

SITE INVESTIGATION FACTUAL REPORT

Report No: 148703
Client: CRAWFORD CLAIMS MGMT SUS
Site: 9 Rosslyn Hill, London

Client Ref: SU1300377-Mr G Ramirez
Date of Visit: 24/07/2013



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

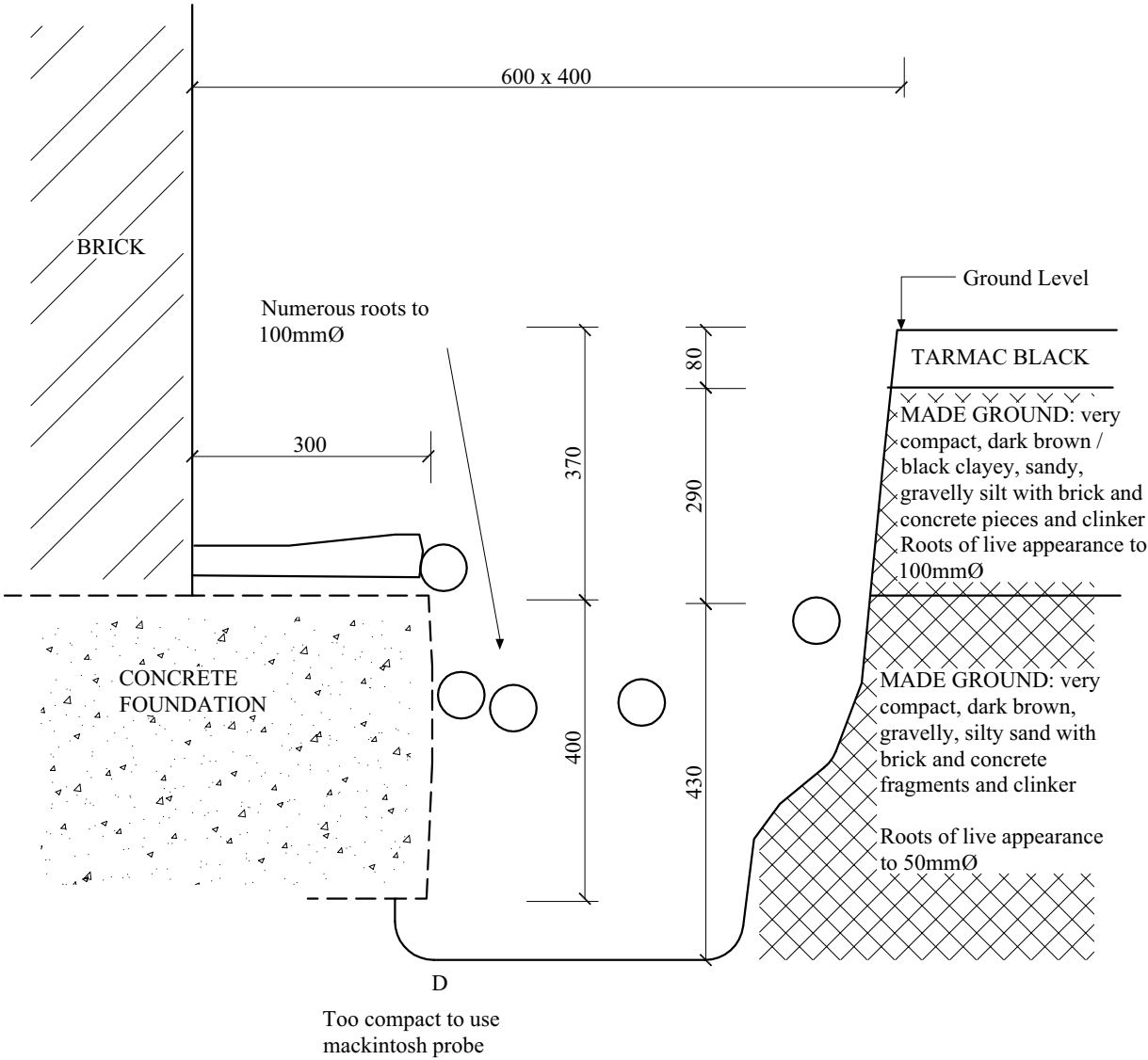
Unit E2 First Floor Suite, Boundary Court
Willow Farm Business Park, Castle Donington
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CET is the trading name of CET Structures Ltd
Registered in England No. 02527130

Investigation Layout Plan			Sheet: 1 of 1 Job No: 148703E Date: 24/07/13	Site: 9 Rosslyn Hill, NW3 Work carried out for: Crawford Claims MGMT SUS																												
AH (SI)	PS (Checked)	NR (Drawn)	Weather: Dry																													
Garages OPEN RWP DISCHARGES ONTO ADJACENT PROPERTY TPBH1 H = 12M D = 1 Tarmac H = 10M D = 5 ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.																																
Remarks:		Key: <table><tr><td>Combined Gulley</td><td>RWWG</td><td>Surface Water Drain</td><td></td></tr><tr><td>Manhole</td><td>MH</td><td>Foul Water Drain</td><td></td></tr><tr><td>Rain Water Pipe</td><td>RWP</td><td>Tree / Bush (approx. ht in m)</td><td></td></tr><tr><td>Rain Water Gulley</td><td>RWG</td><td>Trial Pit</td><td></td></tr><tr><td>Soil Vent Pipe</td><td>SVP</td><td>Borehole</td><td></td></tr><tr><td>Waste Gulley</td><td>WG</td><td></td><td></td></tr><tr><td>Waste Pipe</td><td>WP</td><td></td><td></td></tr></table>			Combined Gulley	RWWG	Surface Water Drain		Manhole	MH	Foul Water Drain		Rain Water Pipe	RWP	Tree / Bush (approx. ht in m)		Rain Water Gulley	RWG	Trial Pit		Soil Vent Pipe	SVP	Borehole		Waste Gulley	WG			Waste Pipe	WP		
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Scale: N.T.S.																																

Trial Pit No: 1	Sheet: 1 of 1	Site: 9, Rosslyn Hill, NW3
	Job No: 148703E	
	Date: 24/07/13	
Excavation Method: Hand Tools	Drawn by: Jo F	Work carried out for: Crawford Claims MGMT SUS
Weather: Dry	Ground Level mOD:	



FOR STRATA BELOW 800mm SEE BH LOG 1

Remarks: All measurements in millimetres.			Key: D Small disturbed sample J Jar sample		
U/S foundation assumed only. Found with the aid of curved steel in. Unable to expose foundation due to roots			B Bulk disturbed sample V Pilcon Vane (kPa)		
			W Water sample M Mackintosh probe		
			TDTD Too dense to drive		
Logged: AH	Checked: PS	Approved:	Scale: N.T.S.		

Borehole No: 1			Sheet: 1 of 1		Site: 9 Rosslyn Hill, NW3									
Boring Method: Hand Auger			Job No: 148703E							Date: 24/07/2013				
Diameter: 75mm		Coordinates:		Ground Level mOD:						Work Carried out for: Crawford Claims MGMT SUS				
Depth (m)	Description of Strata		Thick-ness (m)	Legend	Sample	Test Type	Result	Depth (m)	Field Records/Comments	Depth to water (m)				
0.80	As Trial Pit 1		0.80						Roots of live appearance to 3mm diameter to 2.2m					
0.95	MADE GROUND: very compact dark brown gravelly silty sand with brick & concrete fragments & clinker		0.15											
1.25	MADE GROUND: medium compact mid brown grey veined silty clay with partings of orange silt & fine sand, brick fragments carbon deposits & occasional gravel		0.30		D	M	22 31 21 26	1.00						
2.30	Firm mid brown grey veined silty CLAY with partings of orange silt & fine sand & carbon flecks		1.05	____x ____ ____ x____ ____ ____ ____x. ____	D	V	50 50	1.50						
					D	V	88 72	2.00						
3.00	Stiff as above		0.70	____x ____ ____ x____ ____ ____	D	V	82 92	2.50	No roots observed below 2.2m					
	BH ends at 3.0m				D	V	120+ 120+	3.00						
Remarks: Borehole dry & open on completion					Key: T.D.T.D. Too Dense to Drive D Small disturbed sample J Jar sample B Bulk disturbed sample V Pilcon Vane (kPa) W Water sample M Mackintosh Probe									
Logged: AH		Checked: PS		Drawn by NR		Scale: NTS		Weather: Dry						

Borehole No: 1			Sheet: 1 of 1			Site: 9, Rosslyn Hill, NW3				
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Logged: AH		Checked: PS	Drawn by Jo F			Scale: NTS		Weather: Dry		

Laboratory Testing Results

Our Ref : 148703

Location : 9, Rosslyn Hill, NW3

Work carried out for: CRAWFORD CLAIMS MGMT SUS

Date Sampled: 24/07/2013

Date Received : 24/07/2013

Date Tested : 25/07/2013

Date of Report : 01/08/2013

TP/BH No	Sample Ref		Type	Moisture Content (%) [11]	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) [8]	Soil Sample Suction (kPa)	In situ Shear Vane Strength (kPa) [9]	Organic Content (%) [10]	pH Value [11]	Sulphate Content (g/l)			Class
	Depth (m)																SO3 [12]	SO4 [13]		
1	0.77(U/S)		D	6	86															
	1.0		D	22	9	73	23	50	-0.02	46	CV									
	1.5		D	38	<5							168	69	50						
	2.0		D	36	<5	84	25	59	0.18	59	CV	168	154	70						
	2.5		D	30	<5							168	182	87						
	3.0		D	32	<5	81	23	58	0.16	58	CV	168	189	> 120						

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

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

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

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

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

[13] SO₄ = 1.2 x SO₃

[14] 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

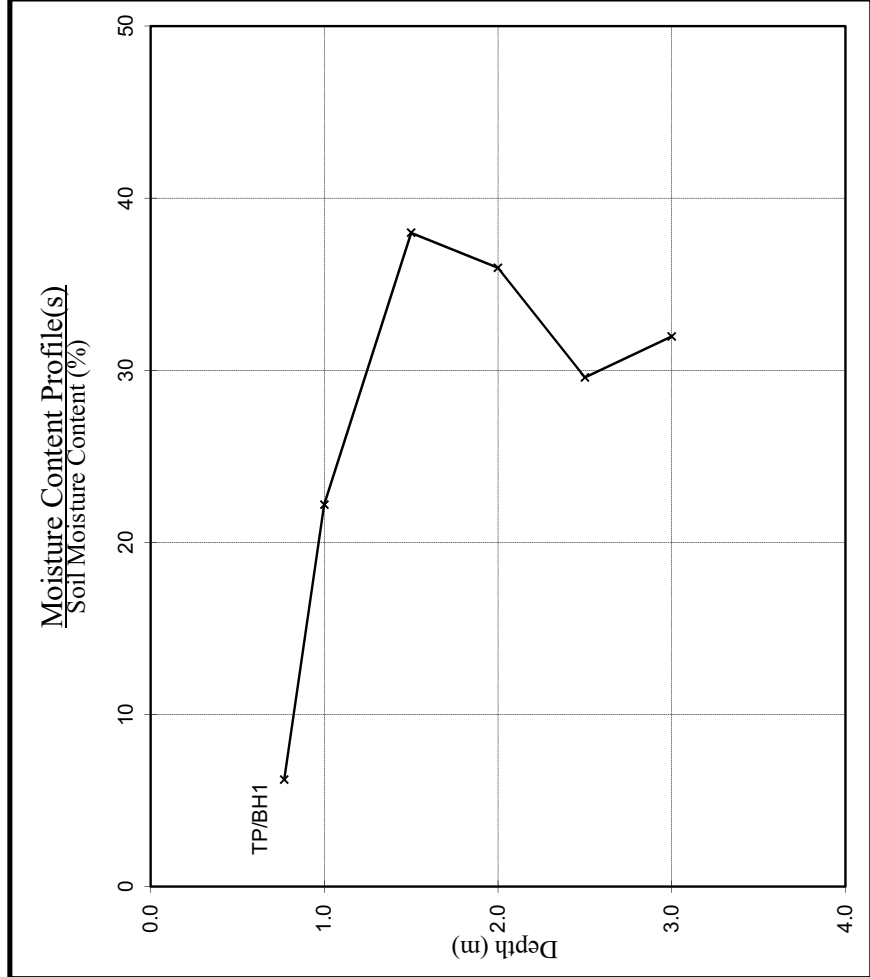
[8] In-house method S9a adapted from BRE IP 4/93

of fine soils

Moisture Content and Suction Profiles

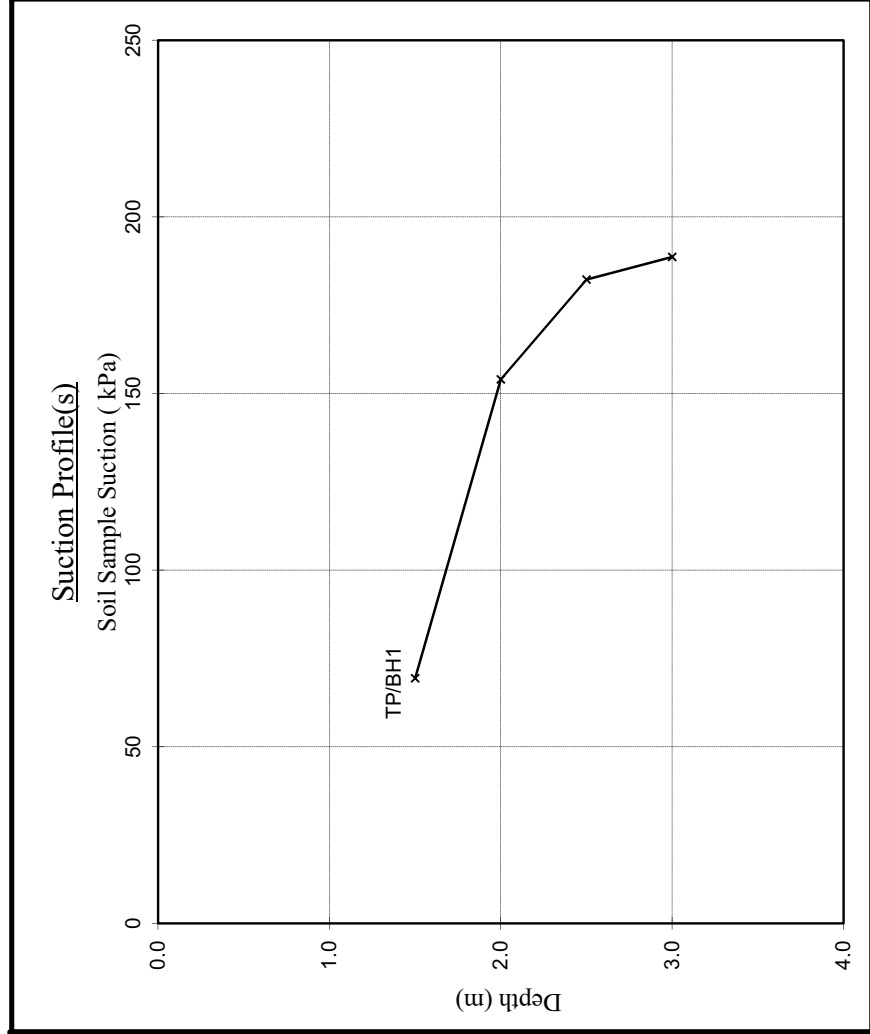
Our Ref :	148703	Date Sampled :	24/07/2013
Location :	9, Rosslyn Hill, NW3	Date Received :	24/07/2013
Work carried out for:	CRAWFORD CLAIMS MGMT SUS	Date Tested :	25/07/2013
		Date of Report :	01/08/2013

Note : Unless specifically noted the profiles have not been related to a site datum.



Notes

1. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly overconsolidated clays) at shallow depths.



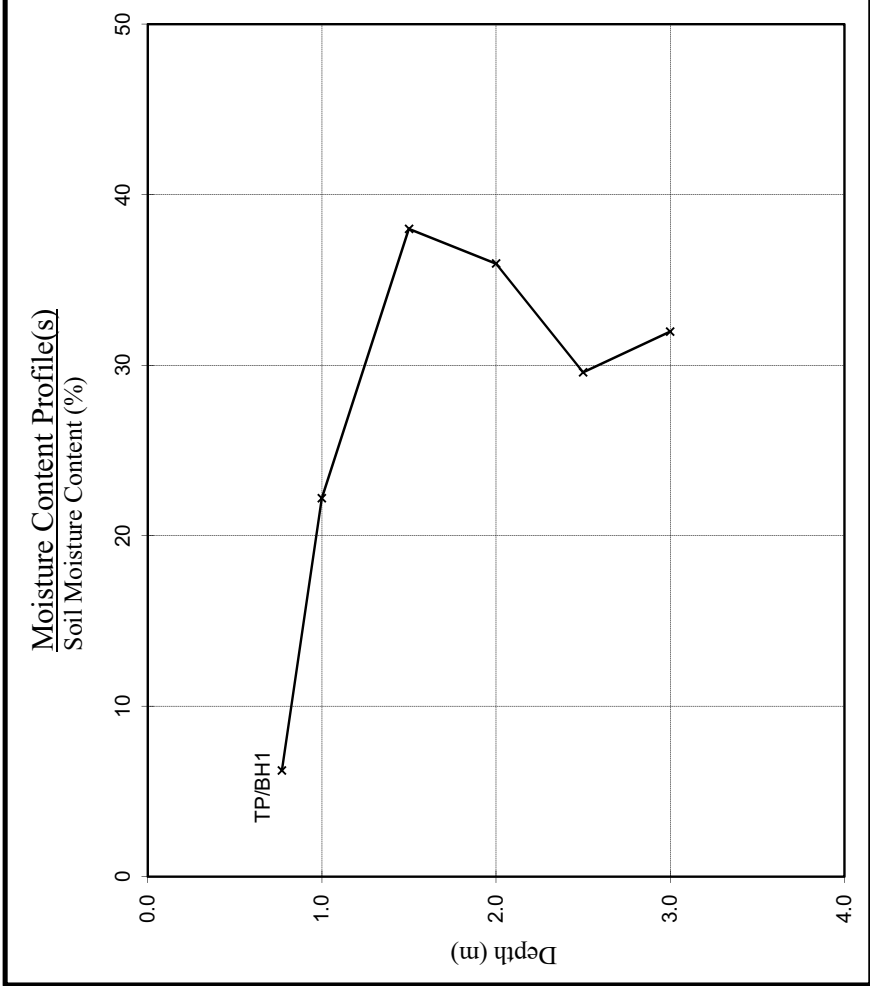
Note

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.

Moisture Content and Shear Strength Profiles

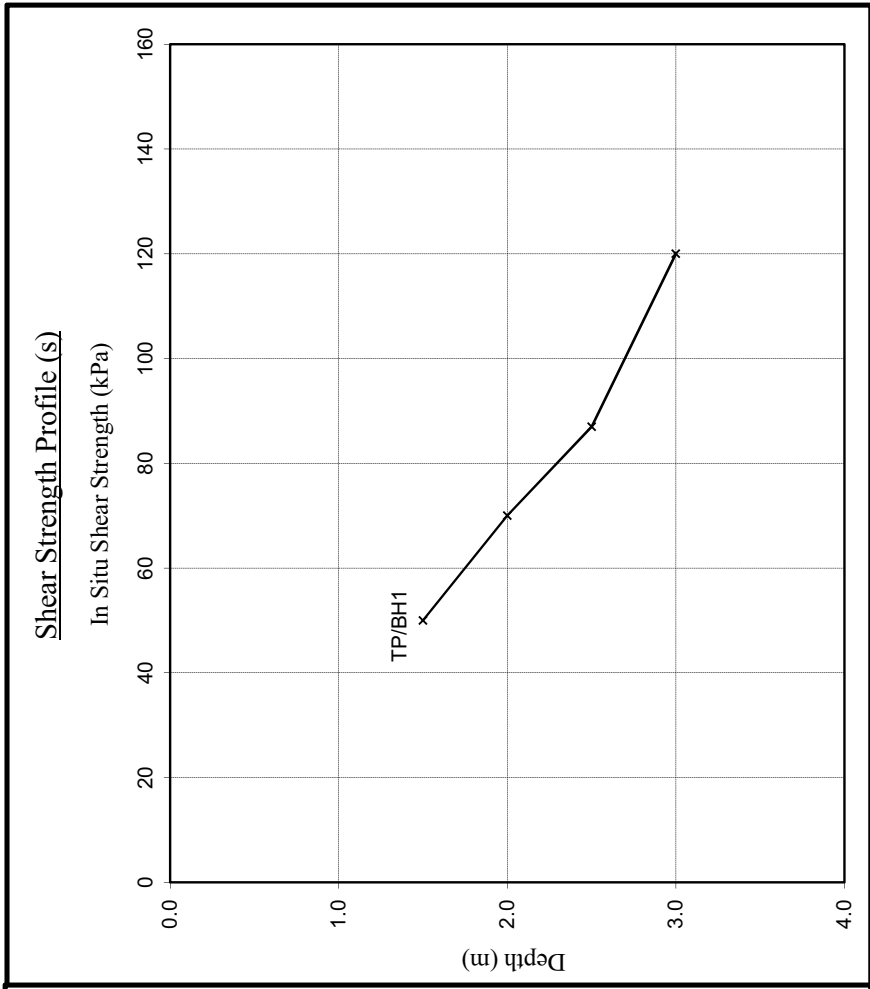
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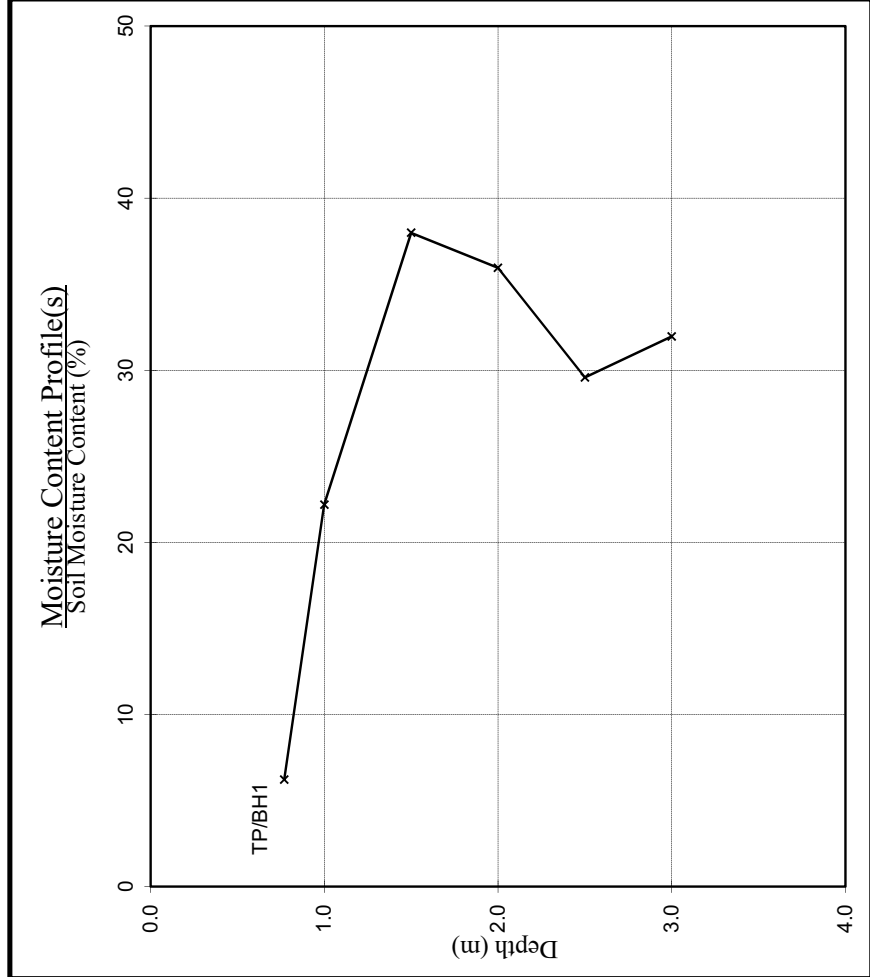
Note

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 120 kPa.

Moisture Content and Suction Profiles

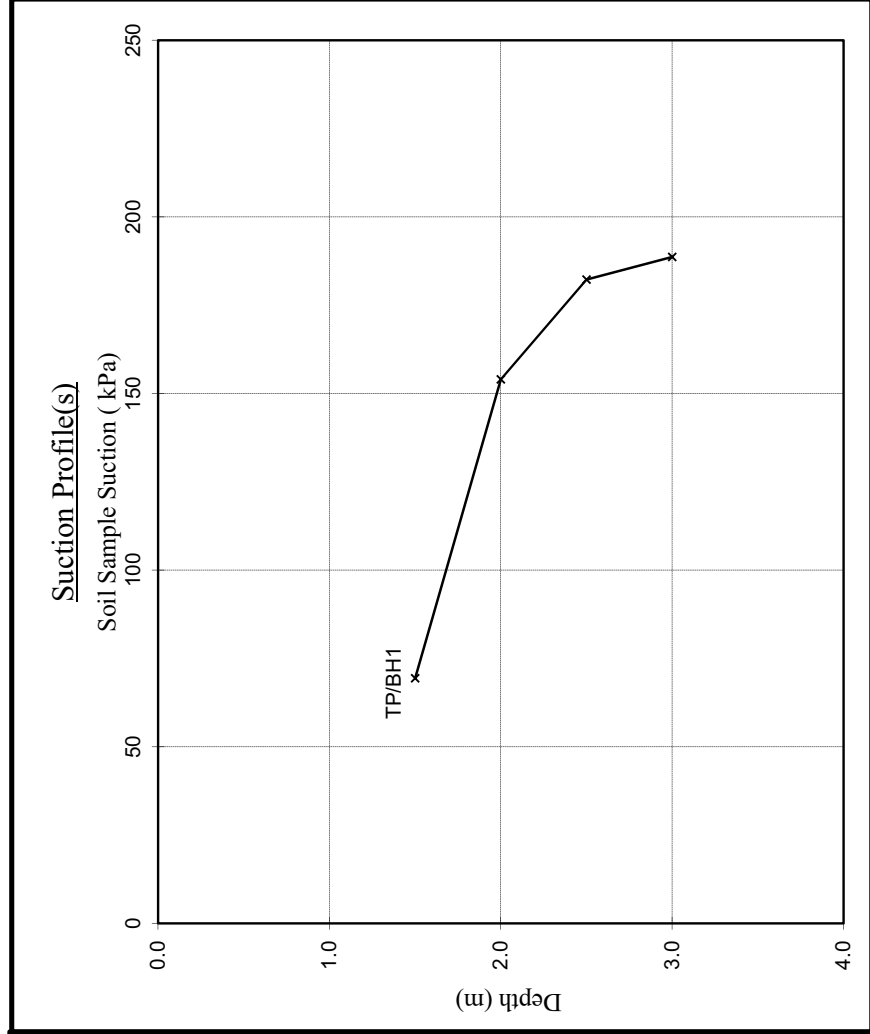
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Tree Root Identification Ltd

Sheet: 1 of 1

Job No: 148703
Date: 31/07/2013
Order No: 458302

Our Ref: CET310713

Site: 9 Rosslyn Hill,
London.

Work carried
out for: Crawford Claims MGMT SUS

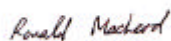
Certificate of Analysis

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 -

Trial pit/ Borehole number	Root diameter (mm)	Tree, shrub or climber from which root originates	Result of starch test#
BH1 (depth: 2200mm)	1.5-2.0	<u>Fraxinus</u> (ash) (4 roots)	positive

The presence of starch indicates that the root was alive in the recent past.



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Accounts/Quality Manager: Fiona M. Sinclair, H.N.C. (Management)

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