

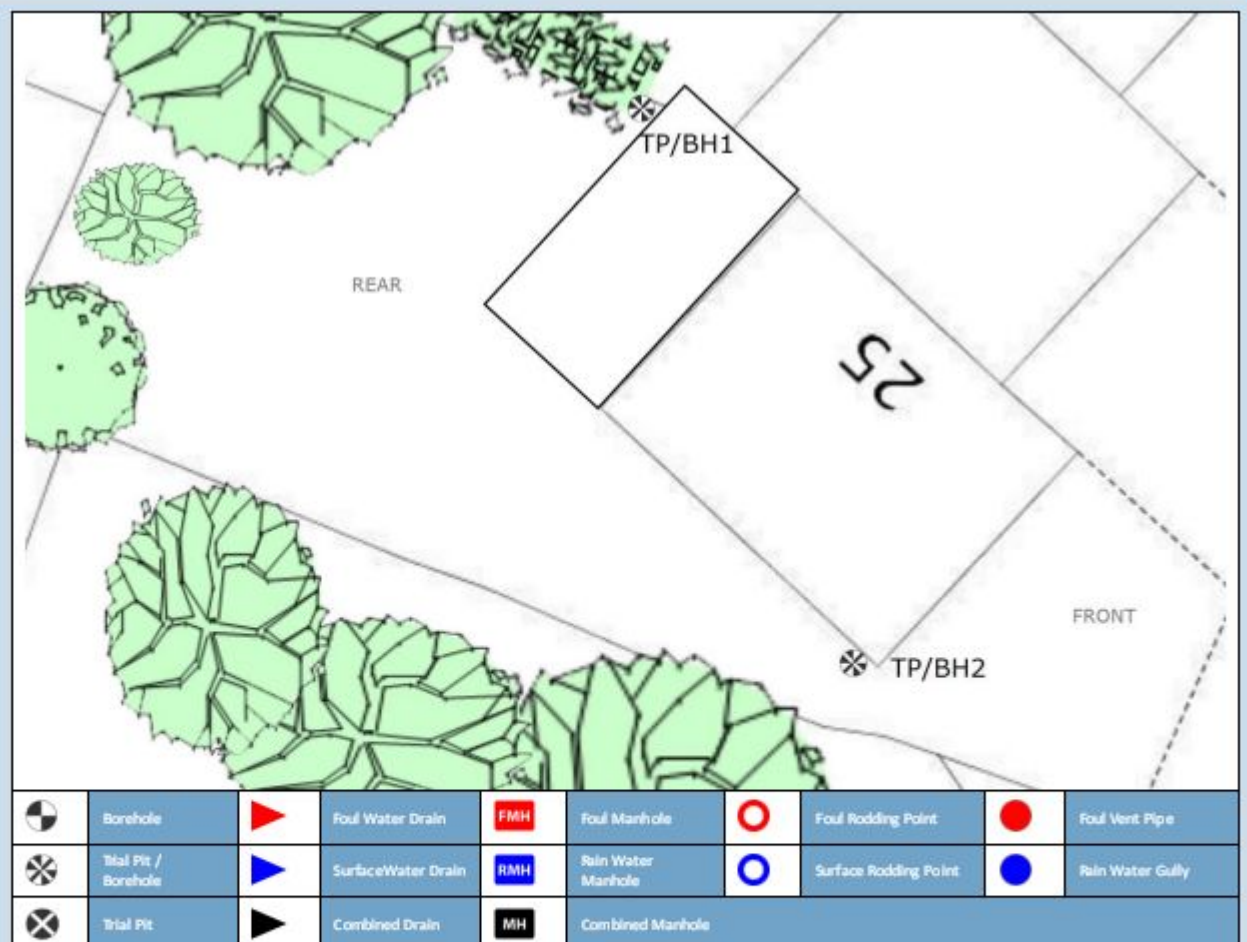
GEOTECHNICAL

for Infront Innovation

25 Galaxie Road, Waterlooville, Hampshire, PO8 9AT

Client: Infront Innovation
Client Contact: Spencer Caizley
Client Ref: IFS-DLG-SUB-13-0044404
Policy Holder: Mrs Elaine Potter
Report Date: 30 October 2013
Our Ref: C9201G4027

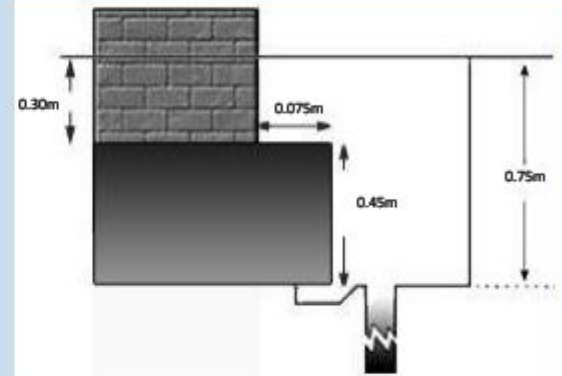
Site Plan



TP/BH1 Foundation Detail and Borehole Log

Foundation Detail

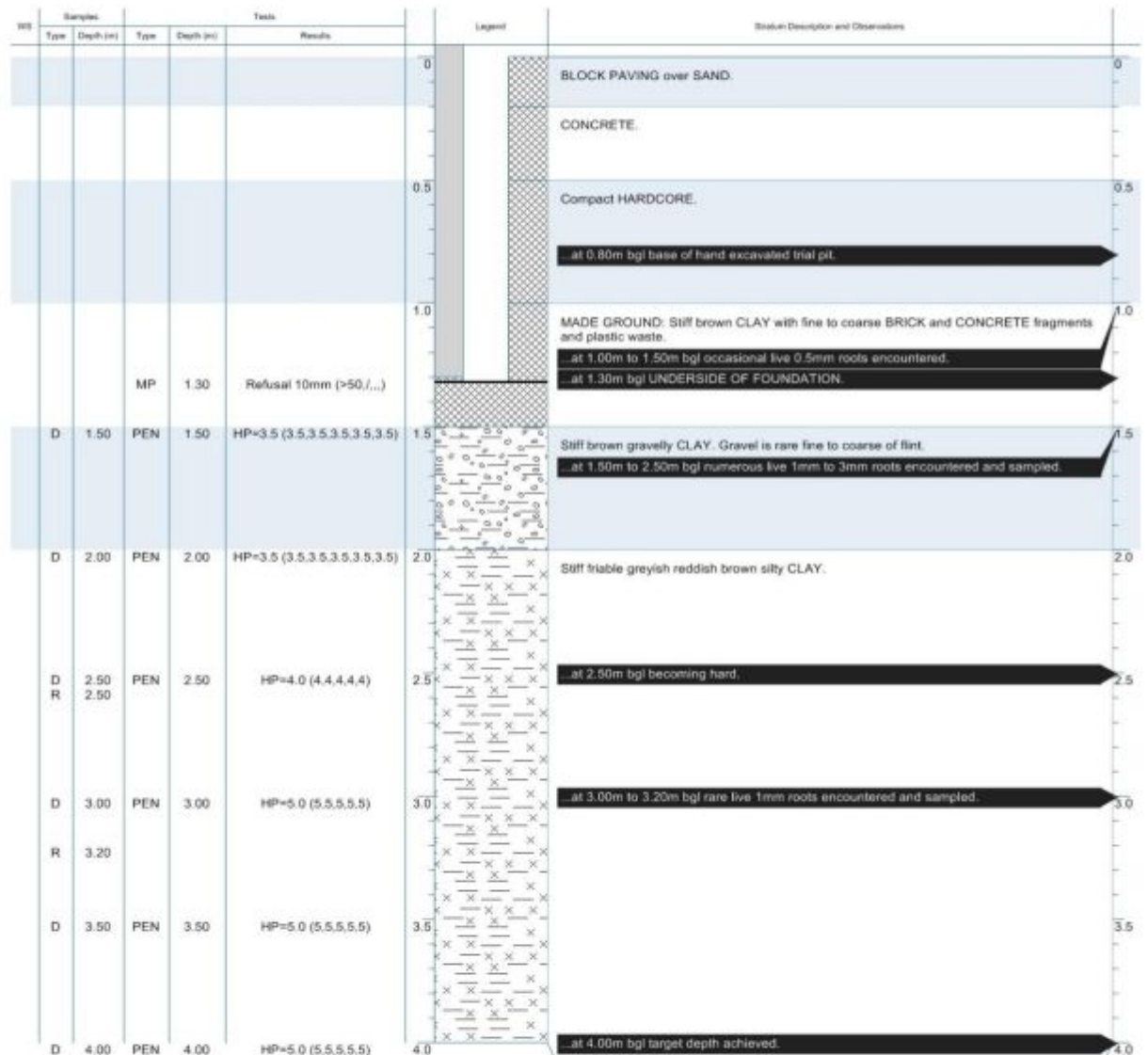
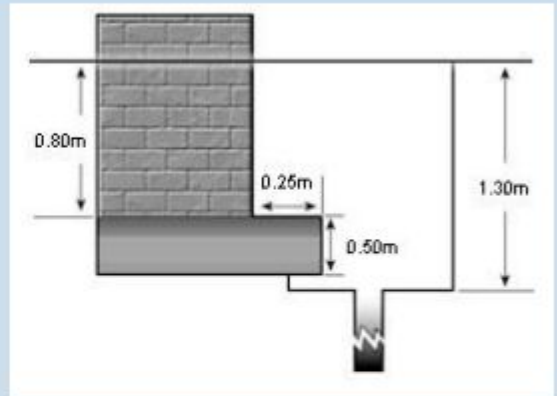
Foundation comprised continuation of brick wall to 300mm bgl, bearing on concrete to 750mm bgl, projecting 75mm from the brick wall. Underside of foundation exposed to 100mm back from the face of the concrete.



TP/BH2 Foundation Detail and Borehole Log

Foundation Detail

Foundation comprised continuation of brick and block wall to 800mm bgl, bearing on concrete to 1300mm bgl, projecting 250mm from the brick wall. Underside of foundation exposed to 50mm back from the face of the concrete.



— End of borehole at 4.00m —
Foundation comprised continuation of brick and block wall to 800mm bgl, bearing on concrete to 1300mm bgl, projecting 250mm from the brick wall. Underside of foundation exposed to 50mm back from the face of the concrete. Borehole completed by Hand Held Percussive Window Sampler. Groundwater strikes not encountered.

Site Observations

GENERAL:

Site Investigation works undertaken during dry weather conditions (i.e. no rain).

HEALTH, SAFETY AND ENVIRONMENTAL:

No positive signals detected in Power, Radio and Genny mode at TP/BH1 and TP/BH2 locations.

FOUNDATIONS:

Property foundations were exposed and underside confirmed in TP/BH1 and TP/BH2.

ROOTS:

Roots encountered to 1.40m bgl in TP/BH1.

Roots encountered to 3.20m bgl in TP/BH2.

IN-SITU TESTING INFO:

Hand Penetrometer (PEN) tests undertaken in TP/BH1 and TP/BH2 within the window sampler at maximum intervals of 0.50m.

Mackintosh Probe (MP) tests undertaken within the borehole, as appropriate for the soils encountered, at maximum intervals of 0.50m in TP/BH2.

GROUNDWATER:

Ground water strikes not encountered in TP/BH1 and TP/BH2.

The groundwater observation does not necessarily indicate equilibrium conditions. It should be appreciated that groundwater levels are subject to both seasonal and weather induced variations. Other effects such as construction activities may also change groundwater levels.

ROOT IDENTIFICATION

for Infront Innovation

25 Galaxie Road, Waterlooville, Hampshire, PO8 9AT

Client: Infront Innovation
Client Contact: Spencer Caizley
Claim Number: 013091913
Client Reference: IFS-DLG-SUB-13-0044404
Policy Holder: Mrs Elaine Potter
Report Date: 22 October 2013
Our Ref: R3322



Intec
Parc Menai, Bangor,
Gwynedd, North Wales
LL57 4FG
Tel: 01248 672652

Sub Sample	Species Identified		Root Diameter	Starch
TP/BH1:				
0.75-1.4m	<i>Fraxinus</i> spp.		7 mm	Abundant
0.75-1.4m	Cupressaceae spp.	1	2 mm	Abundant
1.5-2.5m	<i>Quercus</i> spp.	2	3 mm	Abundant
TP/BH2:				
3-3.7m	<i>Quercus</i> spp.	3	1 mm	Moderate

Comments:

- 1 - Plus 1 other also identified as Cupressaceae spp.
- 2 - Plus 3 others also identified as *Quercus* spp.
- 3 - Plus 1 other also identified as *Quercus* spp.

Fraxinus spp. include common ash.

Cupressaceae spp. include Lawson cypress, western red cedar, Monterey cypress, Leyland cypress and junipers.

Quercus spp. are oaks (both deciduous and evergreen).

Signed: M D Mitchell

Unless we are otherwise instructed in writing, the above sample material will normally be disposed of 6 years after the date of this report.

SOIL ANALYSIS

for Infront Innovation

25 Galaxie Road, Waterlooville, Hampshire, PO8 9AT

Client: Infront Innovation
Client Contact: Spencer Caizley
Claim Number: 013091913
Policy Holder: Mrs Elaine Potter
Report Date: 1 November 2013
Our Ref: C2606S9201

Compiled By:

Checked By:

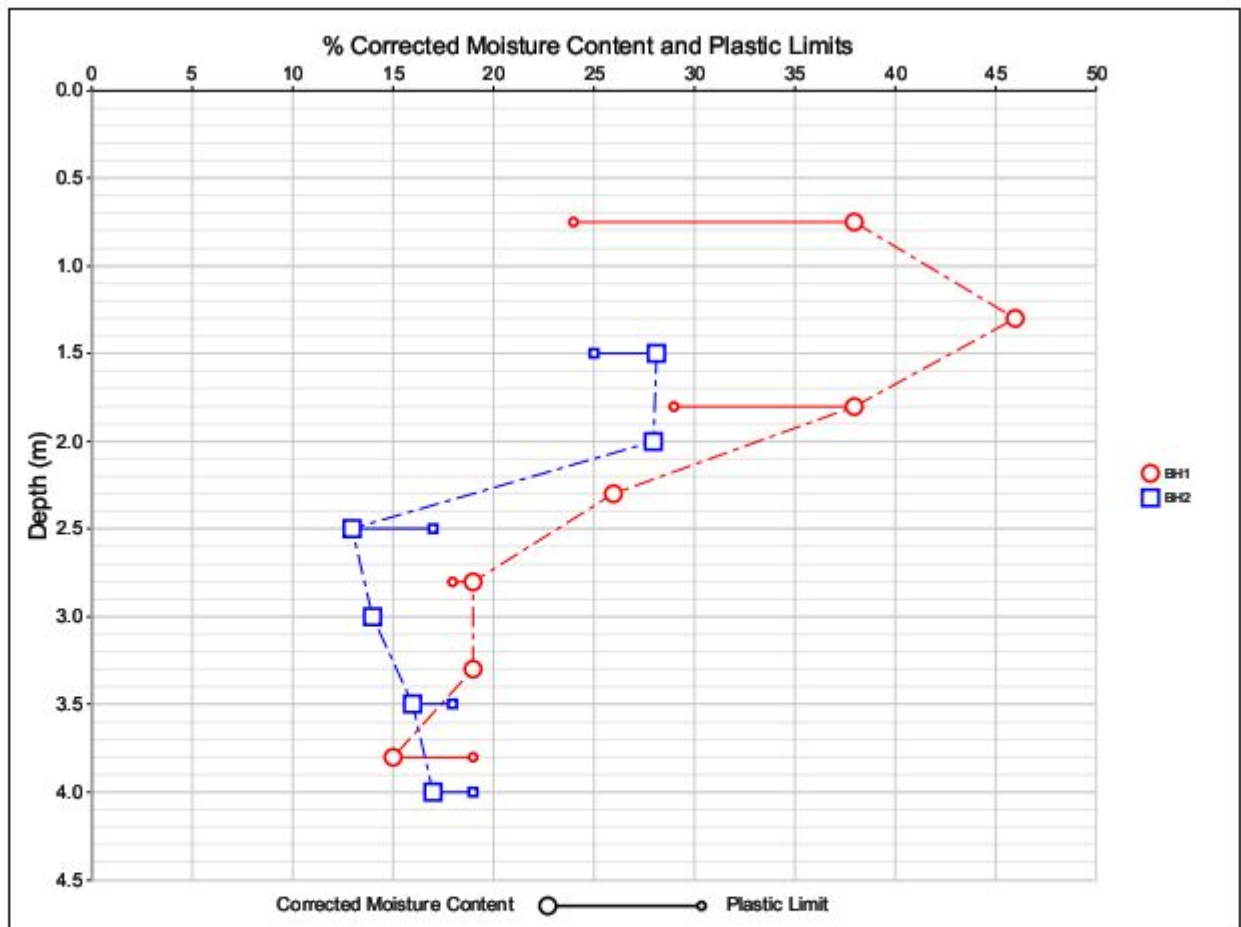


Note

Where appropriate moisture contents have been corrected to demonstrate the equivalent moisture content following the sample being passed through a .425 mm sieve for comparison with the Liquid & Plastic Limit. Where this is not available, uncorrected moisture contents have been used in the graph on the following page.

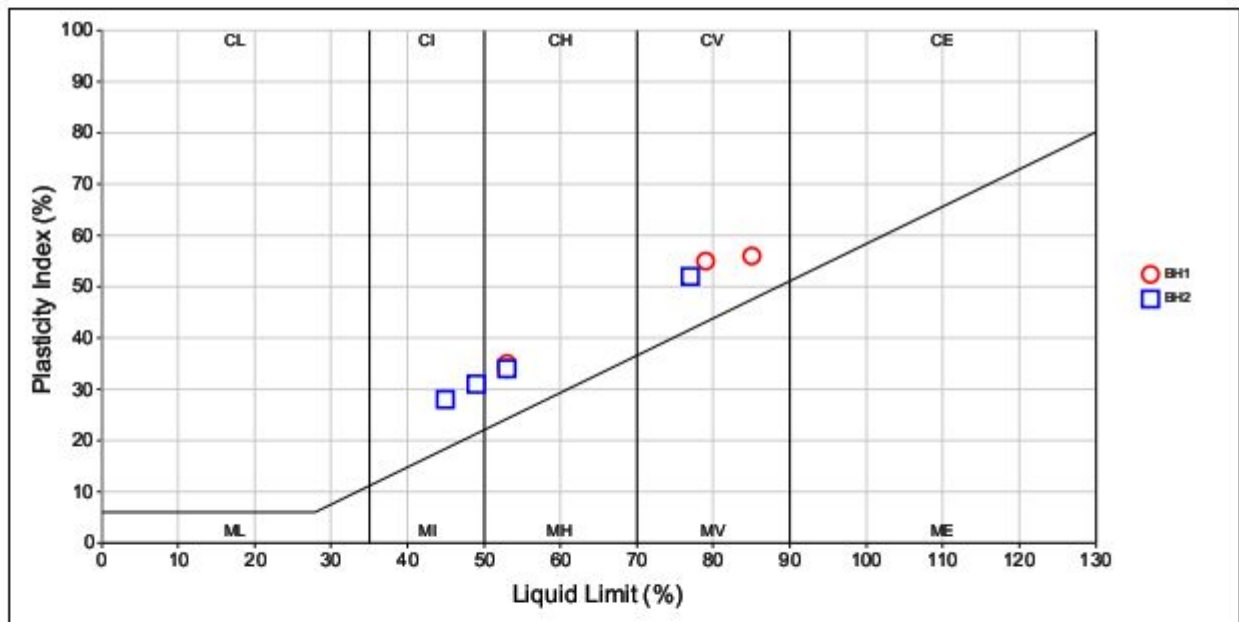
Lab Ref	Depth (m)	MC (%)	Corr MC (%)	LL (%)	PL (%)	PI (%)	% Passing .425mm
Samples from BH1							
001	0.75	38	38	79	24	55	100
002	1.30	46					
003	1.80	38	38	85	29	56	100
004	2.30	26					
005	2.80	19	19	53	18	35	100
006	3.30	19					
007	3.80	15	15	53	19	34	100
Samples from BH2							
008	1.50	27	28	77	25	52	96
009	2.00	28					
010	2.50	13	13	45	17	28	100
011	3.00	14					
012	3.50	16	16	49	18	31	100
013	4.00	17	17	53	19	34	100

Corrected Moisture Content and Plastic Limits Graph



Lab Ref	Depth (m)	Description	BS:5930	NHBC Chapter 4.2
Samples from BH1				
001	0.75	Brown CLAY.	CV	High
002	1.30	Brown CLAY.		
003	1.80	Brown CLAY.	CV	High
004	2.30	Reddish brown slightly sandy CLAY.		
005	2.80	Reddish brown mottled grey slightly sandy CLAY.	CH	Medium
006	3.30	Reddish brown slightly sandy CLAY.		
007	3.80	Brown mottled grey slightly sandy CLAY.	CH	Medium
Samples from BH2				
008	1.50	Brown slightly gravelly CLAY.	CV	High
009	2.00	Brown slightly sandy CLAY.		
010	2.50	Reddish brown mottled grey sandy CLAY.	CI	Medium
011	3.00	Red brown slightly gravelly sandy CLAY.		
012	3.50	Reddish brown mottled grey slightly sandy CLAY.	CI	Medium
013	4.00	Reddish brown mottled grey slightly sandy CLAY.	CH	Medium

Plasticity Chart for Casagrande Classification



References and Interpretation

The following provides a brief interpretation of the test results by comparison of the results to published classifications. The Atterberg Limit test may be used to classify the plasticity of soils; the plasticity classes defined in BS5930:1999 "Code of Practice for Site Investigations" are as follows.

CL (ML)	CLAY and CLAY/SILT of Low plasticity
CI (MI)	CLAY and CLAY/SILT of Intermediate plasticity
CH (MH)	CLAY and CLAY/SILT of High plasticity
CV (MV)	CLAY and CLAY/SILT of Very High plasticity
CE (ME)	CLAY and CLAY/SILT of Extremely High plasticity
O	The letter O is added to prefixes to symbolise a significant proportion of organic matter.
NP	Non-plastic

The Plasticity Index (PI) Result obtained from the Atterberg Limit tests may also be used to classify the potential for volume change of fine soils, in accordance with the National House Building Council's standards - Chapter 4.2 (2003) "Building Near Trees", as summarised below.

Modified PI < 10	Non Classified.
Modified PI = 10 to <20	Low volume change potential.
Modified PI = 20 to <40	Medium volume change potential.
Modified PI = 40 or greater	High volume change potential.

The 2003 edition of Chapter 4.2 also permits use of the Plasticity Index without modification. The classifications for this are grouped by soil type (soils with similar visual soils description and using unmodified Plasticity Indices.

OEDOMETER TESTING

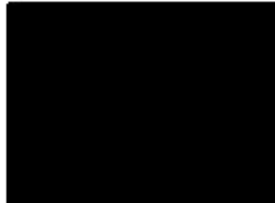
for Infront Innovation

25 Galaxie Road, Waterlooville, Hampshire, PO8 9AT

Client: Infront Innovation
Client Contact: Spencer Caizley
Claim Number: 013091913
Policy Holder: Mrs Elaine Potter
Report Date: 1 November 2013
Our Ref: C2606S9201

Compiled By:

Checked By:



Summary of Oedometer Testing

Lab Ref	Depth (m)	Strain	Dd (mm)	Remarks
Samples from BH1				
001	0.75	0.0002	0.1	
002	1.30	0.0001	0.0	
003	1.80	0.0001	0.0	
004	2.30	-0.0001	0.0	
005	2.80	0.0001	0.0	
006	3.30	0.0072	1.8	
007	3.80	0.0000	0.0	
Samples from BH2				
008	1.50	0.0041	3.0	
009	2.00	0.0020	0.5	
010	2.50	0.0005	0.1	
011	3.00	0.0000	0.0	
012	3.50	0.0004	0.1	
013	4.00	0.0066	1.7	

BH1 Dd Total: 1.9mm

BH2 Dd Total: 5.4mm

Oedometer Strain

