GEOCORE

Site Investigations Ltd.

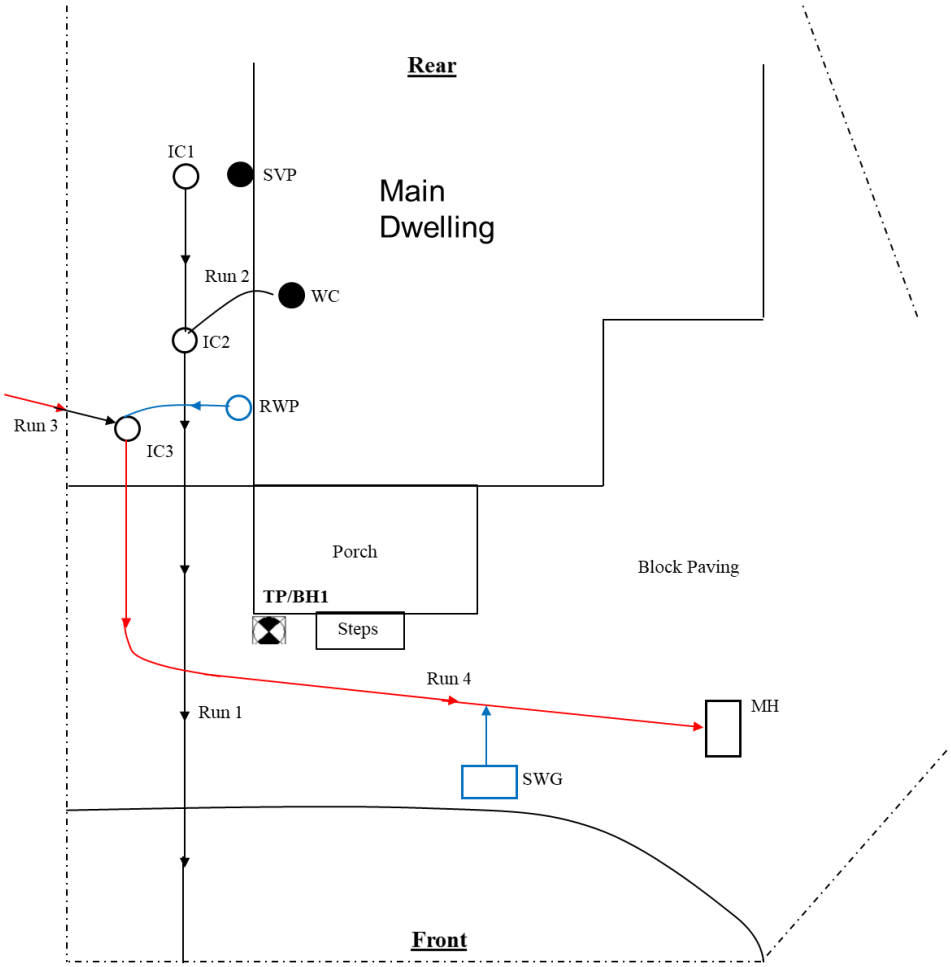
SITE INVESTIGATION FACTUAL REPORT

CLIENT:	B Maule & Co Ltd
NAME:	Sims
ADDRESS:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY
CLIENT REF:	20206310
OUR REF:	HH/20/65759

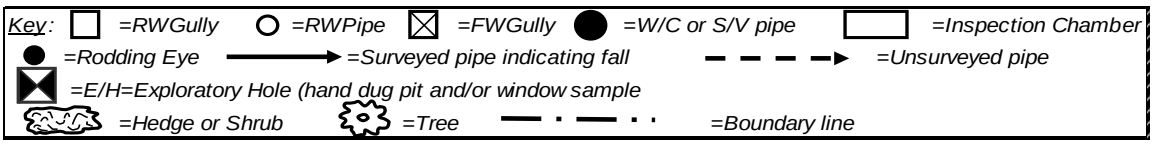
Tralee Close Kirkleatham Business Park Redcar Cleveland TS10 5SG
T 01642 481144 F 01642 498419 M 07778 019665 E geocore@geocore.co.uk W www.geocore.co.uk
Managing Director: Adam Woodhead MBA, BSc (Hons) FGS
Company Registration No. 4042825 VAT Registration No. 708 6835 09

SITE AND DRAINAGE LAYOUT

Site Crew:	J Dickinson & R Mortell	**Date:**	15th October 2020
Address:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY		
Geocore Ref:	HH/20/65759	**Client Ref:**	20206310

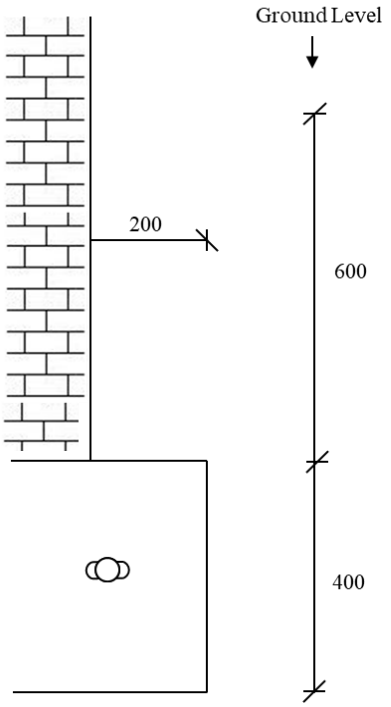


General Comments: TPBH1 relocated to new position due to the presence of drains as agreed by the engineer.



FOUNDATION PIT RECORD

Site Crew:	J Dickinson & R Mortell	**Date:**	15th October 2020
Address:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY		
Geocore Ref:	HH/20/65759	**Client Ref:**	20206310
Trial Pit No: 1			



For strata information, please refer to borehole log TPBH1.

BOREHOLE LOG RECORD

Site Crew:	J Dickinson & R Mortell	**Date:**	15th October 2020
Address:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY		
Geocore Ref:	HH/20/65759	**Client Ref:**	20206310
Borehole No: 1			

BOREHOLE LOG

Geocore Site Investigations Ltd
Tralee Close, Kirkleatham Bus Pk
Redcar, TS10 5SG
Telephone: 01642 481144

Location				BOREHOLE No
Oak Tree House, Wood Lane, Ruislip, HA4 6EY				TP/BH1
Job No	Date	Ground Level (m)	Co-Ordinates ()	
HH/20/65759	15-10-20			
Client				Sheet
B Maule & Co Ltd				1 of 1

SAMPLES & TESTS			Water	STRATA				Instrument/ Backfill
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thick-ness)	DESCRIPTION	
						(0.20) 0.20	MADE GROUND Crazy paving.	
						(0.55) 0.75	MADE GROUND Brown slightly clayey slightly gravelly coarse sand with occasional cobbles. Gravel is of fine to coarse angular to sub angular brick, quartz and flint. Cobbles are of angular brick.	
1.00	HV	60 kPa @ 1.0m				(1.65) 2.40	Soft becoming stiff with depth brown slightly sandy CLAY. BASE OF FOUNDATION 1.0m	
1.00-2.00	ROOTS							
1.10	D1							
1.40	HV	140 kPa @ 1.4m						
1.60	D2							
1.90	HV	130 kPa @ 1.9m						
2.10	D3							
2.40	HV	150+ kPa @ 2.4m						

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 2.4m. Excavation remained open with standing water at 2.2m.

All dimensions in metres Scale 1:18.75	Client Engineer Patrick Porterfield	Method/ Plant Used HH WINDOW SAMPLER	Logged By J.Dickinson

GEOCORE BH 65759.GPJ AUGUST 768.GPJ 19/11/20

GEOCORE Site Investigations Ltd.	TESTING		
Site Crew:	J Dickinson & R Mortell	**Date:**	15th October 2020
Address:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY		
Geocore Ref:	HH/20/65759	**Client Ref:**	20206310

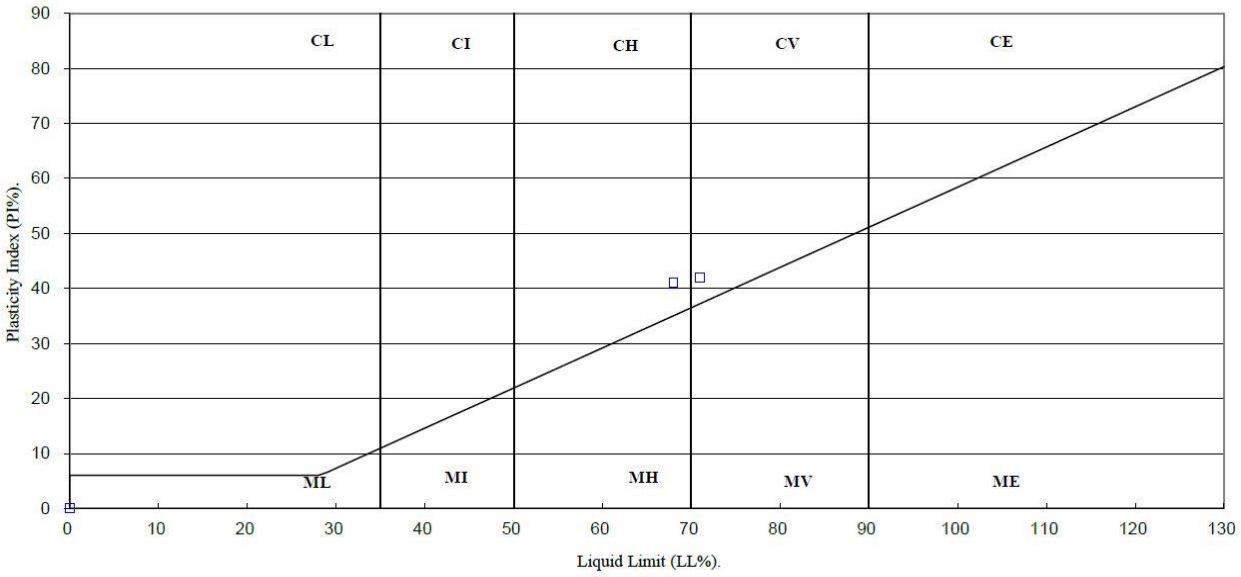
SUMMARY OF SOIL CLASSIFICATION TESTS

(BS1377 : PART 2 : 1990)

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Moisture Content % Clause 3.2	Linear Shrinkage % Clause 6.5	Particle Density Mg/m^3 Clause 8.2	Liquid Limit % Clause 4.3/4	Plastic Limit % Clause 5.3	Plasticity Index % Clause 5.4	Passing .425mm %	Remarks
TP/BH1			1.10		24			68	27	41	88	High plasticity CH.
TP/BH1			1.60		23							
TP/BH1			2.10		26			71	29	42	100	Very high plasticity CV.

SYMBOLS : NP : Non Plastic * : Liquid Limit and Plastic Limit Wet Sieved.

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.



GEOCORE Site Investigations Ltd.	ROOT ANALYSIS		
Site Crew:	J Dickinson & R Mortell	**Date:**	15th October 2020
Address:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY		
Geocore Ref:	HH/20/65759	**Client Ref:**	20206310

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

Geocore Site Investigations Limited

Tralee Close
Kirkleatham Business Park
REDCAR

Cleveland TS10 5SG

Your ref: **65759**
02/11/2020 *Our ref:* 80/8110

Dear Sirs

Oak Tree House, Wood Lane, Ruislip HA4 6EY

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

TP/BH1, 1.0-2.0m

1 root: QUERCUS (Oak). 10 further samples, not examined in detail appeared similar under low magnification. Alive, recently*.

1 root: too DECAYED for identification.

1 sample: although examined microscopically, this was found to be only a section of either twig, stem or sucker - NOT a root. Not identified.

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.

CCTV SURVEY DETAILS

Site Crew:	J Dickinson & R Mortell	**Date:**	15th October 2020
Address:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY		
Geocore Ref:	HH/20/65759	**Client Ref:**	20206310

Run: 1	**Dir: D/S**	**Pipe Dia(mm):**	**100**	**System:**	**C/W**	**Made Of:**	**PVC**
From:	**I/C1**	**Inv(m):**	**0.36**	**To:**	**IC2 & LSR**	**Inv(m):**	**n/a**
Metres	**Faults/Defects**					**Internal Condition Grade (ICG)**	**Remarks**
0	ST						
0	WL 0%						
1.86	MH						I/C2
12.98	WL 0%						
12.98	FH					Grade 1	Main sewer in road
Run: 2	**Dir: U/S**	**Pipe Dia(mm):**	**100**	**System:**	**F/W**	**Made Of:**	**PVC**
From:	**I/C2**	**Inv(m):**	**0.4**	**To:**	**WC Downstairs**	**Inv(m):**	**n/a**
Metres	**Faults/Defects**					**Internal Condition Grade (ICG)**	**Remarks**
0	ST						
0	WL 0%						
0.2	LL						
1.9	WL 0%						
1.9	FH					Grade 1	Rest bend
Run: 3	**Dir: U/S**	**Pipe Dia(mm):**	**100**	**System:**	**S/W**	**Made Of:**	**PVC**
From:	**I/C3**	**Inv(m):**	**0.55**	**To:**	**LSR**	**Inv(m):**	**n/a**
Metres	**Faults/Defects**					**Internal Condition Grade (ICG)**	**Remarks**
0	Start						
0	Water level 0% height/diameter.						
0.1	LU						
0.3	LR						
3	FH: At Limit of survey requirement					Grade 1	Off boundary

Key: **I/C=Inspection Chamber, Inv=Invert , RWG=Rainwater Gully, FWG=Foul Water Gully, CWG = Combined Water Gully**

CCTV SURVEY DETAILS

Site Crew:	J Dickinson & R Mortell	**Date:**	15th October 2020
Address:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY		
Geocore Ref:	HH/20/65759	**Client Ref:**	20206310

Run: 4	**Dir: D/S**	**Pipe Dia(mm):**	**100**	**System:**	**S/W**	**Made Of:**	**PVC**
From:	**I/C 3**	**Inv(m):**	**0.55**	**To:**	**I/C on drivway**	**Inv(m):**	**N/A**

Metres	**Faults/Defects**	**Internal Condition Grade (ICG)**	**Remarks**
0	ST		
0	WL 0%		
1.55	LL		
3.8	WL 20%		
4.3	CU		CCTV under water
5.6	WL 0%		
11.5	FH	Refer to notes	I/C on driveway away from area of damge

Key: **I/C=Inspection Chamber, Inv=Invert , RWG=Rainwater Gully, FWG=Foul Water Gully, CWG = Combined Water Gully**

SURVEY NOTES

Site Crew:	J Dickinson & R Mortell	**Date:**	15th October 2020
Address:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY		
Geocore Ref:	HH/20/65759	**Client Ref:**	20206310

The property is served by a separate foul and surface water system.

Run 1 I/C1 downstream to main sewer in the road. No defects identifed.

Run 2 I/C2 upstream to W/C. No defects identified.

Run 3 I/C3 upstream to manhole off the boundary. No defects identified. The Policy Holder does not derive any benefit from this drain run. Water authority asset.

Run 4 I/C3 downstream to manhole on driveway. There is a small section of pipe at 3.8 to 5.4 metres that the cctv temporarily loses vison due to a belly in the pipe. This section is showing no signs of leaking. No structural defect found. The drain run is shared and therefore a water authority asset.

RECOMMENDATIONS

Site Crew:	J Dickinson & R Mortell	**Date:**	15th October 2020
Address:	Oak Tree House, Wood Lane, Ruislip, HA4 3EY		
Geocore Ref:	HH/20/65759	**Client Ref:**	20206310

There are no further recommendations required for the drains.

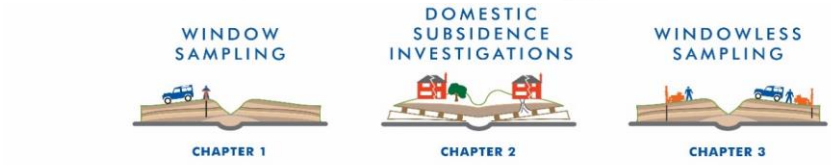
DRAINAGE KEY CODES

Condition Grades for Clayware, Concrete and Plastic Sewer Pipes	
Internal Condition Grade (ICG)	**Typical Defect Descriptions**
5	Already collapsed Deformation >10% and broken Extensive areas of fabric missing Fracture with deformation >10%
4	Broken Deformation >10% and broken Fracture with deformation 6-10% Multiple fracture Serious loss of level Serious joint defects with voids or soil visible (open joint with >50mm soil or void visible or joint displacement >25% of diameter) Surface damage - spalling large (entire surface of brick missing) Surface damage - wear large (entire surface of brick missing)
3	Fracture with no deformation or deformation <5% Longitudinal cracking with or multiple cracking Minor loss of level Severe joint defects, ie open joint (large) or displaced joint (large) Surface damage - spalling medium (large areas of chipped brick) Surface damage - wear medium (entire surface of brick missing)
2	Circumferential crack Moderate joint defects, ie open joint (medium) or displace joint (medium) Surface damage - spalling slight (small fragments breaking away from surface) Surface damage - wear slight (increased roughness)
1	No or slight structural defects
Note	Deformed sewers that have subsequently been relined with a structural lining can normally be considered to have no deformation

DRAINAGE CODES			
Code	**Description**	**Code**	**Description**
B	Broken pipe at ….. (or from ….. to …..) o'clock	**JN**	Junction at ….. o'clock, diameter ….. mm
CC	Crack circumferential from ….. to ….. o'clock	**JX**	Junction defective at ….. o'clock, diameter ….. mm
CL	Crack longitudinal @ ….. o'clock	**LC**	Lining of sewer changes/starts/finishes at this point
CM	Cracks multiple from …. to ….. o'clock	**LD**	Line of sewer deviates down
CN	Connection at ….. o'clock, diameter ….. mm	**LL**	Line of sewer deviates left
CNI	Connection at ….. o'clock, diameter ….. mm, intrusion ….. mm	**LR**	Line of sewer deviates right
CU	Camera under water	**LU**	Line of sewer deviates up
CX	Connection defective at ….. o'clock	**MC**	Material of sewer changes at this point
D	Deformed sewer ….. %	**MH**	Manhole/node
DC	Dimension of sewer changes at this point	**OB**	Obstruction ….. % height/diameter loss
DE	Debris (non silt/grease) ….. % cross-sectional loss	**OJL**	Open joint large
DEG	Debris grease ….. % cross sectional area loss	**OJM**	Open joint medium
DES	Debris silt …. % cross-sectional area loss	**RFJ**	Roots fine (at joint)
FC	Fracture circumferential from ….. to ….. o'clock	**RMJ**	Roots mass ….. % cross-sectional area loss (at joint)
FL	Fracture longitudinal at ….. o'clock	**RTJ**	Roots tap (at joint)
FM	Fractures multiple from ….. to ….. o'clock	**SA**	Survey abandoned
GO	General observation at this point	**WL**	Water level % height/diameter
H	Hole in sewer at ….. o'clock	**X**	Sewer collapsed ….. % cross-sectional area loss
JDM	Joint displaced medium	**FH**	End of survey
JDL	Joint displaced large		

GEOCORE

Site Investigations Ltd.



THE HOLE STORY