

SITE INVESTIGATION FACTUAL REPORT

Report No: SI-722311
Client: AA
Site: Kiln Cottage, Scures Hill, Nately Scures
Hampshire
Client Ref: SHAA01013895
Date of Visit: 29/09/2023



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

☎ 0843 2272362
✉ enquiries@cet-uk.com
🌐 www.cet-uk.com

CET is the trading name of CET Structures Ltd
Registered in England No. 02527130

Investigation Layout Plan

Sheet: 1 of 1

Job No: 22311

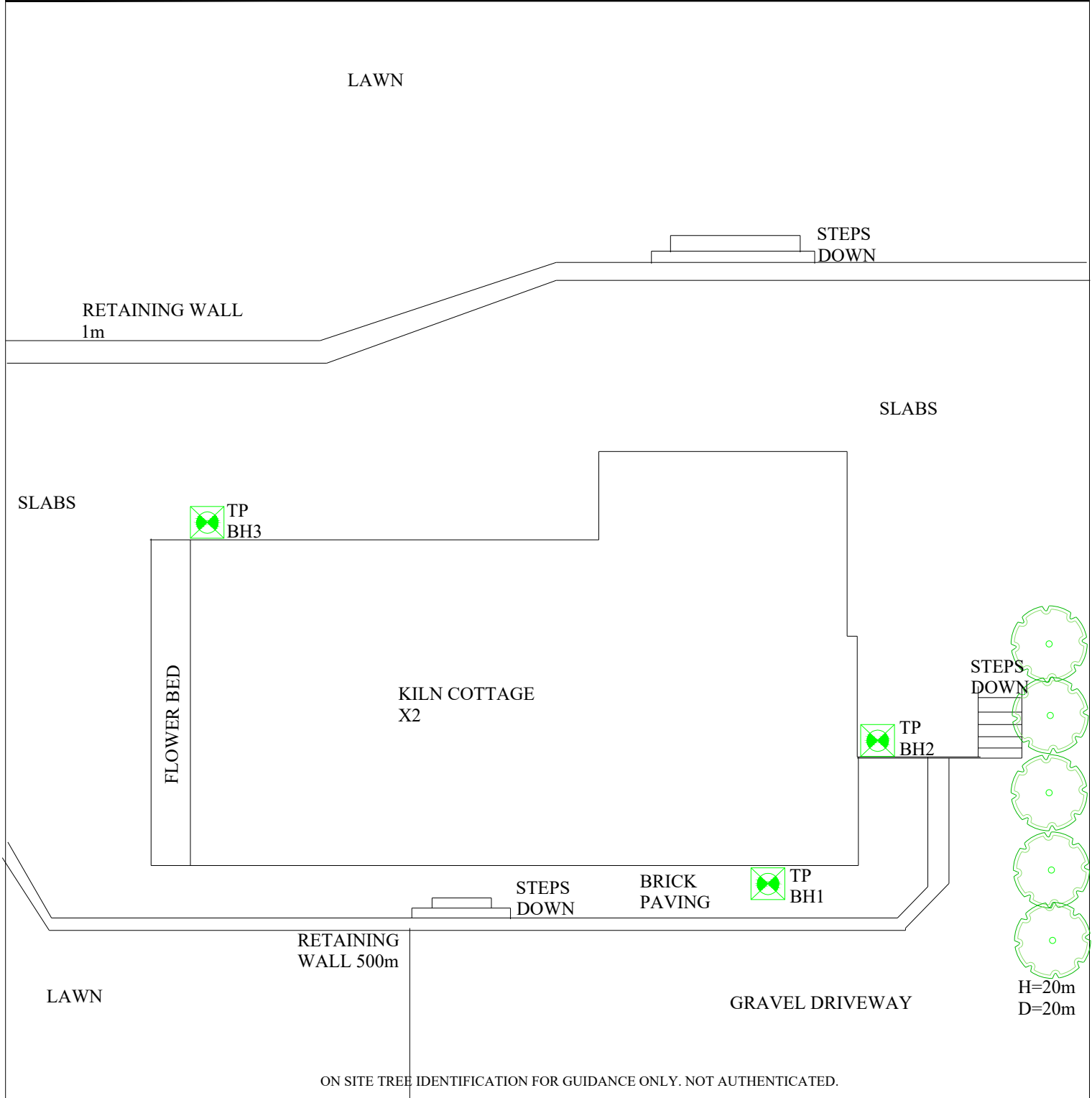
Date: 29/09/23

Site: Kiln Cottage

Work carried out for: AA

KP (SI) SL (Checked) EM (Drawn)

Weather: Dry



Remarks:

Key:

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

Surface Water Drain

Foul Water Drain

Tree / Bush
(approx. ht in m)

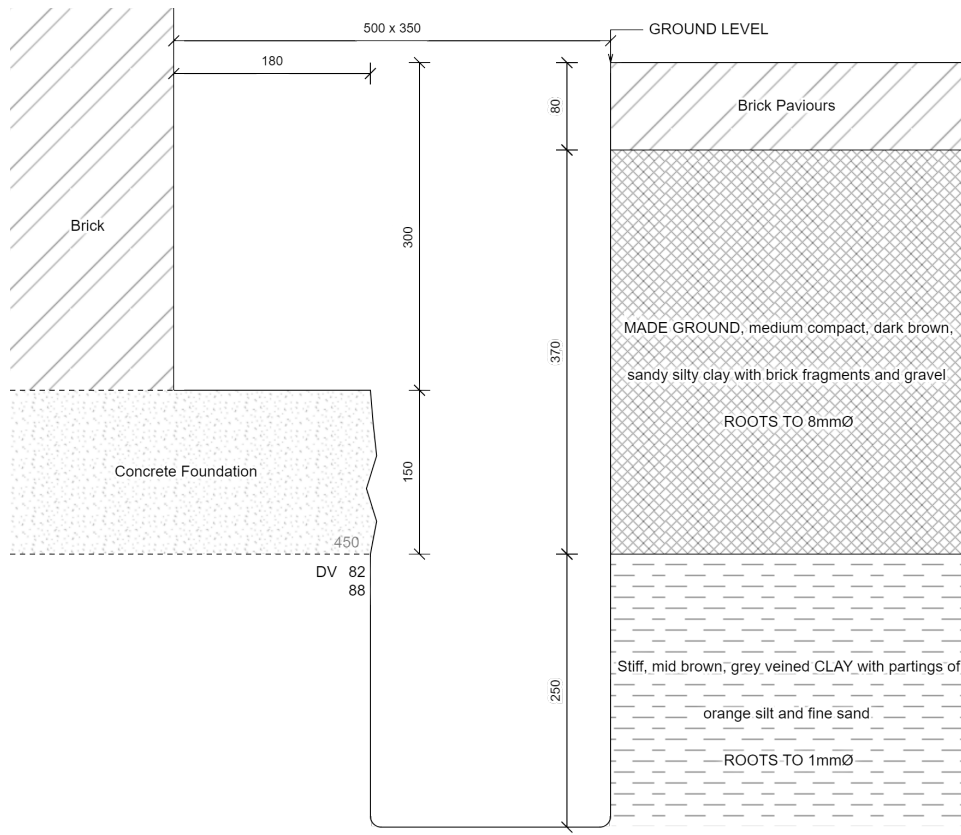
Trial Pit

Borehole

O/D - Open Discharge

Scale: N.T.S.

TEST REPORT: Trial Pit
REPORT NUMBER: C1082068 / 272203.1.1.1
TRIAL PIT REF: TP1 **DATE:** 29/09/2023
CLIENT: AA **SITE:** Kiln Cottage
JOB NO: 722311 **WEATHER:** Dry
EXCAVATION METHOD: Hand tools



For Strata below 700mm see Bore Hole log

Curved steel pin driven under concrete 200mm at 450mm below ground level.

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.

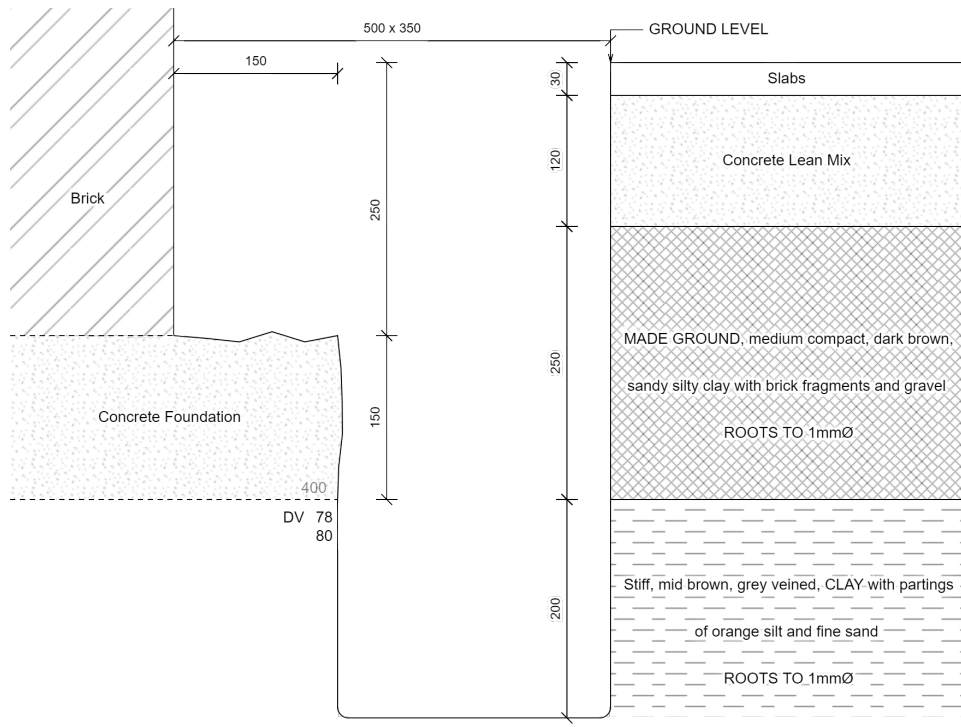
For and on behalf of CTS
 Adam Mason - Quality Control



Approved Signatory
 Report date 02-Oct-23

Borehole		1		Sheet:	1 of 1		Site:	KILN COTTAGE					
				Job No:	722311								
				Date:	29/09/2023								
Boring Method:	Hand Auger			Ground Level:				Client:	AA				
Diameter (mm):	75	Weather:	Dry										
Depth	Soil Description							Samples and Tests					
(m)								Thickness	Legend	Depth	Type	Result	
0.00	See Trial Pit							0.70					
0.70	Stiff mid brown, grey veined CLAY with partings of orange silt and fine sand							2.30					
											1.00	DV	104
													106
											1.50	DV	110
													114
											2.00	DV	116
													120
										2.50	DV	126	
												130	
3.00	Very Stiff mid brown, grey veined CLAY with partings of orange silt and fine sand							2.00		3.00	DV	140+	
												140+	
											3.50	DV	140+
													140+
											4.00	DV	140+
													140+
											4.50	DV	140+
												140+	
										5.00	DV	140+	
												140+	
5.00	End of BH											140+	
Remarks: BH ends at 5m. BH dry and open on completion. No roots observed below 1.1m. No access for mechanical auger due to steps.				Key:				To	Max				
				D - Disturbed Sample				Depth	Dia				
				B - Bulk Sample				(m)	(mm)				
				W - Water Sample				1.10	1				
				J - Jar Sample									
				V - Pilcon Shear Vane (kPa)									
				M - Mackintosh Probe									
				TDTD - Too Dense To Drive									
Logged:	KP	AM	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.						

TEST REPORT: Trial Pit
REPORT NUMBER: C1082068 / 272203.1.1.2
TRIAL PIT REF: TP2 **DATE:** 29/09/2023
CLIENT: AA **SITE:** Kiln Cottage
JOB NO: 722311 **WEATHER:** Dry
EXCAVATION METHOD: Hand tools



For Strata below 600mm see Bore Hole log

Curved steel pin driven under concrete 200mm at 400mm below ground level.

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.

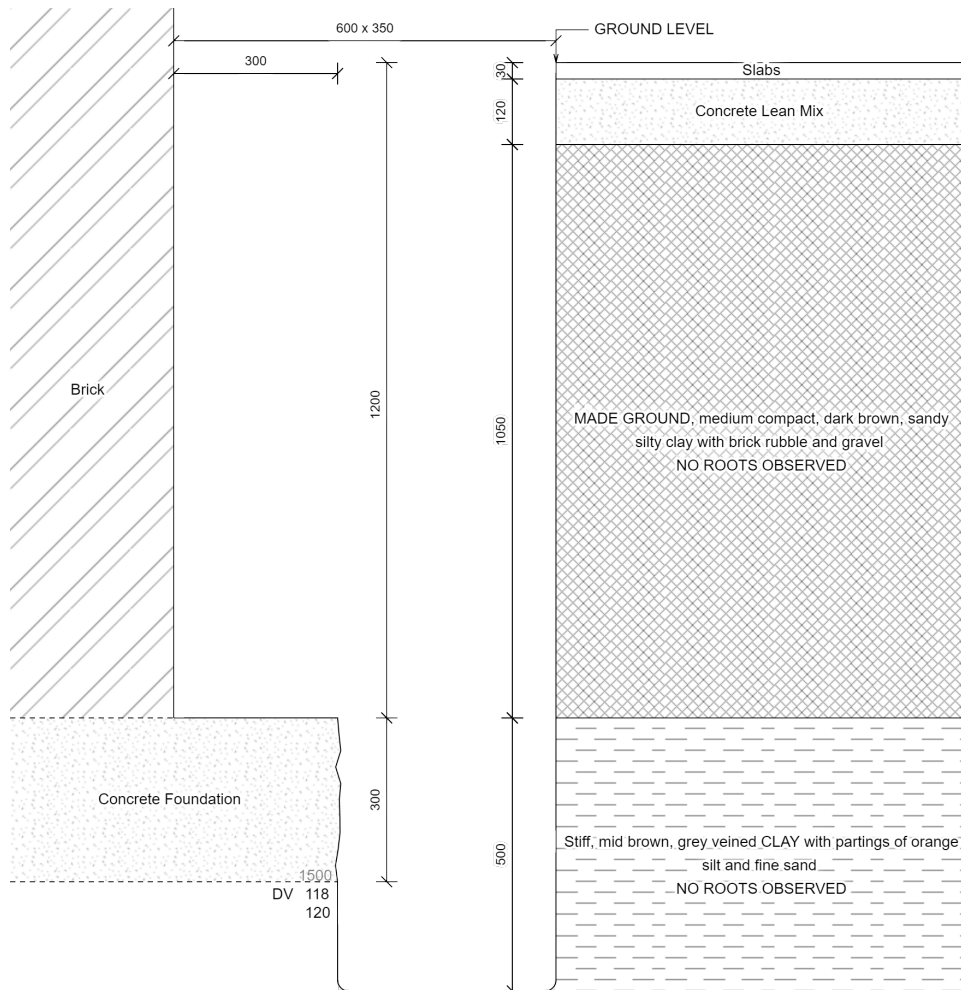
For and on behalf of CTS
 Adam Mason - Quality Control



Approved Signatory
 Report date 02-Oct-23

Borehole		2		Sheet:	1 of 1		Site:	KILN COTTAGE				
Boring Method:		Hand Auger		Job No:	722311			Client:	AA			
Diameter (mm):		75		Date:	29/09/2023				Ground Level:			
Weather:		Dry										
Depth	Soil Description							Samples and Tests				
(m)								Thickness	Legend	Depth	Type	Result
0.00	See Trial Pit							0.60				
0.60	Stiff mid brown, grey veined CLAY with partings of orange silt and sand							1.40				
										1.00	DV	126
												130
										1.50	DV	128
												124
2.00	Very Stiff mid brown, grey veined CLAY with partings of orange silt and fine sand							3.00				
										2.00	DV	140+
												140+
										2.50	DV	140+
												140+
										3.00	DV	140+
												140+
										3.50	DV	140+
												140+
										4.00	DV	140+
												140+
										4.50	DV	140+
												140+
										5.00	DV	140+
												140+
5.00	End of BH											
Remarks: BH ends at 5m. BH dry and open on completion. No roots observed below 1.3m. No access for mechanical auger due to steps.							Key:			To	Max	
							D - Disturbed Sample		Depth	Dia		
							B - Bulk Sample		(m)	(mm)		
							W - Water Sample	Roots	1.30	1		
							J - Jar Sample	Roots				
							V - Pilcon Shear Vane (kPa)	Roots				
							M - Mackintosh Probe	Depth to Water (m)				
							TDTD - Too Dense To Drive					
Logged:	KP	AM	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.					

TEST REPORT: Trial Pit
REPORT NUMBER: C1082068 / 272203.1.1.3
TRIAL PIT REF: TP3 **DATE:** 29/09/2023
CLIENT: AA **SITE:** Kiln Cottage
JOB NO: 722311 **WEATHER:** Dry
EXCAVATION METHOD: Hand tools



For Strata below 1700mm see Bore Hole log

Curved steel pin driven under concrete 200mm at 1500mm below ground level.

- 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.

For and on behalf of CTS
 Adam Mason - Quality Control



Approved Signatory
 Report date 02-Oct-23

Borehole		3		Sheet:	1 of 1		Site:	KILN COTTAGE				
Boring Method:		Hand Auger		Job No:	722311			Client:	AA			
Diameter (mm):		75		Date:	29/09/2023				Ground Level:			
Weather:		Dry										
Depth	Soil Description							Samples and Tests				
(m)								Thickness	Legend	Depth	Type	Result
0.00	See Trial Pit							1.70				
1.70	Stiff mid brown, grey veined CLAY with partings of orange silt and fine sand							0.80				
										2.00	DV	120
												126
2.50	Very stiff mid brown, grey veined CLAY with partings of orange silt and fine sand							2.50				
										2.50	DV	140+
												140+
										3.00	DV	140+
												140+
										3.50	DV	140+
												140+
										4.00	DV	140+
												140+
										4.50	DV	140+
												140+
										5.00	DV	140+
												140+
5.00	End of BH											140+
Remarks: BH ends at 5.0m. BH dry and open on completion. No roots observed. No mechanical auger access due to steps.							Key: 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			To	Max	
										Depth	Dia	
										(m)	(mm)	
Logged: KP							AM			Checked:		
Approved:							Version			V1.0 28/01/16		
										N.T.S.		

**SITE INVESTIGATION
LABORATORY TEST REPORT**

SI REPORT NUMBER: 722311

CLIENT : CET Property Assurance (AA)

SITE:
Kiln Cottage, Scures Hill
Nately Scures Hook
Hampshire
RG27 9JS

DATE OF SITE VISIT:
29/09/2023

DATE RECEIVED BY LABORATORY:
02/10/2023

Approved by : 
C Kosma - Project Delivery Supervisor

DATE REPORTED: 17-Oct-2023

The testing on this report has been subcontracted, see Summary for testing
Laboratory details

Our Ref : 722311

Laboratory Summary Results

Date Sampled: 29/09/2023

Location : Kiln Cottage, Scures Hill

Date Received : 02/10/2023

Client: CET Property Assurance (AA)

Date Tested : 13/10/2023

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

Date of Report : 17/10/2023

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 (d)	# 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		* Class [16]
TP/BH No	Depth (m)																	SO3 (g/l)* [14]	SO4 (mg/l) [15]	
1	U/S 0.45	D	33	<5	65	29	36	0.12	36	CH					86					
	1.0	D	27	<5											106					
	1.5	D	30	<5	68	29	39	0.02	39	CH					112					
	2.0	D	31	<5											118					
	2.5	D	30	<5	66	29	37	0.04	37	CH					128					
	3.0	D	31	<5											> 140					
	3.5	D	31	<5	68	30	38	0.03	38	CH					> 140					
	4.0	D	30	<5											> 140					
	4.5	D	30	<5	67	29	38	0.02	38	CH					> 140					
	5.0	D	30	<5											> 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 : 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 Pilon 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

~ Calculations performed using subcontracted data.

* These tests are not UKAS accredited

These tests have been subcontracted and carried out by PSL (Part of the Phenna Group)

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

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.

Opinions and interpretations expressed herein are outside of the scope of UKAS accreditation.

Our Ref : 722311

Laboratory Summary Results

Date Sampled : 29/09/2023

Location : Kiln Cottage, Scures Hill

Date Received : 02/10/2023

Client: CET Property Assurance (AA)

Date Tested : 13/10/2023

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

Date of Report : 17/10/2023

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 (d)	# 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		* Class [16]
TP/BH No.	Depth (m)																	SO ₃ (g/l)* [14]	SO ₄ (mg/l) [15]	
2	U/S 0.40	D	32	<5	65	28	37	0.10	37	CH					80					
	1.0	D	29	<5	69	30	39	-0.04	39	CH					128					
	1.5	D	31	<5										126						
	2.0	D	31	<5	67	29	38	0.06	38	CH				> 140						
	2.5	D	31	<5										> 140						
	3.0	D	30	<5	68	29	39	0.02	39	CH				> 140						
	3.5	D	29	<5										> 140						
	4.0	D	29	<5	68	30	38	-0.03	38	CH				> 140						
	4.5	D	30	<5										> 140						
	5.0	D	28	<5	69	31	38	-0.07	38	CH				> 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.

Footnote [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 Pilon 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

Footnote [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
 ~ Calculations performed using subcontracted data.
 * These tests are not UKAS accredited

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

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.
 Opinions and interpretations expressed herein are outside of the scope of UKAS accreditation.

These tests have been subcontracted and carried out by PSL (Part of the Phenna Group)
 Full reports can be provided upon request.

Our Ref : 722311

Laboratory Summary Results

Date Sampled : 29/09/2023

Location : Kiln Cottage, Scures Hill

Date Received : 02/10/2023

Client: CET Property Assurance (AA)

Date Tested : 13/10/2023

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

Date of Report : 17/10/2023

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 (d)	# 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		* Class [16]
TP/BH No.	Depth (m)																	SO ₃ (g/l)* [14]	SO ₄ (mg/l) [15]	
3	U/S 1.50	D	31	<5	67	29	38	0.06	38	CH					> 120					
	2.0	D	30	<5											124					
	2.5	D	29	<5	65	28	37	0.03	37	CH					> 140					
	3.0	D	29	<5											> 140					
	3.5	D	30	<5	66	31	35	-0.03	35	CH					> 140					
	4.0	D	28	<5											> 140					
	4.5	D	28	<5	69	31	38	-0.09	38	CH					> 140					
	5.0	D	26	<5											> 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] 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

- Calculations performed using subcontracted data.

* These tests are not UKAS accredited

These tests have been subcontracted and carried out by PSL (Part of the Phenna Group)

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

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.

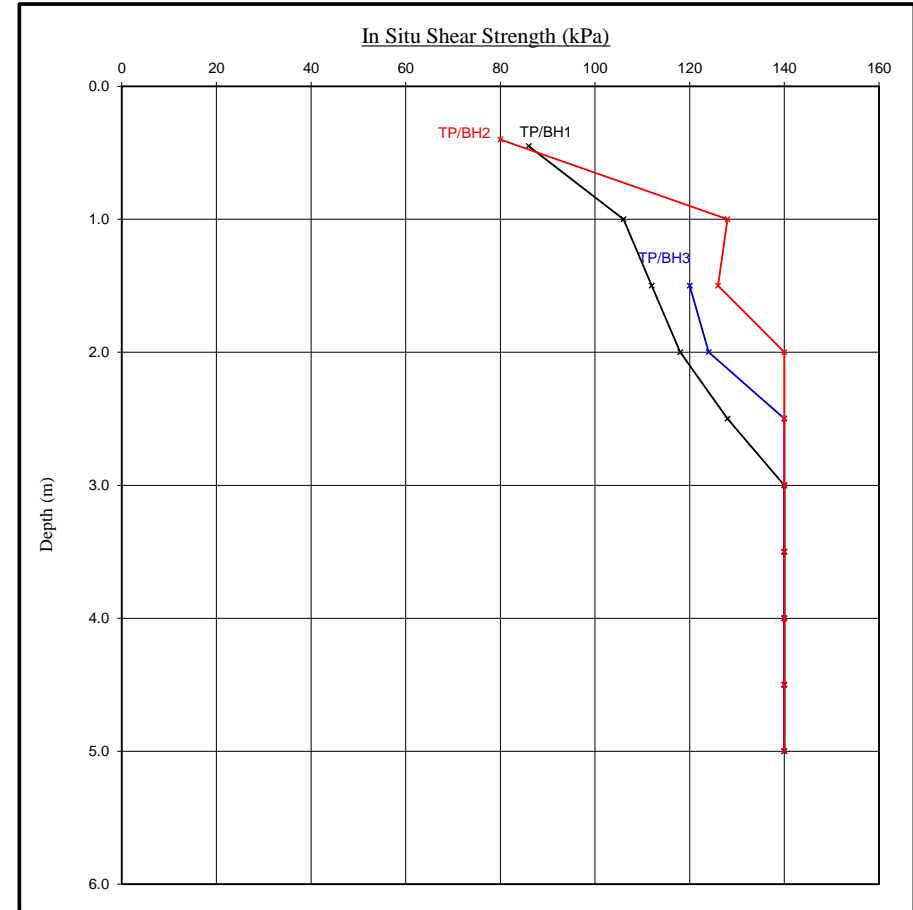
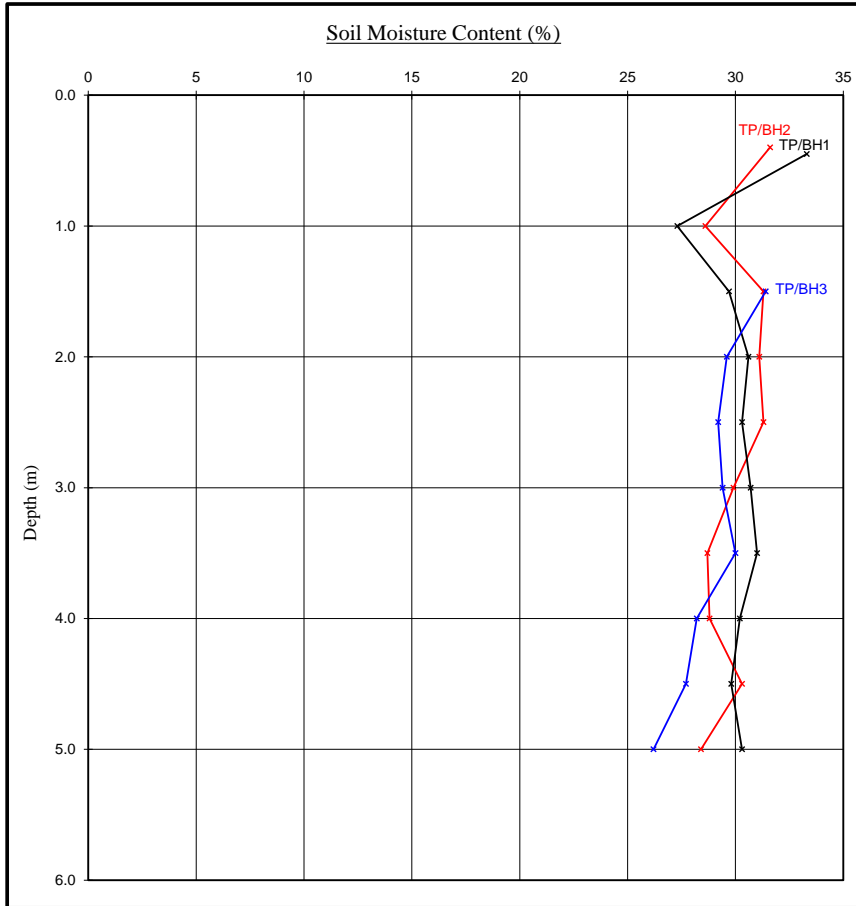
Opinions and interpretations expressed herein are outside of the scope of UKAS accreditation.

Version: BH V1 SUBCON - 28.03.2023

Moisture Content Profiles

Our Ref : 722311
 Location : Kiln Cottage, Scures Hill
 Work carried out for: CET Property Assurance (AA)

Date Sampled : 29/09/2023
 Date Received : 02/10/2023
 Date Tested : 13/10/2023
 Date of Report : 17/10/2023



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

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.

Construction Testing Solutions
4 Oak Spinney Park
Ratby Lane
Leicester Forest East
Leicestershire
LE3 3AW

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

ROOT IDENTIFICATION

Kiln Cottage

Client Reference: 722311
Report Date: 11 October 2023
Our Ref: R55300

Sub Sample	Species Identified		Root Diameter	Starch
TP1:				
USF	Leguminosae spp.	1	1 mm	Abundant
BH1:				
to 1.1m	probably Leguminosae spp.	2	<1 mm	Moderate
TP2:				
USF	probably <i>Quercus</i> spp.	3	1 mm	Low
BH2:				
to 1.3m	<i>Quercus</i> spp.		1.5 mm	Abundant

Comments:

- 1 - Plus 2 very juvenile roots, probably the same.
- 2 - Plus one other the same. Both very juvenile.
- 3 - Plus one other the same. Both rather juvenile.

Leguminosae spp. include laburnum, *Robinia* (false acacia or locust), broom, the pagoda tree and the climber wisteria.
Quercus spp. are oaks (both deciduous and evergreen).

Signed: R. Shaw

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

