

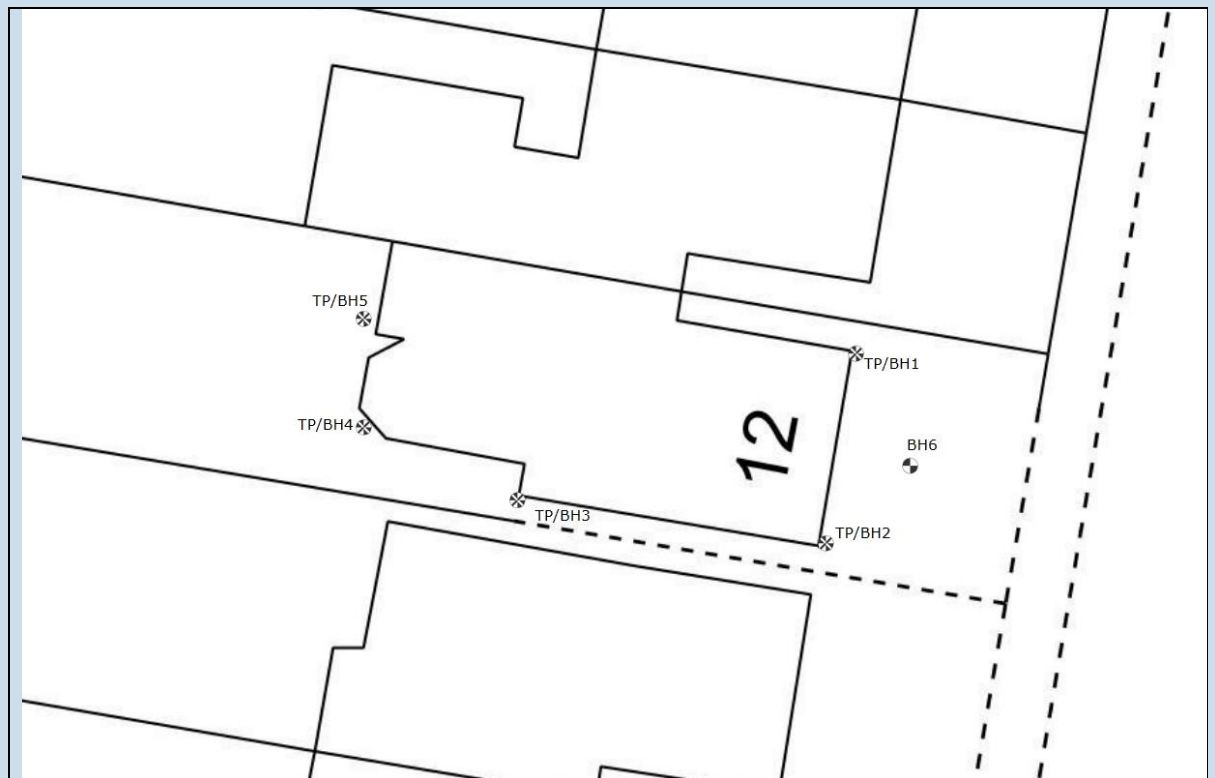
GEOTECHNICAL

for Subsidence Management Services

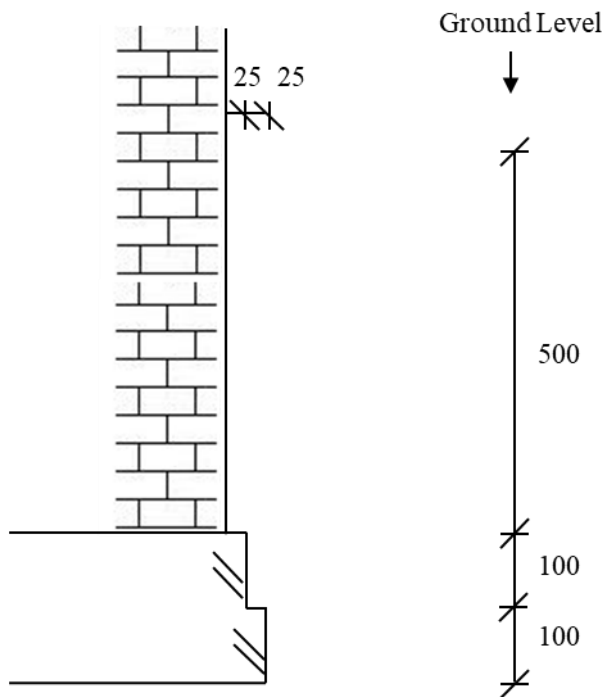
12 Park Avenue, London, N22 7EX

Client:	Subsidence Management Services
Client Contact:	C Sherwin
Claim Number:	IFS-AVI-SUB-21-0091858
Policy Holder:	Ms K Fedorowitz
Report Date:	6 th May 2022
Our Ref:	MD/22/68531

Site Plan



TP/BH3 Foundation Detail



For strata information, please refer to borehole log TPBH3.

TP/BH3 Borehole Log

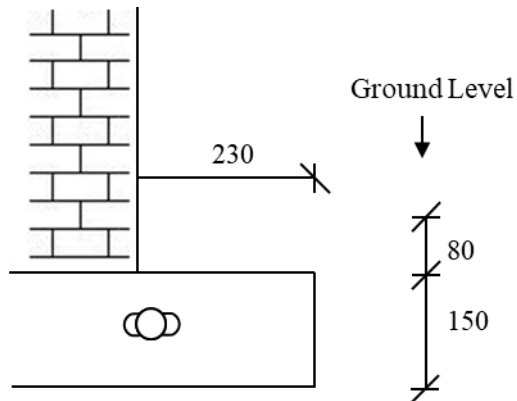
Location 12 Park Avenue, London, N22 7EX				BOREHOLE No TP/BH03	
Job No MR/22/68531	Date 19-04-22	Ground Level (m)	Co-Ordinates ()		
Client Environmental Services				Sheet 1 of 1	

SAMPLES & TESTS			Water	STRATA			Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	
						0.05	MADE GROUND. Paving slab.
						0.10	MADE GROUND. Concrete.
						(0.30)	MADE GROUND. Red/orange gravel. Gravel is of sub angular fine to coarse brick.
						0.40	
						(0.60)	Soft/firm slightly sandy CLAY with some roots.
0.70	HV	30kPa@0.7m					Base of foundation at 0.7m.
0.70-2.10	ROOTS						
0.70	B1						
1.20	11V	48kPa@1.2m					
1.20	B2						
1.70	11V	58kPa@1.7m					
1.70	B3						
2.20	HV	92kPa@2.2m					
2.20	B4						
2.70	HV	108kPa@2.7m					
2.70	B5						
3.20	HV	150kPa@3.2m					
3.20	B6						
3.70	HV	150kPa@3.7m					
3.70	B7						
4.00	HV	150kPa@4.0m					
						4.00	

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Borehole terminated at 4.0m. Excavation remained open and dry on completion.

EBH 68531.GPJ AUGUST 768.GPJ 6/5/22

TP/BH4 Foundation Detail



For strata information, please refer to borehole log TPBH4.

TP/BH4 Borehole Log

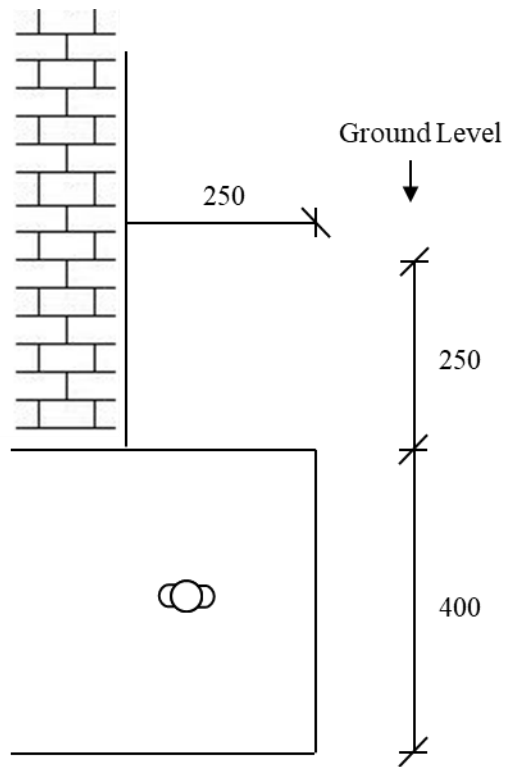
Location 12 Park Avenue, London, N22 7EX				BOREHOLE No TP/BH04	
Job No MR/22/68531	Date 19-04-22	Ground Level (m)	Co-Ordinates ()		
Client Environmental Services				Sheet 1 of 1	

SAMPLES & TESTS			Water	STRATA			Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	
0.25 0.25-3.10 0.25	HV ROOTS B1	40kPa@0.25m				0.05 (0.55) 0.60	MADE GROUND. Paving slab. MADE GROUND. Brown gravelly clay. Gravel is of sub angular fine to coarse brick with brick cobbles. Base of foundation at 0.23m.
0.80 0.80	HV B2	62kPa@0.8m				(0.60) 1.20	Firm brown slightly sandy CLAY with roots.
1.30 1.30	HV B3	88kPa@1.3m					Stiff brown mottled grey slightly sandy CLAY.
1.80 1.80	IIV B4	112kPa@1.8m					
2.30 2.30	IIV B5	120kPa@2.3m				(2.80)	
2.80 2.80	HV B6	150+kPa@2.8m					
3.30 3.30	HV B7	150+kPa@3.3m					
3.80 3.80	IIV B8	150+kPa@3.8m				4.00	
4.00	IIV	150+kPa@4.0m					

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Borehole terminated at 4.0m. Excavation remained open and dry on completion.

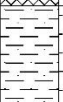
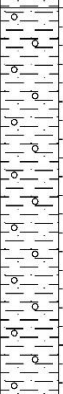
RE: BH 68531.GPJ AUGUST 788.GPJ 6/5/22

TP/BH5 Foundation Detail



For strata information, please refer to borehole log TPBH5.

Location 12 Park Avenue, London, N22 7EX						BOREHOLE No TP/BH05	
Job No MR/22/68531		Date 19-04-22		Ground Level (m)		Co-Ordinates ()	
Client Environmental Services						Sheet 1 of 1	

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION	
						0.05 (0.60)	MADE GROUND. Paving slab. MADE GROUND. Brown slightly sandy gravelly clay. Gravel is of sub angular fine to coarse brick.	
0.65 0.65-2.40 0.65	HV ROOTS B1	72kPa@0.65m				0.65 (0.55)	Base of foundation at 0.65m. Firm/stiff brown slightly sandy CLAY with roots.	
1.10 1.10	HV B2	84kPa@1.1m				1.20 (2.10)	Stiff brown mottled grey slightly sandy slightly gravelly CLAY. Gravel is of sub angular fine to coarse sandstone.	
1.60 1.60	HV B3	106kPa@1.6m						
2.10 2.10	HV B4	150+kPa@2.1m						
2.60 2.60	HV B5	150+kPa@2.6m						
3.10 3.10	HV B6	150+kPa@3.1m				3.30		

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Casing Depth	Dia. mm	Water Dpt	From	To	Hours	From	To	
											Borehole terminated at 3.3m due to refusal. Excavation remained open and dry on completion.

BPH 68531.GPJ AUGUST 17 08:03 00/22

BH6 Borehole Log – Deep Datum

Location 12 Park Avenue, London, N22 7EX						BOREHOLE No BH06 DD			
Job No MR/22/68531		Date 20-04-22		Ground Level (m)		Co-Ordinates ()			
Client Environmental Services						Sheet 1 of 1			

SAMPLES & TESTS			Water	STRATA			Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	
						0.05	MADE GROUND. Block paving.
						0.10	MADE GROUND. Concrete.
							Brown slightly sandy CLAY.
						(5.90)	
						6.00	

Boring Progress and Water Observations						Chiselling			Water Added		GENERAL REMARKS
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From	To	
											Borehole terminated at 6.0m. Excavation remained open and dry on completion. Deep datum installed to 6.0m.

SE BH 68531.GPJ AUGUST 7/08 GPJ 6/5/22

SOIL ANALYSIS

for Subsidence Management Services

12 Park Avenue, London, N22 7EX

Client: Subsidence Management Services
Claim Number: 4501341229
Policy Holder: Ms Krycia Fedorowitz
Report Date: 06/05/2022
Our Ref: L22806

Compiled By:

Name	Position	Signature
Saira Dougan	Laboratory Technician	

Checked By:

Name	Position	Signature
Bob Walker	Laboratory Manager	

Date samples received: 25-Apr-22
Water Content Test Date: 26-Apr-22
Atterberg Limits Test Date: 03-May-22

Oedometer Test Date: 02-May-22



9265

Notes relating to soils testing

Unless otherwise stated, all soil testing was undertaken by Environmental Services at unit 10H Maybrook Business Park, B76 1AL for SubsNetUK of Unit 4 Linnet Court, Cawledge Business Park, Alnwick, NE66 2GD

Soil samples have been prepared in accordance with BS1377:Part 1: 2016 Section 7

Descriptions of soil samples within the laboratory have been undertaken generally in accordance with BS5930:2015. Descriptions of soil samples fall outside of the scope of UKAS accreditation and may have been shortened to remove tertiary components for ease of reference.

The graphical representation of 40% of the LL and the numerical representation of the modified plasticity index (mod. PI) fall outside of the scope of UKAS accreditation.

Following the issue of this soil analysis report, samples will be retained for at least 28 days should additional testing, or referencing, be required. It should be noted that any tests undertaken on soils retained subsequent to the issue of this report may not give an accurate indication of the in-situ conditions of the sample.

This Soil Analysis Report may not be reproduced, in part or in full, without written approval of the laboratory.

The results contained herein relate only to items tested and no others. Additionally as the laboratory is not responsible for the sampling process it takes no responsibility for the condition of the samples and all samples are tested "as received".

Where samples of the same test type are not tested on the same day, or the testing spans multiple days, the test date states the day of the final test or the test date of the final sample.

All information above the laboratory reference on the cover page of this report are as provided by the customer and the laboratory is not responsible for any errors or omissions therein.

Water Content Tests are undertaken in accordance with ISO 17892:Part 1:2014

The Liquid Limit test is undertaken in accordance with BS1377:Part 2:1990 Section 4.4 using an 80g cone with a 30° tip. Sieve percentages reported in blue denote that the sample has been sieved otherwise it has been prepared from its natural state. Sieve percentage reported in BOLD denote that the sample has been oven-dried prior to testing.

Unless otherwise specified herein, the one-point cone penetrometer method has been used with increasing water content. Atterberg results depicted in green have not been tested and are duplicates of the preceding sample, included for reference only.

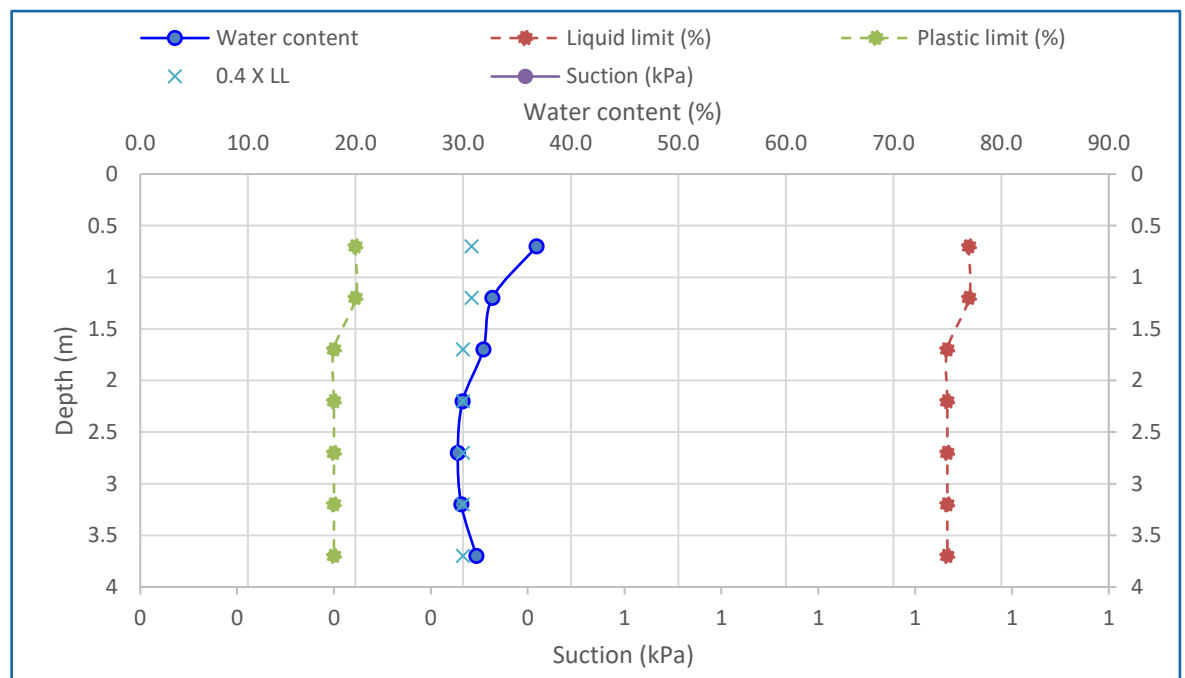
The Plastic Limit test and the determination of the Plasticity Index is undertaken in accordance with BS1377:Part 2:1990. Where a plastic limit has been denoted with an asterisk (*) then it has been derived from the liquid limit and has not been tested.

The Oedometer swell/strain test method is based upon BS1377:Part 5:1990 Section 4.4 'Determination of swelling and collapse characteristics' and unless otherwise stated is undertaken on a remoulded, disturbed, sample.

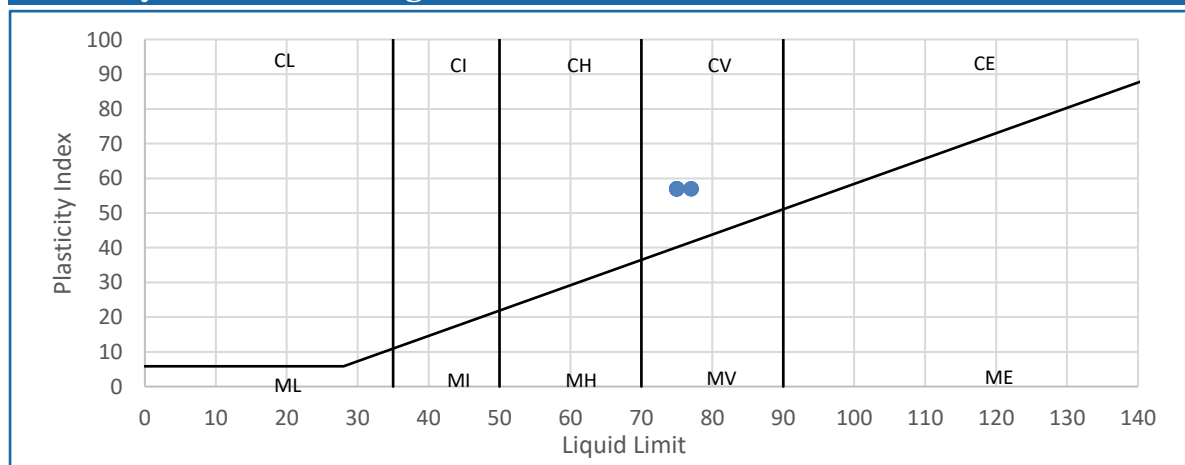
The Oedometer Swell/Strain Test is undertaken in a controlled environment within a temperature range of 16°C and 24°C

Samples from BH3

Lab Ref	Depth (m)	WC (%)	LL (%)	PL (%)	PI (%)	.425 mm (%)	mod. PI (%)	Av. Suc. (kPa)	Description
1	0.7	36.8	77	20	57	82	47		Soft to firm brown/grey veined slightly gravelly CLAY with topsoil rare sand and brick fragments. Gravel is fine, medium and coarse.
2	1.2	32.7	77	20	57	82	47		Soft to firm brown/grey veined slightly gravelly CLAY with topsoil rare sand and brick fragments. Gravel is fine, medium and coarse.
3	1.7	31.9	75	18	57	99	56		Firm brown/grey veined CLAY with rare gravel, sand and brick fragments. Gravel is fine and medium.
4	2.2	30.0	75	18	57	99	56		Firm to stiff brown/grey veined CLAY with rare gravel and sand. Gravel is fine
5	2.7	29.5	75	18	57	99	56		Stiff brown/grey veined CLAY with rare gravel and sand. Gravel is fine
6	3.2	29.8	75	18	57	99	56		Stiff brown/grey veined CLAY
7	3.7	31.2	75	18	57	99	56		Stiff brown/grey veined CLAY with rare gravel. Gravel is fine and medium.

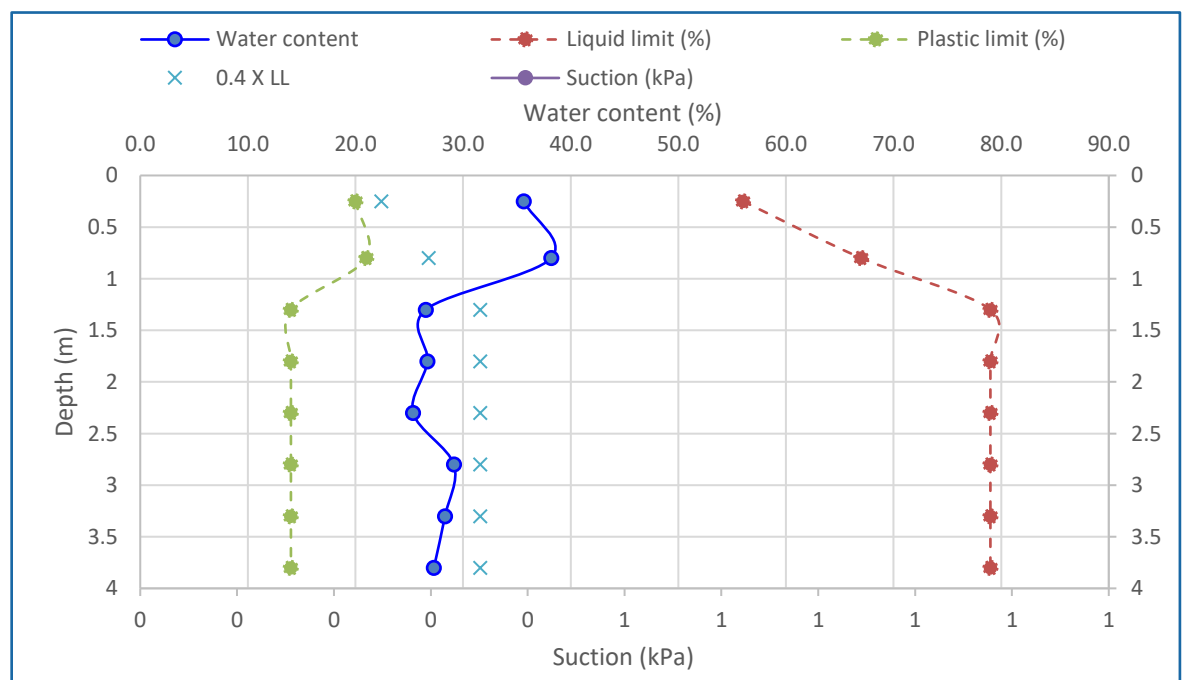


Plasticity Chart for Casagrande Classification

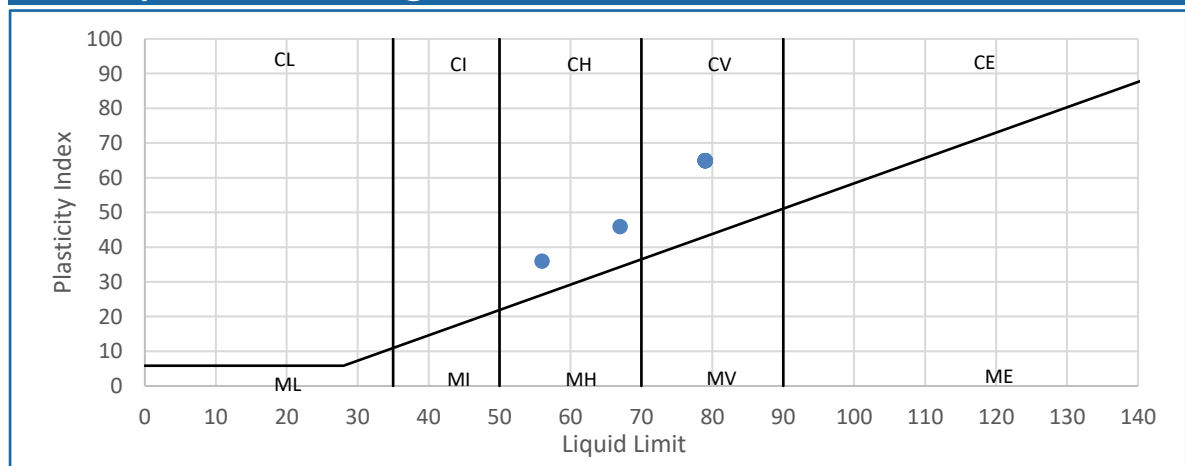


Samples from BH4

Lab Ref	Depth (m)	WC (%)	LL (%)	PL (%)	PI (%)	.425 mm(%)	mod. PI (%)	Av. Suc. (kPa)	Description
8	0.25	35.6	56	20	36	67	24		Soft brown/dark brown mottled gravelly CLAY with topsoil, rare sand, brick fragments and charcoal. Gravel is fine and medium.
9	0.8	38.2	67	21	46	94	43		Soft to firm brown/orange-brown/grey mottled slightly gravelly CLAY with topsoil, rare sand and brick fagments. Gravel is fine and medium.
10	1.3	26.5	79	14	65	98	64		Stiff brown/grey veined CLAY with rare gravel and sand. Gravel is fine
11	1.8	26.7	79	14	65	98	64		Stiff brown/grey veined CLAY with rare gravel and sandy coating. Gravel is fine
12	2.3	25.4	79	14	65	98	64		Stiff brown/grey veined CLAY with rare gravel and sandy coating. Gravel is fine
13	2.8	29.1	79	14	65	98	64		Stiff brown/grey veined CLAY.
14	3.3	28.3	79	14	65	98	64		Stiff brown/grey veined CLAY.
15	3.8	27.3	79	14	65	98	64		Stiff brown/grey veined CLAY with rare gravel and sand. Gravel is fine

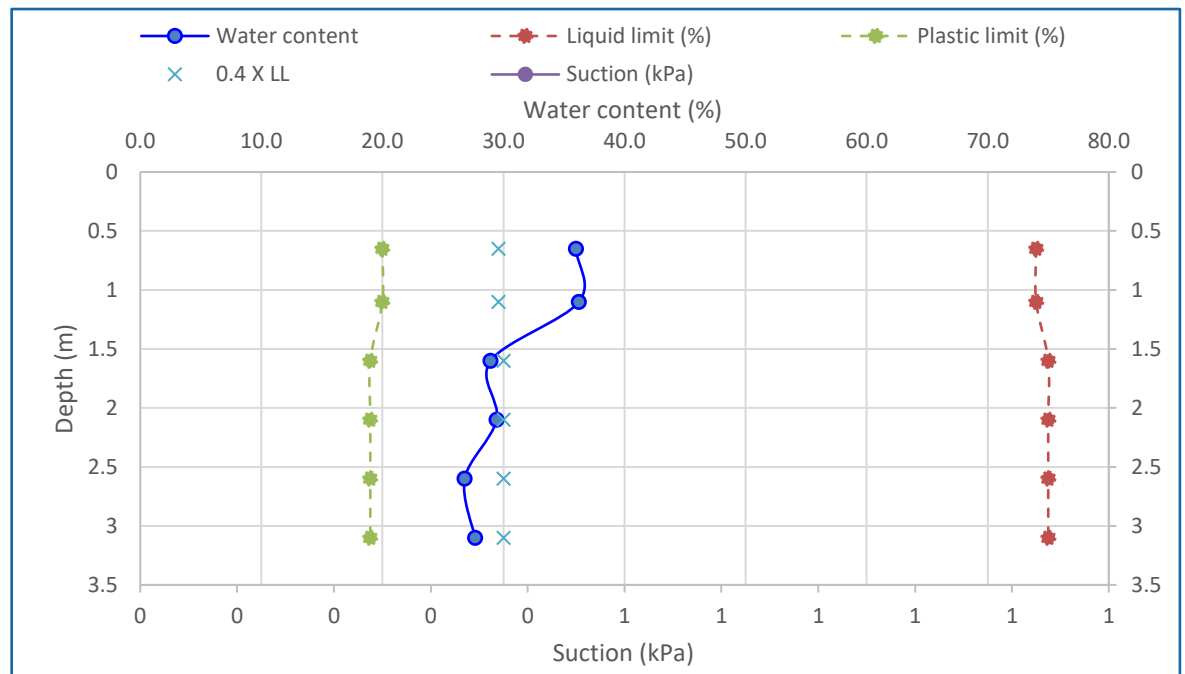


Plasticity Chart for Casagrande Classification

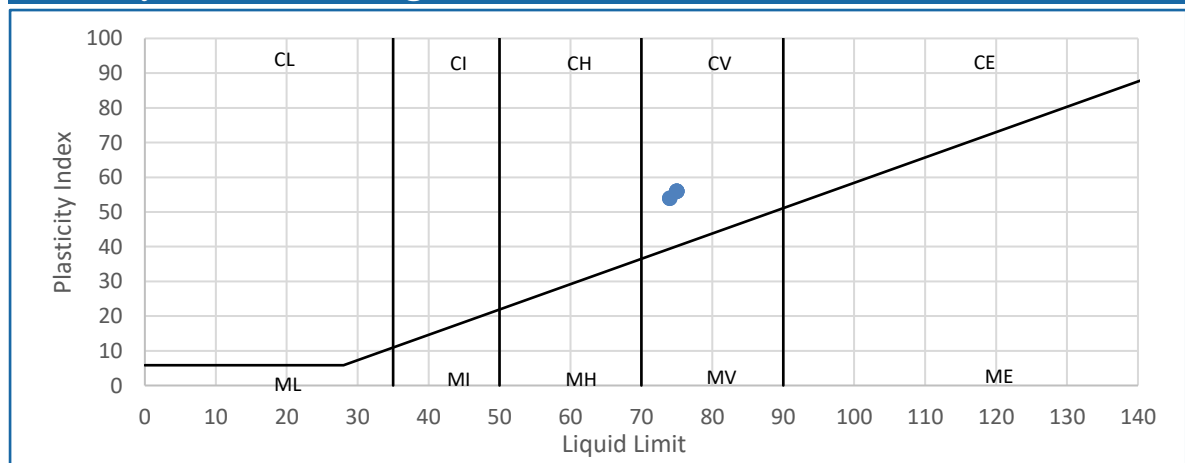


Samples from BH5

Lab Ref	Depth (m)	WC (%)	LL (%)	PL (%)	PI (%)	.425 mm(%)	mod. PI (%)	Av. Suc. (kPa)	Description
16	0.65	36.0	74	20	54	84	45		Soft to firm brown/grey/orange veined slightly gravelly CLAY with topsoil rare sand and brick/concrete fragments. Gravel is fine, medium and coarse.
17	1.1	36.2	74	20	54	84	45		Soft to firm brown/grey veined slightly gravelly CLAY with topsoil rare sand and brick fragments. Gravel is fine and medium.
18	1.6	28.9	75	19	56	99	55		Firm to stiff brown/grey veined CLAY with rare gravel and sand. Gravel is fine
19	2.1	29.4	75	19	56	99	55		Firm to stiff brown/grey veined CLAY with rare gravel and sand. Gravel is fine
20	2.6	26.8	75	19	56	99	55		Stiff brown/grey veined CLAY with rare gravel and sandy coating. Gravel is fine
21	3.1	27.7	75	19	56	99	55		Stiff brown/grey veined CLAY with rare gravel and sand. Gravel is fine



Plasticity Chart for Casagrande Classification

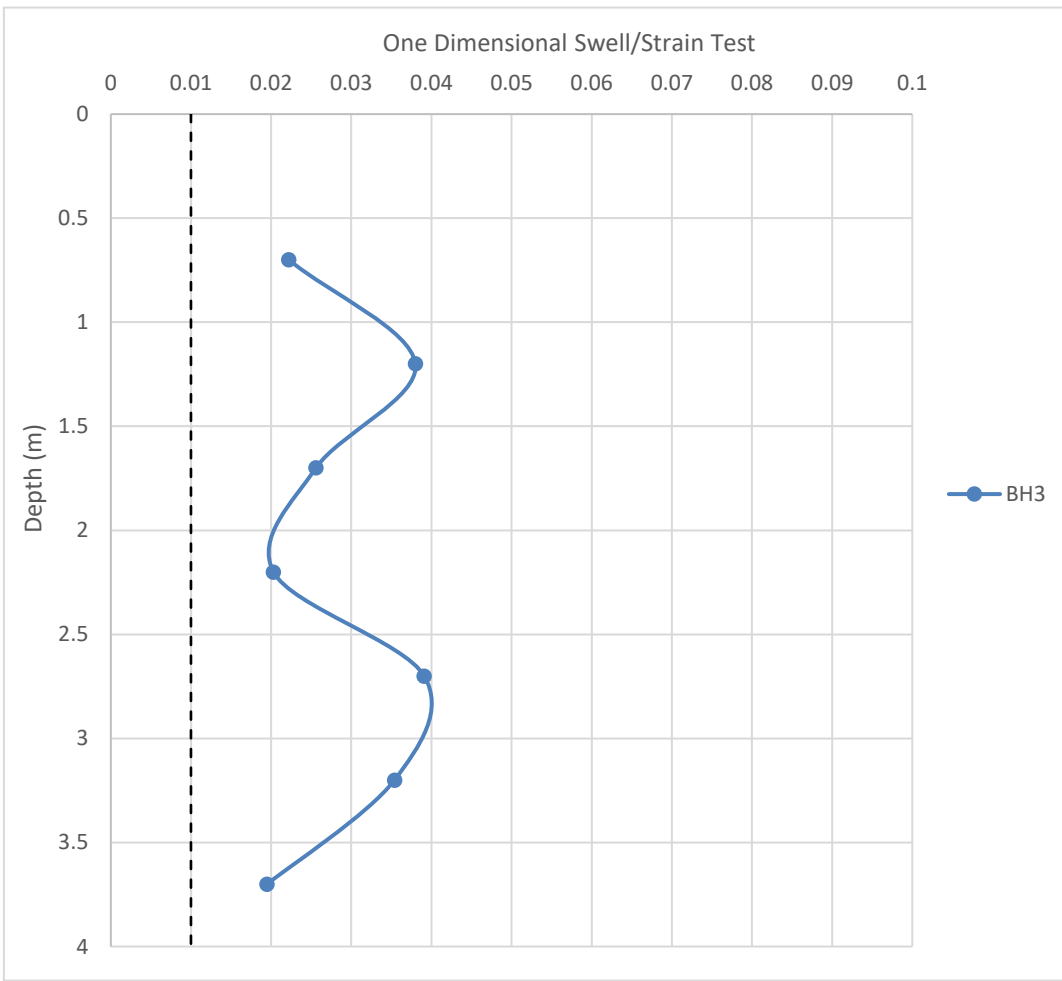


Summary of Oedometer Testing for BH3

Lab Ref	Depth (m)	Strain	Heave (mm)	Remarks
1	0.7	0.0222	7.8	
2	1.2	0.038	9.5	
3	1.7	0.0256	6.4	
4	2.2	0.0203	5.1	
5	2.7	0.0391	9.8	
6	3.2	0.0354	8.9	
7	3.7	0.0195	4.9	

BH 3 estimate of heave

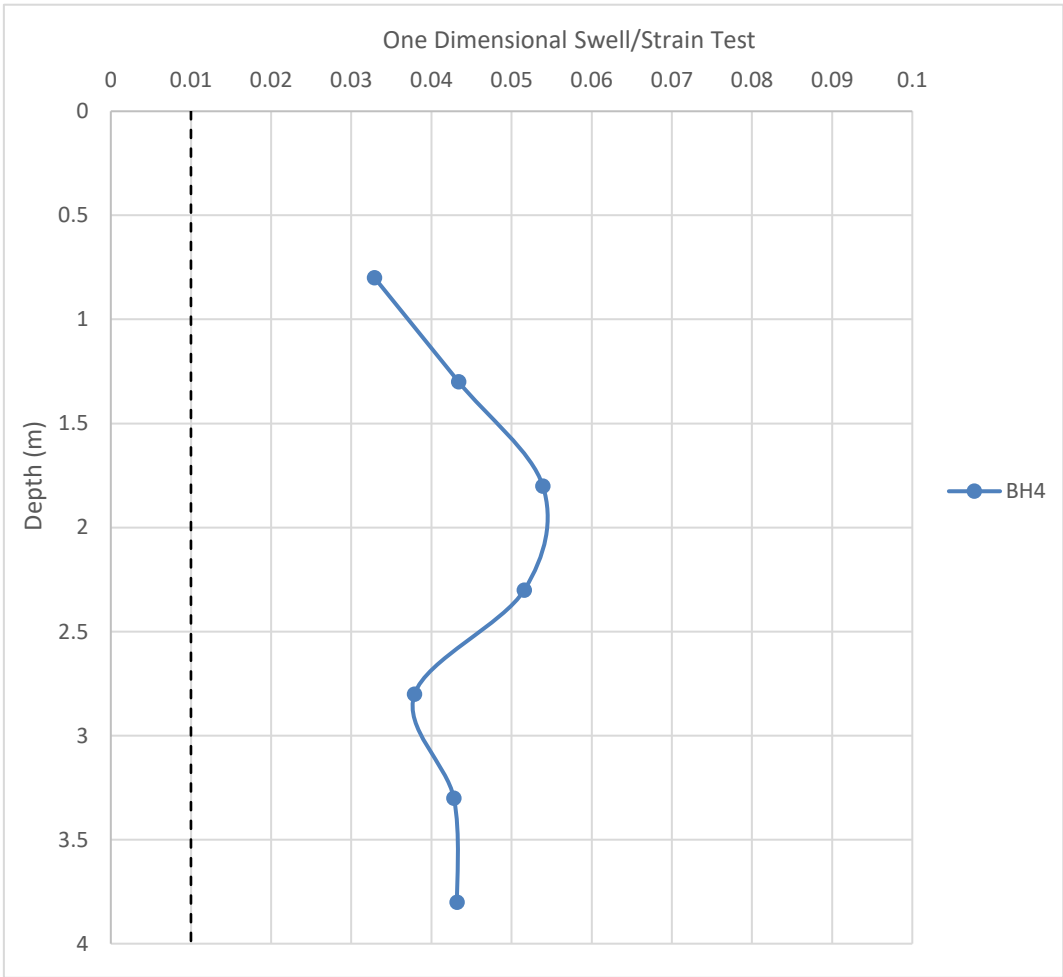
52mm



Summary of Oedometer Testing for BH4

Lab Ref	Depth (m)	Strain	Heave (mm)	Remarks
8	0.25			
9	0.8	0.0329	13.2	
10	1.3	0.0434	10.9	
11	1.8	0.0539	13.5	
12	2.3	0.0516	12.9	
13	2.8	0.0379	9.5	
14	3.3	0.0428	10.7	
15	3.8	0.0432	10.8	

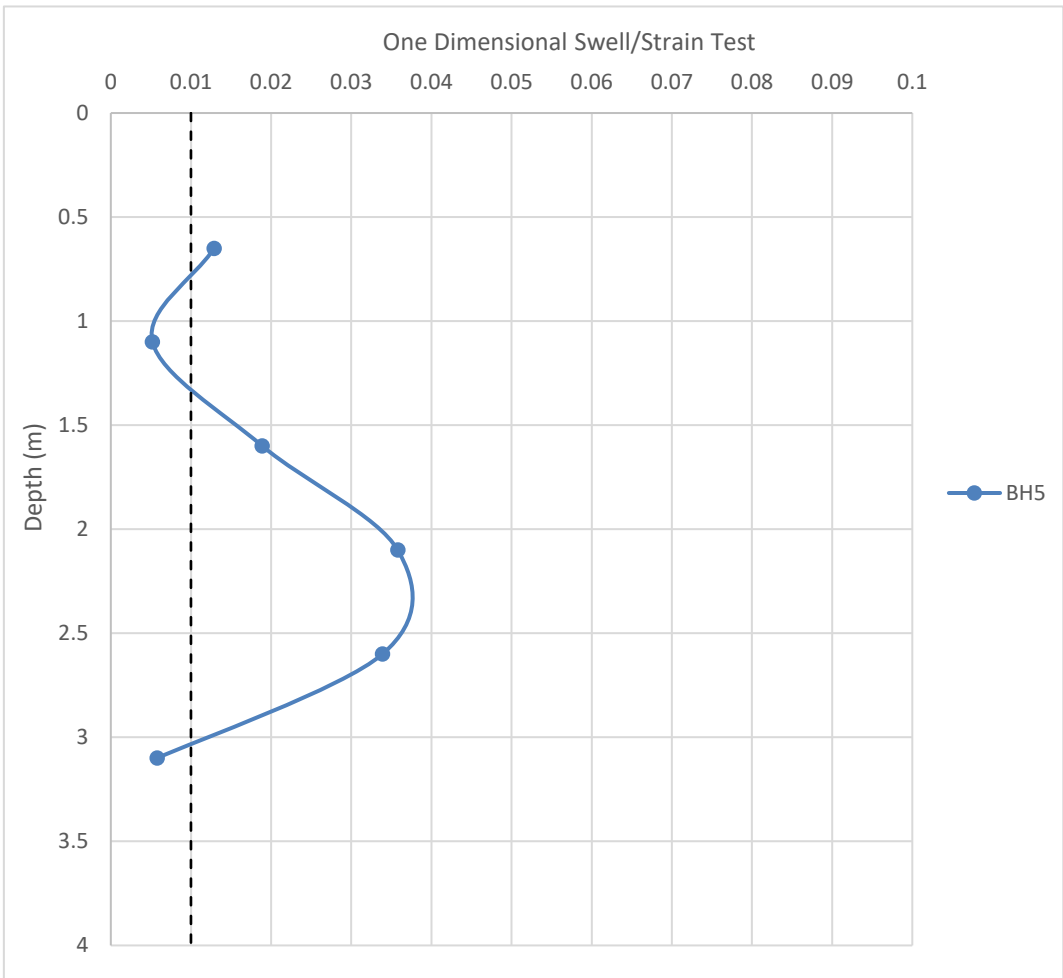
BH 4 estimate of heave	82mm
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Summary of Oedometer Testing for BH5

Lab Ref	Depth (m)	Strain	Heave (mm)	Remarks
16	0.65	0.0129	4.2	
17	1.1	0.0052	0	
18	1.6	0.0189	4.7	
19	2.1	0.0358	8.9	
20	2.6	0.0339	8.5	
21	3.1	0.0058	0	

BH 5 estimate of heave	26mm
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Deviating Samples

The table below details any samples deviating from laboratory procedure or deviating in condition to an extent whereby the validity of results may be affected. A test denoted "I" is likely to have had testing abandoned but where a test result has been provided a non-standard procedure may have been used, details of which will be provided upon request.

LAB REF	CONDITION	WC	ATT	SUC	OED
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

Key

- D Delay in sample receipt
- C Contaminated sample
- B Sample not bagged correctly
- S Sample too sandy (unsuitable for testing)
- G Sample too gravelly (unsuitable for testing)
- V Sample too soft (unsuitable for preparation)
- L Sample too silty
- I Insufficient sample
- O Too much organic content (unsuitable for testing)
- N Non-standard procedure used
- H Sample depth too shallow
- X Testing result too similar to above sample

References

The following provides a brief interpretation of the test results by comparison of the results to published classifications. The Atterberg Limit test may be used to classify the plasticity of soils; the plasticity classes defined in BS5930:2015 "Code of Practice for Site Investigations" are as follows.

CL (ML)	CLAY and CLAY/SILT of Low plasticity
CI (MI)	CLAY and CLAY/SILT of Intermediate plasticity
CH (MH)	CLAY and CLAY/SILT of High plasticity
CV (MV)	CLAY and CLAY/SILT of Very High plasticity
CE (ME)	CLAY and CLAY/SILT of Extremely High plasticity
O	The letter O is added to prefixes to symbolise a significant proportion of organic matter.
NP	Non-plastic

The Plasticity Index (PI) Result obtained from the Atterberg Limit tests may also be used to classify the potential for volume change of fine soils, in accordance with the National House Building Council's standards - Chapter 4.2 (2003) "Building Near Trees", as summarised below.

Modified PI < 10	Non Classified.
Modified PI = 10 to <20	Low volume change potential.
Modified PI = 20 to <40	Medium volume change potential.
Modified PI = 40 or greater	High volume change potential.

The 2003 edition of Chapter 4.2 also permits use of the Plasticity Index without modification. The classifications for this are grouped by soil type (soils with similar visual soils description and using unmodified Plasticity Indices).

ROOT IDENTIFICATION

for Subsidence Management Services

12 Park Avenue, London, N22 7EX

Client: Subsidence Management Services
Client Contact: Chris Sherwin
Claim Number: 4501341229
Client Reference: IFS-AVI-SUB-21-0091858
Policy Holder: Ms Krycia Fedorowitz
Report Date: 28 April 2022
Our Ref: R44965



Intec
Parc Menai, Bangor,
Gwynedd, North Wales
LL57 4FG
Tel: 01248 672652

Sub Sample	Species Identified		Root Diameter	Starch
TP/BH3:				
0.7-2.1m	<i>Populus</i> spp. *	1	3 mm	Moderate
TP/BH4:				
0.25-3.1m	<i>Clematis</i> spp.	2	3 mm	Abundant
TP/BH5:				
0.63-2.4m	Vitaceae spp.		3 mm	Low
0.63-2.4m	Leguminosae spp.	3	1 mm	Abundant

Comments:

- 1 - Plus 3 others also identified as *Populus* spp.
- 2 - Plus 3 others also identified as *Clematis* spp.
- 3 - Plus 2 others also identified as Leguminosae spp.

Populus spp. are poplars and aspens.

Clematis spp. are common flowering, garden climbers.

Vitaceae spp. include creepers such as *Parthenocissus* (Virginia creeper), *Vitis* (grape vine) and *Ampelopsis*.

Leguminosae spp. include laburnum, *Robinia* (false acacia or locust), broom, the pagoda tree and the climber wisteria.

* EPSL research has developed a unique ability to differentiate Willows from Poplars. No other laboratory in the UK can currently provide this service. We now offer this benefit at no extra cost.

Signed: R J Shaw

Unless we are otherwise instructed in writing, the above sample material will normally be disposed of 6 years after the date of this report.