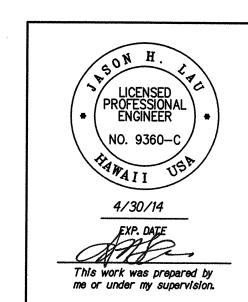
EED BOAD			FICCAL	OUEET	TOTAL	
DIST. NO.		PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	
HAWAII	HAW.	HWY-O-04-14M	2014	45	67	

MAJOR DIVISIONS			GROUP SYMBOLS		TYPICAL NAMES	
	GRAVELS	CLEAN GRAVELS		GW	Well graded gravels, gravel—sand mixtures, little or no fines.	
COARSE GRAINED SOILS (More than 50% of the material is LARGER than No. 200 sieve size.)	(More than 50% of coarse fraction is LARGER than the No. 4	(Little or no fines.)		GP	Poorly graded gravels or gravel—sand mixtures, little or no fines.	
		GRAVELS WITH FINES	# # # # # # # # #	GM	Silty gravels, gravel—sand—silt mixtures.	
	sieve size.)	(Appreciable amt. of fines.)	/ * /=/	GC Clayey gravels, gravel-sand-clay mixtures.		
	SANDS (More than 50% of coarse	CLEAN SANDS (Little or no fines.)		SW	Well graded sands, gravelly sands, little or no fines.	
				SP	Poorly graded sands or gravelly sands, little or no fines.	
	fraction is SMALLER than the No. 4	SANDS WITH FINES		SM	Silty sands, sand—silt mixtures.	
FINE GRAINED SOILS (More than 50% of the material is SMALLER than No. 200 sieve size.)	sieve size.)	(Appreciable amt. of fines.)		SC	Clayey sands, sand—clay mixtures.	
				ML	Inorganic silts and very fine sands, rock flour, silty clayey fine sands or clayey silts with slight plasticit	
	SILTS AND CLAYS (Liquid limit LESS than 50.)			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.	
	SILTS AND CLAYS (Liquid limit GREATER than 50.)			OL	Organic silts and organic silty clays of low plasticity.	
				МН	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	
				СН	Inorganic clays of high plasticity, fat clays.	
, ,				ОН	Organic clays of medium to high plasticity, organic silts.	
HIGHLY ORGANIC SOILS			ψ ψ <u></u>	PT	Peat and other highly organic soils.	
				-L'+L'+L'+ -LT-LT-LT-LT-LT-LT-LT-LT-LT-LT-LT-LT-LT-		
				VOLCANIC TUFF / HIGHLY TO COMPLETELY WEATHERED BASALT		
				CORA	AL	
			SAMPI	_E DE	FINITION	
2" O.D. Standard Split Spoon Sampler			1		thelby Tube RQD Rock Quality Designation	
3 O.D. S	Split Tube Samp	pier	<u></u>	∐ N	IX ∕ 4" Coring <u>¥</u> Water Level	
W.O. 12-5327			DOT SWMP Phase 6 and 7			
rata & Asso	ING LOG LEGEND					

HIRATA & ASSOCIATES, INC.

		E	BORING LOG	V	V.O. <u>12–5327</u>
BORING NO	B9	DRIVING WT	140 lb. 30 in.	START DATE_	5/18/12
SURFACE ELEV	304±	DROP	30 in.	END DATE	5/18/12
F R M P T P L		RY MOIST. ISITY CONT. CF) (%)		DESCRIPTION	
O E	40/3"	14	Clayey SILT (MH) — Covered by a thir	Brown, moist, st layer of gravel.	iff.
	23 7	79 42			
_ 5 _	27 7	71 50	Orange brown col	or from 5 feet.	
-10-	14 6	59 55	Medium stiff from		
-15- -20- -25-			Neither groundwatencountered.		water
30					Plate A4.9

Note: See Sheet EC-13 for approximate location of soil boring B9.



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

SOIL BORING LOGS

KANEOHE WATERSHED STORM WATER
BEST MANAGEMENT PRACTICES ON OAHU
Project No. HWY-0-04-14M
Scale: None Date: March 2014

SHEET No. B-01 OF 1 SHEETS