIDE A WEDGE WITH A 12:1 MINIMUM TRANSITION TAPER FOR TRANSVERSE DROP-OFF AND NO STEEPER THAN 20:1 FOR LONGITUDINAL DROP-OFF, AS APPROVED BY THE ENGINEER. TRANSITION WEDGES WILL NOT BE MEASURED FOR PAYMENT AND SHALL BE REMOVED PRIOR TO PAVING ABUTTING COURSES.

#### NOTES FOR CONSTRUCTION WITHIN COUNTY RIGHT-OF-WAY

- 1. CONTRACTOR SHALL OBTAIN A "WORK TO BE PERFORMED ON COUNTY ROADS PERMIT" FROM THE DIVISION OF LAND USE AND CODES ADMINISTRATION TWO WEEKS PRIOR TO COMMENCEMENT OF WORK.
- 2. SPECIFICALLY REFERENCED ITEMS FROM THE STANDARD DETAIL DRAWINGS AND STANDARD SPECIFICATIONS OF THE DEPARTMENT OF PUBLIC WORKS SHALL BE INCLUDED AS PART OF THE CONSTRUCTION PLANS.
- 3. ALL CONSTRUCTION WORK SHALL CONFORM STRICTLY TO THE APPLICABLE SECTIONS OF THE "HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION (1994)", AND "STANDARD DETAILS", SEPT. 1984, FOR PUBLIC WORKS CONSTRUCTION, OF THE DEPARTMENT OF PUBLIC WORKS.
- 4. ALL EXISTING UTILITIES, WHETHER OR NOT SHOWN ON PLANS, IF DAMAGED DURING CONSTRUCTION BY THE CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE.
- 5. CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, AND OTHER PROTECTIVE DEVICES FOR THE PROTECTION, SAFETY AND CONVENIENCE OF THE PUBLIC ACCORDING TO THE "PART VITTRAFFIC CONTROLS FOR STREETS AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS, SEPTEMBER 3, 1993.
- 6. THE DIRECTOR OF PUBLIC WORKS AND/OR THE DIRECTOR OF THE DEPARTMENT OF WATER SUPPLY HAS THE RIGHT TO STOP CONSTRUCTION SHOULD ANY WORK BE FOUND CONTRARY TO THE APPROVED CONSTRUCTION PLAN OR DETRIMENTAL TO THE PUBLIC'S INTEREST.
- 7. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM HIS WORK AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COST INCURRED FOR ANY NECESSARY REMEDIAL ACTION ORDERED BY THE DIRECTOR OF PUBLIC WORKS SHALL BE PAID BY THE CONTRACTOR.
- 8. CONSTRUCTION DEBRIS AND WASTES SHALL BE DEPOSITED AT AN APPROPRIATE WORK SITE THE CONTRACTOR SHALL INFORM THE DIRECTOR OF PUBLIC WORKS OF THE LOCATION OF THE DISPOSAL SITES. THE DISPOSAL SITE MUST FULFILL THE REQUIREMENTS OF THE GRADING ORDINANCE.

### TEMPORARY EROSION CONTROL MEASURES

- 1. TEMPORARY VEGETATIVE COVER SHALL BE PLANTED WITHIN A PERIOD OF 30 CALENDAR DAYS AFTER THE SITE HAS BEEN GRADED, OR BARED OF VEGETATION, OR IF FINAL GRADING OF THE SITE WILL BE SUSPENDED FOR MORE THAN 30 CALENDAR DAYS. ANY COST FOR TEMPORARY EROSION CONTROL MEASURES WILL BE BORNE BY THE CONTRACTOR.
- 2. TEMPORARY VEGETATIVE COVER SHALL CONSIST OF 40 LBS. COMMON RYE GRASS SEED PER ACRE, 400 LBS. PER ACRE 10-10-10 OR EQUIVALENT FERTILIZER WORKED INTO INTO THE SEED BED BEFORE PLANTING. WATERING AND MAINTENANCE OF GRASS SHALL CONFORM TO THE "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION. "DATED 1994. OF THE STATE OF HAWAII.

### PERMANENT EROSION CONTROL MEASURES

- 1. THE CONTRACTOR SHALL PLANT VEGETATIVE COVER OVER THE ENTIRE PROJECT SITE AS INDICATED IN THE PLANS. THE VEGETATIVE COVER SHALL BE PLANTED, FERTILIZED AND MAINTAINED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION," DATED 1994, OF THE STATE OF HAWAII.
- 2. THE CONTRACTOR SHALL GRASS ALL EXPOSED AREAS THAT HAVE BEEN CONSTRUCTED TO FINAL GRADES WITHIN A PERIOD OF 30 CALENDAR DAYS. ANY COST FOR PERMANENT EROSION CONTROL MEASURES WILL BE BORNE BY THE CONTRACTOR.
- 3. IN LIEU OF GRASS SPRIGS (NOTE 1) THE CONTRACTOR MAY USE HYDRO-MULCH WITH SEEDINGS, AND IRRIGATION SYSTEM CAPABLE OF IRRIGATING ALL OF THE HYDRO-MULCHED AREA.

### PUBLIC HEALTH, SAFETY & CONVENIENCE

- 1. THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH AND SAFETY AND ENVIRONMENTAL QUALITY.
- 2. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AND ITS SURROUNDING AREAS FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH. THE COUNTY OF MAUI MAY REQUIRE SUPPLEMENTARY MEASURES AS NECESSARY.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND REMOVAL OF ALL SILT AND DEBRIS GENERATED BY HIS WORK AND DEPOSITED AND ACCUMULATED WITHIN DOWNSTREAM WATERWAYS, DITCHES AND DRAIN PIPES AND ON PUBLIC AND PRIVATE ROADWAYS. THE CONTRACTOR AGREES TO REIMBURSE THE STATE FOR ALL COSTS EXPENDED IN PERFORMANCE OF THE ABOVE WORK IF REQUIRED FOR PUBLIC HEALTH AND SAFETY, OR MADE NECESSARY BY NON-PERFORMANCE BY THE CONTRACTOR.
- 4. THE CONTRACTOR SHALL OBTAIN A COMMUNITY NOISE PERMIT FROM THE STATE DEPARTMENT OF HEALTH PRIOR TO ANY CONSTRUCTION ACTIVITIES.

### SOLID WASTE CONSTRUCTION NOTES

1. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER HANDLING, STORAGE AND/OR DISPOSAL OF ALL WASTE GENERATED BY THE CONSTRUCTION INCLUDING GRUBBING AND EXCESS EXCAVATED MATERIAL. ANY MATERIAL BROUGHT TO THE COUNTY LANDFILLS WILL BE SUBJECTED TO THE INSTITUTED TIPPING FEE SYSTEM, WITH NO EXCEPTIONS OR EXEMPTIONS.

# **ABBREVIATIONS**

	Δ &: @ A.C. OR A/C ADJ. AZ BE BC BEG BLK.	DELTA AND AT ASPHALT CONCRETE ADJUST AZIMUTH  BASELINE BOTTOM CURB BEGIN BLOCK	PAV'T PB PC Ø PE PED PI PL. RL POC PP	PAVEMENT PULLBOX POINT OF CURVATURE PHASE PLAIN END PEDESTRIAN POINT OF INTERSECTION PLACE PROPERTY LINE POINT OF CURVATURE POWER POLE
	BOL OK BOLL	BOTTOM	PT PVC	POINT OF TANGENCY POLYVINYL CHLORIDE
,	CB Ch Q CLR. CONC. CONN. CONT CY	CATCH BASIN CHORD LENGTH CENTERLINE CLEAR CONCRETE CONNECTION CONTINUATION OR CONTINUOUS CUBIC YARD	R RD. REFL. REINF. REQ'D RP RT. R.O.W. OR R/W	RADIUS ROAD REFLECTOR REINFORCED OR REINFORCEMENT REQUIRED RADIUS POINT RIGHT RIGHT—OF—WAY
	ø, D DBL. DET. DWY. OR D/W	DIAMETER DOUBLE DETAIL DRIVEWAY	S SCH SF SHT.	SLOPE SCHEDULE SQUARE FOOT SHEET
	EA EHH ELEC. ELEV. OR EL E.P. EXIST.	EACH ELECTRIC HANDHOLE ELECTRIC OR ELECTRICAL ELEVATION EDGE OF PAVEMENT EXISTING	SLP S.S. ST. STA. STD STRUCT. SVC. S/W	STREET LIGHT POLE STAINLESS STEEL STREET STATION STANDARD STRUCTURE SERVICE SIDEWALK
	FH FIN FM FT	FIRE HYDRANT FINISHED FORCE MAIN FEET	T TC TEL TEMP	TANGENT TOP CURB TELEPHONE TEMPORARY
,	GA GRD.	GUY ANCHOR GRADE	THK. TRAV. TS TYP	THICK TRAVERSE TRAFFIC SIGNAL TYPICAL
	HT. HORIZ, H HP	HEIGHT HORIZONTAL HIGH POINT	VERT	VERTICAL
	JB	JUNCTION BOX	W W/ W	WIDE WITH WATER LINE
	IN INV	INCHES INVERT ELEVATION	WMH WV	WATER LINE WATER MANHOLE WATER VALVE
1	LAT. LB Lc LEN LF LP LP LT.	LATERAL POUND LENGTH OF CURVE LENGTH LINEAL FEET LIGHT POLE LOW POINT LEFT		
	MAX MB MH MIN MON	MAXIMUM MAILBOX MANHOLE MINIMUM MONUMENT		
	NO.	NUMBER		
	O.C.	ON CENTER		

OUTSIDE DIAMETER

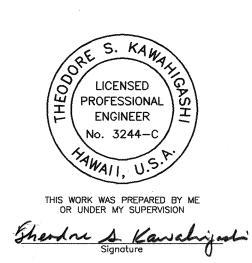
**OFFSET** 

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.		
HAWAII	HAW.	NH-STP-032-1(6)	2000	3	53	

## LEGEND

L	
	NEW CONCRETE SIDEWALK
	NEW A.C. PAVEMENT
	NEW A.C. SHOULDER
OWMH	EXISTING WATER MANHOLE
O WV	EXISTING WATER VALVE
- <b>-</b>	EXISTING FIRE HYDRANT
OPP	EXISTING POWER POLE
O EP	EXISTING ELECTRICAL POLE
o GA	EXISTING GUY ANCHOR
> GW	EXISTING GUY ANCHOR
OLP	EXISTING LIGHT POLE
D-OSL	EXISTING STREET LIGHT POLE
<b>○</b> TS	EXISTING TRAFFIC SIGNAL STANDARD
□ DI	EXISTING DRAIN INLET
TSPB	EXISTING TRAFFIC SIGNAL PULLBOX
þ	EXISTING TRAFFIC SIGN
þ	NEW OR RELOCATED TRAFFIC SIGN
	NEW CURB RAMP
() miles	EXISTING TREES
	RELOCATED TREES
ET	EXISTING TELEPHONE LINES
EE <sub>OH</sub>	EXISTING OVERHEAD ELECTRICAL LINE
EW12	EXISTING UTILITY LINES AND SIZES AS INDICATED  W = WATER S = SEWER D = DRAIN

EXISTING A.C. PAVEMENT



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONSTRUCTION NOTES

LEGEND AND ABBREVIATIONS

KAAHUMANU AVENUE
TRAFFIC SIGNAL MODERNIZATION
HIGH STREET TO WHARF STREET
FEDERAL AID PROJECT NO. NH-STP-032-1(6)

SCALE: AS NOTED

DATE: AUG. 1999

SHEET No. 1 OF 1 SHEETS