SPECIAL PROVISIONS: SUBGRADE EXPLORATION
PID No.: 105259
CAR-39-23.34
May 14, 2025

PROJECT DESCRIPTION

Improvement of 5.08 miles of S.R. 39 in Carroll County by milling, full depth reclamation treatment of the roadway base, and new asphalt pavement. Includes minor work on Bridge Number CAR-39-27.300 guardrail replacement, and pavement markings.

HISTORICAL RECORDS

Historical records were obtained from ODOT's Transportation Information Mapping System (TIMS) for CAR-39-27.35, sub-batch 10365, completed in 1957 consisting of auger soundings for 1.18 miles of the current roadway alignment. In addition, historical records for CAR-39-27.30, sub-batch 1641, and CAR-39-27.35, sub-batch 1642, completed in 1985 and 1957, respectively, for bridges carrying S.R. 39 over Riley Run. Results of these explorations disclosed predominately cohesive soils with some non-cohesive soil, as well as coal, limestone, sandstone, and shale bedrock. However, due to the limited geotechnical data for the current design, results from these explorations are not presented within this current exploration.

GEOLOGY

The project is in the non-glaciated Muskingum-Pittsburgh Plateau Physiographic Region which is characterized as a moderate to high relief dissected plateau with broad major drainage valleys. These drainage valleys contain outwash and lacustrine terraces. The Ohio Department of Natural Resources (ODNR) interactive geologic map indicates that the overburden Cenozoic colluvium in this area is predominately cohesive and underlain by Pennsylvanian-aged claystone, conglomerate, sandstone, shale, siltstone, and lesser amounts of coal, flint, and limestone. This region is known to have rapid vertical and horizontal changes of rock types. Most of the project is underlain by bedrock from the Conemaugh Group except near bordering Columbiana County which is comprised of bedrock from the Allegheny and Pottsville Groups, Undivided.

RECONNAISSANCE

Field reconnaissance was completed by personnel from the Office of Geotechnical Engineering (OGE) on March 21, 2022. The surrounding area was noted as primarily agricultural and rural residential, with a mix of commercial and wooded lands in between. The roadway traverses through hilly topography with large, gradual changes in elevation. The existing pavement was noted as overall being in fair to poor condition due to age with areas of pavement cracking and patching. Current roadway profile grades were achieved through areas of cut and fill methods. The embankments do not appear to be exhibiting any signs of current instability.

SUBSURFACE EXPLORATION

A total of seventy (70) geotechnical exploration locations were completed as part of the subsurface exploration. Geotechnical exploration locations were comprised of thirty-eight (38) borings, completed between March 30 and April 7, 2022, and thirty-two (32) Automatic Dynamic Cone Penetration (ADCP) soundings, completed on April 6 and between May 25 and May 26, 2022, alternating between borings and soundings.

All borings were completed with a truck mounted CME 75 rotary drill rig utilizing 3.5-inch O.D. solid stem augers to advance the borings through soil and/or bedrock. Disturbed samples were collected in accordance with the Standard Penetration Test (AASHTO T206) at continuous intervals for subgrade analysis. The hammer system used was calibrated on April 15, 2020, with an average drill rod Energy Ratio (ER) of 92.5%, capped at 90% per ODOT Specifications for Geotechnical Explorations (SGE), Section 404.3. Borings B-044-0-22 and B-060-0-22 were advanced into bedrock and sampled (AASHTO T225) using an N sized wireline core barrel, water method.

All ADCP soundings were completed with a Kessler Testing Equipment Sapper ADCP unit. The soundings were completed in accordance with ASTM D6951 through a pre-cored hole within the existing pavement. Pavement coring was performed by Office of Pavement Engineering (OPE) prior to OGE exploration. Contact OPE for additional information.

EXPLORATION FINDINGS

All exploration locations were completed within the existing roadway with the borings encountering between 14 to 18-inches of asphalt. The pavement was underlain by aggregate base ranging in thickness from 1 to 4-inches, except in B-028-0-22, B-032-0-22, B-040-0-22, B-044-0-22 through B-057-0-22, and B-060-0-22 through B-068-0-22, which did not encounter any base material.

EXPLORATION FINDINGS (CONT.)

Beneath the surface materials the borings encountered predominately cohesive soils consisting of sandy silt (A-4a), silt and clay (A-6a), and silty clay (A-6b), and lesser amounts of silt (A-4b) and clay (A-7-6) ranging from medium stiff to hard in consistency and damp to wet in moisture condition. Additionally, the borings encountered non-cohesive soils consisting of stone fragments with sand (A-1-b), coarse and fine sand (A-3a), stone fragments with sand and silt (A-2-4), stone fragments with sand, silt, and clay (A-2-6), and sandy silt (A-4a) ranging from medium dense to very dense in compactness and damp in moisture condition.

Select soil samples were collected at subgrade elevation and tested for sulfate content. The maximum reported sulfate content was 1700 ppm with the majority less than 500 ppm. These results are presented on the boring logs, as well as summarized in tabular form, see table titled Determining Sulfate Content in Soils (Supplement 1122) found within this Special Provisions package.

In-place bedrock was encountered within B-012-0-22, B-016-0-22, B-017-0-22, B-021-0-22, B-024-0-22, B-028-0-22, B-032-0-22, B-037-0-22 through B-041-0-22, B-044-0-22 through B-047-0-22, B-060-0-22, and B-064-0-22 through B-068-0-22 between elevations 968.2 and 1268.0 feet. The bedrock was initially split spoon sampled. The bedrock consisted of slightly to severely weathered sandstone that was very weak to moderately strong, and moderately to highly weathered shale that was very weak.

Bedrock in borings B-044-0-22 and B-060-0-22 were cored and into which each were terminated. A photograph of the rock core is presented within this Special Provision package after their respective boring log. Representative rock samples were tested for strength either through unconfined compressive strength or point load index testing. Results of these tests are presented in tabular form, see Bedrock Test Summary table.

Top of bedrock was encountered within or at 3-feet of subgrade in borings B-012-0-22, B-024-0-22, B-037-0-22, B-041-0-22, B-044-0-22, B-047-0-22, B-060-0-22, and B-064-0-22. Additional unsuitable material consisting of silt (A-4b) was noted within 3-feet of subgrade in boring B-045-0-22. Unstable soils noted for high moisture content and/or low strength are present randomly across the project limits.

All boring locations were reported as being dry at completion or dry prior to coring activities.

ADCP soundings generally encountered subgrade support conditions that met or exceeded the Design CBR value of 8. Where there were issues identified, support often increased with depth. ADCP soundings D-007-0-22, D-015-0-22, D-034-0-22, D-039-0-22, D-042-1-22, D-043-1-22, D-050-0-22, D-055-0-22, D-063-0-22, and D-067-0-22 were terminated on refusal.

LEGEND

	DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL	
	STONE FRAGMENTS WITH SAND	A-1-b	1	3
	COARSE AND FINE SAND	A-3a	1	-
	STONE FRAGMENTS WITH SAND AND SILT	A-2-4	2	-
	STONE FRAGMENTS WITH SAND, SILT AND CLAY	A-2-6	2	-
	SANDY SILT	A-4a	32	12
	SILT	A-4b	4	-
	SILT AND CLAY	A-6a	22	7
	SILTY CLAY	A-6b	13	10
	CLAY	A-7-6	5	4
		TOTAL	82	36
	SANDSTONE	VISUAL		
	SHALE	VISUAL		
	PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL		

WC	INDICATES WATER CONTENT IN PERCENT.
N_{60}	INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.
●	INDICATES A PLASTIC MATERIAL WITH A MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.
γ	INDICATES UNIT WEIGHT OF ROCK.
NP	INDICATES A NON-PLASTIC SAMPLE.
NQ	"N" SERIES ROCK CORE BARREL OF "Q" WIRELINE BIT SIZE.
Qu	INDICATES UNCONFINED COMPRESSION TEST, ASTM D7012.
SO4	INDICATES SULFATE CONTENT IN PARTS PER MILLION (ppm).
SS	INDICATES A SPLIT SPOON SAMPLE.
TR	INDICATES TOP OF ROCK ELEVATION.

PARTICLE SIZE DEFINITIONS

BOULDERS	COBBLES	GRAVEL	COARSE SAND	FINE SAND	SILT	CLAY
12" – 3"	3" – 2.0 mm	2.0 mm – No. 10 SIEVE	No. 10 SIEVE – 0.42 mm (No. 40 SIEVE)	0.42 mm – 0.074 mm (No. 200 SIEVE)	0.074 mm – 0.005 mm	0.005 mm

SAMPLE WITH HIGH MOISTURE CONTENT

EXPLOR. ID	STATION	OFFSET	LATITUDE	LONGITUDE	FROM - TO	SAMPLE ID	% REC	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)	
B-013-0-22	63+74	7' RT.	40.617206	-80.935567	4.5 - 6.0	SS-3	56	0	0	2	66	32	28	19	9	27	A-4b (8)	●

BEDROCK TEST SUMMARY

EXPLOR. ID	STATION	OFFSET	LATITUDE	LONGITUDE	SAMPLE DEPTH	SAMPLE ELEVATION	LITHOLOGY	Sc (PSI)	Qu (PSI)
B-044-0-22	187+69	6' LT.	40.623707	-80.892949	3.5' - 8.5'	1194.1' - 1189.1'	SANDSTONE	2,279	-
B-060-0-22	251+71	6' LT.	40.625825	-80.870816	6.0' - 6.4'	971.6' - 971.2'	SANDSTONE	-	7,060

OHIO DEPARTMENT OF TRANSPORTATION

DETERMINING SULFATE CONTENT IN SOILS
SUPPLEMENT 1122

PID No.: 105259
Project C-R-S: CAR-39-23.34

BORING ID	STATION	OFFSET	LATITUDE	LONGITUDE	ELEV. ft	SAMPLE NUMBER	SOAKING TIME (hrs)	SAMPLE 1 DILUTION RATIO	SAMPLE 1 READING	SAMPLE 2 DILUTION RATIO	SAMPLE 2 READING	SAMPLE 3 DILUTION RATIO	SAMPLE 3 READING	AVERAGE READING	SULFATE CONTENT	
B-001-0-22	15+84	7' RT.	40.618633	-80.951966	1239.8	SS-1	16.63	20	20.18	20	19.19	20	20.86	20.08	400	
B-001-0-22	15+84	7' RT.	40.618633	-80.951966	1238.3	SS-2	17.28	20	6.289	20	6.139	20	7.271	6.566	130	
B-004-0-22	27+73	9' LT.	40.619486	-80.947975	1240.7	SS-1	18.16	20	14.25	20	16.10	20	14.53	14.96	300	
B-004-0-22	27+73	9' LT.	40.619486	-80.947975	1237.7	SS-3	19.6	20	5.137	20	5.054	20	5.029	5.073	100	
B-005-0-22	31+75	5' RT.	40.619124	-80.946609	1241.0	SS-1	20.11	20	81.09	20	82.95	20	84.5	82.85	1700	
B-005-0-22	31+75	5' RT.	40.619124	-80.946609	1238.0	SS-3	21.38	20	6.568	20	5.737	20	6.804	6.37	130	
B-008-0-22	43+74	6' LT.	40.617930	-80.942586	1245.0	SS-1	15.81	20	19.62	20	20.80	20	19.38	19.93	400	
B-008-0-22	43+74	6' LT.	40.617930	-80.942586	1243.5	SS-2	16.35	20	9.674	20	8.348	20	9.8	9.274	190	
B-009-0-22	47+79	7' RT.	40.617426	-80.941282	1242.8	SS-1	16.75	20	19.45	20	19.95	20	18.02	19.14	380	
B-009-0-22	47+79	7' RT.	40.617426	-80.941282	1241.3	SS-2	17.21	20	5.687	20	5.753	20	5.299	5.58	110	
B-012-0-22	59+73	7' LT.	40.617290	-80.937008	1256.4	SS-1	17.79	20	22.34	20	21.54	20	20.89	21.59	430	
B-013-0-22	63+74	7' RT.	40.617206	-80.935567	1255.2	SS-1	18.91	20	26.8	20	27.48	20	25.54	26.61	530	
B-013-0-22	63+74	7' RT.	40.617206	-80.935567	1252.2	SS-3	19.61	20	3.021	20	2.689	20	2.87	2.86	<100	
B-016-0-22	75+75	7' LT.	40.617703	-80.931324	1265.9	SS-1	16.98	20	15.62	20	14.53	20	14.15	14.77	300	
B-016-0-22	75+75	7' LT.	40.617703	-80.931324	1264.4	SS-2	17.6	20	4.528	20	3.713	20	4.552	4.264	<100	
B-017-0-22	79+73	7' RT.	40.618083	-80.929978	1265.5	SS-1	18.37	20	12.97	20	13.02	20	13.7	13.23	270	
B-017-0-22	79+73	7' RT.	40.618083	-80.929978	1262.5	SS-3	18.93	20	14.85	20	13.39	20	13.43	13.89	280	
B-020-0-22	91+76	6' LT.	40.619607	-80.926138	1255.7	SS-1	20.23	20	14.78	20	13.24	20	14.15	14.06	280	
B-020-0-22	91+76	6' LT.	40.619607	-80.926138	1254.2	SS-2	20.52	20	6.555	20	6.775	20	7.147	6.826	140	
B-021-0-22	95+72	7' RT.	40.619898	-80.924764	1252.2	SS-1	21.02	20	10.17	20	10.51	20	9.994	10.23	200	
B-021-0-22	95+72	7' RT.	40.619898	-80.924764	1251.9	SS-2A	17.3	20	9.059	20	8.781	20	9.061	8.967	180	
B-024-0-22	107+73	7' LT.	40.620437	-80.920502	1268.0	SS-1	18.02	20	8.898	20	9.237	20	8.209	8.781	180	
B-025-0-22	111+72	7' RT.	40.620531	-80.919069	1250.4	SS-1	18.93	20	19.71	20	19.84	20	19.96	19.84	400	
B-025-0-22	111+72	7' RT.	40.620531	-80.919069	1248.9	SS-2	19.75	20	24.39	20	25.20	20	24.21	24.6	490	
B-028-0-22	123+72	7' LT.	40.620964	-80.914785	1234.4	SS-1	18.48	20	13.24	20	11.74	20	11.07	12.02	240	
B-028-0-22	123+72	7' LT.	40.620964	-80.914785	1232.9	SS-2	19.53	20	9.409	20	8.818	20	10.73	9.652	190	
B-029-0-22	127+72	7' RT.	40.621054	-80.913347	1236.7	SS-1	20.2	20	8.765	20	7.993	20	7.829	8.196	160	
B-029-0-22	127+72	7' RT.	40.621054	-80.913347	1235.2	SS-2	21.23	20	7.523	20	6.788	20	8.167	7.493	150	
B-032-0-22	139+73	8' LT.	40.621208	-80.909033	1227.8	SS-1	21.27	20	27.23	20	27.63	20	31.31	28.72	570	
B-032-0-22	139+73	8' LT.	40.621208	-80.909033	1226.3	SS-2	16.15	20	23.73	20	21.00	20	19.99	21.57	430	
B-033-0-22	143+77	7' RT.	40.621054	-80.907591	1210.5	SS-1	0	20	6.091	20	5.462	20	6.493	6.015	120	
B-033-0-22	143+77	7' RT.	40.621054	-80.907591	1209.0	SS-2	16.68	20	6.499	20	6.049	20	6.17	6.239	130	
B-033-0-22	143+77	7' RT.	40.621054	-80.907591	1207.5	SS-3	17.77	20	14.51	20	13.37	20	13.93	13.94	280	
B-036-0-22	155+74	6' RT.	40.620402	-80.903368	1242.1	SS-1	18.49	20	11.89	20	11.74	20	10.52	11.38	230	
B-036-0-22	155+74	6' RT.	40.620402	-80.903368	1240.6	SS-2	19.15	20	6.812	20	6.560	20	7.145	6.839	140	
B-037-0-22	159+70	7' RT.	40.620339	-80.901939	1236.6	SS-1	19.52	20	16.53	20	18.10	20	16.48	17.04	340	

OHIO DEPARTMENT OF TRANSPORTATION

DETERMINING SULFATE CONTENT IN SOILS
SUPPLEMENT 1122

PID No.: 105259
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BORING ID	STATION	OFFSET	LATITUDE	LONGITUDE	ELEV. ft	SAMPLE NUMBER	SOAKING TIME (hrs)	SAMPLE 1 DILUTION RATIO	SAMPLE 1 READING	SAMPLE 2 DILUTION RATIO	SAMPLE 2 READING	SAMPLE 3 DILUTION RATIO	SAMPLE 3 READING	AVERAGE READING	SULFATE CONTENT	
B-040-0-22	171+75	7' LT.	40.621567	-80.897959	1218.8	SS-1	16.51	20	9.27	20	9.093	20	10.81	9.724	190	
B-040-0-22	171+75	7' LT.	40.621567	-80.897959	1217.3	SS-2	16.97	20	13.27	20	13.31	20	14.11	13.56	270	
B-042-0-22	179+72	0' LT.	40.622622	-80.895444	1208.1	SS-1	17.51	20	6.798	20	6.738	20	6.039	6.525	130	
B-042-0-22	179+72	0' LT.	40.622622	-80.895444	1206.6	SS-2	18.82	20	17.17	20	16.62	20	16.23	16.67	330	
B-043-0-22	183+68	2' RT.	40.623151	-80.894194	1202.6	SS-1	19.36	20	3.67	20	4.767	20	4.673	4.37	<100	
B-043-0-22	183+68	2' RT.	40.623151	-80.894194	1201.1	SS-2	20.89	20	12.79	20	12.75	20	11.55	12.36	250	
B-045-0-22	191+70	7' RT.	40.624216	-80.891669	1171.1	SS-1	20.05	20	4.765	20	4.798	20	4.948	4.837	<100	
B-045-0-22	191+70	7' RT.	40.624216	-80.891669	1169.6	SS-2	21.42	20	6.094	20	6.325	20	6.075	6.165	120	
B-049-0-22	207+72	6' RT.	40.625827	-80.886398	1076.5	SS-1	15.58	20	9.778	20	7.624	20	8.217	8.54	170	
B-049-0-22	207+72	6' RT.	40.625827	-80.886398	1075.0	SS-2	16.21	20	4.968	20	6.647	20	4.843	5.486	110	
B-051-0-22	215+70	7' RT.	40.625864	-80.883524	1020.7	SS-1	16.56	20	3.183	20	4.348	20	4.752	4.094	<100	
B-051-0-22	215+70	7' RT.	40.625864	-80.883524	1019.2	SS-2	17.49	20	2.964	20	3.765	20	3.293	3.341	<100	
B-053-0-22	223+71	6' RT.	40.625909	-80.880639	992.4	SS-2	15.99	20	9.803	20	10.64	20	9.267	9.903	200	
B-053-0-22	223+71	6' RT.	40.625909	-80.880639	990.9	SS-3	16.4	20	5.595	20	5.304	20	4.945	5.281	110	
B-056-0-22	235+71	7' LT.	40.625202	-80.876456	992.9	SS-1	17.01	20	6.597	20	9.866	20	7.189	7.884	160	
B-056-0-22	235+71	7' LT.	40.625202	-80.876456	991.4	SS-2	17.73	20	3.719	20	5.906	20	4.158	4.594	<100	
B-057-0-22	239+72	7' RT.	40.625232	-80.875021	985.5	SS-1	19.05	20	5.627	20	5.350	20	5.676	5.551	110	
B-057-0-22	239+72	7' RT.	40.625232	-80.875021	984.0	SS-2	19.57	20	6.746	20	6.701	20	6.353	6.6	130	
B-058-0-22	243+72	8' LT.	40.625604	-80.873664	980.4	SS-1	21.3	20	6.562	20	5.720	20	7.171	6.484	130	
B-058-0-22	243+72	8' LT.	40.625604	-80.873664	978.9	SS-2	16.28	20	6.837	20	7.532	20	9.549	7.973	160	
B-059-0-22	247+72	7' RT.	40.625811	-80.872250	977.0	SS-1	17.03	20	3.794	20	5.448	20	4.987	4.743	<100	
B-059-0-22	247+72	7' RT.	40.625811	-80.872250	975.5	SS-2	17.62	20	14.98	20	12.74	20	12.93	13.55	270	
B-060-0-22	251+71	6' LT.	40.625825	-80.870816	975.4	SS-1A	18.09	20	4.759	20	5.163	20	5.038	4.987	100	
B-061-0-22	255+71	6' RT.	40.625510	-80.869440	971.9	SS-1A	19.32	20	9.639	20	9.233	20	9.385	9.419	190	
B-061-0-22	255+71	6' RT.	40.625510	-80.869440	970.9	SS-1B	20.21	20	10.41	20	10.79	20	8.807	10	200	
B-061-0-22	255+71	6' RT.	40.625510	-80.869440	969.4	SS-2	21.82	20	7.636	20	6.411	20	7.13	7.059	140	
B-064-0-22	267+68	7' LT.	40.623371	-80.866272	974.2	SS-1A	17.32	20	16.6	20	8.686	20	10.33	11.87	240	
B-066-0-22	275+66	6' LT.	40.621865	-80.864285	972.7	SS-1	0	20	10.09	20	10.45	20	9.325	9.955	200	
B-066-0-22	275+66	6' LT.	40.621865	-80.864285	971.2	SS-2	20.16	20	19.28	20	18.53	20	20.79	19.53	390	
B-068-0-22	283+61	10' LT.	40.622031	-80.861490	969.7	SS-1	20.71	20	30.85	20	36.47	20	40.2	35.84	720	
B-068-0-22	283+61	10' LT.	40.622031	-80.861490	968.2	SS-2	22.25	20	17.06	20	18.00	20	18	17.687	350	

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 15+84, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1242.8 (ft) EOB: 7.5 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.618633, -80.951966

EXPLORATION ID B-001-0-22

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MATERIAL DESCRIPTION AND NOTES	ELEV. 1242.8	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1241.3	1																
STIFF, BROWN AND GREEN, **SILT AND CLAY**, "AND" STONE FRAGMENTS, LITTLE SAND, DAMP	1239.8	2	7 6 5	17	44	SS-1	3.50	43	10	9	22	16	29	16	13	14	A-6a (1)	
DENSE, BROWN, **STONE FRAGMENTS WITH SAND, SILT, AND CLAY**, DAMP	1238.3	3 4	6 11 14	38	6	SS-2	3.50	47	14	7	21	11	30	19	11	10	A-2-6 (0)	
VERY STIFF, BROWN AND GRAY, **SILT AND CLAY**, SOME STONE FRAGMENTS, LITTLE SAND, DAMP		5	12 11 13	36	89	SS-3	3.00	30	12	8	27	23	32	18	14	13	A-6a (4)	
@6.0'; HARD	1235.3	6 7 EOB	10 9 12	32	78	SS-4	4.00	-	-	-	-	-	-	-	-	15	A-6a (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: POURED 6 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-002-0-22	Date:	4/6/2022
Surface Elevation:	1267.6	Surface Materials*:	Asphalt 19.7"
Lat / Long:	40.619208, -80.950756	Test Starting Depth (ft):	1.6

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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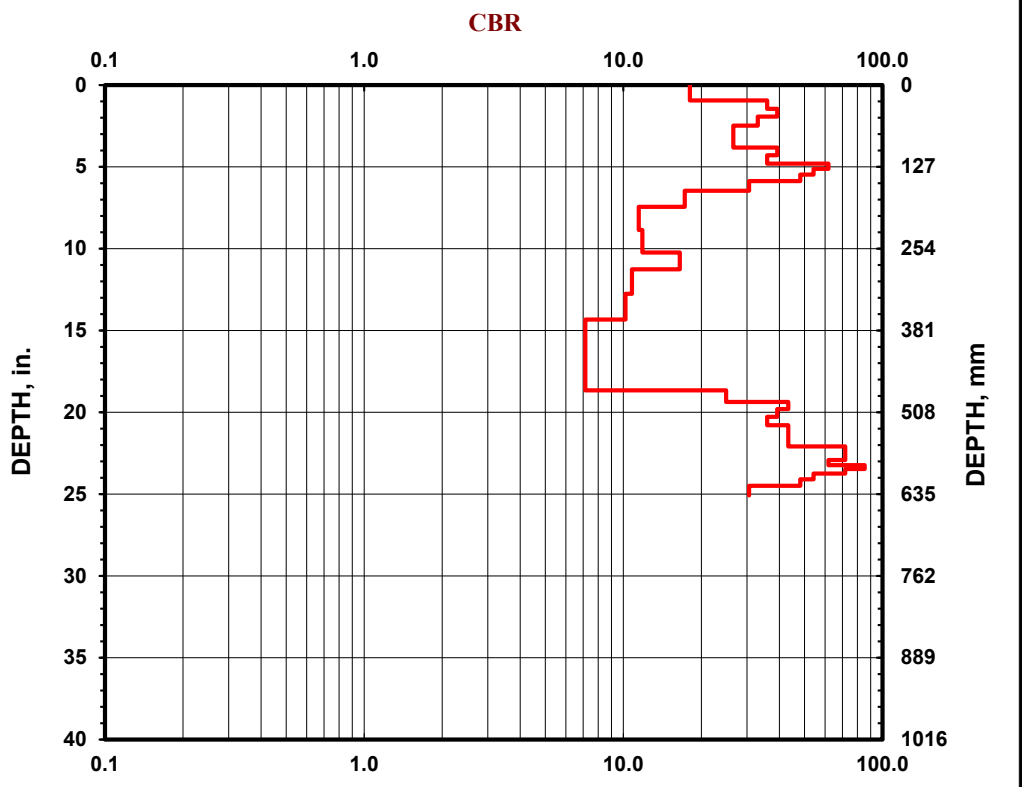
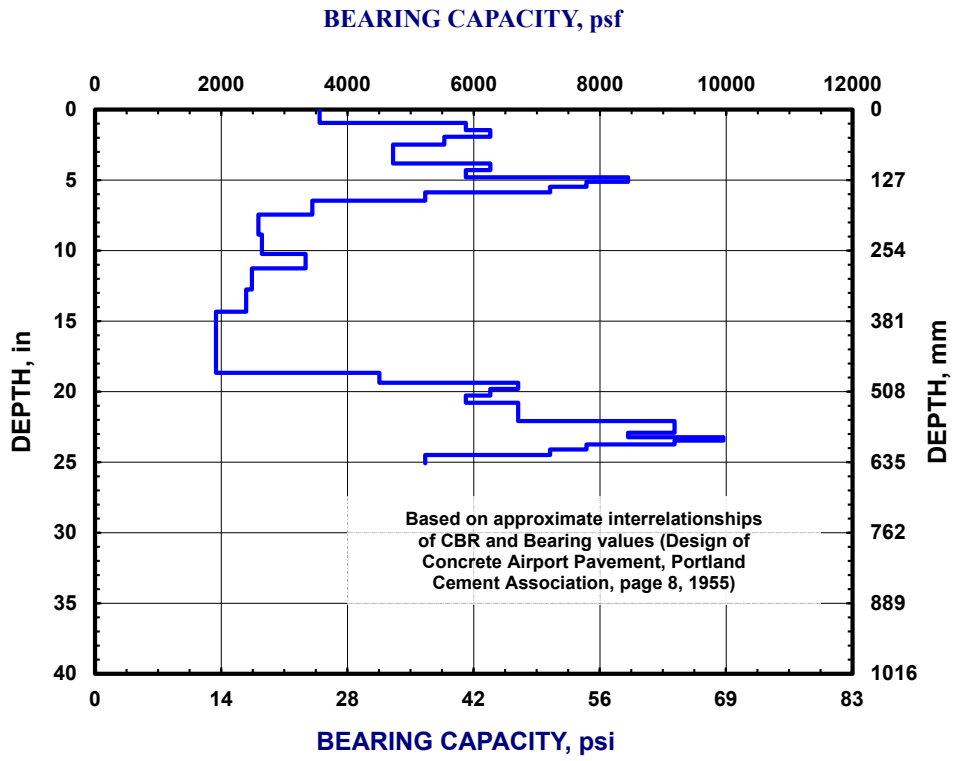
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	24	1
2	37	1
2	49	1
2	63	1
2	80	1
2	97	1
2	109	1
2	122	1
2	130	1
2	139	1
2	149	1
2	164	1
2	189	1
2	225	1
2	260	1
2	286	1
2	324	1
2	364	1
2	419	1
2	474	1
2	492	1
2	503	1
2	515	1
2	528	1
2	539	1
2	550	1
2	561	1
2	568	1
2	575	1
2	582	1
2	590	1
2	596	1
2	603	1
2	612	1
2	622	1
2	637	1
		1
		1
		1
		1
		1
		1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-003-0-22	Date:	4/6/2022
Surface Elevation:	1268.8	Surface Materials*:	Asphalt 18.5"
Lat / Long:	40.61952, -80.949404	Test Starting Depth (ft):	1.5

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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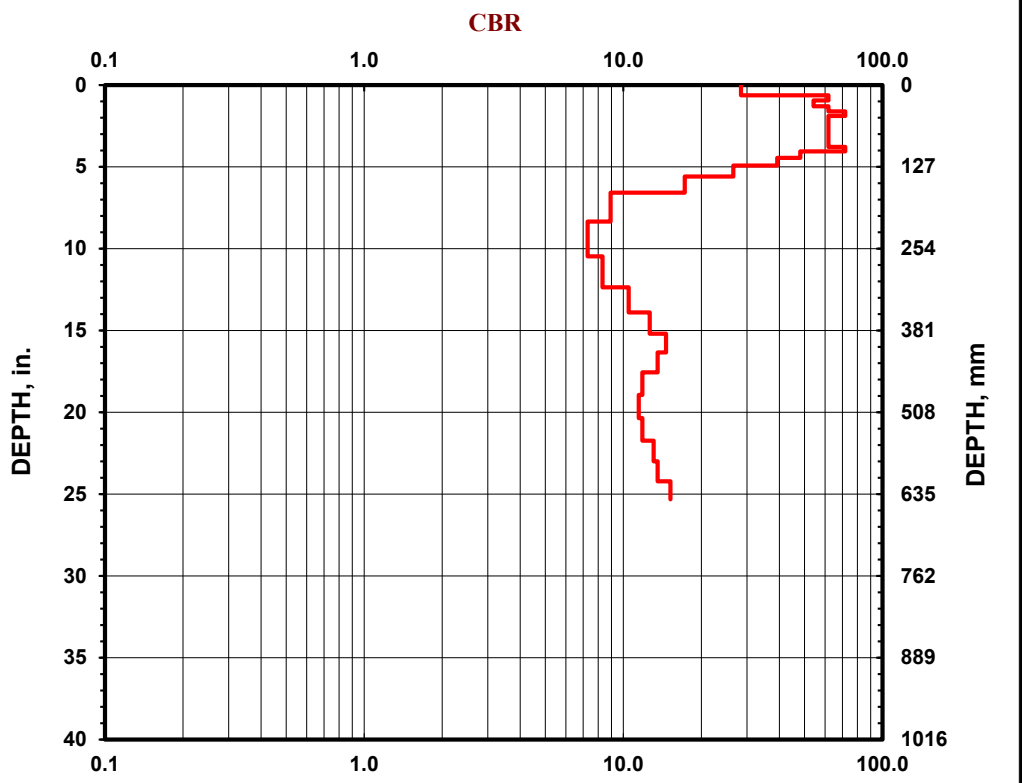
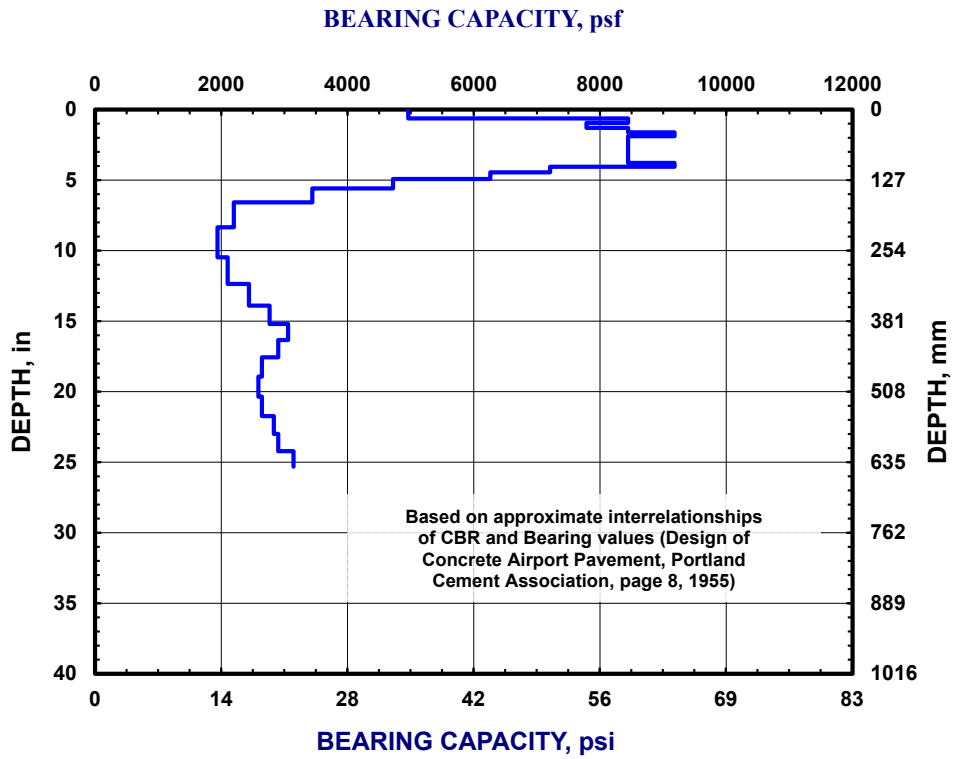
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	16	1
2	24	1
2	33	1
2	41	1
2	48	1
2	56	1
2	64	1
2	72	1
2	80	1
2	88	1
2	96	1
2	103	1
2	113	1
2	125	1
2	142	1
2	167	1
2	212	1
2	266	1
2	314	1
2	353	1
2	386	1
2	415	1
2	446	1
2	481	1
2	517	1
2	552	1
2	584	1
2	615	1
2	643	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 27+73, 9' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1243.7 (ft) EOB: 7.5 ft.
START: 3/31/22 END: 3/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.619486, -80.947975

EXPLORATION ID B-004-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1243.7	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1242.2	1																
VERY STIFF, BROWN AND GRAY, **SILTY CLAY**, SOME STONE FRAGMENTS, SOME SAND, DAMP		2	4 5 5	15	67	SS-1	3.00	35	14	9	17	25	34	17	17	14	A-6b (3)	
@3.0'; NOT ENOUGH MATERIAL TO TEST	1239.2	3 4	3 4 3	11	22	SS-2	2.00	-	-	-	-	-	-	-	-	16	A-6b (V)	
VERY STIFF, BROWN AND GRAY, **SILT AND CLAY**, LITTLE SAND, LITTLE SANDSTONE FRAGMENTS, MOIST		5	2 5 9	21	72	SS-3	3.00	20	13	9	24	34	32	17	15	19	A-6a (7)	
@6.0'; BROWN, DAMP	1236.2	6 7 EOB	3 4 5	14	67	SS-4	2.50	13	13	13	38	23	27	16	11	16	A-6a (6)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 6 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 31+75, 5' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1244.0 (ft) EOB: 7.5 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.619124, -80.946609

EXPLORATION ID B-005-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1244.0	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1242.5	1																
VERY STIFF, BROWN AND GRAY, **SILTY CLAY**, LITTEL SAND, LITTLE STONE FRAGMENTS, DAMP	1241.0	2	7 5 5	15	44	SS-1	4.00	16	9	8	25	42	40	18	22	17	A-6b (11)	
VERY STIFF, REDDISH BROWN AND GRAY, **CLAY**, SOME SILT, TRACE SAND, DAMP		3	4 7 8	23	33	SS-2	4.00	-	-	-	-	-	-	-	-	17	A-7-6 (V)	
		5	4 6 9	23	78	SS-3	3.00	0	0	3	28	69	47	19	28	17	A-7-6 (17)	
	1236.5	7 EOB	7 10 14	36	39	SS-4	3.00	-	-	-	-	-	-	-	-	14	A-7-6 (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 6 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-006-0-22	Date:	4/6/2022
Surface Elevation:	1238.0	Surface Materials*:	Asphalt 20.5"
Lat / Long:	40.618789, -80.94524	Test Starting Depth (ft):	1.7

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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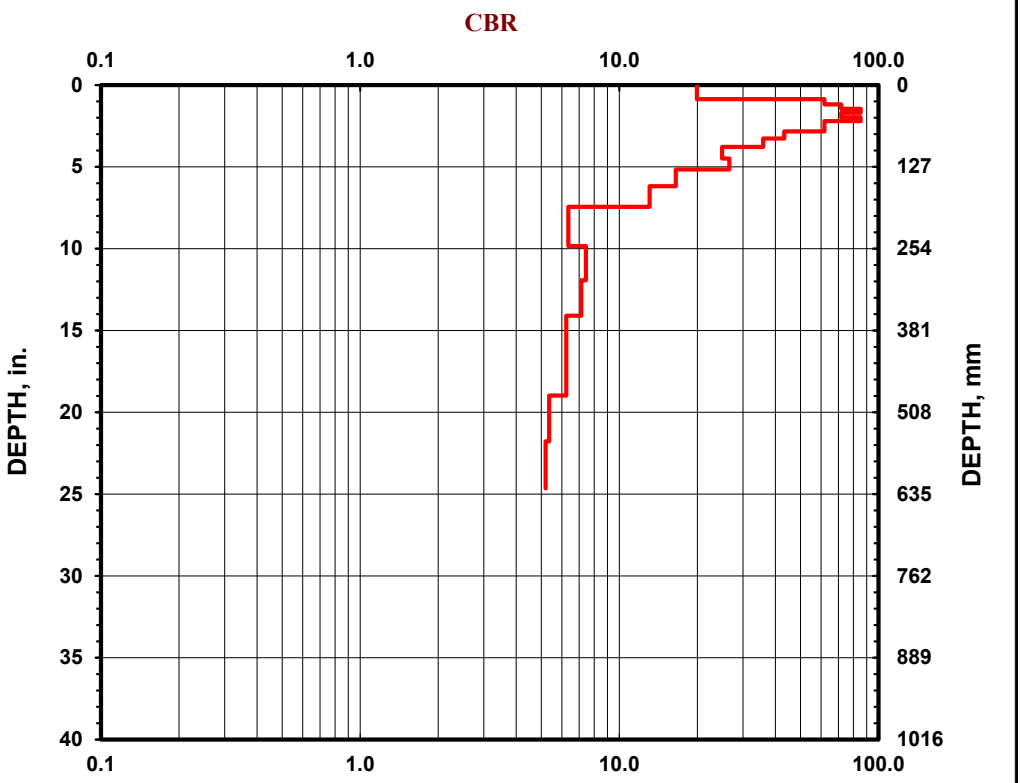
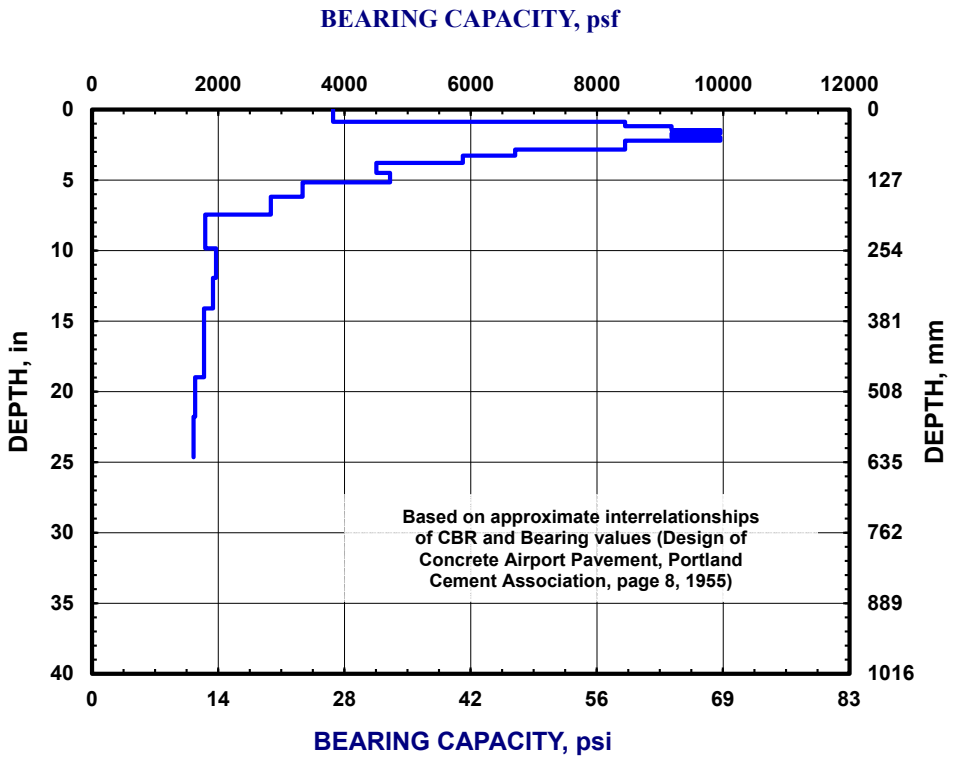
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	22	1
2	30	1
2	37	1
2	43	1
2	50	1
2	56	1
2	64	1
2	72	1
2	83	1
2	96	1
2	114	1
2	131	1
2	157	1
2	189	1
2	250	1
2	303	1
2	358	1
2	420	1
2	482	1
2	553	1
2	626	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-007-0-22	Date:	4/6/2022
Surface Elevation:	1246.6	Surface Materials*:	Asphalt 24"
Lat / Long:	40.618341, -80.943915	Test Starting Depth (ft):	2.0

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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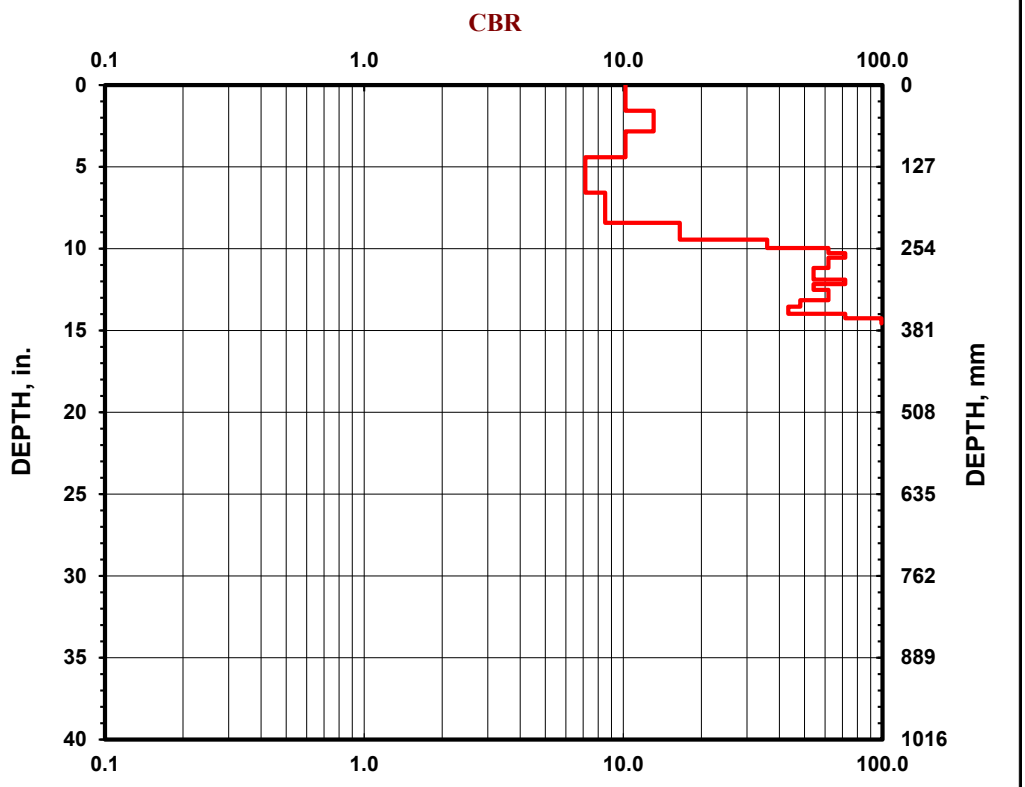
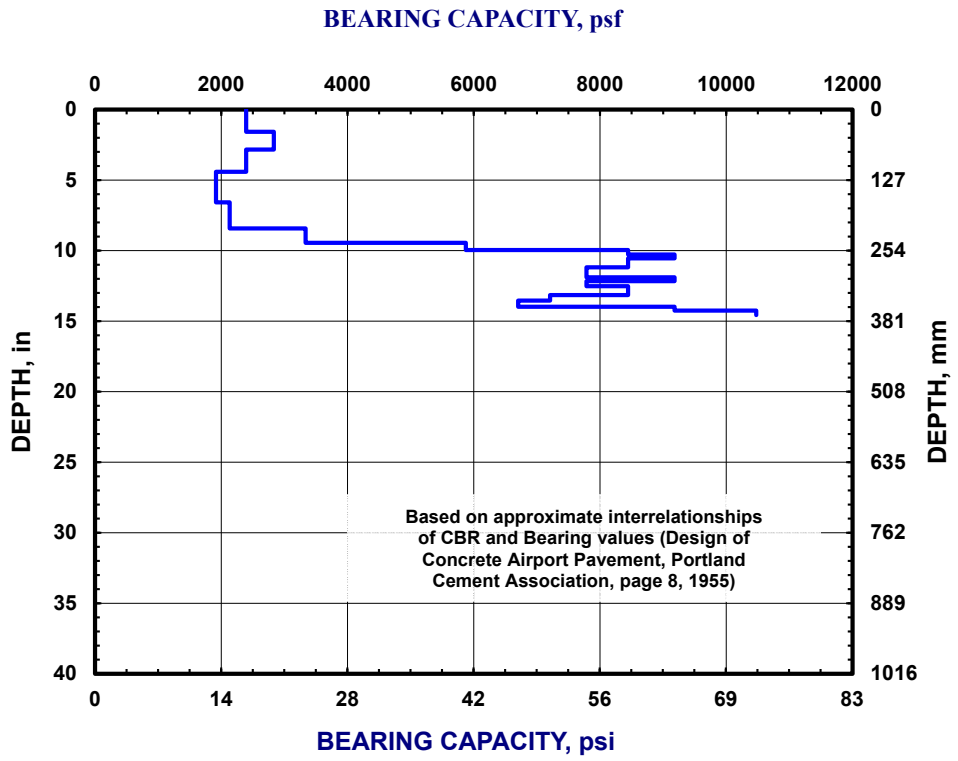
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	40	1
2	72	1
2	112	1
2	167	1
2	214	1
2	240	1
2	253	1
2	261	1
2	268	1
2	276	1
2	284	1
2	293	1
2	302	1
2	309	1
2	318	1
2	326	1
2	334	1
2	344	1
2	355	1
2	362	1
2	365	1
2	368	1
2	370	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 43+74, 6' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / SPROUSE	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1248.0 (ft) EOB: 7.5 ft.
START: 3/31/22 END: 3/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.617930, -80.942586

EXPLORATION ID B-008-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1248.0	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (15") & BASE (3")	1246.5	1																
VERY STIFF, GRAYISH BROWN AND BLACK, **SILT AND CLAY**, SOME SAND, SOME STONE FRAGMENTS, DAMP	1245.0	2	4 5 9	21	44	SS-1	3.50	23	12	12	34	19	29	18	11	16	A-6a (4)	
DENSE, BROWN, **STONE FRAGMENTS WITH SAND, SILT, AND CLAY**, DAMP	1243.5	3	10 17 14	47	67	SS-2	4.00	44	10	11	24	11	29	18	11	10	A-2-6 (0)	
VERY STIFF, BROWN AND GRAY, **SILT AND CLAY**, SOME SAND, SOME STONE FRAGEMENTS, DAMP	1242.0	4	12 8 9	26	89	SS-3	4.00	21	12	12	28	27	32	17	15	14	A-6a (6)	
VERY STIFF, MOTTLED GRAY WITH BROWN, **CLAY**, SOME SILT, TRACE SAND, MOIST	1240.5	5	3 6 9	23	44	SS-4	3.00	0	0	2	26	72	47	18	29	18	A-7-6 (17)	
		6																
		7 EOB																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 6 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 47+79, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1245.8 (ft) EOB: 7.5 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.617426, -80.941282

EXPLORATION ID B-009-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1245.8	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (15") & BASE (3")	1244.3	1																
STIFF, GRAYISH BROWN, **SILT AND CLAY**, SOME SAND, TRACE STONE FRAGMENTS, DAMP		2	6 4 4	12	33	SS-1	1.50	8	11	9	47	25	31	19	12	17	A-6a (8)	
@3.0'; VERY STIFF, MOTTLED BROWN AND GRAY		3 4	6 10 15	38	44	SS-2	4.00	8	10	18	38	26	29	17	12	13	A-6a (7)	
	1239.8	5	10 11 11	33	89	SS-3	3.50	-	-	-	-	-	-	-	-	14	A-6a (V)	
VERY STIFF, MOTTLED BROWN AND GRAY, **SILTY CLAY**, LITTLE SAND, TRACE STONE FRAGEMENTS, MOIST	1238.3	6 7 EOB	6 7 9	24	44	SS-4	3.50	10	5	10	29	46	36	17	19	17	A-6b (12)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 8 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-010-0-22	Date:	4/6/2022
Surface Elevation:	1251.4	Surface Materials*:	Asphalt 20.5"
Lat / Long:	40.617244, -80.939888	Test Starting Depth (ft):	1.7

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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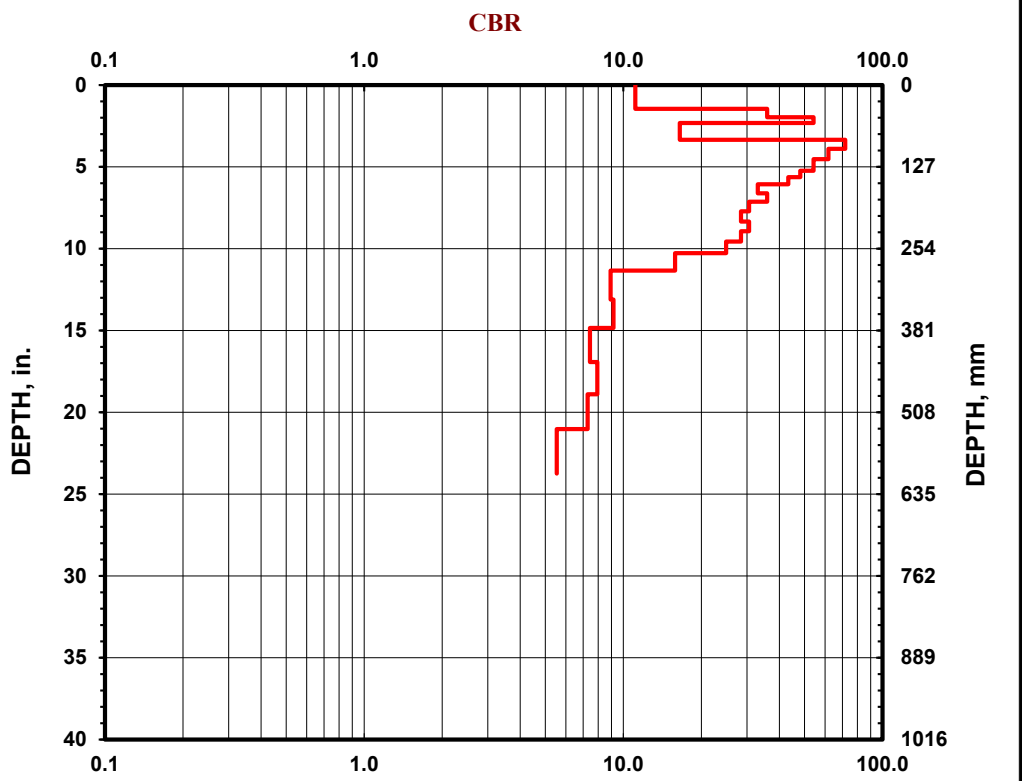
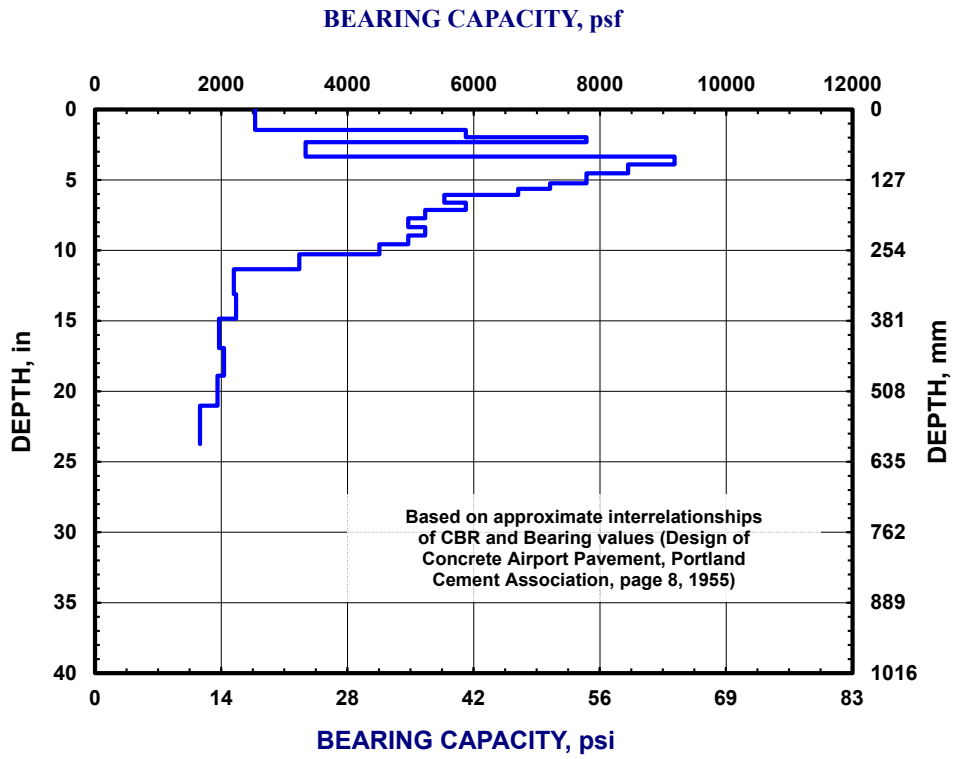
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	37	1
2	50	1
2	59	1
2	85	1
2	92	1
2	99	1
2	107	1
2	115	1
2	124	1
2	133	1
2	143	1
2	154	1
2	168	1
2	181	1
2	196	1
2	212	1
2	227	1
2	243	1
2	261	1
2	288	1
2	333	1
2	377	1
2	430	1
2	480	1
2	534	1
2	603	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-011-0-22	Date:	4/6/2022
Surface Elevation:	1257.1	Surface Materials*:	Asphalt 17"
Lat / Long:	40.617237, -80.938444	Test Starting Depth (ft):	1.4

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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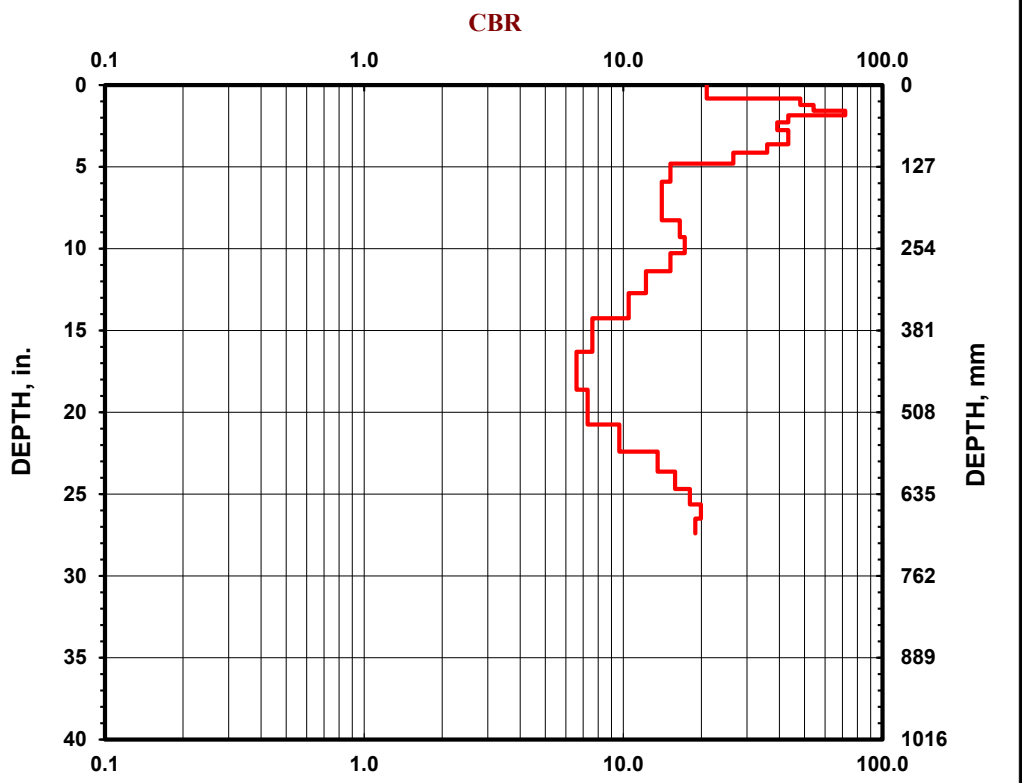
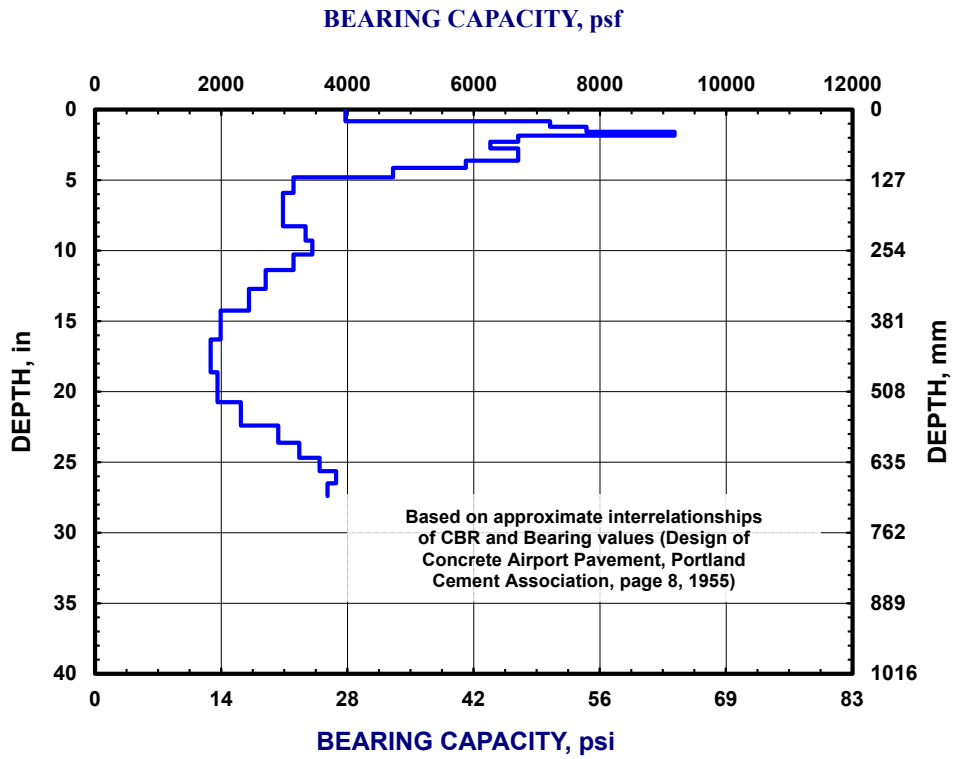
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	21	1
2	31	1
2	40	1
2	47	1
2	58	1
2	70	1
2	81	1
2	92	1
2	105	1
2	122	1
2	150	1
2	180	1
2	210	1
2	236	1
2	261	1
2	289	1
2	323	1
2	362	1
2	414	1
2	473	1
2	527	1
2	569	1
2	600	1
2	627	1
2	651	1
2	673	1
2	696	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 59+73, 7' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1259.4 (ft) EOB: 4.7 ft.
START: 3/31/22 END: 3/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.617290, -80.937008

EXPLORATION ID B-012-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1259.4	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (15") & BASE (3")	1257.9	1																
VERY STIFF, BROWN, **SILT AND CLAY**, SOME SAND, TRACE STONE FRAGMENTS, DAMP	1256.4	2	9 6 12	27	44	SS-1	4.00	9	18	15	33	25	33	20	13	15	A-6a (6)	
SANDSTONE, BROWN, MODERATELY WEATHERED, WEAK TO SLIGHTLY STRONG, VERY FINE GRAINED.	1254.7	TR 3	60/3"	-	100	SS-2	-	-	-	-	-	-	-	-	-	4	Rock (V)	
		4 EOB	60/2"	-	100	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 63+74, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1258.2 (ft) EOB: 7.5 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.617206, -80.935567

EXPLORATION ID B-013-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1258.2	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1256.7	1																
VERY STIFF, BROWN AND GRAY, **SILTY CLAY**, LITTLE STONE FRAGMENTS, LITTLE SAND, DAMP		2	13 6 5	17	39	SS-1	3.00	19	4	7	35	35	37	21	16	19	A-6b (9)	
@3.0'; NOT ENOUGH MATERIAL TO TEST	1253.7	3 4	3 3 3	9	22	SS-2	2.00	-	-	-	-	-	-	-	-	17	A-6b (V)	
MEDIUM STIFF, GRAYISH BROWN, **SILT**, SOME CLAY, TRACE SAND, WET	1252.2	5 6	2 2 2	6	56	SS-3	1.00	0	0	2	66	32	28	19	9	27	A-4b (8)	
MEDIUM STIFF, MOTTLED BROWN AND GRAY, **SILTY CLAY**, TRACE SAND, MOIST	1250.7	7 EOB	1 2 3	8	67	SS-4	1.00	0	1	4	57	38	38	19	19	25	A-6b (12)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-014-0-22	Date:	4/6/2022
Surface Elevation:	1264.2	Surface Materials*:	Asphalt 19.75"
Lat / Long:	40.617254, -80.934123	Test Starting Depth (ft):	1.6

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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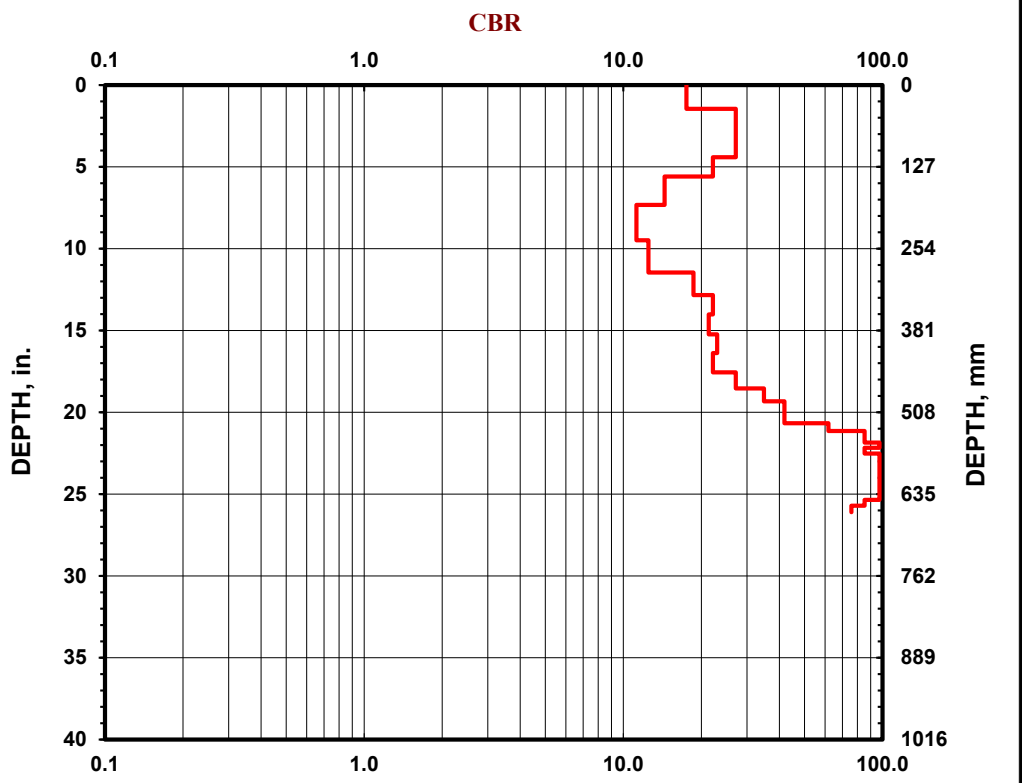
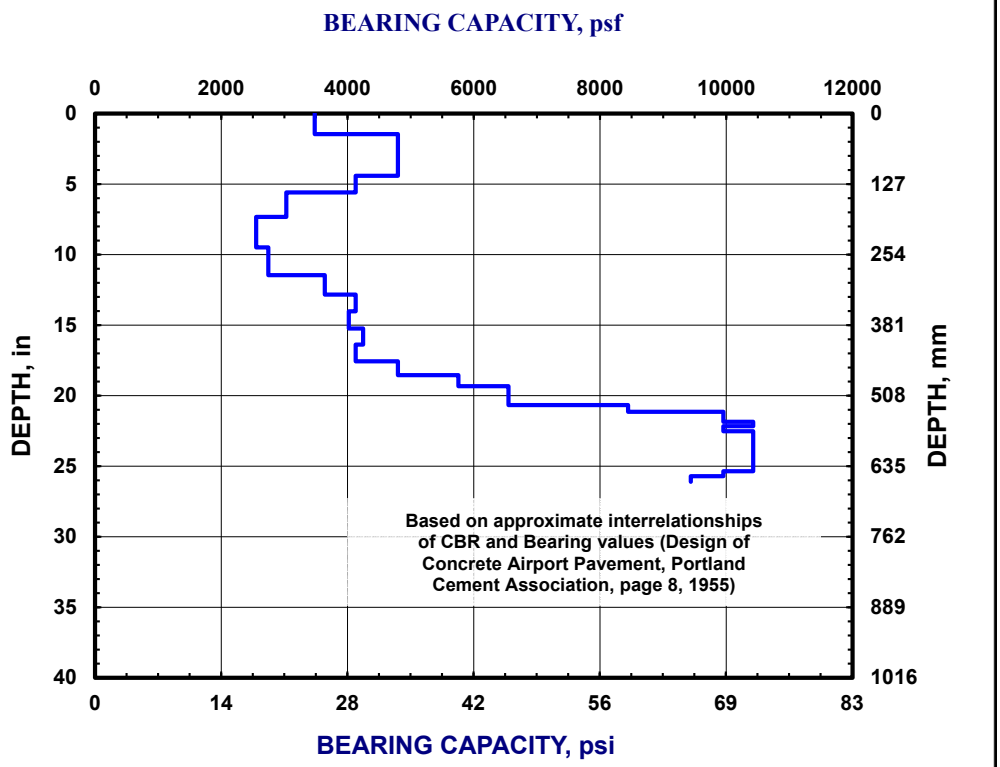
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	37	1
3	62	1
3	87	1
3	112	1
3	142	1
3	186	1
3	241	1
3	291	1
3	326	1
3	356	1
3	387	1
3	416	1
3	446	1
3	471	1
3	491	1
3	508	1
3	525	1
3	537	1
3	546	1
3	555	1
3	563	1
3	572	1
3	580	1
3	588	1
3	596	1
3	604	1
3	612	1
3	620	1
3	628	1
3	636	1
3	644	1
3	653	1
3	663	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-015-0-22	Date:	4/6/2022
Surface Elevation:	1268.5	Surface Materials*:	Asphalt 19.75"
Lat / Long:	40.617363, -80.932698	Test Starting Depth (ft):	1.6

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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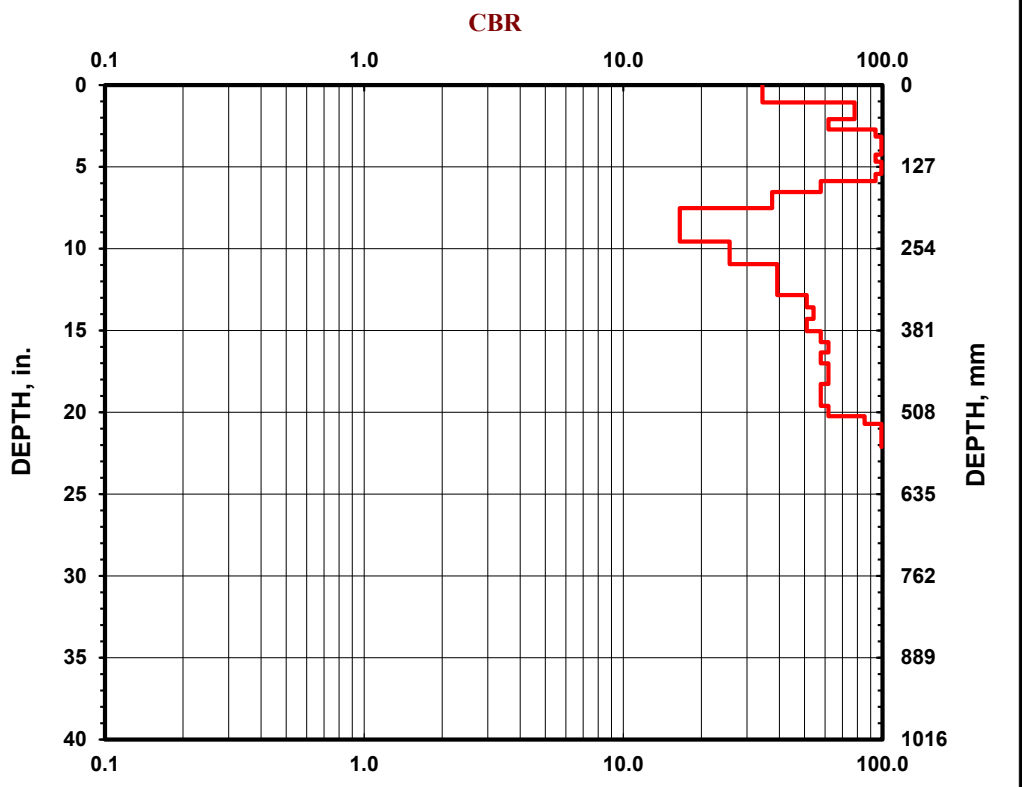
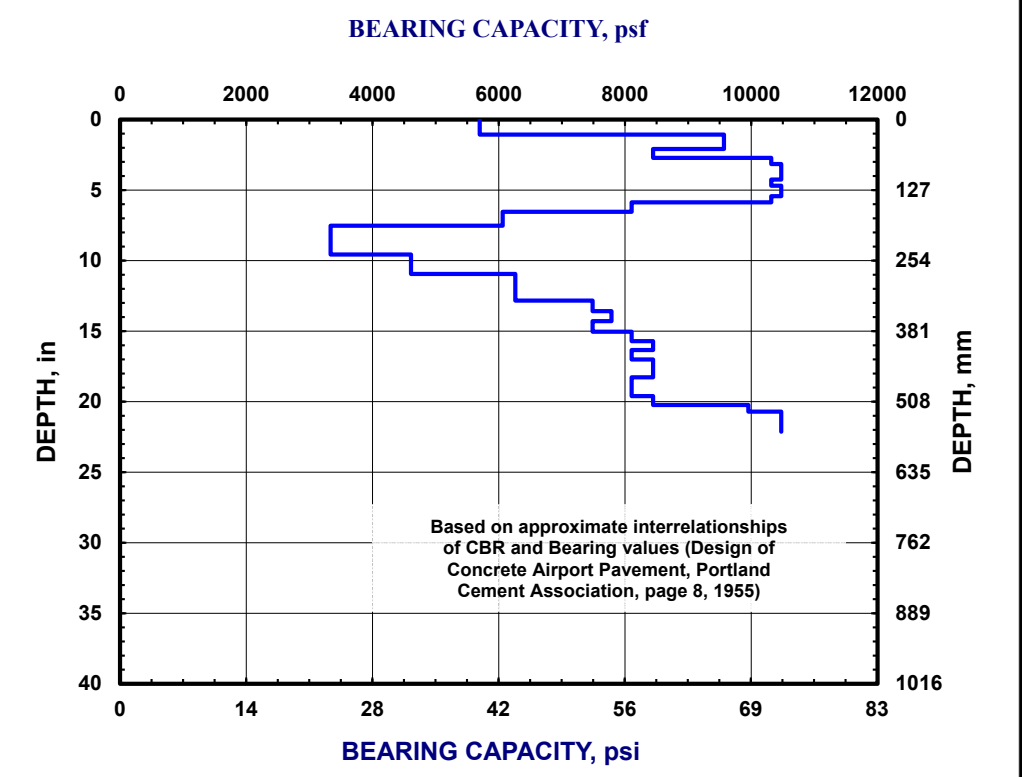
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
4	27	1
4	40	1
4	53	1
4	69	1
4	80	1
4	90	1
4	100	1
4	108	1
4	119	1
4	128	1
4	138	1
4	149	1
4	166	1
4	191	1
4	243	1
4	278	1
4	302	1
4	326	1
4	345	1
4	363	1
4	382	1
4	399	1
4	415	1
4	432	1
4	448	1
4	464	1
4	481	1
4	498	1
4	514	1
4	526	1
4	536	1
4	546	1
4	555	1
4	562	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 75+75, 7' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1268.9 (ft) EOB: 6.3 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.617703, -80.931324

EXPLORATION ID B-016-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1268.9	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1267.4	1																
STIFF, GRAYISH BROWN, **SILT AND CLAY**, LITTLE STONE FRAGMENTS, LITTLE SAND, MOIST	1265.9	2	6 3 4	11	33	SS-1	1.50	12	3	8	46	31	34	21	13	23	A-6a (9)	
STIFF, BROWN, **SILTY CLAY**, TRACE SAND, TRACE STONE FRAGMENTS, MOIST	1264.4	3	2 2 2	6	61	SS-2	1.50	4	3	5	46	42	37	19	18	24	A-6b (11)	
SANDSTONE, BROWN, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, VERY FINE GRAINED.	1262.6	4 TR 5	4 63	-	67	SS-3	-	-	-	-	-	-	-	-	-	9	Rock (V)	
		6 EOB	65/3"	-	67	SS-4	-	-	-	-	-	-	-	-	-	5	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: NOT RECORDED

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 79+73, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1268.5 (ft) EOB: 7.5 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.618083, -80.929978

EXPLORATION ID B-017-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1268.5	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1267.0	1																
VERY STIFF, BROWN AND GRAY, **SILT AND CLAY**, SOME STONE FRAGMENTS, LITTLE SAND, DAMP	1265.5	2	6 5 8	20	44	SS-1	3.00	24	5	10	35	26	30	19	11	14	A-6a (5)	
VERY STIFF, REDDISH BROWN AND BROWN, **SILTY CLAY**, SOME STONE FRAGMENTS, TRACE SAND, DAMP		3	6 5 7	18	28	SS-2	3.50	-	-	-	-	-	-	-	-	17	A-6b (V)	
	1262.5	4	6 13 11	36	78	SS-3	3.00	32	2	6	36	24	37	21	16	15	A-6b (7)	
SANDSTONE, BROWN, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, VERY FINE GRAINED.	1261.0	TR 5 6 7 EOB	13 14 26	60	67	SS-4	4.00	-	-	-	-	-	-	-	-	10	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 6 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-018-0-22	Date:	4/6/2022
Surface Elevation:	1265.0	Surface Materials*:	Asphalt 16.5"
Lat / Long:	40.618668, -80.928738	Test Starting Depth (ft):	1.4

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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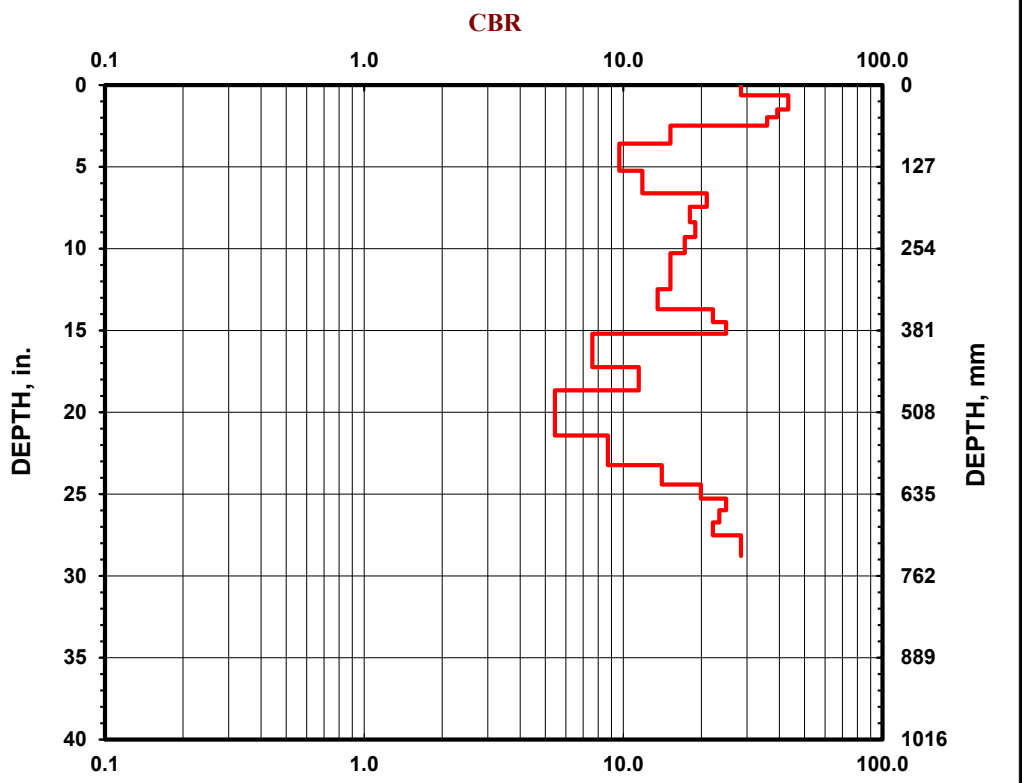
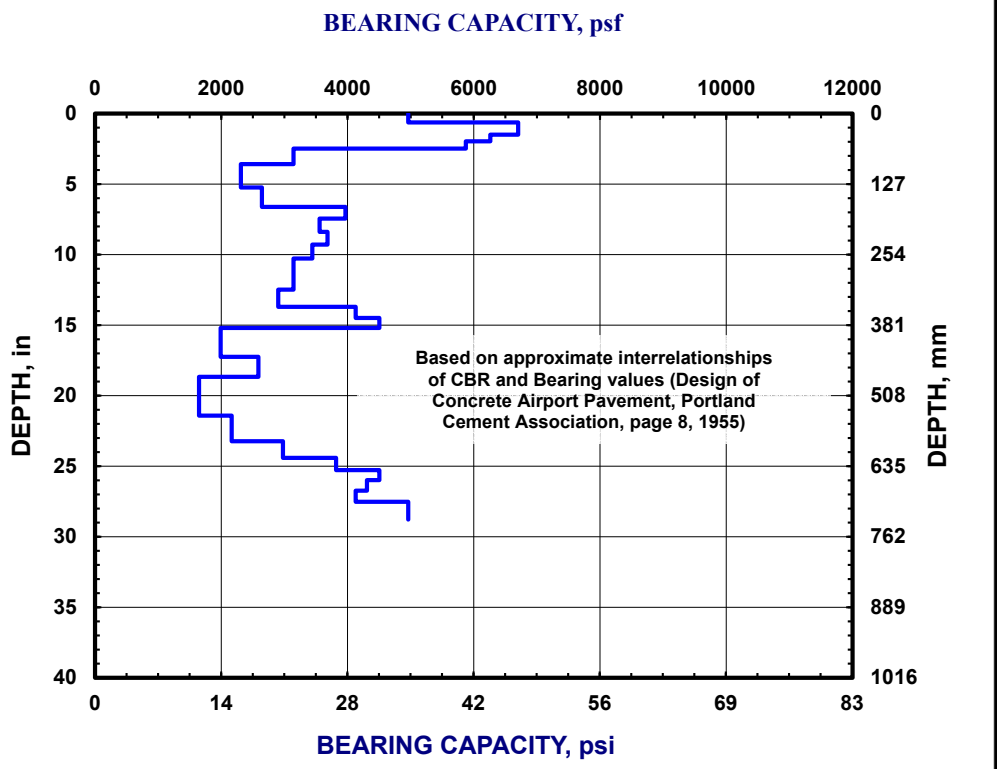
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	16	1
2	27	1
2	38	1
2	50	1
2	63	1
2	91	1
2	133	1
2	168	1
2	189	1
2	213	1
2	236	1
2	261	1
2	289	1
2	317	1
2	348	1
2	368	1
2	386	1
2	438	1
2	474	1
2	544	1
2	590	1
2	620	1
2	642	1
2	660	1
2	679	1
2	699	1
2	715	1
2	731	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-019-0-22	Date:	5/25/2022
Surface Elevation:	1262.1	Surface Materials*:	Asphalt 16.5"
Lat / Long:	40.619148, -80.927461	Test Starting Depth (ft):	1.4

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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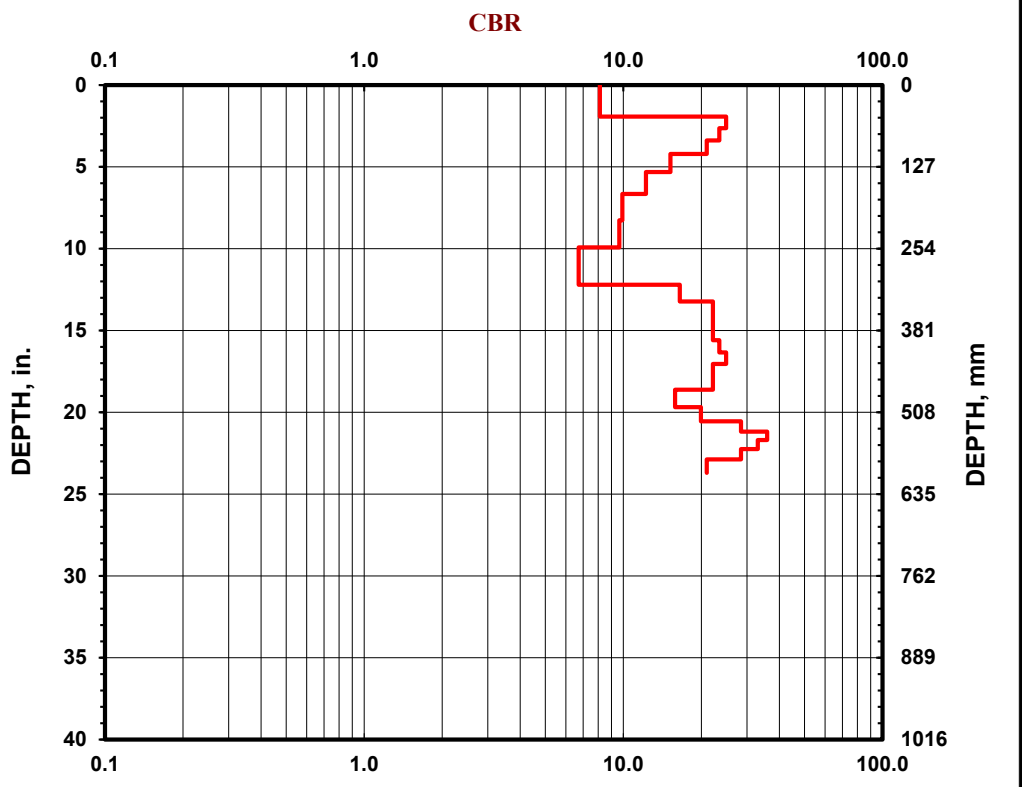
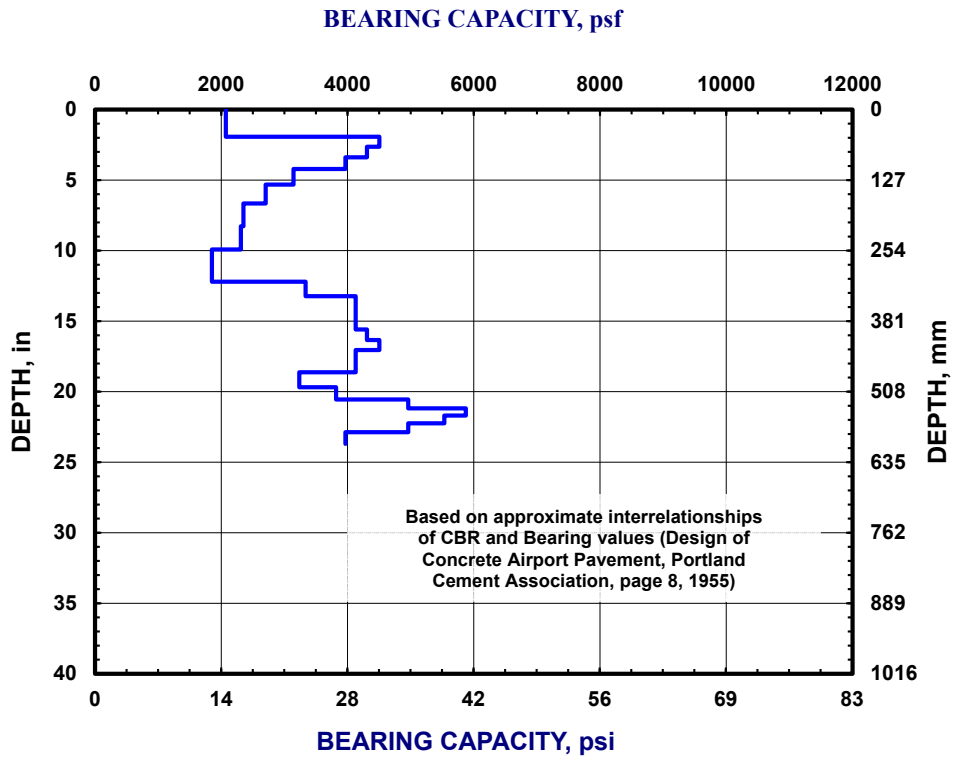
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	49	1
2	67	1
2	86	1
2	107	1
2	135	1
2	169	1
2	210	1
2	252	1
2	310	1
2	336	1
2	356	1
2	376	1
2	396	1
2	415	1
2	433	1
2	453	1
2	473	1
2	500	1
2	522	1
2	538	1
2	551	1
2	565	1
2	581	1
2	602	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 91+76, 6' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1258.7 (ft) EOB: 7.5 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.619607, -80.926138

EXPLORATION ID B-020-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1258.7	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (15") & BASE (3")	1257.2	1																
VERY STIFF, DARK GRAY, **SANDY SILT**, SOME CLAY, TRACE STONE FRAGMENTS, MOIST	1255.7	2	9 4 5	14	39	SS-1	3.00	8	2	16	46	28	27	18	9	19	A-4a (8)	
VERY STIFF, MOTTLED BROWN AND GRAY, **SILTY CLAY**, LITTLE STONE FRAGMENTS, LITTLE SAND, MOIST		3	3 6 8	21	44	SS-2	2.00	19	2	14	36	29	33	16	17	20	A-6b (9)	
		5	12 9 5	21	67	SS-3	3.00	-	-	-	-	-	-	-	-	17	A-6b (V)	
@6.0'; STIFF	1251.2	6 7 EOB	4 7 9	24	11	SS-4	1.50	-	-	-	-	-	-	-	-	17	A-6b (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 6 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 95+72, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1255.2 (ft) EOB: 7.0 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.619898, -80.924764

EXPLORATION ID B-021-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1255.2	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1253.7	1																
VERY STIFF, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, TRACE STONE FRAGMENTS, DAMP	1251.9	2	13 8 8	24	61	SS-1	3.00	1	1	24	44	30	27	17	10	14	A-4a (8)	
		3				SS-2A	3.50	2	1	40	37	20	26	18	8	13	A-4a (4)	
SANDSTONE, BROWN, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, VERY FINE GRAINED.		TR 4	6 14 22	54	44	SS-2B	-	-	-	-	-	-	-	-	-	8	Rock (V)	
		5	22 22 24	69	83	SS-3	-	-	-	-	-	-	-	-	-	12	Rock (V)	
	1248.2	6 EOB 7	33 58	-	67	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 8 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-022-0-22	Date:	5/25/2022
Surface Elevation:	1248.5	Surface Materials*:	Asphalt 14"
Lat / Long:	40.620161, -80.923364	Test Starting Depth (ft):	1.2

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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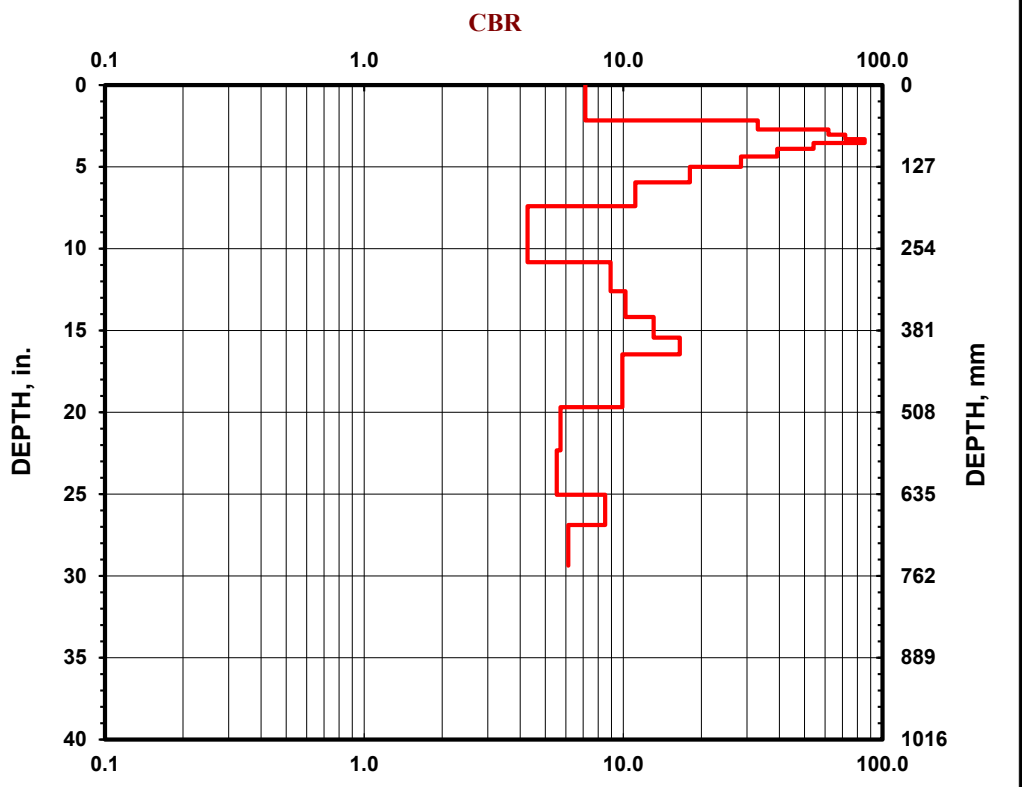
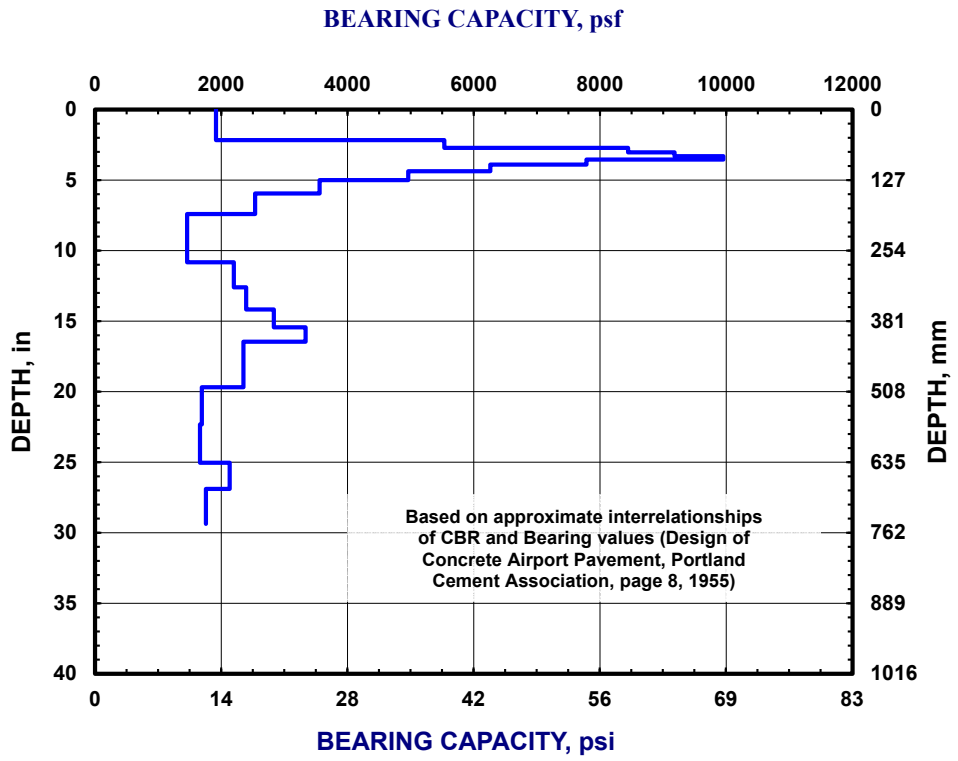
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	55	1
2	69	1
2	77	1
2	84	1
2	90	1
2	99	1
2	111	1
2	127	1
2	151	1
2	188	1
2	275	1
2	320	1
2	360	1
2	392	1
2	418	1
2	459	1
2	500	1
2	567	1
2	636	1
2	683	1
2	746	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-023-0-22	Date:	5/25/2022
Surface Elevation:	1256.7	Surface Materials*:	Asphalt 16"
Lat / Long:	40.620265, -80.921918	Test Starting Depth (ft):	1.3

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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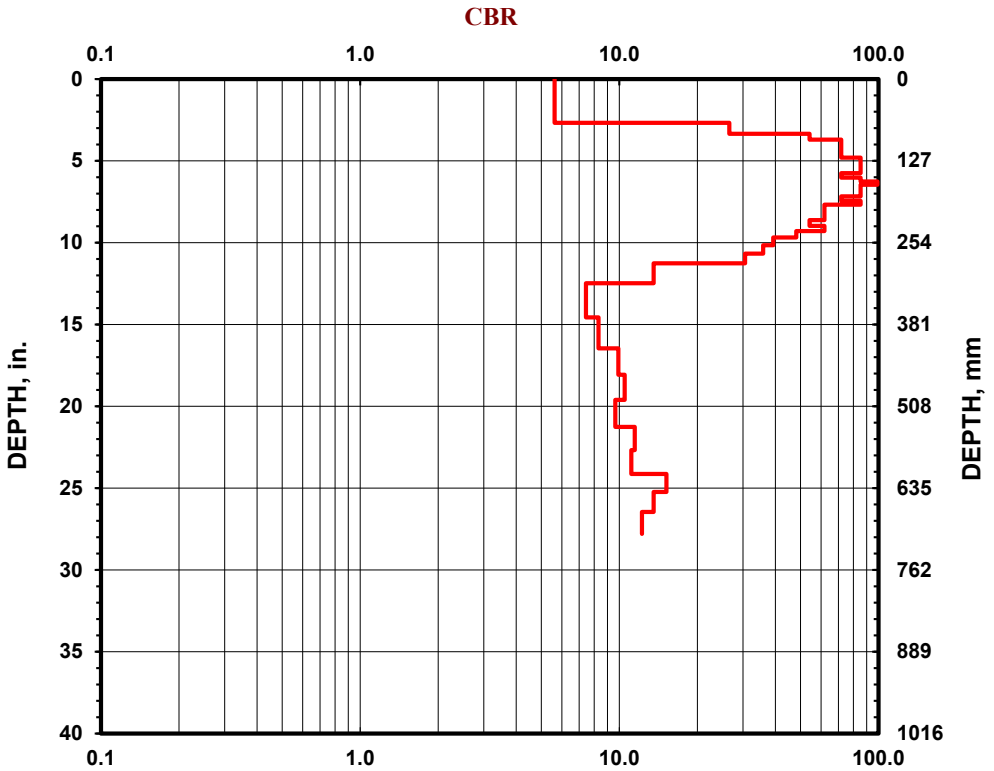
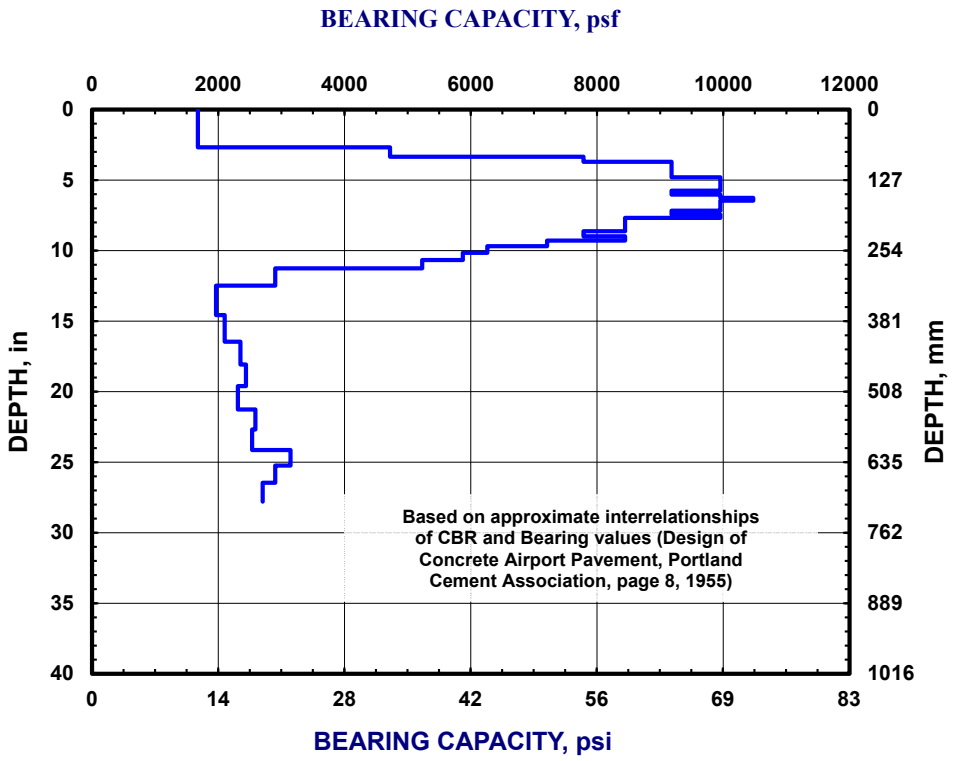
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	68	1
2	85	1
2	94	1
2	101	1
2	108	1
2	115	1
2	122	1
2	128	1
2	134	1
2	140	1
2	146	1
2	153	1
2	159	1
2	164	1
2	170	1
2	176	1
2	182	1
2	189	1
2	195	1
2	203	1
2	211	1
2	219	1
2	228	1
2	236	1
2	246	1
2	258	1
2	271	1
2	286	1
2	317	1
2	370	1
2	418	1
2	459	1
2	498	1
2	540	1
2	576	1
2	613	1
2	641	1
2	672	1
2	706	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 107+73, 7' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1271.0 (ft) EOB: 6.5 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.620437, -80.920502

EXPLORATION ID B-024-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1271.0	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1269.5	1																
HARD, GRAY, **SILT AND CLAY**, TACE SAND, TRACE STONE FRAGMENTS, DAMP	1268.0	2	8 7 13	30	44	SS-1	4.5+	2	1	2	44	51	35	21	14	14	A-6a (10)	
SANDSTONE, YELLOWISHH BROWN, SEVERELY TO HIGHLY WEATHERED, VERY WEAK TO WEAK, VERY FINE GRAINED.		TR 3	11 24 39	95	67	SS-2	-	-	-	-	-	-	-	-	-	9	Rock (V)	
@4.5'; HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG.		4 5	52	-	100	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)	
	1264.5	6 EOB	67	-	83	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 4 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 111+72, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1253.4 (ft) EOB: 7.5 ft.
START: 3/30/22 END: 3/30/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.620531, -80.919069

EXPLORATION ID B-025-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1253.4	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (14") & BASE (4")	1251.9	1																
VERY STIFF, BROWN, **SILTY CLAY**, SOME STONE FRAGMENTS, TRACE SAND, DAMP		2	7 5 7	18	33	SS-1	2.50	31	4	4	32	29	38	21	17	19	A-6b (8)	
@3.0'; STIFF, SOME SAND, LITTLE STONE FRAGMENTS		3 4	2 3 4	11	39	SS-2	2.00	19	3	26	14	38	38	21	17	20	A-6b (6)	
@4.5'; MEDIUM STIFF	1247.4	5 6	2 2 2	6	33	SS-3	1.00	-	-	-	-	-	-	-	-	15	A-6b (V)	
MEDIUM STIFF, BROWN, **SILT**, LITTLE SAND, TRACE STONE FRAGMENT, DAMP	1245.9	7 EOB	1 2 2	6	56	SS-4	1.00	8	8	8	58	18	24	19	5	16	A-4b (8)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 4 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-026-0-22	Date:	5/25/2022
Surface Elevation:	1232.4	Surface Materials*:	Asphalt 14"
Lat / Long:	40.6207, -80.917641	Test Starting Depth (ft):	1.2

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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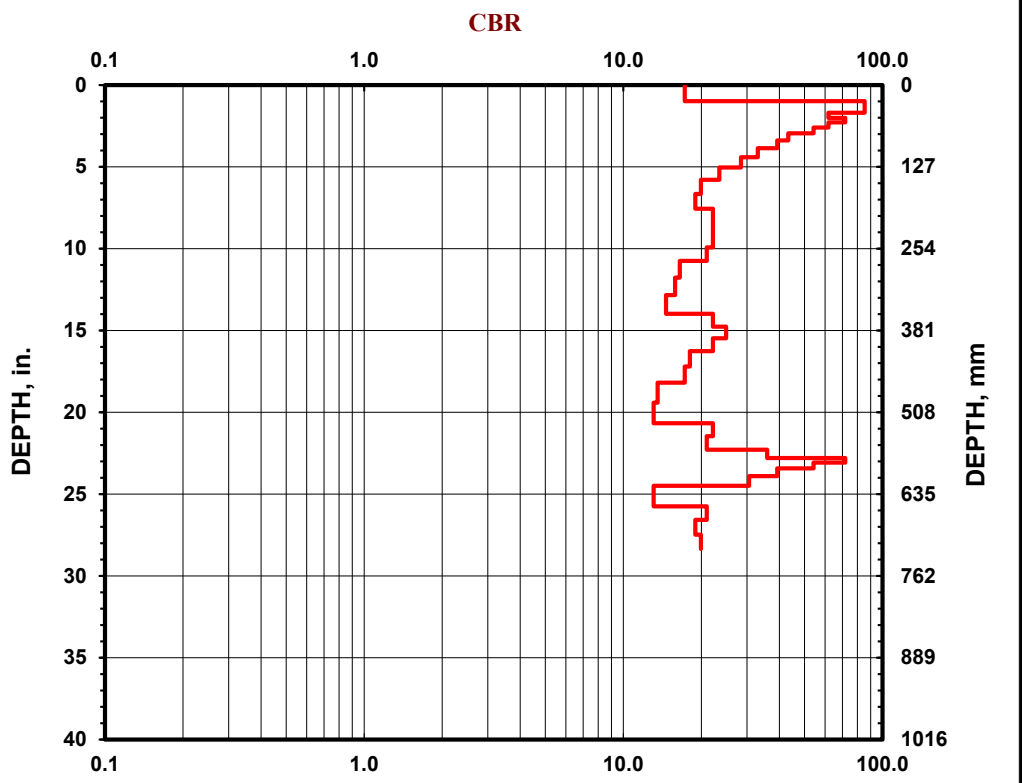
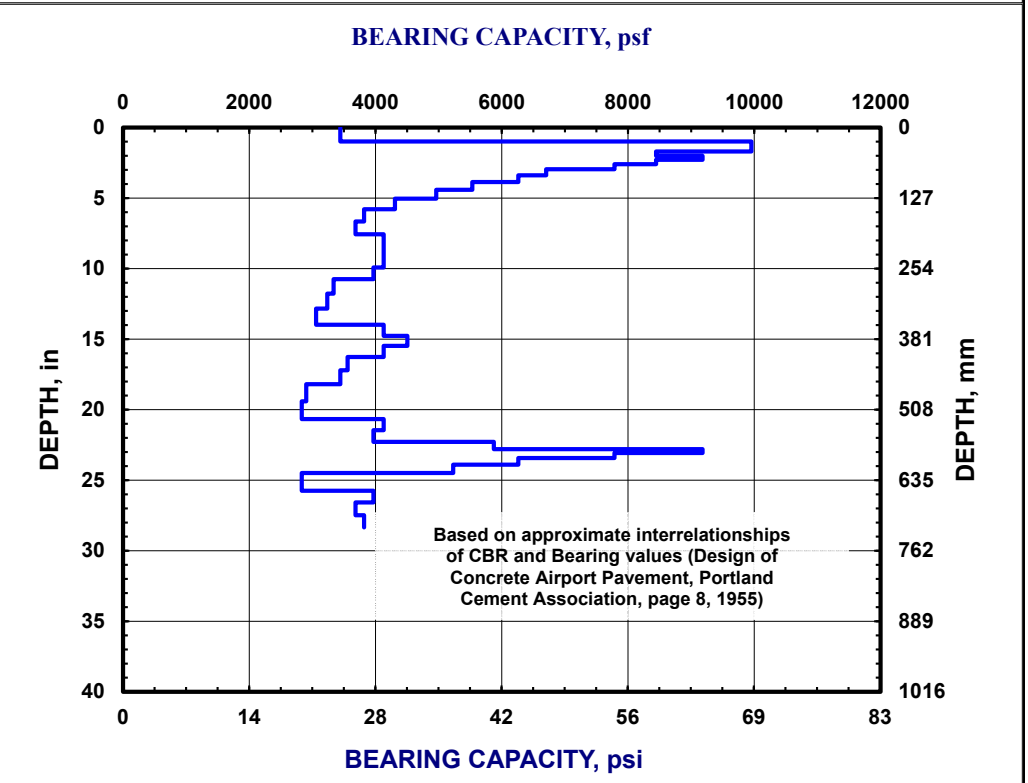
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	25	1
2	31	1
2	37	1
2	43	1
2	51	1
2	58	1
2	66	1
2	75	1
2	86	1
2	98	1
2	112	1
2	128	1
2	147	1
2	169	1
2	192	1
2	212	1
2	232	1
2	252	1
2	273	1
2	299	1
2	326	1
2	355	1
2	375	1
2	393	1
2	413	1
2	437	1
2	462	1
2	493	1
2	525	1
2	545	1
2	566	1
2	579	1
2	586	1
2	595	1
2	607	1
2	622	1
2	654	1
2	675	1
2	698	1
2	720	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-027-0-22	Date:	5/25/2022
Surface Elevation:	1240.6	Surface Materials*:	Asphalt 14"
Lat / Long:	40.620791, -80.916208	Test Starting Depth (ft):	1.2

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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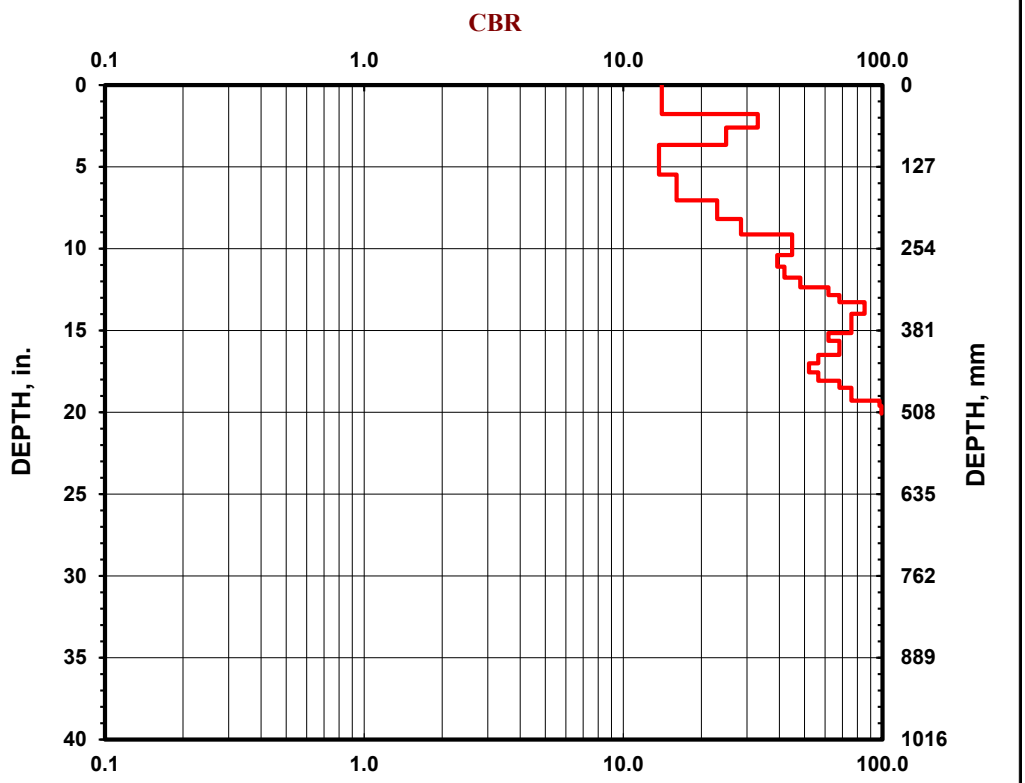
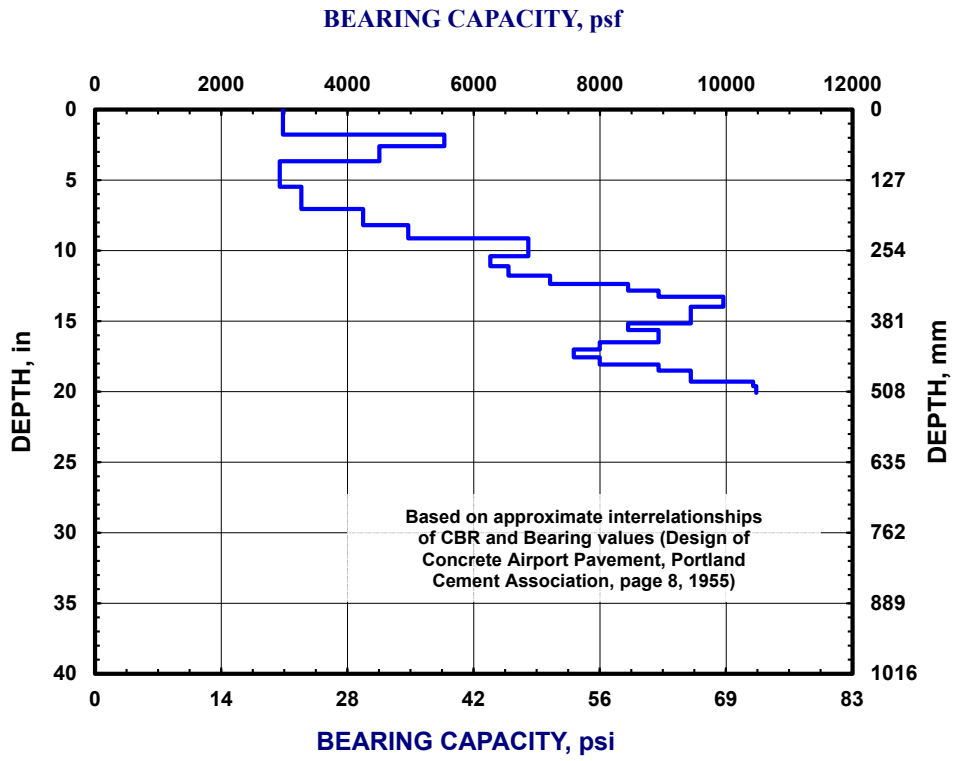
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	45	1
3	66	1
3	93	1
3	139	1
3	179	1
3	208	1
3	232	1
3	248	1
3	264	1
3	282	1
3	299	1
3	314	1
3	326	1
3	337	1
3	346	1
3	355	1
3	365	1
3	375	1
3	385	1
3	397	1
3	408	1
3	419	1
3	432	1
3	446	1
3	459	1
3	470	1
3	480	1
3	490	1
3	498	1
3	504	1
3	510	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 123+72, 7' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1237.4 (ft) EOB: 7.5 ft.
START: 4/6/22 END: 4/6/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.620964, -80.914785

EXPLORATION ID B-028-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1237.4	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (18")	1235.9																	
HARD, BROWN AND DARK BROWN, **SANDY SILT**, SOME STONE FRAGMENTS, LITTLE CLAY, DAMP		1	10 10 8	27	83	SS-1	4.5+	28	14	20	28	10	26	21	5	10	A-4a (1)	
@3.0'; VERY STIFF, LITTLE STONE FRAGMENTS		2 3 4	4 2 3	8	72	SS-2	2.50	11	7	19	45	18	26	21	5	14	A-4a (6)	
@4.5'; MEDIUM STIFF		5	2 1 2	5	50	SS-3	1.00	-	-	-	-	-	-	-	-	19	A-4a (V)	
@6.0'; VERY STIFF	1230.7	6	3 13 30	65	89	SS-4A	3.00	-	-	-	-	-	-	-	-	12	A-4a (V)	
SANDSTONE, BROWN, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, VERY FINE GRAINED.	1229.9	TR 7 EOB				SS-4B	-	-	-	-	-	-	-	-	-	7	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 127+72, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1239.7 (ft) EOB: 7.5 ft.
START: 3/31/22 END: 3/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.621054, -80.913347

EXPLORATION ID B-029-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1239.7	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1238.2	1																
STIFF, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, LITTLE STONE FRAGMENTS, MOIST	1236.7	2	3 6 3	14	72	SS-1	2.00	11	3	10	49	27	28	19	9	20	A-4a (8)	
STIFF, YELLOWISH BROWN, **CLAY**, SOME SILT, TRACE SAND, TRACE STONE FRAGMENTS, MOIST		3	3 4 6	15	33	SS-2	2.00	1	1	4	33	61	47	22	25	22	A-7-6 (15)	
@4.5'; VERY STIFF, DAMP	1233.7	4	4 5 8	20	89	SS-3	3.00	-	-	-	-	-	-	-	-	18	A-7-6 (V)	
VERY STIFF, YELLOWISH BROWN, **SILT**, LITTLE SAND, LITTLE STONE FRAGMENTS, LITTLE CLAY, DAMP	1232.2	5 6 7	5 7 9	24	56	SS-4	4.00	16	2	14	53	15	28	19	9	9	A-4b (7)	
		EOB																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 8 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-030-0-22	Date:	5/25/2022
Surface Elevation:	1245.3	Surface Materials*:	Asphalt 15"
Lat / Long:	40.621204, -80.91191	Test Starting Depth (ft):	1.3

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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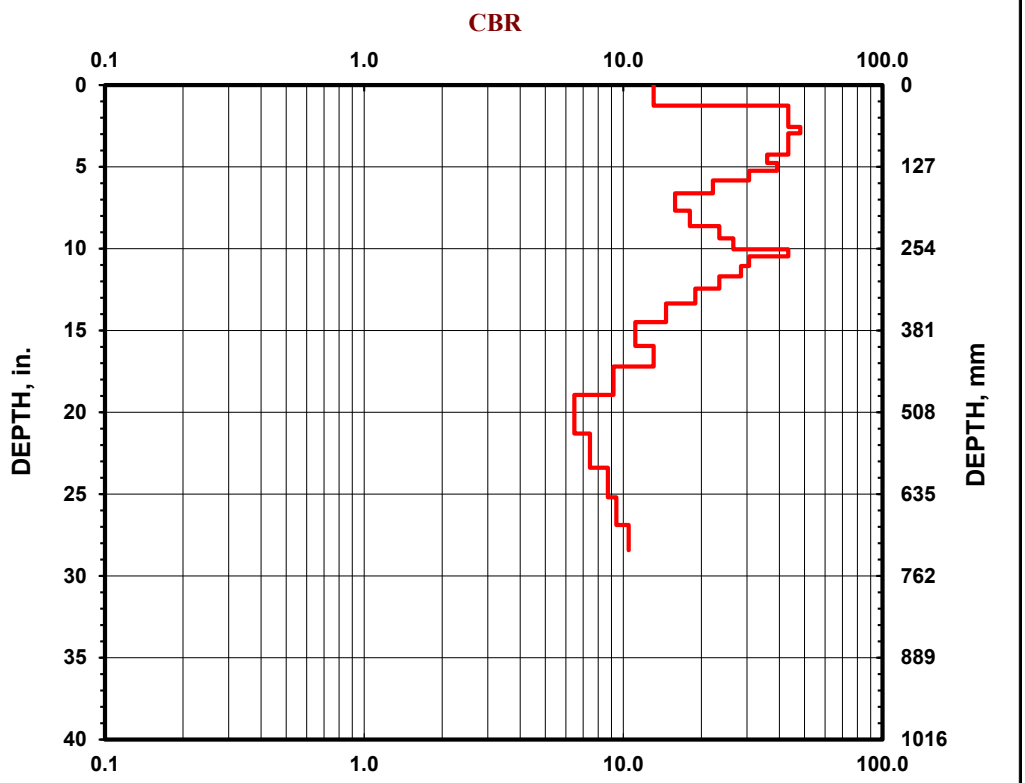
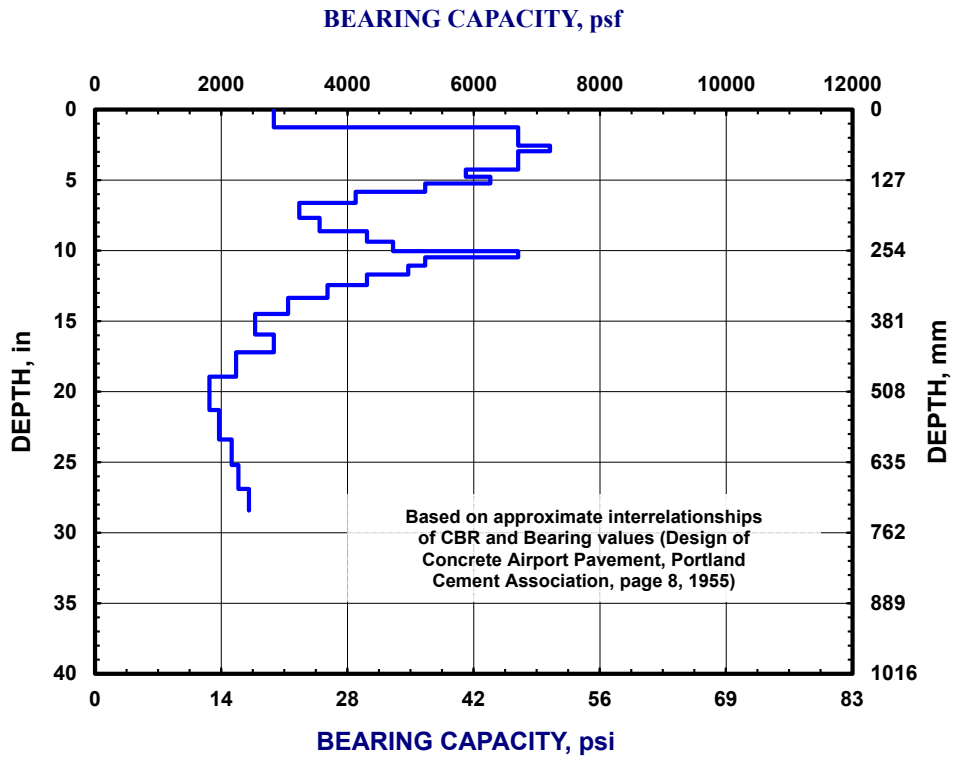
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	32	1
2	43	1
2	54	1
2	65	1
2	75	1
2	86	1
2	97	1
2	108	1
2	121	1
2	133	1
2	148	1
2	168	1
2	195	1
2	219	1
2	238	1
2	255	1
2	266	1
2	281	1
2	297	1
2	316	1
2	339	1
2	368	1
2	405	1
2	437	1
2	481	1
2	541	1
2	594	1
2	640	1
2	683	1
2	722	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-031-0-22	Date:	5/25/2022
Surface Elevation:	1247.1	Surface Materials*:	Asphalt 22"
Lat / Long:	40.621203, -80.910489	Test Starting Depth (ft):	1.8

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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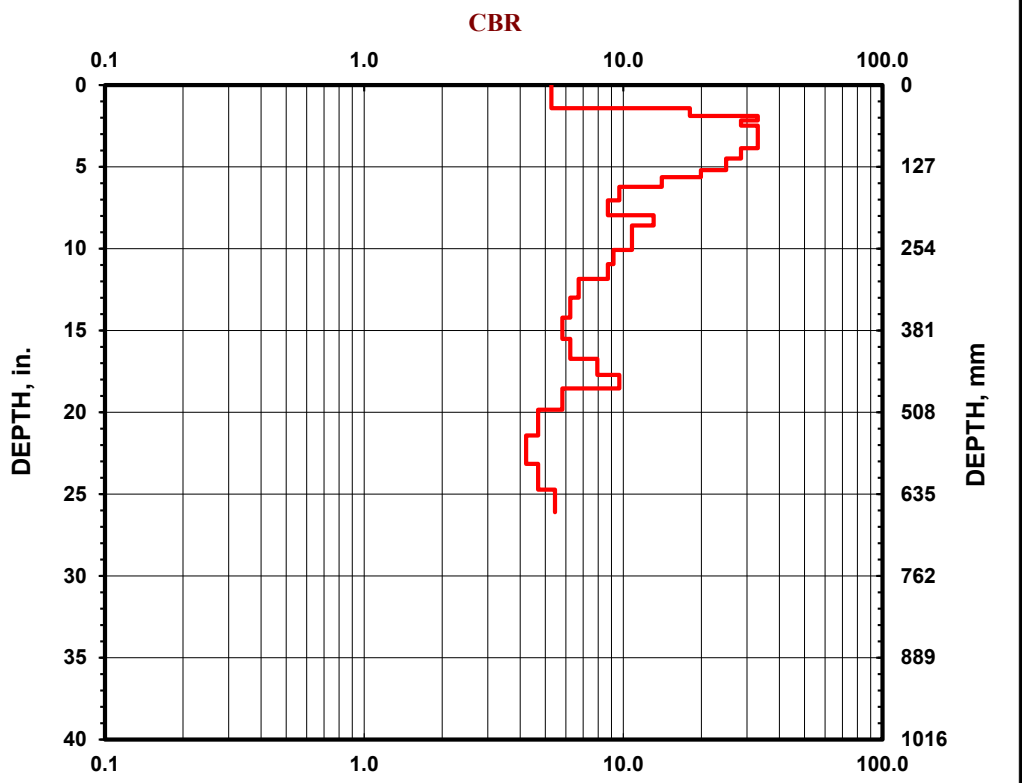
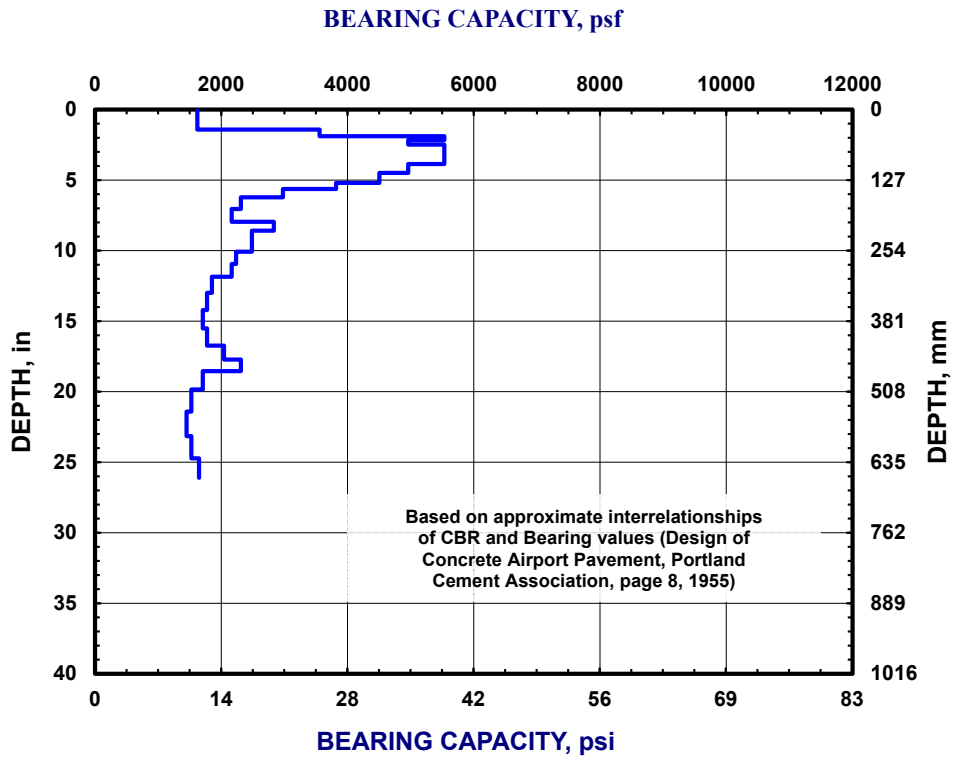
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
1	36	1
1	48	1
1	55	1
1	63	1
1	70	1
1	77	1
1	84	1
1	91	1
1	98	1
1	106	1
1	114	1
1	123	1
1	132	1
1	143	1
1	158	1
1	179	1
1	202	1
1	218	1
1	237	1
1	256	1
1	278	1
1	301	1
1	330	1
1	361	1
1	394	1
1	425	1
1	450	1
1	471	1
1	504	1
1	544	1
1	588	1
1	628	1
1	663	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 139+73, 8' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1230.8 (ft) EOB: 7.5 ft.
START: 4/6/22 END: 4/6/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.621208, -80.909033

EXPLORATION ID B-032-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1230.8	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	1229.3	1																
HARD, BOWN AND DARK BROWN, **SILT AND CLAY**, SOME STONE FRAGMENTS, LITTLE SAND, DAMP	1227.8	2	9 9 10	29	72	SS-1	4.5+	25	8	8	33	26	34	22	12	15	A-6a (6)	
VERY STIFF, BROWN, **SILTY CLAY**, SOME SAND, LITTLE STONE FRAGMENTS, DAMP		3	6 5 6	17	72	SS-2	3.50	13	8	17	27	35	36	20	16	19	A-6b (8)	
@4.5'; MOIST	1224.8	4 5	2 4 6	15	56	SS-3	3.00	-	-	-	-	-	-	-	-	28	A-6b (V)	
SHALE, GRAYISH BROWN, MODERATELY WEATHERED, VERY WEAK, LAMINATED.	1223.3	TR 6 7 EOB	12 15 17	48	89	SS-4	-	-	-	-	-	-	-	-	-	12	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 143+77, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1213.5 (ft) EOB: 7.5 ft.
START: 3/31/22 END: 3/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.621054, -80.907591

EXPLORATION ID B-033-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1213.5	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (14") & BASE (4")	1212.0	1																
MEDIUM DENSE, BROWN, **STONE FRAGMENTS WITH SAND AND SILT**, LITTLE CLAY, DAMP	1210.5	2	7 6 7	20	50	SS-1	-	20	4	41	22	13	NP	NP	NP	13	A-2-4 (0)	
VERY STIFF, BROWN, **SANDY SILT**, SOME STONE FRAGMENTS, LITTLE CLAY, DAMP	1209.0	3	4 4 2	9	28	SS-2	2.50	31	8	11	33	17	28	19	9	14	A-4a (3)	
STIFF, REDDISH BROWN, **CLAY**, SOME SILT, LITTLE STONE FRAGMENTS, TRACE SAND, MOIST	1207.5	4	4 4 2	9	33	SS-3	1.50	16	1	3	25	55	44	19	25	27	A-7-6 (15)	
VERY STIFF, BROWN AND DARK BROWN, **SANDY SILT**, "AND" STONE FRAGMENTS, LITTLE CLAY, DAMP	1206.0	5	2 6 9	23	22	SS-4	-	42	7	15	21	15	26	16	10	15	A-4a (0)	
		6																
		7																
		EOB																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 4 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-034-0-22	Date:	5/25/2022
Surface Elevation:	1232.7	Surface Materials*:	Asphalt 19"
Lat / Long:	40.620904, -80.906169	Test Starting Depth (ft):	1.6

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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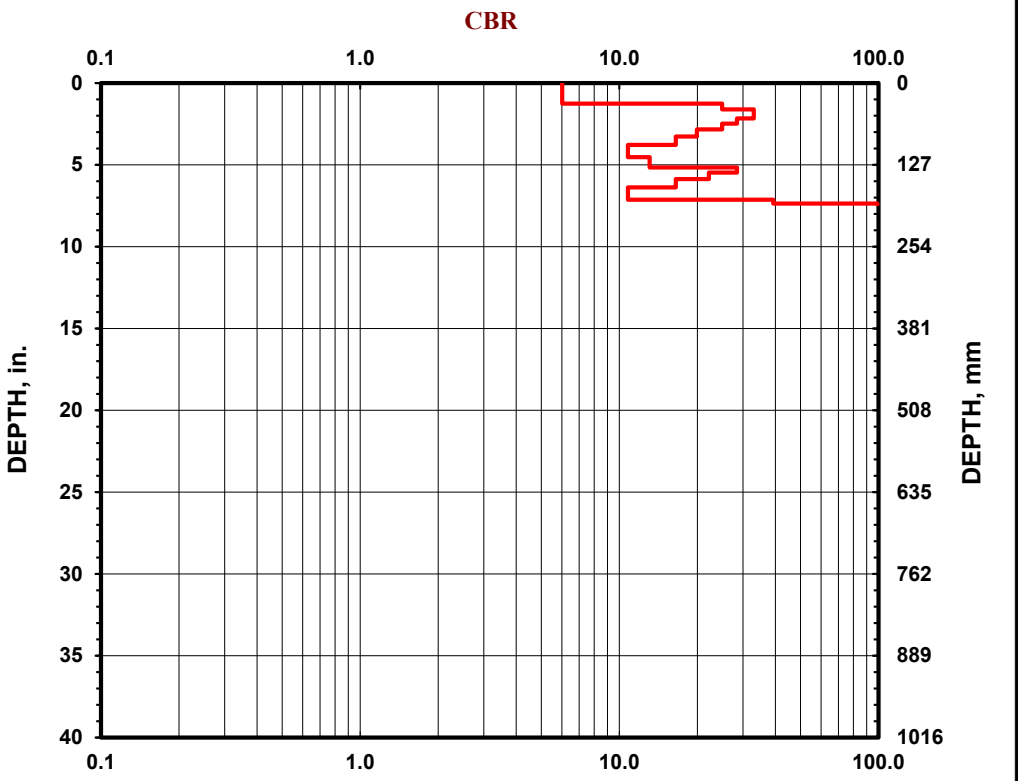
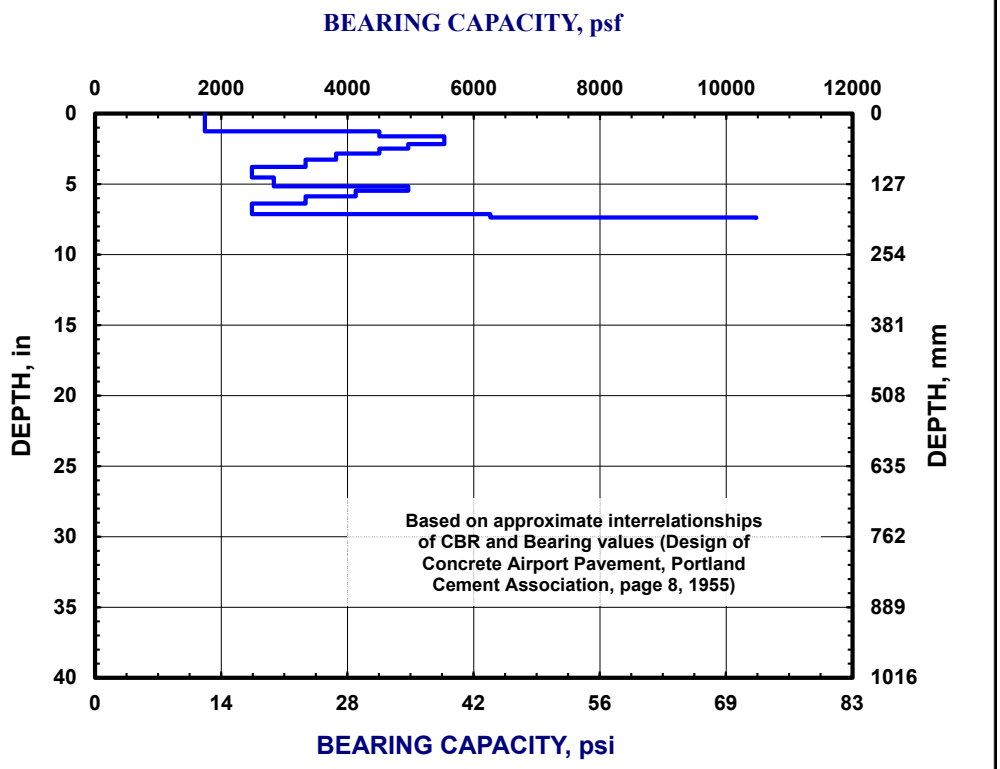
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
1	32	1
1	41	1
1	48	1
1	55	1
1	63	1
1	72	1
1	83	1
1	96	1
1	115	1
1	131	1
1	139	1
1	149	1
1	162	1
1	181	1
1	187	1
1	187	1
1	188	1
1	188	1
1	188	1
1	188	1
1	188	1
1	188	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-035-0-22	Date:	5/25/2022
Surface Elevation:	1244.3	Surface Materials*:	Asphalt 17"
Lat / Long:	40.620633, -80.904778	Test Starting Depth (ft):	1.4

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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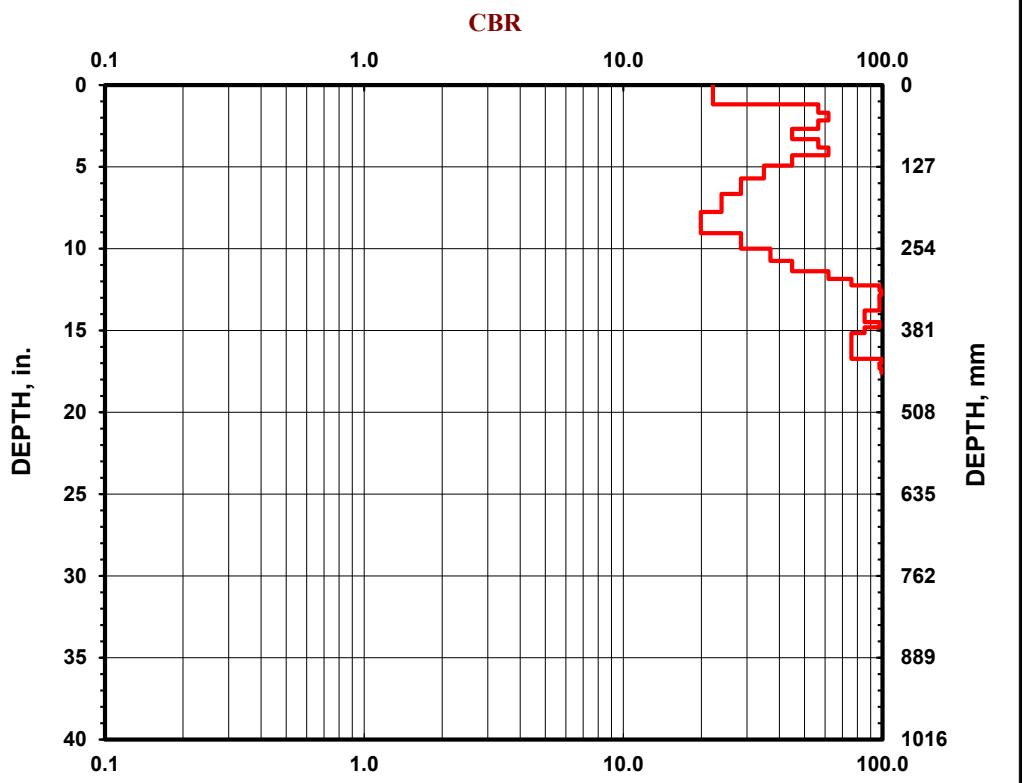
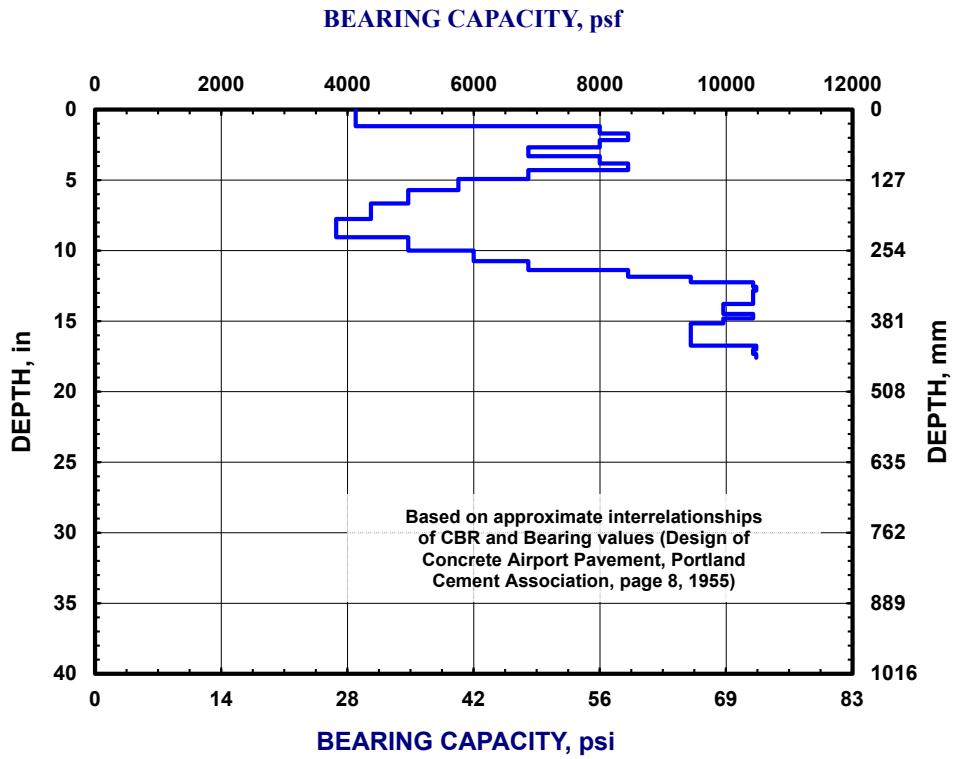
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	30	1
3	43	1
3	55	1
3	68	1
3	84	1
3	97	1
3	109	1
3	125	1
3	145	1
3	169	1
3	197	1
3	230	1
3	254	1
3	273	1
3	289	1
3	301	1
3	311	1
3	319	1
3	326	1
3	334	1
3	342	1
3	350	1
3	359	1
3	368	1
3	376	1
3	385	1
3	395	1
3	405	1
3	415	1
3	425	1
3	432	1
3	440	1
3	447	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 155+74, 6' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1245.1 (ft) EOB: 7.5 ft.
START: 3/31/22 END: 3/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.620402, -80.903368

EXPLORATION ID B-036-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1245.1	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1243.6	1																
VERY STIFF, BROWN, **SANDY SILT**, "AND" STONE FRAGMENT, LITTLE CLAY, DAMP	1242.1	2	5 9 13	33	67	SS-1	3.50	38	3	7	36	16	29	19	10	9	A-4a (3)	
VERY STIFF, BROWN, **SILT AND CLAY**, "AND" STONE FRAGMENTS, LITTLE SAND, DAMP	1240.6	3 4	10 7 5	18	72	SS-2	4.00	50	5	7	25	13	30	18	12	10	A-6a (1)	
MEDIUM STIFF, DARK BROWN, **SANDY SILT**, SOME CLAY, TRACE STONE FRAGMENTS, MOIST	1239.1	5 6	2 2 3	8	78	SS-3	1.00	8	9	24	36	23	27	18	9	18	A-4a (5)	
STIFF, BROWN AND DARK BROWN, **CLAY**, SOME SAND, SOME SILT, LITTLE STONE FRAGMENTS, MOIST	1237.6	7 EOB	2 3 5	12	39	SS-4	2.00	12	7	16	22	43	47	20	27	26	A-7-6 (14)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 6 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 159+70, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1239.6 (ft) EOB: 7.5 ft.
START: 3/31/22 END: 3/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.620339, -80.901939

EXPLORATION ID B-037-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1239.6	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17") & BASE (1")	1238.1	1																
VERY STIFF, BROWN, **SANDY SILT**, SOME STONE FRAGMENTS, LITTLE CLAY, DAMP	1236.6	2	7 11 9	30	78	SS-1	2.50	28	8	12	37	15	30	20	10	11	A-4a (3)	
SANDSTONE, BROWN, HIGHLY WEATHERED, VERY WEAK TO WEAK, VERY FINE GRAINED.		TR 3	7 11 19	45	61	SS-2	-	-	-	-	-	-	-	-	-	9	Rock (V)	
		4																
		5	30 35 36	107	78	SS-3	-	-	-	-	-	-	-	-	-	7	Rock (V)	
		6																
	1232.1	EOB 7	19 20 17	56	83	SS-4	-	-	-	-	-	-	-	-	-	10	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 6 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-038-0-22	Date:	5/25/2022
Surface Elevation:	1232.9	Surface Materials*:	Asphalt 18.5"
Lat / Long:	40.620579, -80.90053	Test Starting Depth (ft):	1.5

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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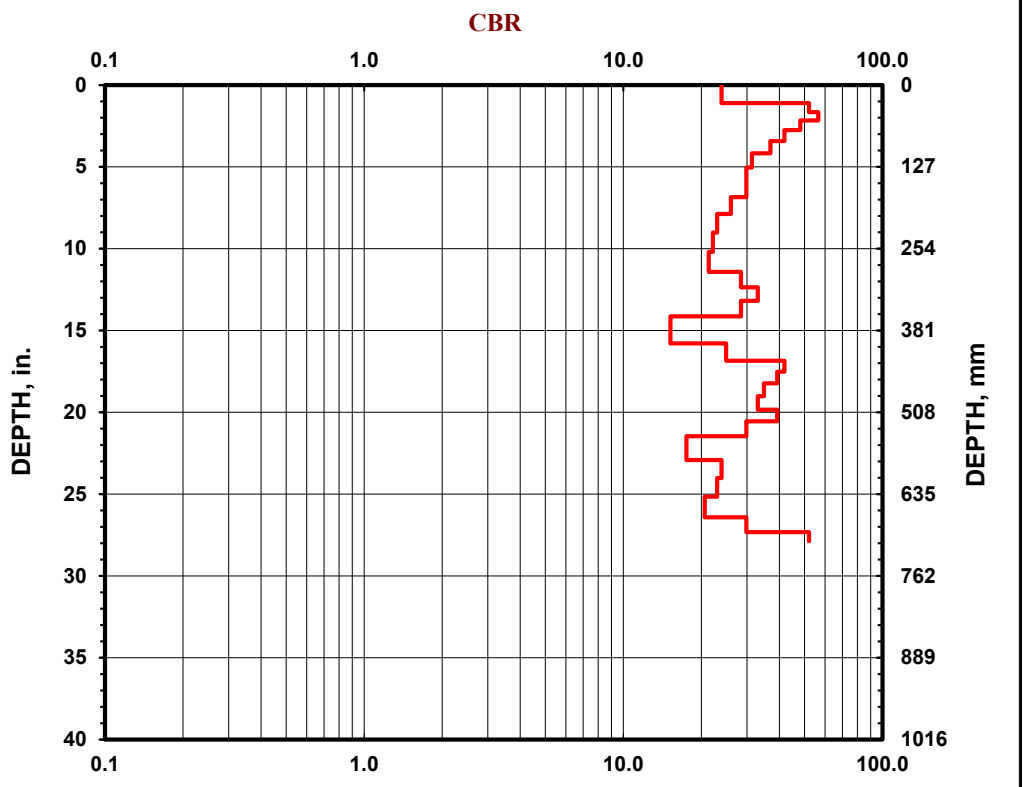
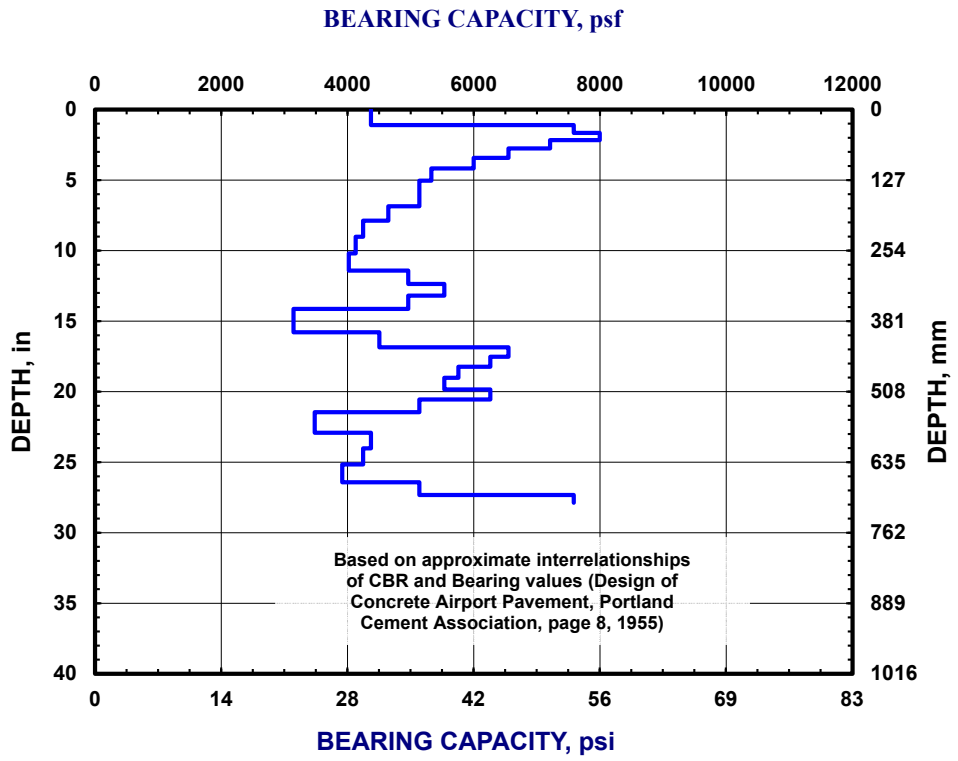
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	28	1
3	42	1
3	55	1
3	70	1
3	87	1
3	106	1
3	128	1
3	151	1
3	174	1
3	200	1
3	229	1
3	259	1
3	290	1
3	314	1
3	335	1
3	359	1
3	401	1
3	428	1
3	445	1
3	463	1
3	483	1
3	504	1
3	522	1
3	545	1
3	582	1
3	610	1
3	639	1
3	671	1
3	694	1
3	708	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-039-0-22	Date:	5/25/2022
Surface Elevation:	1227.8	Surface Materials*:	Asphalt 18.5"
Lat / Long:	40.620996, -80.899203	Test Starting Depth (ft):	1.5

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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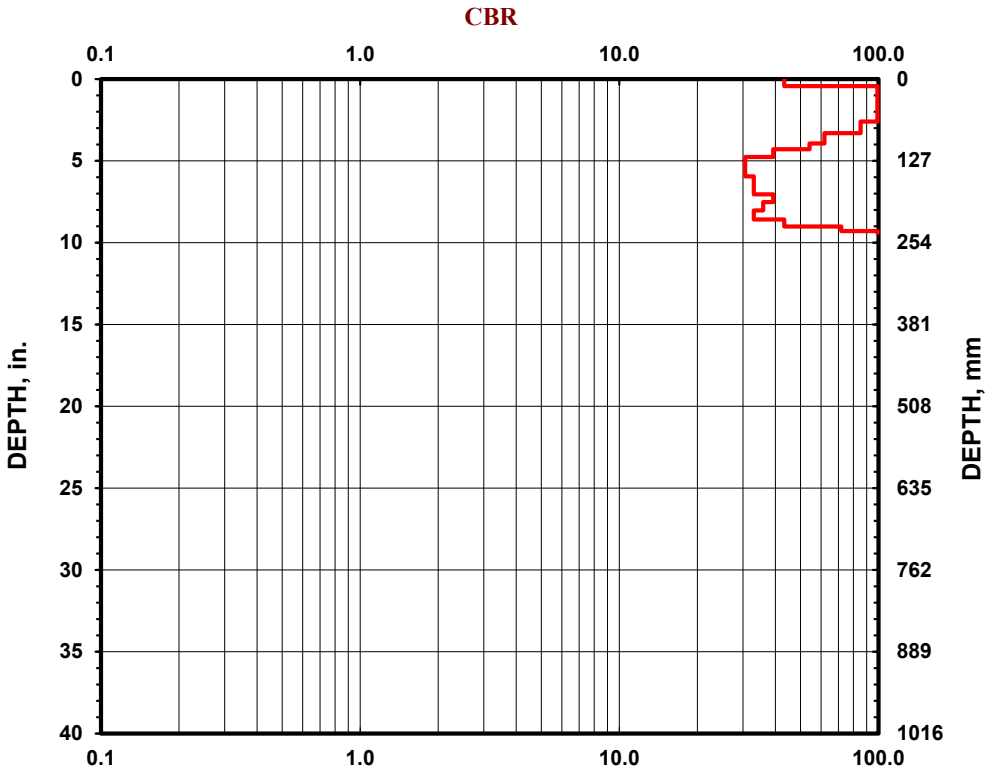
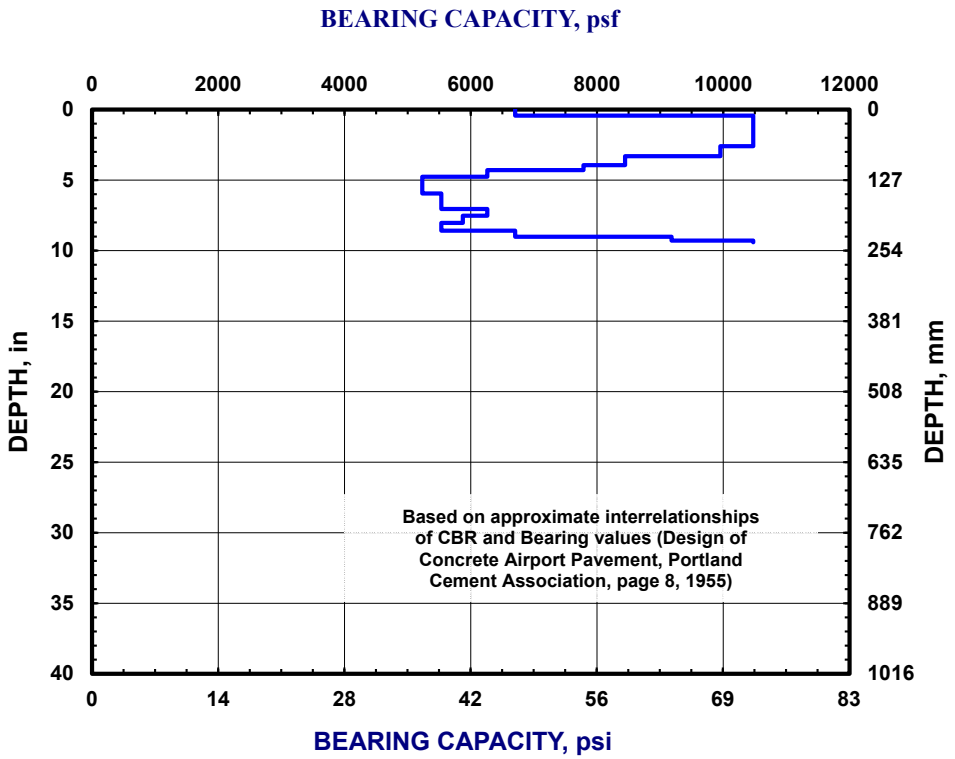
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	11	1
2	16	1
2	20	1
2	24	1
2	28	1
2	31	1
2	35	1
2	39	1
2	43	1
2	47	1
2	52	1
2	56	1
2	61	1
2	66	1
2	72	1
2	78	1
2	84	1
2	92	1
2	100	1
2	109	1
2	121	1
2	136	1
2	151	1
2	165	1
2	179	1
2	191	1
2	204	1
2	218	1
2	229	1
2	236	1
2	239	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 171+75, 7' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1221.8 (ft) EOB: 7.5 ft.
START: 4/5/22 END: 4/5/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.621567, -80.897959

EXPLORATION ID B-040-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1221.8	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (18")	1220.3	1																
HARD, BROWN, **SANDY SILT**, SOME STONE FRAGMENTS, LITTLE CLAY, DAMP		2	7 15 13	42	72	SS-1	4.5+	30	14	11	29	16	29	21	8	8	A-4a (2)	
@3.0'; STIFF, SOME CLAY, LITTLE STONE FRAGMENTS		3 4	6 3 2	8	78	SS-2	1.50	19	13	9	36	23	29	22	7	16	A-4a (5)	
@4.5'; TRACE STONE FRAGMENTS		5	1 4 4	12	67	SS-3	2.00	7	12	14	45	22	31	23	8	16	A-4a (6)	
@6.0'; HARD	1215.1	6 TR	6 11 14	38	89	SS-4A	4.5+	-	-	-	-	-	-	-	-	13	A-4a (V)	
SHALE, BROWN, HIGHLY WEATHERED, VERY WEAK, LAMINATED.	1214.3	7 EOB				SS-4B	-	-	-	-	-	-	-	-	-	10	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 175+69, 6' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1216.9 (ft) EOB: 7.5 ft.
START: 3/31/22 END: 3/31/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.622066, -80.896699

EXPLORATION ID B-041-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1216.9	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1215.4	1																
HARD, GRAY, **CLAY**, SOME SILT, TRACE GRAVEL, NOT ENOUGH MATERIAL TO TEST, DAMP	1215.2	TR 2	5 12 18	45	67	SS-1A	4.00	-	-	-	-	-	-	-	-	10	A-7-6 (V)	
						SS-1B	-	-	-	-	-	-	-	-	-	9	Rock (V)	
SANDSTONE, YELLOWISH BROWN, HIGHLY WEATHERED, WEAK, VERY FINE GRAINED.		3	13 15 16	47	83	SS-2	-	-	-	-	-	-	-	-	-	8	Rock (V)	
		5	7 9 10	29	78	SS-3	-	-	-	-	-	-	-	-	-	8	Rock (V)	
	1209.4	6 7 EOB	15 16 21	56	78	SS-4	-	-	-	-	-	-	-	-	-	6	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 179+72, 0' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1211.1 (ft) EOB: 7.5 ft.
START: 4/7/22 END: 4/7/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.622622, -80.895444

EXPLORATION ID B-042-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1211.1	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	1209.6	1																
VERY STIFF, BROWN, **SANDY SILT**, LITTLE STONE FRAGMENTS, LITTLE CLAY, DAMP		2	4 7 5	18	44	SS-1	2.50	28	11	9	36	16	28	22	6	12	A-4a (3)	
		3	3 6 5	17	50	SS-2	2.50	28	14	10	33	15	29	22	7	13	A-4a (3)	
@4.5'; STIFF		4	4 4 3	11	72	SS-3	2.00	-	-	-	-	-	-	-	-	11	A-4a (V)	
@6.0'; VERY STIFF	1203.6	5	3 4 10	21	78	SS-4	2.50	-	-	-	-	-	-	-	-	14	A-4a (V)	
		6																
		7 EOB																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM DISTRICT SURVEY TIN.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 6 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

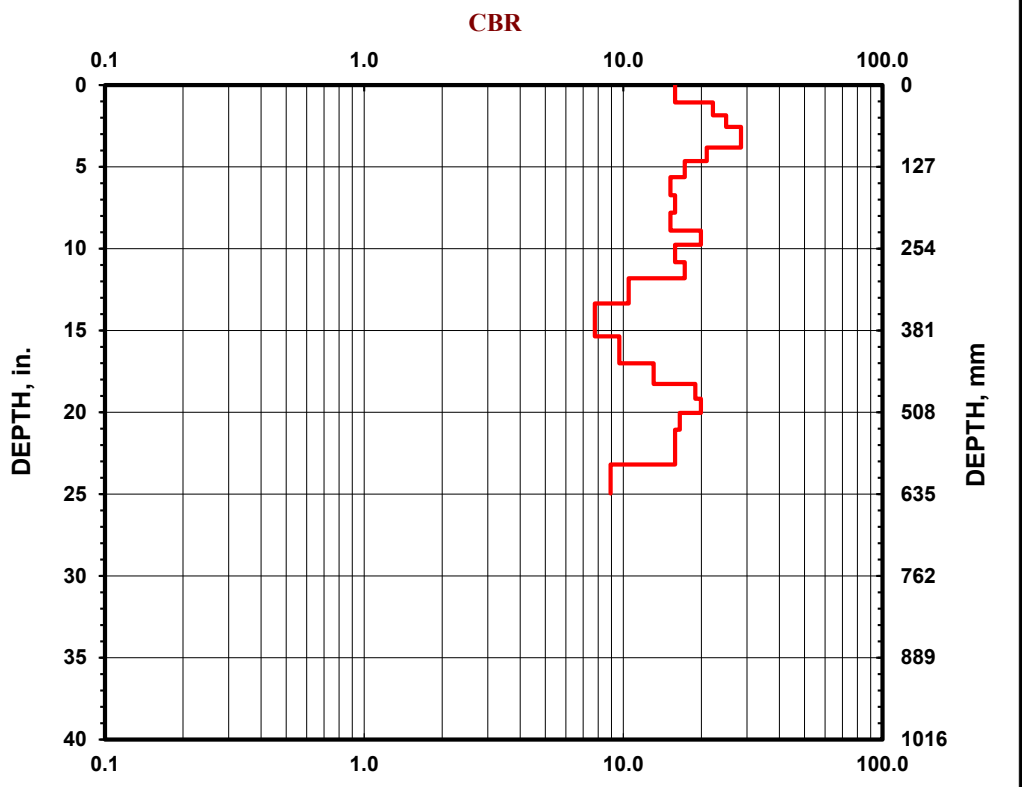
Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-042-1-22	Date:	5/25/2022
Surface Elevation:	1210.5	Surface Materials*:	Asphalt 19.5"
Lat / Long:	40.622644, -80.895455	Test Starting Depth (ft):	1.6

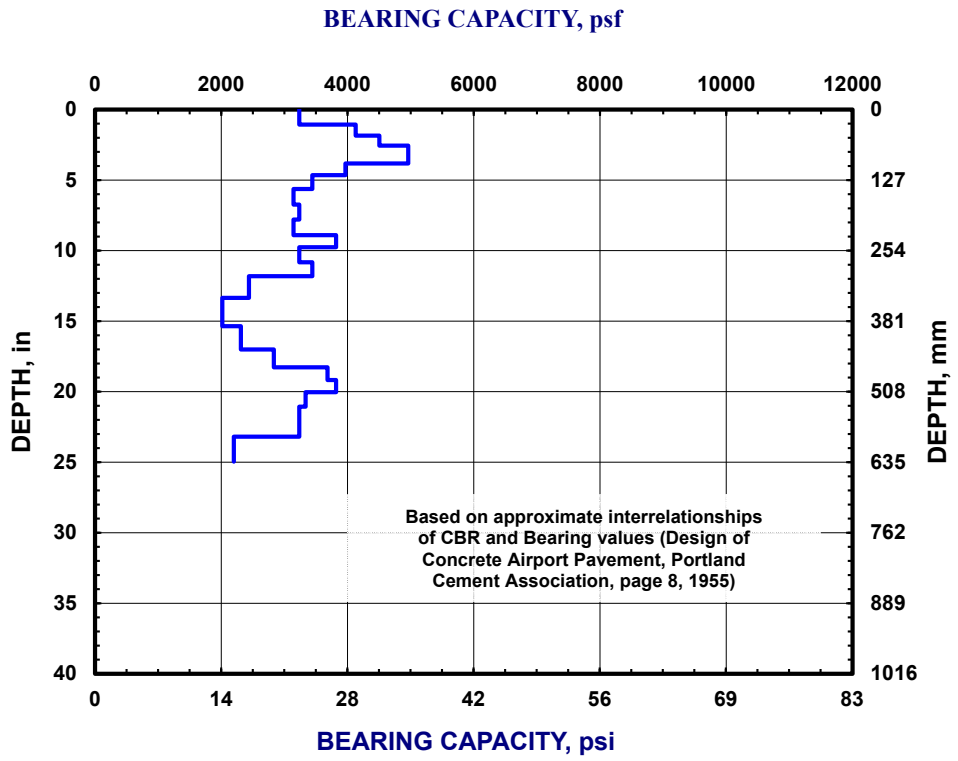
Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

Office of Geotechnical Engineering
Geology, Exploration, and Laboratory Section
http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical

Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	27	1
2	47	1
2	65	1
2	81	1
2	97	1
2	118	1
2	143	1
2	171	1
2	198	1
2	226	1
2	248	1
2	275	1
2	300	1
2	339	1
2	390	1
2	432	1
2	464	1
2	487	1
2	509	1
2	535	1
2	562	1
2	589	1
2	634	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 183+68, 2' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1205.6 (ft) EOB: 7.5 ft.
START: 4/7/22 END: 4/7/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.623151, -80.894194

EXPLORATION ID B-043-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1205.6	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (15") & BASE (3")	1204.1																	
STIFF, BROWN, **SANDY SILT**, LITTLE STONE FRAGMENTS, LITTLE CLAY, DAMP		1	3 4 4	12	44	SS-1	2.00	20	7	12	44	17	28	22	6	11	A-4a (5)	
		2	5 5 4	14	72	SS-2	2.50	16	10	12	44	18	29	22	7	15	A-4a (5)	
		3	3 3 4	11	83	SS-3	2.00	-	-	-	-	-	-	-	-	14	A-4a (V)	
@6.0'; VERY STIFF	1198.1	4	4 5 11	24	67	SS-4	3.50	-	-	-	-	-	-	-	-	12	A-4a (V)	
		EOB 7																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG FROM OGE HANDHELD GPS UNIT. ELEV FROM DISTRICT SURVEY TIN.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 4 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-043-1-22	Date:	5/25/2022
Surface Elevation:	1205.6	Surface Materials*:	Asphalt 18"
Lat / Long:	40.62314, -80.894181	Test Starting Depth (ft):	1.5

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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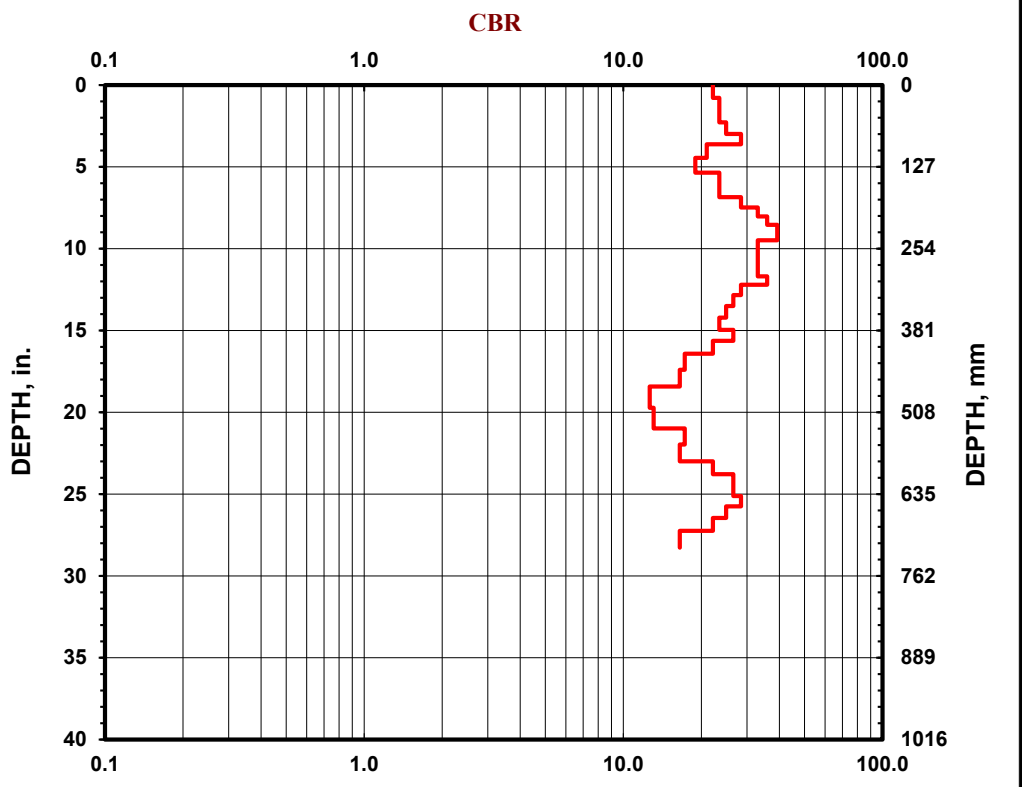
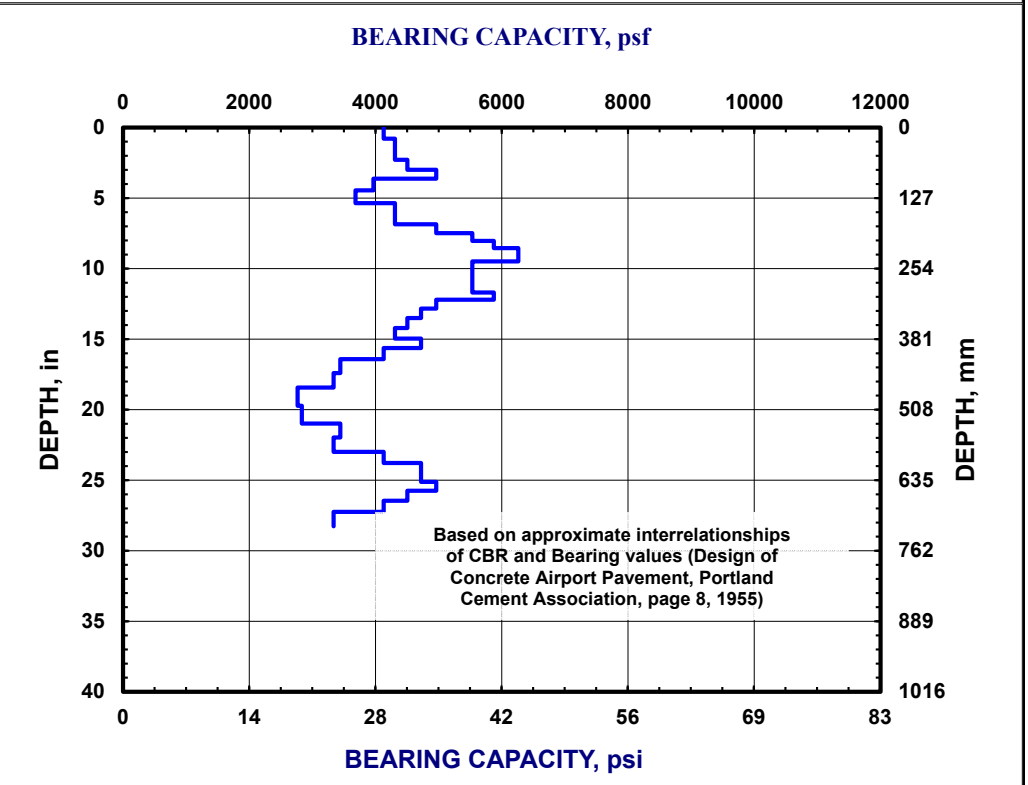
http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical

Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	20	1
2	39	1
2	58	1
2	76	1
2	92	1
2	113	1
2	136	1
2	155	1
2	174	1
2	190	1
2	204	1
2	217	1
2	229	1
2	241	1
2	255	1
2	269	1
2	283	1
2	297	1
2	310	1
2	326	1
2	343	1
2	361	1
2	380	1
2	397	1
2	417	1
2	442	1
2	468	1
2	501	1
2	533	1
2	558	1
2	584	1
2	604	1
2	621	1
2	638	1
2	654	1
2	672	1
2	692	1
2	718	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 187+69, 6' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1197.6 (ft) EOB: 8.5 ft.
START: 4/5/22 END: 4/5/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.623707, -80.892949

EXPLORATION ID B-044-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1197.6	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	1196.1																	
VERY DENSE, BROWN AND GRAY, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, NOT ENOUGH MATEIAL TO TEST, DAMP	1195.8	TR	38	126	78	SS-1A	4.5+	-	-	-	-	-	-	-	-	7	A-1-b (V)	
			33 51			SS-1B	-	-	-	-	-	-	-	-	-	7	Rock (V)	
	1194.1		52/4"	-	100	SS-2	-	-	-	-	-	-	-	-	-	5	Rock (V)	
SANDSTONE, BROWN, HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, VERY FINE GRAINED.																		
SANDSTONE, OLIVE GRAY, HIGHLY WEATHERED, SLIGHTLY STRONG, VERY FINE GRAINED, VERY THIN BEDDED, ARGILLACEOUS, MICACEOUS, JOINT, FRACTURED, SLIGHTLY ROUGH; VERY BLOCKY, FAIR; RQD 15%, REC 93%. @3.5'; Sc = 2,279 psi @4.3'; MODERATELY WEATHERED.	1189.1	EOB	15		93	NQ2-1											CORE	

NOTES: HOLE DRY BEFORE CORING. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 2 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

Ohio Department of Transportation
Division of Engineering

Office of Geotechnical Engineering

B-044-0-22

Run #:	Depth		Recovery		RQD	
NQ2-1	3.5'	8.5'	56/60	93%	9/60	15%

CAR-39-23.34 PID 105259

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 191+70, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1174.1 (ft) EOB: 7.5 ft.
START: 4/4/22 END: 4/4/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.624216, -80.891669

EXPLORATION ID B-045-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1174.1	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	1172.6	1																
HARD, GRAYISH BROWN, **SILT**, LITTLE SAND, LITTLE CLAY, LITTLE STONE FRAGMENTS, DAMP	1171.1	2	12 13 16	44	61	SS-1	4.5+	15	4	13	51	17	27	20	7	11	A-4b (7)	
HARD, GRAYISH BROWN, **SANDY SILT**, SOME STONE FRAGMENTS, LITTLE CLAY, DAMP	1169.6	3 4	13 12 13	38	100	SS-2	4.50	22	3	14	44	17	28	21	7	12	A-4a (5)	
SANDSTONE, GRAYISH BROWN, HIGHLY WEATHERED, VERY WEAK TO WEAK, VERY FINE GRAINED.		TR 5	9 8 9	26	100	SS-3	-	-	-	-	-	-	-	-	-	8	Rock (V)	
	1166.6	6 7 EOB	9 10 11	32	100	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-046-0-22	Date:	5/25/2022
Surface Elevation:	1149.4	Surface Materials*:	Asphalt 18"
Lat / Long:	40.624799, -80.890415	Test Starting Depth (ft):	1.5

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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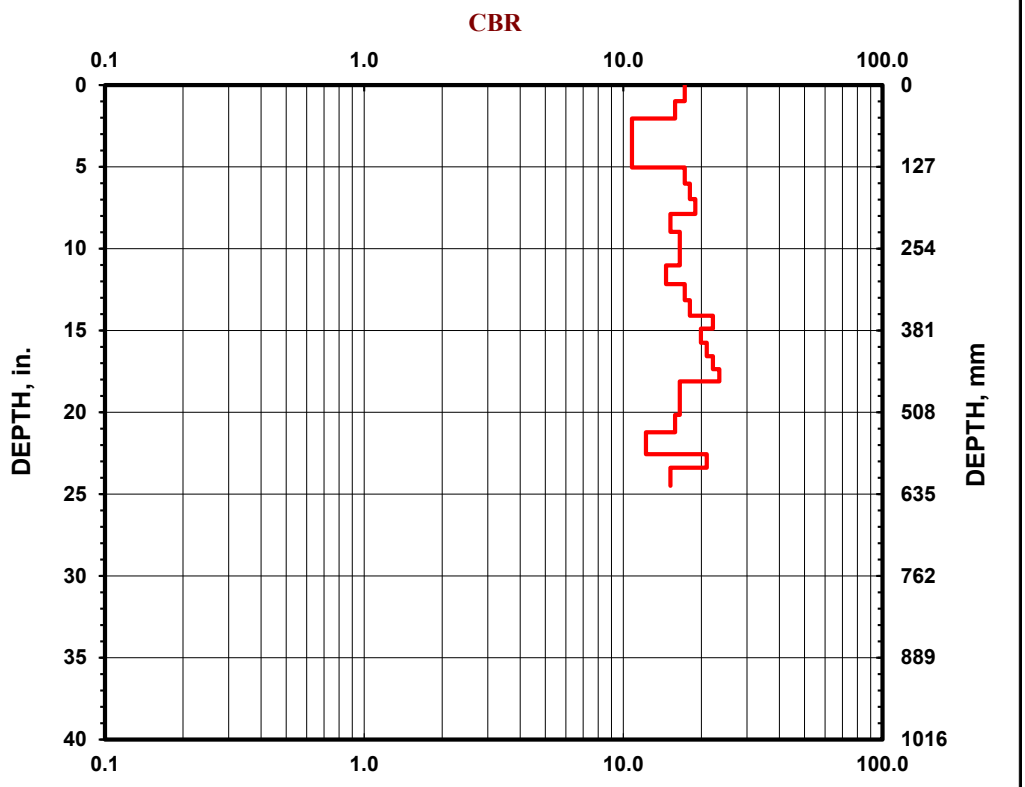
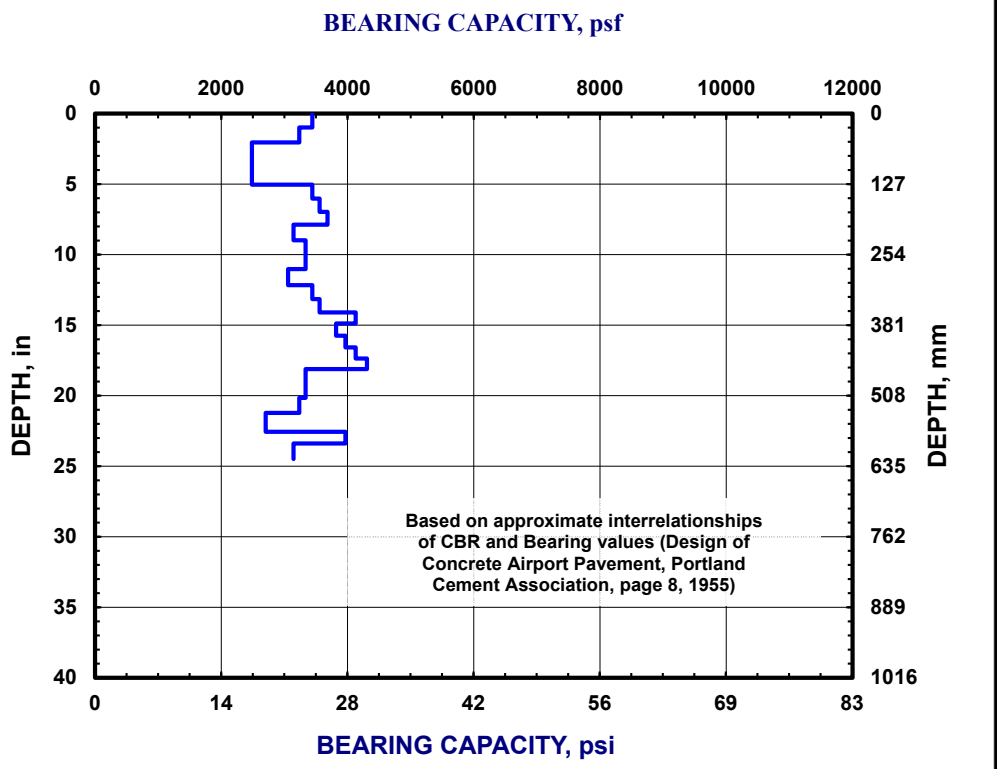
Geology, Exploration, and Laboratory Section
http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical

Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	25	1
2	52	1
2	90	1
2	128	1
2	153	1
2	177	1
2	200	1
2	228	1
2	254	1
2	280	1
2	309	1
2	334	1
2	358	1
2	378	1
2	400	1
2	421	1
2	441	1
2	460	1
2	486	1
2	512	1
2	539	1
2	573	1
2	594	1
2	622	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 199+84, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1131.3 (ft) EOB: 7.4 ft.
START: 4/4/22 END: 4/4/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625307, -80.889110

EXPLORATION ID B-047-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1131.3	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	1129.9																	
SHALE, GRAYISH BROWN, HIGHLY WEATHERED, VERY WEAK, LAMINATED.		TR 1 2 3 4 5 6 7	3 7 12	29	72	SS-1	-	-	-	-	-	-	-	-	-	12	Rock (V)	
			8 10 19	44	94	SS-2	-	-	-	-	-	-	-	-	-	10	Rock (V)	
			23 26 24	75	100	SS-3	-	-	-	-	-	-	-	-	-	9	Rock (V)	
	1123.9	EOB	24 48 52/5"	-	100	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-048-0-22	Date:	5/25/2022
Surface Elevation:	1108.1	Surface Materials*:	Asphalt 20"
Lat / Long:	40.625738, -80.887831	Test Starting Depth (ft):	1.7

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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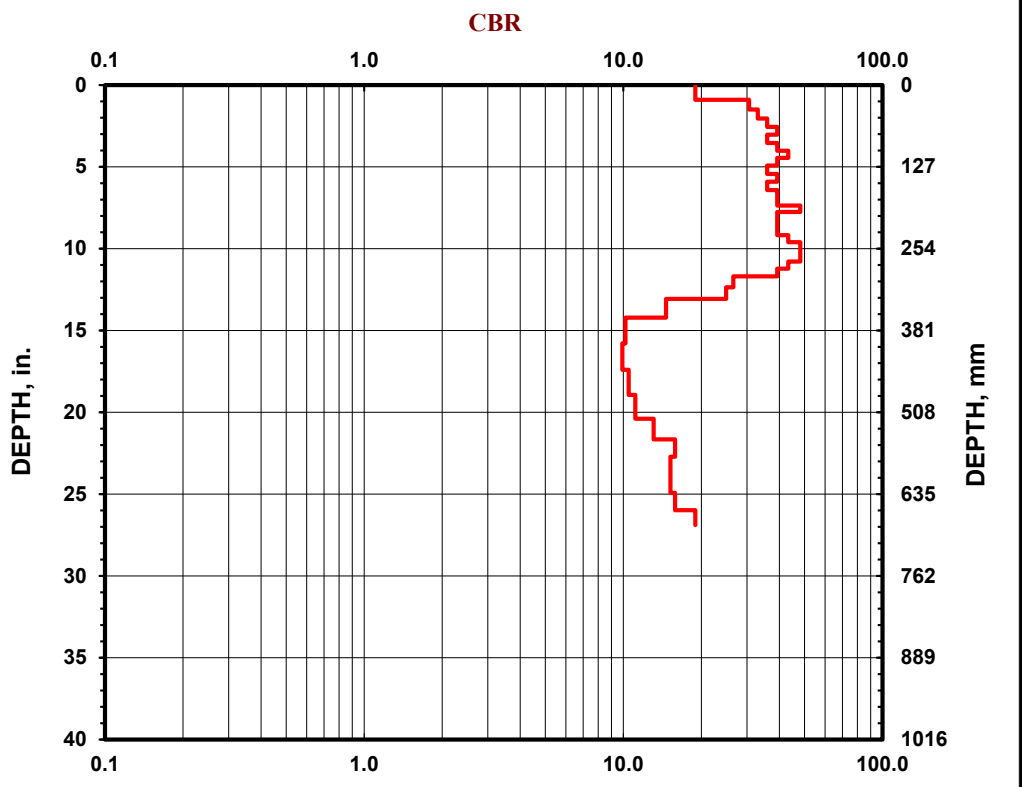
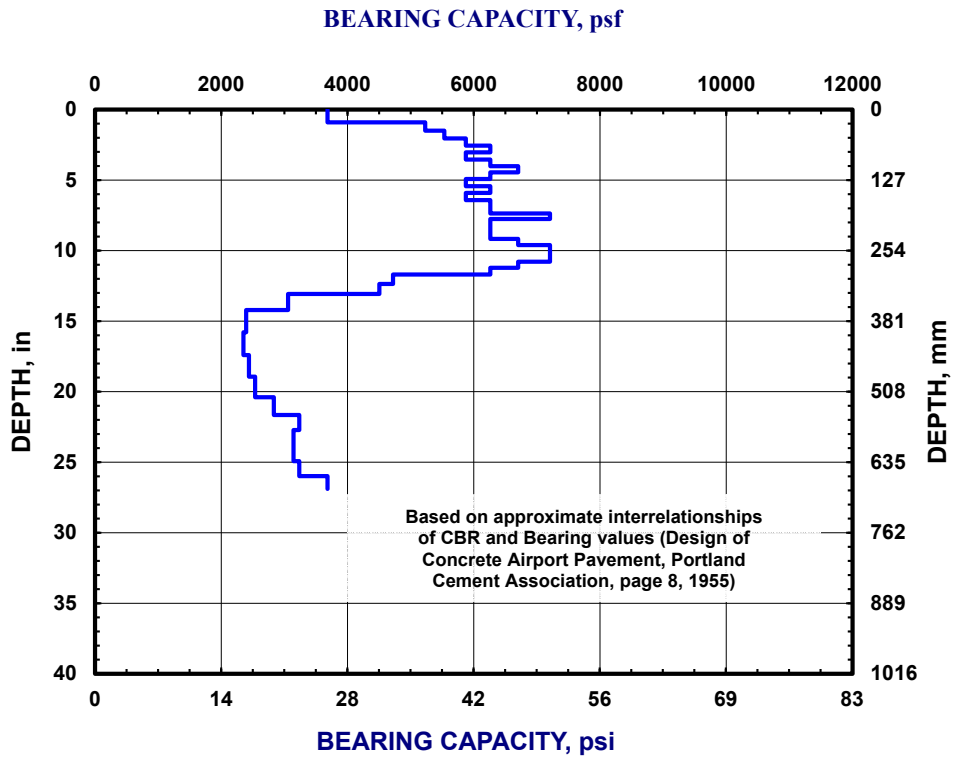
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	23	1
2	38	1
2	52	1
2	65	1
2	77	1
2	90	1
2	102	1
2	113	1
2	125	1
2	138	1
2	150	1
2	163	1
2	175	1
2	187	1
2	197	1
2	209	1
2	221	1
2	233	1
2	244	1
2	254	1
2	264	1
2	274	1
2	285	1
2	297	1
2	314	1
2	332	1
2	361	1
2	401	1
2	442	1
2	481	1
2	518	1
2	550	1
2	577	1
2	605	1
2	633	1
2	660	1
2	683	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 207+72, 6' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1079.5 (ft) EOB: 7.5 ft.
START: 4/4/22 END: 4/4/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625827, -80.886398

EXPLORATION ID B-049-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1079.5	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	1078.0																	
HARD, BROWN AND DARK GRAY, **SANDY SILT**, LITTLE CLAY, LITTLE STONE FRAGEMENTS, DAMP		1	9 8 11	29	67	SS-1	4.5+	17	4	35	26	18	22	16	6	13	A-4a (2)	
@3.0'; VERY STIFF, BROWN, SOME STONE FRAGMENTS		2	7 7 8	23	100	SS-2	3.00	21	1	32	32	14	25	19	6	12	A-4a (2)	
		3	7 8 8	24	100	SS-3	3.00	-	-	-	-	-	-	-	-	10	A-4a (V)	
	1072.0	4	6 8 7	23	100	SS-4	2.50	-	-	-	-	-	-	-	-	10	A-4a (V)	
		5																
		6																
		7 EOB																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-050-0-22	Date:	5/25/2022
Surface Elevation:	1051.6	Surface Materials*:	Asphalt 20.5"
Lat / Long:	40.625882, -80.884961	Test Starting Depth (ft):	1.7

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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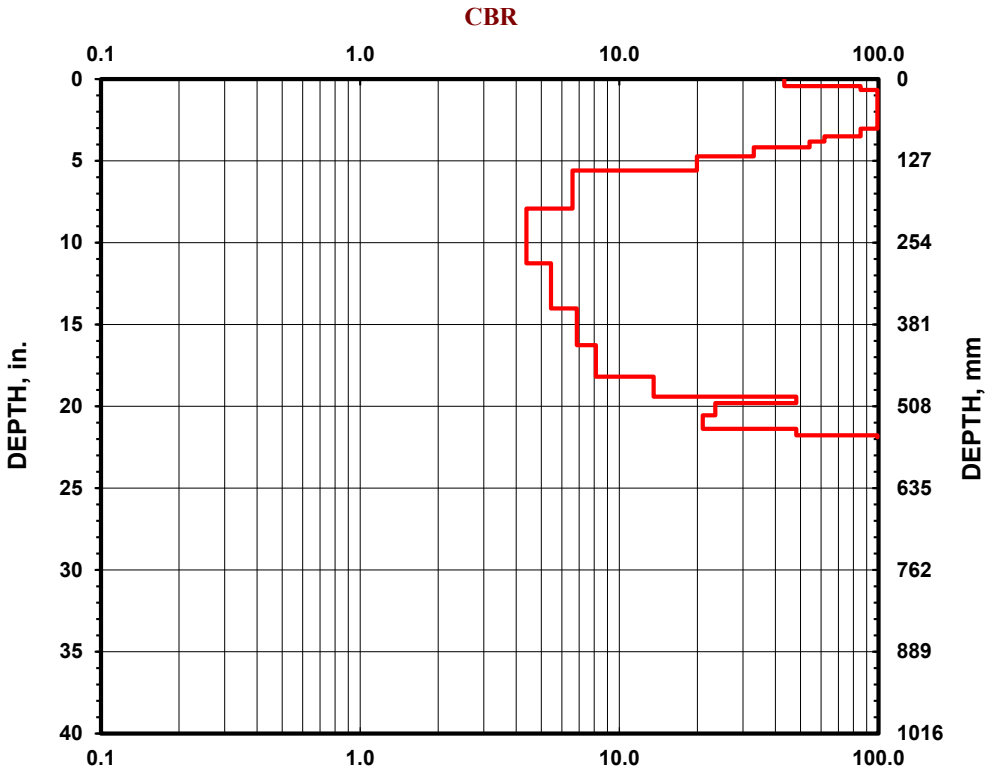
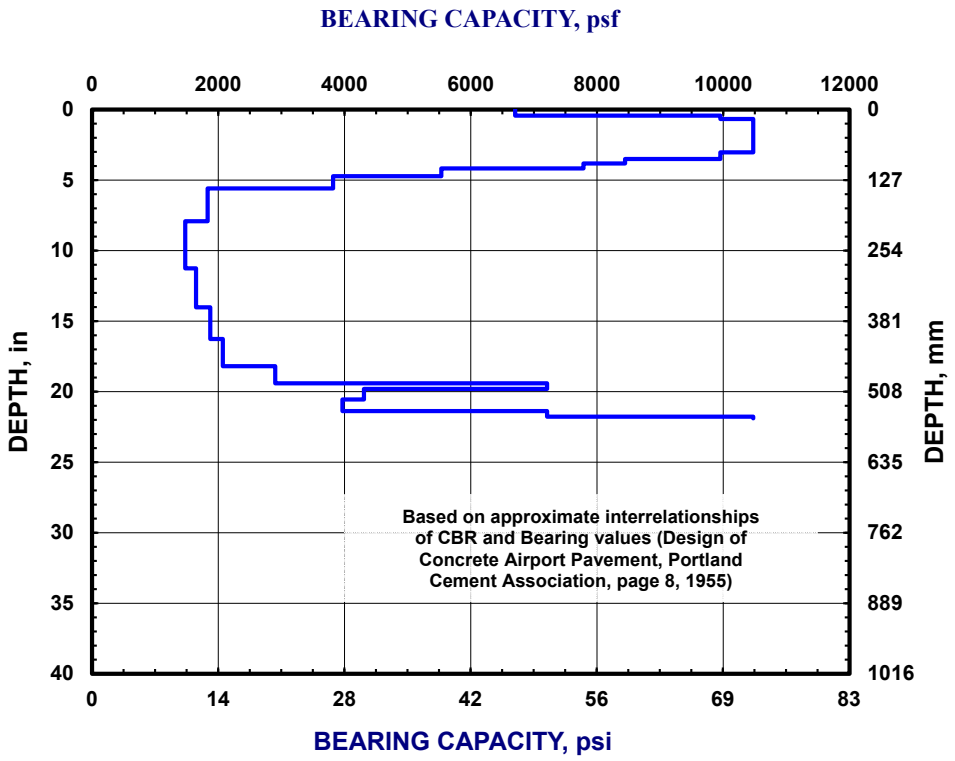
http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical

Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	11	1
2	17	1
2	21	1
2	25	1
2	28	1
2	33	1
2	38	1
2	43	1
2	47	1
2	51	1
2	55	1
2	60	1
2	63	1
2	68	1
2	72	1
2	77	1
2	83	1
2	89	1
2	97	1
2	106	1
2	120	1
2	142	1
2	201	1
2	286	1
2	356	1
2	413	1
2	462	1
2	493	1
2	503	1
2	522	1
2	543	1
2	553	1
2	556	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 215+70, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 1023.7 (ft) EOB: 7.5 ft.
START: 4/4/22 END: 4/4/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625864, -80.883524

EXPLORATION ID B-051-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 1023.7	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	1022.2																	
HARD, GRAY, **SANDY SILT**, SOME CLAY, TRACE STONE FRAGMENTS, DAMP	1020.7	1 2 3	7 7 7	21	78	SS-1	4.50	6	3	24	42	25	26	17	9	14	A-4a (6)	
VERY STIFF, MOTTLED BROWN AND GRAY, **SILT AND CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, DAMP		4	3 5 5	15	78	SS-2	4.00	2	2	15	44	37	32	20	12	18	A-6a (9)	
@4.5'; MOIST		5	3 5 6	17	56	SS-3	4.00	-	-	-	-	-	-	-	-	20	A-6a (V)	
@6.0'; STIFF, GRAY	1016.2	6 7 EOB	1 3 3	9	78	SS-4	1.50	3	1	10	54	32	31	19	12	23	A-6a (9)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

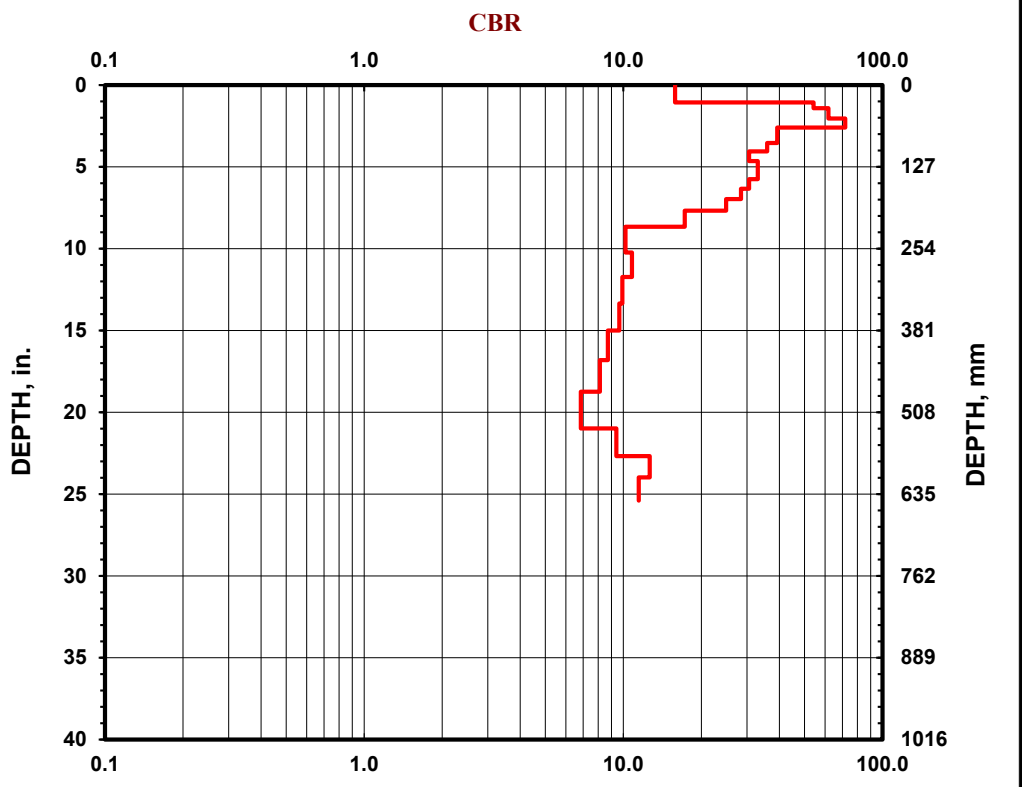
Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-052-0-22	Date:	5/25/2022
Surface Elevation:	997.2	Surface Materials*:	Asphalt 20.5"
Lat / Long:	40.625928, -80.882081	Test Starting Depth (ft):	1.7

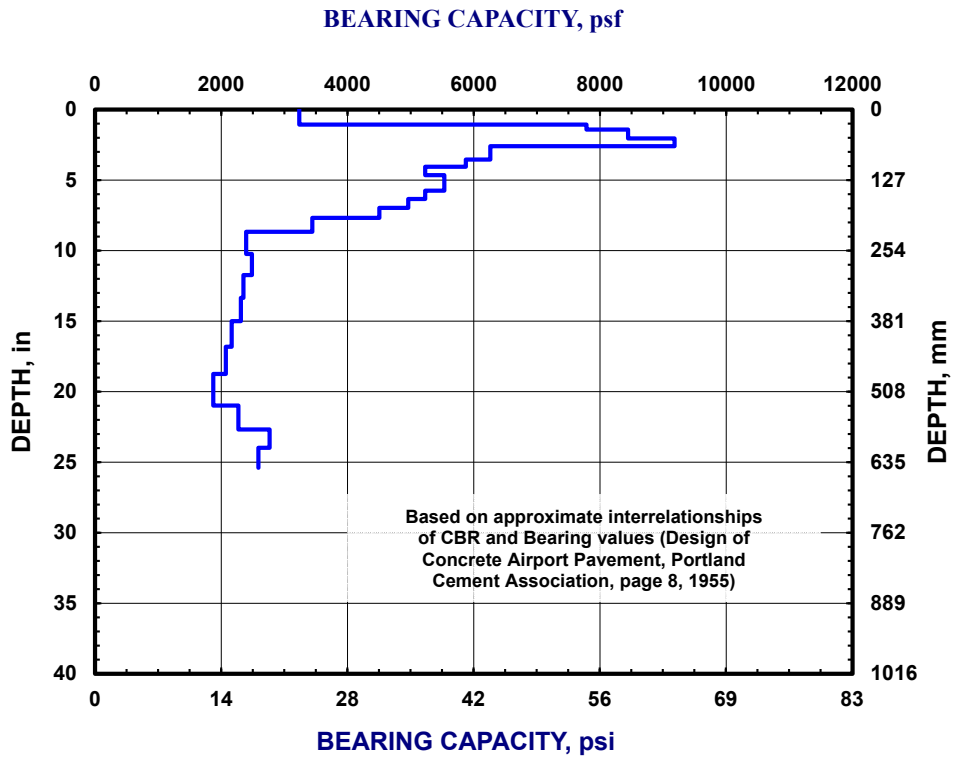
Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

Office of Geotechnical Engineering
Geology, Exploration, and Laboratory Section
http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical

Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	27	1
2	36	1
2	44	1
2	52	1
2	59	1
2	66	1
2	78	1
2	90	1
2	103	1
2	118	1
2	132	1
2	146	1
2	161	1
2	177	1
2	195	1
2	220	1
2	260	1
2	298	1
2	339	1
2	381	1
2	427	1
2	476	1
2	533	1
2	576	1
2	609	1
2	645	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 223+71, 6' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 996.9 (ft) EOB: 7.5 ft.
START: 4/4/22 END: 4/4/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625909, -80.880639

EXPLORATION ID B-053-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 996.9	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	995.4	1																
MEDIUM DENSE, BROWN, **STONE FRAGMENTS WITH SAND**, LITTLE SILT, TRACE CLAY, NOT ENOUGH MATERIAL TO TEST, DAMP	993.9	2	11 8 9	26	33	SS-1	-	-	-	-	-	-	-	-	-	8	A-1-b (V)	
STIFF, BROWN, **SILT AND CLAY**, LITTLE SAND, LITTLE STONE FRAGMENTS, DAMP	992.4	3	7 4 4	12	89	SS-2	2.00	16	7	10	39	28	32	21	11	17	A-6a (7)	
STIFF, BROWN, **SILTY CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, MOIST		4	3 3 3	9	61	SS-3	1.75	9	4	8	36	43	37	21	16	23	A-6b (10)	
@6.0'; VERY STIFF	989.4	5	1 3 4	11	83	SS-4	3.50	-	-	-	-	-	-	-	-	24	A-6b (V)	
		6																
		7																
		EOB																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-054-0-22	Date:	5/26/2022
Surface Elevation:	1005.0	Surface Materials*:	Asphalt 19"
Lat / Long:	40.625854, -80.87921	Test Starting Depth (ft):	1.6

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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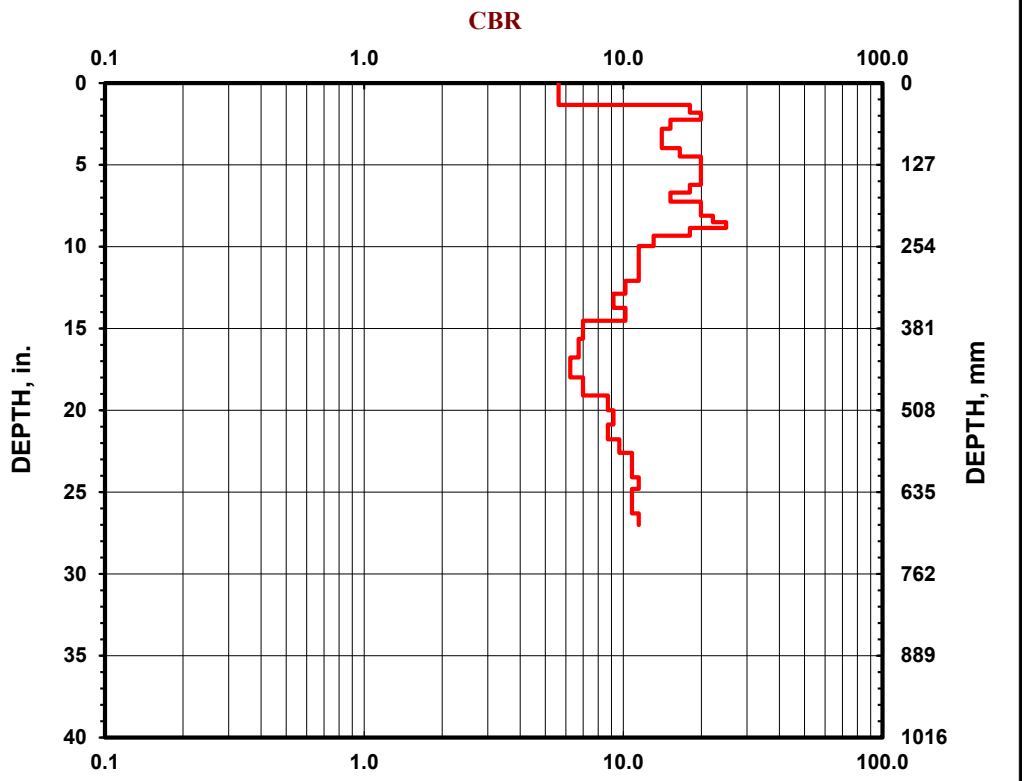
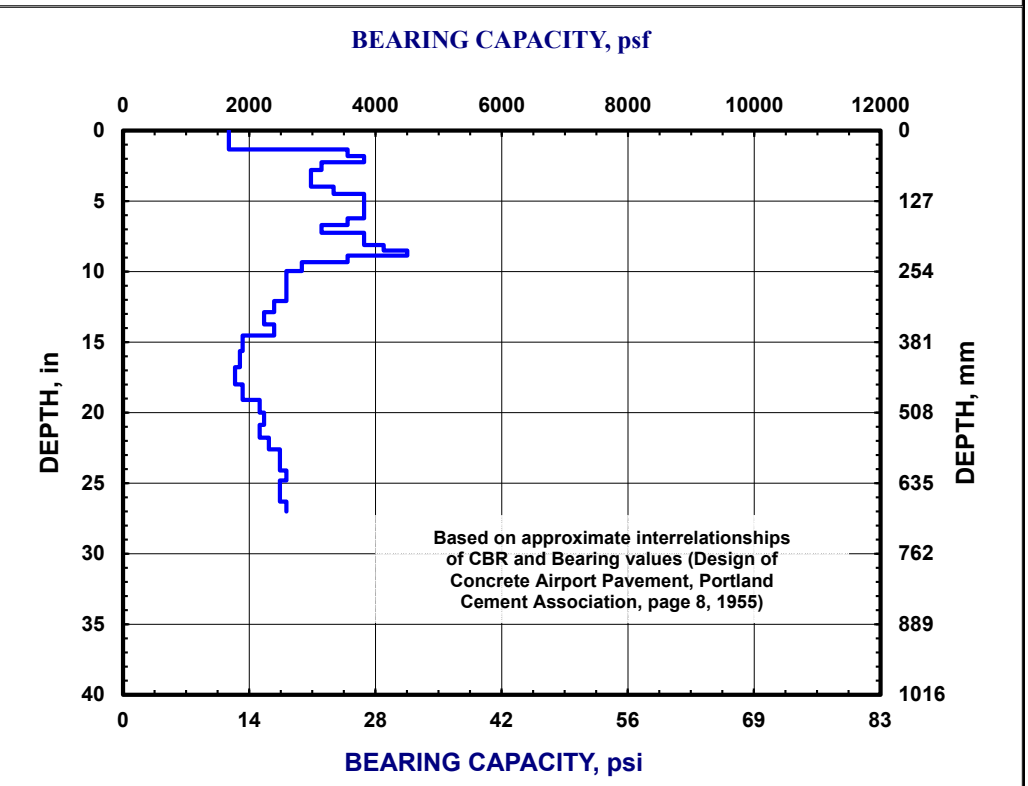
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
1	34	1
1	46	1
1	57	1
1	71	1
1	86	1
1	101	1
1	114	1
1	125	1
1	136	1
1	147	1
1	158	1
1	170	1
1	184	1
1	195	1
1	206	1
1	216	1
1	225	1
1	237	1
1	253	1
1	271	1
1	289	1
1	307	1
1	327	1
1	349	1
1	369	1
1	397	1
1	426	1
1	457	1
1	485	1
1	508	1
1	530	1
1	553	1
1	574	1
1	593	1
1	612	1
1	630	1
1	649	1
1	668	1
1	686	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-055-0-22	Date:	5/26/2022
Surface Elevation:	1003.1	Surface Materials*:	Asphalt 20"
Lat / Long:	40.62547, -80.877842	Test Starting Depth (ft):	1.7

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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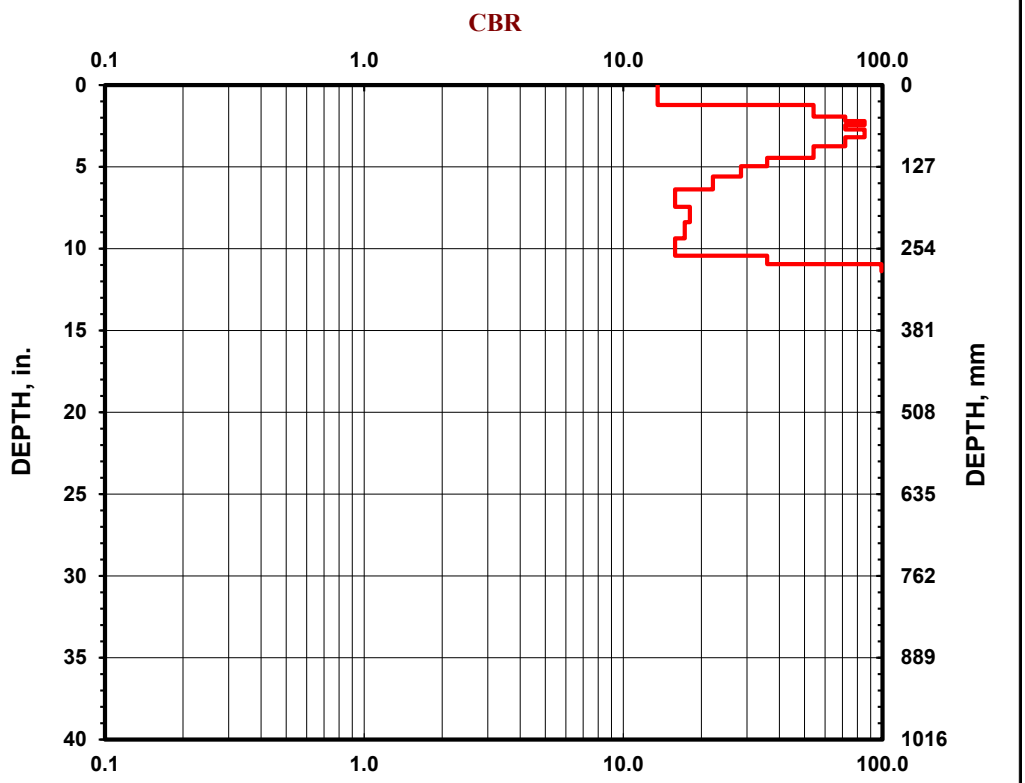
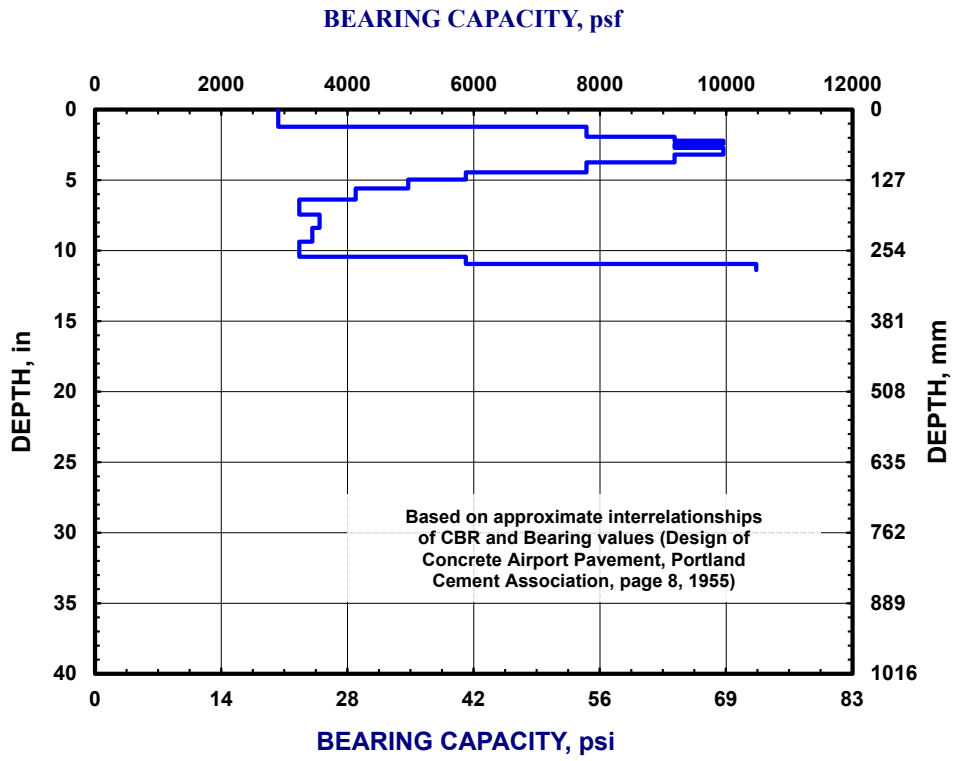
Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
2	31	1
2	40	1
2	49	1
2	56	1
2	62	1
2	69	1
2	75	1
2	81	1
2	88	1
2	95	1
2	104	1
2	113	1
2	126	1
2	142	1
2	162	1
2	189	1
2	213	1
2	238	1
2	265	1
2	278	1
2	283	1
2	287	1
2	289	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 235+71, 7' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 995.9 (ft) EOB: 7.5 ft.
START: 4/5/22 END: 4/5/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625202, -80.876456

EXPLORATION ID B-056-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 995.9	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	994.4	1																
HARD, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, LITTLE STONE FRAGMENTS, DAMP	992.9	2	14 6 5	17	72	SS-1	4.5+	17	17	15	24	27	24	16	8	11	A-4a (3)	
VERY STIFF, MOTTLED BROWN AND GRAY, **SILT AND CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, DAMP		3	5 5 6	17	56	SS-2	4.00	1	1	9	43	46	31	19	12	18	A-6a (9)	
		5	5 6 7	20	44	SS-3	4.00	-	-	-	-	-	-	-	-	17	A-6a (V)	
	988.4	6 7 EOB	6 8 12	30	100	SS-4	3.00	-	-	-	-	-	-	-	-	18	A-6a (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 239+72, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 988.5 (ft) EOB: 7.5 ft.
START: 4/5/22 END: 4/5/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625232, -80.875021

EXPLORATION ID B-057-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 988.5	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (18")	987.0																	
HARD, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, LITTLE STONE FRAGMENTS, DAMP		1	11 7 9	24	78	SS-1	4.5+	14	15	17	29	25	25	17	8	12	A-4a (4)	
@3.0'; BROWN, TRACE STONE FRAGMENTS		2	8 8 9	26	94	SS-2	4.50	7	9	13	39	32	27	19	8	15	A-4a (7)	
@4.5'; VERY STIFF		3	8 8 9	26	89	SS-3	4.00	-	-	-	-	-	-	-	-	17	A-4a (V)	
@6.0'; HARD	981.0	4	5 8 9	26	100	SS-4	4.5+	-	-	-	-	-	-	-	-	16	A-4a (V)	
		5																
		6																
		7 EOB																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 243+72, 8' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 983.4 (ft) EOB: 7.5 ft.
START: 4/7/22 END: 4/7/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625604, -80.873664

EXPLORATION ID B-058-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 983.4	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	981.9	1																
VERY STIFF, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, LITTLE STONE FRAGMENTS, DAMP	980.4	2	4 6 6	18	39	SS-1	2.50	13	13	13	33	28	27	17	10	14	A-4a (5)	
VERY STIFF, BROWN WITH GRAY, **SILT AND CLAY**, LITTLE SAND, TRACE STONE FRAGMENTS, DAMP		3	5 7 9	24	89	SS-2	3.00	2	7	10	42	39	30	19	11	17	A-6a (8)	
		4	7 9 8	26	83	SS-3	4.00	-	-	-	-	-	-	-	-	14	A-6a (V)	
		5	3 5 5	15	44	SS-4	2.50	-	-	-	-	-	-	-	-	16	A-6a (V)	
	975.9	6																
		7 EOB																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / MCINTOSH	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 247+72, 7' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / LEWIS	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 980.0 (ft) EOB: 7.5 ft.
START: 4/7/22 END: 4/7/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625811, -80.872250

EXPLORATION ID B-059-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 980.0	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (16") & BASE (2")	978.5	1																
VERY STIFF, BROWN AND GRAY, **SANDY SILT**, SOME STONE FRAGMENTS, LITTLE CLAY, DAMP		2	11 7 5	18	44	SS-1	3.50	24	22	13	22	19	23	15	8	10	A-4a (1)	
@3.0'; BROWN AND DARK BROWN		3 4	7 8 11	29	67	SS-2	3.50	23	9	24	25	19	26	17	9	15	A-4a (2)	
	975.2	5	5 13 15	42	50	SS-3A	2.00	-	-	-	-	-	-	-	-	15	A-4a (V)	
DENSE, BROWN, **STONE FRAGMENTS WITH SAND**, TRACE SILT, TRACE CLAY, DAMP						SS-3B	-	55	4	27	10	4	NP	NP	NP	6	A-1-b (0)	
@6.0'; DARK BROWN AND BLACK, CONTAINS SLAG	973.6	6	10 14 11	38	67	SS-4A	-	-	-	-	-	-	-	-	-	8	A-1-b (V)	
VERY STIFF, BROWN AND BLACK, **SANDY SILT**, SOME CLAY, LITTLE STONE FRAGMENTS, DAMP	972.5	7 EOB				SS-4B	2.00	15	6	34	25	20	22	16	6	13	A-4a (2)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 8 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 251+71, 6' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 977.6 (ft) EOB: 8.5 ft.
START: 4/5/22 END: 4/5/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625825, -80.870816

EXPLORATION ID B-060-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 977.6	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	976.1	1																
DENSE, BROWN AND GRAY, **SANDY SILT**, SOME CLAY, LITTLE STONE FRAGMENTS, DAMP	975.4	TR 2	12 7	87	56	SS-1A	4.50	19	14	18	25	24	24	16	8	11	A-4a (3)	
		3	51			SS-1B	-	-	-	-	-	-	-	-	-	4	Rock (V)	
SANDSTONE, GRAYISH BROWN, MODERATELY WEATHERED, SLIGHTLY STRONG, VERY FINE GRAINED.	974.1		52/1"	-	100	SS-2	-	-	-	-	-	-	-	-	-	6	Rock (V)	
SANDSTONE, LIGHT OLIVE GRAY, SLIGHTLY WEATHERED, MODERATELY STRONG, VERY FINE GRAINED, THIN, MICACEOUS, CARBONACEOUS, JOINT, SLIGHTLY FRACTURED, NARROW, SLIGHTLY ROUGH; BLOCKY, GOOD; RQD 95%, REC 98%. @6.0' - 6.4'; γ = 148 pcf; Qu = 7,060 psi @7.5' - 8.5'; CONTAINS COAL STRINGERS	969.1	4 5 6 7 8 EOB	95		98	NQ2-1											CORE	

NOTES: HOLE DRY BEFORE CORING. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

Ohio Department of Transportation
Division of Engineering

Office of Geotechnical Engineering

B-060-0-22

Run #:	Depth		Recovery		RQD	
NQ2-1	3.5'	8.5'	59/60	98%	57/60	95%

CAR-39-23.34 PID 105259

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 255+71, 6' RT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 973.9 (ft) EOB: 7.5 ft.
START: 4/5/22 END: 4/5/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.625510, -80.869440

EXPLORATION ID B-061-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 973.9	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (18")	972.4	1																
MEDIUM DENSE, GRAY, **COARSE AND FINE SAND**, LITTLE STONE FRAGMENTS, LITTLE SILT, LITTLE CLAY, DAMP	971.9	2	9 5 5	15	94	SS-1A	-	17	34	20	14	15	18	12	6	7	A-3a (0)	
						SS-1B	4.00	11	6	9	36	38	34	20	14	21	A-6a (9)	
VERY STIFF, BROWN, **SILT AND CLAY**, LITTLE SAND, LITTLE STONE FRAGMENTS, MOIST	970.9	3	3 5 6	17	72	SS-2	2.50	9	8	7	33	43	37	21	16	24	A-6b (10)	
VERY STIFF, BROWN AND GRAY, **SILTY CLAY**, LITTLE SAND, TRACE CLAY, MOIST @4.5' - 6.0'; DAMP		4	5 6 5	17	72	SS-3	2.50	-	-	-	-	-	-	-	-	19	A-6b (V)	
		5	4 6 6	18	72	SS-4	3.00	-	-	-	-	-	-	-	-	22	A-6b (V)	
	966.4	6																
		7																
		EOB																

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

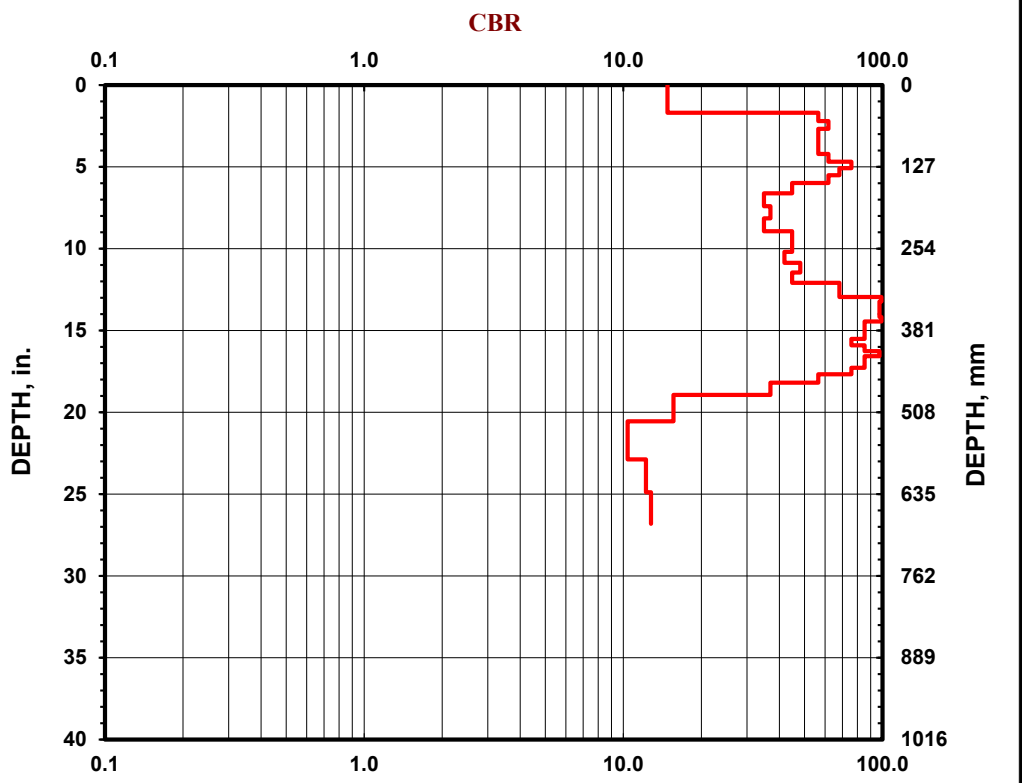
Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-062-0-22	Date:	5/26/2022
Surface Elevation:	975.5	Surface Materials*:	Asphalt 18.5"
Lat / Long:	40.625023, -80.868183	Test Starting Depth (ft):	1.5

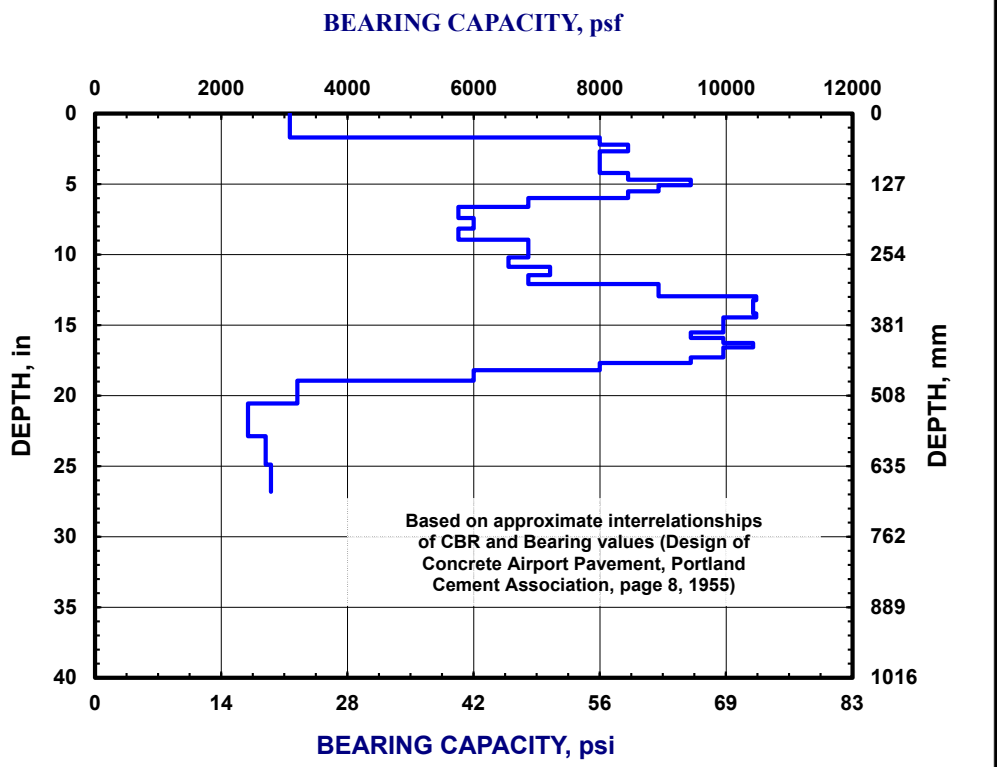
Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

Office of Geotechnical Engineering
Geology, Exploration, and Laboratory Section
http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical

Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	43	1
3	56	1
3	68	1
3	81	1
3	94	1
3	107	1
3	119	1
3	129	1
3	140	1
3	152	1
3	168	1
3	188	1
3	207	1
3	227	1
3	243	1
3	259	1
3	276	1
3	291	1
3	307	1
3	318	1
3	329	1
3	336	1
3	344	1
3	352	1
3	360	1
3	367	1
3	376	1
3	385	1
3	394	1
3	404	1
3	413	1
3	421	1
3	430	1
3	439	1
3	449	1
3	462	1
3	481	1
3	522	1
3	581	1
3	632	1
3	681	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

DCP TEST DATA

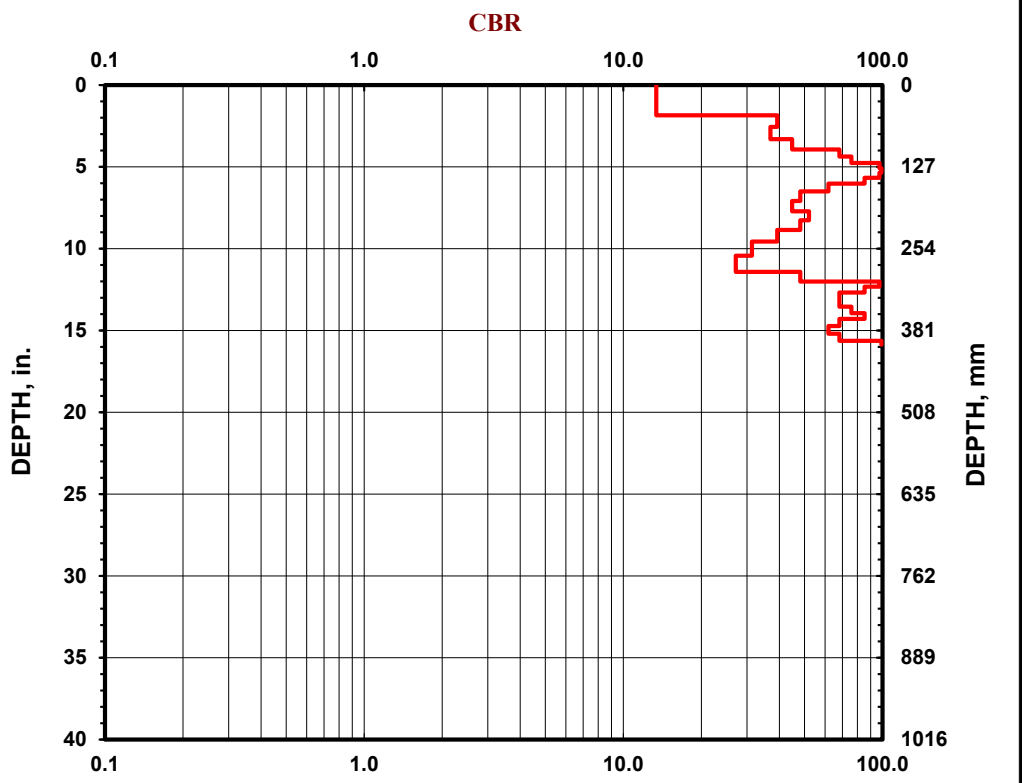
Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-063-0-22	Date:	5/26/2022
Surface Elevation:	979.6	Surface Materials*:	Asphalt 18"
Lat / Long:	40.624229, -80.867147	Test Starting Depth (ft):	1.5

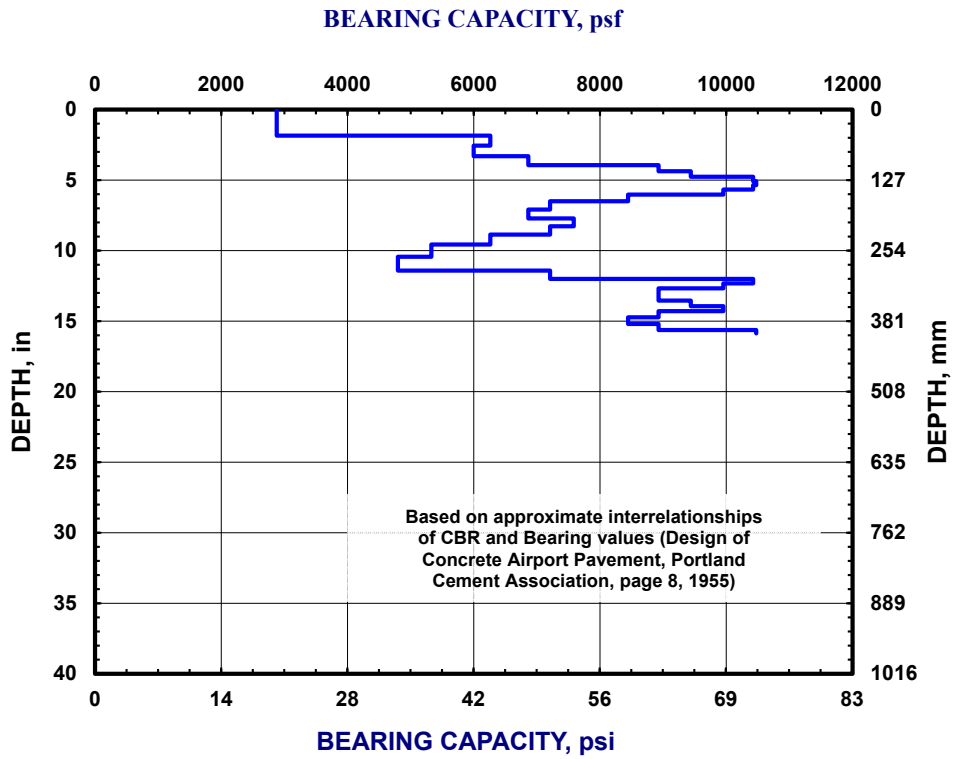
Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

Office of Geotechnical Engineering
Geology, Exploration, and Laboratory Section
http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical

Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	47	1
3	65	1
3	84	1
3	100	1
3	111	1
3	121	1
3	129	1
3	136	1
3	144	1
3	153	1
3	165	1
3	180	1
3	196	1
3	210	1
3	225	1
3	243	1
3	265	1
3	290	1
3	305	1
3	313	1
3	322	1
3	333	1
3	344	1
3	354	1
3	363	1
3	374	1
3	386	1
3	397	1
3	403	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 267+68, 7' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 976.4 (ft) EOB: 4.17 ft.
START: 4/5/22 END: 4/5/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.623371, -80.866272

EXPLORATION ID B-064-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 976.4	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	974.9																	
VERY DENSE, GRAY, **STONE FRAGMENTS WITH SAND AND SILT**, LITTLE CLAY, DAMP	974.2	TR	12 10 25	53	61	SS-1A	-	28	19	18	19	16	22	15	7	9	A-2-4 (0)	
						SS-1B	-	-	-	-	-	-	-	-	-	7	Rock (V)	
SANDSTONE, REDDISH BROWN, HIGHLY WEATHERED, WEAK, VERY FINE GRAINED.	972.2	EOB	29 18 51/2"	-	71	SS-2	-	-	-	-	-	-	-	-	-	9	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-065-0-22	Date:	5/26/2022
Surface Elevation:	969.2	Surface Materials*:	Asphalt 16"
Lat / Long:	40.622466, -80.865477	Test Starting Depth (ft):	1.3

Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

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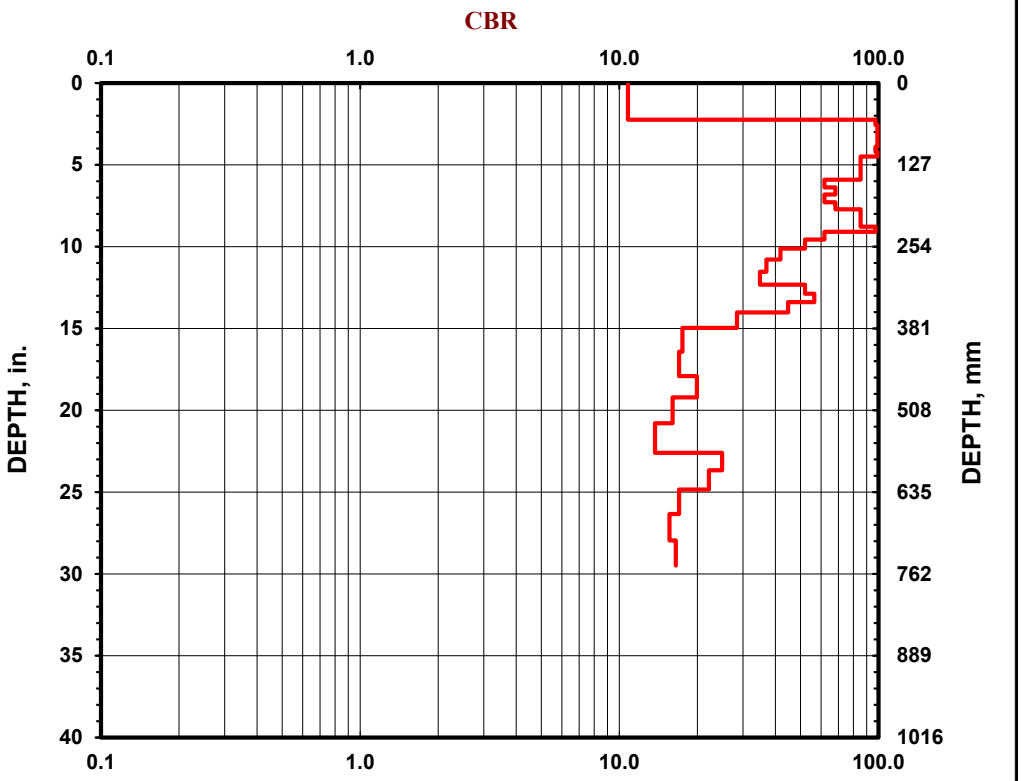
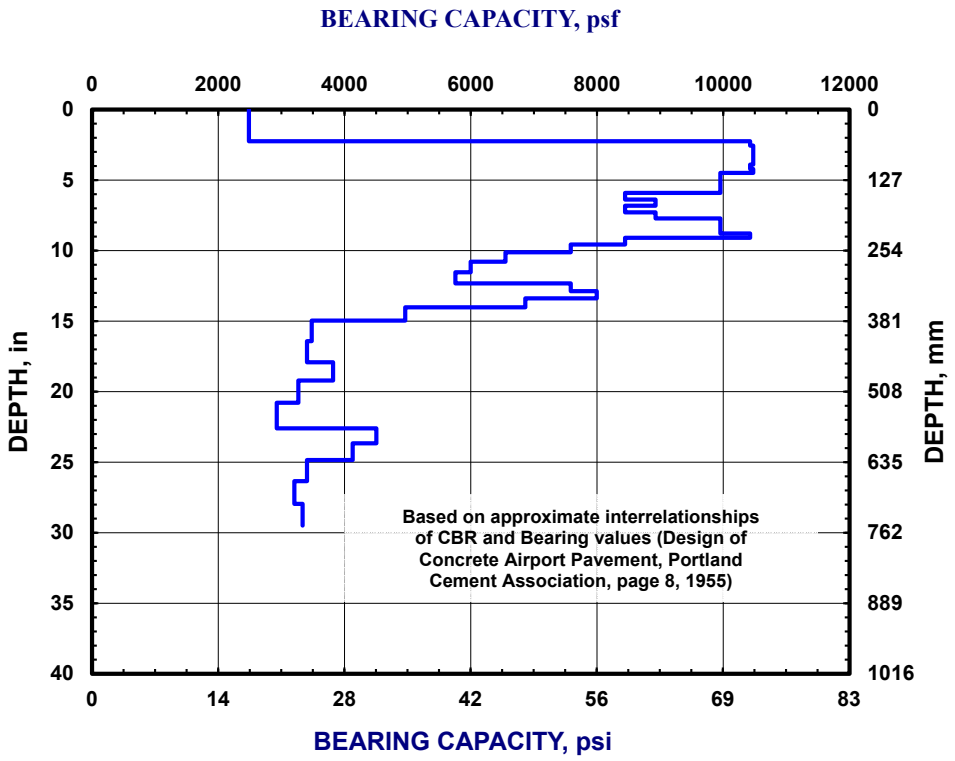
Geology, Exploration, and Laboratory Section
http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical

Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	57	1
3	65	1
3	72	1
3	79	1
3	86	1
3	92	1
3	99	1
3	107	1
3	114	1
3	123	1
3	132	1
3	141	1
3	150	1
3	162	1
3	173	1
3	185	1
3	196	1
3	205	1
3	214	1
3	223	1
3	231	1
3	243	1
3	257	1
3	274	1
3	293	1
3	313	1
3	327	1
3	340	1
3	356	1
3	380	1
3	417	1
3	455	1
3	488	1
3	528	1
3	574	1
3	601	1
3	631	1
3	669	1
3	710	1
3	749	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 275+66, 6' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 975.7 (ft) EOB: 6.83 ft.
START: 4/5/22 END: 4/5/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.621865, -80.864285

EXPLORATION ID B-066-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 975.7	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	974.2																	
VERY STIFF, BROWN GRAY, **SANDY SILT**, SOME CLAY, LITTLE STONE FRAGMENTS, DAMP			8 4 6	15	83	SS-1	3.00	14	17	25	23	21	23	15	8	13	A-4a (2)	
@3.0'; SOME STONE FRAGMENTS, LITTLE CLAY, DAMP	971.2	TR	7 4 17	32	56	SS-2	2.00	27	8	27	22	16	23	16	7	13	A-4a (1)	
SANDSTONE, GRAY, HIGHLY WEATHERED, WEAK, VERY FINE GRAINED, ARGILLACEOUS.	968.9	EOB	7 22 58	120	56	SS-3	3.00	-	-	-	-	-	-	-	-	8	Rock (V)	
			50 53/4"	-	60	SS-4	0.50	-	-	-	-	-	-	-	-	20	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

DCP TEST DATA

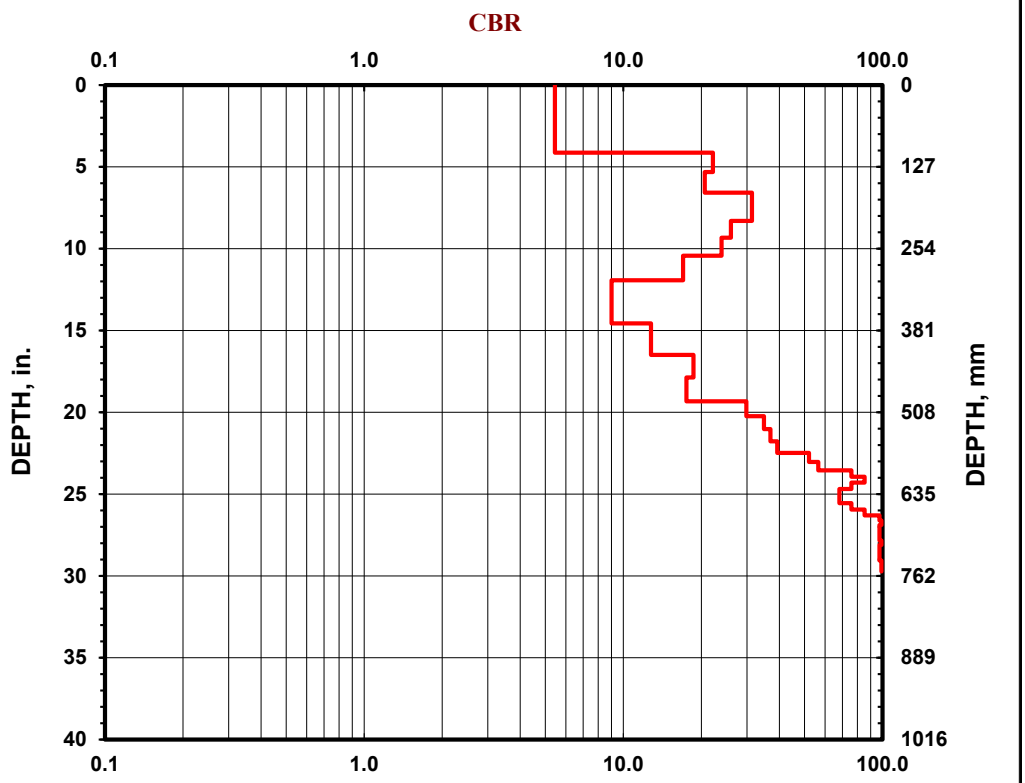
Project:	CAR-39-23.34	PID:	105259
Exploration ID:	D-067-0-22	Date:	5/26/2022
Surface Elevation:	982.1	Surface Materials*:	Asphalt 20"
Lat / Long:	40.621749, -80.862843	Test Starting Depth (ft):	1.7

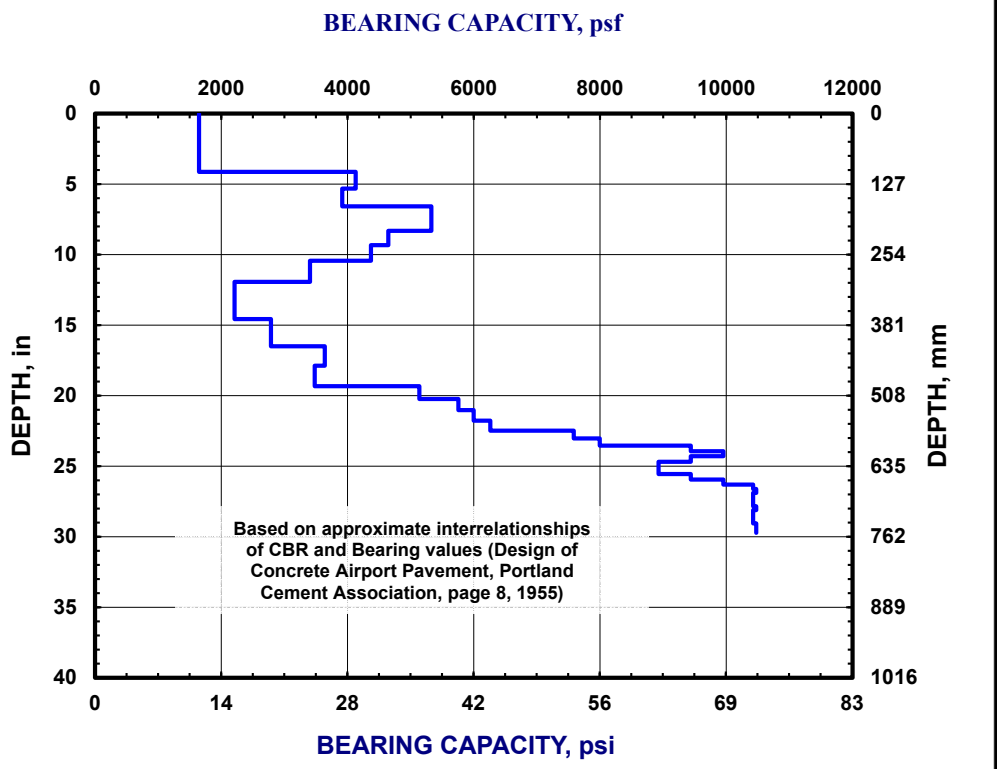
Hammer
- ○ 10.1 lbs.
- ● 17.6 lbs.
- ○ Both hammers used

Office of Geotechnical Engineering
Geology, Exploration, and Laboratory Section
http://www.dot.state.oh.us/Divisions/Engineering/Geotechnical

Soil Type
- ○ CH
- ○ CL
- ● All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	0	1
3	105	1
3	135	1
3	167	1
3	189	1
3	211	1
3	237	1
3	265	1
3	303	1
3	370	1
3	419	1
3	454	1
3	491	1
3	514	1
3	534	1
3	553	1
3	571	1
3	585	1
3	598	1
3	608	1
3	617	1
3	627	1
3	638	1
3	649	1
3	659	1
3	668	1
3	676	1
3	683	1
3	691	1
3	699	1
3	707	1
3	714	1
3	722	1
3	730	1
3	738	1
3	745	1
3	752	1
2	755	1





NOTES: Latitude, Longitude & Elevation from District Survey Grade Instruments.
*Due to method of advancement, surface material values are approximate. Sounding terminated on refusal.

PROJECT: CAR-39-23.34	DRILLING FIRM / OPERATOR: ODOT / SPROUSE	DRILL RIG: CME 75 TRUCK	STATION / OFFSET: 283+61, 10' LT.
TYPE: SUBGRADE	SAMPLING FIRM / LOGGER: ODOT / MCINTOSH	HAMMER: CME AUTOMATIC	ALIGNMENT: CL SR 39
PID: 105259 SFN: N/A	DRILLING METHOD: 3.5" SSA	CALIBRATION DATE: 4/15/20	ELEVATION: 972.7 (ft) EOB: 7.0 ft.
START: 4/5/22 END: 4/5/22	SAMPLING METHOD: SPT	ENERGY RATIO (%): 90*	LAT / LONG: 40.622031, -80.861490

EXPLORATION ID B-068-0-22

PAGE 1 OF 1

MATERIAL DESCRIPTION AND NOTES	ELEV. 972.7	DEPTHS	SPT/ RQD	N_{60}	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%) GR	CS	FS	SI	CL	ATTERBERG LL	PL	PI	WC	ODOT CLASS (GI)	BACK FILL
ASPHALT (17")	971.2	1																
HARD, REDDISH BROWN AND GRAY, **SILT AND CLAY**, SOME SAND, LITTLE STONE FRAGMENTS, RESIDUAL SOIL, DAMP		2	13 7 7	21	83	SS-1	4.50	18	6	17	25	34	33	19	14	17	A-6a (6)	
@3.0'; GRAYISH BROWN, TRACE SAND, TRACE STONE FRAGMENTS	968.2	3 4	7 10 13	35	89	SS-2	4.00	3	1	2	45	49	38	23	15	15	A-6a (10)	
SANDSTONE, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, ARGILLACEOUS.		TR 5	15 25 28	80	100	SS-3	-	-	-	-	-	-	-	-	-	8	Rock (V)	
	965.7	6 EOB 7	48 56	-	100	SS-4	-	-	-	-	-	-	-	-	-	7	Rock (V)	

NOTES: HOLE DRY UPON COMPLETION. LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 5 LB. BENTONITE CHIPS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 5/12/25 10:02 - X:\GINT\PROJECTS\2022 COMPLETE\600953.GPJ

SUMMARY OF LABORATORY RESULTS

OHIO DEPARTMENT OF TRANSPORTION
OFFICE OF GEOTECHNICAL ENGINEERING

PROJECT CAR-39-23.41 **PID** 105259

OGE NUMBER 600867 **PROJECT TYPE** SUBGRADE

Borehole	Depth	CLM	Direction and Location	G (%)	CS (%)	FS (%)	M (%)	C (%)	LL	PL	PI	M (%)	LOI (%)	ODOT CLASS	USCS CLASS	FLAGS				
																LL	PL	M	OC	NP
X-001-0-21	1.0	26.0	Dn Edge	51	21	14	10	4	21	16	5	9		A-1-a	SC-SM					
X-002-0-21	1.0	24.0	Dn Edge	66	20	10	3	1	NP	NP	NP	13		A-1-a	SW					
X-003-0-21	1.0	27.51	Dn Lane	96	3	1	0	0	NP	NP	NP	3		A-1-a	GP					
X-004-0-21	1.0	26.25	Up Edge	63	14	13	8	2	NP	NP	NP	12		A-1-a	GW-GM					
X-005-0-21	1.0	26.50	Dn	78	13	6	2	1	NP	NP	NP	8		A-1-a	GW					
X-006-0-21	1.0	28.48	Up Lane	85	11	3	1	0	NP	NP	NP	6		A-1-a	GW					
X-007-0-21	1.0	27.36	Up Lane	39	15	18	18	10	29	25	4	21		A-2-4	SM					
X-008-0-21	1.0	28.25	Up Edge	49	16	17	11	7	18	15	3	10		A-1-b	SM					

EXPLANATION OF FLAGS

LL - Check LL (flagged if less than PL or greater than 60)
PL - Check PL (flagged if greater than 50)
M - Check Moisture (flagged if greater than LL)
OC - Check ODOT Class (flagged if different from Visual class)
NP - Check NP (flagged if NP sample has significant clay content vs silt)