

SITE INVESTIGATION FACTUAL REPORT

Report No: 263625
Client: Crawford Claims Management
Site: 19 Compayne Gardens, London

Client Ref: SU1502293-
Date of Visit: 16/07/2015

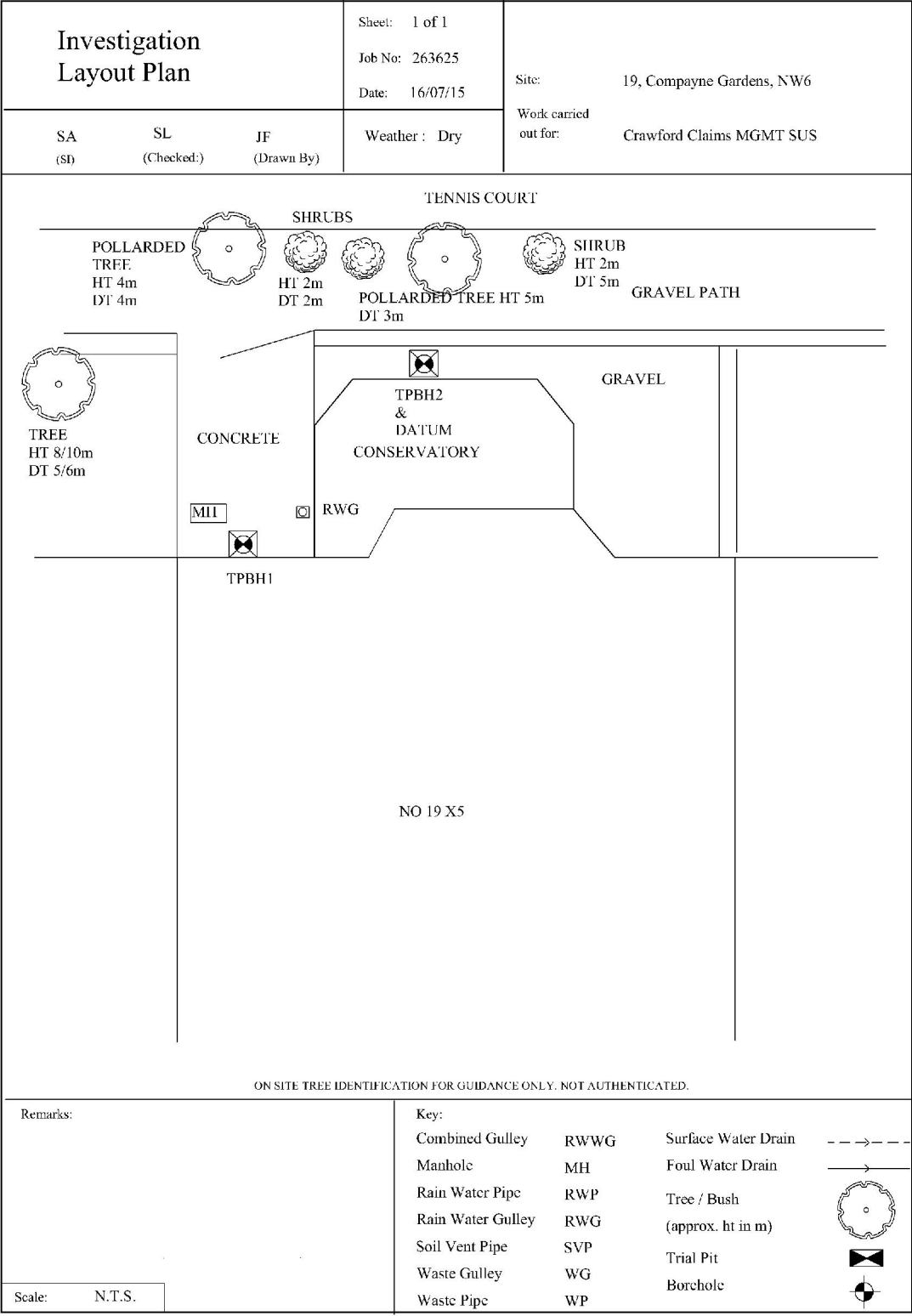


Home Emergency Response - Subsidence Investigation - Drainage Services – Crack & Level Monitoring – Property Video Surveys

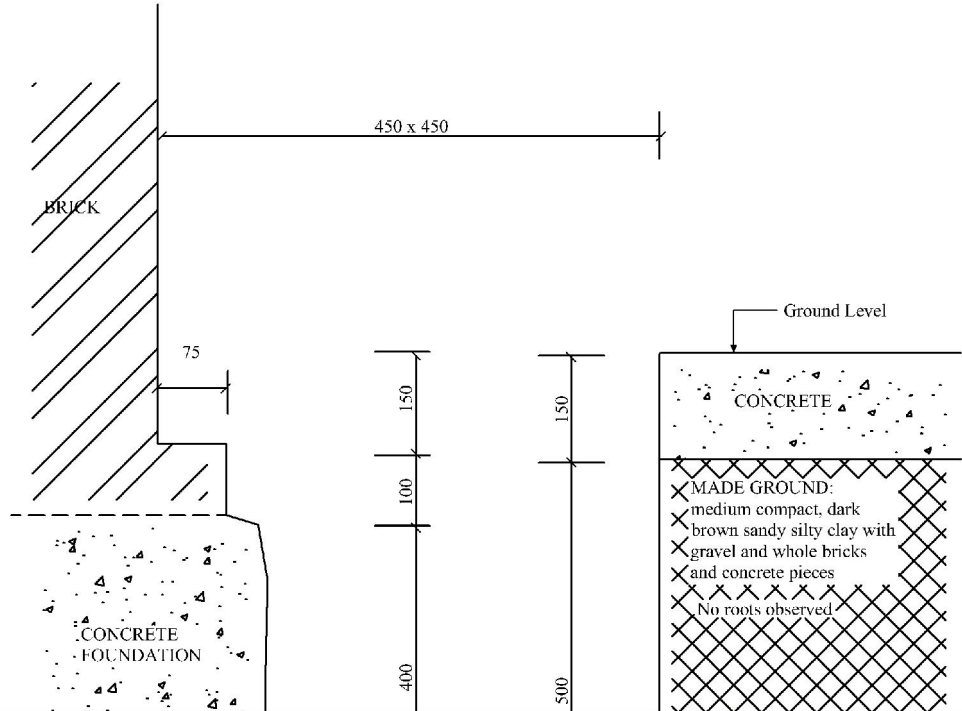
Unit E2 First Floor Suite, Boundary Court
Willow Farm Business Park, Castle Donington
Leicestershire, DE74 2NN



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Registered in England No. 02527130



Trial Pit No: 1	Sheet: 1 of 1	Site: 19, Compayne Gardens, NW6 Work carried out for: Crawford Claims MGMT SUS
	Job No: 263625	
	Date: 16/07/15	
Excavation Method: Hand Tools	Drawn by: Jo F	
Weather: Dry	Ground level mOD:	



Borehole No: 1			Sheet: 1 of 1			Site: 19, Compayne Gardens, NW6					
Boring Method: Hand Auger			Job No: 263625								
Diameter: 75mm			Date: 16/07/2015								
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)
0.85	As trial pit 1		0.85								
1.50	Stiff, mid brown / orange, grey veined silty CLAY with partings of orange and brown silt and fine sand with occasional gravel		0.65		D	V	78 76	1.00	Roots of live appearance to 1mm diameter to 1.7m		
3.00	Stiff, mid brown as above with crystals		1.50		D	V	86 90	1.50	No roots observed below 1.7m		
				D	V	98 104	2.00				
				D	V	130+ 130+	2.50				
				D	V	130+ 130+	3.00				
	Borehole ends at 3.0m										
Remarks: Borehole dry and 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: SA		Checked: SL		Drawn by: Jo F		Scale: NTS		Weather: Dry			

Trial Pit No: 2	Sheet: 1 of 1	Site: 19, Compayne Gardens, NW6	
	Job No: 263625		Work carried out for: Crawford Claims MGMT SUS
	Date: 16/07/15		
Excavation Method: Hand Tools	Drawn by: Jo F		
Weather: Dry	Ground level mOD:		

The diagram illustrates a trial pit excavation. To the left of the pit is a brick wall, indicated by diagonal hatching and labeled 'BRICK'. The pit itself is rectangular, with a width of 500 mm and a depth of 350 mm. The pit is divided into three horizontal sections: a top section of 100 mm, a middle section of 300 mm, and a bottom section of 600 mm. The bottom section is further divided into three sub-sections labeled 12, 13, and 18. The pit is situated on a concrete foundation, labeled 'CONCRETE FOUNDATION', which is 400 mm wide. The ground level is indicated by a dashed line. The soil layers are described as follows: 'Gravel over membrane' (top layer), 'MADE GROUND medium compact dark brown sandy silty clay with gravel and brick pieces and concrete' (middle layer), and 'Roots of live appearance to 7mmØ' (bottom layer). The pit is labeled 'DM 12' and 'DM 13'.

FOR STRATA BELOW 600mm SEE BH LOG 2

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: SA	Checked By: SL	Approved:	Scale: N.T.S.		

Borehole No: 2		Sheet: 1 of 1		Site: 19, Compayne Gardens, NW6					
Datum		Job No: 263625							
Boring Method: Hand Auger / CFA		Date: 16/07/2015							
Diameter: 75mm / 100mm		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)
0.60	As trial pit 2	0.60							
1.00	MADE GROUND: medium compact dark brown, sandy silty clay with gravel and numerous brick and concrete pieces	0.40		D	V	76 68	1.00	Roots of live appearance to 1.5mm diameter to 1.9m with dead and decomposing root fragments to 4.0m	
2.20	Stiff, becoming firm, mid brown / orange, grey veined silty CLAY with partings of orange and brown silt and fine sand	1.20		D	V	68 72	1.50		
				D	V	58 60	2.00		
5.30	Stiff as above with crystals	3.10		D	V	130+ 130+	2.50		
				D	V	130+ 130+	3.00		
	Borehole ends at 5.3m Claystone obstruction - deep datum installed							No roots observed below 4.0m	
Remarks: Borehole dry and open on completion No soil samples taken or insitu strength tests carried out below 3.0m					Key: T.D.T.D. Too Dense to Drive D Small disturbed sample J Jar sample B Bulk disturbed sample V Pileon Vane (kPa) W Water sample M Mackintosh Probe				
Logged: SA	Checked: SL	Drawn by: Jo F	Scale: NTS		Weather: Dry				

Laboratory Testing Results

Our Ref :	263625	Date Sampled :	16/07/2015
Location :	19, Compayne Gardens, NW6	Date Received :	17/07/2015
Work carried out for:	Crawford Claims Management	Date Tested :	17/07/2015
		Date of Report :	24/07/2015

TP/BH No.	Sample Ref.		Type	Moisture Content (%) [1]	Soil Friction > 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) [9]	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]
	Depth (m)																		SO ₃ [14]	SO ₄ [15]	
2	U/S 0.40	D	35	36																	
	1.0	D	36	<5	79	26	53	0.19	53	CV	168	129				72					
	1.5	D	34	<5							168	222				70					
	2.0	D	33	<5	76	27	49	0.12	49	CV	168	250				59					
	2.5	D	33	<5							168	368				> 130					
	3.0	D	34	<5	77	30	47	0.08	47	CV	168	468				> 130					



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

^{††} These tests are not UKAS accredited

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

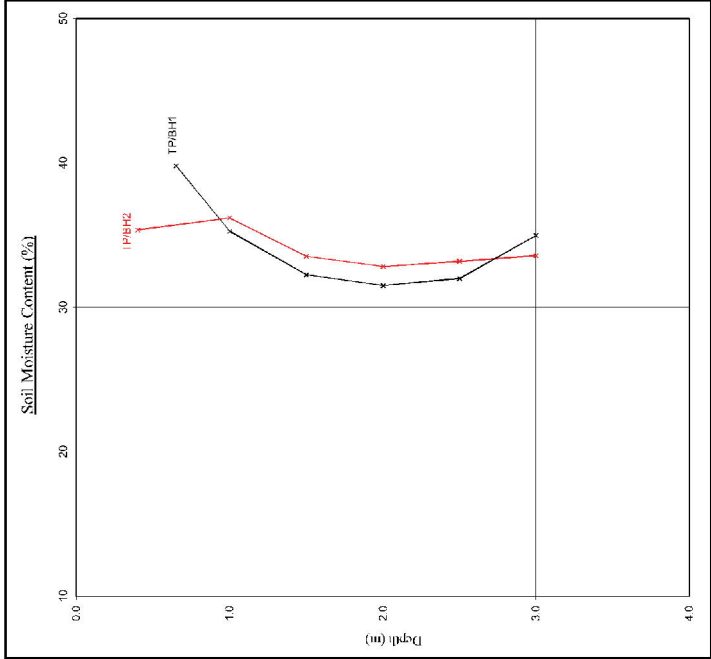
f87 In-house method S9c adapted from BRET IP 4/93

Moisture Content Profiles

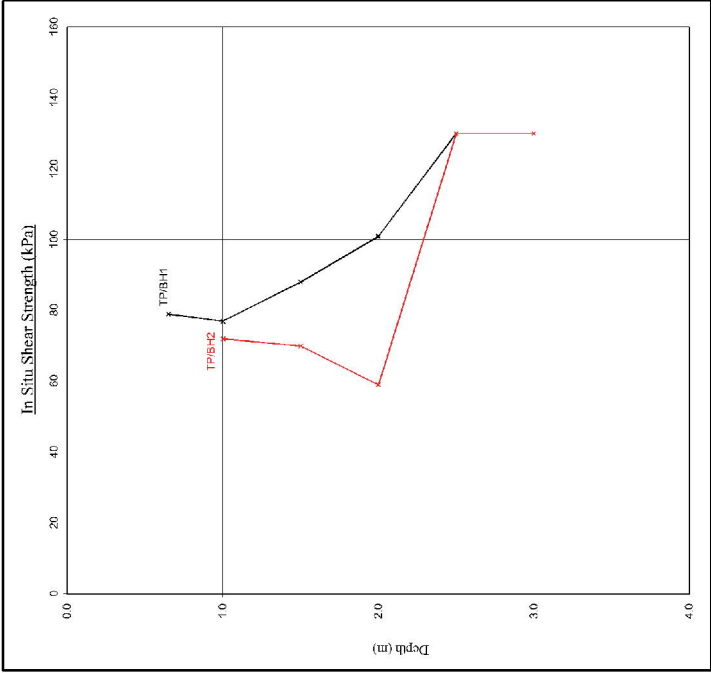
Our Ref: 263625
Location: 19, Campayne Gardens, NW6
Work carried out for: Crawford Claims Management

Shear Strength Profiles

Date Sampled: 16/07/2015
Date Received: 17/07/2015
Date Tested: 17/07/2015
Date of Report: 24/07/2015



- Notes**
1. If plotted, 0.4 D₁ and P₁-2 (after Driscoll, 1987) 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.



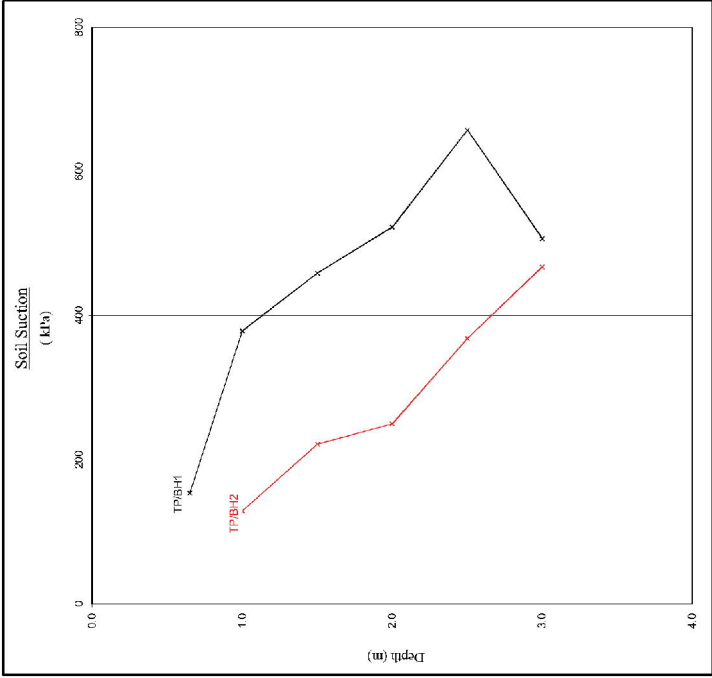
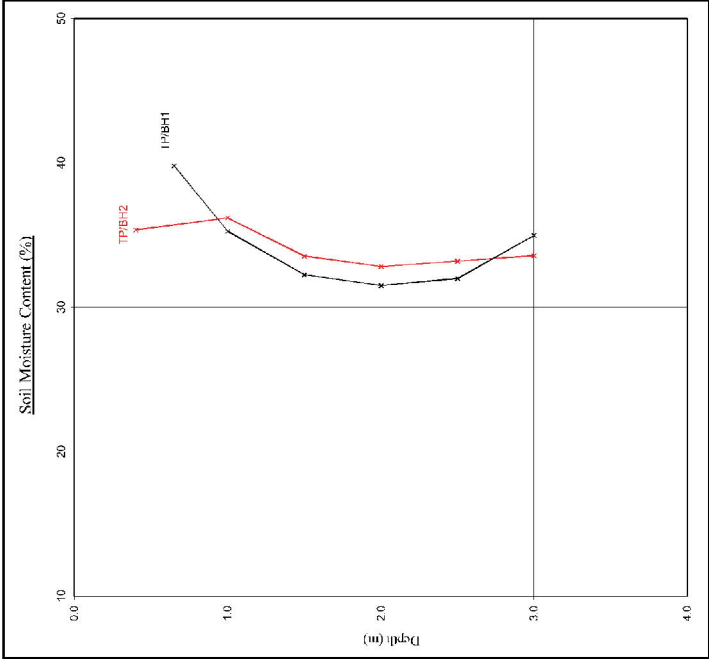
- Note**
1. Unless otherwise stated, values of Shear Strength were determined in situ by CPT using a Picon Hard Vane the calibration of which is limited to a maximum reading of 150 kPa.
 2. Unless specifically noted the profiles have not been related to a site datum.

Moisture Content Profiles

Our Ref: 263625
Location: 19, Campayne Gardens, NW6
Work carried out for: Crawford Claims Management

Soil Suction Profiles

Date Sampled: 16/07/2015
Date Received: 17/07/2015
Date Tested: 17/07/2015
Date of Report: 24/07/2015



Notes

1. Fajotted, 0.4 D₁₀ and P₁₀-2 (after Driscoll, 1987) 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 dependent 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: 263625	Site: 19 Compayne Gardens, London,	
	Date: 21/07/2015	Work carried out for: Crawford Claims MGMT SUS	
	Order No: 717813		
EPSSL Ref: R11733			

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)	1 mm	probably Leguminosae spp. but possibly Ulmus spp. * 2 roots	Negative
BH1 (1.7m)	1 mm	probably Leguminosae spp. but possibly Ulmus spp. * 3 roots	Negative
TP2 (USF)	7 mm	Tilia spp. 2 roots	Positive
TP2 (USF)	4 mm	probably Leguminosae spp. but possibly Ulmus spp. * 2 roots	Negative
BH2 (to 1.9m)	1 mm	Betula spp. * 2 roots	Negative
BH2 (to 1.9m)	1.5 mm	Acer spp. * 3 roots	Negative

* All in a state of decay.

Leguminosae spp. include laburnum, Robinia (false acacia or locust), broom, the pagoda tree and the climber wisteria.
Ulmus spp. are elms.
Tilia spp. are limes.
Betula spp. are birches.
Acer spp. are maples, including sycamore, Norway maple, and Japanese maples.


MDM

Address for correspondence: EPSL, Intec, Parc Menai, Bangor, Gwynedd, North Wales, LL57 4FG

Head of Laboratory Services : M D Mitchell B.Sc. (Hons), M.Phil.

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

Plant Anatomist : Dr D P Aebischer B.Sc. (Hons), M.Sc., Ph.D

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

Registered in England. No 3256771, Registered Office: Yarmouth House, 1300 Parkway, Solent Business Park, Hampshire, PO15 7AE