Auger House, Cross Lane,
Wallasey, Wirral, CH45 8RH

Tel: 0151 630 5886
Fax: 0151 630 5884

admin@auger.co.uk
www.auger.co.uk

Site Investigation Report

Auger Ref:

145038.1.USI

Job Informat on	
Cl ent	Crawford & Co
Cl ent ref	SU2203656
V s t date	06/03/2023
Report date	18/04/2023

Job Summary

- CCTV survey undertaken. Read more.
- 1 tr al hole undertaken. Read more.
- Water encountered n TH1 Read more.
- No dra nage defects found. Read more.

Job Information

Overview

Brief	Auger were commissioned by Crawford & Co to undertake a site investigation and CCTV inspection of the underground drainage within the area of concern (AOC) at the property.

Findings

Trial Hole Findings	Within Trial hole 1 we revealed the footing but were unable to auger to the required depth (3m) in the proposed location. This was due to a solid obstruction we encountered at 1.6m below ground level, therefore we carried out a remote borehole in the grass area closest to TH1 in which we achieved a depth of 3.0m. We took soil and root samples. These measurements are shown in Trial hole log 1 below. In TH1, water was encountered at 1.6m below ground level.
Drain Survey	We carried out a CCTV survey of the below ground drainage system, our findings of which are as follows: **Line 1 - From RWG1 downstream to inaccessible manhole.** Our survey of line 1 revealed no significant defects to the VC pipework on this line which could be allowing an escape of water. **Please note:** RWG1 was surveyed down to what is believed to be a manhole, however as shown in figure 3.1 we were unable to access the manhole. If the loss adjuster wishes for us to survey any drainage from the manhole it will require the customer to move these boxes. We will await the loss adjusters further instructions.

Recommendations

Refer Back to Client	We will now refer the claim back to the client in order to progress the claim.

Photographs

Trial Hole 1

Fig 1.1: Trial Hole 1 Location

Fig 1.2: Trial Hole 1 Footing

S te Photos

F g 3.1: Storage boxes prevent ng access to MH	F g 3.2: Rear of property
	

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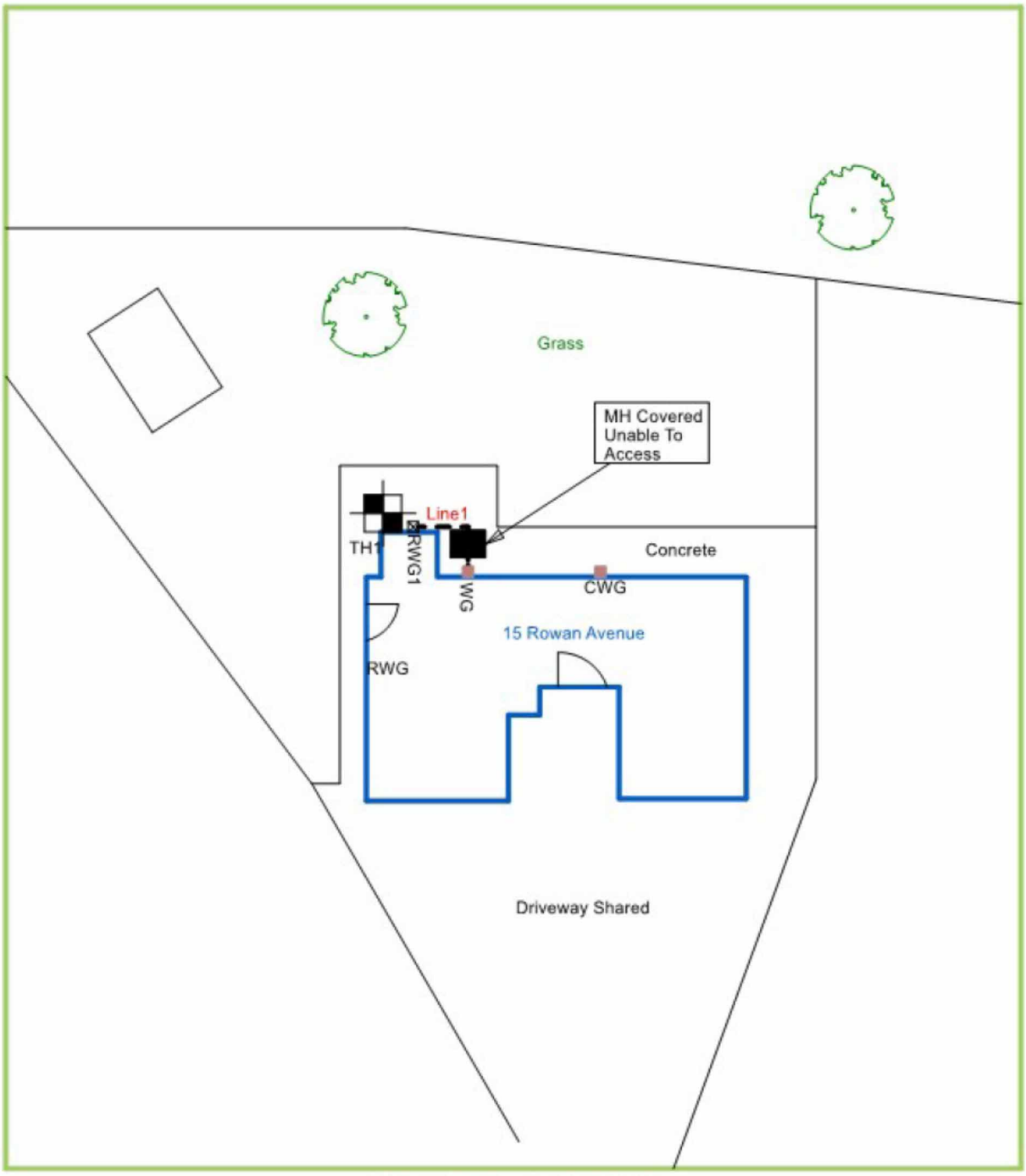
Existing Layout

Job Ref: 145038.1

Date: 07/03/2023



FRONT OF PROPERTY

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

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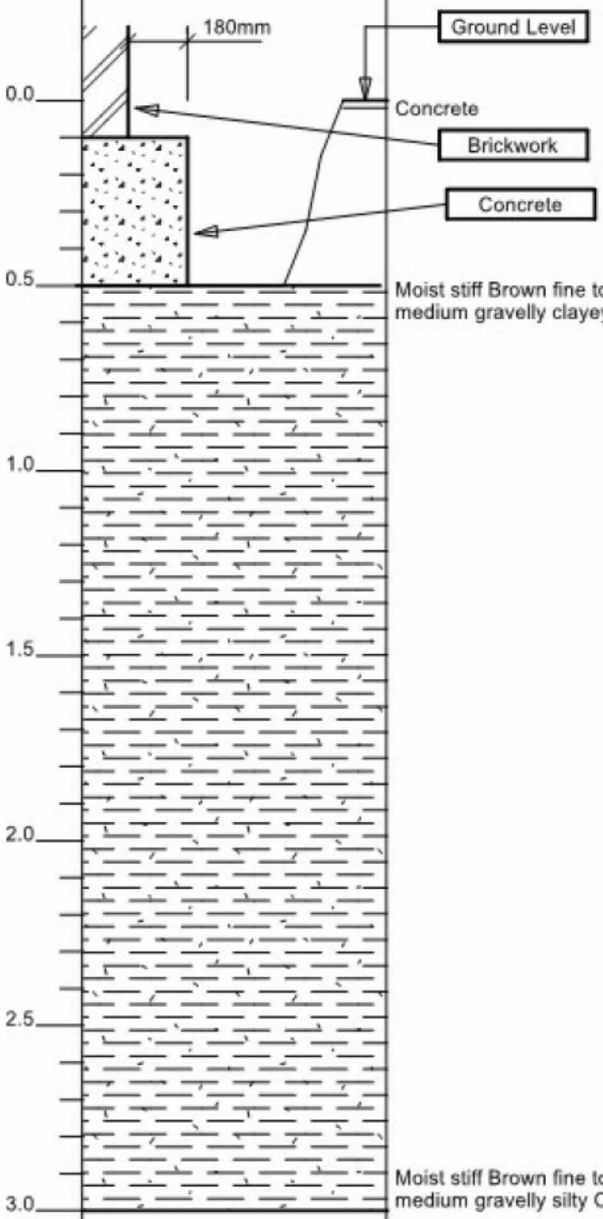
Trial Hole Log No.1

Location: TH1 rear of the property

Job Ref: 145038.1.USI



Depth (m)	Strata Description	Insitu Tests SV(19)	Soil Sample	Root Sample
0.5	Moist stiff Brown fine to medium gravelly clayey SILT	72kpa	Soil @ 0.5m	Root @ 0.5m
1.0		60kpa	Soil @ 1m	Root @ 1m
1.5		80kpa	Soil @ 1.5m	
2.0		92kpa	Soil @ 2m	
2.5		70kpa	Soil @ 2.5m	
3.0	Moist stiff Brown fine to medium gravelly silty CLAY TRIAL HOLE TERMINATED	70kpa	Soil @ 3m	

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	65119
SI Date	06/03/2023
Issue Date	06/03/2023
Report Date	20/03/2023
Auger Reference	145038.1.2.RSS
Insurance Company	Broadspire
LA Claim Reference	SU2203656
LA Co. Reference	Crawford & Co

Checked and approved	20/03/2023	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	65119	
Report Date	20/03/2023	
Auger Reference	145038.1.2.RSS	

TH Trial Hole	Sample Type	Depth (m)	Sample Description
TH1	D	0.50	Brown fine to medium gravelly clayey SILT
TH1	D	1.00	Brown fine to medium gravelly clayey SILT
TH1	D	1.50	Brown fine to medium gravelly clayey SILT
TH1	D	2.00	Brown fine to medium gravelly clayey SILT
TH1	D	2.50	Brown fine to medium gravelly clayey SILT
TH1	D	3.00	Brown fine to medium gravelly 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

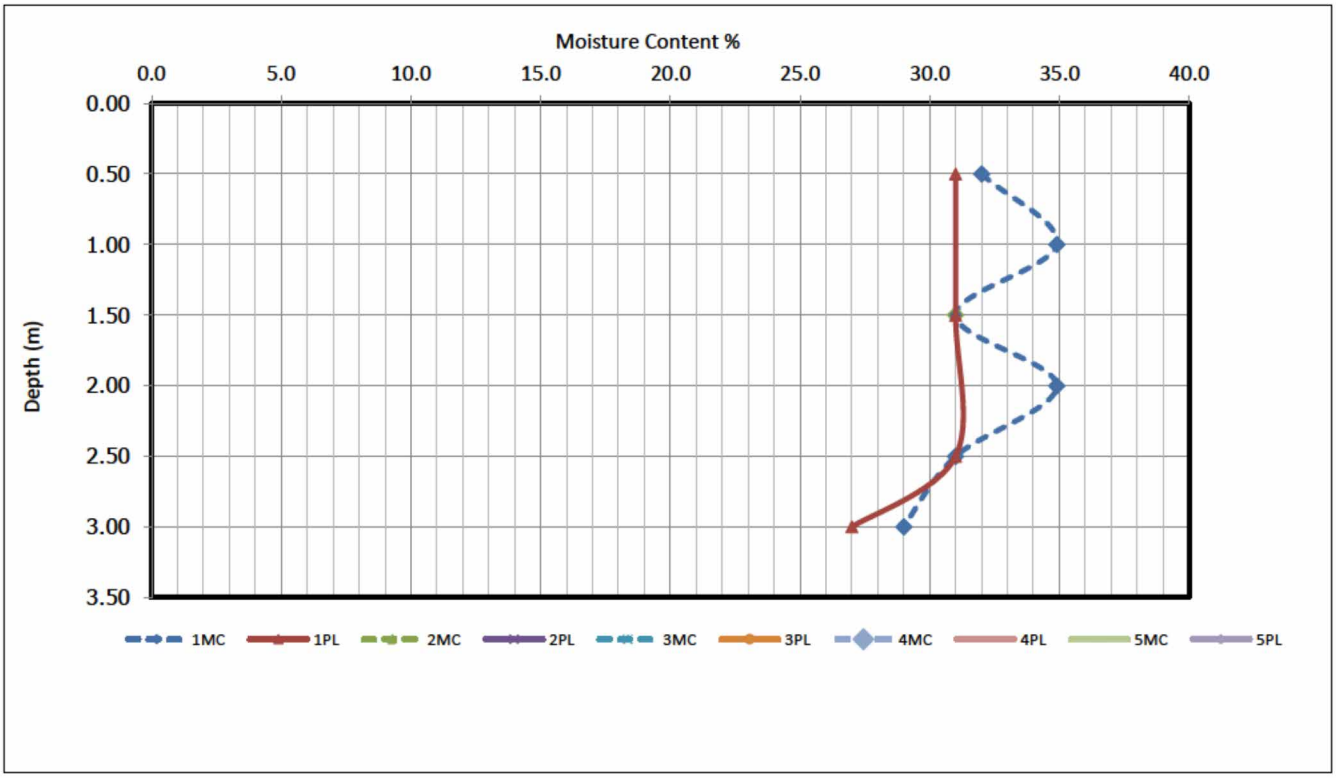
GSTL Contract Number	65119	
Report Date	20/03/2023	
Auger Reference	145038.1.2.RSS	
Remarks	NP - (Non-Plastic), # - (Liquid Limit and Plastic Limit Wet Sieved)	

TH Trial Hole	Sample Type	Depth (m)	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing .425mm %	NHBC Chapter 4.2	Remarks
TH1	D	0.50	32	55	31	24	95	MEDIUM VCP	MH High Plasticity
TH1	D	1.00	35						
TH1	D	1.50	31	55	31	24	95	MEDIUM VCP	MH High Plasticity
TH1	D	2.00	35						
TH1	D	2.50	31	57	31	26	94	MEDIUM VCP	MH High Plasticity
TH1	D	3.00	29	54	27	27	93	MEDIUM VCP	CH High Plasticity

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

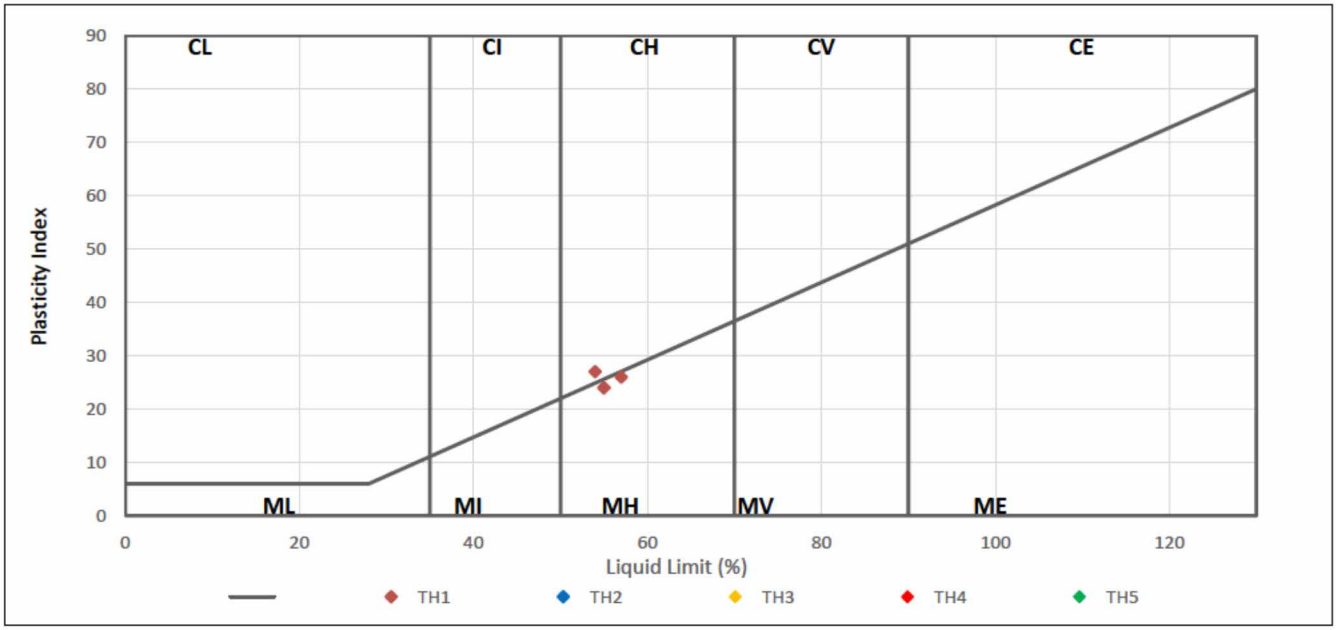
The Atterberg Limits May also be used to classify the volume change potential of fine soils using the National House building system, as given in the NHBC's Standards Chapter 4.2 (2003) "Building Near Trees"

Test Operator
Jason Smi h



PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION

BS 5930:1999+A2:2010



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Test Operator
Jason Smi h

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)

Enterprise House
49-51 Whiteknights Road
Reading
RG6 7BB

Tel: (0118) 986 9552 *(Direct line)*
E-mail: richardsons@botanical.net
Web: www.botanical.net

Auger Solutions
Auger House
Cross Lane
WALLASEY
Wirral CH45 8RH

Your ref: **145038-1-1**

Our ref: 86/2002

14/04/2023

Dear Sirs

Root ID

The samples you sent in relation to the above on 06/03/2023 have been examined. Their structures were referable as follows:

TH1, 0.5m		
6 no.	Examined root: FRAXINUS (Ash).	Alive, recently*.
2 no.	Both samples revealed too few cells for microscopic identification.	
TH1, 1.0m		
4 no.	Examined root: FRAXINUS (Ash).	Alive, recently*.
1 no.	Microscopic examination showed insufficient cells for recognition.	

Click here for more information: FRAXINUS

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

Yours faithfully

[redacted]

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.

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

Report commissioned by auger