PROPERTY ASSURANCE
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SITE INVESTIGATION
FACTUAL REPORT

Report No:	263958
Client:	Crawford Claims Management
Site:	10-10a Sherriff Road, London
Client Ref:	SU1503174-
Date of Visit:	02/09/2015

ISO 9001 REGISTERED FIRM | ISO 14001 REGISTERED FIRM | OHSAS 18001 REGISTERED FIRM

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

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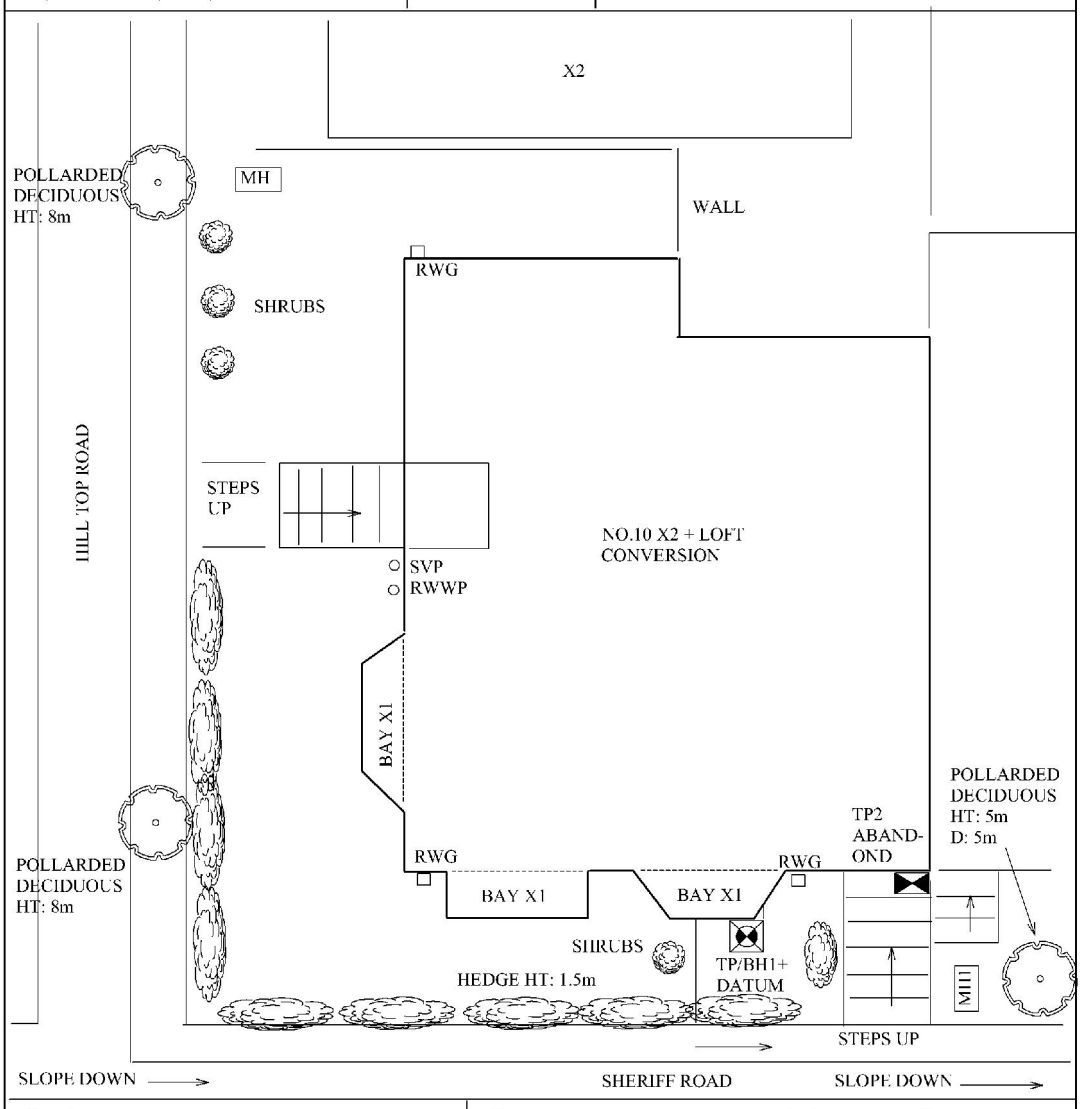
Investigation Layout Plan

Sheet: 1 of 1
Job No: 263958
Date: 02/09/2015

Site: 10-10a Sherriff Road, London, NW6
Work carried out for: Crawford Claims MGMT SUS

MH (SI) SA (Checked) AR (Drawn)

Weather: Dry



Remarks:

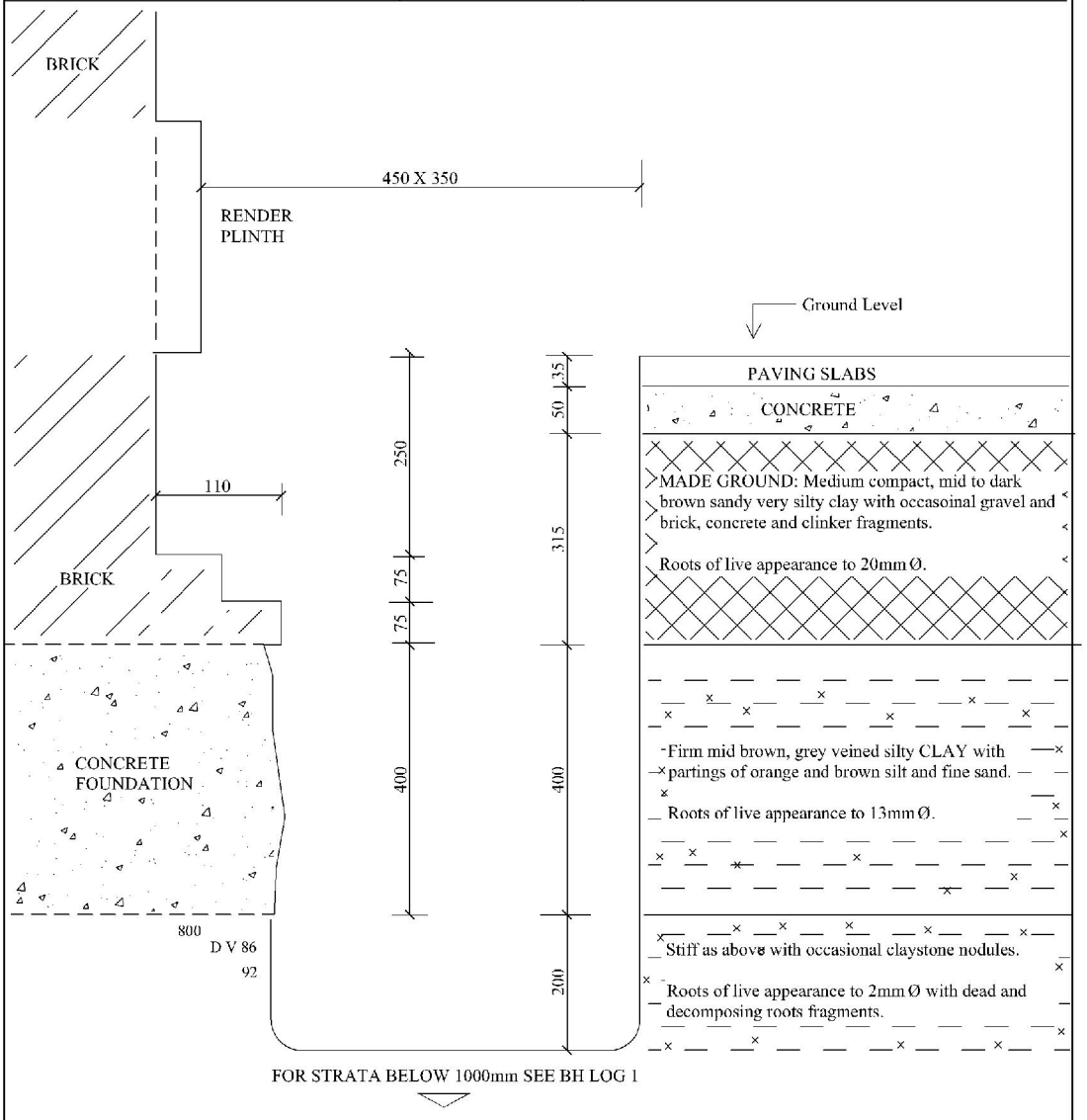
Scale: N.T.S.

Key:

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	O/D - Open Discharge
Waste Pipe	WP	

Trial Pit No: 1

	Sheet: 1 of 1	
	Job No: 263958	
	Date: 02/09/2015	Site: 10-10a Sherriff Road, London
Excavation Method: Hand tools	Drawn by: AR	Work carried out for: Crawford Claims MGMT SUS
Weather: Dry	Ground Level mOD:	



Remarks: All measurements in millimetres.

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		

Logged: MH	Checked: SA	Approved:	Scale: N.T.S.

Borehole No: 1 & Datum	Sheet: 1 of 1	Site: 10 - 10A, Sherriff Road, London, NW6
Boring Method: CFA	Job No: 263958	
Diameter: 100mm Coordinates:	Date: 02/09/2015	Work Carried out for: Crawford Claims MGMT SUS
	Ground Level mOD:	

Depth (m)	Description of Strata	Thick-ness (m)	Legend	Sample	Test Type	Test Result	Depth (m)	Field Records/Comments	Depth to water (m)
	As trial pit 1	1.00							
1.00				D	V	120	1.00	Roots of live appearance to 1mm diameter to 2.7m	
	Stiff, mid brown, grey veined silty CLAY with partings of orange and brown silt and fine sand and occasional claystone nodules	1.00		D		128	1.50		
2.00				D	V	122	2.00		
2.20	Stiff as above with crystals	0.20				122			
	Very stiff, mid brown, grey veined silty CLAY with partings of orange and brown silt and fine sand with occasional claystone nodules and crystals	0.80		D			2.50	Dead and decomposing root fragments to 5.1m	
3.00				D	V	140+	3.00		
	Borehole sampling ends	2.10				140+			
5.10	Borehole ends at 5.1m Claystone obstruction - too dense for drill to penetrate								

Remarks:
Borehole dry and open on completion
Datum installed at 5.1m. No soil samples or insitu strength testing below 3.0m

Key: T.D.T.D. Too Dense to Drive
D Small disturbed sample
B Bulk disturbed sample
W Water sample
J Jar sample
V Pilcon Vane (kPa)
M Mackintosh Probe

Logged: MH	Checked: SA	Drawn by Jo F	Scale: NTS	Weather: Dry

Trial Pit No: 2

Sheet: 1 of 1

Job No: 263958

Date: 02/09/2015

Site: 10-10a Sherriff Road, London

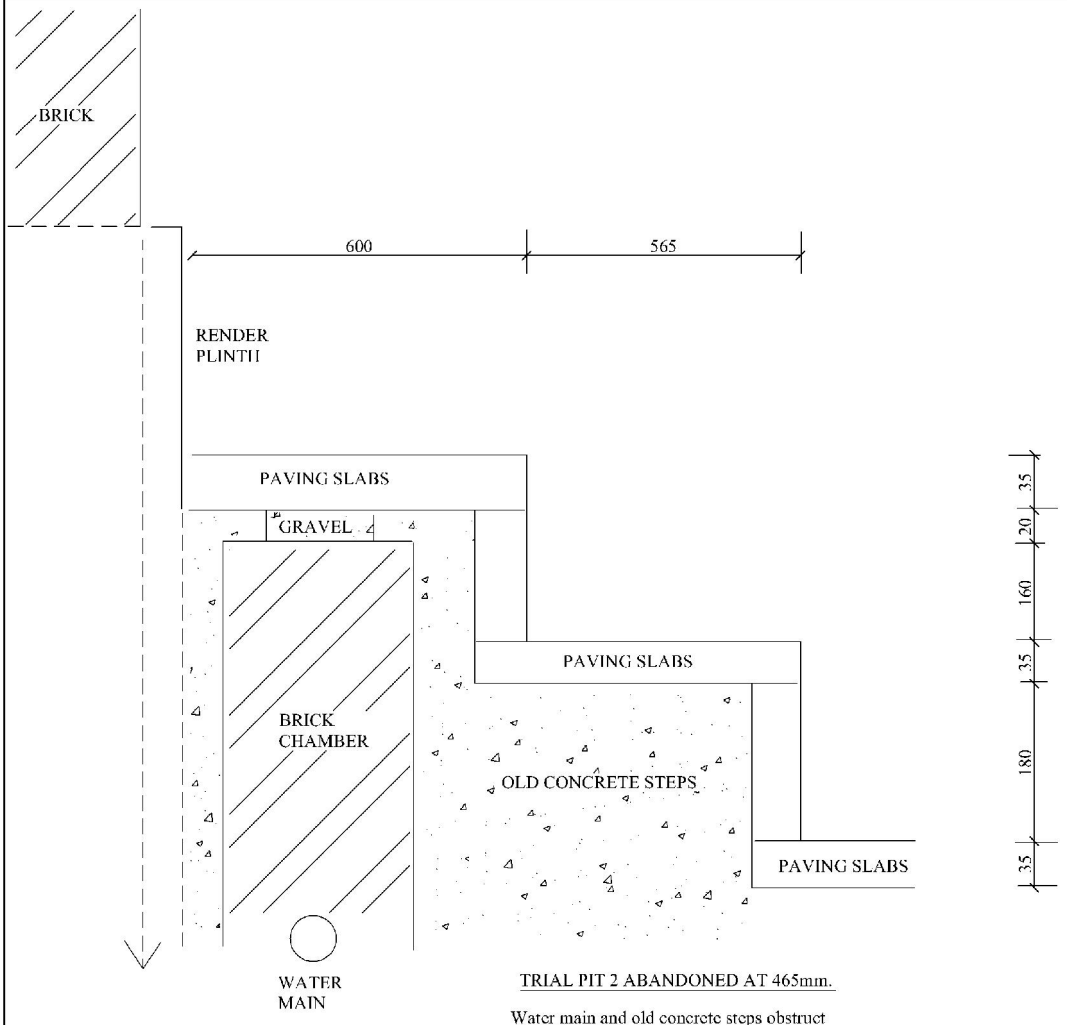
Excavation Method: Hand tools

Drawn by: AR

Work carried out for: Crawford Claims MGMT SUS

Weather: Dry

Ground Level mOD:



U/S of foundation not found

TRIAL PIT 2 ABANDONED AT 465mm.

Water main and old concrete steps obstruct

Remarks: All measurements in millimetres.

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		

Logged: MH | Checked: SA | Approved:

Scale: N.T.S.

Laboratory Summary Results

Our Ref : 263958

Location : 10-10a, Sherriff Road, London, NW6

Work carried out for: Crawford Claims Management

Date Sampled: 02/09/2015

Date Received : 03/09/2015

Date Tested : 03/09/2015

Date of Report : 10/09/2015

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 0.80	D	32	<5	77	26	51	0.12	51	CV	168	199			89					
	1.0	D	30	<5							168	246			124					
	1.5	D	32	<5							168	260								
	2.0	D	32	<5	77	26	51	0.13	51	CV	168	241			122					
	2.5	D	33	<5							168	247								
	3.0	D	31	<5	76	24	52	0.14	52	CV	168	271			> 140					

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 S9c edapted 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] $SO_4 = 1.2 \times SO_3$

[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 other wise.

* These tests are not UKAS accredited

Full reports can be provided upon request

Key

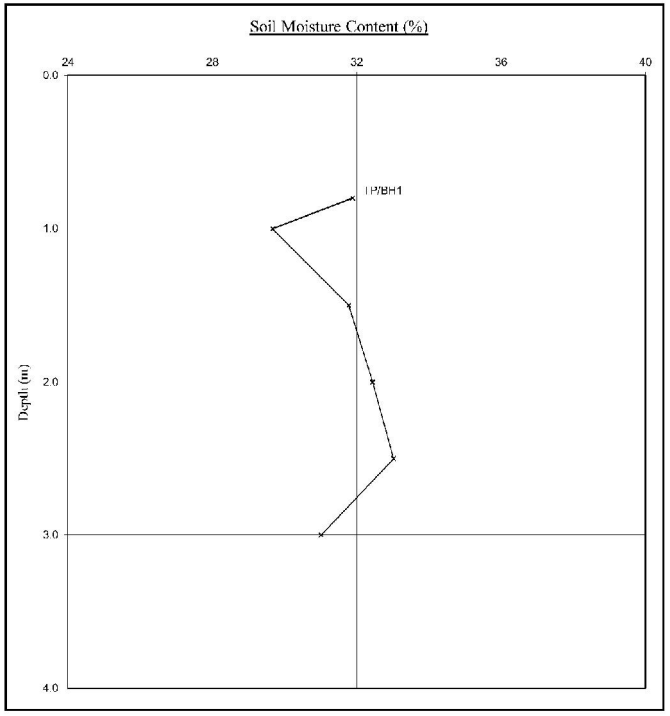
D	Disturbed sample (small)
B	Disturbed sample (bulk)
U	Undisturbed sample
W	Groundwater sample
BNP	Essentially Non-Plastic by inspection
U/S	Underside of Foundation

Version: 5BH V1.4 - 11/05/15

8618

Moisture Content Profiles

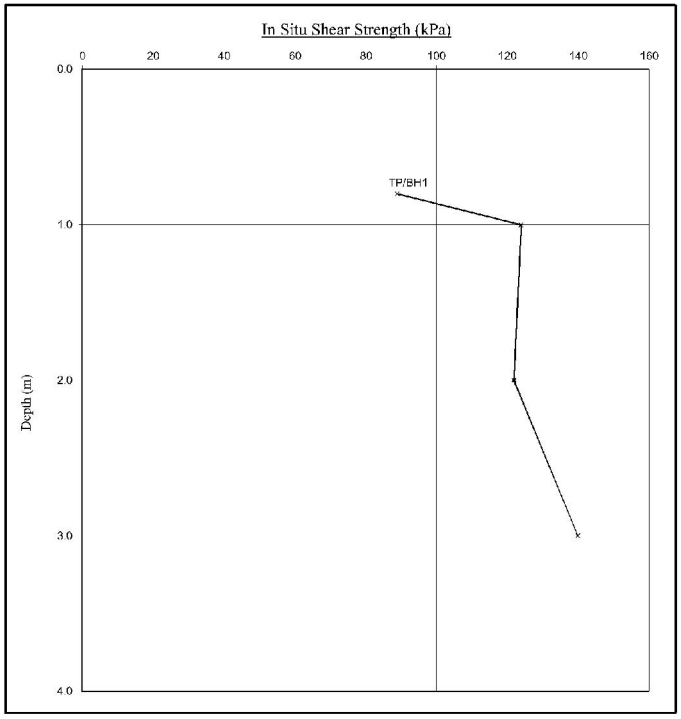
Our Ref : 263958
Location : 10-10a, Sherriff Road, London, NW6
Work carried out for: Crawford Claims Management



Notes
1. If plotted, 0.4 LL and PI –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 : 02/09/2015
Date Received : 03/09/2015
Date Tested : 03/09/2015
Date of Report : 10/09/2015



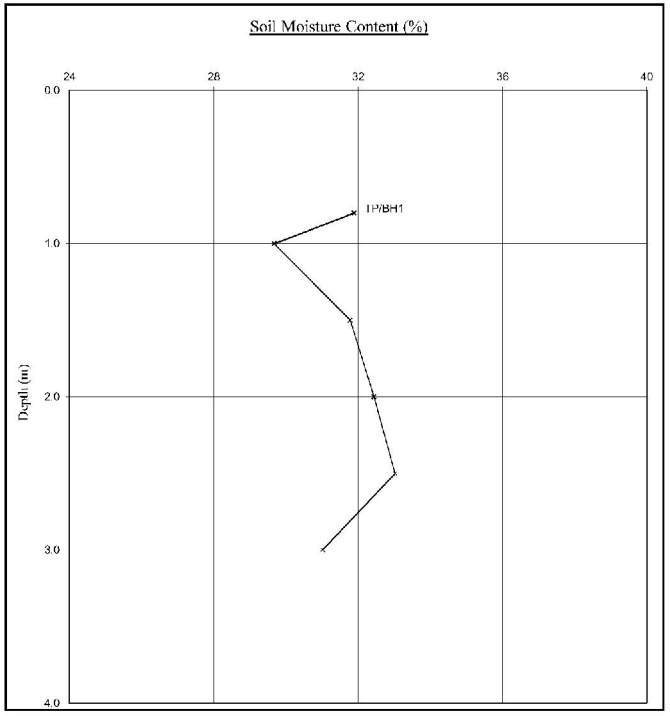
Note
1. Unless otherwise stated, values of Shear Strength were determined in situ by CET using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 140 kPa.
2. Unless specifically noted the profiles have not been related to a site datum.

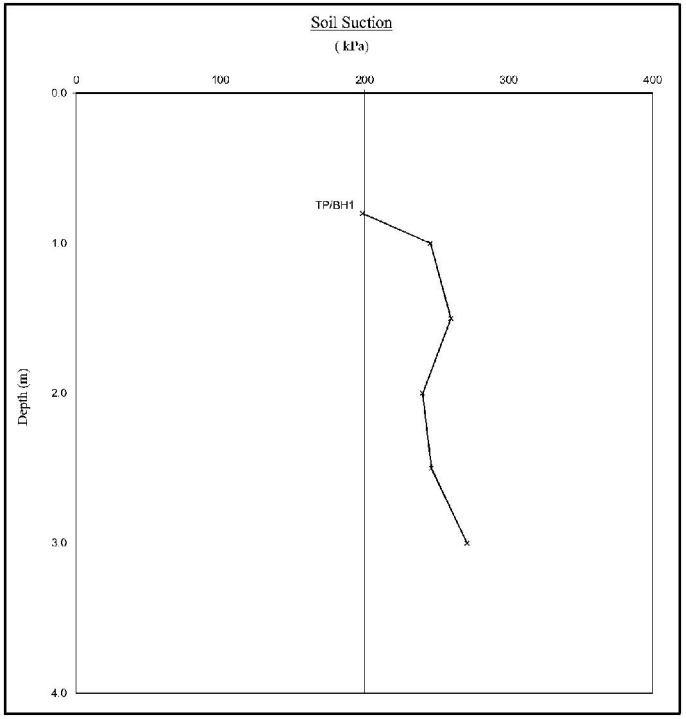
Moisture Content Profiles

Soil Suction Profiles

Our Ref : 263958
Location : 10-10a, Sherriff Road, London, NW6
Work carried out for: Crawford Claims Management

Date Sampled : 02/09/2015
Date Received : 03/09/2015
Date Tested : 03/09/2015
Date of Report : 10/09/2015





Notes
1. If plotted, 0.4 LL and PI –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
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 Job No: **263958** Date: **04/09/2015** Order No: **738028** EPSL Ref: **R12094**	Site: **10-10A Sheriff Road, 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**
TP1 (USF)	2 mm	Cupressaccae spp.	Negative
TP1 (USF)	2 mm	Tilia spp. 3 roots	Positive
TP1 (USF)	2 mm	Ligustrum spp.	Positive
BH1 (to 2.7m)	<1 mm	Tilia spp. 5 roots	Negative

Cupressaceae spp. include Lawson cypress, western red cedar, Monterey cypress, Leyland cypress and junipers.
Tilia spp. are limes.
Ligustrum spp. are privets.

[redacted]

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