

SITE INVESTIGATION FACTUAL REPORT

Report No: 614082
Client: Crawford Claims Management
Site: 42 Stonegate, Cowbit

Client Ref: SU1807857
Date of Visit: 23/08/2019

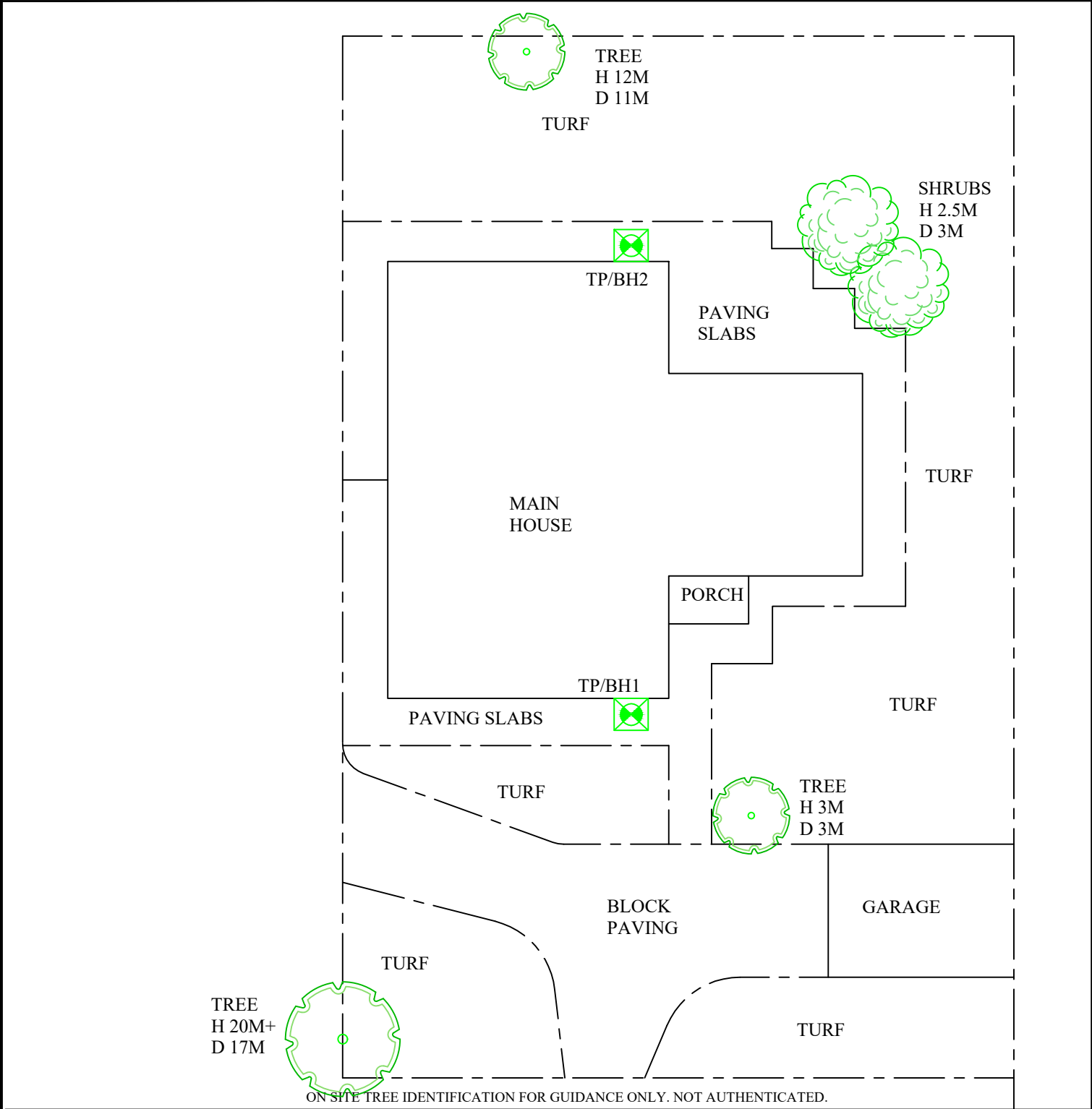


Home Emergency Response - Subsidence Investigation - Drainage Services – Crack & Level Monitoring – Property Video Surveys

Unit E2 First Floor Suite, Boundary Court
Willow Farm Business Park, Castle Donington
Leicestershire, DE74 2NN

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💻 www.cet-uk.com

CET is the trading name of CET Structures Ltd
Registered in England No. 02527130



ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

Remarks:	Key:	
	Combined Gulley	RWWG
	Manhole	MH
	Rain Water Pipe	RWP
	Rain Water Gulley	RWG
	Soil Vent Pipe	SVP
	Waste Gulley	WG
	Waste Pipe	WP
	Surface Water Drain	---
	Foul Water Drain	---
	Tree / Bush	(approx. ht in m)
	Trial Pit	
	Borehole	
	O/D - Open Discharge	

Scale: N.T.S.

TEST REPORT: Trial Pit

REPORT NUMBER: C1037945 / 80518.1.1.1

TRIAL PIT REF: Tp1 1of1

DATE: 23/08/2019

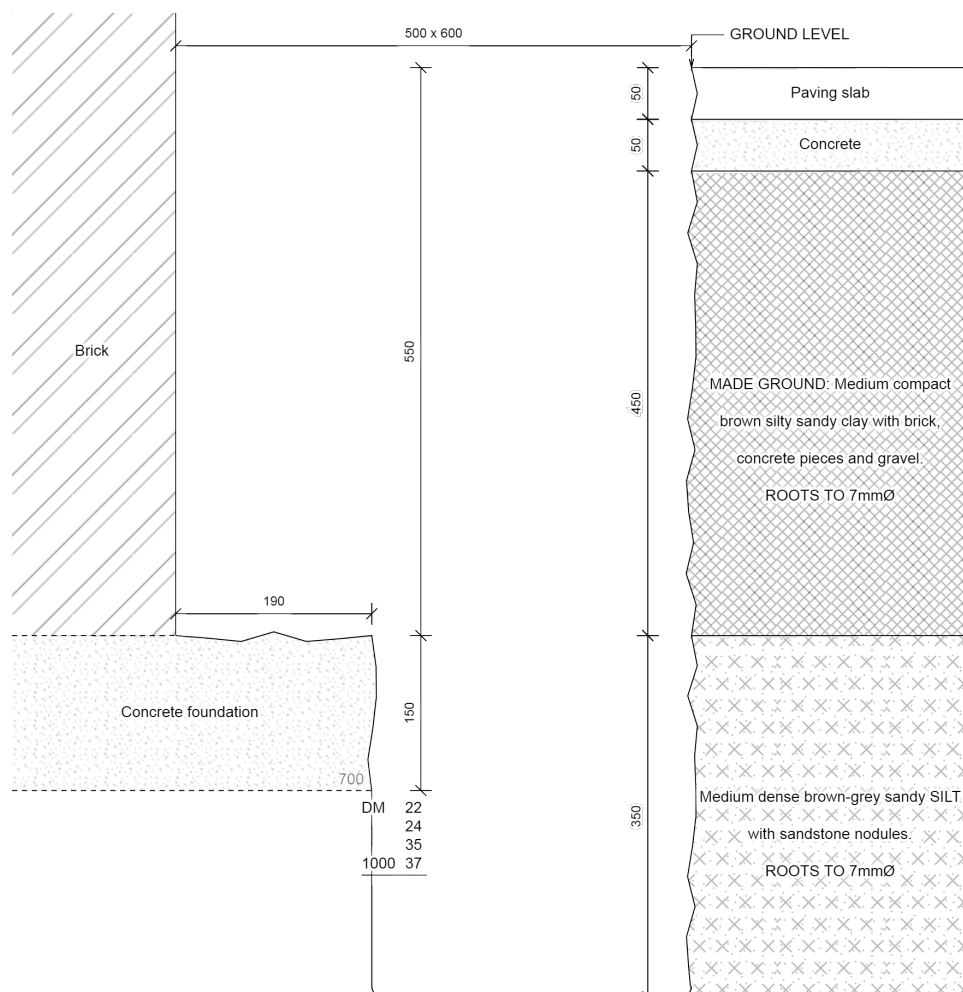
CLIENT: Crawford & Co

SITE: 42 Stonegate

JOB NO: 614082

WEATHER: Dry

EXCAVATION METHOD: Hand tools



For Strata below 900mm see Bore Hole log

Key:

D Small disturbed sample J Jar sample
B Bulk disturbed sample V Pilcon vane (kPa)
W Water sample M Mackintosh probe
TDTD Too dense to drive

Remarks:

Test results reported relate only to the items tested.

This report shall not be reproduced except in full without approval of the Laboratory.

For and on behalf of CET

Kerry Bone - Lab Technician

Report Format:

DE74 2UD

Approved Signatory

27-Aug-19

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Report version 1

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[illegible]

TEST REPORT: Trial Pit

REPORT NUMBER: C1037945 / 80518.1.1.2

TRIAL PIT REF: TP2 1 of 1

DATE: 23/08/2019

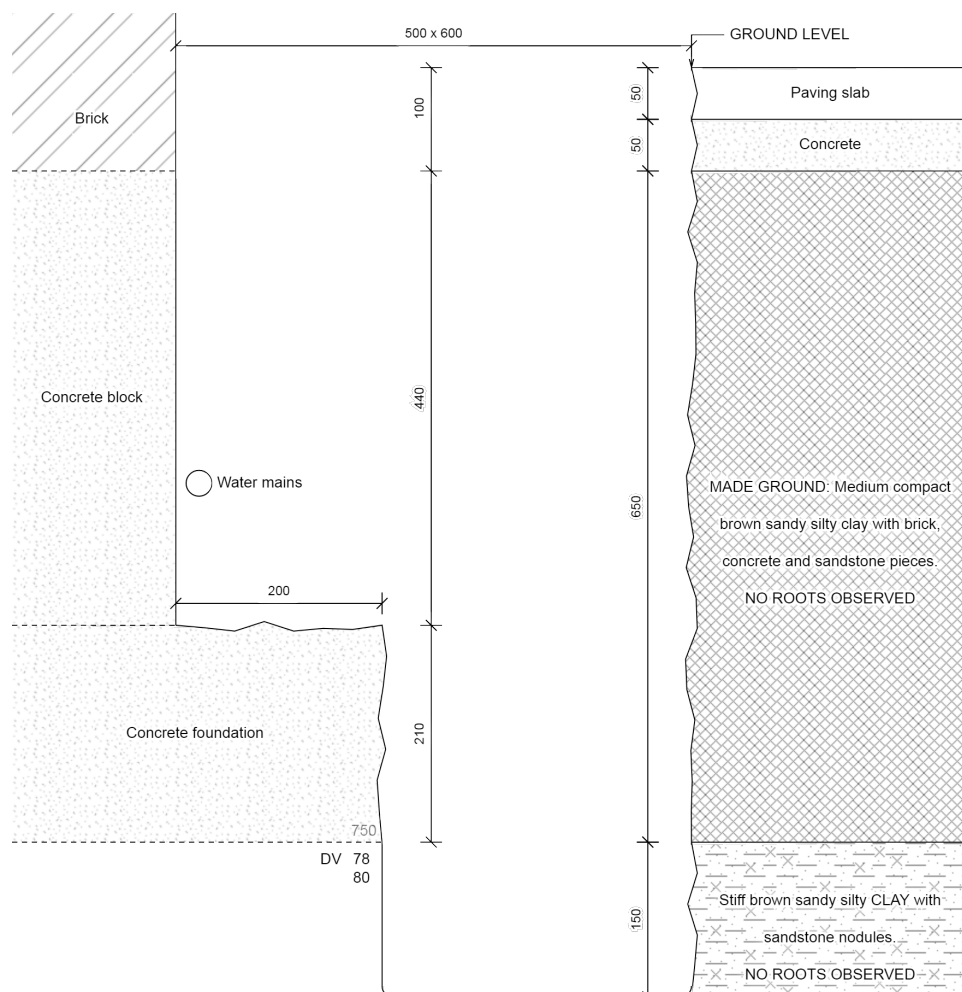
CLIENT: Crawford & Co

SITE: 42 Stonegate

JOB NO: 614082

WEATHER: Dry

EXCAVATION METHOD: Hand tools



Key:

D Small disturbed sample J Jar sample
B Bulk disturbed sample V Pilcon vane (kPa)
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TDTD Too dense to drive

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Report version 1

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Borehole		2		Sheet:	1 of 1	Site:	42 Stonegate				
				Job No:	614082						
				Date:	23/08/2019						
Boring Method:	Rotary Auger			Ground Level:		Client:	Crawford Claims Management				
Diameter (mm):	100	Weather:	dry								
Depth	Soil Description						Samples and Tests				
(m)						Thickness	Legend	Depth	Type	Result	
0.00	See Trial Pit					1.00					
1.00	Very soft moist brown silty sandy CLAY with sandstone nodules					3.00		1.00	DV	24	
										22	
								1.50	D		
								2.00	DV	18	
										16	
								2.50	D		
								3.00	DV	18	
										22	
								3.50	D		
4.00	End of BH							4.00	DV	18	
										18	
Remarks: BH ends at 4.0m. Unable to extract sample. Water strike at 1.4m. BH collapsing to 2.1m on completion. Unsuitable for Datum instillation. No roots observed.					Key: D - Disturbed Sample B - Bulk Sample W - Water Sample Roots J - Jar Sample Roots V - Pilcon Shear Vane (kPa) Roots M - Mackintosh Probe Depth to Water (m) TDTD - Too Dense To Drive					To Depth (m)	Max Dia (mm)
										1.60	
Logged:	PB	LM	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.				

Laboratory Summary Results

Our Ref : 614082
 Location : 42 Stonegate
 Client: Crawford Claims Management
 Address: Cartwright House, Tottle Road, Riverside Business Park, NG2 1RU

Date Sampled: 23/08/2019
 Date Received : 27/08/2019
 Date Tested : 27/08/2019
 Date of Report : 29/08/2019

Sample Ref		Type	Moisture Content (%) [1]	Soil Fraction > 0.425mm (%) [2]	Liquid Limit (%) [3]	Plastic Limit (%) [4]	Plasticity Index (%) [5]	Liquidity * Index [5]	Modified * Plasticity Index (%) [6]	Soil * Class [7]	Filter Paper Contact Time (h)	Soil Sample Suction (kPa) [8]	Oedometer Strain [9]	Estimated Heave Potential (Dd) (mm)[10]	In situ * Shear Vane Strength (kPa) [11]	Organic * Content (%) [12]	pH * Value [13]	Sulphate Content * (g / l)		* Class [16]
TP/BH No	Depth (m)																	SO ₃ [14]	SO ₄ [15]	
1	U/S 0.70	D	29	<5	33	25	8	0.54	8	ML										
	1.0	D	49	<5											103					
	1.5	D	50	<5	56	27	29	0.79	29	CH										
	2.0	D	51	<5											19					
	2.5	D	47	<5																
	3.0	D	52	<5	48	24	24	1.16	24	CI					18					

Test Methods / Notes

[1] BS 1377 : Part 2 : 1990, Test No 3.2
 [2] Estimated if <5%, otherwise measured
 [3] BS 1377 : Part 2 : 1990, Test No 4.4
 [4] BS 1377 : Part 2 : 1990, Test No 5.3
 [5] BS 1377 : Part 2 : 1990, Test No 5.4
 [6] BRE Digest 240 : 1993
 [7] BS 5930 : 2018 : Figure 8 - Plasticity Chart for the classification of fine soils

[8] In-house method S9a adapted from BRE IP 4/93
 [9] In-house Test Procedure S17a: One Dimensional Swell/Strain Test
 [10] Estimated Heave Potential (Dd)
 [11] Values of shear strength were determined in situ by CET using a Pilcon hand vane or Geonor vane (GV).
 [12] BS 1377 : Part 3 : 1990, Test No 4
 [13] BS 1377 : Part 2 : 1990, Test No 9
 [14] BS 1377 : Part 3 : 1990, Test No 5.6
 [15] SO₄ = 1.2 x SO₃

[16] BRE Special Digest One (Concrete in Aggressive Ground) August 2005
 Note that if the SO₄ content falls into the DS-4 or DS-5 class, it would be prudent to consider the sample as falling into the DS-4M or DS-5M class respectively unless water soluble magnesium testing is undertaken to prove otherwise.

* These tests are not UKAS accredited
 Full reports can be provided upon request.

Key

D Disturbed sample (small)
 B Disturbed sample (bulk)
 U Undisturbed sample
 W Groundwater sample
 ENP Essentially Non-Plastic by inspection
 U/S Underside of Foundation



Our Ref : 614082

Location : 42 Stonegate

Client: Crawford Claims Management

Address: Cartwright House, Tottle Road, Riverside Business Park, NG2 1RU

Laboratory Testing Results

Date Sampled : 23/08/2019

Date Received : 27/08/2019

Date Tested : 27/08/2019

Date of Report : 29/08/2019

Sample Ref.		Type	Moisture Content	Soil Fraction > 0.425mm (%) [2]	Liquid Limit (%) [3]	Plastic Limit (%) [4]	Plasticity Index (%) [5]	Liquidity * Index [5]	Modified * Plasticity Index (%) [6]	Soil * Class [7]	Filter Paper Contact Time (h)	Soil Sample Suction (kPa) [8]	Oedometer Strain [9]	Estimated Heave Potential (Dd) (mm)[10]	In situ * Shear Vane Strength (kPa) [11]	Organic * Content (%) [12]	pH * Value [13]	Sulphate Content * (g / l)		* Class [16]		
TP/BH No.	Depth (m)																	SO3 [14]			SO4 [15]	
2	U/S 0.75	D	25	<5	34	25	9	0.01	9	ML					79							
	1.0	D	34	<5											23							
	1.5	D	35	<5																		
	2.0	D	39	<5	49	27	22	0.57	22	CI					17							
	2.5	D	53	<5																		
	3.0	D	45	<5											20							
	3.5	D																				
	4.0	D	49	<5	45	25	20	1.18	20	CI					18							

Test Methods / Notes

[1] BS 1377 : Part 2 : 1990, Test No 3.2

[2] Estimated if <5%, otherwise measured

[3] BS 1377 : Part 2 : 1990, Test No 4.4

[4] BS 1377 : Part 2 : 1990, Test No 5.3

[5] BS 1377 : Part 2 : 1990, Test No 5.4

[6] BRE Digest 240 : 1993

[7] BS 5930 : 1981 : Figure 31 - Plasticity Chart for the classification of fine soils

[8] In-house method S9a adapted from BRE TP 493

[9] In-house Test Procedure S17a: One Dimensional Swell/Strain Test

[10] Estimated Heave Potential (Dd)

[11] Values of shear strength were determined in situ by CET using a Pilcon hand vane or Geonor vane (GV).

[12] BS 1377 : Part 3 : 1990, Test No 4

[13] BS 1377 : Part 2 : 1990, Test No 9

[14] BS 1377 : Part 3 : 1990, Test No 5.6

[15] SO₄ = 1.2 x SO₃

[16] BRE Special Digest One (Concrete in Aggressive Ground) August 2005

Note that if the SO₄ content falls into the DS-4 or DS-5 class, it would be prudent to consider the sample as falling into the DS-4M or DS-5M class respectively unless water soluble magnesium testing is undertaken to prove otherwise.

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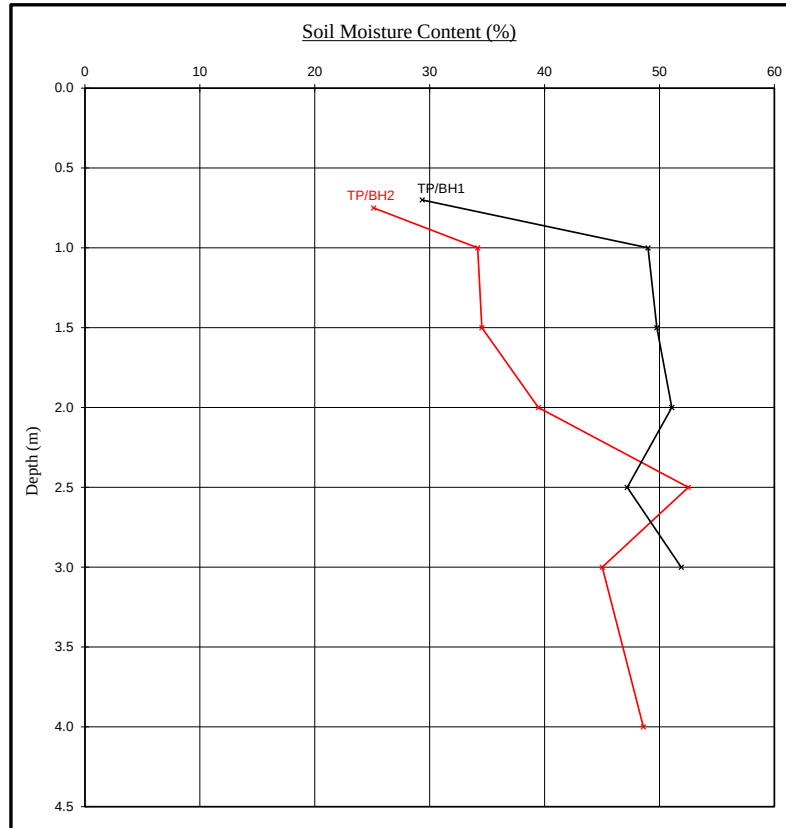
ENP Essentially Non-Plastic by inspection

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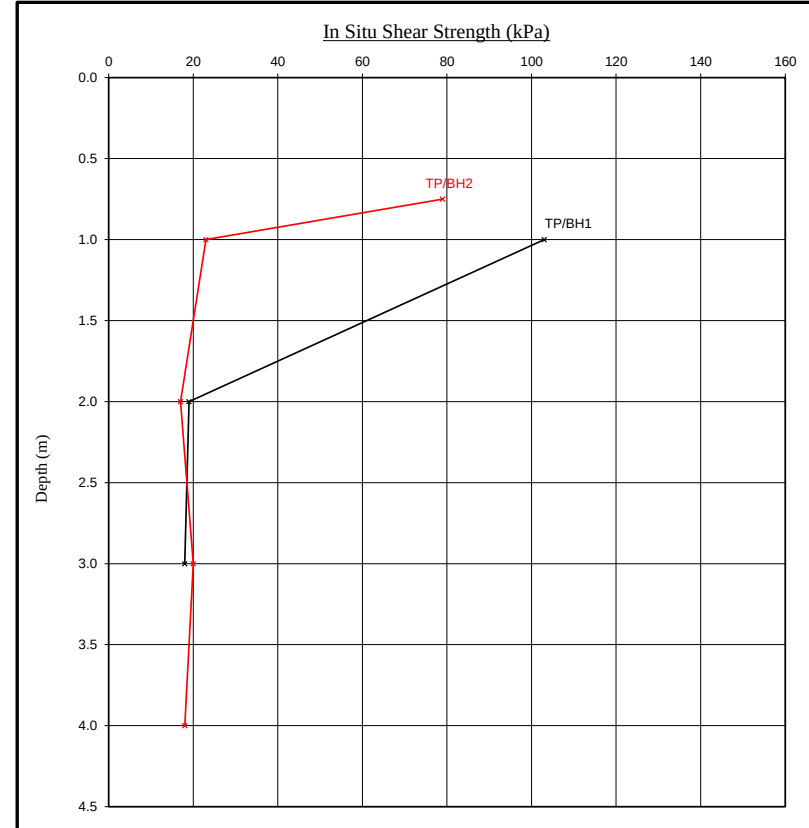
Moisture Content Profiles

Our Ref : 614082
 Location : 42 Stonegate
 Work carried out for: Crawford Claims Management



Shear Strength Profiles

Date Sampled : 23/08/2019
 Date Received : 27/08/2019
 Date Tested : 27/08/2019
 Date of Report : 29/08/2019



Notes

1. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly overconsolidated clay) at shallow depths.
2. Unless specifically noted the profiles have not been related to a site datum.

Note

1. Unless otherwise stated, values of Shear Strength were determined in situ by CET using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 140 kPa.
2. Unless specifically noted the profiles have not been related to a site datum.

EPSL European Plant Science Laboratory	Sheet: 1 of 1	Site: 42 Stonegate,
	Job No: 614082	Work carried out for: Crawford Claims MGMT SUS
	Date: 29/08/2019	
	Order No: 5427	
EPSL Ref: R32599		

Certificate of Analysis

The following work was commissioned by CET on behalf of their client. Root samples were obtained in sealed packets from the above site with no reference given as to the types of tree or shrub from which they may have originated.

The results were as follows -

<u>Trial pit/ Borehole number</u>	<u>Root diameter (mm)</u>	<u>Tree, shrub or climber from which root originates</u>	<u>Result of starch test</u>
TP1 (USF)	4 mm	Prunus spp. 3 roots	Positive
TP1 (USF)	2 mm	probably Quercus spp. but possibly Castanea spp.	Positive
BH1 (to 2m)	3 mm	Prunus spp.	Positive
BH1 (to 2m)	<1 mm	broadleaved species, too juvenile for positive identification * 2 roots	Positive

* Possibly Quercus/Castanea spp.

Prunus spp. include blackthorn, cherry, cherry-laurel, Portuguese laurel, peach, plum, and related species.

Quercus spp. are oaks. Castanea spp. include sweet chestnut.



MDM

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Plant Anatomist : Dr G S Turner B.Sc. (Hons), M.Sc., Ph.D

Plant Anatomist : Dr R J Shaw B.Sc. (Hons), Ph.D

Consultant: Dr M P Denne B.Sc. (Hons), M.Sc., Ph.D

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Classification: General