PROPERTY ASSURANCE
Giving our all

# SITE INVESTIGATION
# FACTUAL REPORT

| | |
|---|---|
| Report No: | SI-560417 |
| Client: | Sedgwick International UK - Morley |
| Site: | 75 Ladygate Lane<br>Hillingdon |
| Client Ref: | 8767150 |
| Date of Visit: | 24/03/2023 |

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💻 www.cet-uk.com

# Investigation Layout Plan

Sheet: 1 of 1

Job No: 560417

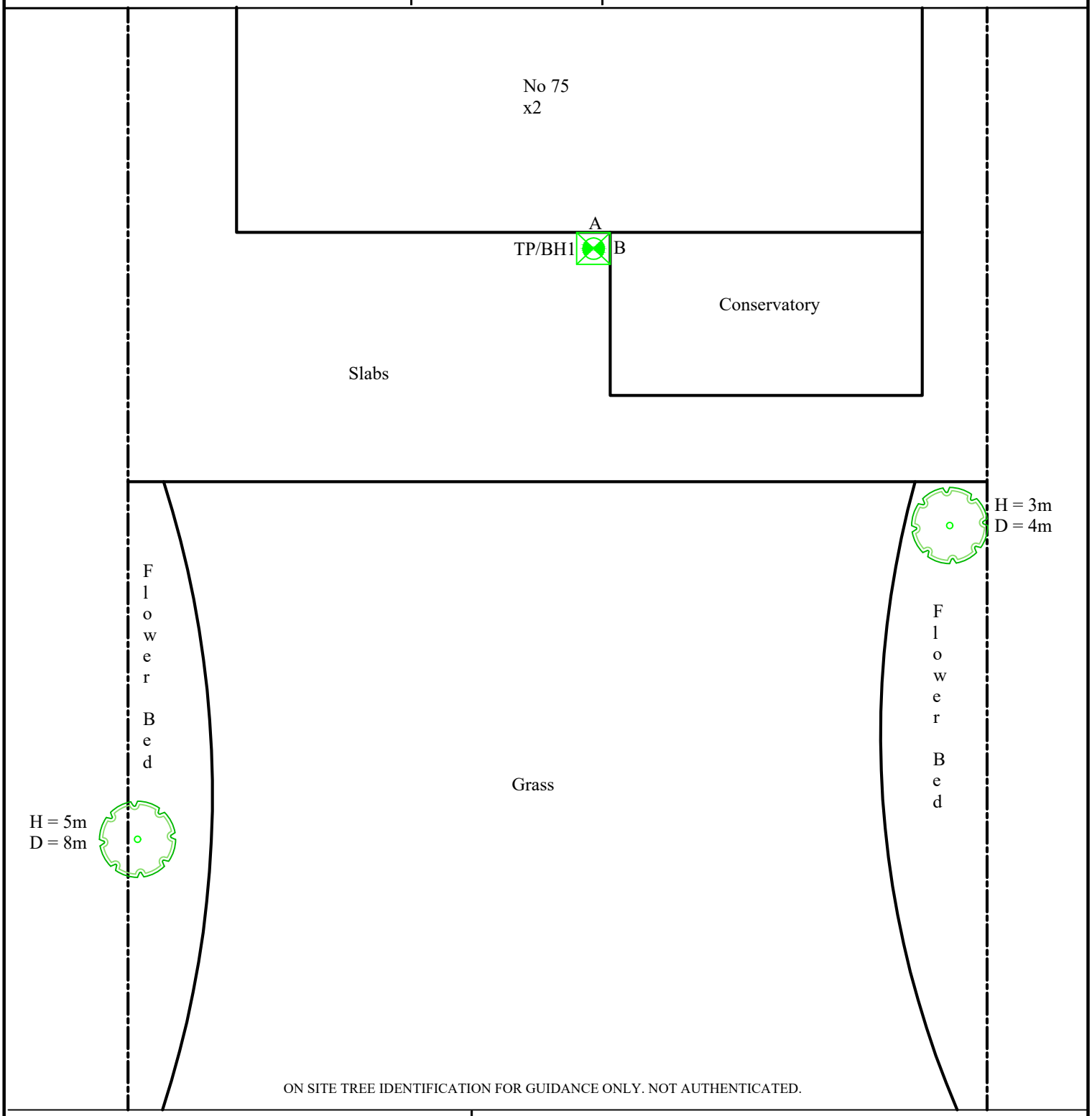
Date: 24/03/2023

Site: 75 Ladygate Lane

Work carried out for: Sedgwick International

PM (SI) | SA (Checked) | LP (Drawn)

Weather: Dry




ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

Remarks:

Scale: N.T.S.

Key:

| | |
|---|---|
| Combined Gulley | RWWG |
| Manhole | MH |
| Rain Water Pipe | RWP |
| Rain Water Gulley | RWG |
| Soil Vent Pipe | SVP |
| Waste Gulley | WG |
| Waste Pipe | WP |

Surface Water Drain

Foul Water Drain

Tree / Bush (approx. ht in m)

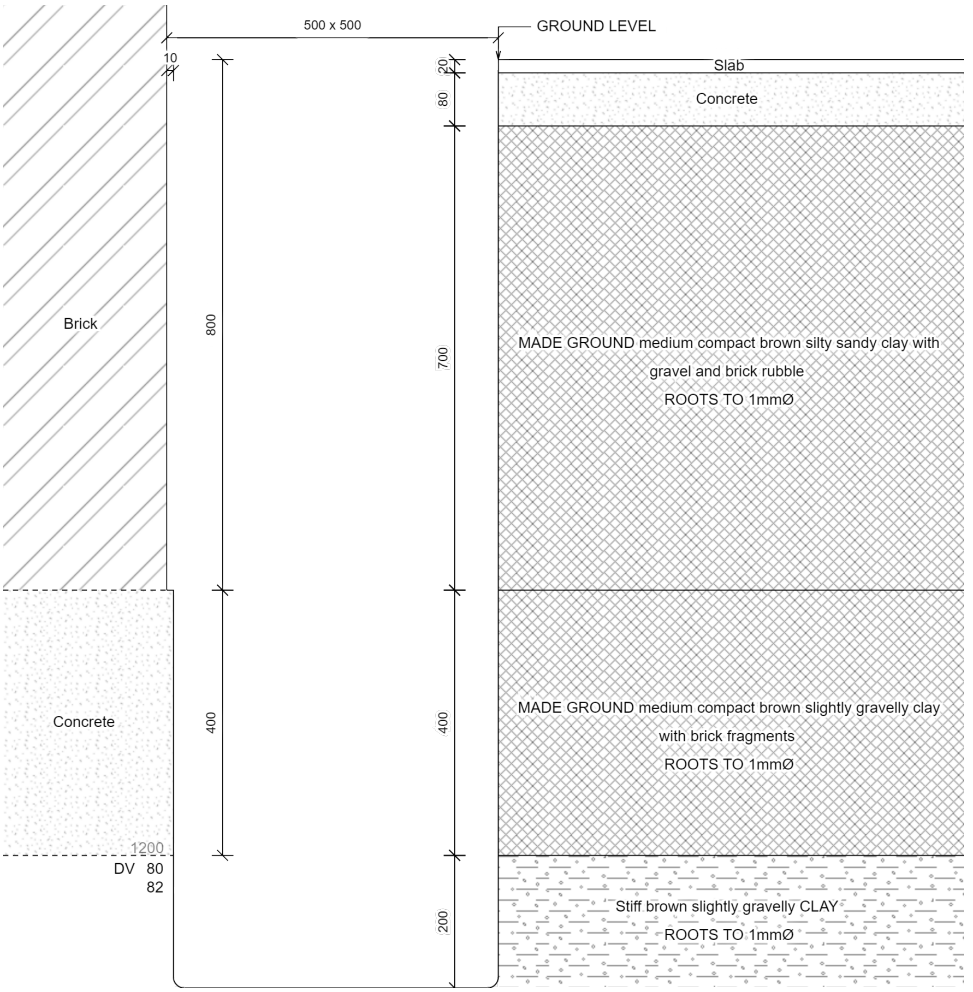
Trial Pit

Borehole

O/D - Open Discharge

**TEST REPORT:** **Trial Pit**

| | | | |
|---|---|---|---|
| REPORT NUMBER: | C1075615 / 245151.1.1.1 | | |
| TRIAL PIT REF: | TP1A | DATE: | 24/03/2023 |
| CLIENT: | Sedgwick International UK | SITE: | 75 LADYGATE LANE |
| JOB NO: | 560417 | WEATHER: | Dry |
| 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.
The laboratory does not apply a conformity statement to test reports as standard, unless specifically requested by the customer.
Amended report. This test report supersedes test report version 1 - .

For and on behalf of CTS
Adam Mason - Quality Control

Approved Signatory
Report date 30-Mar-23

Lawness Barns
Mountnessing Road
Billericay
Essex CM12 0TS

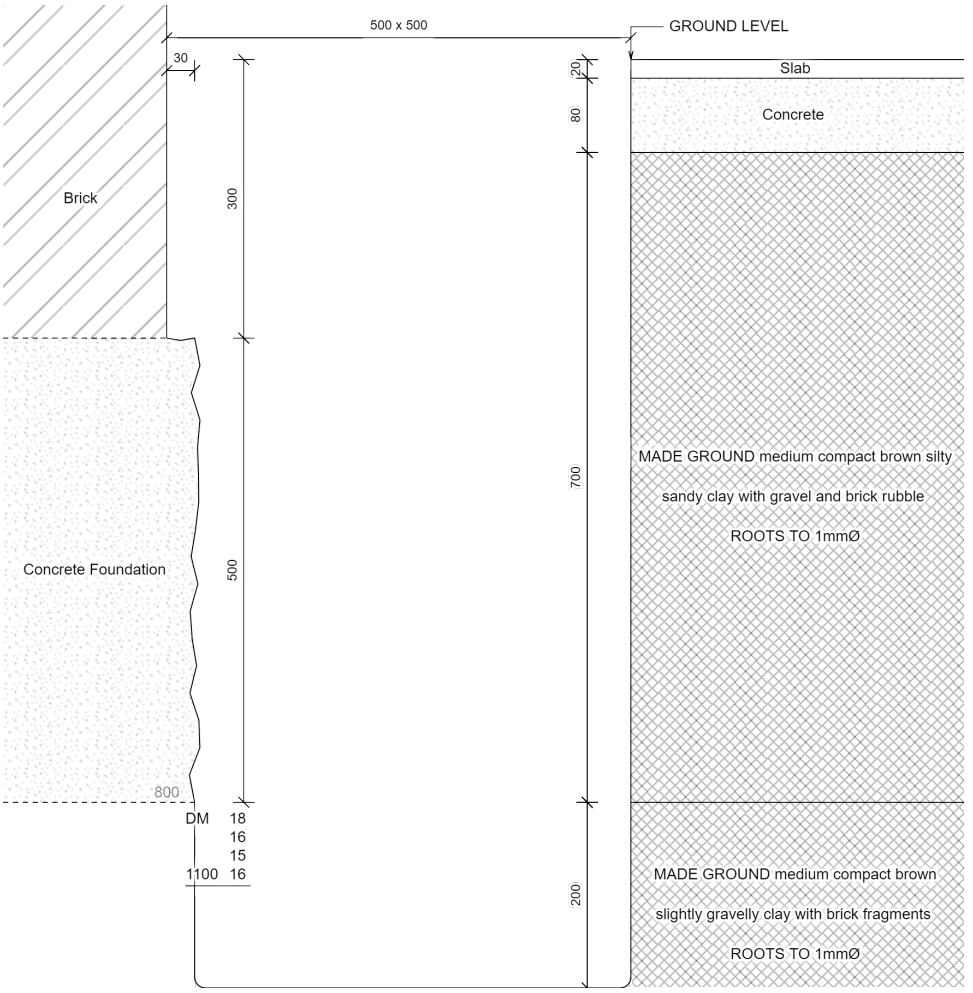
0343 227 8545
enquiries@constructiontesting.co.uk
**www.constructiontesting.co.uk**
END OF REPORT

Construction Testing Solutions Ltd.
Registered in England No. 05998333

CTS Group

| | |
|---|---|
| **TEST REPORT:** | **Trial Pit** |
| REPORT NUMBER: | C1075615 / 245151.1.1.2 |
| TRIAL PIT REF: | TP1B |
| CLIENT: | Sedgwick International UK |
| JOB NO: | 560417 |
| EXCAVATION METHOD: | Hand tools |

| | |
|---|---|
| DATE: | 24/03/2023 |
| SITE: | 75 LADYGATE LANE |
| WEATHER: | Dry |




For Strata below 1000mm see Trial Pit 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.
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For and on behalf of CTS
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Report date 30-Mar-23

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END OF REPORT

Construction Testing Solutions Ltd.
Registered in England No. 05998333

# Borehole 1

| | | | | | |
|---|---|---|---|---|---|
| Sheet: | 1 of 1 | Site: | 75 LADYGATE LANE | | |
| Job No: | 560417 | | | | |
| Date: | 24/03/2023 | | | | |
| Boring Method: | Hand Auger | Ground Level: | | Client: | SEDGWICK INTERNATIONAL UK |
| Diameter (mm): | 75 | Weather: | | | |

| Depth (m) | Soil Description | Thickness | Legend | Samples and Tests: Depth | Type | Result |
|---|---|---|---|---|---|---|
| 0.00 | See Trial Pit | 1.40 | | | | |
| 1.40 | Stiff brown slightly gravelly CLAY | 0.10 | | | | |
| 1.50 | End of BH | | | | | |

Remarks:
BH ends at 1.5m. Unable to extract samples due to gravel obstruction. BH dry and open on completion. No roots observed below 1.4m

**Key:**

| | | To Depth (m) | Max Dia (mm) |
|---|---|---|---|
| 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

| Logged: | PM | Checked: | Approved: | Version | V1.0 28/01/16 | N.T.S. |
|---|---|---|---|---|---|---|

# SITE INVESTIGATION
# LABORATORY TEST REPORT

**SI REPORT NUMBER:** 560417

**CLIENT :** CET Property Assurance (Sedgwick International UK)

**SITE:**
75 Ladygate Lane
HA4 7QX

**DATE OF SITE VISIT:**
24/03/2023

**DATE RECEIVED BY LABORATORY:**
30/03/2023

Compiled by : .....
C Major - Deputy Laboratory Manager

Approved by : .....
L Marshall - Laboratory Manager

**DATE REPORTED:** 27-Apr-2023

# Laboratory Summary Results

Our Ref : 560417

Date Sampled: 24/03/2023

Location : 75 Ladygate Lane

Date Received : 30/03/2023

Client: CET Property Assurance (Sedgwick International UK)

Date Tested : 26/04/2023

Address: Unit 4, Boundary Court, Willow Farm Business Park, Castle Donington, DE74 2NN

Date of Report : 27/04/2023

| Sample Ref | | Type | Moisture Content | Soil Fraction > 0.425mm | Liquid Limit | Plastic Limit | Plasticity Index | Liquidity * Index | Modified * Plasticity Index | Soil * Class | Filter Paper Contact Time | Soil Sample Suction | Oedometer Strain | Estimated * Heave Potential (Dd) | In situ * Shear Vane Strength | Organic * Content | pH Value | Sulphate Content | | * Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP No | Depth ( m ) | | ( % ) *[1]* | ( % ) *[2]* | ( % ) *[3]* | ( % ) *[4]* | ( % ) *[5]* | *[5]* | ( % ) [6] | *[7]* | ( d ) | (kPa) [8] | *[9]* | *(mm)[10]* | (kPa) *[11]* | ( % )*[12]* | *[13]* | $SO_3$ (g/l) * *[14]* | $SO_4$ (mg/l) *[15]* | *[16]* |
| 1 | 0.50 | D | 16 | 48 | 50 | 17 | 33 | -0.02 | 17 | CH | Too gravelly | | | | | | | | | |
| | 1.00 | D | 26 | 23 | 55 | 19 | 36 | 0.20 | 28 | CH | 7 | 15.7 | | | | | | | | |
| 1A | U/S 1.20 | D | 24 | 19 | 54 | 19 | 35 | 0.15 | 29 | CH | Too gravelly | | | | 81 | | | | | |

**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 fines soils

*[8]* Building Research Establishment Information Paper 4/93

*[9] In Accordance with BS 1377-5 : 1990 : Clause 3*

*[10]* Estimated Heave Potential (Dd)

*[11]* Values of shear strength were determined in situ by CTS using a Pilcon hand vane or Geonor vane (GV).

*[12]* BS 1377 : Part 3 : 2018 + A1 2021 Clause 4 - *Tested By CTS Leicester*

*[13]* BS 1377 : Part 3 : 2018 + A1 2021 Clause 12 - *Tested By CTS Leicester*

*[14]* Sulphate content as SO3 as required by BS 1377: Part 3: 1990 has been provided for information purposes - *Tested By CTS Leicester*

*[15]* BS 1377 : Part 3 : 2018 + A1 2021 Clause 7.6 - Tested By CTS Leicester

[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.

PSD Chart - BS 1377: Part 2 : 1990, Test No 9.2

* 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 |

UKAS TESTING

4161



Version: 5BH V3.8 - 17.03.2023

Our Ref : 560417

# Laboratory Testing Results

Date Sampled : 24/03/2023

Location : 75 Ladygate Lane

Date Received : 30/03/2023

Client: CET Property Assurance (Sedgwick International UK)

Date Tested : 26/04/2023

Address: Unit 4, Boundary Court, Willow Farm Business Park, Castle Donington, DE74 2NN

Date of Report : 27/04/2023

| Sample Ref. | | Type | Moisture Content | Soil Fraction | Liquid Limit | Plastic Limit | Plasticity Index | Liquidity * Index | Modified * Plasticity Index | Soil * Class | Filter Paper Contact Time | Soil Sample Suction | Oedometer Strain | Estimated * Heave Potential (Dd) | In situ * Shear Vane Strength | Organic * Content | pH Value | Sulphate Content | | * Class |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TP No. | Depth ( m ) | | ( % ) *[1]* | > 0.425mm ( % ) *[2]* | ( % ) *[3]* | ( % ) *[4]* | ( % ) *[5]* | *[5]* | ( % ) [6] | *[7]* | ( d ) | (kPa) [8] | *[9]* | *(mm)[10]* | (kPa) *[11]* | ( % )*[12]* | *[13]* | $SO_3$ (g/l) * *[14]* | $SO_4$ (mg/l) *[15]* | *[16]* |
| 1B | U/S 0.80 | D | 23 | 27 | 53 | 17 | 36 | 0.17 | 26 | CH | 7 | 34 | | | | | | | | |

**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]* Building Research Establishment Information Paper 4/93

*[9] In Accordance with BS 1377-5 : 1990 : Clause 3*

*[10]* Estimated Heave Potential (Dd)

*[11]* Values of shear strength were determined in situ by CTS using a Pilcon hand vane or Geonor vane (GV).

*[12]* BS 1377 : Part 3 : 2018 + A1 2021 Clause 4 - *Tested By CTS Leicester*

*[13]* BS 1377 : Part 3 : 2018 + A1 2021 Clause 12 - *Tested By CTS Leicester*

*[14]* Sulphate content as SO3 as required by BS 1377: Part 3: 1990 has been provided for information purposes - *Tested By CTS Leicester*

*[15]* BS 1377 : Part 3 : 2018 + A1 2021 Clause 7.6 - Tested By CTS Leicester

[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 soluable magnesium testing is undertaken to prove otherwise.

PSD Chart - BS 1377: Part 2 : 1990, Test No 9.2

* These tests are not UKAS accredited

Full reports can be provided upon request.

**Key**

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| U | Undisturbed sample |
| W | Groundwater sample |
| ENP | Essentially Non-Plastic by inspection |
| U/S | Underside of Foundation |

UKAS TESTING

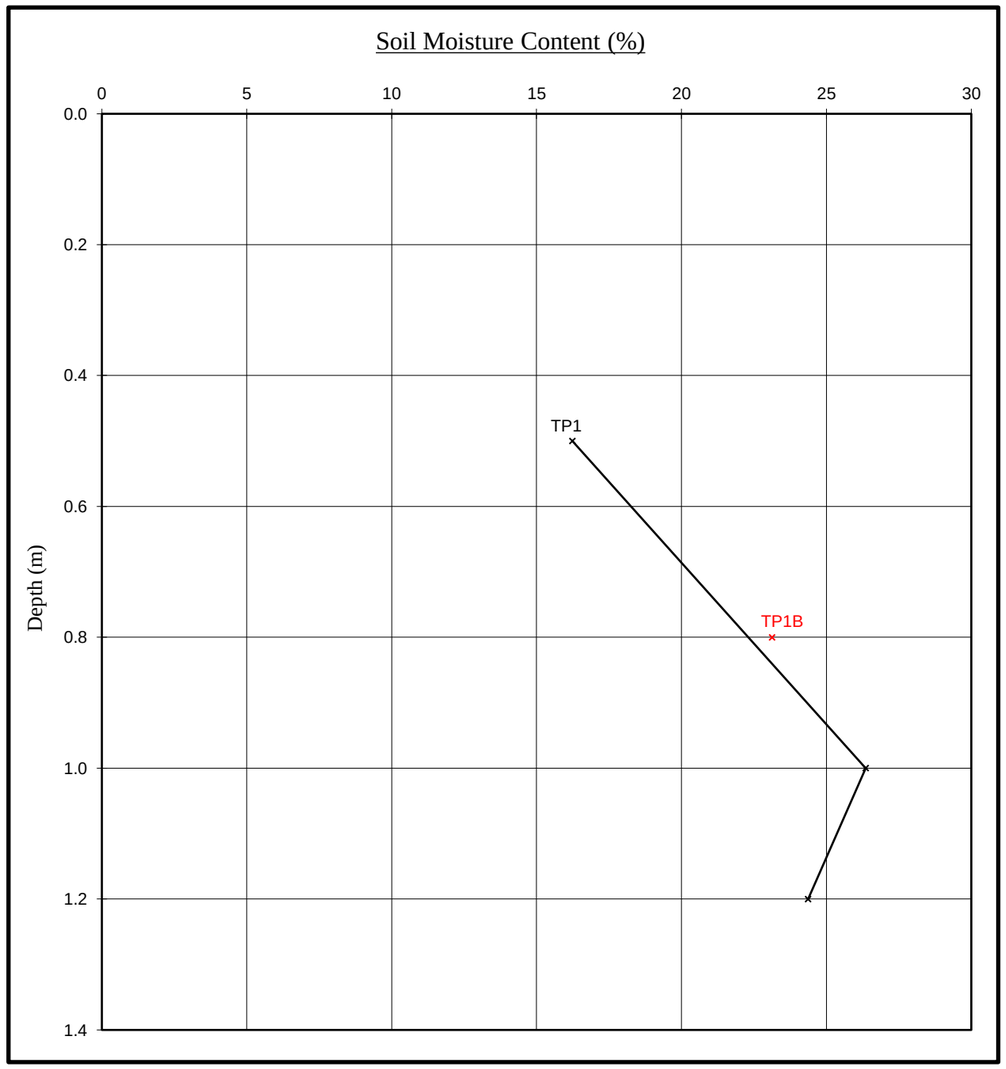
4161



Version: 5BH V3.8 - 17.03.2023

# Moisture Content Profiles

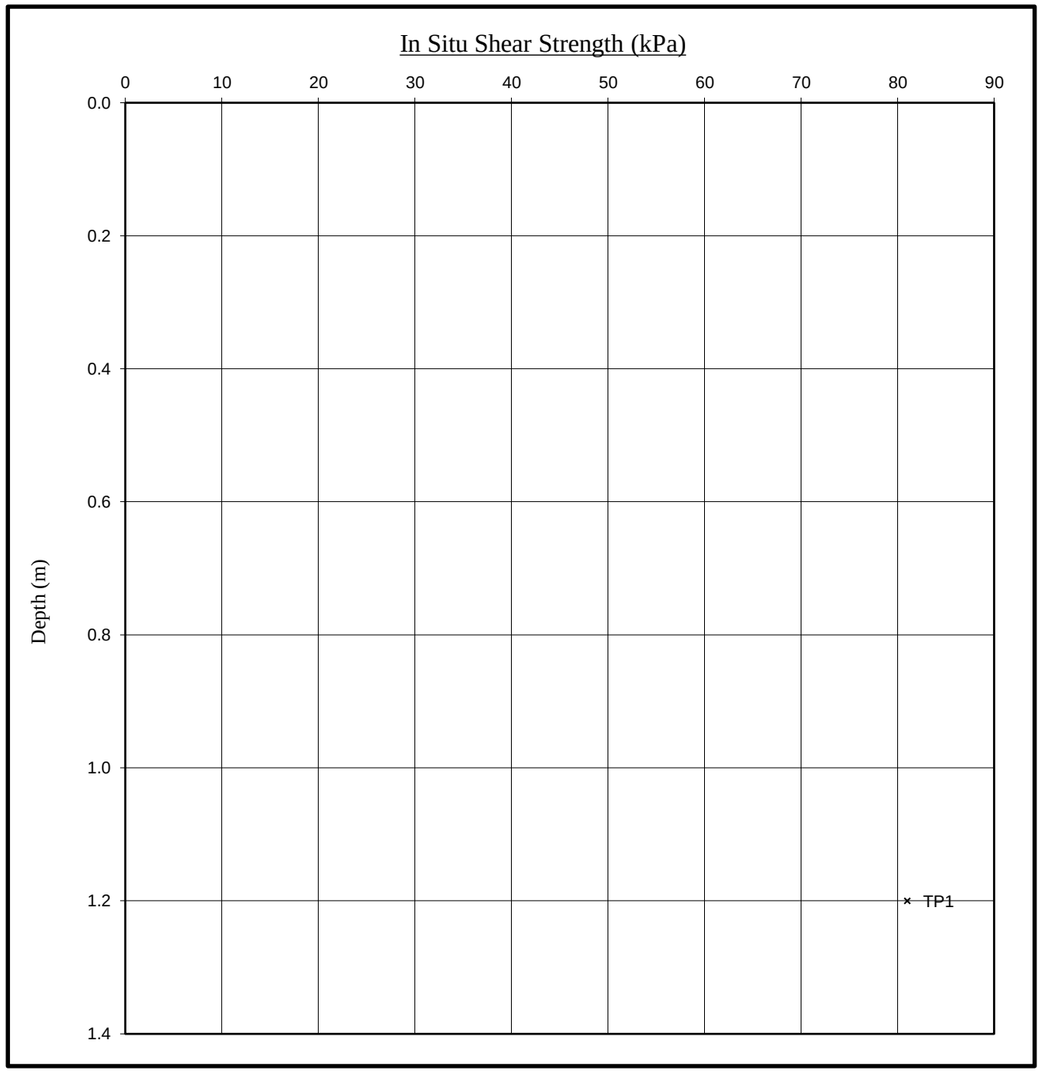
Our Ref : 560417
Location : 75 Ladygate Lane
Work carried out for: CET Property Assurance (Sedgwick International UK)




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

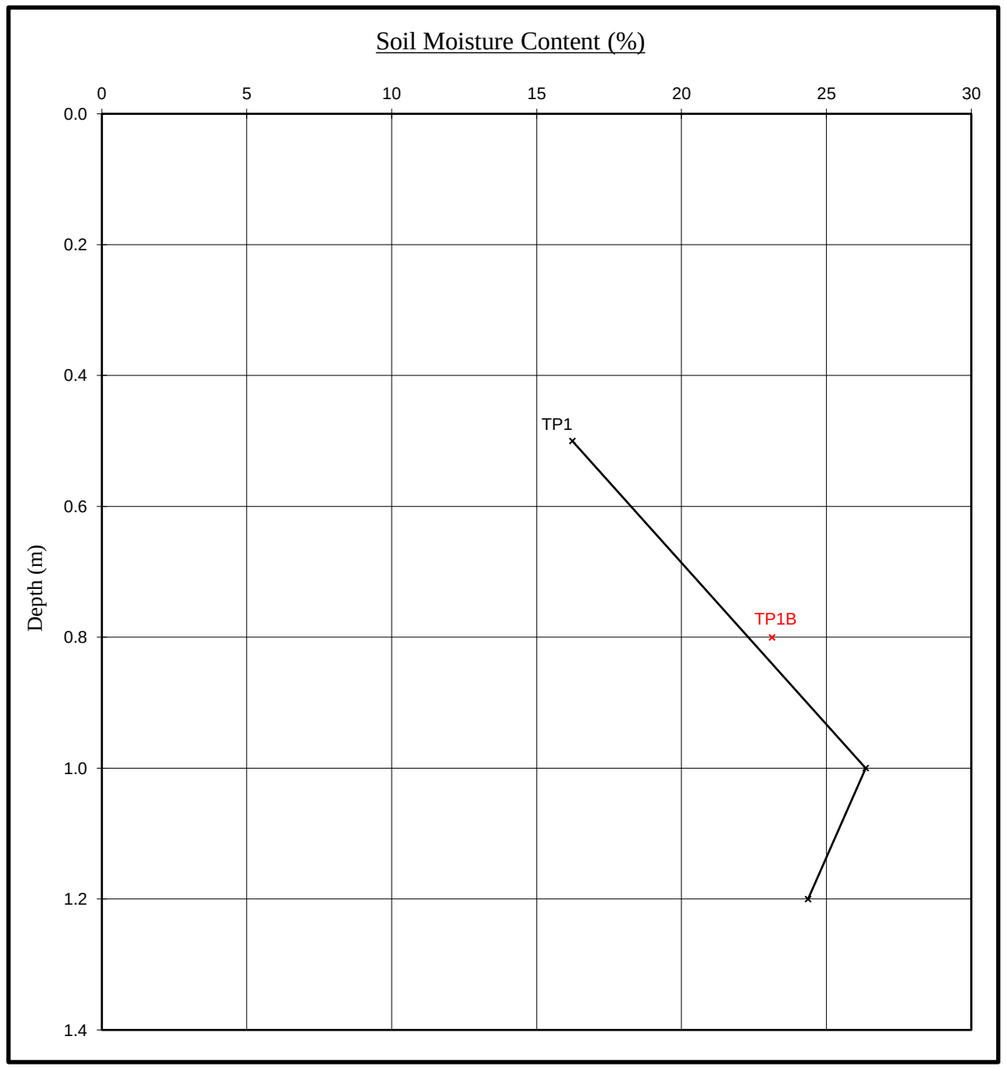
Date Sampled : 24/03/2023
Date Received : 30/03/2023
Date Tested : 26/04/2023
Date of Report : 27/04/2023




Note
1. Unless otherwise stated, values of Shear Strength were determined in situ by CTS using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 130 kPa.
2. Unless specifically noted the profiles have not been related to a site datum.

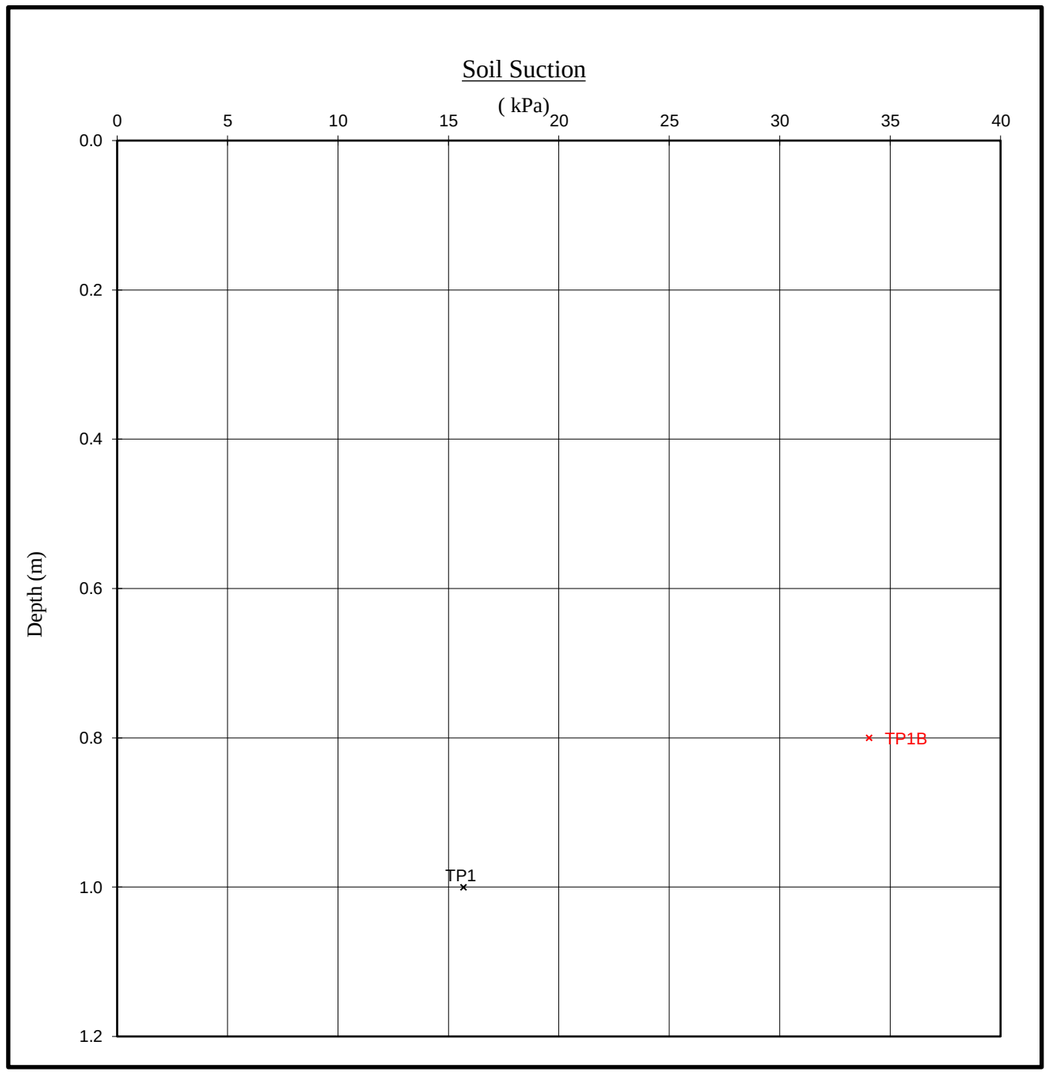
# Moisture Content Profiles

Our Ref : 560417
Location : 75 Ladygate Lane
Work carried out for: CET Property Assurance (Sedgwick International UK)




# Soil Suction Profiles

Date Sampled : 24/03/2023
Date Received : 30/03/2023
Date Tested : 26/04/2023
Date of Report : 27/04/2023




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.

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
Independent Scientific Analysis

European Plant Science Laboratory

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Ratby Lane
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Parc Menai, Bangor,
Gwynedd, North Wales
LL57 4FG
Tel: 01248 672652
Fax: 01248 672601

# ROOT IDENTIFICATION

**75 Lady Gate Lane,**

Client Reference: 560417
Report Date: 12 April 2023
Our Ref: R52045

| Sub Sample | Species Identified | | Root Diameter | Starch |
|---|---|---|---|---|
| **TP1A:** | | | | |
| USF | *Quercus* spp. | 1 | 1.5 mm | Moderate |
| **TP1B:** | | | | |
| USF | *Quercus* spp. | | 1 mm | Moderate |
| USF | broadleaved species, too juvenile for positive identification | 2 | <1 mm | Absent |

**Comments:**

1 - Plus 2 others also identified as *Quercus* spp.
2 - Plus 1 other the same.

*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.