One Earth Solar Farm

Volume 6.0 Environmental Statement [EN010159]

Volume 3

Appendix 8.4 Preliminary Factual Site Investigation Results

February 2025

Document Reference: EN010159/APP/6.21

Revision 01

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 - Reg 5 (2) (a)

PERSHING CONSULTANTS

One Earth Solar Farm

Ground Investigation Factual Report

2372986 INTERIM DRAFT

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

CENTRAL ALLIANCE CONTROL SHEET

Project No.: 2372986

Title: One Earth Solar Farm Ground Investigation Factual Report

Client: Pershing Consultants

Issue Date: October 24

Office: Central Alliance Pre-Construction Services Limited, (Part of RSK Environment Limited), Alliance House, South Park Way, Wakefield 41 Business Park, Wakefield, WF2 0XJ

Version: 2372986-FAC-01 Int Draft

Russell Witter
Geo-Environmental Engineer
[redacted]

John Parkinson
Senior Geo-Environmental Engineer
[redacted]

VERSION CONTROL SHEET

Reference	Date	Status	Amended by	Approved by
FAC-01	25/10/2024	Interim Draft	Russell Witter	John Parkinson

CONTENTS

1 INTRODUCTION

1.1 Commissioning

Central Alliance Pre-Construction Services Limited (Central Alliance) was instructed by Pershing Consultants Ltd (PCL) to undertake intrusive ground investigation at their site in near Fledborough, Lincolnshire. Central Alliance was commissioned to provide the following for the project:

- A factual description of the work undertaken
- Maps and plans
- Exploratory hole logs
- Monitoring Results
- Laboratory testing results

1.2 Objectives

The objective of the ground investigation was to obtain geological data across the site, to establish geotechnical properties, investigate presence of below ground contamination and to install ground monitoring instrumentation, to aid in the design and completion of the Clients proposed works.

1.3 Scope of works

The scope of the investigation was designed by AECOM as provided within the received specification document Ground Investigation Specification One Earth Solar First Issue 16 08 2024.

The scope included:

- 13No. Dynamic Sampled boreholes with Rotary Core follow-on to scheduled depth of between 7.00 and 17.00m.
- 12No. Machine-Excavated Trial Pits to scheduled depth of 4.50m bgl.

Final exploratory hole locations were agreed on site between the Client and Central Alliance, following consideration of the existing site conditions and site access restrictions. Details of the works completed, including any deviation from the scope of work, is identified in **Section 3.**

1.4 Limitations

This report presents a description of the site at the time of the fieldwork, results of the fieldwork, in-situ testing undertaken, strata encountered and geotechnical and/or chemical test results, and where applicable, the data obtained during the subsequent monitoring programme.

There may be other conditions prevailing at the site which have not been disclosed by this investigation and which have not been considered by this report. Responsibility cannot be accepted for conditions at the site not revealed by the investigation and

confirmation of intermediate ground conditions between exploratory holes should be considered if deemed necessary.

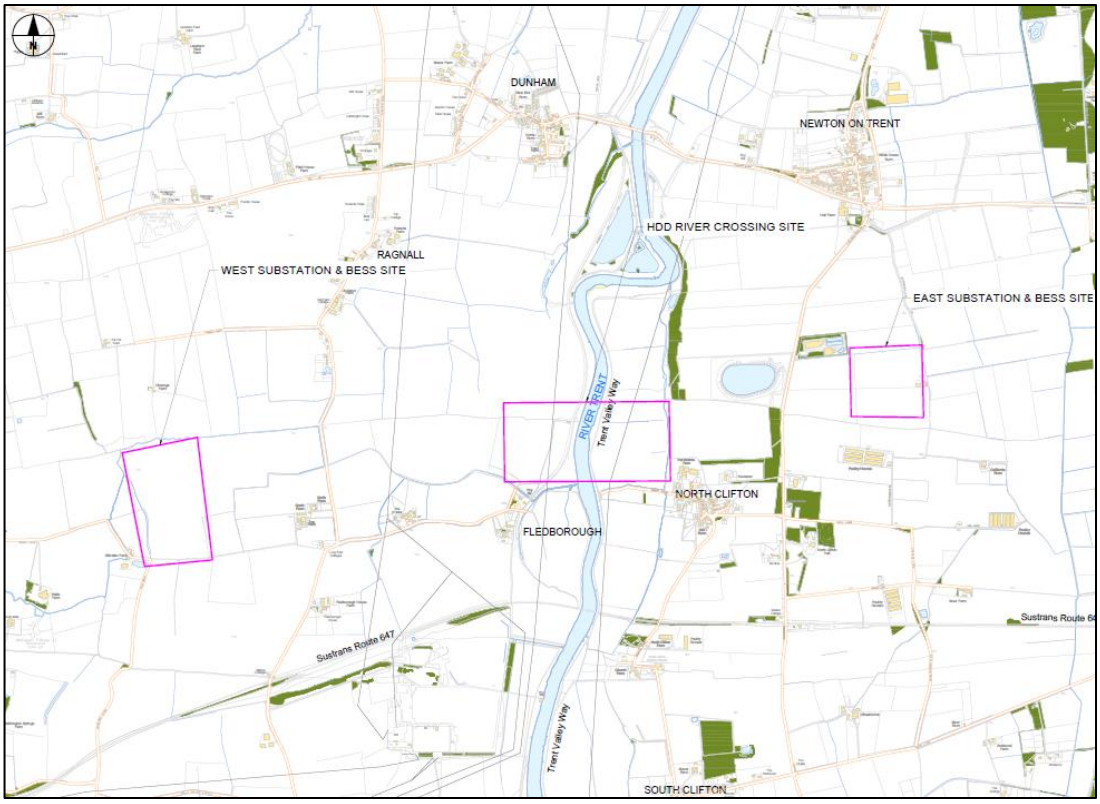
Unless instructed by the Client, Central Alliance is not obliged to and disclaims any obligation to update the report for events taking place after the date on which this investigation was undertaken.

2 SITE DETAILS

2.1 Site Location

The site is located near the village of Fledborough, Lincolnshire, adjacent to the River Trent and approximately 16km to the west of Lincoln. The approximate centre of the site is at Grid Reference 481607, 372571, and the nearest postcode is NG23 7AT.

The site is divided across three areas, as shown in the plan below.



Site location details are presented in **Table 1 - Site Location** and satellite imagery of the area is presented in **Figure 1.**

Table 1 - Site Location

Site name	One Earth Solar Farm
Full site compound address and postcode	During the works the compound was located to the east of the site at: Hall Farm, Southmoor Lane, Lincoln, LN1 2LJ.
National Grid reference (compound)	483641, 372938

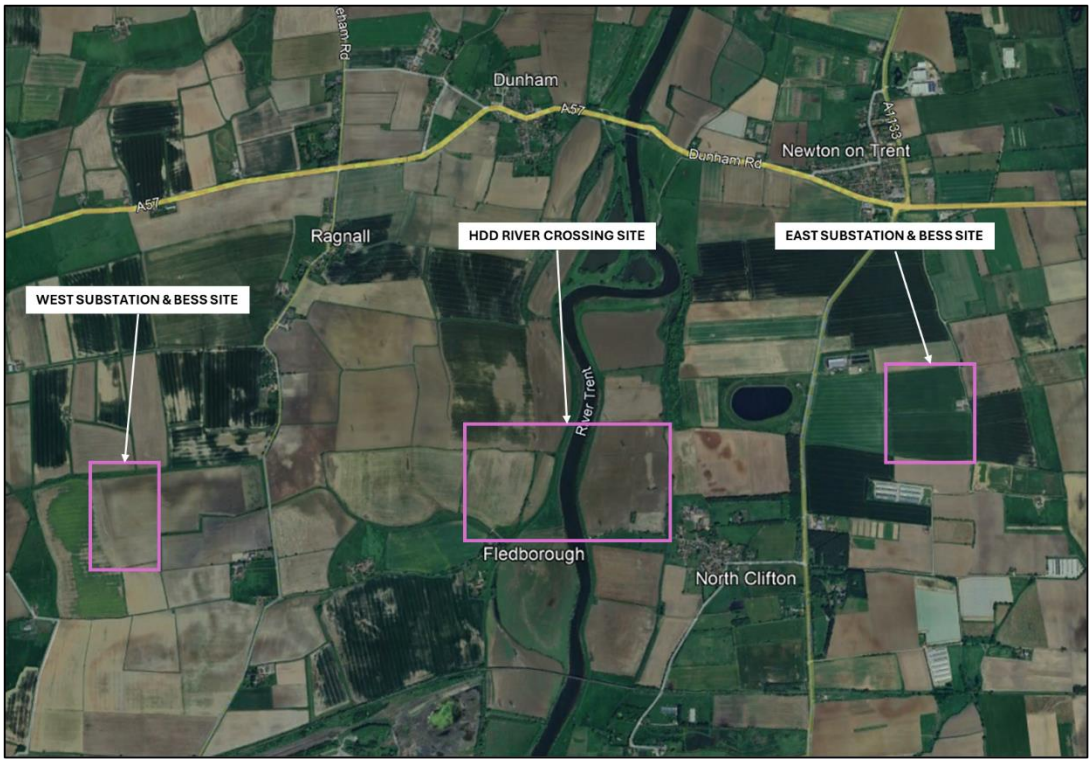


Figure 1: Site Location (Google Earth©, 2024)

2.2 Site Description

West Substation and BESS Site: Area of agricultural fields directly due west of North Farm, Fledborough with further agricultural fields surrounding it

East Substation and BESS site: Area of agricultural fields northeast of North Clifton with further agricultural fields surrounding it

HDD River Crossing: an area of agricultural fields either side of the River Trent between the villages of Fledborough to the west and North Clifton to the east. The river flows in a general north to south direction in this area and is bound by levees.

2.3 Site Geology

2.3.1 Made Ground

Made Ground is not indicated to be present at the location.

2.3.2 Anticipated Geological Sequence

Published records (British Geological Survey, BGS) for the area indicate the geology of the site to be characterised by the strata recorded in **Tables 2** and **3**, seen below

Table 2 - Site Geology (Superficial)

Strata	Description
Holme Pierrepont Member to the east Alluvium shown adjacent to the River Trent. No superficial deposits shown to underlie the east of the site.	Generally pinkish poorly sorted SAND and GRAVEL. CLAY, SILT, SAND and GRAVEL
Relevant information sources: BGS Geology Viewer ☐ BGS Geoindex ☒ Previous SI reports ☐	

Table 3 - Site Geology (Solid Geology)

Strata	Description
Mercia Mudstone	Dominantly Brownish Red, less commonly green/grey mudstones and siltstone with thick gypsum bearing units
Relevant information sources: BGS Geology Viewer ☒ BGS Geoindex ☒ Previous SI reports ☐	

3 FIELDWORK

3.1 General Fieldwork Information

The ground investigation works were completed between Monday 23rd September and Tuesday 22nd October 2024, with works completed during normal weekday shifts

The fieldwork was carried out in general accordance with Eurocode 7, BS5930:2015+A1:2020 - 'Code of Practice for Ground Investigations'; BS10175 'Investigation of potentially contaminated sites – Code of Practice' (2001); Association of Geotechnical and Geo-environmental Specialist Guidelines for Good Practice in Geotechnical Ground Investigation (June 2016) and logged in accordance with BS EN ISO 14688-1:2018 and BS EN ISO 14688-2:2018.

The final locations of exploratory holes were determined by the presence of underground services, practicalities, and any site access restrictions. The locations of exploratory holes are provided on drawing ##-######-## with coordinates and levels recorded on the individual exploratory hole logs presented as Appendix A.

3.2 Exploratory Holes

The exploratory holes were completed using a combination of dynamic sampling, rotary coring and machine trial pitting techniques. The logging, sampling and subsampling of the exploratory holes were completed by a suitably qualified Geo-Environmental Engineer provided by Central Alliance.

The completed scope of works was as follows:

- 13No. Dynamic Sampled boreholes with Rotary Core follow-on to a maximum depth between 7.00m and 19.50m bgl.
- 12No. Trial Pits to a maximum depth between 1.60m and 4.00m bgl

The trial pits were terminated at slightly shallower depths due to groundwater ingress and instability.

Due to the presence of gravels adjacent to the River Trent, a cable percussive rig was mobilised to site to assist the rotary rig. BH005, BH007, BH008 and BH010 were advanced by cable percussive techniques to either the scheduled depth of the borehole or to rockhead to allow the rotary core follow-on to continue to the scheduled depth.

For full details of the strata encountered, groundwater strikes, samples taken, in-situ testing, logging legend sheet, and calibration certificates please refer to the individual exploratory hole records presented as Appendix A.

Photographs of recovered cores/samples and/or Trial Pit excavations, are provided as Appendix B.

3.3 Monitoring Installations

The following monitoring instrumentation was installed to facilitate the specified post-fieldworks monitoring:

- 9No. 50mm diameter groundwater/ground gas monitoring standpipe installation
- 4No. vibrating wire piezometer (VWP) installation

3.4 Post-Fieldwork Monitoring

Monitoring is to be completed in accordance with BS10175 and BS5930 with gas concentrations read using a GA2000 gas analyser. Monitoring is ongoing and will be reported in the final report.

4 LABORATORY TESTING

4.1 Geotechnical Laboratory Testing

Laboratory testing was scheduled by Pershing Consultants/AECOM on selected soil/rock samples recovered during the investigation. The samples were sent to Professional Soils Laboratory (PSL) at their testing facility in Doncaster, South Yorkshire.

All testing has been carried out in accordance with the laboratory's UKAS accreditation following lab standards set out in BS EN INO 17892. At the time of interim draft report issue, geotechnical laboratory testing is still ongoing. A full set of results will be included in the revised draft report.

4.2 Chemical Laboratory Testing

Chemical testing was scheduled by Pershing Consultants/AECOM on selected samples recovered during the ground investigation and from groundwater samples recovered during the monitoring. The samples were sent to Envirolab at their laboratory in Hattersley, Greater Manchester.

All testing was carried out in accordance with the laboratory's UKAS accreditation.

At the time of interim draft report issue, laboratory testing is still ongoing. A full set of results will be included in the revised draft report.

Completed chemical laboratory testing results to date are presented as Appendix C.

DRAWING(S)

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Appendix A
Exploratory Hole Logs

CENTRAL ALLIANCE

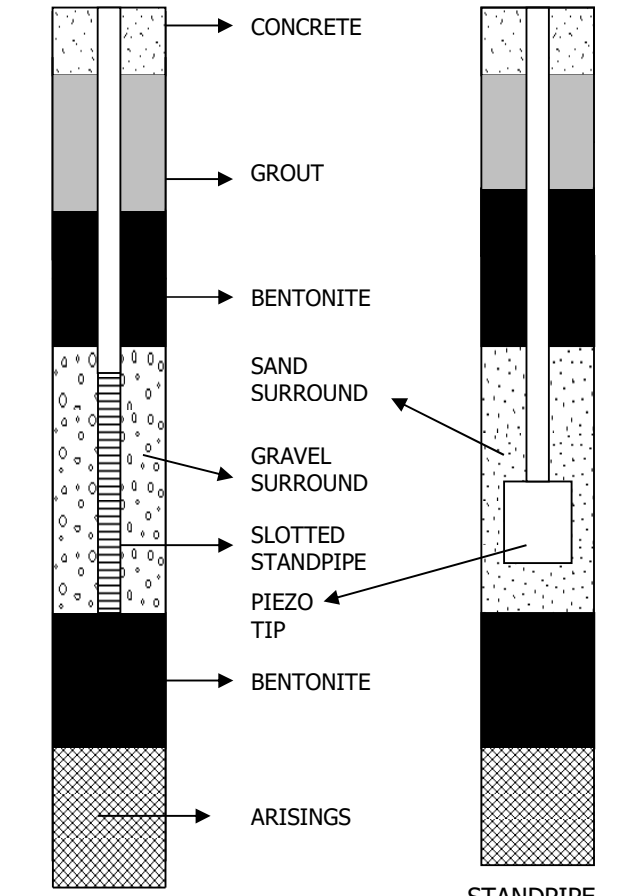
GROUND ENGINEERING TECHNICAL SERVICES

EXPLORATORY HOLE LEGEND SHEET

STRATA LEGENDS

- TOPSOIL
- MADE GROUND
- CLAY
- SANDY GRAVELLY CLAY
- ORGANIC CLAY
- SILT
- SAND
- GRAVEL
- SAND & GRAVEL
- PEAT
- COBBLES
- BOULDERS
- MUDSTONE
- SILTSTONE
- SANDSTONE
- LIMESTONE
- CHALK

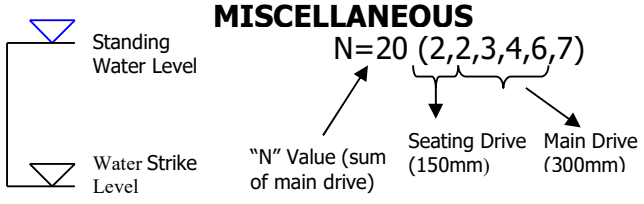
INSTALLATIONS / BACKFILL



SAMPLE & IN SITU TESTS

B	Bulk Disturbed Sample
D	Disturbed Sample
W	Water Sample
ES	Environmental Soil Sample
EW	Environmental Water Sample
U	Undisturbed Sample
UT	Undisturbed Thin Wall Sample
P	Piston Sample
S	SPT (Split Spoon)
C	CPT / Core Sample
HV	Hand Vane
PID	Photo Ionisation Detector

MISCELLANEOUS



Allied Exploration & Geotechnics Ltd.

Unit 25 Stella Gill Industrial Estate
Pelton Fell
Chester-le-Street
DH2 2RG

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

SPT Hammer Ref:	DS 7.10.1
Test Date:	24/01/2023
Report Date:	24/01/2023
File Name:	DS 7.10.1.spt
Test Operator:	SW

Instrumented Rod Data

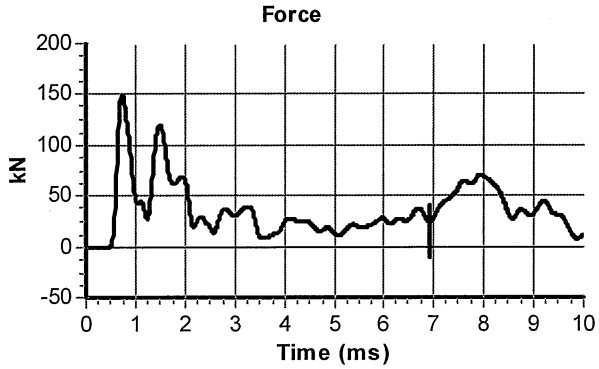
Diameter d_r (mm):	67
Wall Thickness t_r (mm):	8.7
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	65939
Accelerometer No.2:	66286

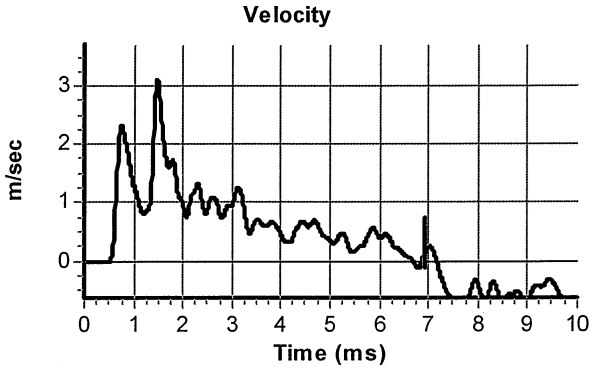
SPT Hammer Information

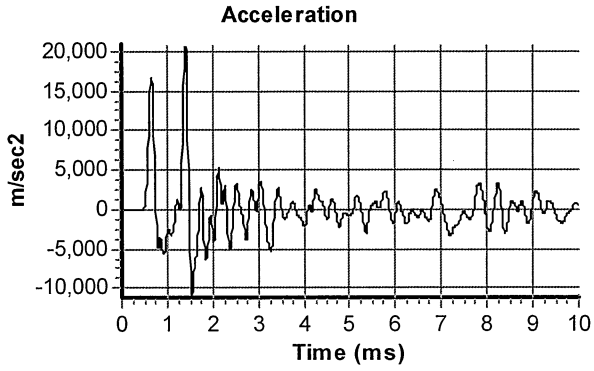
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	14.1

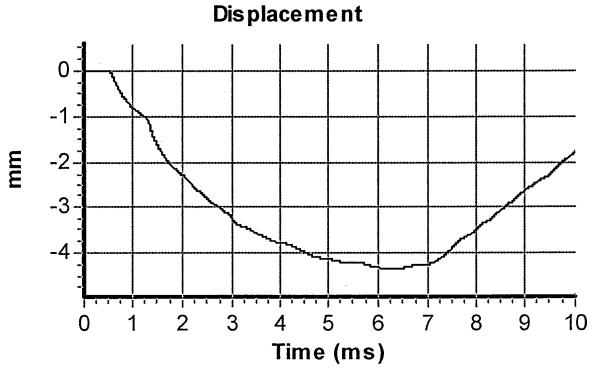
Comments / Location

Mass and drop supplied by client









Calculations

Area of Rod A (mm2):	1593
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	292

Energy Ratio E_r (%): **62**

[redacted]

Signed: Steven Wakely

Title: Laboratory Technichian

The recommended calibration interval is 12 months

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

///SAFER RIG SERVICES

Safer Rig Services
Portview Road
Avonmouth
Bristol
BS11 9JE

SPT Hammer Ref:	AR2152
Test Date:	11/04/2024
Report Date:	15/04/2024
File Name:	CA AR2152.spt
Test Operator:	MS

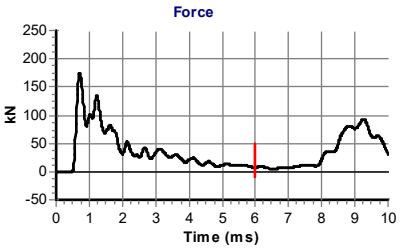
Instrumented Rod Data

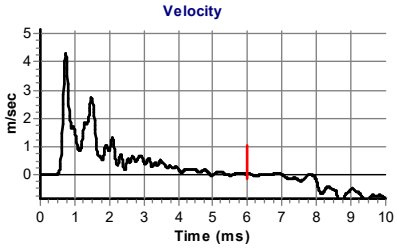
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.8
Assumed Modulus E_a (GPa):	200
Accelerometer No.1:	73534
Accelerometer No.2:	73538

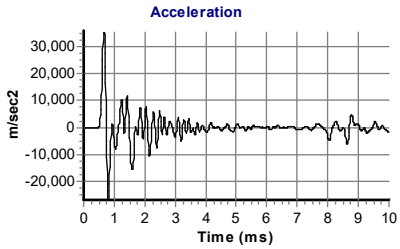
SPT Hammer Information

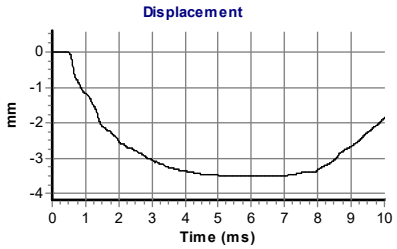
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	12.2

Comments / Location









Calculations

Area of Rod A (mm2):	1008
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	301

Energy Ratio E_r (%): **64**

Matt Stokes

Signed: M.Stokes

Title: Equipment Inspector

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

///SAFER RIG SERVICES

Safer Rig Services
Portview Road
Avonmouth
Bristol
BS11 9JE

SPT Hammer Ref:	AR2154
Test Date:	05/08/2024
Report Date:	06/08/2024
File Name:	AR2154.spt
Test Operator:	MS

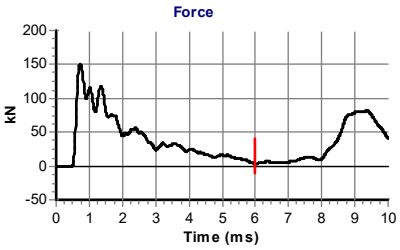
Instrumented Rod Data

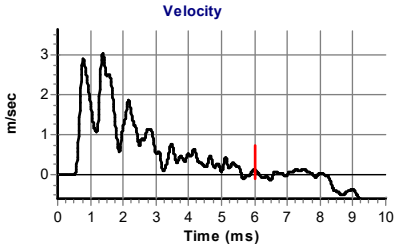
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.8
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	73534
Accelerometer No.2:	73538

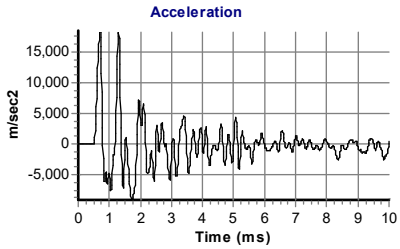
SPT Hammer Information

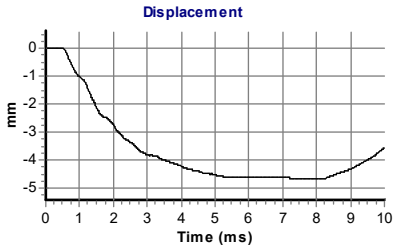
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	12.1

Comments / Location









Calculations

Area of Rod A (mm2):	1008
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	334

Energy Ratio E_r (%): **71**

Matt Stokes

Signed: M.Stokes

Title: Equipment Inspector

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House
3A South Park Way
Wakefield 41 Business Park
Wakefield WF2 0XJ
+44 (0)1924 229889
www.central-alliance.co.uk

Start Date:	30/09/2024	Checked:	
End Date:	01/10/2024	Approved:	

Location ID

BH001

DRAFT

Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 2.50	Dynamic Sampling	Comacchio 205
2.50 - 10.00	Rotary Coring	Comacchio 205

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**479072.89**	Northing:	**372470.64**
Elevation:	**9.35mAOD**	Final Depth:	**10.00m**
Logger:	**AT**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Hole Diameter

Depth (m)	Diam (mm)
10.00	121

Casing Diameter

Depth (m)	Diam (mm)
2.50	143

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
01/10/2024	Standpipe	4.00	2.50 - 4.00	50

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 0.50	Concrete
0.50 - 2.50	Bentonite
2.50 - 4.00	Gravel
4.00 - 10.00	Bentonite

Sample Summary

Environmental Samples			
Soil	**8**	Water	**0**
Geotechnical Samples			
Bulk	**2**	Large Bulk	**0**
Disturbed	**3**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**0**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

In-Situ Tests

PID	**0**
Hand Vane*	**0**
Standard Penetration Tests	**3**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	8	21	450	21	N=21 (3,5/4,6,5,6)	AR2152
Split Spoon	2.00	-	-	3	7	450	7	N=7 (1,2/1,1,2,3)	AR2152
Split Spoon	2.50	2.50	-	15	33	450	33	N=33 (6,9/6,8,9,10)	AR2152

SPT Hammer Ref.	Energy Ratio (%)
AR2152	64

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
2.50 - 4.00	Water	Reddish Brown	90
4.00 - 5.50	Water	Reddish Brown	90
5.50 - 7.00	Water	Reddish Brown	90
7.00 - 8.50	Water	Reddish Brown	90
8.50 - 10.00	Water	Reddish Brown	90

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	117	100	
2.00 - 2.50	117	100	

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

Alliance House,
3A South Park Way
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www.central-alliance.co.uk

Start Date:	30/09/2024	Checked:	
End Date	01/10/2024	Approved:	

Location ID

BH001

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 1 of 2

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 2.50	Dynamic Sampling	Comacchio 205
2.50 - 10.00	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**479072.89**	Northing:	**372470.64**
Elevation:	**9.35mAOD**	Final Depth:	**10.00m**
Logged By:	**AT**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Soft brown slightly sandy silty CLAY with occasional rootlets. Sand is fine. [TOPSOIL]		(0.30) 0.30	9.05										0.00 - 0.30	1 B	
Firm brown slightly sandy silty CLAY. Sand is fine.		(0.70) 1.00	8.35										0.30	1 ES	
													0.50	2 ES	
													0.50 - 1.00	2 B	
Firm reddish brown silty CLAY.													1.00	3 ES	
From 1.30m to 1.60m, Becomes greenish grey with occasional mudstone inclusions.		(0.60) 1.60	7.75										1.20 - 1.65	1 D	SPT(S) 1.20m, N=21 (3,5/4,6,5,6)
Firm to stiff reddish brown CLAY.		(0.90) 2.50	6.85		143 2.50								2.00	4 ES	SPT(S) 2.00m, N=7 (1,2/1,1,2,3)
													2.00 - 2.45	2 D	
Assumed zone of core loss. MUDSTONE. (Drillers description)		(0.50) 3.00	6.35									AZCL	2.50 - 2.95	3 D	SPT(S) 2.50m, N=33 (6,9/6,8,9,10)
Moderately weak greenish grey SILTSTONE. Discontinuities are horizontal closely spaced planar rough open clean.		(0.35) 3.35	6.00					2.50 4.00	67	13	0	5 NI	3.00	5 ES	
From 3.20m to 3.35m, Moderately strong greenish grey SILTSTONE and weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.															
Extremely weak reddish brown partially weathered mercia MUDSTONE recovered as firm to stiff very gravelly CLAY. Gravel is angular to subangular fine to coarse.		(0.65) 4.00	5.35									NA			
Assumed zone of core loss. MUDSTONE. (Drillers description)		(0.40) 4.40	4.95									AZCL			
Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as very clayey angular to subangular fine to coarse GRAVEL.		(0.60) 5.00	4.35					4.00 5.50	73	14	9	NI			
Continued on Next Page															

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
30/09	07:00	0.00	-	
30/09	17:00	7.00	2.50	
01/10	07:00	7.00	2.50	4.60
01/10	16:00	10.00	2.50	

Backfill

From (m)	To (m)	Material
0.00	0.50	Concrete
0.50	2.50	Bentonite
2.50	4.00	Gravel
4.00	10.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	2.50 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	30/09/2024	Checked:	
End Date	01/10/2024	Approved:	

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 2.50	Dynamic Sampling	Comacchio 205
2.50 - 10.00	Rotary Coring	Comacchio 205

Location ID

BH001

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 2 of 2

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**479072.89**	Northing:	**372470.64**
Elevation:	**9.35mAOD**	Final Depth:	**10.00m**
Logged By:	**AT**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Very weak reddish brown mercia MUDSTONE. Discontinuities are horizontal closely spaced undulating smooth open clean.	(0.28)										7			
	5.28	4.07												
Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as clayey angular to subangular fine to coarse GRAVEL.	(0.22)										NI			
	5.50	3.85												
Assumed zone of core loss. MUDSTONE. (Drillers description)	(0.40)										AZCL	5.60	6 ES	
	5.90	3.45												
Very weak reddish brown mercia MUDSTONE with frequent veins infilled by gypsum and gypsum nodules. Discontinuities are horizontal planar undulating stepped smooth open to partly open clean.	(1.04)						5.50 7.00	73	59	29	10			
	6.94	2.41												
Very weak reddish brown locally green partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.	(0.29)										NI			
	7.23	2.12												
Very weak reddish brown mercia MUDSTONE. Discontinuities are 1) subhorizontal 0-10 Deg very closely to closely spaced planar and undulating smooth open to partly open clean. 2) Subhorizontal 45 Deg very closely spaced undulating smooth partly open to open clean.	(0.35)										17			
	7.58	1.77												
Very weak reddish brown locally green mercia MUDSTONE. Discontinuities are subhorizontal 45 deg planar smooth partly open to open clean.	(0.42)						7.00 8.50	100	51	0	NI	7.80	7 ES	
	8.00	1.35									17			
Very weak reddish brown mercia MUDSTONE. Discontinuities are 1) Horizontal 0-10 Deg planar smooth open clean. 2) Subhorizontal 40 Deg planar smooth open with gravel infill. *From 8.00m to 8.14m, Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.*	(0.39)										NI			
	8.39	0.96									8			
Very weak reddish brown locally green mercia MUDSTONE with frequent veins of white gypsum. Discontinuities are 1) Horizontal 0-10 Deg closely to medium spaced planar and undulating smooth partly open to open clean. 2) Subhorizontal 50 Deg undulating smooth open clean. *From 8.39m to 8.58m, Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.*	(1.61)						8.50 10.00	100	91	35	NI			
	10.00	-0.65	121 10.00								11	8.90	8 ES	
EOH at 10.00m - Scheduled Depth														

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
30/09	07:00	0.00	-	
30/09	17:00	7.00	2.50	
01/10	07:00	7.00	2.50	4.60
01/10	16:00	10.00	2.50	

Backfill

From (m)	To (m)	Material
0.00	0.50	Concrete
0.50	2.50	Bentonite
2.50	4.00	Gravel
4.00	10.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	2.50 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	02/10/2024	Checked:	
End Date:	03/10/2024	Approved:	

Location ID

BH002

DRAFT

Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**479291.89**	Northing:	**372242.50**
Elevation:	**6.82mAOD**	Final Depth:	**10.30m**
Logger:	**ED**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 10.30	Rotary Coring	Comacchio 205

Hole Diameter

Depth (m)	Diam (mm)
10.30	121

Casing Diameter

Depth (m)	Diam (mm)
6.00	143

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
03/10/2024	Standpipe	3.50	1.20 - 3.50	50

If Methodology includes Dynamic Sampling refer to Runs table for info.

No Groundwater Encountered

Backfill

Depth (m)	Legend Code
0.00 - 1.20	Bentonite
1.20 - 3.50	Gravel
3.50 - 10.30	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**3**
Standard Penetration Tests	**3**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**8**	Water	**0**
Geotechnical Samples			
Bulk	**5**	Large Bulk	**0**
Disturbed	**18**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**0**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	2	6	450	6	N=6 (1,1/2,2,1,1)	AR2154
Split Spoon	2.00	-	1.80	7	8	450	8	N=8 (4,3/2,2,2,2)	AR2154
Split Spoon	3.00	3.00	-	20	50	225		50 (8,12/50 for 150mm)	AR2154

SPT Hammer Ref.	Energy Ratio (%)
AR2154	64

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
3.00 - 4.30	Water	Reddish Grey	100
4.30 - 5.80	Water	Reddish Grey	75
5.80 - 6.30	Water	-	0
6.30 - 7.80	Water	-	0
7.80 - 9.30	Water	-	0
9.30 - 10.30	Water	-	0

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	117	100	
2.00 - 3.00	117	100	

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End Date	03/10/2024	Approved:	

Location ID

BH002

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 1 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 10.30	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**479291.89**	Northing:	**372242.50**
Elevation:	**6.82mAOD**	Final Depth:	**10.30m**
Logged By:	**ED**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results	
Soft to firm brown becoming light brown sandy CLAY. Sand is fine.		(1.20)											0.00 - 0.30	1 B		
													0.30	2 ES	HV 0.30m, (p)=80 kPa (r)=14 kPa	
													0.30	4 D		
													0.30 - 0.50	3 B		
													0.50	5 ES	HV 0.50m, (p)=80 kPa (r)=18 kPa	
													0.50	6 D		
													0.50 - 1.20	7 B		
													1.00	8 ES	HV 1.00m, (p)=100 kPa (r)=18 kPa	1
													1.00	9 D		
Reddish brown sandy slightly clayey subangular fine to coarse mudstone GRAVEL. Sand is fine.		1.20	5.62										1.20 - 1.65	11 D	SPT(S) 1.20m, N=6 (1,1/2,2,1,1)	
		(0.80)											1.60	10 D		
Stiff friable reddish brown slightly gravelly CLAY. Gravel is subangular fine to coarse mudstone.		2.00	4.82										2.00	12 ES	SPT(S) 2.00m, N=8 (4,3/2,2,2,2)	2
													2.00 - 2.45	13 D		
		(0.90)											2.60	14 D		
Weak grey mercia MUDSTONE.		2.90	3.92													
		(0.10)														
Assumed zone of core loss - Weathered MUDSTONE (Drillers description).		3.00	3.82										3.00	15 ES	SPT(S) 3.00m, 50 (8,12/50 for 150mm)	3
		(0.30)										AZCL	3.00 - 3.45	16 D		
Weak light grey and brown mercia MUDSTONE.		3.30	3.52													
		(0.20)										0				
Weak friable light brown slightly clayey mercia MUDSTONE.		3.50	3.32										3.50	17 D		
		(0.30)						3.00 4.50	100	0	0	0				
Weak friable light grey mercia MUDSTONE. Non-intact core recovered as subangular fine to coarse GRAVEL.		3.80	3.02													
		(0.30)										NI	4.00	18 D		4
		4.10	2.72										4.00	19 ES		
Weak friable light brown slightly sandy mercia MUDSTONE. Sand is fine to coarse.		(0.20)										0				
Assumed zone of core loss - Weathered MUDSTONE (Drillers description).		4.30	2.52													
		(0.70)										AZCL				
Continued on Next Page		5.00	1.82										5.00	20 D		5
													5.00	21 ES		

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
02/10	08:00	0.00	-	
02/10	16:00	6.30	3.00	2.10
03/10	07:00	6.30	3.00	2.20
03/10	16:00	10.30	6.00	

Backfill

From (m)	To (m)	Material
0.00	1.20	Bentonite
1.20	3.50	Gravel
3.50	10.30	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.20 - 3.50	3.50	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	02/10/2024	Checked:	
End Date	03/10/2024	Approved:	

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 10.30	Rotary Coring	Comacchio 205

Location ID

BH002

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 2 of 3

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**479291.89**	Northing:	**372242.50**
Elevation:	**6.82mAOD**	Final Depth:	**10.30m**
Logged By:	**ED**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Weak friable light brown slightly sandy mercia MUDSTONE. Sand is fine to coarse.		(0.30)										0			
Weak light brown mercia MUDSTONE recovered as stiff slightly sandy CLAY. Sand is fine to coarse.		5.30 (0.50)	1.52					4.50 5.80	100	0	0		5.50	22 D	
Assumed zone of core loss - Weathered MUDSTONE (Driller's description).		5.80 (0.10)	1.02									AZCL			
Very weak to weak reddish brown mercia MUDSTONE. Discontinuities are 1) Horizontal (0-5 degrees) very closely spaced planar stepped rough and partly open to moderately wide with clay and gypsum infill 2) Sub-vertical (50-60 degrees) planar rough and partly open with clay and gypsum infill. *From 5.90m to 5.98m, Non-intact core recovered as angular fine to coarse GRAVEL. From 6.25m to 6.30m, Non-intact core recovered as angular fine to coarse GRAVEL.*		5.90 (0.40)	0.92		143 6.00			5.80 6.30	80	56	0	22	6.00	23 D	
Assumed zone of core loss - Weathered fractured MUDSTONE (Driller's description).		6.30 (0.25)	0.52									AZCL			
Extremely weak to weak reddish brown mercia MUDSTONE. Non-intact core recovered as slightly clayey angular to subangular fine to coarse GRAVEL. *From 6.55m to 6.59m, Gypsum vein (42mm).*		6.55 (1.25)	0.27					6.30 7.80	83	7	0	NI	7.00 - 8.00 7.10 7.30 7.60	24 B 25 D 26 ES 27 D	
Assumed zone of core loss - Weathered fractured MUDSTONE (Driller's description).		7.80 (0.70)	-0.98									AZCL	8.10	28 D	
Very weak to weak reddish brown mercia MUDSTONE with frequent gypsum veining (<7.00mm). Discontinuities are 1) Horizontal (10-20 degrees) closely spaced, planar and stepped, rough and partly open to open with gravel and clay infill 2) Sub-vertical (45-50 degrees), planar, rough and partly open with gypsum infill. *From 9.15m to 9.30m, Non-intact core recovered as angular fine to coarse GRAVEL.*		8.50 (0.80)	-1.68					7.80 9.30	53	20	7	14 NI	9.00 - 10.00 9.10	29 B 30 D	
Assumed zone of core loss - Weathered fractured MUDSTONE (Driller's description).		9.30 (0.50)	-2.48					9.30 10.30	50	25	11	AZCL			
Very weak to weak reddish brown mercia MUDSTONE with frequent gypsum veining (<7.00mm). Discontinuities are 1)		9.80	-2.98									13	9.90	31 D	

Continued on Next Page

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
02/10	08:00	0.00	-	
02/10	16:00	6.30	3.00	2.10
03/10	07:00	6.30	3.00	2.20
03/10	16:00	10.30	6.00	

Backfill

From (m)	To (m)	Material
0.00	1.20	Bentonite
1.20	3.50	Gravel
3.50	10.30	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.20 - 3.50	3.50	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	02/10/2024	Checked:	
End Date	03/10/2024	Approved:	

Location ID

BH002

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Log Type

Combined Borehole

Scale: 1:25

Sheet 3 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 10.30	Rotary Coring	Comacchio 205

Project No:	**2372986**	Location Details	
Name:	**One Earth Solar Farm**	Easting: **479291.89**	Northing: **372242.50**
Location:	**Hall Farm, Lincoln**	Elevation: **6.82mAOD**	Final Depth: **10.30m**
Client:	**Pershing Consultants**	Logged By: **ED**	Grid System: **OSGB**
		Orientation: **N/A**	Inclination: **90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Horizontal (10-20 degrees) closely spaced, planar and stepped, rough and partly open to open with gravel and clay infill 2) Sub-vertical (45-50 degrees), planar, rough and partly open with gypsum infill. *From 10.18m to 10.30m, Non-intact core recovered as angular fine to coarse GRAVEL.*		(0.50)													
		10.30	-3.48	121 10.30								NI			
EOH at 10.30m - Scheduled Depth															

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
02/10	08:00	0.00	-	
02/10	16:00	6.30	3.00	2.10
03/10	07:00	6.30	3.00	2.20
03/10	16:00	10.30	6.00	

Backfill

From (m)	To (m)	Material
0.00	1.20	Bentonite
1.20	3.50	Gravel
3.50	10.30	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.20 - 3.50	3.50	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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End Date:	03/10/2024	Approved:	

Location ID

BH003

DRAFT

Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**478976.07**	Northing:	**372181.99**
Elevation:	**9.59mAOD**	Final Depth:	**10.80m**
Logger:	**AG**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.50	Dynamic Sampling	Comacchio 205
3.50 - 10.80	Rotary Coring	Comacchio 205

Hole Diameter

Depth (m)	Diam (mm)
10.80	121

Casing Diameter

Depth (m)	Diam (mm)
3.50	143

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
03/10/2024	Standpipe	3.50	1.00 - 3.50	50

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 0.30	Concrete
0.30 - 1.00	Bentonite
1.00 - 3.50	Gravel
3.50 - 10.80	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**3**
Standard Penetration Tests	**3**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**10**	Water	**0**
Geotechnical Samples			
Bulk	**6**	Large Bulk	**0**
Disturbed	**12**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**0**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	3	12	450	12	N=12 (1,2/2,3,3,4)	AR2152
Split Spoon	2.00	-	-	4	23	450	23	N=23 (2,2/3,5,7,8)	AR2152
Split Spoon	3.00	-	-	6	30	450	30	N=30 (2,4/6,8,8,8)	AR2152

SPT Hammer Ref.	Energy Ratio (%)
AR2152	64

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
3.50 - 5.00	Water	Reddish Brown	80
5.00 - 6.50	Water	Reddish Brown	80
6.50 - 7.80	Water	Brown	90
7.80 - 9.30	Water	Brown	90
9.30 - 10.80	Water	Brown	90

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	117	100	
2.00 - 3.00	102	100	
3.00 - 3.50	102	0	

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Start Date:	02/10/2024	Checked:	
End Date	03/10/2024	Approved:	

Location ID
BH003
DRAFT

Log Type
Combined Borehole

Scale: 1:25
Sheet 1 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.50	Dynamic Sampling	Comacchio 205
3.50 - 10.80	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**478976.07**	Northing:	**372181.99**
Elevation:	**9.59mAOD**	Final Depth:	**10.80m**
Logged By:	**AG**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results	
MADE GROUND: Grass over soft light brown slightly sandy clayey SILT. Sand is fine. [TOPSOIL]		(0.30)											0.00 - 0.30	3 B		
		0.30	9.29										0.30	1 ES	HV 0.30m, (p)=20 kPa (r)=5 kPa	
													0.30	2 D		
Soft to firm light brown slightly sandy silty CLAY. Sand is fine.													0.50	4 ES	HV 0.50m, (p)=50 kPa (r)=8 kPa	
													0.50	5 D		
		(0.70)											0.50 - 1.00	6 B		
1		1.00	8.59										1.00	7 ES	HV 1.00m, (p)=60 kPa (r)=2 kPa	1
Firm light reddish brown slightly silty CLAY.													1.00	8 D		
													1.00 - 1.50	9 B		
		(0.50)											1.20 - 1.65	10 D	SPT(S) 1.20m, N=12 (1,2/2,3,3,4)	
													1.20 - 2.00	11 B		
		1.50	8.09													
Firm to stiff reddish brown clayey SILT with occasional mudstone inclusions.													2.00	13 ES	SPT(S) 2.00m, N=23 (2,2/3,5,7,8)	
													2.00	14 D		
													2.00 - 2.45	15 D		
2													2.00 - 3.00	12 B		2
		(2.00)														
													3.00	17 ES	SPT(S) 3.00m, N=30 (2,4/6,8,8,8)	
													3.00	18 D		
3													3.00 - 3.50	16 B		3
		3.50	6.09		143 3.50											
Assumed zone of core loss. MUDSTONE. (Drillers description)																
		(0.80)										AZCL				
4													4.00	19 ES		4
													4.00	20 D		
								3.50 5.00	47	0	0					
		4.30	5.29													
Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as very clayey angular to subangular fine to coarse GRAVEL.																
		(0.70)										NI				
5		5.00	4.59										5.00	21 ES		5
Continued on Next Page													5.00	22 D		

Observations / Remarks

Misc.
No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
02/10	07:00	0.00	-	
02/10	16:00	6.50	3.50	1.70
03/10	07:00	6.50	3.50	0.40
03/10	16:00	10.80	3.50	

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	1.00	Bentonite
1.00	3.50	Gravel
3.50	10.80	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 3.50	3.50	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	02/10/2024	Checked:	
End Date	03/10/2024	Approved:	

Location ID

BH003

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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.50	Dynamic Sampling	Comacchio 205
3.50 - 10.80	Rotary Coring	Comacchio 205

Log Type

Combined Borehole

Scale: 1:25

Sheet 2 of 3

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**478976.07**	Northing:	**372181.99**
Elevation:	**9.59mAOD**	Final Depth:	**10.80m**
Logged By:	**AG**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Assumed zone of core loss. MUDSTONE. (Drillers description)	(0.40)										AZCL			
Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as slightly clayey angular to subangular fine to coarse GRAVEL with low cobble content. Cobbles are subangular mudstone.	5.40	4.19									NI			
From 5.75m to 5.86m, Very weak reddish brown mercia MUDSTONE. Discontinuities are horizontal undulating smooth. From 5.86m to 6.10m, Non-intact core recovered as angular to subangular fine to coarse GRAVEL.	(0.70)						5.00 6.50	73	34	0	9			
											NI			
Very weak reddish brown mercia MUDSTONE. Discontinuities are 1) Horizontal 5 deg planar smooth open clean. 2) Subvertical 45 deg planar smooth open clean. 3) Vertical undulating smooth open clean with occasional gravel infill.	6.10	3.49									8			
	(0.40)													
Assumed zone of core loss. MUDSTONE. (Drillers description)	6.50	3.09										6.50 6.50	23 ES 24 D	
From 6.50m, Colour is reddish brown.	(0.20)										AZCL			
Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.	6.70	2.89									NI			
	(0.30)													
Very weak reddish brown mercia MUDSTONE. Discontinuities are 1) horizontal 5-10 Deg closely to medium spaced planar smooth open clean. 2) Vertical 85 Deg stepped smooth open clean.	7.00	2.59					6.50 7.80	73	33	31	9			
From 7.18m to 7.22m, non-intact core recovered as angular to subangular fine to coarse GRAVEL.	(0.55)													
Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.	7.55	2.04									NI			
	(0.25)													
Assumed zone of core loss. MUDSTONE. (Drillers description)	7.80	1.79									AZCL	8.00 8.00	25 ES 26 D	
	(0.40)													
Very weak reddish brown mercia MUDSTONE interbedded with moderately weak greenish grey fine grained SANDSTONE interbedded with SILTSTONE. Discontinuities are 1) Horizontal 5-10 Deg very closely to closely spaced planar and undulating smooth open clean. 2) Vertical 85 Deg stepped smooth open clean.	8.20	1.39									NI			
From 8.20m to 8.30m, Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL. From 8.35m to 8.42m, Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL. From 8.49m to 8.51m, Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL. From 8.70m, Weak reddish brown.	(1.10)						7.80 9.30	73	47	7	17			
From 9.15m, Mineral veining is subhorizontal to horizontal. From 9.16m to 9.30m, Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.											NI			
assumed zone of core loss. MUDSTONE. (Drillers description)	9.30	0.29												
	(0.40)										AZCL	9.50 9.50	27 ES 28 D	
Very weak reddish brown mercia MUDSTONE. Discontinuities are very closely to closely spaced planar undulating smooth open clean.	9.70	-0.11									15			
From 9.90m to 10.05m, Very weak reddish brown mercia MUDSTONE.	(0.35)										NI			
Continued on Next Page														

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
02/10	07:00	0.00	-	
02/10	16:00	6.50	3.50	1.70
03/10	07:00	6.50	3.50	0.40
03/10	16:00	10.80	3.50	

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	1.00	Bentonite
1.00	3.50	Gravel
3.50	10.80	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 3.50	3.50	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	02/10/2024	Checked:	
End Date	03/10/2024	Approved:	

Location ID

BH003

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Log Type

Combined Borehole

Scale: 1:25

Sheet 3 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.50	Dynamic Sampling	Comacchio 205
3.50 - 10.80	Rotary Coring	Comacchio 205

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**478976.07**	Northing:	**372181.99**
Elevation:	**9.59mAOD**	Final Depth:	**10.80m**
Logged By:	**AG**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
From 9.90m to 10.05m, Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.		10.05	-0.46												
Very weak reddish brown mercia MUDSTONE. Discontinuities are 1) Horizontal 5-10 Deg closely spaced planar smooth open clean with gravel infill. 2) Subhorizontal 45 Deg planar smooth open with gravel infill.		(0.43)										17			
From 10.34m to 10.48m, Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL. with low cobble content. Cobbles are angular to subangular mudstone.		10.48	-0.89					9.30 10.80	73	54	14	NI			
Very weak reddish brown mercia MUDSTONE with occasional veins of white gypsum. Discontinuities are horizontal5-10 Deg closely spaced planar and undulating smooth open clean.		(0.32)										9			
From 10.58m to 10.61m, Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.		10.80	-1.21	121 10.80											
EOH at 10.80m - Scheduled Depth															

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
02/10	07:00	0.00	-	
02/10	16:00	6.50	3.50	1.70
03/10	07:00	6.50	3.50	0.40
03/10	16:00	10.80	3.50	

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	1.00	Bentonite
1.00	3.50	Gravel
3.50	10.80	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 3.50	3.50	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	04/10/2024	Checked:	
End Date:	08/10/2024	Approved:	

Location ID

BH004

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Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**479178.14**	Northing:	**371956.12**
Elevation:	**12.44mAOD**	Final Depth:	**12.00m**
Logger:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 4.00	Dynamic Sampling	Comacchio 205
4.00 - 12.00	Rotary Coring	Comacchio 205

Hole Diameter

Depth (m)	Diam (mm)
12.00	121

Casing Diameter

Depth (m)	Diam (mm)
4.20	143

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
08/10/2024	Standpipe	4.00	1.00 - 4.00	50

If Methodology includes Dynamic Sampling refer to Runs table for info.

No Groundwater Encountered

Backfill

Depth (m)	Legend Code
0.00 - 1.00	Bentonite
1.00 - 4.00	Gravel
4.00 - 12.00	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**2**
Standard Penetration Tests	**4**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**6**	Water	**0**
Geotechnical Samples			
Bulk	**6**	Large Bulk	**0**
Disturbed	**11**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**0**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	3	10	450	10	N=10 (1,2/4,2,2,2)	AR2154
Split Spoon	2.20	-	-	6	15	450	15	N=15 (3,3/3,4,4,4)	AR2154
Split Spoon	3.20	-	-	14	30	450	30	N=30 (6,8/7,8,7,8)	AR2154
Split Spoon	4.20	-	-	12	50	375		50 (5,7/50 for 225mm)	AR2154

SPT Hammer Ref.	Energy Ratio (%)
AR2154	64

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
4.20 - 5.50	Water	Brown	100
5.50 - 6.20	Water	Brown	50
6.20 - 7.50	Water	Brown	80
7.50 - 9.00	Water	Brown	100
9.00 - 10.50	Water	Brown	100
10.50 - 12.00	Water	Brown	100

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.20	117	100	
2.20 - 3.20	117	100	
3.20 - 4.20	102	100	

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Start Date:	04/10/2024	Checked:	
End Date	08/10/2024	Approved:	

Location ID

BH004

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Log Type

Combined Borehole

Scale: 1:25

Sheet 1 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 4.00	Dynamic Sampling	Comacchio 205
4.00 - 12.00	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**479178.14**	Northing:	**371956.12**
Elevation:	**12.44mAOD**	Final Depth:	**12.00m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Grass over soft brown CLAY [TOPSOIL].		(0.20)											0.00 - 0.30	2 B	
													0.10	1 D	
Soft light brown mottled light grey CLAY.		0.20	12.24												
													0.30	3 D	
													0.30	4 ES	
													0.30 - 0.50	5 B	
													0.50	6 ES	
													0.50 - 1.20	7 B	
													0.60	8 D	
From 0.70m, Gravelly CLAY. Gravel is angular fine to coarse mudstone.		(1.00)													
													1.00	10 ES	1
													1.00	9 D	
Firm to very stiff medium strength red CLAY.		1.20	11.24										1.20 - 1.65	101 D	SPT(S) 1.20m, N=10 (1,2/4,2,2,2)
													1.20 - 2.20	104 B	
													1.70	102 ES	
													1.80	103 D	
															HV 2.00m, (p)=52 kPa (r)=10 kPa 2
From 2.20m to 2.40m, is soft and friable.													2.20 - 2.65	105 D	SPT(S) 2.20m, N=15 (3,3/3,4,4,4)
													2.20 - 3.20	108 B	
		(3.00)													
From 2.90m, Mottled grey.													2.90	106 D	
													3.00	107 ES	HV 3.00m, (p)=56 kPa (r)=12 kPa 3
													3.20 - 3.65	109 D	SPT(S) 3.20m, N=30 (6,8/7,8,7,8)
													3.20 - 4.20	112 B	
													3.90	110 ES	
													4.00	111 D	4
Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.		4.20	8.24		143 4.20								4.20 - 4.65	113 D	SPT(S) 4.20m, 50 (5,7/50 for 225mm)
		(0.30)										NI			
Weak reddish brown mercia MUDSTONE. Discontinuities are 1) Subhorizontal closely spaced planar smooth open. 2) Subhorizontal medium spaced undulating smooth partly open.		4.50	7.94					4.20 5.50	100	77	55				
Continued on Next Page															5

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
04/10	08:00	0.00	-	
04/10	16:00	1.20	-	
07/10	08:00	1.20	-	
07/10	16:00	4.20	3.00	
08/10	08:00	4.20	3.00	
08/10	16:00	12.00	4.20	

Backfill

From (m)	To (m)	Material
0.00	1.00	Bentonite
1.00	4.00	Gravel
4.00	12.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	04/10/2024	Checked:	
End Date	08/10/2024	Approved:	

Location ID
BH004
DRAFT

Log Type
Combined Borehole

Scale: 1:25
Sheet 2 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 4.00	Dynamic Sampling	Comacchio 205
4.00 - 12.00	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**479178.14**	Northing:	**371956.12**
Elevation:	**12.44mAOD**	Final Depth:	**12.00m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
												5			
		(1.70)													
From 5.50m to 5.60m, Weak reddish brown mercia MUDSTONE. Non-intact core recovered as subangular to subrounded fine to coarse GRAVEL.								5.50 6.20	100	79	27	NI			
												6			
From 5.95m to 6.00m, Weak reddish brown mercia MUDSTONE. Non-intact core recovered as subangular to subrounded fine to coarse GRAVEL.												NI			
												5			
Assumed zone of core loss. MUDSTONE. (Drillers description)		6.20	6.24												
		(0.90)						6.20 7.50	31	6	0	AZCL			
Weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular fine to coarse GRAVEL.		7.10	5.34									NI			
												0			
		(0.40)										NI			
Assumed zone of core loss. MUDSTONE. (Drillers description)		7.50	4.94												
		(0.35)										AZCL			
Moderately weak reddish brown mercia MUDSTONE. Discontinuities are horizontal medium spaced undulating rough open.		7.85	4.59									7			
From 8.00m to 8.10m, Weak reddish brown MUDSTONE. Non-intact core recovered as angular fine to coarse GRAVEL.												NI			
From 8.10m to 8.30m, Very weak.								7.50 9.00	77	67	17				
		(1.15)										3			
Medium strong reddish brown mercia MUDSTONE. Discontinuities are 1) Subhorizontal medium spaced planar smooth tight. 2) Subhorizontal medium spaced planar smooth tight and open.		9.00	3.44									AZCL			
From 9.00m to 9.15m, Assumed zone of core loss.															
								9.00 10.50	90	90	38	5			
		(1.50)													
Continued on Next Page															

Observations / Remarks

Misc.
No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
04/10	08:00	0.00	-	
04/10	16:00	1.20	-	
07/10	08:00	1.20	-	
07/10	16:00	4.20	3.00	
08/10	08:00	4.20	3.00	
08/10	16:00	12.00	4.20	

Backfill

From (m)	To (m)	Material
0.00	1.00	Bentonite
1.00	4.00	Gravel
4.00	12.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Location ID

BH004

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 3 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 4.00	Dynamic Sampling	Comacchio 205
4.00 - 12.00	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**479178.14**	Northing:	**371956.12**
Elevation:	**12.44mAOD**	Final Depth:	**12.00m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
At 10.35m, Discontinuity is 30 Deg undulating rough and partly open.															
Moderately weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular fine to coarse GRAVEL. *From 10.50m to 10.70m, Assumed zone of core loss.*		10.50	1.94									AZCL			
		(0.50)										NI			
Strong reddish brown mercia MUDSTONE.		11.00	1.44					10.50 12.00	87	67	40	0			
		(0.50)													
Medium strong reddish brown mercia MUDSTONE. Discontinuities are 1) Subhorizontal undulating smooth and tight. 2) Horizontal stepped rough and open.		11.50	0.94									4			
		(0.50)													
EOH at 12.00m - Scheduled Depth		12.00	0.44	121 12.00											

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
04/10	08:00	0.00	-	
04/10	16:00	1.20	-	
07/10	08:00	1.20	-	
07/10	16:00	4.20	3.00	
08/10	08:00	4.20	3.00	
08/10	16:00	12.00	4.20	

Backfill

From (m)	To (m)	Material
0.00	1.00	Bentonite
1.00	4.00	Gravel
4.00	12.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	15/10/2024	Checked:	
End Date:	16/10/2024	Approved:	

Location ID

BH005

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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.00	Cable Percussion Boring	Dando 2000

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481462.72**	Northing:	**372660.49**
Elevation:	**4.65mAOD**	Final Depth:	**9.00m**
Logger:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Hole Diameter

Depth (m)	Diam (mm)
9.00	150

Casing Diameter

Depth (m)	Diam (mm)
9.00	150

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
1.30	-	1.50	20	1.00	
2.10	-	2.50	20	1.50	
6.20	-	6.50	20	3.00	

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
16/10/2024	Vibrating Wire Piezometer	3.50		70

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 9.00	Grout

In-Situ Tests

PID	**0**
Hand Vane*	**0**
Standard Penetration Tests	**5**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**5**	Water	**0**
Geotechnical Samples			
Bulk	**10**	Large Bulk	**0**
Disturbed	**16**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**3**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	2.00	1.50	-	3	7	450	7	N=7 (1,2/2,1,2,2)	7-10-1
Split Spoon	4.00	3.00	-	4	7	450	7	N=7 (2,2/2,2,2,1)	7-10-1
Split Spoon	6.00	4.50	-	1	0	75		0 (1 for 75mm/0 for 0mm)	7-10-1
Cone	7.50	7.50	1	13	23	450	23	N=23 (6,7/6,6,5,6)	7-10-1
Split Spoon	9.00	9.00	2	25	50	190		50 (25 for 85mm/50 for 105mm)	7-10-1

SPT Hammer Ref.	Energy Ratio (%)
7-10-1	62

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)
8.30 - 8.50	30
8.50 - 9.00	60

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks

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Location ID: **BH005**

DRAFT

Methodology & Plant

Depth (m)	Method	Equipment
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.00	Cable Percussion Boring	Dando 2000

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details:

Easting:	**481462.72**	Northing:	**372660.49**
Elevation:	**4.65mAOD**	Final Depth:	**9.00m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Log Type: **Cable Percussion**

Scale: 1:50

Sheet 1 of 1

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Chiselling (mins)	Water Added (Litres)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill
MADE GROUND: Firm brown CLAY. [TOPSOIL]		(0.10)	4.55						
Firm brown CLAY.		0.10							
		(2.20)						1.00	
								1.30	
								1.50	
								2.10	
Plastic blackish grey clayey amorphous PEAT with a slight organic odour.		2.30	2.35						
		(1.70)						3.00	
Brownish yellow very sandy angular to rounded fine to coarse mixed lithology GRAVEL. Sand is fine to coarse.		4.00	0.65						
		(5.00)						6.20	
				30					
				60					
						150	150		
EOH at 9.00m - Refusal		9.00	-4.35			9.00	9.00		

Samples & Testing

Depth (m)	Ref	Test Results
0.10 - 0.50	1 B	
0.60	2 D	
0.60 - 1.20	3 B	
0.80	101 ES	
1.00	4 D	
1.20 - 1.65	5 UT	13 blows, 100% Recovery
1.70	6 D	
1.70 - 2.00	7 B	
2.00	8 D	SPT(S) 2.00m, N=7 (1,2/2,1,2,2)
2.00 - 2.45	9 D	
2.50	102 ES	
2.50 - 3.00	10 B	
3.00	11 D	8 blows, 100% Recovery
3.00 - 3.45	12 UT	
3.50	13 D	
3.50 - 4.00	14 B	
4.00	15 D	SPT(S) 4.00m, N=7 (2,2/2,2,2,1)
4.00 - 4.45	16 D	
4.50	103 ES	
4.50 - 5.00	17 B	
5.00	18 D	12 blows, 100% Recovery
5.00 - 5.45	19 UT	
5.50 - 6.00	20 B	
6.00	104 ES	SPT(S) 6.00m, 0 (1 for 75mm/0 for 0mm)
6.00	21 D	
6.00 - 6.45	22 D	
6.50 - 7.00	23 B	
7.50	105 ES	SPT(C) 7.50m, N=23 (6,7/6,6,5,6)
7.50	24 D	
7.50 - 7.95	25 D	
7.50 - 7.95	26 B	
8.00 - 8.50	27 B	
9.00	28 D	SPT(S) 9.00m, 50 (25 for 85mm/50 for 105mm)
9.00 - 9.45	29 D	

Observations / Remarks

Misc.

Groundwater Encountered
Casing Used
Monitoring Point/s Installed
Hammer Ref & Energy Ratio (%)
7-10-1 (62[%])

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
15/10	12:00	0.00	-	-
15/10	16:00	7.00	7.00	4.00
16/10	07:00	7.00	7.00	1.00
16/10	14:30	9.00	9.00	2.00

Backfill

From (m)	To (m)	Material
0.00	9.00	Grout

Installations

Instrument Details	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer		3.50	70

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
1.30	1.00	20	
2.10	1.50	20	
6.20	3.00	20	

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Location ID

BH006

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Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481517.90**	Northing:	**372663.21**
Elevation:	**4.90mAOD**	Final Depth:	**19.00m**
Logger:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 8.00	Dynamic Sampling	Comacchio 205
4.00 - 19.00	Rotary Coring	Commachio 205
8.00 - 9.00	Rotary Open Holing	Commachio 205

Hole Diameter

Depth (m)	Diam (mm)
3.00	128
8.00	113
9.00	140
19.00	116

Casing Diameter

Depth (m)	Diam (mm)
9.00	140

If Methodology includes Dynamic Sampling refer to Runs table for info.

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
2.30	2.30	3.00	20	1.65	

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
15/10/2024	Vibrating Wire Piezometer	13.60	0.00 - 13.60	18

Backfill

Depth (m)	Legend Code
0.00 - 13.60	Grout
13.60 - 19.00	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**5**
Standard Penetration Tests	**4**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**7**	Water	**0**
Geotechnical Samples			
Bulk	**8**	Large Bulk	**0**
Disturbed	**14**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**2**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	3.00	3.00	2.30	0	1	450	1	N=1 (0,0/0,0,1,0)	AR2154
Split Spoon	5.00	5.00	-	1	1	150		1 (1 for 75mm/1 for 75mm)	AR2154
Split Spoon	6.50	6.50	-	1	2	225		2 (1 for 75mm/2 for 150mm)	AR2154
Split Spoon	9.00	9.00	-	13	35	450	35	N=35 (5,8/6,6,9,14)	AR2154

SPT Hammer Ref.	Energy Ratio (%)
AR2154	71

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
9.00 - 10.50	Water	Brown	90
10.50 - 12.00	Water	Brown	40
12.00 - 13.50	Water	Brown	70
13.50 - 15.00	Water	Brown	50
15.00 - 16.50	Water	Brown	60
16.50 - 18.00	Water	Brown	60
18.00 - 19.00	Water	Brown	60

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.80 - 3.00	128	100	
3.00 - 4.00	113	100	
4.60 - 5.00	113	100	
5.00 - 6.50	113	100	
6.50 - 8.00	113	67	

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Location ID

BH006

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Log Type

Combined Borehole

Scale: 1:25

Sheet 1 of 4

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 8.00	Dynamic Sampling	Comacchio 205
8.00 - 9.00	Rotary Open Holing	Commachio 205
4.00 - 19.00	Rotary Coring	Commachio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**481517.90**	Northing:	**372663.21**
Elevation:	**4.90mAOD**	Final Depth:	**19.00m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill
Soft to firm low strength brown slightly sandy silty CLAY. Sand is fine to coarse.		(0.54)					
Very soft brown very sandy silty friable CLAY. Sand is fine to coarse.		0.54	4.36				
From 1.80m, Slightly sandy.		(2.16)				1.65 1.75 1.90 2.10 2.30	
From 2.30m, is grey.							
Soft low strength grey CLAY.		2.70	2.20				
From 3.00m to 3.25m, Slightly sandy silty CLAY.		(1.02)		128 3.00			
From 3.60m, is bluish grey.							
Firm low strength bluish grey CLAY.		3.72	1.18				
From 4.60m, Is soft.		(1.98)					
Continued on Next Page							

Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
					0.20 - 0.50	3 B	
					0.30	1 ES	HV 0.30m, (p)=24 kPa (r)=6 kPa
					0.40	2 D	
							HV 0.60m, (p)=Fail kPa (r)=Fail kPa
					0.70	4 D	
					0.70 - 1.10	6 B	
					0.80	5 ES	
					1.20 - 1.80	7 UT	100 Ublows, 100% Recovery
					1.70	8 D	
					1.80 - 2.60	9 B	
					1.90	10 ES	
					2.80	11 D	HV 2.80m, (p)=26 kPa (r)=8 kPa
					2.80 - 3.00	13 B	
					2.90	12 ES	
					3.00 - 3.45	14 D	SPT(S) 3.00m, N=1 (0,0/0,0,1,0)
					3.20	15 D	
					3.30 - 3.60	16 B	
					3.80	17 D	
					3.90	18 ES	HV 3.90m, (p)=30 kPa (r)=10 kPa
					4.00 - 4.45	19 UT	
					4.60	20 D	
					4.60 - 5.00	22 B	
					4.70	21 ES	
							HV 4.80m, (p)=30 kPa (r)=8 kPa
					5.00 - 5.45	23 D	SPT(S) 5.00m, 1 (1 for 75mm/1 for 75mm)
					5.00 - 5.70	24 B	

Observations / Remarks

Misc.

Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
10/10	08:00		-	-
10/10	16:00	4.00	3.00	3.10
11/10	08:00	4.00	3.00	1.20
11/10	15:00	15.00	9.00	2.20
14/10	08:00	19.00	9.00	1.70
14/10	15:30		-	-

Backfill

From (m)	To (m)	Material
0.00	13.60	Grout
13.60	19.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer	0.00 - 13.60	13.60	18

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
2.30	1.65	20	

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Location ID

BH006

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Log Type

Combined Borehole

Scale: 1:25

Sheet 2 of 4

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 8.00	Dynamic Sampling	Comacchio 205
8.00 - 9.00	Rotary Open Holing	Commachio 205
4.00 - 19.00	Rotary Coring	Commachio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**481517.90**	Northing:	**372663.21**
Elevation:	**4.90mAOD**	Final Depth:	**19.00m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)
Firm low strength bluish grey CLAY.	5.70	-0.80		
Soft brownish grey sandy silty CLAY. Sand is fine to coarse.	(0.40)			
Grey slightly clayey slightly gravelly fine to coarse SAND. Gravel is subrounded fine to coarse mixed lithologies (River Terrace).	6.10	-1.20		
	(1.30)			
Brownish grey sandy subangular to subrounded fine to coarse mudstone and mixed lithologies GRAVEL (River Terrace). Sand is fine to coarse.	7.40	-2.50		
	(0.60)			
No recovery - Rotary open holed to pass gravel band.	8.00	-3.10	113 / 8.00	
	(1.00)			
Very weak red mercia MUDSTONE. Non-intact core recovered as subangular top rounded fine to coarse GRAVEL (River terrace deposit).	9.00	-4.10	140 / 9.00	140 / 9.00
	(1.20)			
Continued on Next Page				

Water Level (m)

Installation / Backfill

Coring, Samples & Testing

Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
					5.80	25 D	
					5.90	26 ES	
					6.30	27 D	
					6.50 - 6.95	28 D	SPT(S) 6.50m, 2 (1 for 75mm/2 for 150mm)
					6.50 - 7.30	29 B	
					7.60	30 D	
					9.00 - 9.45	31 D	SPT(S) 9.00m, N=35 (5,8/6,6,9,14)
9.00 10.50	100	13	9	NI			

Observations / Remarks

Misc.

Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
10/10	08:00		-	-
10/10	16:00	4.00	3.00	3.10
11/10	08:00	4.00	3.00	1.20
11/10	15:00	15.00	9.00	2.20
14/10	08:00	19.00	9.00	1.70
14/10	15:30		-	-

Backfill

From (m)	To (m)	Material
0.00	13.60	Grout
13.60	19.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer	0.00 - 13.60	13.60	18

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
2.30	1.65	20	

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End Date	15/10/2024	Approved:	

Location ID

BH006

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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 8.00	Dynamic Sampling	Comacchio 205
8.00 - 9.00	Rotary Open Holing	Commachio 205
4.00 - 19.00	Rotary Coring	Commachio 205

Log Type

Combined Borehole

Scale: 1:25

Sheet 3 of 4

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481517.90**	Northing:	**372663.21**
Elevation:	**4.90mAOD**	Final Depth:	**19.00m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Very weak red mercia MUDSTONE. Non-intact core recovered as subangular top rounded fine to coarse GRAVEL (River terrace deposit).	10.20	-5.30								
Extremely weak red speckled grey mercia MUDSTONE.	(0.30)						0			
From 10.40m to 10.50m, non-intact core recovered as slightly sandy silty CLAY. Sand is fine to coarse.	10.50	-5.60					NA			
Extremely weak to very weak red speckled grey mercia MUDSTONE. Discontinuities are sub-horizontal, closely spaced, undulating, smooth and tight to partly open.							12			
At 11.05m, 1 No discontinuity, 45 degrees, undulating, smooth and tight.										
From 11.25m to 11.60m, Non-intact core recovered as slightly gravelly sandy silty CLAY. Gravel is angular fine to coarse mudstone. Sand is fine to coarse.	(1.50)		10.50 12.00	100	77	31	NA			
At 11.95m, 1 No discontinuity, horizontal, planar, smooth, very open with clay infill.	12.00	-7.10					7.5			
Very weak reddish brown mercia MUDSTONE with occasional gypsum veins (1.00mm - 6.00mm). Discontinuities are 1) Sub-horizontal, closely spaced, undulating, rough and partly open to open 2) 30 degrees, closely spaced, rough, planar and partly open with gravel infill.							NI			
At 12.50m, Band of weak gypsum (30.00mm).										
At 12.60m, Band of weak gypsum 30 degrees (10.00mm).	(1.50)		12.00 13.50	100	93	48	9			
At 13.10m, Band of weak gypsum (25.00mm).										
Below 13.35m, is grey speckled red and moderately weak.	13.50	-8.60					AZCL			
Moderately weak to medium strong grey stained red mercia MUDSTONE with frequent gypsum veins (1.00-7.00mm). Discontinuities are 1) Horizontal, medium spaced, smooth, planar and tight 2) Horizontal, medium spaced, stepped, smooth and partly open.							NI			
From 13.50m to 13.65m, Assumed zone of core loss.										
From 13.65m to 13.70m, Non-intact core recovered as angular fine to coarse mudstone GRAVEL.			13.50 15.00	90	87	51	7			
AT 14.41m, Band of weak gypsum (40.00mm).										
Continued on Next Page										

Observations / Remarks

Misc.

Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
10/10	08:00		-	-
10/10	16:00	4.00	3.00	3.10
11/10	08:00	4.00	3.00	1.20
11/10	15:00	15.00	9.00	2.20
14/10	08:00	19.00	9.00	1.70
14/10	15:30		-	-

Backfill

From (m)	To (m)	Material
0.00	13.60	Grout
13.60	19.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer	0.00 - 13.60	13.60	18

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
2.30	1.65	20	

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Start Date:	10/10/2024	Checked:	
End Date	15/10/2024	Approved:	

Location ID

BH006

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Log Type

Combined Borehole

Scale: 1:25

Sheet 4 of 4

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 8.00	Dynamic Sampling	Comacchio 205
8.00 - 9.00	Rotary Open Holing	Commachio 205
4.00 - 19.00	Rotary Coring	Commachio 205

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481517.90**	Northing:	**372663.21**
Elevation:	**4.90mAOD**	Final Depth:	**19.00m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
At 15.20m, Band of moderately weak gypsum (<30.00mm).															
From 15.50m to 15.90m, Discontinuities are horizontal, very closely spaced, undulating, smooth and very open with gravel infill.								15.00 16.50	100	100	28				
		(5.50)													
At 16.40m, Band of moderately weak gypsum (<30.00mm).															
At 16.86m, Band of moderately weak gypsum (<30.00mm).															
At 17.00m, Band of moderately weak gypsum (<30.00mm).												7			
At 17.32m, Band of moderately weak gypsum (<30.00mm).								16.50 18.00	100	100	73				
From 18.73m to 18.81m, Moderately weak gypsum.								18.00 19.00	100	100	64				
EOH at 19.00m - Scheduled Depth		19.00	-14.10	116 19.00											

Observations / Remarks

Misc.

Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
10/10	08:00		-	-
10/10	16:00	4.00	3.00	3.10
11/10	08:00	4.00	3.00	1.20
11/10	15:00	15.00	9.00	2.20
14/10	08:00	19.00	9.00	1.70
14/10	15:30		-	-

Backfill

From (m)	To (m)	Material
0.00	13.60	Grout
13.60	19.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer	0.00 - 13.60	13.60	18

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
2.30	1.65	20	

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Start Date:	14/10/2024	Checked:	
End Date:	16/10/2024	Approved:	

Location ID

BH007

DRAFT

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.50	Cable Percussion Boring	Dando 2000
9.20 - 19.40	Rotary Coring	Commachio 205

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481486.70**	Northing:	**372521.54**
Elevation:	**4.68mAOD**	Final Depth:	**19.40m**
Logger:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Hole Diameter

Depth (m)	Diam (mm)
7.50	150
19.40	116

Casing Diameter

Depth (m)	Diam (mm)
7.50	150
9.20	140

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
2.30	-	3.00	20	2.00	
4.20	-	4.50	20	1.00	
5.60	-	6.00	20	1.00	

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
16/10/2024	Standpipe	6.00	4.00 - 6.00	50

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 4.00	Bentonite
4.00 - 6.00	Gravel
6.00 - 19.40	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**0**
Standard Penetration Tests	**7**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**7**	Water	**0**
Geotechnical Samples			
Bulk	**10**	Large Bulk	**0**
Disturbed	**17**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**2**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	2	5	450	5	N=5 (1,1/1,1,2,1)	7-10-1
Split Spoon	3.00	-	-	0	3	450	3	N=3 (0,0/0,1,1,1)	7-10-1
Split Spoon	4.00	-	-	2	4	450	4	N=4 (1,1/1,1,1,1)	7-10-1
Split Spoon	6.00	-	-	10	21	450	21	N=21 (5,5/5,5,6,5)	7-10-1
Split Spoon	7.50	7.50	1	13	27	450	27	N=27 (6,7/7,6,7,7)	7-10-1
Split Spoon	9.00	9.00	3	25	0	317		50 (25 for 135mm/50 for 182mm)	7-10-1
Split Spoon	9.50	9.50	3	25	50	175		50 (25 for 81mm/50 for 94mm)	7-10-1

SPT Hammer Ref.	Energy Ratio (%)
7-10-1	62

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)
5.50 - 6.00	90
7.00 - 7.50	60
8.50 - 9.00	60
9.30 - 9.50	30

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
9.20 - 10.50	Water	Brown	80
10.50 - 12.00	Water	Brown	80
12.00 - 13.50	Water	Brown	80
13.50 - 15.00	Water	Brown	90
15.00 - 16.50	Water	Brown	90
16.50 - 18.00	Water	Brown	90
18.00 - 19.40	Water	Brown	90

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks

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Location ID

BH007

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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.50	Cable Percussion Boring	Dando 2000
9.20 - 19.40	Rotary Coring	Commachio 205

Log Type

Combined Borehole

Scale: 1:50

Sheet 1 of 2

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481486.70**	Northing:	**372521.54**
Elevation:	**4.68mAOD**	Final Depth:	**19.40m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Soft to firm brown CLAY [TOPSOIL].												0.10 - 0.50	1 B	
												0.30	101 ES	
From 0.70m, is firm.												0.60	2 D	
												0.60 - 1.20	3 B	
												0.90	102 ES	
												1.00	4 D	
	(2.30)				1.00							1.00		
												1.20 - 1.65	5 D	SPT(S) 1.20m, N=5 (1,1/1,1,2,1)
												1.65 - 2.00	6 B	
					2.00							2.00	7 D	20 Ublows, 80% Recovery
												2.00 - 2.45	8 UT	
	2.30	2.38			2.30									
FIrm brown slightly sandy silty CLAY. Sand is fine to medium.												2.50 - 3.00	9 B	
												2.60	103 ES	
												3.00	10 D	SPT(S) 3.00m, N=3 (0,0/0,1,1,1)
												3.00 - 3.45	11 D	
From 3.50m, is soft brown mottled black sandy silty CLAY.												3.50 - 4.00	12 B	
												3.70	104 ES	
	(3.20)											4.00	13 D	SPT(S) 4.00m, N=4 (1,1/1,1,1,1)
					4.20							4.00 - 4.45	14 D	
												4.50 - 5.00	15 B	
												5.00	16 D	10 Ublows, 90% Recovery
												5.00 - 5.45	17 UT	
	5.50	-0.82										5.50	18 D	
Grey speckled white and black sandy slightly clayey subangular to rounded fine to coarse mixed lithology GRAVEL. Sand is fine to coarse (River Terrace).					5.60							5.50 - 6.00	19 B	
	(0.70)											5.60	105 ES	
												6.00	20 D	SPT(S) 6.00m, N=21 (5,5/5,5,6,5)
												6.00 - 6.45	21 D	
	6.20	-1.52												
Yellowish brown sandy subrounded to rounded fine to coarse mixed lithology GRAVEL. Sand is fine to coarse (River Terrace).												6.50 - 7.00	22 B	
												6.70	106 ES	
			150 / 7.50	150 / 7.50								7.50	23 D	SPT(S) 7.50m, N=27 (6,7/7,6,7,7)
												7.50 - 7.95	24 D	
	(3.00)											7.50 - 7.95	25 B	
												8.00 - 8.50	26 B	
												8.30	107 ES	
												9.00	27 D	SPT(S) 9.00m, 50 (25 for 135mm/50 for 182mm)
												9.00 - 9.45	28 D	
	9.20	-4.52		140 / 9.20										
Assumed zone of core loss. MUDSTONE. (Drillers description)												9.50 - 9.95	29 D	SPT(S) 9.50m, 50 (25 for 81mm/50 for 94mm)
	(0.70)						9.20 10.50	46	46	21	AZCL			
	9.90	-5.22												

Continued on Next Page

Observations / Remarks

Misc.

Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
14/10	05:00	0.00	-	-
14/10	16:00	7.50	7.50	1.00
15/10	08:00	7.50	9.50	1.00
15/10	15:30	13.50	9.20	3.95
16/10	08:00	13.50	9.20	1.50
16/10	16:00	19.40	9.20	1.50

Backfill

From (m)	To (m)	Material
0.00	4.00	Bentonite
4.00	6.00	Gravel
6.00	19.40	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	4.00 - 6.00	6.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
2.30	2.00	20	
4.20	1.00	20	
5.60	1.00	20	

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End Date	16/10/2024	Approved:	

Location ID
BH007
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Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.50	Cable Percussion Boring	Dando 2000
9.20 - 19.40	Rotary Coring	Commachio 205

Log Type
Combined Borehole

Scale: 1:50
Sheet 2 of 2

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481486.70**	Northing:	**372521.54**
Elevation:	**4.68mAOD**	Final Depth:	**19.40m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Moderately weak to medium strong brown mottled grey mercia MUDSTONE with occasional gypsum veins. Discontinuities are subhorizontal closely spaced planar smooth open to moderately wide.									8			
From 10.80m to 12.40m, 60 Deg medium spaced undulating smooth and tight discontinuity.					10.50 12.00	100	100	55	4			
At 11.10m, Horizontal planar smooth very wide with clay infill discontinuity.												
From 12.40m to 12.50m, Non-intact core recovered as angular to subangular fine to coarse mudstone GRAVEL.	(5.10)								NI			
From 12.80m to 12.87m, Weak gypsum.					12.00 13.50	100	93	51				
From 13.20m to 13.34m, Weak									5			
From 14.18m to 14.22m, Band of weak gypsum.					13.50 15.00	100	100	79				
Medium strong to strong brown mottled grey mercia MUDSTONE with frequent gypsum veins. Discontinuities are horizontal medium spaced undulating rough tight to partly open.	15.00	-10.32							NI			
From 15.00m to 15.20m, Non-intact core recovered as angular fine to coarse mudstone and gypsum GRAVEL.					15.00 16.50	100	87	75	4			
	(2.60)											
From 16.50m to 16.60m, Assumed zone of core loss.									AZCL			
From 16.95m to 17.00m, Band of weak gypsum.					16.50 18.00	93	85	60	2			
From 17.48m to 17.60m, Non-intact core recovered as angular medium to coarse gypsum GRAVEL.	17.60	-12.92							NI			
Medium strong to strong brown and grey mercia MUDSTONE with occasional gypsum veins. Discontinuities are horizontal very closely spaced planar rough partly open.	(0.40)								15			
Strong grey mottled brown mercia MUDSTONE with occasional gypsum veins. Discontinuities are horizontal medium spaced planar rough open.	18.00	-13.32										
From 18.70m to 18.87m, Band of moderately weak gypsum.	(1.40)				18.00 19.40	100	100	74	5			
From 19.27m to 19.35m, Band of weak gypsum.												
EOH at 19.40m - Scheduled Depth	19.40	-14.72	116 19.40									

Observations / Remarks

Misc.
Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
14/10	05:00	0.00	-	-
14/10	16:00	7.50	7.50	1.00
15/10	08:00	7.50	9.50	1.00
15/10	15:30	13.50	9.20	3.95
16/10	08:00	13.50	9.20	1.50
16/10	16:00	19.40	9.20	1.50

Backfill

From (m)	To (m)	Material
0.00	4.00	Bentonite
4.00	6.00	Gravel
6.00	19.40	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	4.00 - 6.00	6.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
2.30	2.00	20	
4.20	1.00	20	
5.60	1.00	20	

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End Date:	10/10/2024	Approved:	

Location ID

BH008

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Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Project No:	2372986
Name:	One Earth Solar Farm
Location:	Hall Farm, Lincoln
Client:	Pershing Consultants

Location Details

Easting:	481691.06	Northing:	372551.49
Elevation:	4.61mAOD	Final Depth:	18.30m
Logger:	AR	Grid System:	OSGB
Orientation:	N/A	Inclination:	90°

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.70	Dynamic Sampling	Comacchio 205
3.70 - 7.90	Rotary Open Holing	Comacchio 205
7.90 - 18.30	Rotary Coring	Comacchio 205

Hole Diameter

Depth (m)	Diam (mm)
18.30	121

Casing Diameter

Depth (m)	Diam (mm)
9.30	143

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks
1.30	-	-	20	1.30	

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
10/10/2024	Standpipe	8.00	4.00 - 8.00	50

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 0.30	Concrete
0.30 - 4.00	Bentonite
4.00 - 8.00	Gravel
8.00 - 18.30	Bentonite

In-Situ Tests

PID	0
Hand Vane*	2
Standard Penetration Tests	6

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	3	Water	0
Geotechnical Samples			
Bulk	5	Large Bulk	0
Disturbed	10	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	2	5	450	5	N=5 (1,1/1,1,1,2)	AR2152
Split Spoon	2.00	-	-	0	0	450	0	N=0 (0,0/0,0,0,0)	AR2152
Split Spoon	2.70	-	-	21	33	450	33	N=33 (9,12/10,10,7,6)	AR2152
Split Spoon	3.70	3.70	-	4	50	410		50 (2,2/50 for 260mm)	AR2152
Split Spoon	7.90	7.90	-	18	50	405		50 (7,11/50 for 255mm)	AR2152
Split Spoon	9.30	9.30	-	6	29	450	29	N=29 (2,4/6,7,6,10)	AR2152

SPT Hammer Ref.	Energy Ratio (%)
AR2152	64

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
7.90 - 9.30	Water	Brown	80
9.30 - 10.80	Water	Brown	80
10.80 - 12.30	Water	Brown	80
12.30 - 13.80	Water	Brown	70
13.80 - 15.30	Water	Brown	70
15.30 - 16.80	Water	Brown	70
16.80 - 18.30	Water	Brown	70

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	117	100	
2.00 - 2.70	117	70	
2.70 - 3.70	102	100	

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Location ID
BH008
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Log Type
Combined Borehole

Scale: 1:25
Sheet 1 of 4

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.70	Dynamic Sampling	Comacchio 205
3.70 - 7.90	Rotary Open Holing	Comacchio 205
7.90 - 18.30	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**481691.06**	Northing:	**372551.49**
Elevation:	**4.61mAOD**	Final Depth:	**18.30m**
Logged By:	**AR**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
MADE GROUND: Vegetation over soft brown mottled greyish brown slightly sandy silty CLAY [TOPSOIL]. *From 0.00m to 0.40m, Occasional rootlets.*		(2.00)											0.20 0.20 - 0.70 0.50 0.75 1.00 1.20 - 1.65 1.50 - 2.00 1.75	2 D 1 B 3 ES 4 D 5 ES 6 D 7 B 8 D	SPT(S) 1.20m, N=5 (1,1/1,1,1,2) HV 1.70m, (p)=64 kPa (r)=20 kPa
Very soft to soft dark brownish black organic slightly sandy clayey SILT.		2.00 (0.40)	2.61			1.30 1.30							2.00 2.00 - 2.70 2.00 - 2.75 2.30	9 ES 11 B 10 D 12 D	SPT(S) 2.00m, N=0 (0,0/0,0,0,0) HV 2.20m, (p)=20 kPa (r)=5 kPa
Black slightly gravelly slightly organic silty fine to coarse SAND. Gravel is subrounded to rounded fine to coarse mudstone, quartz and various igneous lithologies.		2.40 (0.90)	2.21										2.70 2.70 - 3.15 2.70 - 3.30	13 D 14 D 15 B	SPT(S) 2.70m, N=33 (9,12/10,10,7,6)
Very dense greyish brown gravelly fine to coarse SAND. Gravel is subrounded to rounded fine to coarse quartz, mudstone and various igneous lithologies.		3.30 (0.40)	1.31										3.30 - 3.70	16 B	
Very dense fine to coarse SAND and subrounded to rounded fine to coarse various mixed lithologies GRAVEL.		3.70	0.91										3.70 - 4.15	17 D	SPT(S) 3.70m, 50 (2,2/50 for 260mm)
Continued on Next Page															

Observations / Remarks

Misc.
Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
07/10	07:00	0.00	-	
07/10	16:00	3.70	3.70	
08/10	07:00	3.70	3.70	0.40
08/10	16:00	12.30	9.30	0.70
09/10	07:00	12.30	9.30	0.70
09/10	16:00	18.30	9.30	

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	4.00	Bentonite
4.00	8.00	Gravel
8.00	18.30	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	4.00 - 8.00	8.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
1.30	1.30	20	

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Start Date:	07/10/2024	Checked:	
End Date	10/10/2024	Approved:	

Location ID

BH008

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 2 of 4

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.70	Dynamic Sampling	Comacchio 205
3.70 - 7.90	Rotary Open Holing	Comacchio 205
7.90 - 18.30	Rotary Coring	Comacchio 205

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481691.06**	Northing:	**372551.49**
Elevation:	**4.61mAOD**	Final Depth:	**18.30m**
Logged By:	**AR**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Very dense fine to coarse SAND and subrounded to rounded fine to coarse various mixed lithologies GRAVEL.		(4.20)													
Very stiff reddish brown occasionally grey silty CLAY with occasional lithorelicts of mudstone (<20.00mm) [MM Grade 4a].		7.90 (0.30)	-3.29										7.90 - 8.35	18 D	SPT(S) 7.90m, 50 (7,11/50 for 255mm)
Assumed zone of core loss - Weathered MUDSTONE (Driller's description).		8.20 (0.80)	-3.59					7.90 9.30	21	0	0	AZCL			
Stiff reddish brown an grey silty CLAY with occasional lithorelicts of mudstone (<20.00mm) [MM Grade 4a].		9.00 (0.30)	-4.39									NA			
Assumed zone of core loss - Weathered MUDSTONE (Driller's description).		9.30 (0.40)	-4.69		143 9.30							AZCL			SPT(S) 9.30m, N=29 (2,4/6,7,6,10)
Stiff grey silty CLAY with occasional lithorelicts of mudstone (<20.00mm) [MM Grade 4a].		9.70 (0.42)	-5.09									NA			
Continued on Next Page															

Observations / Remarks

Misc.

Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
07/10	07:00	0.00	-	
07/10	16:00	3.70	3.70	
08/10	07:00	3.70	3.70	0.40
08/10	16:00	12.30	9.30	0.70
09/10	07:00	12.30	9.30	0.70
09/10	16:00	18.30	9.30	

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	4.00	Bentonite
4.00	8.00	Gravel
8.00	18.30	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	4.00 - 8.00	8.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
1.30	1.30	20	

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End Date	10/10/2024	Approved:	

Location ID

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Log Type

Combined Borehole

Scale: 1:25

Sheet 3 of 4

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.70	Dynamic Sampling	Comacchio 205
3.70 - 7.90	Rotary Open Holing	Comacchio 205
7.90 - 18.30	Rotary Coring	Comacchio 205

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481691.06**	Northing:	**372551.49**
Elevation:	**4.61mAOD**	Final Depth:	**18.30m**
Logged By:	**AR**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Stiff grey silty CLAY with occasional lithorelicts of mudstone (<20.00mm) [MM Grade 4a].		10.12	-5.51												
Extremely weak to very weak reddish brown and grey mercia MUDSTONE with frequent gypsum veins (1.00-2.00mm) and occasional very thin to thin beds of gypsum. Discontinuities are horizontal, very close to closely spaced, undulating, smooth and tight to partly open with clay smear or gravel infill.		(0.68)						9.30 10.80	73	20	0	13			
Assumed zone of core loss - Weathered MUDSTONE (Driller's description).		10.80 (0.35)	-6.19									AZCL			
Extremely weak to very weak reddish brown and light grey mercia MUDSTONE with frequent gypsum veins (1.00-2.00mm) and occasional very thin to thin beds of gypsum. Discontinuities are horizontal, close to medium spaced, planar, undulating, smooth and tight to partly open with clay smear or infill [MM Grade 1/11].		11.15	-6.54					10.80 12.30	77	61	35	9			
From 12.30m to 12.53m, Assumed zone of core loss.												AZCL			
From 13.68m to 13.73m, Non-intact core recovered as reddish brown clayey angular to subangular fine to coarse gypsum and mudstone GRAVEL.								12.30 13.80	85	53	28	9			
From 14.02m to 14.09m, Non-intact core recovered as reddish brown clayey angular to subangular fine to coarse gypsum and mudstone GRAVEL.								13.80 15.30	100	88	45				
		(7.15)													
Continued on Next Page															

Observations / Remarks

Misc.

Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
07/10	07:00	0.00	-	
07/10	16:00	3.70	3.70	
08/10	07:00	3.70	3.70	0.40
08/10	16:00	12.30	9.30	0.70
09/10	07:00	12.30	9.30	0.70
09/10	16:00	18.30	9.30	

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	4.00	Bentonite
4.00	8.00	Gravel
8.00	18.30	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	4.00 - 8.00	8.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
1.30	1.30	20	

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End Date	10/10/2024	Approved:	

Location ID

BH008

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Log Type

Combined Borehole

Scale: 1:25

Sheet 4 of 4

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.70	Dynamic Sampling	Comacchio 205
3.70 - 7.90	Rotary Open Holing	Comacchio 205
7.90 - 18.30	Rotary Coring	Comacchio 205

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481691.06**	Northing:	**372551.49**
Elevation:	**4.61mAOD**	Final Depth:	**18.30m**
Logged By:	**AR**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
From 15.24m to 15.30m, Non-intact core recovered as reddish brown clayey angular to subangular fine to coarse mudstone GRAVEL.															
								15.30 16.80	100	79	42				
From 16.80m to 16.88m, Assumed zone of core loss.												AZCL			
From 16.91m to 16.99m, Non-intact core recovered as angular to subangular fine to coarse mudstone GRAVEL.															
From 17.50m to 17.71m, Very thin beds of weak to moderately weak light grey siltstone.								16.80 18.30	95	79	77	4			
EOH at 18.30m - Scheduled Depth		18.30	-13.69	121 18.30											

Observations / Remarks

Misc.

Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
07/10	07:00	0.00	-	
07/10	16:00	3.70	3.70	
08/10	07:00	3.70	3.70	0.40
08/10	16:00	12.30	9.30	0.70
09/10	07:00	12.30	9.30	0.70
09/10	16:00	18.30	9.30	

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	4.00	Bentonite
4.00	8.00	Gravel
8.00	18.30	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	4.00 - 8.00	8.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks
1.30	1.30	20	

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Start Date:	10/10/2024	Checked:	
End Date:	15/10/2024	Approved:	

Location ID

BH009

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Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details			
Easting:	**481688.53**	Northing:	**372421.45**
Elevation:	**4.78mAOD**	Final Depth:	**19.50m**
Logger:	**AR**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.50	Dynamic Sampling	Comacchio 205
9.50 - 16.70	Rotary Coring	Commachio 205

Hole Diameter

Depth (m)	Diam (mm)
3.00	117
9.50	102
16.70	116

Casing Diameter

Depth (m)	Diam (mm)
8.00	121

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
15/10/2024	Vibrating Wire Piezometer	11.00	0.30 - 11.00	18

If Methodology includes Dynamic Sampling refer to Runs table for info.

No Groundwater Encountered

Backfill

Depth (m)	Legend Code
0.00 - 0.30	Concrete
0.30 - 11.00	Grout
11.00 - 19.50	Bentonite

In-Situ Tests

PID	**0**
Hand Vane*	**8**
Standard Penetration Tests	**8**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**7**	Water	**0**
Geotechnical Samples			
Bulk	**9**	Large Bulk	**0**
Disturbed	**17**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**1**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	2.00	-	-	2	4	450	4	N=4 (1,1/1,1,1,1)	AR2152
Split Spoon	3.00	-	-	8	21	450	21	N=21 (4,4/4,4,6,7)	AR2152
Split Spoon	4.00	4.00	-	4	11	450	11	N=11 (2,2/2,2,3,4)	AR2152
Split Spoon	5.00	5.00	-	24	44	450	44	N=44 (10,14/12,12,10,10)	AR2152
Split Spoon	6.00	5.00	-	10	18	450	18	N=18 (5,5/5,7,3,3)	AR2152
Split Spoon	7.00	5.00	-	7	17	450	17	N=17 (2,5/4,3,5,5)	AR2152
Split Spoon	8.00	8.00	-	12	41	450	41	N=41 (5,7/9,10,10,12)	AR2152
Split Spoon	9.00	8.00	-	6	44	450	44	N=44 (3,3/5,11,14,14)	AR2152

SPT Hammer Ref.	Energy Ratio (%)
AR2152	64

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
9.50 - 10.70	Water	Brown	70
10.70 - 12.20	Water	Brown	70
12.20 - 13.70	Water	Brown	70
13.70 - 15.20	Water	Brown	70
15.20 - 16.70	Water	Brown	70
16.70 - 18.20	Water	Brown	80
18.20 - 19.50	Water	Brown	80

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	117	100	
2.00 - 3.00	117	100	
3.00 - 4.00	102	100	
4.00 - 5.00	102	100	
5.00 - 6.00	102	70	
6.00 - 7.00	102	100	
7.00 - 8.00	102	100	
8.00 - 9.00	102	100	
9.00 - 9.50	102	100	

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End Date	15/10/2024	Approved:	

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.50	Dynamic Sampling	Comacchio 205
9.50 - 16.70	Rotary Coring	Commachio 205

Location ID

BH009

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 1 of 4

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481688.53**	Northing:	**372421.45**
Elevation:	**4.78mAOD**	Final Depth:	**19.50m**
Logged By:	**AR**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results	
MADE GROUND: Vegetation over soft dark brown slightly sandy slightly organic silty CLAY with occasional rootlets. Sand is fine to coarse [TOPSOIL].		(0.30)											0.10 0.10 - 0.30	2 D 1 B		
		0.30	4.48										0.25	3 ES	HV 0.25m, (p)=60 kPa (r)=20 kPa	
Soft to firm orangish brown sandy silty CLAY. Sand is fine to coarse.															HV 0.50m, (p)=140 kPa (r)=25 kPa	
		(0.90)											0.70 - 1.00 0.75	4 B 5 D		
1													1.00	6 ES	HV 1.00m, (p)=110 kPa (r)=20 kPa	1
		1.20	3.58										1.20 - 1.65	7 UT	75 Ublows, 100% Recovery	
Soft to firm brown mottled grey slightly sandy silty CLAY. Sand is fine to coarse.																
		(1.25)											1.75	9 D		
2													2.00 2.00 - 2.40 2.00 - 2.45	8 ES 11 B 10 D	SPT(S) 2.00m, N=4 (1,1/1,1,1,1) HV 2.00m, (p)=70 kPa (r)=15 kPa	2
		2.45	2.33													
Orangish brown fine to coarse SAND and subrounded to rounded fine to coarse quartz and various mixed lithologies GRAVEL. *From 2.45m to 2.65m, Very soft dark grey slightly gravelly, sandy, slightly organic, clayey SILT. Sand is fine to coarse. Gravel is subrounded to rounded fine to coarse quartz and various mixed lithologies.*													2.50	12 D		
													2.75	13 D		
3				117 3.00									3.00 3.00 - 3.45	14 ES 15 D	SPT(S) 3.00m, N=21 (4,4/4,4,6,7)	3
		(2.05)											3.50 - 4.00	16 B		
													3.75	17 D		
4													4.00 4.00 - 4.45	18 ES 19 D	SPT(S) 4.00m, N=11 (2,2/2,2,3,4)	4
		4.50	0.28										4.50 - 5.00	20 B		
Multicoloured very sandy subrounded to well rounded fine to coarse mixed lithologies GRAVEL with low cobble content. Cobbles are subrounded to well rounded mixed lithologies. Sand is fine to coarse.																
5													5.00 - 5.45	21 D	SPT(S) 5.00m, N=44 (10,14/12,12,10,10)	5

Continued on Next Page

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
10/10	13:00	0.00	-	-
10/10	16:30	4.00	4.00	-
11/10	07:00	4.00	4.00	0.90
11/10	16:30	8.00	8.00	-
14/10	07:00	8.00	8.00	1.30
14/10	16:40	16.70	8.00	-
15/10	07:00	16.70	8.00	1.50
15/10	16:40		-	-

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	11.00	Grout
11.00	19.50	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer	0.30 - 11.00	11.00	18

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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End Date	15/10/2024	Approved:	

Location ID

BH009

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Log Type

Combined Borehole

Scale: 1:25

Sheet 2 of 4

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.50	Dynamic Sampling	Comacchio 205
9.50 - 16.70	Rotary Coring	Commachio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**481688.53**	Northing:	**372421.45**
Elevation:	**4.78mAOD**	Final Depth:	**19.50m**
Logged By:	**AR**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Multicoloured very sandy subrounded to well rounded fine to coarse mixed lithologies GRAVEL with low cobble content. Cobbles are subrounded to well rounded mixed lithologies. Sand is fine to coarse.		(1.90)											5.50 - 6.00	22 B	
													6.00 - 6.45	23 D	SPT(S) 6.00m, N=18 (5,5/5,7,3,3)
													6.20	24 D	
Firm friable brown mottled grey slightly sandy silty CLAY. Sand is fine to coarse.		6.40	-1.62										6.75	25 D	HV 6.75m, (p)=FAIL kPa (r)=FAIL kPa
															SPT(S) 7.00m, N=17 (2,5/4,3,5,5)
		(1.60)											7.50 - 8.00	26 B	
													7.75	29 D	HV 7.75m, (p)=60 kPa (r)=10 kPa
From 7.93m, discontinuities have clay infill.															
Stiff dark grey mottled reddish brown slightly gravelly CLAY. Gravel is angular to subangular fine to medium mudstone.		8.00	-3.22		121 / 8.00								8.00 - 8.45 8.00 - 8.70	27 D 28 B	SPT(S) 8.00m, N=41 (5,7/9,10,10,12)
		(0.70)											8.60	29 ES	
Firm to stiff light grey mottled reddish brown silty CLAY. *At 8.75m, Lense of angular to subangular fine to medium gravel.*		8.70	-3.92										8.70 - 9.50 8.80	30 B 31 D	HV 8.80m, (p)=48 kPa (r)=12 kPa
													9.00 - 9.45	32 D	SPT(S) 9.00m, N=44 (3,3/5,11,14,14)
		(0.80)													
Assumed zone of core loss - (Driller's description).		9.50	-4.72	102 / 9.50									9.50	33 ES	HV 9.50m, (p)=Fail kPa (r)=Fail kPa
		(0.55)										AZCL			
Continued on Next Page															

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
10/10	13:00	0.00	-	-
10/10	16:30	4.00	4.00	-
11/10	07:00	4.00	4.00	0.90
11/10	16:30	8.00	8.00	-
14/10	07:00	8.00	8.00	1.30
14/10	16:40	16.70	8.00	-
15/10	07:00	16.70	8.00	1.50
15/10	16:40		-	-

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	11.00	Grout
11.00	19.50	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer	0.30 - 11.00	11.00	18

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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www.central-alliance.co.uk

Start Date:	10/10/2024	Checked:	
End Date	15/10/2024	Approved:	

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.50	Dynamic Sampling	Comacchio 205
9.50 - 16.70	Rotary Coring	Commachio 205

Location ID

BH009

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 3 of 4

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481688.53**	Northing:	**372421.45**
Elevation:	**4.78mAOD**	Final Depth:	**19.50m**
Logged By:	**AR**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Assumed zone of core loss - (Driller's description).		10.05	-5.27												
Extremely weak light grey SILTSTONE. Discontinuities are sub-horizontal (20-30 degrees), planar, rough and tight with clay infill.		(0.15)										7			
		10.20	-5.42					9.50 10.70	54	42	0	16			
Extremely weak reddish brown mercia MUDSTONE with infrequent gypsum veining (<5.00mm). Discontinuities are, Horizontal (0-10 degrees), very close to closely spaced, planar, rough and tight to partly open with clay and gravel infill.		(1.12)										AZCL			
												11			
		11.32	-6.54					10.70 12.20	90	83	33	11			
Very weak to weak greenish grey mercia MUDSTONE with frequent gypsum veining (<28.00mm). Discontinuities are horizontal (0-10 degrees), very close to medium spaced, planar, rough to smooth and partly open to open with gravel infill.															
From 12.20m, becoming reddish brown.								12.20 13.70	100	93	75	7			
		(3.88)													
From 13.45m to 14.15m, Greenish grey and reddish brown.												AZCL			
								13.70 15.20	92	88	79	7			
Continued on Next Page															

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
10/10	13:00	0.00	-	-
10/10	16:30	4.00	4.00	-
11/10	07:00	4.00	4.00	0.90
11/10	16:30	8.00	8.00	-
14/10	07:00	8.00	8.00	1.30
14/10	16:40	16.70	8.00	-
15/10	07:00	16.70	8.00	1.50
15/10	16:40		-	-

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	11.00	Grout
11.00	19.50	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer	0.30 - 11.00	11.00	18

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	10/10/2024	Checked:	
End Date	15/10/2024	Approved:	

Location ID
BH009
DRAFT

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 9.50	Dynamic Sampling	Comacchio 205
9.50 - 16.70	Rotary Coring	Commachio 205

Log Type
Combined Borehole

Scale: 1:25

Sheet 4 of 4

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481688.53**	Northing:	**372421.45**
Elevation:	**4.78mAOD**	Final Depth:	**19.50m**
Logged By:	**AR**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Very weak to weak greenish grey mercia MUDSTONE with frequent gypsum veining (<28.00mm). Discontinuities are horizontal (0-10 degrees), very close to medium spaced, planar, rough to smooth and partly open to open with gravel infill. Assumed zone of core loss - (Driller's description).		15.20 (0.30)	-10.42									AZCL			
Extremely weak to very weak reddish brown mercia MUDSTONE. Non-intact core recovered as clayey angular to subangular fine to coarse GRAVEL.		15.50 (0.60)	-10.72					15.20 16.70	80	37	29	NI			
Very weak reddish brown and greenish grey mercia MUDSTONE with infrequent gypsum veining. Discontinuities are 1) Horizontal (0-20 degrees), close to medium spaced, undulating, rough and open with clay infill.		16.10	-11.32	116 16.70								5			
From 17.10m to 17.20m, Zone of very frequent gypsum veining (<6.00mm).												AZCL			
From 17.45m to 17.65m, Becomes greenish grey.								16.70 18.20	93	93	82	5			
From 17.65m, Becomes reddish brown.		(3.40)													
From 18.50m to 18.55m, Gypsum vein (55.00mm). *From 18.55m, gypsum veining becomes infrequent.*												AZCL			
From 19.10m, Becomes reddish brown and greenish grey.								18.20 19.50	86	86	58	7			
EOH at 19.50m - Scheduled Depth		19.50	-14.72												

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
10/10	13:00	0.00	-	-
10/10	16:30	4.00	4.00	-
11/10	07:00	4.00	4.00	0.90
11/10	16:30	8.00	8.00	-
14/10	07:00	8.00	8.00	1.30
14/10	16:40	16.70	8.00	-
15/10	07:00	16.70	8.00	1.50
15/10	16:40		-	-

Backfill

From (m)	To (m)	Material
0.00	0.30	Concrete
0.30	11.00	Grout
11.00	19.50	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer	0.30 - 11.00	11.00	18

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	16/10/2024	Checked:	
End Date:	17/10/2024	Approved:	

Location ID

BH010

DRAFT

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 5.00	Dynamic Sampling	Commachio 205

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481743.25**	Northing:	**372419.52**
Elevation:	**4.80mAOD**	Final Depth:	**5.00m**
Logger:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Log Type

Header Sheet

Scale: 1:50

Sheet 1 of 1

Hole Diameter

Depth (m)	Diam (mm)
4.00	117
5.00	102

Casing Diameter

Depth (m)	Diam (mm)
5.00	121

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
17/10/2024	Vibrating Wire Piezometer	4.00		70

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 5.00	Grout

In-Situ Tests

PID	**0**
Hand Vane*	**1**
Standard Penetration Tests	**2**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	**7**	Water	**0**
Geotechnical Samples			
Bulk	**6**	Large Bulk	**0**
Disturbed	**9**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**1**
Undisturbed Thin Wall (NR)			**1**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	2.00	-	-	2	0	450	0	N=0 (1,1/0,0,0,0)	AR2152
Split Spoon	4.00	4.00	-	21	50	450	50	N=50 (7,14/12,14,14,10)	AR2152

SPT Hammer Ref.	Energy Ratio (%)
AR2152	64

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	117	0	
2.00 - 3.00	117	100	
3.00 - 4.00	117	100	
4.00 - 5.00	102	100	

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Start Date:	16/10/2024	Checked:	
End Date:	17/10/2024	Approved:	

Location ID

BH010

DRAFT

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 5.00	Dynamic Sampling	Commachio 205

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**481743.25**	Northing:	**372419.52**
Elevation:	**4.80mAOD**	Final Depth:	**5.00m**
Logged By:	**AW**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Log Type

Dynamic Sampling

Scale: 1:50

Sheet 1 of 1

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Firm dark brown slightly gravelly slightly sandy silty CLAY with roots and rootlets. Sand is fine. Gravel is angular to subangular fine to medium mudstone [TOPSOIL].		(0.30)					0.00 - 0.30	1 B	
		0.30	4.50				0.10	2 ES	
							0.20	3 D	
Soft to firm brown sandy silty CLAY. Sand is fine to medium.							0.40 - 0.70	4 B	
							0.50	5 ES	
							0.60	6 D	
From 0.80m, Becomes slightly sandy.									
		(1.35)					0.90 - 1.20	7 B	
							1.00	8 ES	
							1.10	9 D	
							1.20 - 1.65	10 UT	100 blows
Soft bluish grey mottled orangish brown slightly sandy silty CLAY. Sand is fine.		1.65	3.15				1.70	11 D	
							1.90	12 ES	
		(0.70)					2.00 - 2.45	13 D	SPT(S) 2.00m, N=0 (1,1/0,0,0,0)
Soft dark grey locally mottled dark brown slightly gravelly sandy silty CLAY. Sand is fine to coarse. Gravel is rounded fine mudstone and quartz.		2.35	2.45				2.45 - 3.00	14 B	
							2.70	15 ES	
		(1.00)					2.80	16 D	HV 2.80m, (p)=24 kPa (r)=5 kPa
At 2.90m, Becomes very sandy.							3.00 - 3.75	24 UT-NR	0% Recovery
Brown gravelly slightly clayey fine to coarse SAND. Gravel is subangular to rounded fine to medium quartz.		3.35	1.45				3.35 - 4.00	17 B	
From 3.50m, No clay.							3.70	18 ES	
							3.80	19 D	
		(1.65)					4.00 - 4.45	20 D	SPT(S) 4.00m, N=50 (7,14/12,14,14,10)
							4.45 - 5.00	21 B	
							4.70	22 ES	
							4.80	23 D	
EOH at 5.00m - Terminated due to drilling issues in sand & gravel		5.00	-0.20	121 5.00					

Observations / Remarks

1) 1 No. SPTY recorded with self-weighting: SPT @ 2.00m - 300mm SW

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Backfill

Depth (m)	Material
0.00 - 5.00	Grout

Hammer Ref & Energy Ratio (%)

AR2152 (64%)

Dynamic Sampling Runs

From (m)	To (m)	Diam (mm)	Recovery (%)	Remarks
1.20	2.00	117	0	
2.00	3.00	117	100	
3.00	4.00	117	100	
4.00	5.00	102	100	

Installations

Instrument Details	Resp. Zone	Depth (m)	Diameter
Vibrating Wire Piezometer		4.00	70

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	27/09/2024	Checked:	
End Date:	01/10/2024	Approved:	

Location ID

BH011

DRAFT

Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Project No:	2372986
Name:	One Earth Solar Farm
Location:	Hall Farm, Lincoln
Client:	Pershing Consultants

Location Details

Easting:	483440.71	Northing:	373101.00
Elevation:	8.74mAOD	Final Depth:	13.10m
Logger:	JD	Grid System:	OSGB
Orientation:	N/A	Inclination:	90°

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 13.10	Rotary Coring	Comacchio 205

Hole Diameter

Depth (m)	Diam (mm)
13.10	121

Casing Diameter

Depth (m)	Diam (mm)
9.00	143

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
01/10/2024	Standpipe	4.50	1.20 - 4.50	50

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 1.20	Bentonite
1.20 - 4.50	Gravel
4.50 - 13.10	Bentonite

In-Situ Tests

PID	0
Hand Vane*	3
Standard Penetration Tests	3

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	4	Water	0
Geotechnical Samples			
Bulk	5	Large Bulk	0
Disturbed	9	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	2	8	450	8	N=8 (1,1/3,2,2,1)	AR2154
Split Spoon	2.00	-	-	3	15	450	15	N=15 (2,1/1,2,4,8)	AR2154
Split Spoon	3.00	3.00	-	25	50	300		50 (25 for 125mm/50 for 175mm)	AR2154

SPT Hammer Ref.	Energy Ratio (%)
AR2154	71

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
3.00 - 4.50	Water	Brown	100
4.50 - 6.00	Water	Brown	50
6.00 - 7.50	Water	Brown	100
7.50 - 9.00	Water	Brown	100
9.00 - 10.50	Water	Brown	100
10.50 - 12.00	Water	Brown	100
12.00 - 13.10	Water	Brown	100

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	128	100	
2.00 - 3.00	128	100	

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Start Date:	27/09/2024	Checked:	
End Date	01/10/2024	Approved:	

Location ID

BH011

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 1 of 3

Project No:	2372986
Name:	One Earth Solar Farm
Location:	Hall Farm, Lincoln
Client:	Pershing Consultants

Location Details

Easting:	483440.71	Northing:	373101.00
Elevation:	8.74mAOD	Final Depth:	13.10m
Logged By:	JD	Grid System:	OSGB
Orientation:	N/A	Inclination:	90°

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 13.10	Rotary Coring	Comacchio 205

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Grass over soft brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is subrounded fine to coarse mudstone. [TOPSOIL]		(1.20)											0.00 - 0.30	1 B	
													0.30	1 ES	HV 0.30m, (p)=40 kPa (r)=24 kPa
													0.30 - 0.50	2 B	
													0.50	1 D	HV 0.50m, (p)=42 kPa (r)=24 kPa
													0.50	2 ES	
													0.50 - 1.20	3 B	
													1.00	2 D	HV 1.00m, (p)=40 kPa (r)=18 kPa
													1.00	3 ES	
Soft friable reddish brown gravelly CLAY. Gravel is subrounded fine to coarse mudstone.		1.20	7.54										1.20 - 1.65	3 D	SPT(S) 1.20m, N=8 (1,1/3,2,2,1)
													1.20 - 2.00	4 B	
													1.50	5 D	
													2.00	4 ES	SPT(S) 2.00m, N=15 (2,1/1,2,4,8)
													2.00 - 2.45	4 D	
		(1.80)											2.00 - 3.00	5 B	
													2.50	6 D	
Assumed zone of core loss - weak MUDSTONE (Drillers description).		3.00	5.74										3.00 - 3.45	7 D	SPT(S) 3.00m, 50 (25 for 125mm/50 for 175mm)
		(1.20)						3.00 4.50	20	0	0	AZCL			
Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as slightly sandy clayey angular to subangular fine to coarse GRAVEL. Sand is fine to coarse. (Mercia Mudstone).		4.20	4.54												
		(0.30)										NI			
Assumed zone of core loss - Firm MUDSTONE and white calcite (Drillers description).		4.50	4.24										4.60	8 D	
Continued on Next Page															

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
27/08	08:00	0.00	-	
27/08	16:00	2.00	-	
30/09	08:00	2.00	-	
30/09	16:00	10.50	9.00	1.50

Backfill

From (m)	To (m)	Material
0.00	1.20	Bentonite
1.20	4.50	Gravel
4.50	13.10	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.20 - 4.50	4.50	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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www.central-alliance.co.uk

Start Date:	27/09/2024	Checked:	
End Date	01/10/2024	Approved:	

Location ID

BH011

DRAFT

Log Type

Combined Borehole

Scale: 1:25

Sheet 2 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 13.10	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**483440.71**	Northing:	**373101.00**
Elevation:	**8.74mAOD**	Final Depth:	**13.10m**
Logged By:	**JD**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Assumed zone of core loss - Firm MUDSTONE and white calcite (Drillers description).		(1.35)						4.50 6.00	10	0	0	AZCL			
Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as slightly sandy clayey angular to subangular fine to medium GRAVEL. Sand is fine to medium. (Mercia Mudstone).		5.85 (0.15)	2.89									NI	6.00	9 D	
Assumed zone of core loss - Firm MUDSTONE and white calcite (Drillers description).		6.00 (0.35)	2.74									AZCL			
Extremely weak reddish brown to greenish grey mercia MUDSTONE recovered as slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is angular to subangular fine to coarse. (Mercia Mudstone).		6.35 (1.15)	2.39					6.00 7.50	77	0	0	NI			
Assumed zone of core loss - MUDSTONE (Drillers description).		7.50 (1.15)	1.24					7.50 9.00	23	0	0	AZCL			
Very weak greenish grey locally reddish brown mercia MUDSTONE. Non-intact core recovered as slightly sandy angular to subangular fine to coarse GRAVEL. Sand is fine to coarse. (Mercia Mudstone).		8.65 (0.35)	0.09									NI			
Assumed zone of core loss - MUDSTONE (Drillers description).		9.00 (0.44)	-0.26		143 9.00							AZCL			
Weak greenish grey mercia MUDSTONE with infrequent gypsum veining and nodules (Veins <5.00mm, Nodules <60mm). Discontinuities are 1) Horizontal (0-10 degrees), very close to closely spaced, planar and undulating, rough and open to moderately wide with gravel infill 2) Vertical (70-85 degrees), undulating and smooth, tight and clean. (Mercia Mudstone).		9.44 (1.06)	-0.70					9.00 10.50	71	43	0	12			

Continued on Next Page

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
27/08	08:00	0.00	-	
27/08	16:00	2.00	-	
30/09	08:00	2.00	-	
30/09	16:00	10.50	9.00	1.50

Backfill

From (m)	To (m)	Material
0.00	1.20	Bentonite
1.20	4.50	Gravel
4.50	13.10	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.20 - 4.50	4.50	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	27/09/2024	Checked:	
End Date	01/10/2024	Approved:	

Location ID

BH011

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Log Type

Combined Borehole

Scale: 1:25

Sheet 3 of 3

Project No:	2372986
Name:	One Earth Solar Farm
Location:	Hall Farm, Lincoln
Client:	Pershing Consultants

Location Details

Easting:	483440.71	Northing:	373101.00
Elevation:	8.74mAOD	Final Depth:	13.10m
Logged By:	JD	Grid System:	OSGB
Orientation:	N/A	Inclination:	90°

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 13.10	Rotary Coring	Comacchio 205

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Weak greenish grey mercia MUDSTONE with infrequent gypsum veining and nodules (Veins <5.00mm, Nodules <60mm). Discontinuities are 1) Horizontal (0-10 degrees), very close to closely spaced, planar and undulating, rough and open to moderately wide with gravel infill 2) Vertical (70-85 degrees), undulating and smooth, tight and clean. (Mercia Mudstone).															
Assumed zone of core loss - MUDSTONE (Drillers description).		10.50 (0.30)	-1.76									AZCL			
Weak reddish brown mercia MUDSTONE with gypsum veining and infrequent nodules (Veins <45.00mm; Nodules <30.00mm). Discontinuities are 1) Horizontal (0-10 degrees), close, planar, rough and open to moderately wide with gravel infill 2) Sub-vertical (50-65 degrees), very close, planar and undulating, rough, partly open to open and clean 3) Vertical (75-85 degrees), planar, rough, partly open and clean. (Mercia Mudstone). *From 11.40m, Becomes light grey.*		10.80 (1.00)	-2.06					10.50 12.00	80	35	15	13			
Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as slightly sandy angular to subangular fine to coarse GRAVEL (Mercia Mudstone).		11.80 (0.20)	-3.06									NI			
Assumed zone of core loss - MUDSTONE (Drillers description).		12.00 (0.35)	-3.26									AZCL			
Very weak reddish brown mercia MUDSTONE recovered as slightly sandy slightly clayey angular to subangular fine to coarse GRAVEL. (Mercia Mudstone).		12.35 (0.50)	-3.61					12.00 13.10	68	7	0	NI			
Weak greenish grey mercia MUDSTONE with common gypsum nodules (up to 15.00mm). Discontinuities are 1) Horizontal (0-10 degrees), planar, rough, open and clean. (Mercia Mudstone).		12.85 (0.08) 12.93 (0.17)	-4.11 -4.19									12 NI			
Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL. (Mercia Mudstone).		13.10	-4.36	121 13.10											
EOH at 13.10m - Scheduled Depth															

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
27/08	08:00	0.00	-	
27/08	16:00	2.00	-	
30/09	08:00	2.00	-	
30/09	16:00	10.50	9.00	1.50

Backfill

From (m)	To (m)	Material
0.00	1.20	Bentonite
1.20	4.50	Gravel
4.50	13.10	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.20 - 4.50	4.50	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	24/09/2024	Checked:	
End Date:	26/09/2024	Approved:	

Location ID

BH012

DRAFT

Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Project No:	2372986
Name:	One Earth Solar Farm
Location:	Hall Farm, Lincoln
Client:	Pershing Consultants

Location Details

Easting:	483291.84	Northing:	372784.38
Elevation:	11.14mAOD	Final Depth:	14.00m
Logger:	ED	Grid System:	OSGB
Orientation:	N/A	Inclination:	90°

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 14.00	Rotary Coring	Comacchio 205

Hole Diameter

Depth (m)	Diam (mm)
14.00	121

Casing Diameter

Depth (m)	Diam (mm)
9.00	143

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

No Groundwater Encountered

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
27/09/2024	Standpipe	4.00	1.00 - 4.00	50

If Methodology includes Dynamic Sampling refer to Runs table for info.

Backfill

Depth (m)	Legend Code
0.00 - 1.00	Bentonite
1.00 - 4.00	Gravel
4.00 - 14.00	Bentonite

In-Situ Tests

PID	0
Hand Vane*	3
Standard Penetration Tests	4

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Sample Summary

Environmental Samples			
Soil	11	Water	0
Geotechnical Samples			
Bulk	2	Large Bulk	0
Disturbed	11	Disturbed (NR)	0
Piston	0	Piston (NR)	0
Undisturbed	0	Undisturbed (NR)	0
Undisturbed Thin Wall			0
Undisturbed Thin Wall (NR)			0
Core Sample			0

(NR) Indicates sample undertaken but with 0% Recovery

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	4	16	450	16	N=16 (2,2/3,4,4,5)	DS-21-1-3
Split Spoon	2.00	-	-	9	18	450	18	N=18 (5,4/6,5,3,4)	DS-21-1-3
Split Spoon	3.00	3.00	0.00	25	50	295		50 (25 for 110mm/50 for 185mm)	DS-21-1-3
Split Spoon	8.00	8.00	6.60	5	0	445		50 (3,2/50 for 295mm)	DS-21-1-3

SPT Hammer Ref.	Energy Ratio (%)
DS-21-1-3	56

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
3.00 - 4.50	Water	Brown	100
4.50 - 6.00	Water	Brown	100
6.00 - 7.50	Water	Brown	5
7.50 - 8.00	Water	Brown	100
8.00 - 9.50	Water	Brown	100
9.50 - 11.00	Water	Brown	5
11.00 - 12.50	Water	Brown	80
12.50 - 14.00	Water	Brown	80

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	128	100	
2.00 - 3.00	128	100	

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Start Date:	24/09/2024	Checked:	
End Date	26/09/2024	Approved:	

Location ID
BH012
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Log Type
Combined Borehole

Scale: 1:25
Sheet 1 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 14.00	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**483291.84**	Northing:	**372784.38**
Elevation:	**11.14mAOD**	Final Depth:	**14.00m**
Logged By:	**ED**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Soft light brown slightly gravelly SILT. Gravel is subangular fine to coarse mudstone.	(0.45)											0.30	1 D	HV 0.25m, (p)=NA kPa (r)=NA kPa Fail
												0.30	101 ES	
Soft friable reddish brown slightly gravelly sandy silty CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse mudstone.	0.45	10.69										0.50	102 ES	HV 0.50m, (p)=NA kPa (r)=NA kPa Fail
												0.50	2 D	
	(0.75)											0.75	3 D	HV 0.75m, (p)=NA kPa (r)=NA kPa Fail
												0.80	4 B	
1												1.00	103 ES	1
Soft to firm light grey gravelly CLAY. Gravel is angular fine to coarse mudstone.	1.20	9.94										1.20 - 1.65	6 D	SPT(S) 1.20m, N=16 (2,2/3,4,4,5)
	(0.20)													
Soft to firm reddish brown slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is angular fine to coarse mudstone.	1.40	9.74										1.60	5 D	
												1.90	104 ES	
2	(1.40)													SPT(S) 2.00m, N=18 (5,4/6,5,3,4) 2
												2.50	7 D	
Light grey gravelly fine to coarse SAND. Gravel is angular fine to coarse mudstone.	2.80	8.34												
	(0.20)											2.90	105 ES	
3 Assumed zone of core loss. MUDSTONE. (Drillers description)	3.00	8.14										3.00 - 3.45	8 D	SPT(S) 3.00m, 50 (25 for 110mm/50 for 185mm) 3
	(0.67)										AZCL			
Very weak reddish brown and greenish grey partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.	3.67	7.47					3.00 4.50	55	35	0				
	(0.26)										NI			
	3.93	7.21										3.90	106 ES	
4 Very weak reddish brown mercia MUDSTONE. Discontinuities are horizontal 0-5 Deg closely spaced planar smooth open clean.	(0.42)										11	3.90	9 D	4
Very weak greenish grey mercia MUDSTONE. Discontinuities are horizontal very closely spaced planar smooth open clean.	4.35	6.79										4.40	10 D	
	(0.15)													
Assumed zone of core loss. MUDSTONE. (Drillers description)	4.50	6.64										4.90	107 ES	
5 Continued on Next Page	(1.00)											5.00	11 D	5

Observations / Remarks

Misc.
No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
24/09	08:00	0.00	-	
24/09	16:00	3.00	3.00	0.00
25/09	08:00	3.00	3.00	0.00
25/09	16:00	9.50	8.00	6.60
26/09	08:00	9.50	8.00	6.40
26/09	16:00	14.00	9.00	6.00

Backfill

From (m)	To (m)	Material
0.00	1.00	Bentonite
1.00	4.00	Gravel
4.00	14.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	24/09/2024	Checked:	
End Date	26/09/2024	Approved:	

Location ID

BH012

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Log Type

Combined Borehole

Scale: 1:25

Sheet 2 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 14.00	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**483291.84**	Northing:	**372784.38**
Elevation:	**11.14mAOD**	Final Depth:	**14.00m**
Logged By:	**ED**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Assumed zone of core loss. MUDSTONE. (Drillers description)												AZCL			
Very weak greenish grey mercia MUDSTONE. Discontinuities are horizontal very closely spaced planar smooth open clean.		5.50	5.64					4.50 6.00	33	17	0				
		(0.25)										20	5.60 5.60	108 ES 12 D	
Extremely weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.		5.75	5.39												
		(0.25)										NI			
No recovery. Weak MUDSTONE. (Drillers description)		6.00	5.14										6.00 - 7.50	13 B	
		(2.00)										AZCL			
Assumed zone of core loss. MUDSTONE. (Drillers description)		8.00	3.14												SPT(S) 8.00m, 50 (3,2/50 for 295mm)
		(1.00)						8.00 9.50	40	21	0	AZCL	8.70	109 ES	
Very weak reddish brown mercia MUDSTONE. Discontinuities are horizontal 0-5 Deg very closely to closely spaced planar and undulating smooth open clean.		9.00	2.14		143 9.00										
		(0.31)										6			
Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.		9.31	1.83												
		(0.19)										NI			
Assumed zone of core loss. MUDSTONE. (Drillers description)		9.50	1.64												

Continued on Next Page

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
24/09	08:00	0.00	-	
24/09	16:00	3.00	3.00	0.00
25/09	08:00	3.00	3.00	0.00
25/09	16:00	9.50	8.00	6.60
26/09	08:00	9.50	8.00	6.40
26/09	16:00	14.00	9.00	6.00

Backfill

From (m)	To (m)	Material
0.00	1.00	Bentonite
1.00	4.00	Gravel
4.00	14.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	24/09/2024	Checked:	
End Date	26/09/2024	Approved:	

Location ID
BH012
DRAFT

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 14.00	Rotary Coring	Comacchio 205

Log Type
Combined Borehole

Scale: 1:25
Sheet 3 of 3

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**483291.84**	Northing:	**372784.38**
Elevation:	**11.14mAOD**	Final Depth:	**14.00m**
Logged By:	**ED**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Assumed zone of core loss. MUDSTONE. (Drillers description)		(1.20)						9.50 11.00	20	0	0	AZCL			
Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.		10.70 (0.30)	0.44									NI	10.70	110 ES	
Assumed zone of core loss. MUDSTONE. (Drillers description)		11.00 (0.25)	0.14									AZCL			
Very weak reddish brown partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL.		11.25 (0.27)	-0.11									NI			
Very weak reddish brown mercia MUDSTONE with occasional green dots, common nodules and veins of white gypsum. Discontinuities are horizontal 5-10 Deg very closely to closely spaced undulating smooth open clean with occasional gravel infill. *From 11.65m to 11.71m, Non-intact core recovered as angular to subangular fine to coarse GRAVEL.* *From 11.88m to 11.96m, Non-intact core recovered as angular to subangular fine to coarse GRAVEL.* *From 12.26m to 12.33m, Non-intact core recovered as angular to subangular fine to coarse GRAVEL.*		11.52 (0.98)	-0.38					11.00 12.50	83	65	9	12	12.20	111 ES	
Very weak reddish brown locally green mercia MUDSTONE with white gypsum nodules. Discontinuities are horizontal 0-5 Deg planar smooth open clean.		12.50 (0.25)	-1.36									AZCL			
Very weak reddish brown locally green partially weathered mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL with low cobble content. Cobbles are angular to subangular mudstone.		12.75 (0.51)	-1.61									10 NI			
Very weak reddish brown mercia MUDSTONE with frequent white gypsum nodules and veins. Discontinuities are 1) Horizontal 5-10 Deg closely to medium spaced planar and undulating smooth open clean. 2) Subhorizontal undulating smooth open clean.		13.26 (0.52)	-2.12					12.50 14.00	90	45	23	6			
Very weak reddish brown mercia MUDSTONE. Discontinuities are planar smooth open clean. *From 13.78m to 13.95m, Non-intact core recovered as clayey angular to subangular fine to coarse GRAVEL.*		13.78 (0.22)	-2.64									NI 20			
EOH at 14.00m - Scheduled Depth		14.00	-2.86	121 14.00											

Observations / Remarks

Misc.
No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
24/09	08:00	0.00	-	
24/09	16:00	3.00	3.00	0.00
25/09	08:00	3.00	3.00	0.00
25/09	16:00	9.50	8.00	6.60
26/09	08:00	9.50	8.00	6.40
26/09	16:00	14.00	9.00	6.00

Backfill

From (m)	To (m)	Material
0.00	1.00	Bentonite
1.00	4.00	Gravel
4.00	14.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Start Date:	24/09/2024	Checked:	
End Date:	26/09/2024	Approved:	

Location ID

BH013

DRAFT

Log Type

Header Sheet

Scale: 1:25

Sheet 1 of 1

Project No:	**2372986**
Name:	**One Earth Solar Farm**
Location:	**Hall Farm, Lincoln**
Client:	**Pershing Consultants**

Location Details

Easting:	**483568.58**	Northing:	**372807.21**
Elevation:	**7.06mAOD**	Final Depth:	**11.00m**
Logger:	**ED**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 6.20	Rotary Coring	Comacchio 205
6.20 - 6.80	Dynamic Sampling	Comacchio 205
6.80 - 11.00	Rotary Coring	Comacchio 205

Hole Diameter

Depth (m)	Diam (mm)
11.00	121

Casing Diameter

Depth (m)	Diam (mm)
7.40	143

Groundwater Strikes

Strike (m)	Casing (m)	Sealed (m)	Time (min)	Rose To (m)	Remarks

Installation / Instrument Details

Date	Instrument Details	To (m)	Resp. Zone (m)	Diam (mm)
27/09/2024	Standpipe	4.00	1.00 - 4.00	50

If Methodology includes Dynamic Sampling refer to Runs table for info.

No Groundwater Encountered

Backfill

Depth (m)	Legend Code
0.00 - 0.50	Concrete
0.50 - 1.00	Bentonite
1.00 - 4.00	Gravel
4.00 - 11.00	Bentonite

Sample Summary

Environmental Samples			
Soil	**10**	Water	**0**
Geotechnical Samples			
Bulk	**6**	Large Bulk	**0**
Disturbed	**12**	Disturbed (NR)	**0**
Piston	**0**	Piston (NR)	**0**
Undisturbed	**0**	Undisturbed (NR)	**0**
Undisturbed Thin Wall			**0**
Undisturbed Thin Wall (NR)			**0**
Core Sample			**0**

(NR) Indicates sample undertaken but with 0% Recovery

In-Situ Tests

PID	**0**
Hand Vane*	**3**
Standard Penetration Tests	**4**

* One count indicates an average reported result of 3 tests carried out at one depth where available.

Standard Penetration Test Summary

Test Type	Depth (m)	Casing (m)	Water (m)	Seating Blows	Main Blows	Penetration Total (mm)	N	Reported Result	Hammer Ref
Split Spoon	1.20	-	-	3	10	450	10	N=10 (1,2/2,2,3,3)	AR2152
Split Spoon	2.00	-	-	9	26	450	26	N=26 (3,6/6,6,6,8)	AR2152
Split Spoon	3.00	-	-	14	50	270		50 (2,12/50 for 120mm)	AR2152
Split Spoon	6.20	6.20	-	14	25	450	25	N=25 (6,8/7,5,6,7)	AR2152

SPT Hammer Ref.	Energy Ratio (%)
AR2152	64

Applicable to Cable Percussion Only

Chiselling

Depth (m)	Duration (mins)

Water Added

Depth (m)	Litres

Applicable to Rotary Only

Drilling Flush

Depth (m)	Flush Type	Flush Colour	Return %
3.00 - 4.20	Water	Brown	40
4.20 - 5.70	Water	Brown	40
5.70 - 6.20	Water	Brown	40
6.80 - 8.30	Water	Brown	30
8.30 - 9.80	Water	Brown	20
9.80 - 11.00	Water	Brown	80

Applicable to Dynamic Sampling Only

Dynamic Sampling Runs

Depth (m)	Diam (mm)	Recovery %	Remarks
1.20 - 2.00	117	100	
2.00 - 3.00	117	100	
6.20 - 6.80	102	100	

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End Date	26/09/2024	Approved:	

Location ID

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Log Type

Combined Borehole

Scale: 1:25

Sheet 1 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 6.20	Rotary Coring	Comacchio 205
6.20 - 6.80	Dynamic Sampling	Comacchio 205
6.80 - 11.00	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**483568.58**	Northing:	**372807.21**
Elevation:	**7.06mAOD**	Final Depth:	**11.00m**
Logged By:	**ED**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
Loose brown slightly gravelly silty fine SAND with occasional rootlets. Gravel is subangular to rounded fine to medium chert [TOPSOIL]		(0.20) 0.20	6.86										0.10	1 D	
Loose brown and grey clayey slightly gravelly coarse SAND. Gravel is subrounded fine to medium chert.		(0.40) 0.60	6.46										0.30	101 ES	HV 0.25m, (p)=62 kPa (r)=48 kPa
Loose grey very gravelly fine to coarse SAND. Gravel is rounded fine chert.		(0.60) 1.20	5.86										0.50 0.50	102 ES 2 D	HV 0.50m, (p)=NA kPa (r)=NA kPa Fail
Soft grey and light brown slightly gravelly slightly sandy CLAY. Sand is fine. Gravel is rounded fine mudstone.		(0.30) 1.50	5.56										1.00 1.00	103 ES 3 D	HV 0.75m, (p)=NA kPa (r)=NA kPa Fail
Soft reddish brown slightly sandy gravelly CLAY. Sand is fine. Gravel is subrounded fine to medium mudstone.		(0.50) 2.00	5.06										1.20 - 1.50 1.20 - 1.65 1.30	8 B 5 D 104 ES	SPT(S) 1.20m, N=10 (1,2/2,2,3,3)
Soft reddish brown very sandy CLAY. Sand is fine to medium.		(0.50) 2.50	4.56										1.50 1.50 - 2.00	4 D 9 B	
Loose reddish brown and grey slightly clayey very sandy angular to subangular coarse mudstone GRAVEL. Sand is medium to coarse.		(0.50) 3.00	4.06										1.80	105 ES	
Assumed zone of core loss - Fractured weak grey brown MUDSTONE (Driller's description).		(1.00) 4.00	3.06					3.00 4.20	17	7	0	AZCL	2.00 - 2.45 2.00 - 2.50 2.10	6 D 10 B 106 ES	SPT(S) 2.00m, N=26 (3,6/6,6,6,8)
From 3.20m to 3.30m, Soft brown and grey slightly sandy very gravelly CLAY. Sand is fine. Gravel is subrounded fine mudstone.													2.50 - 3.00	11 B	
Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular medium to coarse GRAVEL. (Mercia Mudstone).		(0.12) 4.12	2.94									NI	2.90	107 ES	
Very weak reddish brown mercia MUDSTONE. Discontinuities are horizontal (10-15 degrees), medium spaced, planar, rough, open and clean. (Mercia Mudstone).		(0.08) 4.20	2.86									25	3.00 - 3.45	7 D	SPT(S) 3.00m, 50 (2,12/50 for 120mm)
Assumed zone of core loss - Weak brown MUDSTONE. Clay fine Gravel (Driller's description).								4.20 5.20	20	0	0	AZCL	4.20 - 5.70 4.30 4.50	14 B 108 ES 12 D	
Continued on Next Page															

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
24/09	07:00	0.00	-	
24/09	17:00	3.00	-	
25/09	07:00	3.00	-	
25/09	17:00	8.30	7.20	0.30
26/09	07:00	8.30	7.20	2.80
26/09	17:00	11.00	7.40	2.10

Backfill

From (m)	To (m)	Material
0.00	0.50	Concrete
0.50	1.00	Bentonite
1.00	4.00	Gravel
4.00	11.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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End Date	26/09/2024	Approved:	

Location ID

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Log Type

Combined Borehole

Scale: 1:25

Sheet 2 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 6.20	Rotary Coring	Comacchio 205
6.20 - 6.80	Dynamic Sampling	Comacchio 205
6.80 - 11.00	Rotary Coring	Comacchio 205

Project No:	2372986
Name:	One Earth Solar Farm
Location:	Hall Farm, Lincoln
Client:	Pershing Consultants

Location Details

Easting:	483568.58	Northing:	372807.21
Elevation:	7.06mAOD	Final Depth:	11.00m
Logged By:	ED	Grid System:	OSGB
Orientation:	N/A	Inclination:	90°

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
From 5.00m to 5.20m, Extremely weak reddish brown MUDSTONE. Non-intact core recovered as gravelly coarse SAND. Gravel is angular to subangular fine to coarse. (Mercia Mudstone).		(2.00)										NI			
								5.20 6.20	0	0	0	AZCL	5.50 5.60	109 ES 13 D	
Loose reddish brown slightly sandy slightly clayey subangular to subrounded fine to coarse mudstone GRAVEL. Sand is fine.		6.20 (0.60)	0.86										6.20 - 6.65 6.20 - 6.70 6.50	15 D 17 B 110 ES	SPT(S) 6.20m, N=25 (6,8/7,5,6,7)
From 6.70m to 6.80m, Reddish brown MUDSTONE.													6.60 6.70	16 D 18 D	
Assumed zone of core loss - Weak MUDSTONE - Gravel and Clay (Driller's description).		6.80 (1.33)	0.26		143 7.40			6.80 8.30	11	11	11	AZCL			
Very weak reddish brown and greenish grey mercia MUDSTIONE with frequent gypsum nodules (<110mm). Discontinuities are horizontal (0-5 degrees), planar, rough and clean. (Mercia Mudstone).		8.13 (0.17)	-1.08									6			
Assumed zone of core loss - Brown weak MUDSTONE. Calcite bands (Driller's description).		8.30 (0.40)	-1.25									AZCL			
Very weak to weak reddish brown mercia MUDSTONE with frequent gypsum nodules. Discontinuities are horizontal (0-10 degrees), closely spaced, planar, rough, partly open to open and clean.		8.70 (0.41)	-1.64									10			
From 8.84m to 8.98m, Non-intact core recovered as angular fine to coarse GRAVEL. (Mercia Mudstone).								8.30 9.80	73	24	15				
Very weak reddish brown mercia MUDSTONE. Non-intact core recovered as angular to subangular fine to coarse GRAVEL. (Mercia Mudstone).		9.11 (0.41)	-2.06									NI			
Very weak to weak reddish brown and greenish grey mercia MUDSTONE with common gypsum nodules. Discontinuities are 1) Horizontal (0-10 degrees), very close to close closely spaced planar and undulating, rough, partly open to open and clean. (Mercia Mudstone).		9.52 (0.28)	-2.46									18			
Very weak to weak reddish brown and greenish grey mercia		9.80	-2.74												
Continued on Next Page															

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
24/09	07:00	0.00	-	
24/09	17:00	3.00	-	
25/09	07:00	3.00	-	
25/09	17:00	8.30	7.20	0.30
26/09	07:00	8.30	7.20	2.80
26/09	17:00	11.00	7.40	2.10

Backfill

From (m)	To (m)	Material
0.00	0.50	Concrete
0.50	1.00	Bentonite
1.00	4.00	Gravel
4.00	11.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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End Date	26/09/2024	Approved:	

Location ID

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Log Type

Combined Borehole

Scale: 1:25

Sheet 3 of 3

Methodology & Plant

Depth (m)	Method	Plant Used
0.00 - 1.20	Inspection Pit	Hand Tools
1.20 - 3.00	Dynamic Sampling	Comacchio 205
3.00 - 6.20	Rotary Coring	Comacchio 205
6.20 - 6.80	Dynamic Sampling	Comacchio 205
6.80 - 11.00	Rotary Coring	Comacchio 205

Project No:	**2372986**		
Name:	**One Earth Solar Farm**		
Location:	**Hall Farm, Lincoln**		
Client:	**Pershing Consultants**		

Location Details

Easting:	**483568.58**	Northing:	**372807.21**
Elevation:	**7.06mAOD**	Final Depth:	**11.00m**
Logged By:	**ED**	Grid System:	**OSGB**
Orientation:	**N/A**	Inclination:	**90°**

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Hole Ø (mm) Depth (m)	Casing Ø (mm) Depth (m)	Water Level (m)	Installation / Backfill	Coring, Samples & Testing: Core Run	TCR	SCR	RQD	If	Depth (m)	Ref	Test Results
MUDSTONE with frequent gypsum veining (<5.00mm thick). Discontinuities are horizontal (0-10 degrees), close to medium spaced, planar and stepped, rough and partly open to open with occasional gravel infill. (Mercia Mudstone).		(0.60)										12			
Very weak reddish brown to greenish grey mercia MUDSTONE. Non-intact core recovered as angular fine to coarse GRAVEL. (Mercia Mudstone).		10.40 (0.35)	-3.34					9.80 11.00	100	50	28	NI			
Very weak to weak reddish brown mercia MUDSTONE with gypsum veining (<8.00mm) and nodules (<65.00mm). Discontinuities are horizontal (0-10 degrees), very close to closely spaced, rough to smooth, planar to undulating, partly open to open and clean (Mercia Mudstone).		10.75 (0.25)	-3.70									12			
EOH at 11.00m - Scheduled Depth		11.00	-3.94	121 11.00											

Observations / Remarks

Misc.

No Groundwater Encountered
Casing Used
Monitoring Point/s Installed

Shift Information

Date	Time	Depth (m)	Casing (m)	Water (m)
24/09	07:00	0.00	-	
24/09	17:00	3.00	-	
25/09	07:00	3.00	-	
25/09	17:00	8.30	7.20	0.30
26/09	07:00	8.30	7.20	2.80
26/09	17:00	11.00	7.40	2.10

Backfill

From (m)	To (m)	Material
0.00	0.50	Concrete
0.50	1.00	Bentonite
1.00	4.00	Gravel
4.00	11.00	Bentonite

Installations

Instrument Type	Resp. Zone	Depth (m)	Diameter
Standpipe	1.00 - 4.00	4.00	50

Groundwater Strikes

Strike (m)	Rises To (m)	Time (min)	Remarks

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Exploratory Hole Number: **TP001** DRAFT

Log Type: **Trial Pit**

		Location Details			Methodology & Plant		
Project No:	**2372986**	Easting:	**478881.16**	Northing:	**372487.84**	Trial Pit	Scale: 1:30
Name:	**One Earth Solar Farm**	Elevation:	**8.78mAOD**	Final Depth:	**4.00m**		Checked By:
Location:	**Hall Farm, Lincoln**	Logger:	**HG**	Grid System:	**OSGB**	Wheeled Backhoe Excavator	Approved By:
Client:	**Pershing Consultants**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 26/09/2024
							Finish Date: 26/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Soft brown slightly sandy CLAY with occasional roots and rootlets. Sand is fine to coarse. [TOPSOIL]		(0.50)				0.10 - 0.50	1 B	
						0.30	3 ES	
						0.40	2 D	
		0.50	8.28					
Stiff reddish brown slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is angular fine gypsum.						0.60 - 1.00	4 LB	
						0.90	5 D	
						1.00	6 ES	
						1.50 - 2.00	7 B	
						2.00	8 D	
		(3.50)						
				2.60		2.50 - 3.00	9 B	
				2.60				
						3.00	10 D	
						3.50 - 4.00	11 B	
EOH at 4.00m - Refusal on hard strata		4.00	4.78			4.00	12 D	

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None	1.50m
				Stability: Stable	0.70m
				Backfill: Arisings	Orientation: °

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Exploratory Hole Number
TP002
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Log Type
Trial Pit
Sheet 1 of 1

Project No:	**2372986**	Location Details	Methodology & Plant
Name:	**One Earth Solar Farm**	Easting: **479204.33** Northing: **372542.34**	Trial Pit
Location:	**Hall Farm, Lincoln**	Elevation: **7.27mAOD** Final Depth: **3.00m**	
Client:	**Pershing Consultants**	Logger: **HG** Grid System: **OSGB**	Wheeled Backhoe Excavator
		Orientation: **N/A** Inclination: **90°**	

Scale: 1:30
Checked By:
Approved By:
Start Date: 26/09/2024
Finish Date: 26/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Soft brown slightly gravelly slightly sandy CLAY with occasional roots and rootlets. Sand is fine to coarse. Gravel is angular fine gypsum. [TOPSOIL]		(0.50)				0.10 - 0.50 0.30	1 B 3 ES	
Stiff yellowish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular fine gypsum and mudstone.		0.50 (1.00)	6.77			0.50 1.00	2 D 4 D	
Very soft low strength reddish brown slightly gravelly slightly sandy silty CLAY with low cobble content. Sand is fine to coarse. Gravel is very angular to angular fine to coarse mudstone. Cobbles are very angular mudstone. *Yellowish brown and light grey fine to coarse SAND.* *From 2.80m, Gravelly.*		1.50 (1.50)	5.77			1.50 1.50 - 2.00 1.75 2.00 2.00 - 2.50 2.50	5 ES 6 LB 9 D 7 D 8 B 10 D	HV 1.50m, (p)=80 kPa (r)=20 kPa HV 2.50m, (p)=40 kPa (r)=5 kPa
EOH at 3.00m - Abandoned due to water ingress		3.00	4.27			3.00	11 D	

Observations / Remarks

Breaking Out / Hard Strata

Depth Top (m)	Depth Base (m)	Duration (hh:mm)

Stability & Backfill
Shoring: None
Stability: Stable
Backfill: Arisings

Pit Dimensions
1.50m
0.70m
Orientation:
°

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Exploratory Hole Number
TP003
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Log Type
Trial Pit
Sheet 1 of 1

Project No:	**2372986**	Location Details	Methodology & Plant
Name:	**One Earth Solar Farm**	Easting: **479128.06** Northing: **372209.20**	Trial Pit
Location:	**Hall Farm, Lincoln**	Elevation: **9.62mAOD** Final Depth: **4.00m**	Wheeled Backhoe Excavator
Client:	**Pershing Consultants**	Logger: **HG** Grid System: **OSGB**	
		Orientation: **N/A** Inclination: **90°**	

Scale: 1:30
Checked By:
Approved By:
Start Date: 26/09/2024
Finish Date: 26/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Soft brown slightly gravelly sandy CLAY with occasional roots and rootlets. Sand is fine to coarse. [TOPSOIL]		(0.50)				0.10 - 0.50	1 B	
						0.30	3 ES	
		0.50	9.12			0.50	2 D	
Stiff reddish brown locally light grey slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is angular fine quartz.						0.50 - 1.00	4 LB	
						0.90	5 D	
						1.00	6 ES	
						1.50 - 2.00	7 B	
						1.90	8 D	
		(3.50)				2.50 - 3.00	9 B	
From 3.00m, Becomes very gravelly with high cobble content. Gravel is angular fine to coarse mudstone. Cobbles are angular mudstone.						2.90	10 D	
						3.50 - 4.00	11 B	
						3.90	12 D	
EOH at 4.00m - Refusal on hard Strata		4.00	5.62					

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	1.50m 0.70m Orientation: °

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Exploratory Hole Number: **TP004** DRAFT

Log Type: **Trial Pit**

		Location Details			Methodology & Plant		
Project No:	**2372986**	Easting:	**479044.59**	Northing:	**371896.53**	Trial Pit	Scale: 1:30
Name:	**One Earth Solar Farm**	Elevation:	**11.31mAOD**	Final Depth:	**4.00m**		Checked By:
Location:	**Hall Farm, Lincoln**	Logger:	**HG**	Grid System:	**OSGB**	Wheeled Backhoe Excavator	Approved By:
Client:	**Pershing Consultants**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 26/09/2024
							Finish Date: 26/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Stiff brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular fine flint and gypsum. [TOPSOIL]		(0.30)				0.10 - 0.30	1 B	
						0.20	2 D	
		0.30	11.01			0.30	3 ES	
Stiff reddish brown slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is angular fine gypsum and mudstone.						0.50 - 1.00	4 LB	
		(0.90)						
						0.90	5 D	
						1.00	6 ES	
		1.20	10.11					
Reddish brown sandy clayey angular fine to coarse mudstone GRAVEL. Sand is fine to coarse.						1.50 - 2.00	7 B	
						1.90	8 D	
						2.50 - 3.00	9 B	
		(2.80)						
						2.90	10 D	
EOH at 4.00m - Refusal on hard Strata		4.00	7.31					

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None	1.50m
				Stability: Stable	0.70m
				Backfill: Arisings	Orientation: °

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Exploratory Hole Number: **TP005** DRAFT

Log Type: **Trial Pit**

Project No:	**2372986**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**One Earth Solar Farm**	Easting: **479313.36**	Northing: **371922.34**	Trial Pit	Checked By:
Location:	**Hall Farm, Lincoln**	Elevation: **9.66mAOD**	Final Depth: **3.50m**		Approved By:
Client:	**Pershing Consultants**	Logger: **HG**	Grid System: **OSGB**	Wheeled Backhoe Excavator	Start Date: 26/09/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 26/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over slightly gravelly slightly clayey fine to coarse SAND. Gravel is subrounded fine to coarse flint. [TOPSOIL]		(0.25)				0.00 - 0.20 0.10 0.10	1 B 2 D 3 ES	
		0.25	9.41					
Stiff yellowish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine flint and gypsum.						0.50 - 1.00	4 LB	
		(1.15)				0.90 1.00	5 D 6 ES	
		1.40	8.26					
Stiff reddish brown locally light grey slightly gravelly slightly sandy CLAY. Sand is fine to coarse. Gravel is angular fine gypsum and flint.						1.50 - 2.00	7 B	
		(1.10)				1.90	8 D	
		2.50	7.16					
Extremely weak reddish brown mercia MUDSTONE recovered as sandy clayey angular to subrounded fine to coarse mudstone GRAVEL. Sand is fine to coarse.						2.50 - 3.00	9 B	
		(1.00)				2.90	10 D	
		3.50	6.16			3.50	11 D	
EOH at 3.50m - Refusal on hard Strata								

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	1.50m 0.70m Orientation: °

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Exploratory Hole Number
TP006
DRAFT

Log Type
Trial Pit
Sheet 1 of 1

Project No:	**2372986**	Location Details	Methodology & Plant
Name:	**One Earth Solar Farm**	Easting: **481433.94** Northing: **372524.54**	Trial Pit
Location:	**Hall Farm, Lincoln**	Elevation: **4.70mAOD** Final Depth: **2.20m**	Wheeled Backhoe Excavator
Client:	**Pershing Consultants**	Logger: **HG** Grid System: **OSGB**	
		Orientation: **N/A** Inclination: **90°**	

Scale: 1:30
Checked By:
Approved By:
Start Date: 01/10/2024
Finish Date: 01/10/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over soft to firm brown slightly sandy CLAY with frequent roots and rootlets. Sand is fine to coarse. [TOPSOIL]		(0.30)				0.10 - 0.30	1 B	
						0.20	2 D	
		0.30	4.40			0.30	3 ES	PID 0.30m = 0.0ppm
Very soft to soft light grey and yellowish brown silty CLAY with frequent lenses of fine to coarse sand.						0.50 - 1.00	4 LB	
						0.90	5 D	
						1.00	6 ES	PID 1.00m = 0.0ppm
		(1.90)						
						1.50 - 2.00	7 B	
EOH at 2.20m - Abandoned due to water ingress		2.20	2.50			2.20	8 D	

Observations / Remarks

Breaking Out / Hard Strata

Depth Top (m)	Depth Base (m)	Duration (hh:mm)

Stability & Backfill
Shoring: None
Stability: Stable
Backfill: Arisings

Pit Dimensions
1.50m
0.70m
Orientation:
°

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Exploratory Hole Number
TP007
DRAFT

Log Type
Trial Pit
Sheet 1 of 1

Project No:	**2372986**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**One Earth Solar Farm**	Easting: **481429.90**	Northing: **372441.84**	Trial Pit	Checked By:
Location:	**Hall Farm, Lincoln**	Elevation: **4.68mAOD**	Final Depth: **2.50m**		Approved By:
Client:	**Pershing Consultants**	Logger: **HG**	Grid System: **OSGB**	Wheeled Backhoe Excavator	Start Date: 01/10/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 01/10/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over stiff brown slightly sandy CLAY with frequent roots and rootlets. Sand is fine to coarse. [TOPSOIL]		(0.30)				0.10 - 0.30	1 B	
						0.20	2 D	
		0.30	4.38			0.30	3 ES	PID 0.30m = 0.0ppm
Soft to firm light grey and reddish brown silty CLAY with frequent lenses of fine to coarse sand.						0.50 - 1.00	4 LB	
						0.90	5 D	
						1.00	6 ES	PID 1.00m = 0.0ppm
		(2.20)						
						1.50 - 2.00	7 B	
From 2.40m, Becomes bluish grey.								
EOH at 2.50m - Abandoned due to water ingress		2.50	2.18			2.50	8 D	

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	1.50m 0.70m Orientation: °

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Exploratory Hole Number
TP008
DRAFT

Log Type
Trial Pit
Sheet 1 of 1

		Location Details			Methodology & Plant		
Project No:	**2372986**	Easting:	**481755.79**	Northing:	**372615.04**	Trial Pit	Scale: 1:30
Name:	**One Earth Solar Farm**	Elevation:	**4.03mAOD**	Final Depth:	**1.60m**		Checked By:
Location:	**Hall Farm, Lincoln**	Logger:	**HG**	Grid System:	**OSGB**	Wheeled Backhoe Excavator	Approved By:
Client:	**Pershing Consultants**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 27/09/2024
							Finish Date: 27/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over stiff friable brown sandy CLAY with frequent roots and rootlets. Sand is fine to coarse. [TOPSOIL]		(1.60)				0.10 - 0.40	1 B	
						0.30	2 D	
						0.40	3 ES	
						0.50 - 1.00	4 LB	
						0.90	5 D	
						1.00	6 ES	
EOH at 1.60m - Abandoned due to water ingress		1.60	2.43					

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	1.70m 0.70m Orientation: °

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Exploratory Hole Number
TP009
DRAFT

Log Type
Trial Pit
Sheet 1 of 1

Project No:	**2372986**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**One Earth Solar Farm**	Easting: **481754.95**	Northing: **372545.66**	Trial Pit	Checked By:
Location:	**Hall Farm, Lincoln**	Elevation: **4.28mAOD**	Final Depth: **2.90m**		Approved By:
Client:	**Pershing Consultants**	Logger: **HG**	Grid System: **OSGB**	Wheeled Backhoe Excavator	Start Date: 27/09/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 27/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over stiff friable brown sandy CLAY with frequent roots and rootlets. Sand is fine to coarse. [TOPSOIL]		(0.40)				0.10 - 0.40	1 B	
						0.30	2 D	
		0.40	3.88			0.40	3 ES	
Stiff reddish brown and grey slightly sandy CLAY. Sand is fine to coarse.						0.50 - 1.00	4 LB	
						0.90	5 D	
						1.00	6 ES	
		(2.10)				1.50 - 2.00	7 B	
						1.90	8 D	
From 2.00m, Medium strength.								HV 2.00m, (p)=58 kPa (r)=24 kPa
		2.50	1.78			2.50 - 2.90	9 B	
Very soft bluish grey slightly gravelly slightly sandy silty CLAY. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse gypsum.		(0.40)						
						2.80	10 D	
EOH at 2.90m - Abandoned due to water ingress		2.90	1.38					

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	1.70m 0.70m Orientation: °

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Exploratory Hole Number
TP010
DRAFT

Log Type
Trial Pit
Sheet 1 of 1

Project No:	**2372986**	Location Details		Methodology & Plant	Scale: 1:30
Name:	**One Earth Solar Farm**	Easting: **483303.86**	Northing: **372998.48**	Trial Pit	Checked By:
Location:	**Hall Farm, Lincoln**	Elevation: **9.97mAOD**	Final Depth: **2.50m**		Approved By:
Client:	**Pershing Consultants**	Logger: **HG**	Grid System: **OSGB**	Wheeled Backhoe Excavator	Start Date: 30/09/2024
		Orientation: **N/A**	Inclination: **90°**		Finish Date: 30/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over soft friable brown sandy CLAY with frequent roots and rootlets. Sand is fine to coarse. [TOPSOIL]		(0.40)				0.10 - 0.40	1 B	
						0.30	2 D	PID 0.30m = 6.1ppm
		0.40	9.57			0.40	3 ES	
Reddish brown slightly sandy slightly clayey very angular to angular fine to medium mudstone GRAVEL with occasional pockets of stiff light grey clay. Sand is fine to coarse.						0.50 - 1.00	4 LB	
						0.90	5 D	
						1.00	6 ES	PID 1.00m = 2.5ppm
		(2.10)				1.50 - 2.00	7 B	
From 2.00m, Gravel is fine to coarse.						1.90	8 D	
		2.50	7.47			2.50	9 D	
EOH at 2.50m - Refusal on hard strata								

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	1.50m 0.70m Orientation: °

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Exploratory Hole Number: **TP011** DRAFT

Log Type: **Trial Pit**

		Location Details			Methodology & Plant		
Project No:	**2372986**	Easting:	**483551.04**	Northing:	**373015.64**	Trial Pit	Scale: 1:30
Name:	**One Earth Solar Farm**	Elevation:	**7.48mAOD**	Final Depth:	**3.70m**		Checked By:
Location:	**Hall Farm, Lincoln**	Logger:	**HG**	Grid System:	**OSGB**		Approved By:
Client:	**Pershing Consultants**	Orientation:	**N/A**	Inclination:	**90°**	Wheeled Backhoe Excavator	Start Date: 30/09/2024
							Finish Date: 30/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over soft friable brown sandy CLAY. Sand is fine to coarse. [TOPSOIL		(0.50)				0.10 - 0.50	1 B	
						0.40	2 D	
Stiff grey sandy silty friable CLAY. Sand is fine to coarse.		0.50	6.98			0.50	3 ES	PID 0.50m = 6.0ppm
						0.50 - 1.00	4 LB	
From 0.70m to 0.75m, Band of weak aranacious mudstone.						0.90	5 D	
		(1.00)				1.00	6 ES	PID 1.00m = 4.3ppm
Light grey slightly clayey sandy very angular to angular fine to medium mudstone GRAVEL. Sand is fine to coarse.		1.50	5.98			1.50 - 2.00	7 B	
						1.90	8 D	
From 2.20m, Becomes reddish brown and gravel is fine to coarse.						2.50	10 D	
		(2.20)				2.50 - 3.00	9 B	
EOH at 3.70m - Refusal on hard strata		3.70	3.78			3.70	11 D	

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	1.50m 0.70m Orientation: °

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Exploratory Hole Number: **TP012** DRAFT

Log Type: **Trial Pit**

		Location Details			Methodology & Plant		
Project No:	**2372986**	Easting:	**483428.68**	Northing:	**372848.45**	Trial Pit	Scale: 1:30
Name:	**One Earth Solar Farm**	Elevation:	**9.18mAOD**	Final Depth:	**3.30m**		Checked By:
Location:	**Hall Farm, Lincoln**	Logger:	**HG**	Grid System:	**OSGB**	Wheeled Backhoe Excavator	Approved By:
Client:	**Pershing Consultants**	Orientation:	**N/A**	Inclination:	**90°**		Start Date: 30/09/2024
							Finish Date: 30/09/2024

Strata Description	Legend	Depth (m) (Stratum Thickness)	Reduced Level (mAOD)	Water Level (m)	Installation / Backfill	Samples & Testing: Depth (m)	Ref	Test Results
MADE GROUND: Grass over soft friable brown sandy CLAY with frequent roots and rootlets. Sand is fine to coarse. [TOPSOIL]		(0.40)				0.10 - 0.40	1 B	
						0.30	2 D	PID 0.30m = 4.8ppm
		0.40	8.78			0.40	3 ES	
Stiff light grey locally yellowish brown sandy silty friable CLAY. Sand is fine to coarse.						0.50 - 1.00	4 LB	
From 1.00m, Becomes reddish brown.		(1.20)				0.90	5 D	
						1.00	6 ES	PID 1.00m = 8.0ppm
		1.60	7.58			1.50 - 2.00	7 B	
Reddish brown slightly sandy silty very angular to angular fine to coarse mudstone GRAVEL with high cobble content. Sand is fine to medium. Cobbles are angular mudstone.						1.90	8 D	
		(1.70)				2.50 - 3.00	9 B	
						2.90	10 D	
EOH at 3.30m - Refusal on hard strata		3.30	5.88			3.30	11 D	

Observations / Remarks	Breaking Out / Hard Strata			Stability & Backfill	Pit Dimensions
	Depth Top (m)	Depth Base (m)	Duration (hh:mm)	Shoring: None Stability: Stable Backfill: Arisings	1.50m 0.70m Orientation: °

Appendix B
Exploratory Hole Photographs

PHOTOGRAPH 1 – BH001 – 0.00m to 1.20m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH001

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PHOTOGRAPH 2 – BH001 – 1.20m to 2.50m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH001

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PHOTOGRAPH 3 – BH001 – 2.50m to 7.00m bgl

PHOTOGRAPH 4 – BH001 – 7.00m to 10.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH001

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PHOTOGRAPH 1 – BH002 – 1.20m to 3.00m bgl

PHOTOGRAPH 2 – BH002 – 3.00m to 5.80m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH002

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PHOTOGRAPH 3 – BH002 – 5.80m to 7.80m bgl

PHOTOGRAPH 4 – BH002 – 7.80m to 10.30m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH002

CENTRAL ALLIANCE
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PHOTOGRAPH 1 – BH003 – 1.20m to 2.00m bgl

PHOTOGRAPH 2 – BH003 – 2.00m to 3.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH003

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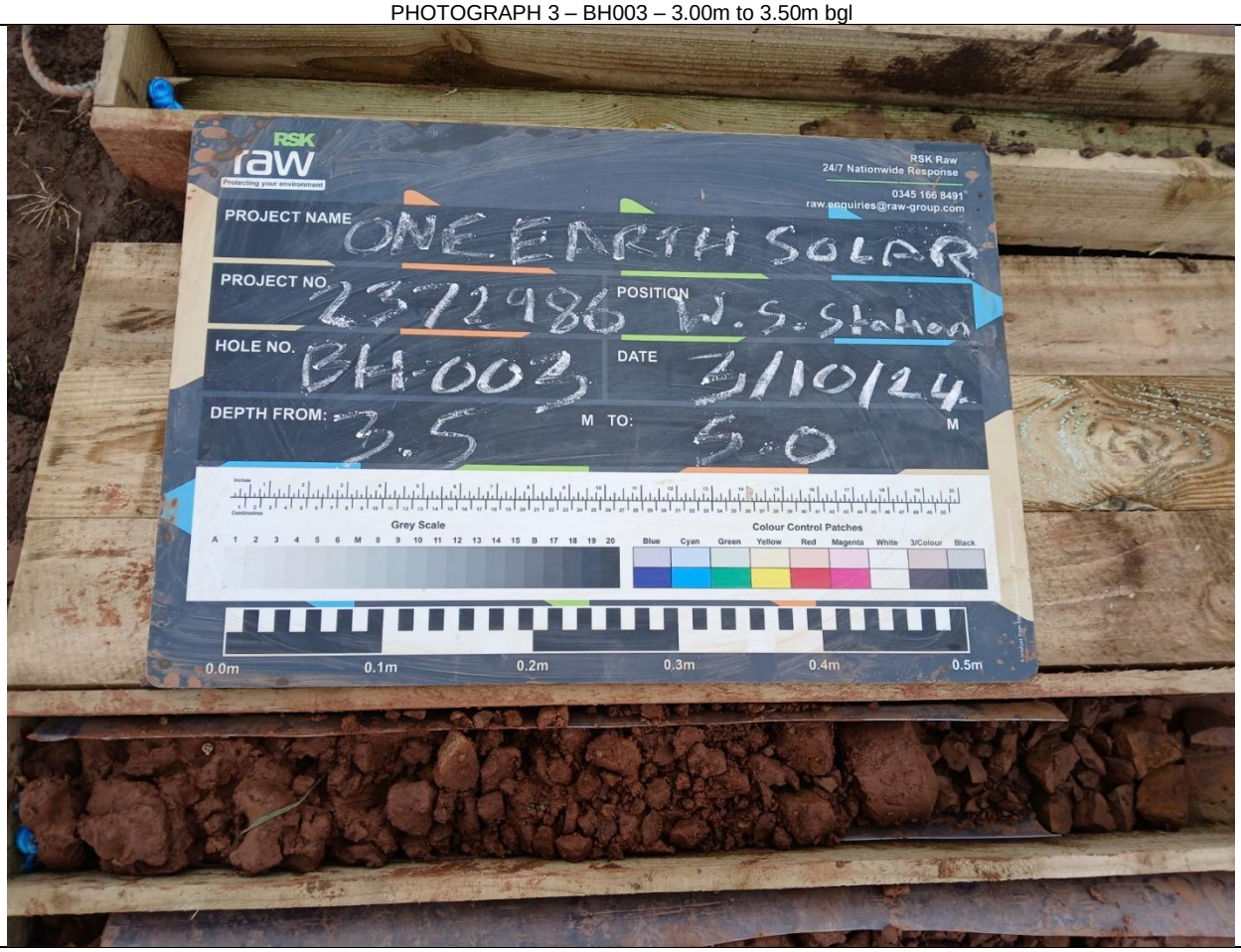
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 3 – BH003 – 3.00m to 3.50m bgl



PHOTOGRAPH 4 – BH003 – 3.50m to 5.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH003

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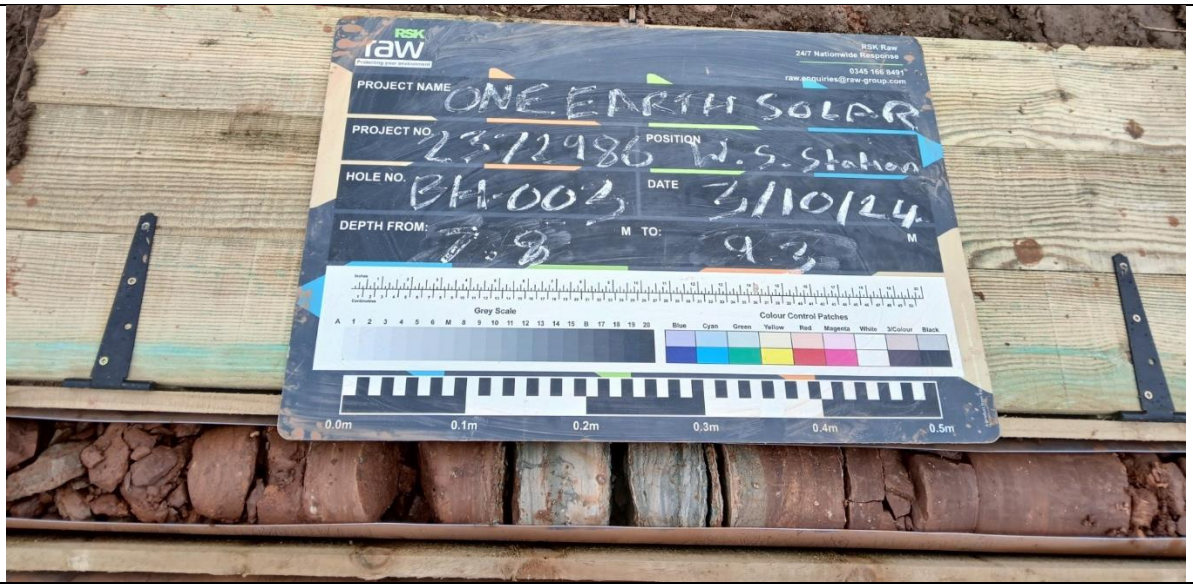
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 5 – BH003 – 5.00m to 6.50m bgl

PHOTOGRAPH 6 – BH003 – 6.50m to 7.80m bgl

Client	AECOM	CENTRAL ALLIANCE GROUND ENGINEERING TECHNICAL SERVICES
Project	One Earth Solar Farm	
Title	BH003	



PHOTOGRAPH 7 – BH003 – 7.80m to 9.30m bgl

PHOTOGRAPH 8 – BH003 – 9.30m to 10.80m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH003

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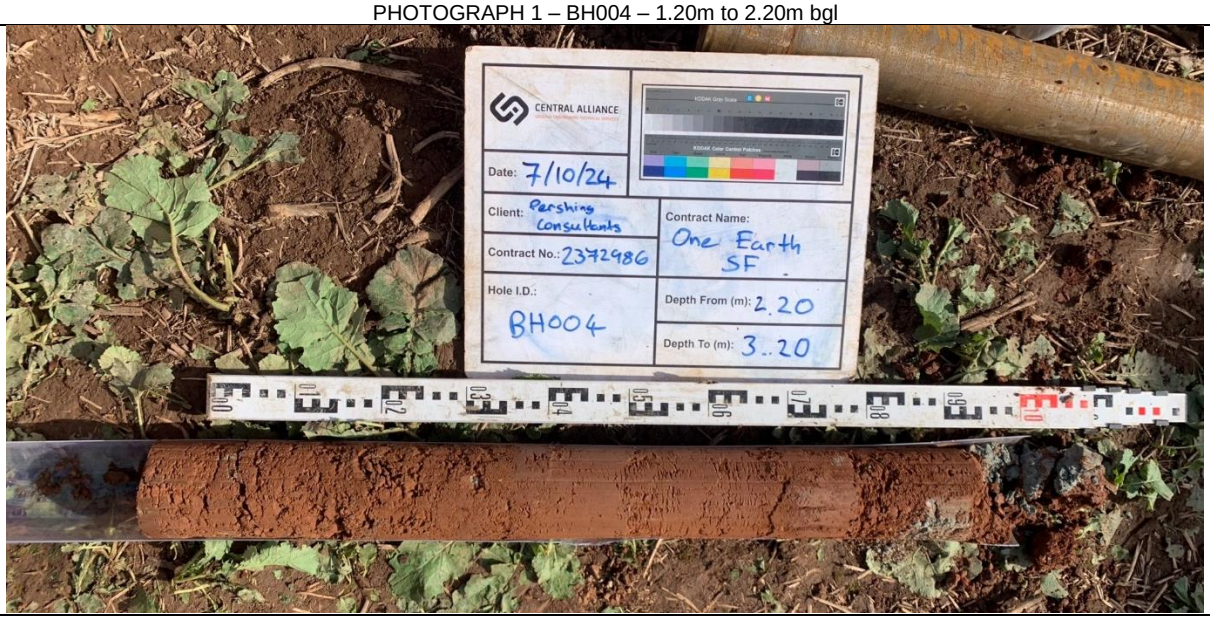
PHOTOGRAPH 1 – BH004 – 1.20m to 2.20m bgl



PHOTOGRAPH 2 – BH004 – 2.20m to 3.20m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH004

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PHOTOGRAPH 3 – BH004 – 3.20m to 4.20m bgl

PHOTOGRAPH 4 – BH004 – 4.20m to 6.20m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH004

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PHOTOGRAPH 5 – BH004 – 6.20m to 9.00m bgl

PHOTOGRAPH 6 – BH004 – 9.00m to 12.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH004

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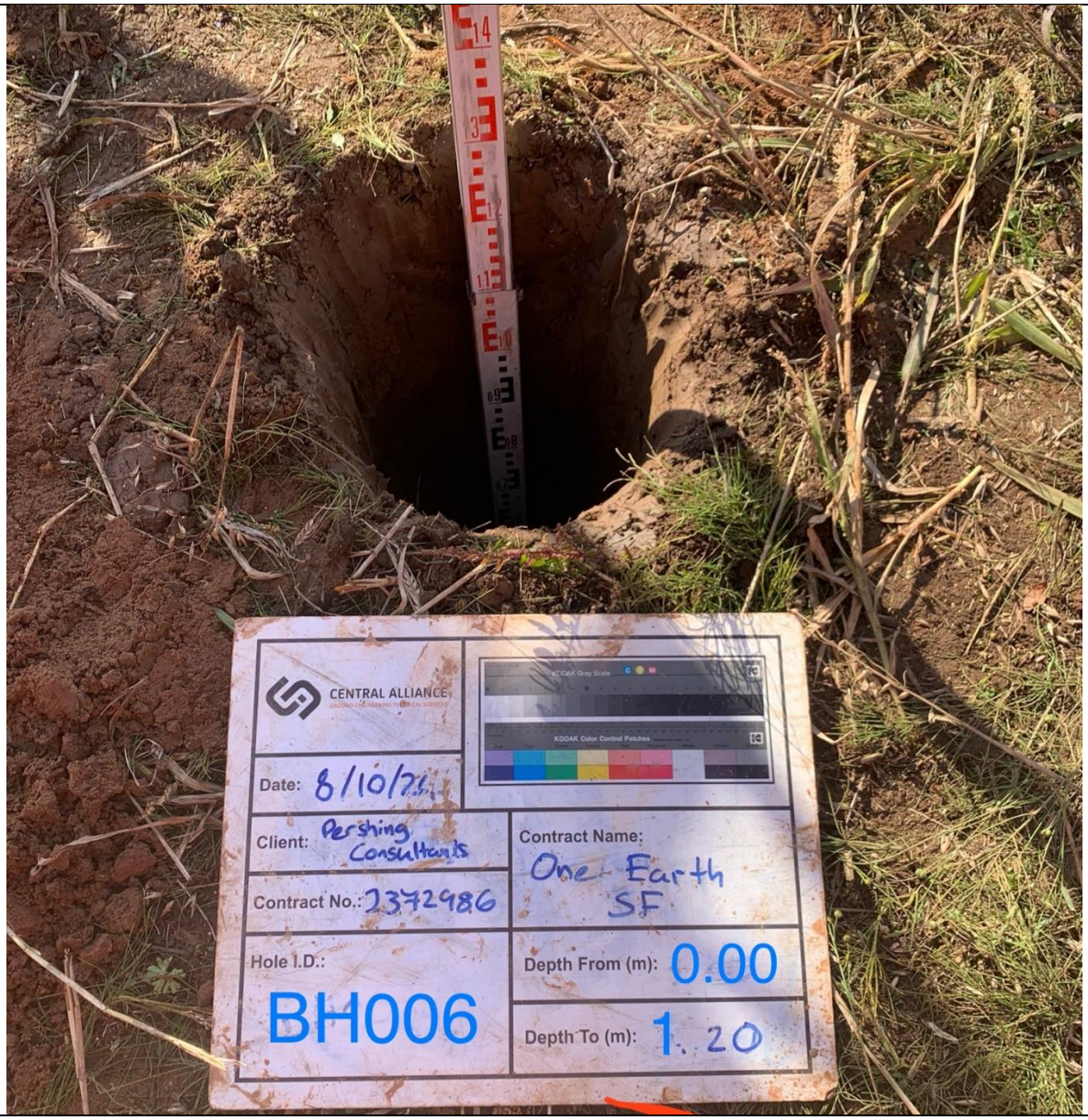

PHOTOGRAPH 1 – BH006 – 0.00m to 1.20m bgl

PHOTOGRAPH 2 – BH006 – 1.80m to 3.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH006

CENTRAL ALLIANCE
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PHOTOGRAPH 3 – BH006 – 3.00m to 4.00m bgl

PHOTOGRAPH 4 – BH006 – 4.60m to 5.00m bgl

PHOTOGRAPH 5 – BH006 – 5.00m to 6.50m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH006

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PHOTOGRAPH 6 – BH006 – 6.50m to 8.00m bgl

PHOTOGRAPH 7 – BH006 – 9.00m to 12.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH006

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PHOTOGRAPH 8 – BH006 – 15.00m to 18.00m bgl

PHOTOGRAPH 9 – BH006 – 18.00m to 19.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH006

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PHOTOGRAPH 1 – BH007 – 9.20m to 12.00m bgl

PHOTOGRAPH 2 – BH007 – 12.00m to 15.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH007

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PHOTOGRAPH 3 – BH007 – 15.00m to 18.00m bgl

PHOTOGRAPH 4 – BH007 – 18.00m to 19.40m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH007

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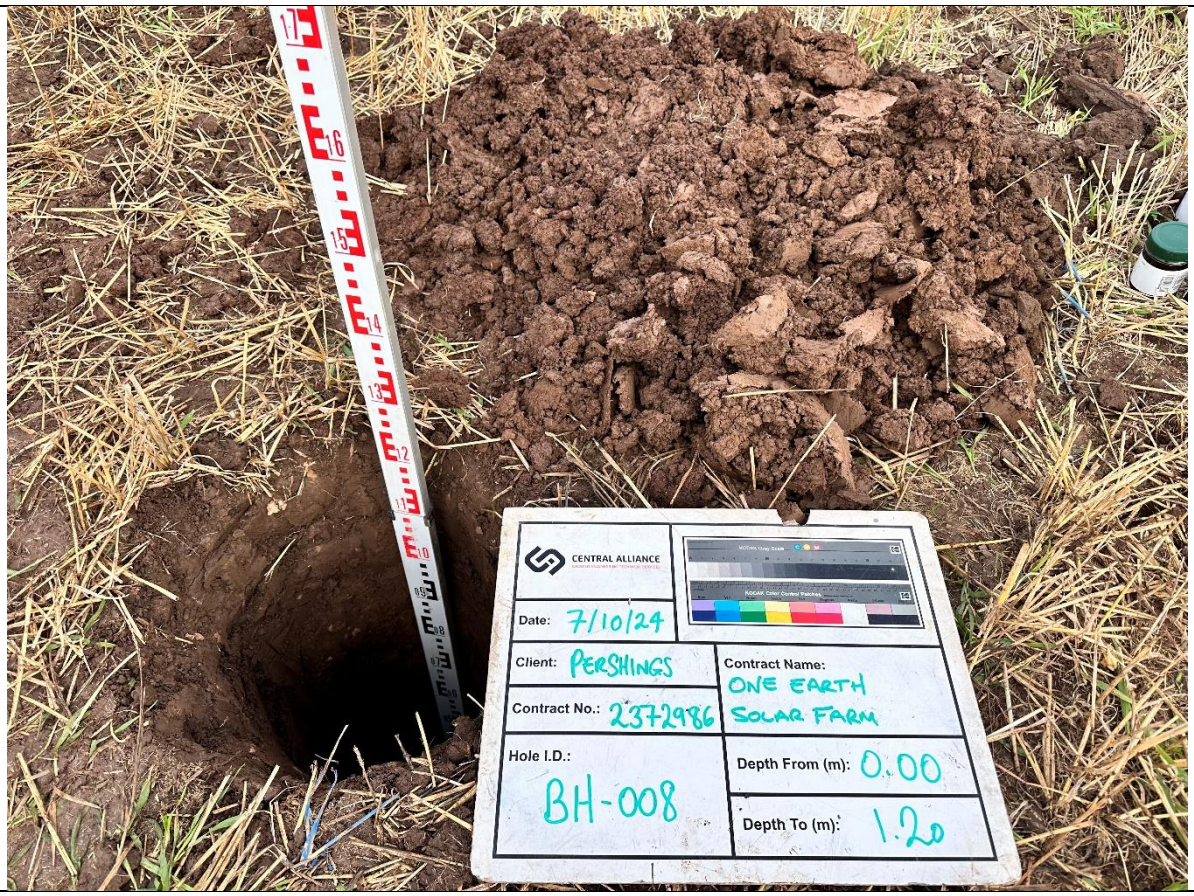

PHOTOGRAPH 1 – BH008 – 0.00m to 1.20m bgl

PHOTOGRAPH 2 – BH008 – 1.20m to 2.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH008

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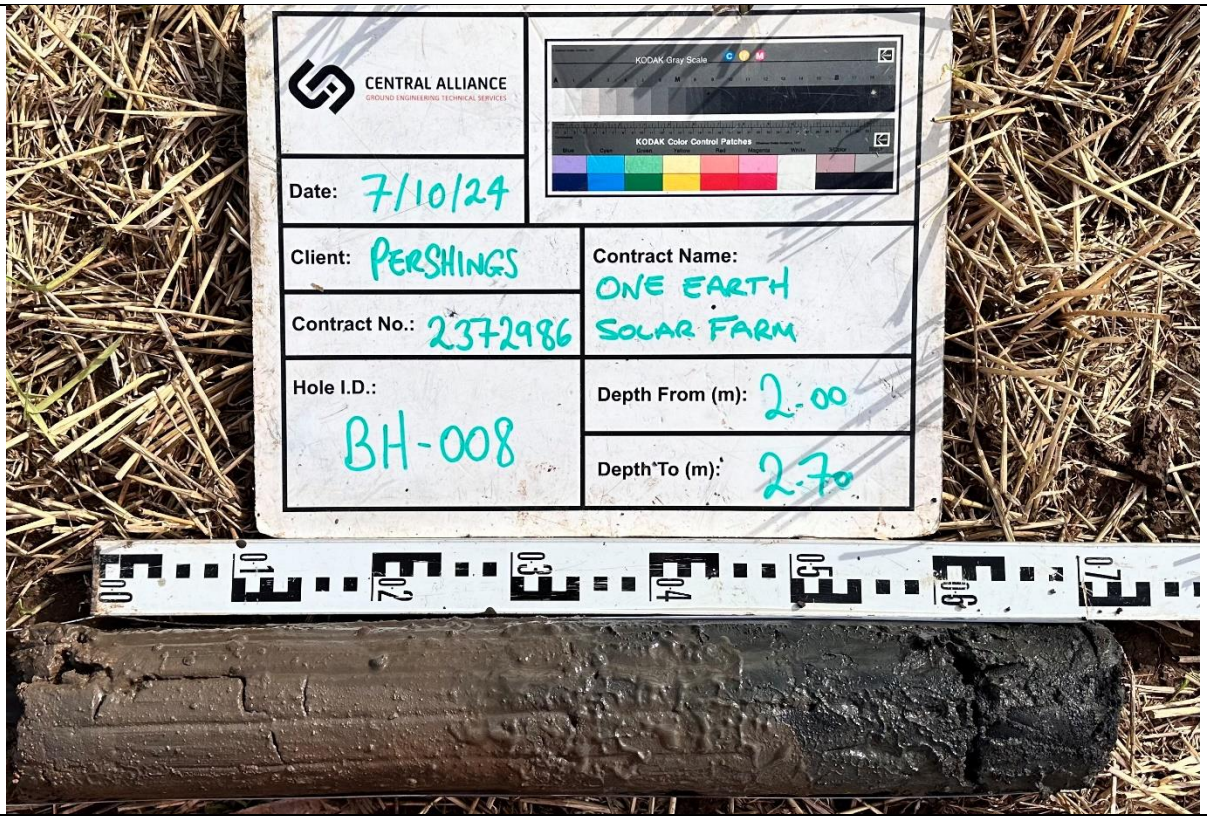


PHOTOGRAPH 3 – BH008 – 2.00m to 2.70m bgl

PHOTOGRAPH 4 – BH008 – 2.70m to 3.70m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH008

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

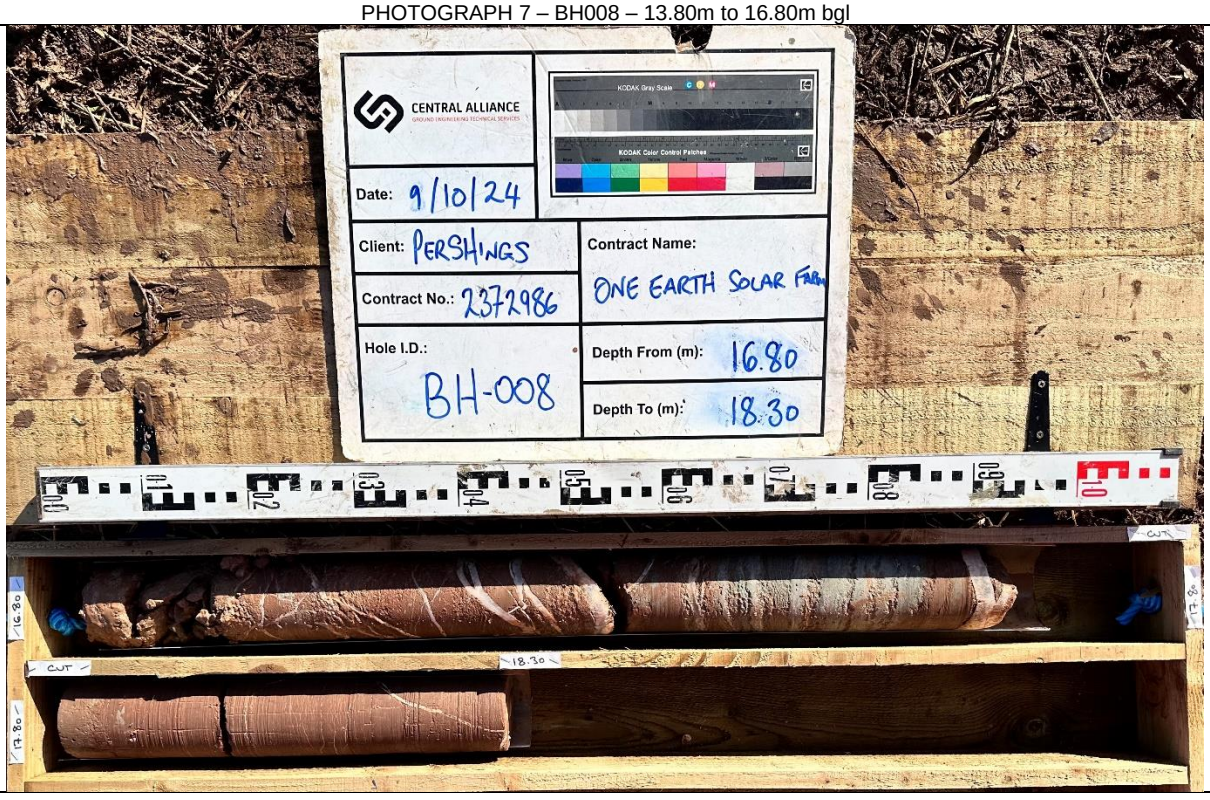
PHOTOGRAPH 5 – BH008 – 7.90m to 10.80m bgl

PHOTOGRAPH 6 – BH008 – 10.80m to 13.80m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH008

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

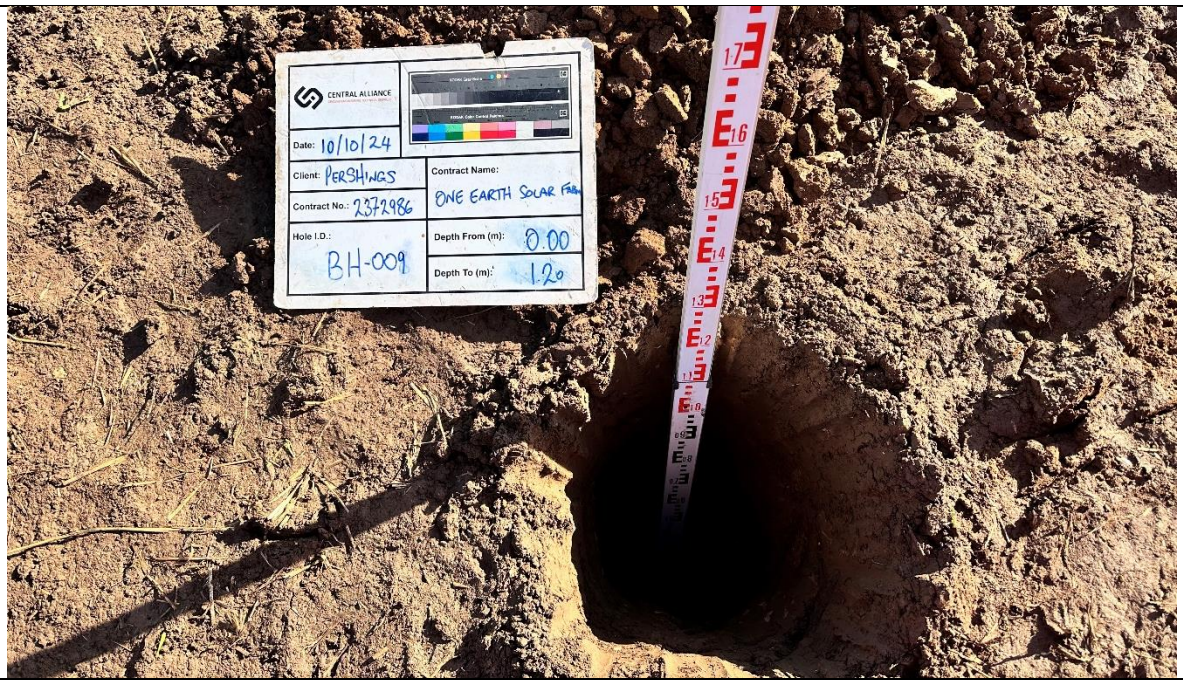
PHOTOGRAPH 7 – BH008 – 13.80m to 16.80m bgl



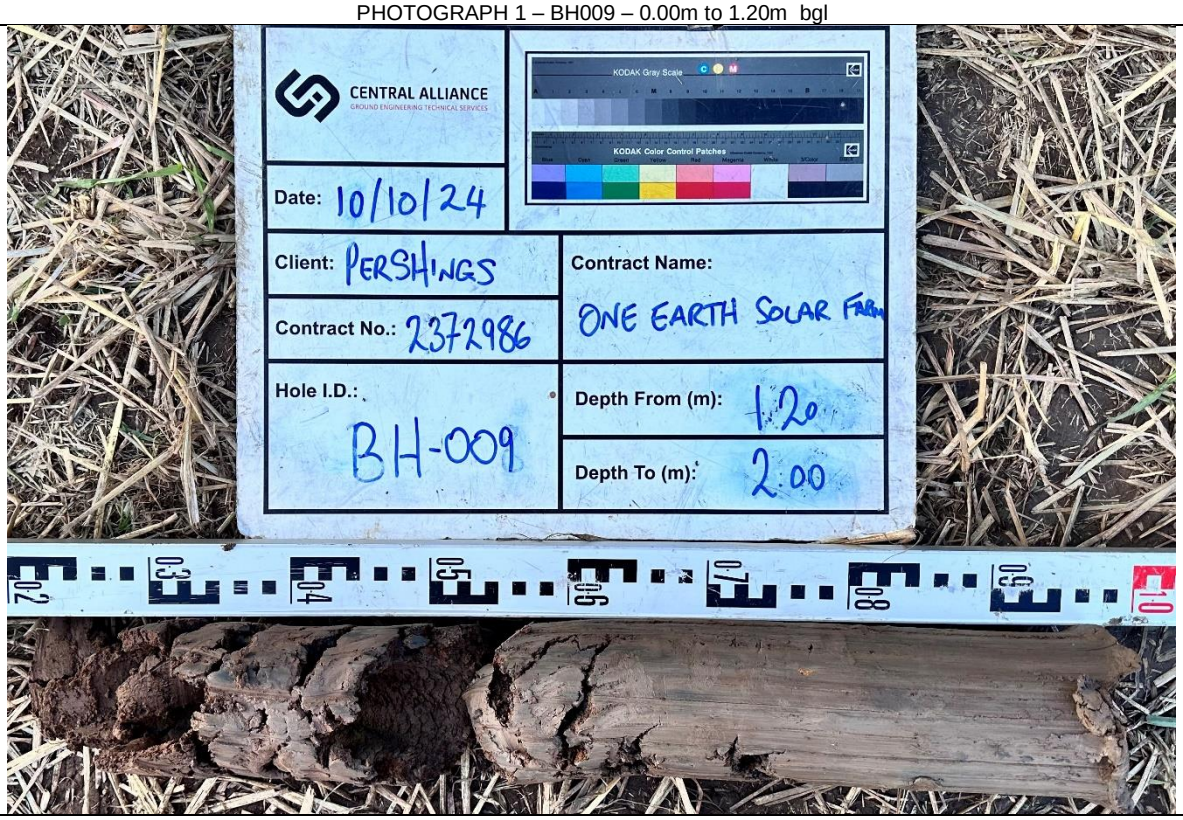
PHOTOGRAPH 8 – BH008 – 16.80m to 18.30m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH008

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



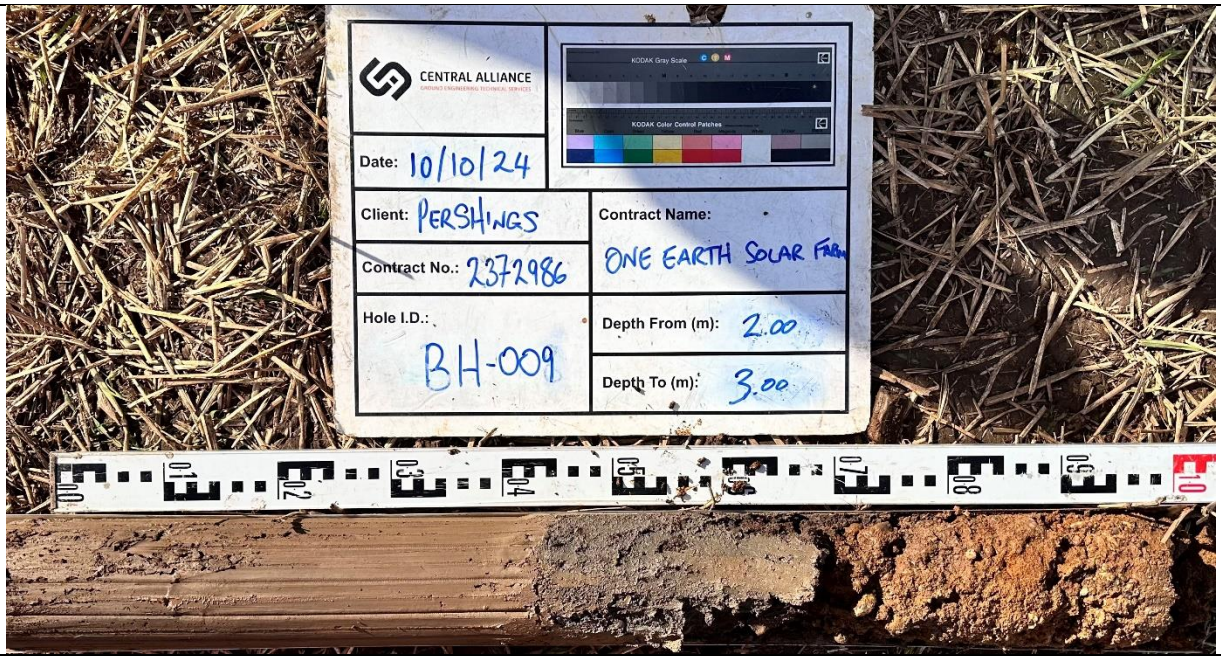
PHOTOGRAPH 1 – BH009 – 0.00m to 1.20m bgl



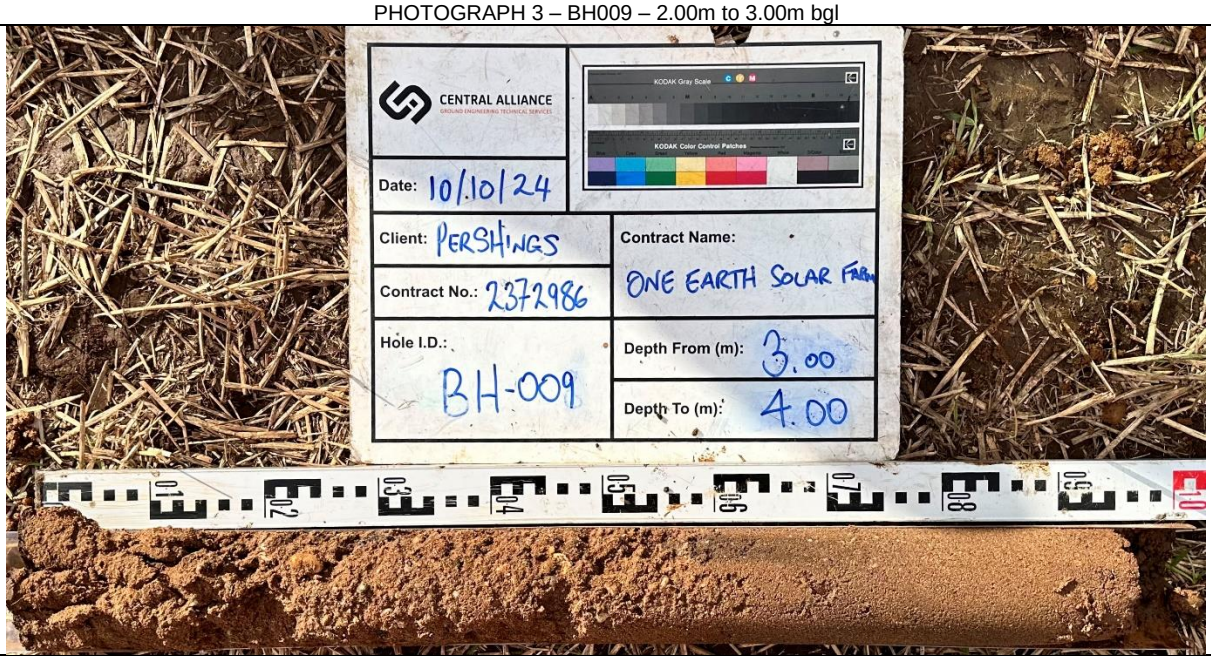
PHOTOGRAPH 2 – BH009 – 1.20m to 2.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH009

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES



PHOTOGRAPH 3 – BH009 – 2.00m to 3.00m bgl



PHOTOGRAPH 4 – BH009 – 3.00m to 4.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH009

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 5 – BH009 – 4.00m to 5.00m bgl

PHOTOGRAPH 6 – BH009 – 5.00m to 6.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH009

CENTRAL ALLIANCE
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PHOTOGRAPH 7 – BH009 – 6.00m to 7.00m bgl

PHOTOGRAPH 8 – BH009 – 7.00m to 8.00m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH009

CENTRAL ALLIANCE
GROUND ENGINEERING TECHNICAL SERVICES

PHOTOGRAPH 9 – BH009 – 8.00m to 9.00m bgl

PHOTOGRAPH 10 – BH009 – 9.00m to 9.50m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH009

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PHOTOGRAPH 11 – BH009 – 9.50m to 12.20m bgl

PHOTOGRAPH 12 – BH009 – 12.20m to 15.20m bgl

Client	AECOM
Project	One Earth Solar Farm
Title	BH009

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