

SITE INVESTIGATION FACTUAL REPORT

Report No: 719009
Client: Crawford Claims Management
Site: 9 Willoughby Road

Client Ref: SU1904557
Date of Visit: 07/05/2020



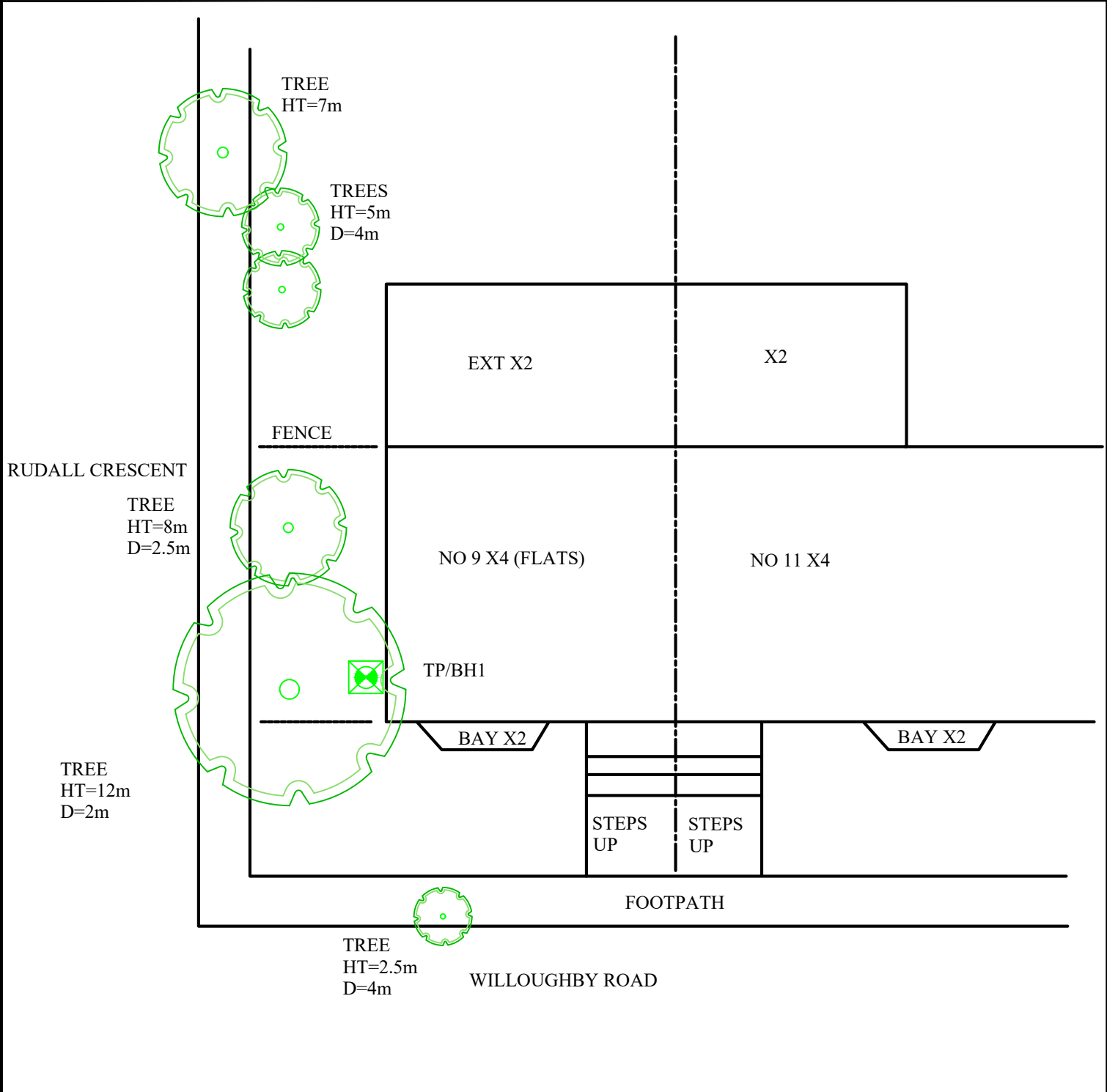
Home Emergency Response - Subsidence Investigation - Drainage Services – Crack & Level Monitoring – Property Video Surveys

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

Investigation Layout Plan		Sheet: 1 of 1	Site: 9 WILLOUGHBY ROAD
		Job No: 719009	
		Date: 07/05/20	Work carried out for: Crawford Claims Management
MH (SI)	DVC (Drawn)	Weather: Dry	
(Checked)	(Drawn)		



ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

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

TEST REPORT: Trial Pit

REPORT NUMBER: C1042928 / 101499.1.1.1

TRIAL PIT REF: TP1

DATE: 07/05/2020

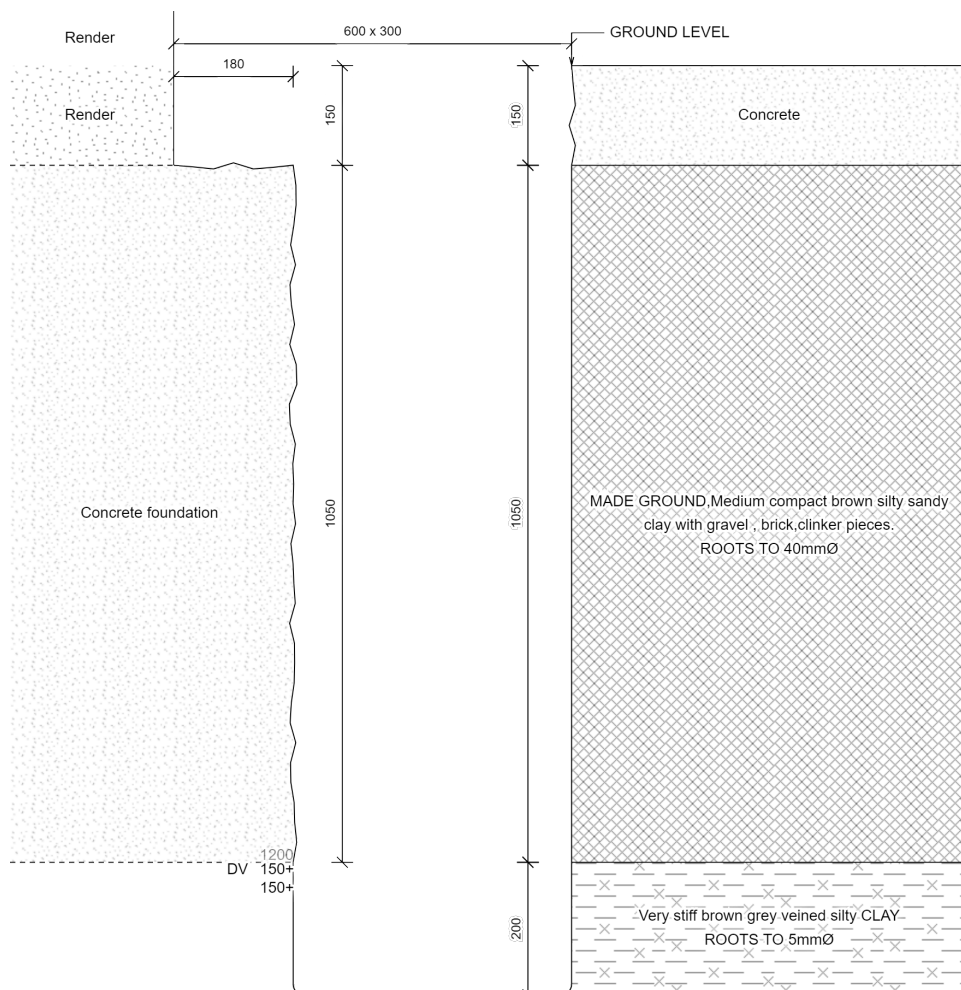
CLIENT: Crawford & Co

SITE: 9 Willoughby Road

JOB NO: 719009

WEATHER: Sunny

EXCAVATION METHOD: Hand tools



For Strata below 1400mm 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
Scott Alger - Lab

Report Format:

DE74 2UD

Approved Signatory
07-May-20

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Report version 1

Page 1 of 1

Borehole		1			Sheet:	1 of 1	Site:	9 Willoughby Road				
					Job No:	719009						
					Date:	07/05/2020						
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							1.40				
1.40	Very stiff brown-grey veined silty CLAY							1.10		1.50	D	
2.50	Very stiff brown-grey veined silty sandy CLAY							0.50		2.50	D	
3.00	End of BH									3.00	DV	130+
												130+
Remarks: BH ends at 3.0m. BH dry and open on completion, no roots observed below 2.0m.					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	Max	
										Depth	Dia	
										(m)	(mm)	
										2.00	1	
Logged:	IC	SA	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.					

Laboratory Summary Results

Our Ref : 719009
 Location : 9 Willoughby Road
 Client: Crawford Claims Management
 Address: Cartwright House, Tottle Road, Riverside Business Park, NG2 1RU

Date Sampled: 07/05/2020
 Date Received : 12/05/2020
 Date Tested : 12/05/2020
 Date of Report : 19/05/2020

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 (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 1.20	D	21	<5	58	19	39	0.05	39	CH	168	766			150					
	1.5	D	21	<5							168	615								
	2.0	D	22	<5	46	22	24	0.00	24	CI	168	280			130					
	2.5	D	24	<5							168	173								
	3.0	D	28	<5	55	27	28	0.03	28	CH	168	128			130					

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
 [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.

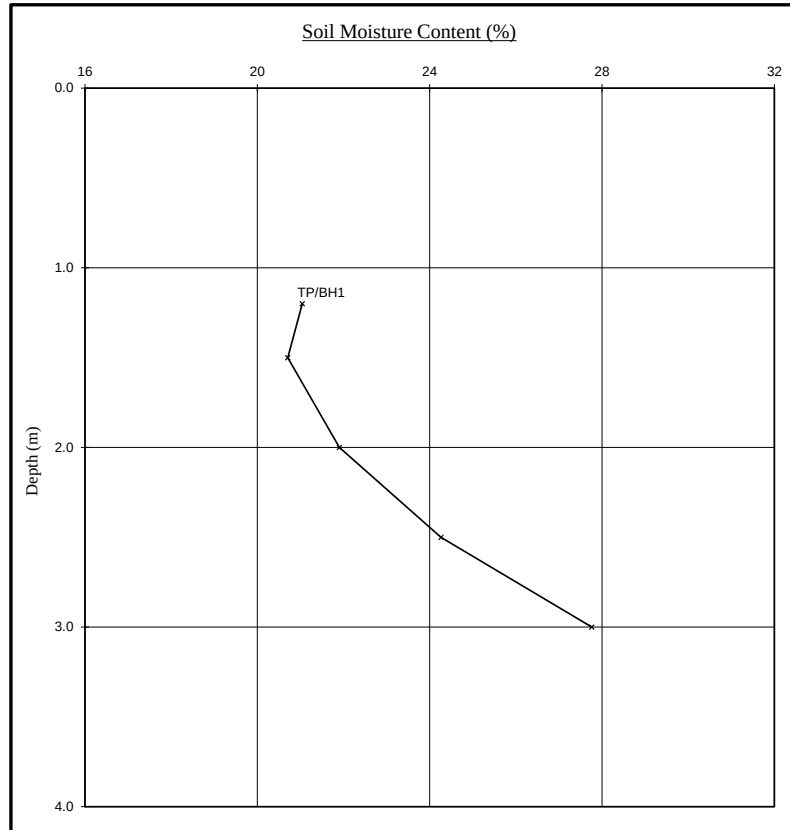
Key

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



Moisture Content Profiles

Our Ref : 719009
 Location : 9 Willoughby Road
 Work carried out for: Crawford Claims Management

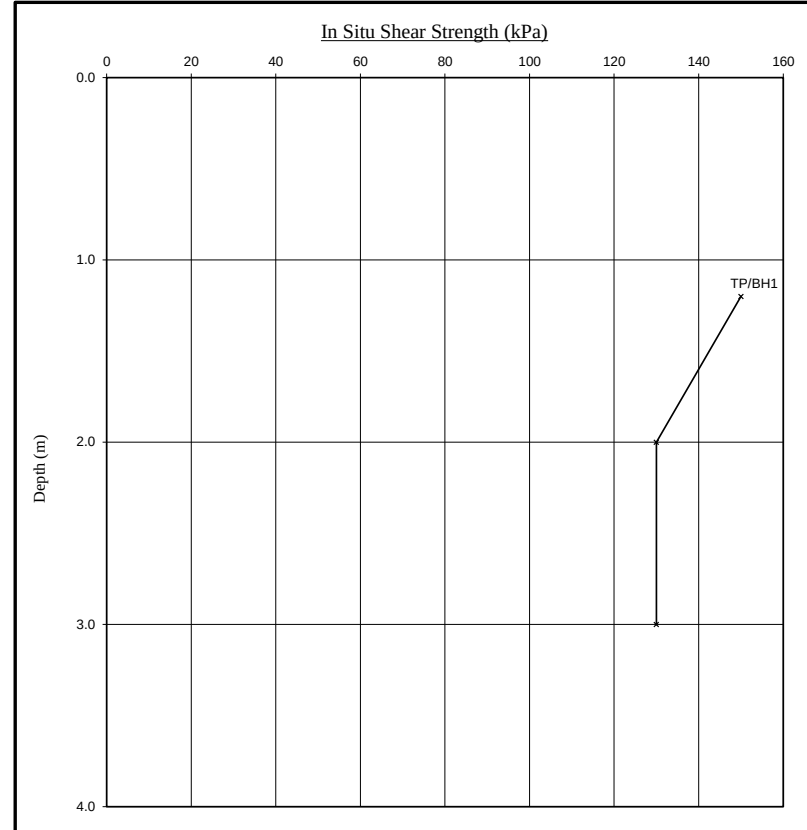


Notes

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.

Shear Strength Profiles

Date Sampled : 07/05/2020
 Date Received : 12/05/2020
 Date Tested : 12/05/2020
 Date of Report : 19/05/2020



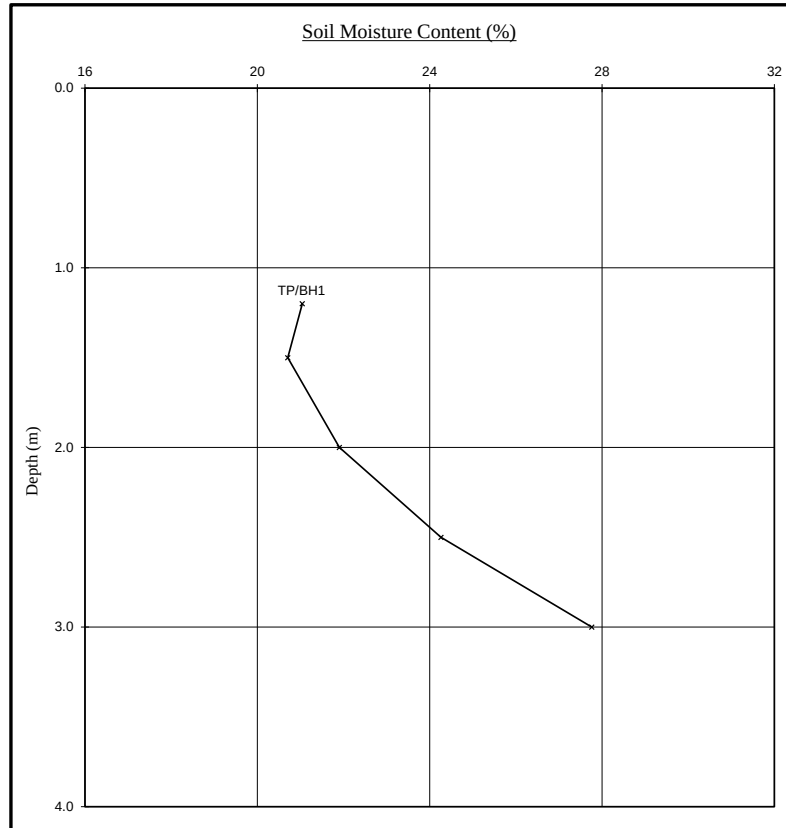
Note

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.

Moisture Content Profiles

Our Ref : 719009
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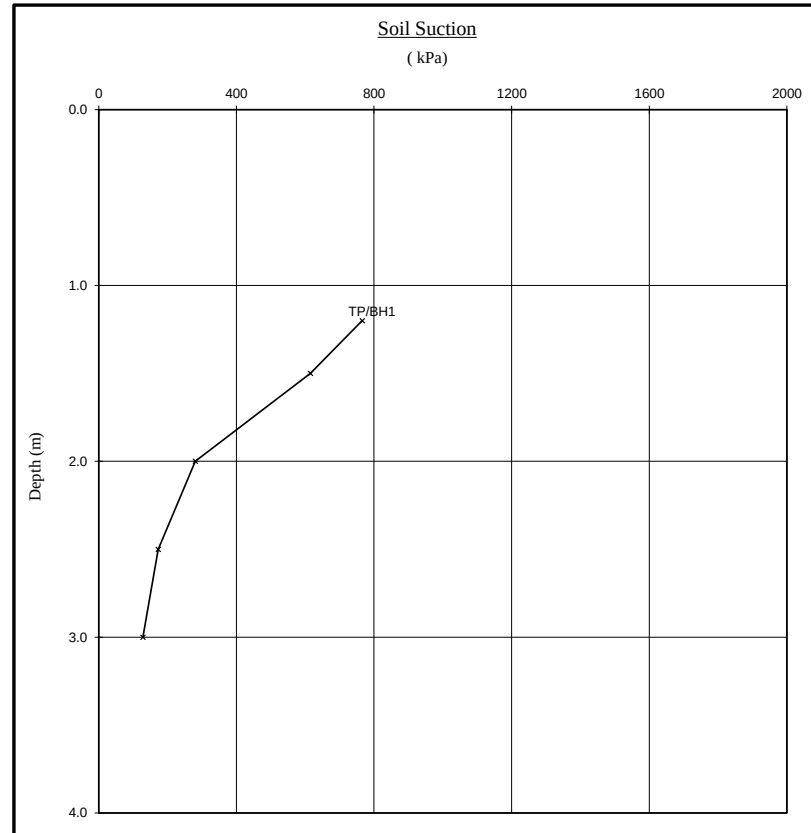
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Notes

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.

Soil Suction Profiles



Note

When shown, the theoretical equilibrium suction profiles are based on conventional assumptions associated with London Clay (and similarly overconsolidated clays) at shallow depths. Note that the sample disturbance component is dependant on the method of sampling and any subsequent recompaction. The above plots show this to be 100kPa which is the value suggested by the BRE on the basis of their limited number of tests on recompacted samples. This may or may not be appropriate in this instance and judgement should be exercised.

EPSL European Plant Science Laboratory	Sheet: 1 of 1	Site: 9 Willoughby Raod,
	Job No: 719009	Work carried
	Date: 14/05/2020	out for: Crawford Claims MGMT SUS
	Order No: 1555244	
EPSSL Ref: R36374		

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	Fraxinus spp. 3 roots	Positive
BH1 (to 2m)	1.5 mm	Fraxinus spp. 2 roots	Positive

Fraxinus spp. include common ash.

MDM

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

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