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

- THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT FROM THE STATE'S HIGHWAY DISTRICT ENGINEER AT 3060 EIWA STREET, ROOM 205, LIHUE, KAUAI, HAWAII PRIOR TO COMMENCEMENT OF WORK WITHIN THE STATE OF HAWAII RIGHT-OF-WAY.
- 2. CONSTRUCTION AND RESTORATION OF ALL EXISTING HIGHWAY FACILITIES WITHIN STATE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE CURRENT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AND THE "SPECIFICATIONS FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS", OF THE STATE HIGHWAYS DIVISION.
- 3. ONLY ONE LANE SHALL BE CLOSED DURING WORKING HOURS. THE ENTIRE WIDTH OF PAVEMENT, INCLUDING THE PAVED SHOULDERS, MAY BE UTILIZED FOR TRAFFIC PURPOSES. ALL LANES SHALL BE OPEN TO TRAFFIC DURING THE PEAK PERIODS OF 6:00 AM TO 8:30 AM AND 3:30 PM TO 6:00 PM AND DURING OFF-WORK HOURS.
- 4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION AND FOR THE CONVENIENCE AND SAFETY OF PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES AND PRECAUTIONS TO BE TAKEN SHALL CONFORM WITH THE "ADMINISTRATIVE RULES OF HAWAII GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT TO PUBLIC STREETS AND HIGHWAYS" ADOPTED BY THE DIRECTOR OF TRANSPORTATION, AND THE CURRENT U.S. FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART VI TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS". IF LANE CLOSURES ARE REQUIRED DURING CONSTRUCTION, A TRAFFIC CONTROL PLAN SHALL BE INCORPORATED INTO THE CONSTRUCTION PLANS AND MUST BE APPROVED BY THE DIVISION PRIOR TO THE ISSUANCE OF THE PERMIT.
- 5. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN HIGHWAY RIGHTS-OF-WAY EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE DISTRICT ENGINEER.
- 6. THE MINIMUM PAVEMENT STRUCTURE SHALL CONSIST OF:
  4" ASPHALT CONCRETE, 8" AGGREGATE BASE AND 12" AGGREGATE SUBBASE, OR
  4" ASPHALT CONCRETE AND 8" ASPHALT CONCRETE BASE COURSE OR ASPHALT
  CONCRETE, OR MATCH EXISTING PAVEMENT STRUCTURE, WHICHEVER IS GREATER.
- 7. COMPACTION TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE "SPECIFICATIONS FOR INSTALLATION OF MISCELLANEOUS IMPROVEMENTS WITHIN STATE HIGHWAYS", AS FOLLOWS:
- A. SUBBASE: 1 COMPACTION TEST FOR EACH 300 LINEAL FEET PER LIFT.B. BASE COURSE: 1 COMPACTION TEST FOR EACH 200 LINEAL FEET PER LIFT.
- C. ONE COMPACTION TEST FOR EACH 300 LINEAL FEET OF TRENCH PER LIFT.

  AND ONE COMPACTED TEST PER LIFT PER ROAD CROSSING.
- A COPY OF THE RESULTS SHALL BE SUBMITTED TO THE DISTRICT ENGINEER. PRIOR TO PROJECT'S ACCEPTANCE.
- 8. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADEQUATE, SAFE, NON-SKID BRIDGING MATERIAL OVER THE TRENCH, INCLUDING SHORING, WHEN TRENCHING IN PAVEMENT AREAS, TO HANDLE ALL TYPES OF VEHICULAR TRAFFIC.
- 9. LONGITUDINAL DRAINAGE ALONG THE HIGHWAY SHALL BE MAINTAINED.
- 10. PAVEMENT STRIPING SHALL BE DONE BY CONTRACTOR.
- 11. ALL REGULATORY, GUIDE AND CONSTRUCTION SIGNS AND BARRICADES SHALL BE OF HIGH INTENSITY REFLECTIVE SHEETING.
- 12. THE CONTRACTOR SHALL EXERCISE CARE WHEN EXCAVATING IN THIS AREA. DAMAGES TO THE EXISTING FACILITIES SHALL BE IMMEDIATELY REPORTED TO THE RESPECTIVE UTILITY COMPANIES, COUNTY, OR STATE AGENCY. THE REPAIR WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- 13. THE CONTRACTOR SHALL NOTIFY THE HIGHWAY LIGHTING AND TRAFFIC SIGNAL SUPERVISOR, DEPARTMENT OF TRANSPORTATION (STATE) THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK IN THIS AREA.
- 14. DRIVEWAYS SHALL BE KEPT OPEN UNLESS THE OWNERS OF THE PROPERTY USING THESE RIGHTS-OF-WAYS ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
- 15. WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN PASSABLE CONDITION, OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGE BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
- 16. THE CONTRACTOR SHALL REFERENCE, TO THE SATISFACTION OF THE DISTRICT ENGINEER, ALL EXISTING TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR ALL TRAFFIC SIGNS, POSTS AND PAVEMENT MARKINGS DISTURBED BY HIS ACTIVITIES, UNLESS DIRECTED OTHERWISE BY THE DISTRICT ENGINEER OR HIS REPRESENTATIVE.
- 17. STEEL TRACK EQUIPMENT WILL NOT BE ALLOWED ON PAVEMENT WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.

# 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, 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 KAUAI 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 DOWN-STREAM WATERWAYS, DITCHES AND DRAIN PIPES AND ON PUBLIC AND PRIVATE ROADWAYS.
- 4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFTY OF THE PUBLIC.

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

- 1. ALL PAVEMENT SHALL BE RESTORED TO ITS ORIGINAL CONDITION IN ACCORD WITH COUNTY OF KAUAI, HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE AND PUBLIC WORKS CONSTRUCTION (1994) WITH 2" MINIMUM A.C. AND 8" BASE COURSE.
- 2. THE CONTRACTOR SHALL PROVIDE, INSTALL, MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION AND FOR THE CONVENIENCE AND SAFETY OF PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES, AND PRECAUTIONS TO BE TAKEN SHALL CONFORM WITH RULES AND REGULATIONS GOVERNING THE USE OF TRAFFIC CONTROL DEVICES AT WORK SITES ON OR ADJACENT AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION AND FOR THE TO PUBLIC STREETS AND HIGHWAYS ADOPTED BY THE HIGHWAY SAFETY COORDINATOR AND U.S. FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS DATED 1988 AND ITS AMENDMENTS.
- 3. THE CONTRACTOR SHALL, WHENEVER NECESSARY, PROPERLY SHEET AND BRACE ALL EXCAVATIONS TO RENDER IT SECURE AND SHALL REMOVE ALL SUCH SHEETING AND BRACING BEFORE COMPLETION OF THE BACKFILL FOR WATER MAINS, THE MINIMUM COVER REQUIREMENTS (FROM TOP OF PIPE TO FINISHED GRADE OVER PIPE) IS THREE (3) FEET.
- 4. a. A PERMIT SHALL BE OBTAINED BY THE CONTRACTOR FROM THE DEPARTMENT OF PUBLIC WORKS BEFORE BEGINNING WORK ON ANY PORTION OF A PUBLIC STREET.
  - b. DRIVEWAYS SHALL BE KEPT OPEN UNLESS OWNERS OF THE ABUTTING LOTS USING THESE RIGHT-OF-WAYS ARE OTHERWISE PROVIDED FOR SATISFACTORILY.
  - c. ALL WORK INCLUDING REPAIR OF DAMAGED PAVEMENT AND SHOULDERS SHALL BE INSPECTED AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS. ALL UNAPPROVED WORK SHALL BE CONSIDERED UNACCEPTABLE AND SHALL BE REWORKED AND CORRECTED AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS, AT THE CONTRACTOR'S EXPENSE.
  - d. Damaged shoulders shall be restored to a condition equal to or better than existing condition.
  - e. WORK ON A PUBLIC STREET AREA MAY BE PERFORMED ONLY BETWEEN THE HOURS OF 8:00 A.M. TO 3:30 P.M. MONDAY THROUGH FRIDAY, EXCEPT ON HOLIDAYS RECOGNIZED BY THE COUNTY OF KAUAI, UNLESS OTHERWISE PERMITTED BY THE DEPARTMENT OF PUBLIC WORKS, COUNTY OF KAUAI.
- f. DURING NON-WORKING HOURS, ALL TRENCHES SHALL BE COVERED WITH A SAFE NON-SKID BRIDGING MATERIAL AND ALL LANES SHALL BE OPENED TO TRAFFIC.
- g. NO MATERIAL AND/OR EQUIPMENT SHALL BE STOCKPILED OR OTHERWISE STORED WITHIN COUNTY RIGHT-OF-WAYS EXCEPT AT LOCATIONS DESIGNATED IN WRITING AND APPROVED BY THE COUNTY ENGINEER.

#### WATER NOTES

- 1. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER SYSTEM FACILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE COUNTY OF KAUAI DEPARTMENT OF WATER'S "WATER SYSTEM STANDARDS", VOLUME 1, DATED MARCH 1985 AND THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION", VOLUME 2, DATED 1985, AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS.
- 2. ALL PLANS APPROVED BY THE DEPARTMENT OF WATER ARE BASED SOLELY ON THE ADEQUACY OF THE WATER SUPPLY. ALL OTHER FEATURES OF THE WATER SYSTEM, SUCH AS LINES, GRADES, FITTINGS, ETC., AND DRAINAGE AND OTHER FEATURES OF IMPROVEMENTS SHALL NOT BE THE RESPONSIBILITY OF THE DEPARTMENT OF WATER.
- 3. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF WATER, CONSTRUCTION SECTION, ONE (1) WEEK PRIOR TO COMMENCING WORK ON THE WATER SYSTEM.
- 4. FIRE HYDRANT SHALL BE CLEANED AFTER INSTALLATION AND PAINTED WITH TWO COATS OF PAINT. PAINT SHALL BE APPROVED BY DEPARTMENT OF WATER. CONTRACTOR TO RENUMBER FIRE HYDRANT AS DIRECTED BY DEPARTMENT OF WATER.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATER LINE TEES AND BENDS. WHEREVER THERE IS A POSSIBILITY OF WATER LINE MOVEMENT DUE TO REMOVAL OF THE SUPPORTING EARTH BEYOND THE REACTION BLOCKS. THE CONTRACTOR SHALL TAKE WHATEVER MEASURE HE DEEMS NECESSARY TO PROTECT THE WATER LINES, SUCH AS CONSTRUCTION OF SPECIAL REACTION BLOCKS (WITH DEPARTMENT OF WATER APPROVAL) AND/OR MODIFYING HIS CONSTRUCTION METHODS.
- 6. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT ARE NOT GUARANTEED AS TO THE ACCURACY OR THE ENCOUNTERING OF OTHER OBSTACLES DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO EXISTING UTILITIES.
- 7. THE CONTRACTOR SHALL CHLORINATE THE ENTIRE INSIDE SURFACE OF EACH PIPE AND FITTING WITH DISINFECTION SOLUTION OF 5 OUNCES OF SODIUM HYPOCHLORITE MIXED WITH 10 GALLONS OF WATER.
- 8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS FOR TESTING.
- 9. PRIOR TO EXCAVATING FOR NEW DRAIN, SEWER AND OTHER UTILITY LINES, THE CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATION OF EXISTING WATER MAINS AND APPURTENANCES. WHERE THE INSTALLATION OF THE NEW DRAIN, SEWER OR OTHER UTILITY LINES IS TO CROSS OVER OR UNDER EXISTING WATER MAINS, THE CONTRACTOR SHALL EXPOSE THE EXISTING WATER MAINS PRIOR TO TRENCHING. EXCAVATION AROUND WATER MAINS SHALL BE DONE BY HAND.
- 10. ALL METER BOXES AND VALVE BOXES/MANHOLES INCLUDING FRAMES AND COVERS SHALL BE FURNISHED, INSTALLED AND PAID FOR BY THE CONTRACTOR.
- 11. REAPPROVAL SHALL BE REQUIRED IF THIS PROJECT IS NOT UNDER CONSTRUCTION WITHIN A PERIOD OF ONE YEAR. (SEE RULES AND REGULATIONS OF THE DEPARTMENT OF WATER).
- 12. CONTRACTOR SHALL FURNISH AND INSTALL ADDITIONAL FITTINGS IF NECESSARY TO MEET FIELD CONDITIONS.
- 13. THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE WITH THE DEPARTMENT OF WATER AT LEAST 10 DAYS BEFORE CONSTRUCTION AND SHALL NOTIFY THE DEPARTMENT AT LEAST THREE (3) WORKING DAYS PRIOR TO START OF CONSTRUCTION.
- 14. THE CONTRACTOR SHALL SUBMIT THE NAME OF ITS AUTHORIZED SUPERINTENDENT ON THE JOB TO THE DEPARTMENT OF WATER.
- 15. ALL MATERIALS (PIPE, PIPE LUBRICANTS, PAINTS, SEALANTS, FORM OIL, CONCRETE ADMIXTURES, ETC.) IN DIRECT CONTACT WITH THE POTABLE WATER SHALL OBTAIN NATIONAL SANITATION FOUNDATION (NSF) APPROVALS. THE CONTRACTOR SHALL SUBMIT THESE APPROVALS TO THE DEPARTMENT OF WATER FOR REVIEW AND APPROVAL PRIOR TO ITS APPLICATION.

### GENERAL CONSTRUCTION NOTES

**APPROVED:** 

COUNTY OF KAUAI

COUNTY OF KAUAI

COUNTY ENGINEER, DEPARTMENT OF PUBLIC WORKS

(FOR CONSTRUCTION WITHIN COUNTY R/W ONLY)

(FOR CONSTRUCTION WITHIN COUNTY R/W ONLY)

- 1. ALL CONSTRUCTION WORK IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE PUBLICATIONS "HAWAII STANDARD SPECIFICATIONS FOR ROAD BRIDGE AND PUBLIC WORKS CONSTRUCTION 1994" AND "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION." THE STANDARD DETAILS ARE AVAILABLE AT THE COUNTY OF KAUAI CLERKS OFFICE, DATED 9-84.
- 2. NO GRADING BETWEEN 6 P.M. TO 6 A.M. ON ANY GIVEN DAY OR ON SATURDAYS, SUNDAYS AND HOLIDAYS WITHOUT PERMISSION FROM THE COUNTY ENGINEER.
- 3. CONTRACTOR TO NOTIFY PUBLIC WORKS DEPARTMENT FIVE (5) CALENDAR DAYS PRIOR TO COMMENCING ANY GRADING WORK. WHEN COMPLETED AND READY FOR FINAL INSPECTION, NOTIFY PUBLIC WORKS DEPARTMENT INSPECTION SECTION.
- 4. CONSTRUCTION PLANS ARE VALID FOR A PERIOD OF ONE YEAR FROM THE DATE OF APPROVAL; IF CONSTRUCTION DOES NOT COMMENCE WITHIN THIS ONE YEAR TIME FROM THEN, THE CONSTRUCTION PLANS WILL HAVE TO BE RESUBMITTED TO THE COUNTY AGENCIES FOR REVIEW AND APPROVAL.
- 5. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS RESULTING FROM HIS WORK AND DEPOSITED IN DRAINAGE FACILITIES, ROADWAYS AND OTHER AREAS. THE COSTS INCURRED FOR ANY NECESSARY REMEDIAL ACTION BY THE CHIEF ENGINEER SHALL BE PAYABLE BY THE CONTRACTOR.

LEGEND	EXISTING (SHOWN SCREENED)
DRAINLINE	
WATERLINE AND SIZE	W8
SEWER LINE AND SIZE	is incommunity to be an interpreted $58$ sensential as in the manifestation on in the resonant
FIRE HYDRANT	annumentation resident annumentation resident annumentation of the first of the fir
WATER VALVE	ΦW
AIR RELIEF VALVE	◆ ARV
WATER METER	Tanasan La
DRAIN MANHOLE	□ DMH
DRAIN INLET	DI
POWER POLE	O PP
SEWER MANHOLE	○ SMH
PAVEMENT STRIPING	Administration relies to the end of the Police of the Poli
CONCRETE CURB	
ELECTRIC LINE, OVERHEAD	EL.O/H
SPOT ELEVATION	14.50
DIRECTION OF SURFACE FLOW	~~ ~~
PROPERTY LINE	

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAWAII	STP-050-1(14)	1997	3	11

# **ABBREVIATIONS**

ADDITEVI	110113		
&	AND	KE	KAUAI ELECTRIC (CITIZENS UTILITIES)
œ	AT		LATERAL
AC	ASPHALT CONCRETE	LC	LENGTH OF CURVE
ADJ	ADJUSTMENT		LINEAL FEET
ARV	AIR RELIEF VALVE		
		LP	LIGHT POLE
ASSY	ASSEMBLY		LEFT
AZ	AZIMUTH	MAX	MAXIMUM
B	BASE LINE	MB	MAILBOX
BC	BOTTOM CURB	MECO	MAUI ELECTRIC COMPANY
BEG	BEGIN	MH	MANHOLE
BLDG	BUILDING	MIN	MINIMUM
BLK	BLOCK	MON	MONUMENT
BM	BENCH MARK	NEMA	NATIONAL ELECTRICAL
BOTT	BOTTOM		MANUFACTURERS ASSOCIATION
C	CONDUCTOR	NO. OR #	
CB	CATCH BASIN	O.C.	ON CENTER
CH	CHORD LENGTH	O.D.	OUTSIDE DIAMETER
C .	CENTERLINE		
€ Cl	CAST IRON	0/H	OVERHEAD
CL	CLASS	0/S	OFFSET
C.L.	CHAIN LINK	PAVT OR	
CLR	CLEAR	PAV'T	PAVEMENT
		PC	POINT OF CURVATURE
CMU	CONCRETE MASONRY UNIT	PCC	POINT OF COMPOUND CURVATURE
CO	COMPANY	PED	PEDESTRIAN
CONC	CONCRETE	PL	PLACE
COND	CONDUIT	6	PROPERTY LINE
CONT	CONTINUATION OR CONTINUOUS	PP	POWER POLE
CRM	CONCRETE RUBBLE MASONRY	PT	POINT OF TANGENCY
COL	COLUMN	PVC	POLYVINYL CHLORIDE
CU	COPPER	R	RADIUS
Ø	DIAMETER	RCP	REINFORCED CONCRETE PIPE
DBL	DOUBLE	REINF	REINFORCED OR REINFORCEMENT
DET	DETAIL		
D.I.	DRAIN INLET	RD REQ'D	ROAD
DIA	DIAMETER		REQUIRED
	DRAIN LINE	RPM	RAISED PAVEMENT MARKERS
D/L		RT	RIGHT
DMH	DRAIN MANHOLE	ROW OR	DIALIT OF WAY
DWY. OR	PS PS II (PS IA S A	R/W	RIGHT-OF-WAY
D/W	DRIVEWAY	S	SLOPE
EA	EACH	SCH	SCHEDULE
ELEC	ELECTRIC	SF	SQUARE FOOT
ELEV	ELEVATION	SHT	SHEET
EQ	EQUAL	S/L	SEWER LINE
EXIST	EXISTING	SMH	SEWER MANHOLE
FH	FIRE HYDRANT	ST	STREET
FIN	FINISHED	STA	STATION
FL	FLOW LINE	STD	STANDARD
FT	FEET	S/W	SIDEWALK
GA	GUY ANCHOR	T	
	GALVANIZED	TC	TANGENT TOP CURB
	GALVANIZED IRON	TEMP	
GRD	GRADE		TEMPORARY
		THK	THICK
GRND	GROUND	TYP	TYPICAL
HT	HEIGHT	VB	VALVE BOX
HB	HOSE BIBB	VERT	VERTICAL
HECO	HAWAIIAN ELECTRIC COMPANY	W/	WITH
HGL	HYDRAULIC GRADE LINE	W/L	WATER LINE
HORIZ	HORIZONTAL		
HP	HIGH POINT	WM	WATER METER
HWY	HIGHWAY	W	WATER VALVE
IN	INCHES		
INV	INVERT ELEVATION		
11 <b>4 V</b>	HAAEIVI EEF AVIION		

REVISION DATE BRIEF MADE BY APPROVED

DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

# AND ABBREVIATIONS

KAUMUALII HIGHWAY IMPROVEMENTS
AT MOI ROAD

SCALE: NONE

DATE: APRIL 1997

CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

₹(

LICENSED PROFESSIONAL ENGINEER
No. 3244-C

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Therdae & Kawahiji

AT MOI ROAD FED. AID PROJECT NO. STP-050-1(14)

SHEET No. 1 OF 1 SHEETS