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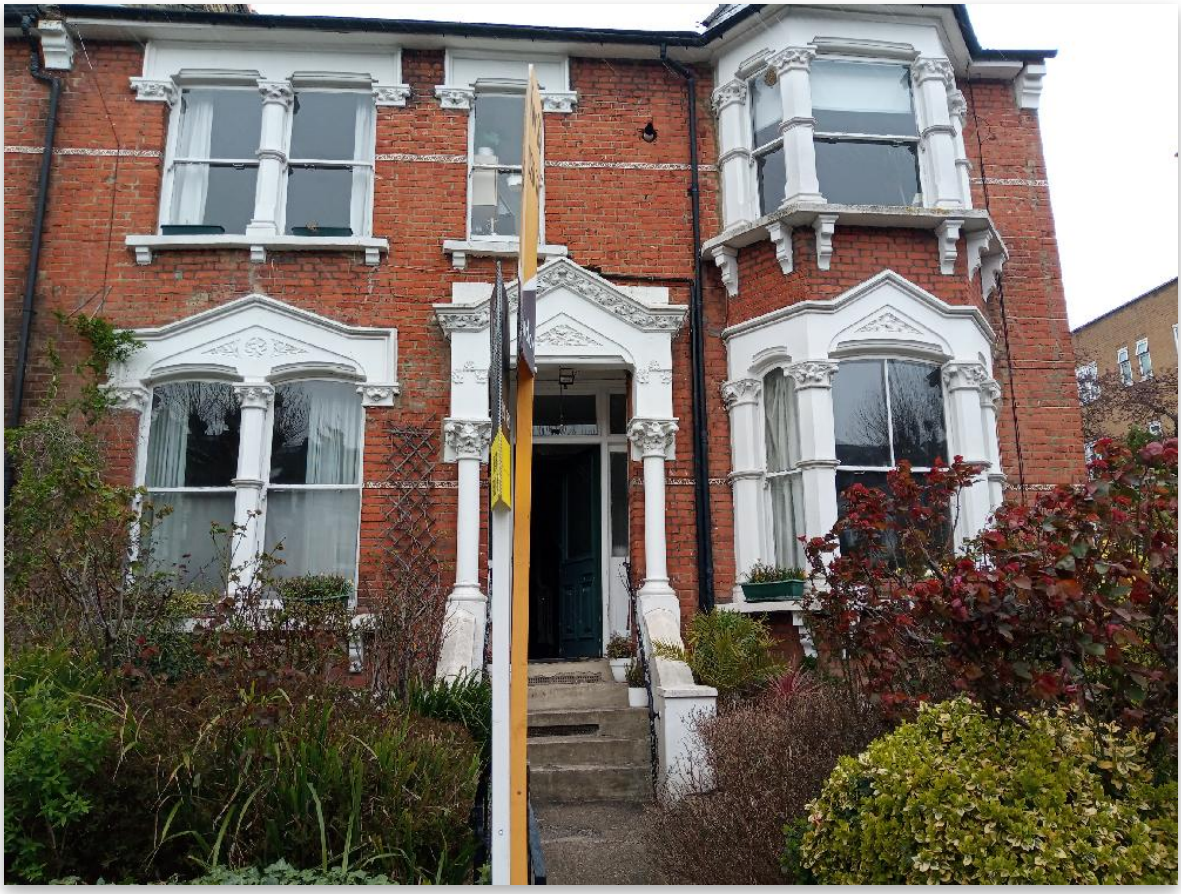
Site Investigation Report

Auger Ref:
148967.1.TSI



Job Information	
Client	Questgates
Client ref	QG1S1223419
Visit date	24/03/2023
Report date	24/04/2023

Job Summary

- 2 trial holes undertaken. Read more.
- Requested root samples not taken. Read more.

CYBER ESSENTIALS
ROSPA Member
2018 ROSPA Fleet Safety Award Gold
ISOQAR REGISTERED UKAS MANAGEMENT SYSTEMS 0026
Cert No. 17143 ISO 9001 ISO 14001 ISO 16001
Drain Shield uk
INVESTORS IN PEOPLE® We invest in people Gold

Job Information

Overview	
Brief	Auger were commissioned by Questgates to undertake a site investigation within the area of concern (AOC) at the property.

Findings	
Trial Hole Findings	Within TH1 we revealed the footing and augered to the required depth (3m) in the proposed location. We took soil samples. No roots were found in the TH, so no samples were taken. These measurements are shown in Trial Hole Log 1 below. Within TH2 we revealed the footing and augered to the required depth (3m) in the proposed location. We took soil and root samples. These measurements are shown in Trial Hole Log 2 below.

Photographs

Trial Hole 1

Fig 1.1: Trial Hole 1 Location

Fig 1.2: Trial Hole 1 Footing

Trial Hole 2

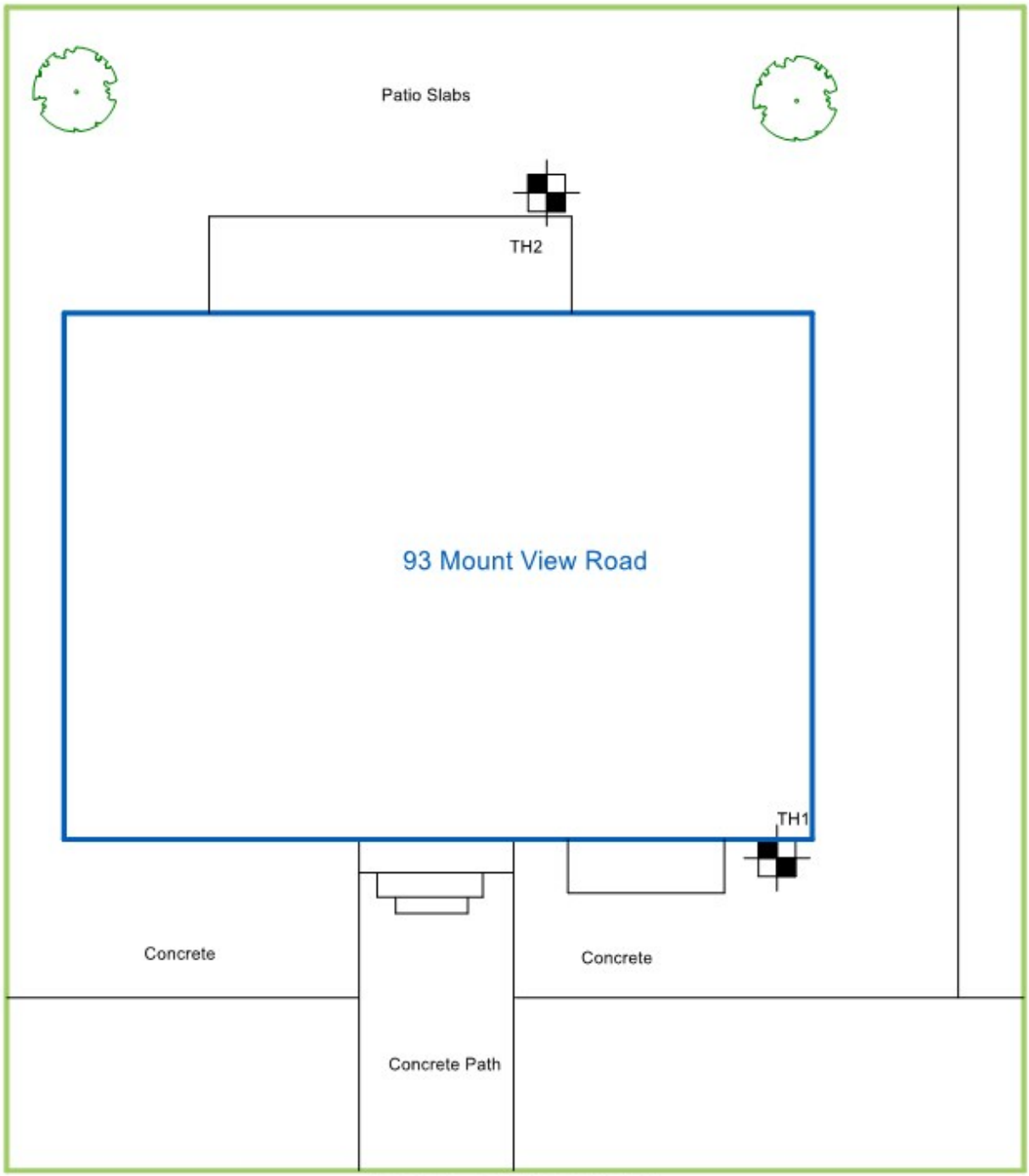
Fig 2.1: Trial Hole 2 Location

Fig 2.2: Trial Hole 2 Footing

Site Photos

Fig 3.1: Rear of property

auger	Existing Layout	Job Ref: 148967.1 Date: 24/03/2024



This drawing should be used for diagrammatic purposes only. Auger are not responsible or liable for any 3rd party works undertaken using the details outlined in this drawing.
Confirmation of the drainage configuration can only be confirmed by excavation or detailed technical survey.

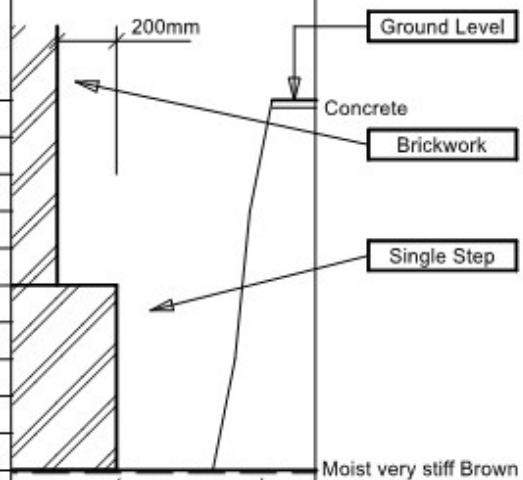
LEGEND

- = Manhole (MH)
- = Inspection Chamber (IC)
- = Inspection Point (IP)
- = Blockage / Collapse
- = Soil Vent Pipe (SVP) / WC
- = Combined Waste Gully (CWG) / Foul Waste Gully (FWG)
- = Rainwater Gully (RWG)
- = Rainwater Pipe (RWP)
- = Lines not camera surveyed
- = Lines camera surveyed
- = Assumed water mains feed
- = Walls
- = Fences
- = Building Outline
- = Trial hole
- = Borehole
- = Direction of flow
- = Gate / Door
- = Shrubs / Bush
- = Hedge
- = Tree
- = Steps

Trial Hole Log No.1

Location: Front RHC

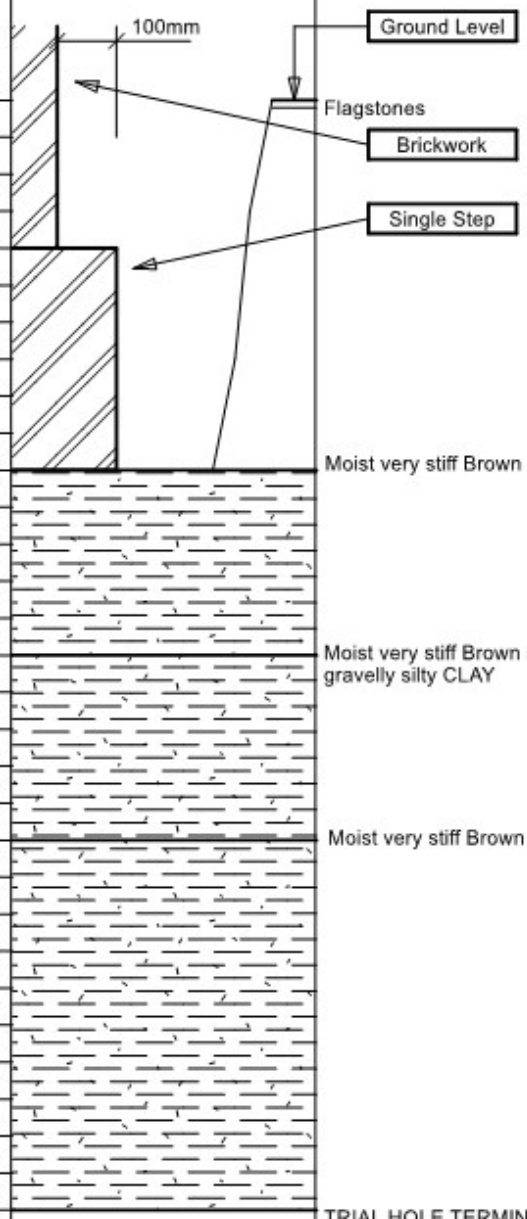
Job Ref: 148967.1.TSI

Depth (m)	Symbolic Log	Strata Description	Insitu Tests SV(19)	Insitu Tests	Soil Sample	Root Sample
0.0		Concrete				
1.0		Moist very stiff Brown silty CLAY	82kpa		Soil @ 1m	
1.5		Moist very stiff Brown silty fine to medium gravelly CLAY	82kpa		Soil @ 1.5m	
2.0		Moist very stiff Brown silty CLAY	88kpa		Soil @ 2m	
2.5		Moist very stiff Brown silty fine to medium gravelly CLAY	88kpa		Soil @ 2.5m	
3.0		TRIAL HOLE TERMINATED	92kpa			

Trial Hole Log No.2

Location: Rear RHC of lean too

Job Ref: 148967.1.TSI



Depth (m)	Symbolic Log	Strata Description	Insitu Tests SV(19)	Insitu Tests	Soil Sample	Root Sample
1.0		Moist very stiff Brown silty CLAY	80kpa		Soil @ 1m	Root @ 1m
1.5		Moist very stiff Brown slightly fine gravelly silty CLAY	80kpa		Soil @ 1.5m	
2.0		Moist very stiff Brown silty CLAY	88kpa		Soil @ 2m	
2.5			90kpa		Soil @ 2.5m	
3.0		TRIAL HOLE TERMINATED	90kpa			

Richardson's Botanical Identifications

Root identification
Vegetation surveys
Tree/Building investigations
Plant taxonomy

Dr Ian B K Richardson
BSc, MSc, PhD, MRSB, FLS
James Richardson
BSc (Hons. Biology)

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RG6 7BB

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Web: www.botanical.net

Auger Solutions
Auger House
Cross Lane
WALLASEY
Wirral CH45 8RH

Your ref: **148967-1-1**

Our ref: 86/4313

03/05/2023

Dear Sirs

Root ID

The samples you sent in relation to the above on 24/03/2023 have been examined. Their structures were referable as follows:

TH2, 1.0m		
1 no.	Examined root: most like ACER (Maples, Sycamores). In its absence, our next suggestions would be CARPINUS (Hornbeam) and also AESCULUS (Horse Chestnut and related Buckeyes). This was a very IMMATURE sample - less than 0.15mm in diameter.	Alive, recently*.
1 no.	Microscopic examination showed insufficient cells for recognition.	

Click here for more information: ACER AESCULUS CARPINUS

I trust this is of help. Please call us if you have any queries; our Invoice is enclosed.

Yours faithfully

Dr Ian B K Richardson

* Based mainly on the Iodine test for starch. Starch is present in some cells of a living woody root, but is more or less rapidly broken down by soil micro-organisms on death of the root, sometimes before decay is evident. This result need not reflect the state of the parent tree.

* * Try out our web site on www.botanical.net * *

Identified with no information on vegetation, on or off site.

Report commissioned by auger

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	Geotechnical Testing Analysis Report	auger environmental + claims mgmt + subsidence + drainage +
Unit 3 & 4, Heol Aur, Dafen Ind Estate, Dafen Llanelli, Carmarthenshire, SA14 8QN	*The testing results contained within this report have been performed by GSTL a UKAS accredited laborotory on behalf of Auger.	Auger House, Cross Lane, Wallasey, Wirral, CH45 8RH

Summary Of Claim Details

Policy Holder	
GSTL Job Reference	65580
SI Date	24/03/2023
Issue Date	24/03/2023
Report Date	14/04/2023
Auger Reference	148967.1.2.RSS
Insurance Company	Zurich
LA Claim Reference	QG1S1223419
LA Co. Reference	Questgates Subsidence

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Checked and approved	14/04/2023	Wayne Honey	W. Honey

UKAS TESTING
2788

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX (BS 1377:1990 - Part 2 : 4.4 & 5.3) DESCRIPTIONS	auger environmental claims mgmt subsidence drainage
GSTL Contract Number	**65580**	
Report Date	**14/04/2023**	
Auger Reference	**148967.1.2.RSS**	

TH Trial Hole	Sample Type	Depth (m)	Sample Description
TH1	D	1.00	Brown silty CLAY
TH1	D	1.50	Brown fine to medium gravelly sandy silty CLAY
TH1	D	2.00	Brown silty CLAY
TH1	D	2.50	Brown silty fine to medium gravelly CLAY
TH2	D	1.00	Brown silty CLAY
TH2	D	1.50	Brown slightly fine gravelly silty CLAY
TH2	D	2.00	Brown silty CLAY
TH2	D	2.50	Brown silty CLAY

Test Operator
Jason Smith

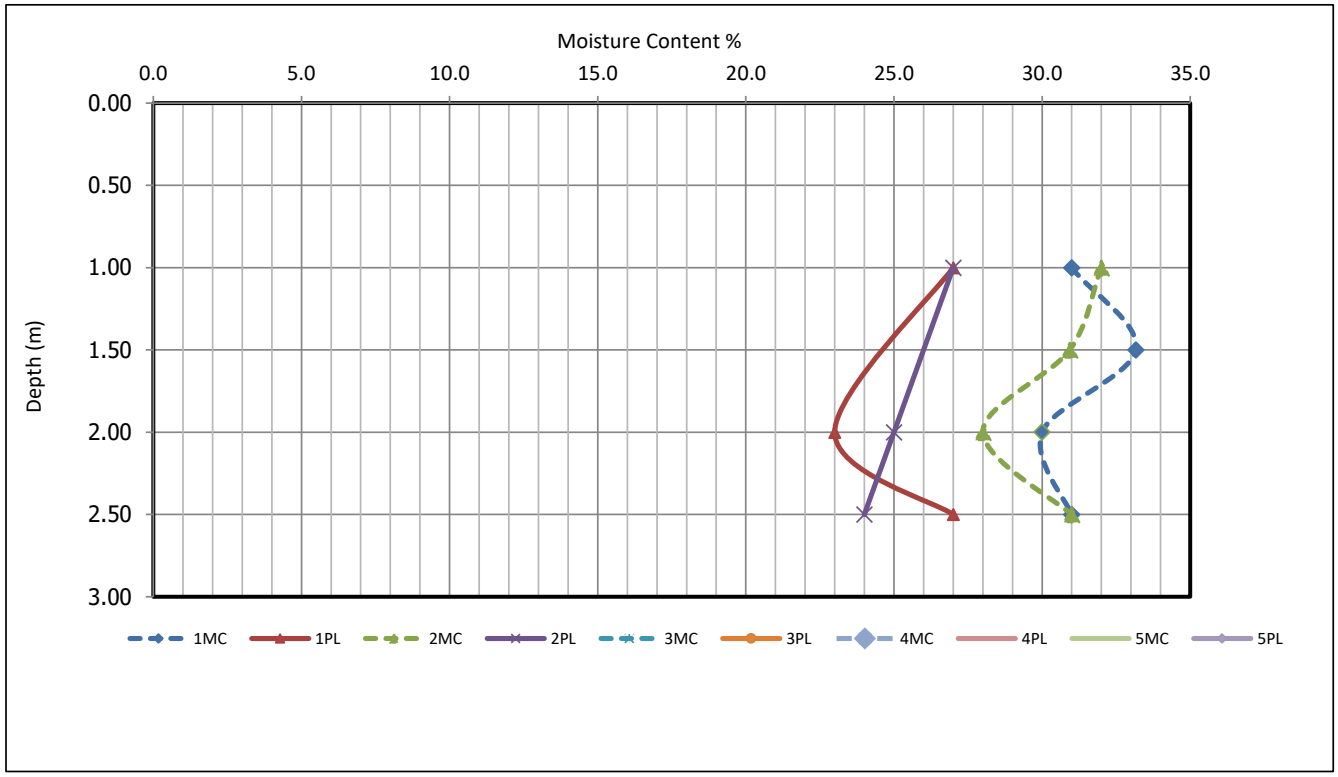
GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX (BS 1377:1990 - Part 2 : 4.4 & 5.3)	auger environmental claims mgmt subsidence drainage
GSTL Contract Number	**65580**	
Report Date	**14/04/2023**	
Auger Reference	**148967.1.2.RSS**	
Remarks	NP - (Non-Plastic), # - (Liquid Limit and Plastic Limit Wet Sieved)	

TH Trial Hole	Sample Type	Depth (m)	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing .425mm %	NHBC Chapter 4.2	Remarks
TH1	D	1.00	31	77	27	50	98	HIGH VCP	CV Very High Plasticity
TH1	D	1.50	33						
TH1	D	2.00	30	80	23	57	100	HIGH VCP	CV Very High Plasticity
TH1	D	2.50	31	73	27	46	80	HIGH VCP	CV Very High Plasticity
TH2	D	1.00	32	72	27	45	98	HIGH VCP	CV Very High Plasticity
TH2	D	1.50	31						
TH2	D	2.00	28	70	25	45	100	HIGH VCP	CH/V High/HighPlasticity
TH2	D	2.50	31	67	24	43	98	HIGH VCP	CH High Plasticity

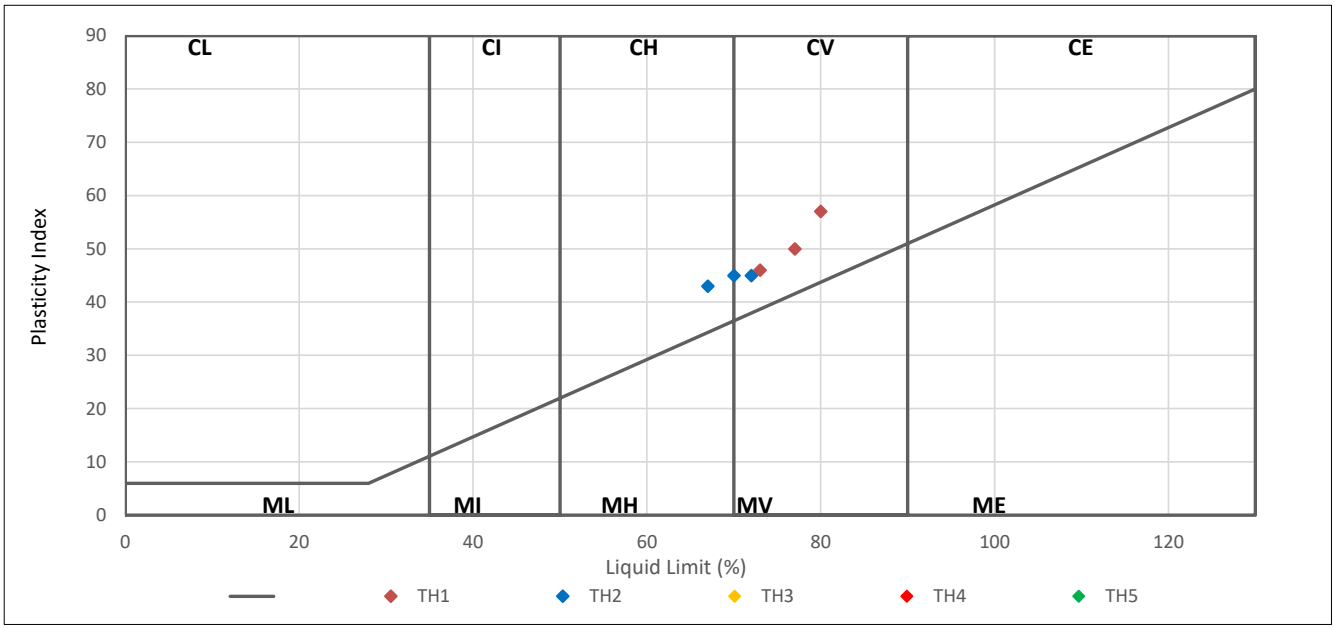
Modified Plasticity Index (PI) <10	: Non Classified
Modified PI = 10 to <20	: Low volume change potential (LOW VCP)
Modified PI = 20 to <40	: Medium volume change potential (Med VCP)
Modified PI = 40 or greater	: High volume change potential (HIGH VCP)

The Atterberg Limits May also be used to classify the volume change potential of fine soils using the National House building system, as given in the NHBC's Standards Chapter 4.2 (2003) "Building Near Trees"

Test Operator
Jason Smith



PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION
BS 5930:1999+A2:2010



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Modified PI = 10 to <20	: Low volume change potential (LOW VCP)
Modified PI = 20 to <40	: Medium volume change potential (Med VCP)
Modified PI = 40 or greater	: High volume change potential (HIGH VCP)

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