

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-05-01	1992	42	49

BORING 1

DEPTH (FT)	GRAPHIC SYMBOL	UNITED SOIL CLASSIFICATION	DESCRIPTION	SAMPLE NO.	SPT N-BLOWS/FT	PROBE BLOW PER FT.	WATER CONT. %	PLASTIC LIMIT	LIQUID LIMIT	WET DENSITY P.C.F.	DRY DENSITY P.C.F.	% MINUS NO. 200	UNCONSOLIDATED COMPACTION P.S.F.	WATER SHEAR P.S.F.
0			ELEV. = 192' ± *											
0			SOFT, GRAY, ORGANIC, CLAYEY SILT W/ROOTS	A	-	-	144	-	-	84	34	-	-	-
5				B	-	-	203	-	-	-	-	-	-	-
10			SOFT, DARK GRAY, SILTY SAND W/GRAVEL & TRACES OF ROOTS	C	-	-	75	-	-	103	59	-	-	-
15				D	3	-	164	-	-	-	-	-	-	-
20			SOFT, DARK GRAY, ORGANIC, CLAYEY SILT W/ SOME GRAVEL & ROOTS	E	-	-	76	91	100	139	79	-	-	-
25				F	2 1/5	-	57	-	-	-	-	-	-	-
30			SOFT, GRAYISH BROWN, CLAYEY SILT W/ SOME SAND & GRAVEL	G	-	-	69	56	64	107	63	-	-	-
35				H	1	-	44	-	-	-	-	-	-	-
40			VERY LOOSE TO MEDIUM, BROWN, SILTY GRAVEL W/ SAND	I	10	-	50	-	-	-	-	-	-	-
45			END OF BORING @ 41.5' D-13-90											

BORING 2

DEPTH (FT)	GRAPHIC SYMBOL	UNITED SOIL CLASSIFICATION	DESCRIPTION	SAMPLE NO.	SPT N-BLOWS/FT	PROBE BLOW PER FT.	WATER CONT. %	PLASTIC LIMIT	LIQUID LIMIT	WET DENSITY P.C.F.	DRY DENSITY P.C.F.	% MINUS NO. 200	UNCONSOLIDATED COMPACTION P.S.F.	WATER SHEAR P.S.F.
0			ELEV. = 188' ± *											
0			SOFT, DARK GRAYISH BROWN, ORGANIC, CLAYEY SILT W/ ROOTS & DECOMPOSED ROCK	A	-	-	152	61	140	75	36	-	-	-
5				B	-	-	80	-	-	-	-	-	-	-
10			SOFT, MOTTLED BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	C	-	-	48	-	-	102	69	-	-	-
15				D	3	-	66	-	-	-	-	-	-	-
20				E	-	-	74	39	-	107	61	-	-	-
25			STIFF, REDDISH BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	F	15	-	55	53	-	-	-	-	-	-
30				G	-	-	44	-	-	106	73	-	-	-
35				H	49	-	41	-	-	-	-	-	-	-
40			END OF BORING @ 41.5' D-20-90											
45			*Elevation Estimated from Preliminary Plan By ParEn, Inc. Received 8-9-90											

BORING 3

DEPTH (FT)	GRAPHIC SYMBOL	UNITED SOIL CLASSIFICATION	DESCRIPTION	SAMPLE NO.	SPT N-BLOWS/FT	PROBE BLOW PER FT.	WATER CONT. %	PLASTIC LIMIT	LIQUID LIMIT	WET DENSITY P.C.F.	DRY DENSITY P.C.F.	% MINUS NO. 200	UNCONSOLIDATED COMPACTION P.S.F.	WATER SHEAR P.S.F.
0			ELEV. = 215' ± *											
0			STIFF, MOTTLED BROWN, CLAYEY SILT W/ TRACES OF ROOTS	A	11	-	53	-	-	-	-	-	-	-
5				B	-	-	62	90	91	77	60	-	2400	1190
10				C	7	-	68	-	-	-	-	-	-	-
15			STIFF, MOTTLED BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	D	-	-	67	-	-	96	58	-	2200	1330
20				E	21	-	50	-	-	-	-	-	-	-
25			HARD, MOTTLED GRAYISH BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	F	-	-	54	-	-	106	69	-	-	-
30				G	31	-	61	-	-	-	-	-	-	-
35			STIFF, MOTTLED BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	H	10	-	50	-	-	-	-	-	-	-
40			END OF BORING @ 31.5' D-24-90											
45			*Elevation Estimated from Preliminary Plan By ParEn, Inc. Received 8-9-90											

BORING 4

DEPTH (FT)	GRAPHIC SYMBOL	UNITED SOIL CLASSIFICATION	DESCRIPTION	SAMPLE NO.	SPT N-BLOWS/FT	PROBE BLOW PER FT.	WATER CONT. %	PLASTIC LIMIT	LIQUID LIMIT	WET DENSITY P.C.F.	DRY DENSITY P.C.F.	% MINUS NO. 200	UNCONSOLIDATED COMPACTION P.S.F.	WATER SHEAR P.S.F.
0			ELEV. = 225' ± *											
0			STIFF, DARK BROWN, CLAYEY SILT W/ TRACES OF ROOTS & DECOMPOSED ROCK	A	21	-	43	42	87	-	-	-	-	-
5				B	-	-	52	-	-	106	70	-	-	-
10			STIFF, MOTTLED BROWN, CLAYEY SILT W/ DECOMPOSED ROCK & TRACES OF GRAVEL	C	25	-	46	-	-	-	-	-	-	-
15				D	-	-	58	59	84	101	64	-	-	-
20			STIFF, MOTTLED BROWN, CLAYEY SILT W/ DECOMPOSED ROCK	E	10	-	68	-	-	-	-	-	-	-
25				F	-	-	63	-	-	102	63	-	-	-
30			STIFF, MOTTLED GRAYISH BROWN, CLAYEY SILT W/ DECOMPOSED ROCK FRAGMENTS	G	17	-	62	-	-	-	-	-	-	-
35				H	17	-	63	-	-	-	-	-	-	-
40			END OF BORING @ 31.5' D-21-90											
45			*Elevation Estimated from Preliminary Plan By ParEn, Inc. Received 8-9-90											

BORING 5

DEPTH (FT)	GRAPHIC SYMBOL	UNITED SOIL CLASSIFICATION	DESCRIPTION	SAMPLE NO.	SPT N-BLOWS/FT	PROBE BLOW PER FT.	WATER CONT. %	PLASTIC LIMIT	LIQUID LIMIT	WET DENSITY P.C.F.	DRY DENSITY P.C.F.	% MINUS NO. 200	UNCONSOLIDATED COMPACTION P.S.F.	WATER SHEAR P.S.F.
0			ELEV. = 210' ± *											
0			HARD, BROWN, SILTY CLAY W/ TRACES OF ROOTS & DECOMPOSED ROCK	A	27	-	62	-	-	95	11	-	2950	1750
5				B	-	-	47	41	105	71	-	-	1750	2000
10			STIFF, MOTTLED GRAYISH BROWN, SILTY CLAY W/ DECOMPOSED ROCK	C	33	-	45	-	-	-	-	-	-	-
15				D	-	-	64	-	-	96	60	-	1680	1900
20			STIFF, MOTTLED GRAY, SILTY CLAY W/ TRACES OF DECOMPOSED ROCK	E	9	-	74	46	136	-	-	-	-	-
25				F	-	-	76	-	-	97	55	-	1430	1600
30			STIFF, MOTTLED GRAYISH BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	G	15	-	72	-	-	-	-	-	-	-
35				H	29	-	76	47	74	-	-	-	-	-
40			END OF BORING @ 31.5' D-25-90											
45			*Elevation Estimated from Preliminary Plan By ParEn, Inc. Received 8-9-90											

BORING 6

DEPTH (FT)	GRAPHIC SYMBOL	UNITED SOIL CLASSIFICATION	DESCRIPTION	SAMPLE NO.	SPT N-BLOWS/FT	PROBE BLOW PER FT.	WATER CONT. %	PLASTIC LIMIT	LIQUID LIMIT	WET DENSITY P.C.F.	DRY DENSITY P.C.F.	% MINUS NO. 200	UNCONSOLIDATED COMPACTION P.S.F.	WATER SHEAR P.S.F.
0			ELEV. = 188' ± *											
0			STIFF, MOTTLED BROWN, CLAYEY SILT W/ TRACES OF ROOTS & DECOMPOSED ROCK	A	9	-	56	-	-	-	-	-	-	-
5				B	15	-	54	-	-	-	-	-	-	-
10			STIFF, MOTTLED GRAYISH BROWN, CLAYEY SILT W/ DECOMPOSED ROCK	C	-	-	50	59	-	106	69	-	1750	2000
15				D	10	-	64	-	-	-	-	-	-	-
20			MEDIUM, MOTTLED REDDISH BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	E	-	-	80	47	95	94	52	-	610	200
25				F	9	-	80	-	-	-	-	-	-	-
30			STIFF, MOTTLED GRAYISH BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	G	-	-	64	-	-	99	60	-	1070	580
35				H	10	-	65	-	-	-	-	-	-	-
40			END OF BORING @ 31.5' D-21-90											
45			*Elevation Estimated from Preliminary Plan By ParEn, Inc. Received 8-9-90											

BORING 7

DEPTH (FT)	GRAPHIC SYMBOL	UNITED SOIL CLASSIFICATION	DESCRIPTION	SAMPLE NO.	SPT N-BLOWS/FT	PROBE BLOW PER FT.	WATER CONT. %	PLASTIC LIMIT	LIQUID LIMIT	WET DENSITY P.C.F.	DRY DENSITY P.C.F.	% MINUS NO. 200	UNCONSOLIDATED COMPACTION P.S.F.	WATER SHEAR P.S.F.
0			ELEV. = 165' ± *											
0			HARD, MOTTLED GRAYISH BROWN, SILTY CLAY W/ ROOTS	A	42	-	41	44	-	-	-	-	-	-
5			STIFF, MOTTLED BROWN, CLAYEY SILT W/ DECOMPOSED ROCK & TRACES OF ROOTS	B	16	-	58	-	-	-	-	-	-	-
10				C	-	-	56	-	-	77	62	-	4910	2090
15			MEDIUM, MOTTLED GRAYISH BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	D	6	-	74	54	99	-	-	-	-	-
20				E	-	-	92	67	-	102	53	-	-	-
25			MEDIUM, MOTTLED BROWN, CLAYEY SILT (DECOMPOSED ROCK) STRUCTURE	F	50 1/4	-	31	-	-	-	-	-	-	-
30			DENSE, DARK GRAY (BLACK) CLAY	G	35 1/2	-	-	-	-	-	-	-	-	-
35			END OF BORING @ 21.0' D-22-90											
40			*Elevation Estimated from Preliminary Plan By ParEn, Inc. Received 8-9-90											

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BORING LOGS

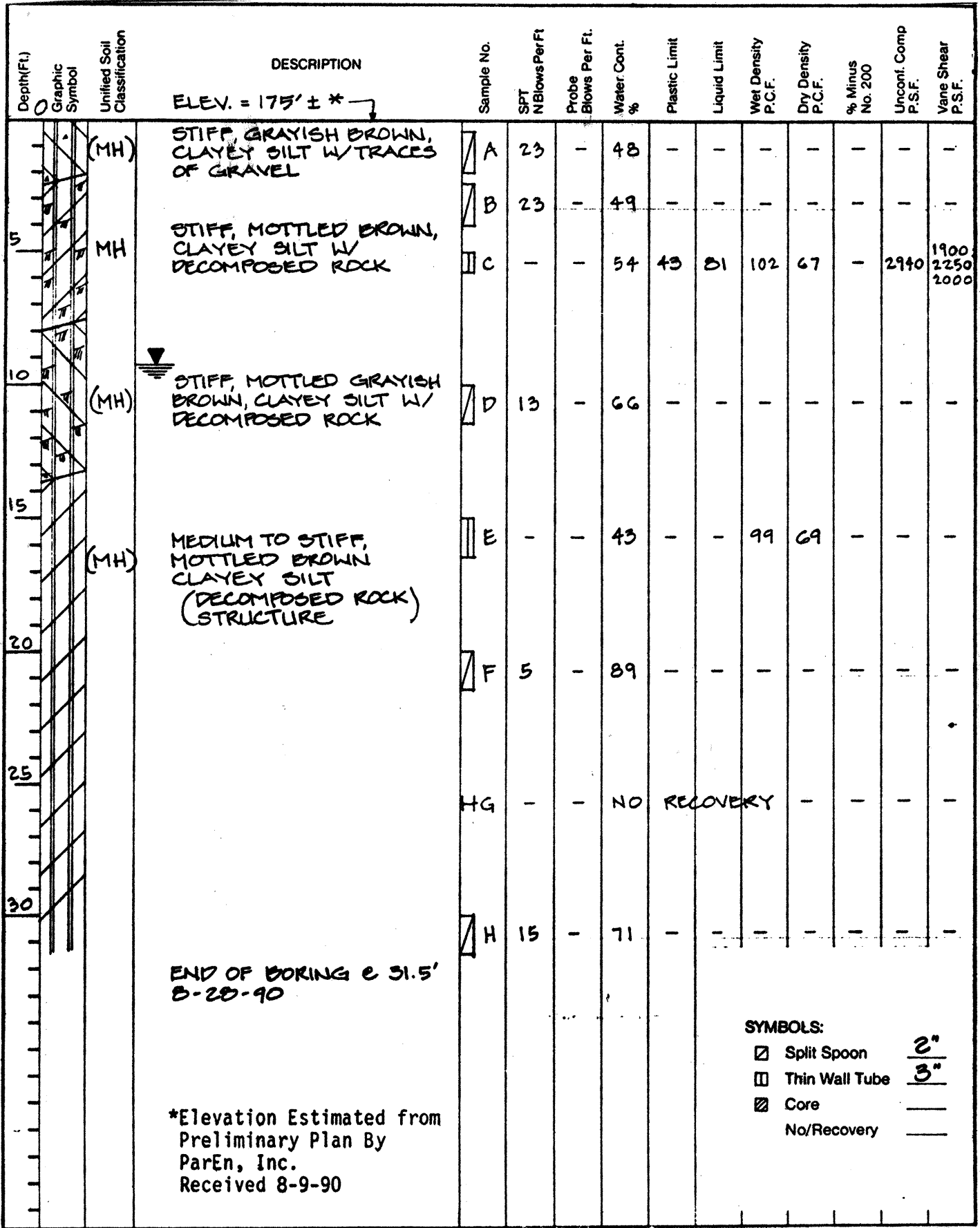
CASTLE HILLS ACCESS ROAD
PROJ. NO. HWY-0-05-01

SCALE: NO SCALE DATE: JAN, 1991

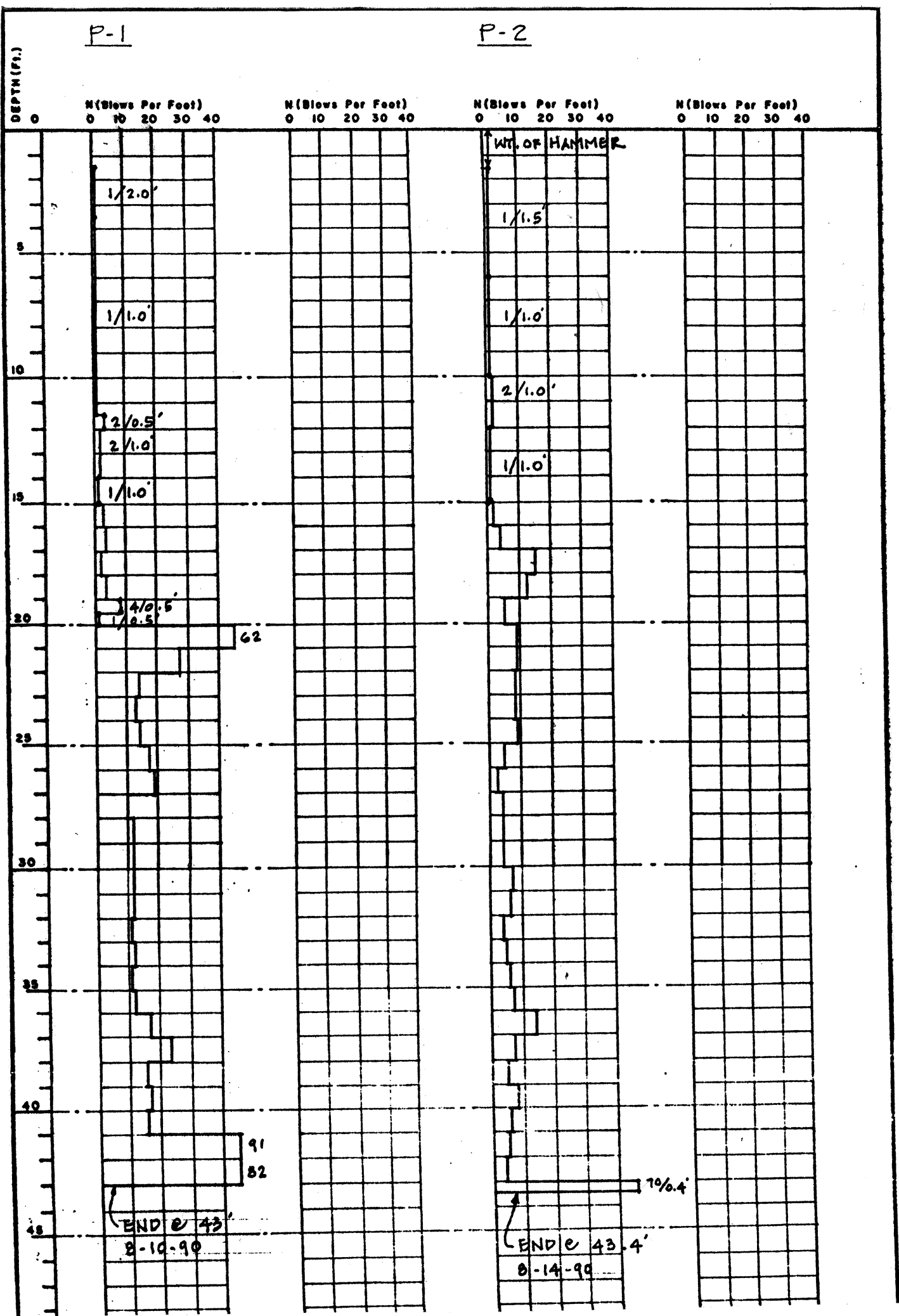
SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-05-01	1992	43	49

BORING 8



PROBE P-1 AND P-2



PROBE P-3, P-4 AND P-5

