



technical investigation services

auger, scotia house, kelvinside,
wallasey, wirral ch44 7jy

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SITE INVESTIGATION/
CCTV REPORT
AT
STONECROFT
HALL ROYD LANE



Loss Adjustor Craig Martin

Crawford & Company COE
Cartwright House
Tottle Road
Riverside Business Park
NG2 1RU

Contents:

Existing Drainage Layout
Trial Hole Logs
Investigation Summary
Summary of Findings
Survey Conclusions
Photographs
CCTV Inspection Listings

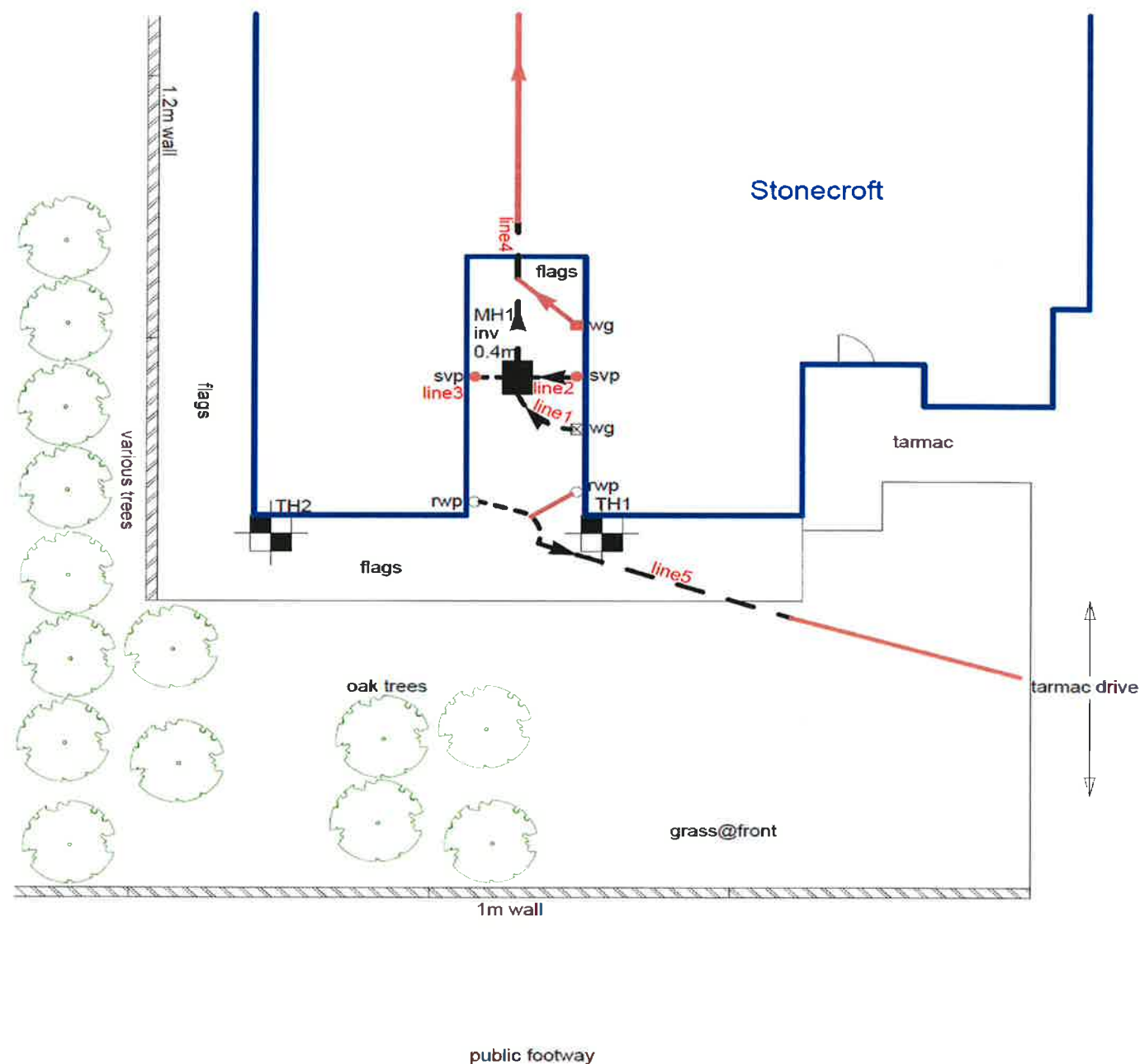
Insured Mr Firth
Client's Ref SU1200023
Auger's Ref: 29033.1.USI
Visit Date: 27-Jan-12
Report Date: 10 Feb. 12
Author: LC
Checked By: H.E



INVESTOR IN PEOPLE



EXISTING DRAINAGE LAYOUT



FRONT OF PROPERTY

This drawing assumes the layout of the drainage system shown below. The conformation of the pipework location can only be determined by excavation and detailed technical survey.

LEGEND = Manhole = Inspection Chamber = Inspection Pot = Shrub/bush = Hedge = Tree = Blockage = svp/w/c = wg/wg = rwp = Trial hole = Borehole	= Direction of flow = Lines not camera surveyed = Lines camera surveyed = Assumed water mains feed = Walls = Fences = Railings
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Risk Address: Stonecroft, Hall Royd Lane,
Barnsley S75 4PP

Job No: 29033.1

Date: 27/01/2012



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Risk Address : Stonecroft, Hall Royd Lane, Barnsley,
S75 4PP

Insured : Mr Firth

Date Drawn : 27/01/12

Drawn By : K. B.

Job No : 29033.01



Trial Hole Log No. 2

Location : LH CORNER OF THE PROPERTY

Moist = Normal wetting condition of subsoil. MP = Mackintosh Probe (Blows per 100mm). SV() = Shear Vane (19mm or 33mm)

DEPTH METRES	SYMBOLIC LOG	STRATA DESCRIPTION	INSITU TESTS		Soil Sample	Root Sample	Water / Stability
			Type	Result			
0.0	<p>150mm</p> <p>Ground Level</p> <p>York Stone</p> <p>Stone</p> <p>Concrete</p>						
0.5							
1.0							
1.5		Moist very stiff light brown sandy CLAY	SV(19)	90kpa	Soil @ 1.2m		
2.0	<p>Dry very stiff light brown sandy CLAY</p>		SV(19)	180kpa	Soil @ 1.7m	Root @ 1.7m	
2.5			SV(19)	130+kpa	Soil @ 2.4m		
3.0		TRIAL HOLE TERMINATED	SV(19)	130+kpa			



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Risk Address : Stonecroft, Hall Royd Lane, Barnsley,
S75 4PP

Insured : Mr Firth

Date Drawn : 27/01/12

Drawn By : K. B.

Job No : 29033.01



Trial Hole Log No. 1

Location : FRONT ELEVATION

Moist = Normal wetting condition of subsoil. MP = Mackintosh Probe (Blows per 100mm). SV() = Shear Vane (19mm or 33mm)

DEPTH METRES	SYMBOLIC LOG	STRATA DESCRIPTION	INSITU TESTS		Soil Sample	Root Sample	Water / Stability
			Type	Result			
0.0	150mm Ground Level York Stone Stone						
0.5							
1.0	Concrete						
1.5		Moist very stiff light brown sandy CLAY	SV(19)	80kpa	Soil @ 1.3m		
2.0			SV(19)	110kpa	Soil @ 1.7m	Root @ 1.7m	
2.5		Dry very stiff light brown sandy CLAY	SV(19)	130kpa	Soil @ 2.4m		
3.0		TRIAL HOLE TERMINATED	SV(19)	130kpa			



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INVESTIGATION SUMMARY

Auger was commissioned to undertake a site investigation & CCTV / inspection survey of the underground drainage to determine whether there are any subsequent defects causing subsidence to the above address.

SUMMARY OF FINDINGS

Visual Summary:	A visual survey of the above address revealed no obvious signs of any significant defects to the drainage system.
CCTV Survey:	Line 1-5 – No evidence of any significant defects to the surveyed underground drainage system.
Defects requiring repair	No defects.

SURVEY CONCLUSIONS

Our engineer attended the above address and undertook a site investigation and CCTV / inspection survey of the underground drainage system

The issues encountered during the survey to the underground drainage have been categorised in accordance with the WRc Drainage Repair guidelines as follows

Condition A Issues - *"Structurally sound with no leakage evident, slight cracks/defects permitted."*

Line 1-5

The results of the CCTV / inspection survey to this part of the system revealed no significant defects which would affect its operation during normal usage, however, it must be appreciated that as with all drainage systems, regular maintenance and upkeep is essential. It should be periodically inspected in the future for any deterioration and kept free flowing / free of blockages. Any damage noted during future inspections should be repaired immediately in accordance with current Building Regulations.

PHOTOGRAPHS



Fig 1.1 – Area Of Surveyed Drainage



Fig 1.2 – Manhole 1

PLEASE NOTE

- i. Where any excavation reinstatement of the surface is required, the reinstatement will always attempt to match the previous surface patterns and colouring, however we cannot guarantee an exact match.
- ii. With any repair process, complications and unforeseen circumstances can arise. These scenarios will be reported whilst on-site and could potentially cause an increase in repair costs and inconvenience.
- iii. All above recommendations are in assumption that there is clear access to excavate without any issues arising such as gas or electric mains in the area of the recommended repairs. If during the excavation of these lines, issues such as gas or electric mains do arise, extra costs will be incurred if a third party is required to attend or alterations to the recommendations are required.



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CCTV INSPECTION LISTINGS

The chainage listings below only include defective joint displacements which have been rated as medium or above during the CCTV inspection. Any slight joint displacements which may have been noted to this drainage system have not been included within these listings in accordance with current WRc guidelines.

Line No	-	1
From	-	MH1 Upstream
Invert Depth	-	0.40m
To	-	WG.
Pipe Size	-	100mm Diameter
Pipe Material	-	Plastic Pipe

0.0m	Start Survey
1.8m	Finished Survey Length

End of line

Line No	-	2
From	-	MH1 Upstream
Invert Depth	-	0.40m
To	-	SVP.
Pipe Size	-	100mm Diameter
Pipe Material	-	Plastic Pipe

0.0m	Start Survey
0.4m	Line Deviates Up
0.6m	Soil and Vent Pipe Finished Survey Length

End of line



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Line No	-	3
From	-	MH1 Upstream
Invert Depth	-	0.40m
To	-	SVP.
Pipe Size	-	100mm Diameter
Pipe Material	-	Plastic Pipe

0.0m Start Survey
0.1m Line Deviates Left
0.4m Line Deviates Up
0.6m Soil and Vent Pipe Finished Survey Length
End of line

Line No	-	4
From	-	MH1 Downstream
Invert Depth	-	0.40m
To	-	REAR.
Pipe Size	-	100mm Diameter
Pipe Material	-	Plastic Pipe

0.0m Start Survey
1.2m Connection Position at 03 O'Clock Waste Gully
5.0m Finished Survey Length
End of line

Line No	-	5
From	-	RWP Downstream
Invert Depth	-	0.00m
To	-	FRONT.
Pipe Size	-	100mm Diameter
Pipe Material	-	Plastic Pipe

0.0m Start Survey
0.7m Connection Position at 09 O'Clock Rain Water Pipe
0.8m Line Deviates Down
1.4m Line Deviates Left
5.5m Finished Survey Length
End of line

LIMITATIONS OF REPORT

We were commissioned to carry out an inspection of the accessible areas of the drainage to the property, identifying any major defects and recommending any repair works that may be necessary. It should be appreciated that the exact layout of the system cannot be confirmed without the exposure of inaccessible branches and connections etc.

The lack of any significant defects within the main drainage line should not be regarded as a guarantee of watertightness. Defects may be encountered upon exposure of inaccessible branches and gullies etc.

The contents of this report are strictly confined to comments concerning those terms outlined above. It is not a structural survey and must not be construed as such.

The views expressed in this report are based entirely upon a visual examination of the drainage, supported by information obtained from a drainage CCTV inspection / water pressure test.

RIGHTS OF ORIGINATOR

This report was for the sole use of the client. It must not be reproduced or transferred to any other third party without the express written consent of the author.

We will consider the re-issue of the report in its original form to a third party within 6 months of the original report date for an administrative fee. (currently £100.00 excl VAT).

Upon the lapse of a 6-month period the report can only be re-issued following a full re-inspection, which will attract a full survey fee.

We reserve the right to refuse copies of the report to any third party (other than those named above). We also reserve the right to amend our opinions in the event of additional information being made available at some future date.

Helen Evans

Account Manager
Auger





Laboratory Report



Contract Number: 15013

Client's Reference: Auger Ref 29033.1

Report Date: 08-02-2012

Client Name: Auger Solutions
Scotia House,
Kelvinside,
Wallasey,
Merseyside,
CH44 7JY

Contract Title: Stonecroft, Hall Royd Lane, S75 4PP
For the attention of: ADMIN

Date Received: 30-01-2012
Date Commenced: 30-01-2012
Date Completed: 10-02-2012

Test Description	Quantity	Checked	Approved
Natural Moisture Content BS1377 Part 2 1990 *	6		
Plasticity Index bs 1377 pART 2 1990 Clause 4.4 *	6		
One Dimensional Swell/Strain Test (Documented in house procedure based on BS 1377 Part 5 - Oedometers)	6		

Notes: Observations and Interpretations are outside the UKAS Accreditation
* - Denotes test included in laboratory scope of accreditation
- Denotes test carried out by approved contractor

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 in full, without the prior written approval of the laboratory.

Approved Signatories:

D V Edwards (Managing Director), Paul Evans (Technical Manager), E Sharp (Technical Co-Ordinator).



Testing on Behalf of



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The Avenue,
Llanelli, Carmarthenshire . SA15 2DS
tel: +44 (0)1554 749720
fax: +44 (0)1554 749845
e-mail: info@geolab.org.uk

Report of Analysis

Contract No: 15013-060212

Client: Auger Solutions
Scotia House,
Kelvinside, Wallasey,
Merseyside
CH44 7JY

Claim Details

Policy Holder Mr Firth

Risk Address Stone Croft, Hall Road Lane, Barnsley

SI Date 27/01/2012

Issue Date

Report Date 10/02/2012

Auger Ref 29033.1

Insurance Company

LA Claim Reference SU1200023

LA Co. Crawford & Co

Notes:

Contents

- 1) Certificate
- 2) Descriptions
- 3) Atterberg Results
- 4) Oedometer Results
- 5) Oedometer Results

Approved By:



Authorised Signatories:

Paul Evans
Quality Manager

Emma Sharp
Laboratory Co-Ordinator

Page 1 of 5

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.

Hole Number	Sample Number	Depth	Description of Sample*
1		1.30	Brown silty CLAY.
1		1.70	Brown silty CLAY.
1		2.40	Brown silty CLAY.
2		1.20	Brown silty CLAY.
2		1.70	Brown silty CLAY.
2		2.40	Brown silty CLAY.



LABORATORY TESTING SERVICES LIMITED

Testing on behalf of



Stone Croft, Hall Road Lane, Barnsley

Contract No: 15013-06021:

Client Ref No:

29033.1

Summary of Soil Classification Tests

BS 1377:Part 2:1990 3.2 4.4 5.0

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.	Plasticity Index % Cl. 6.	% Passing .425mm	Remarks	NHBC Chapter 4.2
1	D	1.30	25	46	27	19	100	MI Intermediate Plasticity	LOW VCP
1	D	1.70	17	35	19	16	100	CL/I Low/Inter. Plasticity	LOW VCP
1	D	2.40	14	36	18	18	100	CI Intermediate Plasticity	LOW VCP
2	D	1.20	27	49	29	20	100	MI Intermediate Plasticity	LOW VCP
2	D	1.70	14	35	18	17	100	CL/I Low/Inter. Plasticity	LOW VCP
2	D	2.40	19	41	22	19	100	CI Intermediate Plasticity	LOW VCP

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

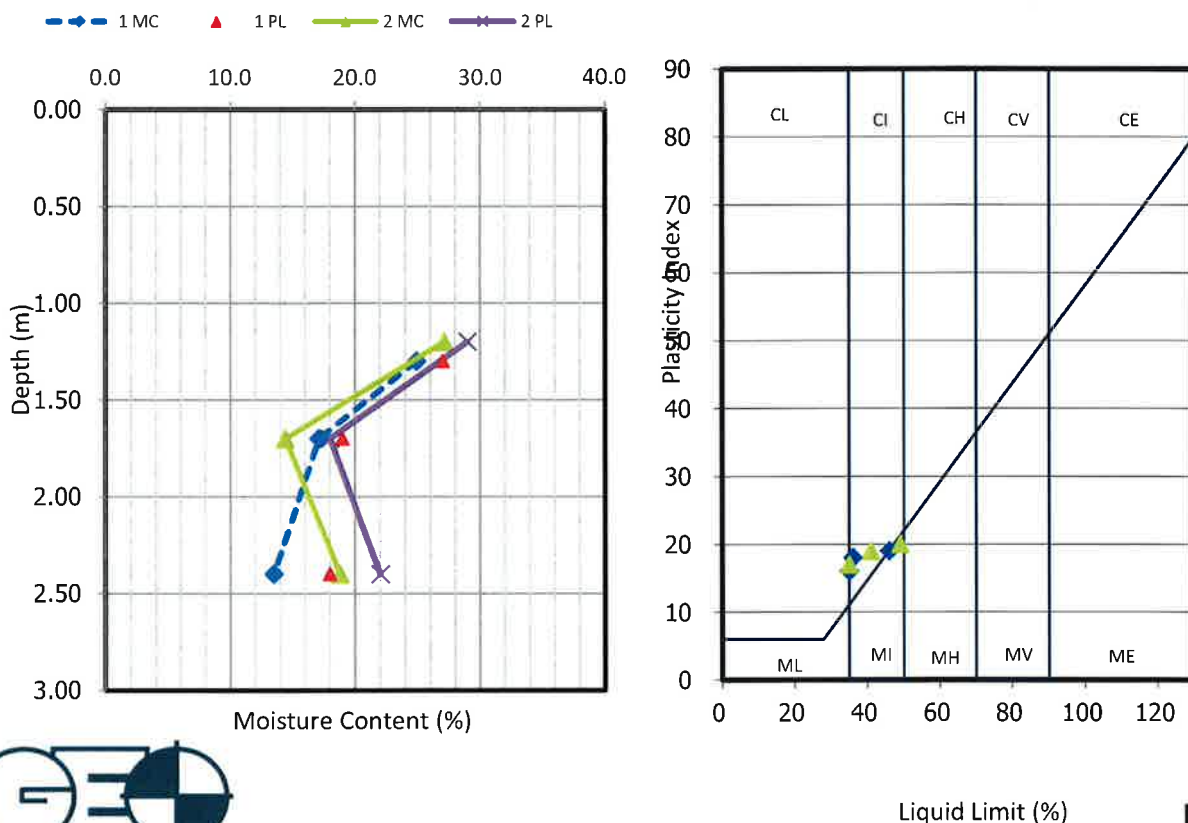
The Atterburg Limits May also be used to classify the volume change potential of fine soils using the National House building system, as given in the NHBC's Standards Chapter 4.2 (2003) "Building Near Trees"

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 (Medium VCP)

Modified PI = 40 or greater : High volume change potential (HIGH VCP)



Testing on behalf of



Stone Croft, Hall Road Lane,
Barnsley

Contract No.:
Contract No: 15013-060212
Client Ref No:
29033.1



Oedometer Results

Borehole No:	1			
Location	Stone Croft, Hall Road Lane, Barnsley			
Depth (m)	Sample No & Comments	Moisture Content %	STRAIN	Dd (mm)
1.30		25	0.0001	0.07
1.70		17	0.0000	0.00
2.40		14	0.0001	0.04
				0.11

Total Column Dd : 0.11 mm Therefore Free Surface Heave Potential Over B/H is about 0cm to 1cm

Borehole No:	2			
Location	Stone Croft, Hall Road Lane, Barnsley			
Depth (m)	Sample No & Comments	Moisture Content %	STRAIN	Dd (mm)
1.20		27	0.0000	0.00
1.70		14	0.0001	0.03
2.40		19	0.0001	0.04
				0.06

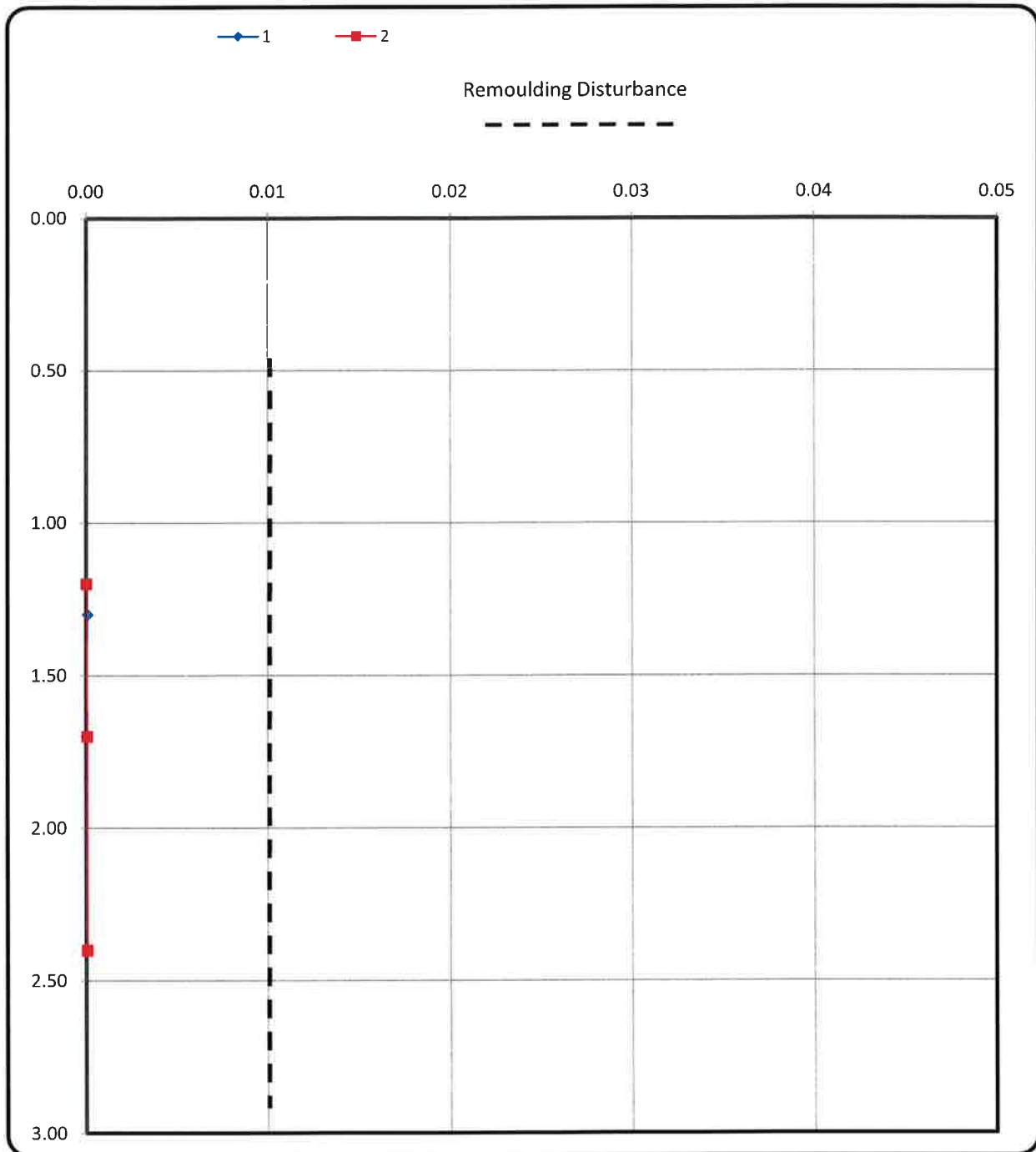
Total Column Dd : 0.06 mm Therefore Free Surface Heave Potential Over B/H is about 0cm to 1cm



**Stone Croft, Hall Road Lane,
Barnsley**

Contract No.:
Contract No: 15013-060212
Client ref:
29033.1
Page 4 of 5

Oedometer Data



Testing on behalf



**Stone Croft, Hall Road Lane,
Barnsley**

Contract No.:

Contract No: 15013-060212

Client Ref No:

29033.1



Root identification
Vegetation surveys
Tree/Building investigations
Plant taxonomy

Richardson's Botanical Identifications

Dr Ian B K Richardson
BSc, PhD, CBiol, MiBiol, MiHort, FLS
James Richardson
BSc (Hons. Biology)

Auger Solutions
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Kelvinside, WALLASEY
Merseyside
CH44 7JY

Enterprise House
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Reading
RG6 7BB

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

09/02/2012

Your ref: **29033-1**

Our ref: **71/8011**

Dear Sirs

Stone Croft, Hall Royd Lane, Barnsley

The samples you sent in relation to the above on 27/01/2012 (received by us on 02/02/2012) have been examined. The structure was referable as follows:

TP/BH1, 1.7m

1 root: QUERCUS (Oak) or the related CASTANEA (Sweet Chestnut). 2 further roots, not examined in detail appeared similar under low magnification. Alive, recently*.

1 root: essentially too thin and immature for identification; definitely NOT a conifer. Alive, recently*.

4 roots: unfortunately insufficient cells for identification.

TP/BH2, 1.7m

1 root: QUERCUS (Oak) or the related CASTANEA (Sweet Chestnut). A further root, not examined in detail appeared similar under low magnification. Alive, recently*.

1 root: microscopic examination showed insufficient cells for recognition.

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.