Kailua Road Intersection Project:

Improvements

Project Location: Kailua, Oahu, Hawaii

Project Number: 110922-00

Kokua Geotech LLC

94-974 Pakela Street, Suite 109 Waipahu, HI 96797 (808) 397-6974

Key to Log of Borings

Sheet 1 of 1

levation (feet) ample Type ample Type ampling Resista ows/ft raphic Log	Pocket Pen./Torval	Water Content, %	Dry Unit Weight, pcf	Remarks and Other Tests	
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COLUMN DESCRIPTIONS

- 1 Elevation (feet): Elevation (MSL, feet).
- Depth (feet): Depth in feet below the ground surface.
- 3 Sample Type: Type of soil sample collected at the depth interval shown.
- 4 Sample Number: Sample identification number.
- Sampling Resistance, blows/ft: Number of blows to advance driven sampler one foot (or distance shown) beyond seating interval using the hammer identified on the boring log.
- U.S.C.S: Type of material encountered.
- Graphic Log: Graphic depiction of the subsurface material encountered.
- 8 MATERIAL DESCRIPTION: Description of material encountered. May include consistency, moisture, color, and other descriptive text.

- 9 Pocket Pen./Torvane, tsf: the reading from Poecket Penetrometer or Torvane.
- 10 Water Content, %: Water content of the soil sample, expressed as percentage of dry weight of sample.
- Dry Unit Weight, pcf: Dry weight per unit volume of soil sample measured in laboratory, in pounds per cubic foot.
- 12 Remarks and Other Tests: Other Tests

FIELD AND LABORATORY TEST ABBREVIATIONS

CHEM: Chemical tests to assess corrosivity

COMP: Compaction test

CONS: One-dimensional consolidation test

LL: Liquid Limit, percent

PI: Plasticity Index, percent

SA: Sieve analysis (percent passing No. 200 Sieve)

UC: Unconfined compressive strength test, Qu, in ksf

WA: Wash sieve (percent passing No. 200 Sieve)

MATERIAL GRAPHIC SYMBOLS



Asphaltic Concrete (AC)

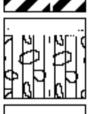
Basalt Rock Formation



Boulders



Fat CLAY, CLAY w/SAND, SANDY CLAY (CH)



到到 Silty GRAVEL (GM)



Silty SAND (SM)

TYPICAL SAMPLER GRAPHIC SYMBOLS

Auger sampler

Bulk Sample 3-inch-OD California w/ brass rings

CME Sampler

X Grab Sample ∣

HQ Coring

3-inch OD Modified California w/ brass liners

Pitcher Sample

PQ Coring

Probing w/Pointed Tip

2-inch-OD unlined split spoon (SPT)

Shelby Tube (Thin-walled, fixed head)

OTHER GRAPHIC SYMBOLS

— Water level (at time of drilling, ATD)

→ Water level (after waiting)

Minor change in material properties within a stratum

Inferred/gradational contact between strata

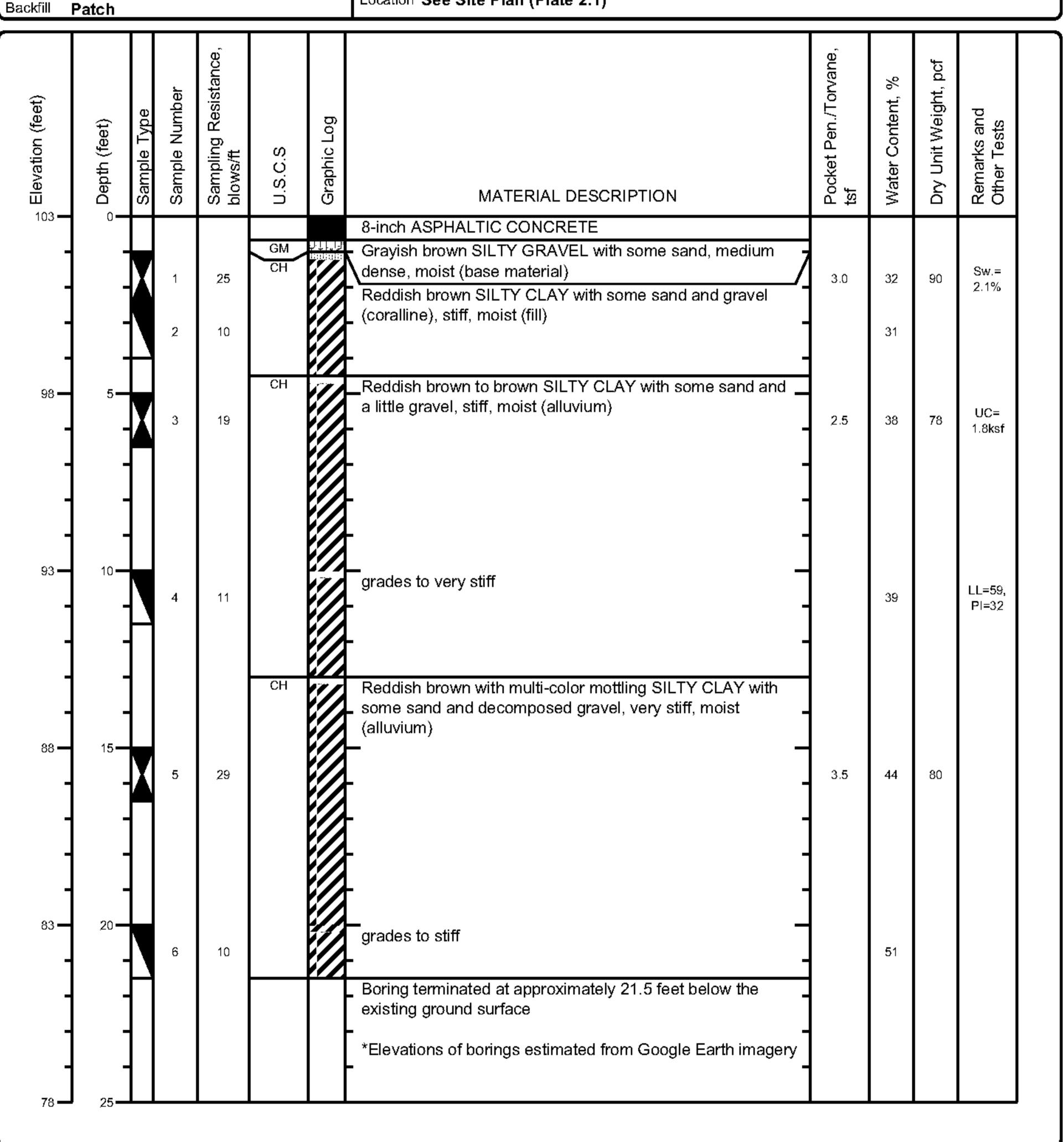
= ?= Queried contact between strata

GENERAL NOTES

- 1: Soil classifications are based on the Unified Soil Classification System. Descriptions and stratum lines are interpretive, and actual lithologic changes may be gradual. Field descriptions may have been modified to reflect results of lab tests.
- 2: Descriptions on these logs apply only at the specific boring locations and at the time the borings were advanced. They are not warranted to be representative of subsurface conditions at other locations or times.

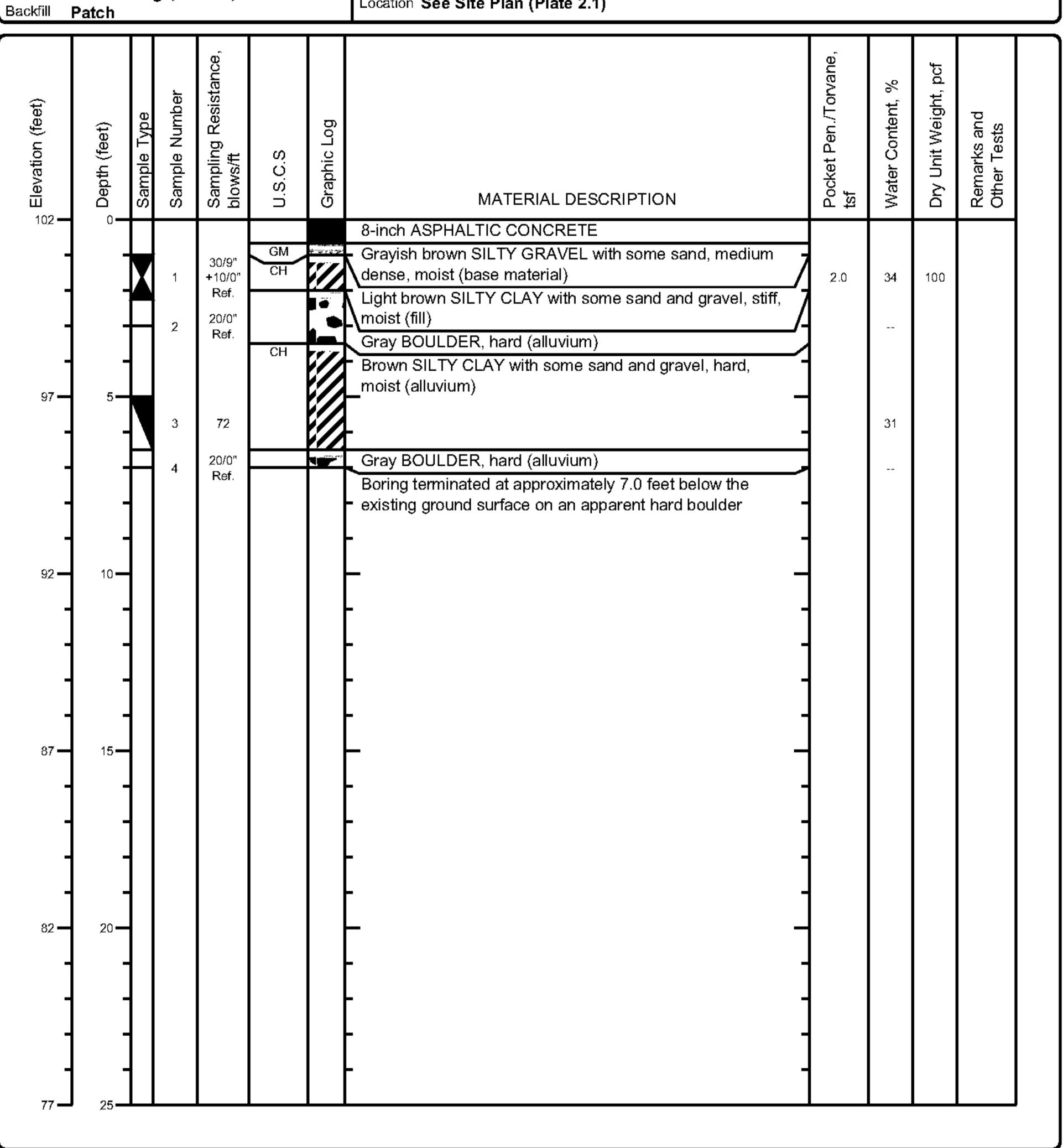
Project: Kailua Road Intersection Improvements	Kokua Geotech LLC	Log of Boring No. 1
Project Location: Kailua, Oahu, Hawaii	94-974 Pakela Street, Suite 109	
Project Number: 110922-00	Waipahu, HI 96797 (808) 397-6974	Sheet 1 of 1

Date(s) Drilled 11/27/23	Logged By CH	Checked By AJF
Drilling Method CF Auger	Drill Bit Size/Type 4-inch Solid Stem Auger	Total Depth of Borehole 21.5 feet
Drill Rig Type Mobile B-53	Drilling Contractor Kokua Geotech LLC	Approximate Surface Elevation +103 feet MSL*
Groundwater Level and Date Measured Not Encountered	Sampling MCS & SPT Method(s)	Hammer Data 140 lbs. with 30-inch drop
Borehole Soil Cuttings, Gravel, and AC Backfill Patch	Location See Site Plan (Plate 2.1)	



Project: Kailua Road Intersection Project: Improvements Project Location: Kailua, Oahu, Hawaii Project Number: 110922-00 Kokua Geotech LLC 94-974 Pakela Street, Suite 109 Waipahu, HI 96797 (808) 397-6974 Log of Boring No. 2 Sheet 1 of 1

Date(s) Drilled 11/27/23	Logged By CH	Checked By AJF
Drilling Method CF Auger	Drill Bit Size/Type 4-inch Solid Stem Auger	Total Depth of Borehole 8.5 feet
Drill Rig Type Mobile B-53	Drilling Contractor Kokua Geotech LLC	Approximate Surface Elevation +102 feet MSL*
Groundwater Level and Date Measured Not Encountered	Sampling Method(s) MCS & SPT	Hammer Data 140 lbs. with 30-inch drop
Borehole Soil Cuttings, Gravel, and AC Backfill Patch	Location See Site Plan (Plate 2.1)	



Project: Kailua Road Intersection Improvements	Kokua Geotech LLC	Log of Boring No. 3
Project Location: Kailua, Oahu, Hawaii	94-974 Pakela Street, Suite 109	
Project Number: 110922-00	Waipahu, HI 96797 (808) 397-6974	Sheet 1 of 1

Date(s) Drilled 11/28/23	Logged By CH	Checked By AJF
Drilling Method CF Auger	Drill Bit Size/Type 4-inch Solid Stem Auger	Total Depth of Borehole 13.5 feet
Drill Rig Type Mobile B-53	Drilling Contractor Kokua Geotech LLC	Approximate Surface Elevation +88 feet MSL*
Groundwater Level and Date Measured Not Encountered	Sampling MCS & SPT Method(s)	Hammer Data 140 lbs. with 30-inch drop
Borehole Soil Cuttings, Gravel, and AC Backfill Patch	Location See Site Plan (Plate 2.2)	

Borehole Backfill	Patch	ungs	s, Gr	avei, a	na AC		Location See Site Plan (Plate 2.2)					
္ဌ Elevation (feet) 	ے Depth (feet) 	Sample Type	Sample Number	Sampling Resistance, blows/ft	U.S.C.S	Graphic Log	MATERIAL DESCRIPTION	Pocket Pen./Torvane, tsf	Water Content, %	Dry Unit Weight, pcf	Remarks and Other Tests	
) 		1	34 25	SM		8-inch ASPHALTIC CONCRETE Grayish brown SILTY GRAVEL with some sand, medium dense, moist (base material) Brownish tan SILTY SAND with some gravel, medium dense, moist (fill) Brownish tan SILTY CLAY with some sand, gravel, and cobbles, very stiff, moist (fill)		8	131		
83 -	5		3	Ø	СН		Brown SILTY CLAY with some sand and a little gravel, stiff, moist (alluvium)	1.5	26	100	Sw.= 8.9%	
78 -	10		4	31			Grayish brown BASALT, moderately weathered, hard (basalt rock formation)		21			
73 -	15		5	10/0" Ref.			Boring terminated at approximately 13.5 feet below the existing ground surface on apparent hard basalt rock—formation—					
68 -	20 —						- - -					
- 63 	- 25 											

Project: Kailua Road Intersection Improvements Project Location: Kailua, Oahu, Hawaii Project Number: 110922-00 Kokua Geotech LLC 94-974 Pakela Street, Suite 109 Waipahu, HI 96797 (808) 397-6974 Log of Boring No. 4 Sheet 1 of 1

Date(s) Drilled 11/28/23	Logged By CH	Checked By AJF
Drilling Method CF Auger	Drill Bit Size/Type 4-inch Solid Stem Auger	Total Depth of Borehole 15.3 feet
Drill Rig Type Mobile B-53	Drilling Contractor Kokua Geotech LLC	Approximate Surface Elevation +91 feet MSL*
Groundwater Level and Date Measured Not Encountered	Sampling Method(s) MCS & SPT	Hammer Data 140 lbs. with 30-inch drop
Borehole Soil Cuttings, Gravel, and AC Backfill Patch	Location See Site Plan (Plate 2.2)	

