

Graveley Road, Great
Wymondley

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Environmental - Geotechnical - Laboratory - Foundations

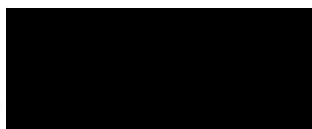
13 Triangle Business Park, Stoke Mandeville, HP22 5BL

Tel: 01296 739400 Email: consultants@subadra.com

INFILTRATION TEST REPORT

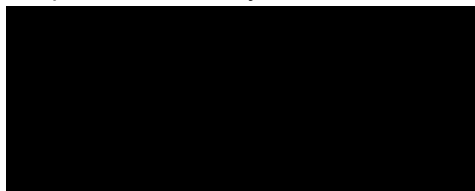


Report Prepared By:



Megan Chan

Report Reviewed By:



Steven Partridge

Client: Weetwood Services Ltd

Subadra Consulting Ltd. Registered in
England No. 4586038
Registered Office 13 Triangle Business
Park, Stoke Mandeville, HP22 5BL

Report

IN23854 CL 001

Date

February 2023

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**Graveley Road, Great
Wymondley**

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Attachment Two:	Test Pit Logs
Attachment Three:	Infiltration Test Data

Client: Weetwood Services Ltd

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1 Introduction

1.1 The Purpose of Our Testing

The site is located on Graveley Road in Great Wymondeley and comprises undeveloped land currently in use for crop production. We understand that the site is to be redeveloped with a solar farm.

We have been commissioned by Weetwood Services Ltd to carry out infiltration testing of the underlying soil to provide data to assist with developing a drainage strategy for the proposed development. Our infiltration testing was undertaken in accordance with the guidelines and methodology presented in British Research Establishment (BRE) Digest 365 (2016).

Your attention is drawn to the Notice to Interested Parties included as Attachment One.

1.2 The Scope of Our Work

Our assessment of the site was carried out in the following parts:

- A desk based a review of the sites geo-environmental setting using data information that is readily available in the public domain
- Collection of public utility drawings for the sites locality to assist with locating public utilities that may be present;
- Supervising the excavation of eight test pits using a JCB 3CX excavator. Five of these were excavated in locations set out by the client, with three additional pits added to the scope by us to verify underlying geology and provide additional infiltration data.
- Filling the test pits over two days day with potable water from a refillable water bowser and monitoring of falling water levels within the pits by a suitably qualified technician;
- Backfilling of test pits on completion;
- Provision of this report, which details the results of our testing and conclusions, and makes recommendations for further works (if necessary).

All the activities comprising this assessment were carried out in accordance with the procedures set out in our Quality Manual.

Client: Weetwood Services Ltd

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1.3 Previous Reports Relating to the Site

We do not hold, and have not been provided with any, previous reports relating to the site.

1.4 Proposed Development Plans

Proposed Developments

We understand that the site is to be redeveloped with a solar farm. We understand this will include associated battery storage containers, transformers stations, storage buildings, fencing, and means of access.

A site plan showing the proposed development plan is provided below.

This development is associated with application number 21/03380/FP (North Herts Council).

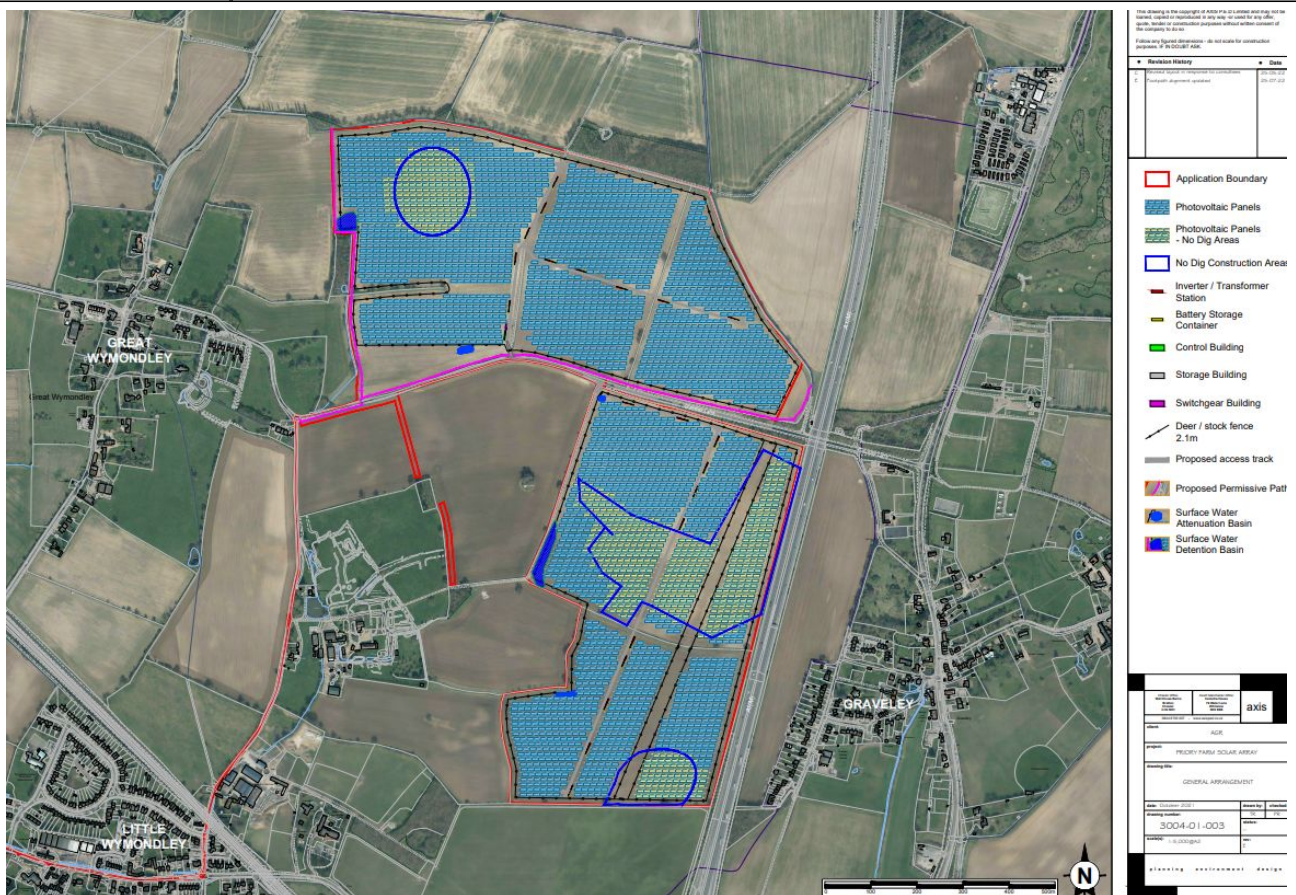


Table One: Proposed Development Plans

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1.5 Site Description, Location and Setting

Site Description	Site Description	The site comprises an area of undeveloped land, currently in use for crop production.
	Grid Reference	522432 228490
	Elevation (approx)	105m
	Size (approx)	88ha
Surrounding Land Use	North	Undeveloped land, in use for crop production
	East	The A1(M) forms part of the eastern boundary with residential properties beyond this (~135m). Undeveloped land is also present.
	South	Undeveloped land
	West	Undeveloped land, with residential properties and community buildings beyond this (~250m).
Geology, and Hydrogeology	Drift Geology	Near-surface geology is varied across the site. The British Geological Survey (BGS) shows shallow drift geology through the centre of the site to comprise Glaciofluvial Deposits, which is described as sand and gravel. This unit has been classified by the Environment Agency as a Secondary Aquifer (Class A). The BGS shows Lowestoft Formation on the north-western portion of the site, as well as on the south eastern and western edges. This is described as sand, gravel, silt and clay, with chalk and flint throughout. This unit has been classified by the Environment Agency as a Secondary Aquifer (undifferentiated). The BGS show that Head Deposits are present, described as clay, silt, sand and gravel, in the north-western corner of the site. This unit has been classified by the Environment Agency as a Secondary Aquifer (undifferentiated). The BGS also show Glaciolacustrine Deposits on the north-eastern portion of the site. This is described as clay and silt, and has been classified by the Environment Agency as an Unproductive Aquifer.
	Solid Geology	The BGS shows solid geology to comprise Holywell Nodular Chalk Formation and New Pit Chalk Formation, which is described as chalk. This has been classified by the Environment Agency as a Principal Aquifer.
	Nearby Borehole Records	The BGS hold records for a borehole constructed <5m away from the site, on Graveley Road (BGS ref. TL22NW16). This records underlying geology to comprise firm to stiff brown sandy clay with chalk and flint gravel to a depth of 1.09m, overlying medium hard to hard white chalk to a termination depth of 12.19m. Groundwater was not observed during.

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Hydrology

Surface Water Features

The nearest surface water feature is a land drain on the northern boundary of the site. A pond is also shown ~460m to the west of the site.

Table Two: Summary of Desk Based Sensitivity Review

2 Infiltration Results

2.1 BRE 365 Requirements

The British Research Establishment Digest 365 (2016) (BRE 365) guidance document sets out the recommended procedure for undertaking soakaway testing and design. This guidance specifies that the following procedures must be adhered to:

- Tests must be completed a minimum of 1.0m above groundwater level;
- Record the water level in the test pits until they fall to a depth equivalent to less than 25% of the original effective storage volume;
- Each test pit should be filled and the infiltration rate recorded three times during either the same, or on consecutive days;
- The soakaway should discharge from full to half empty in a 24hour period.

Table Three: BRE Testing Requirements

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2.2 Details of Our Works

Activity		Description of Works
Service Clearance	Public Utility Drawings	We have obtained and reviewed public utility drawings from the relevant service provider. This provides information regarding major services that supply the site and neighbouring properties. Copies of these plans have been provided to the client separately.
	On-site	Prior to excavating, all trial pit locations underwent a final service check using a Cable Avoidance Tool (CAT).
Infiltration Testing	Excavating Test Pits	Our infiltration testing was carried out on 9th to 10th February 2023. We excavated eight test pits to a maximum depth of 3m using a JCB 3CX excavator, at the location shown in Figure One on the following page. Five of these were excavated in locations set out by the client, with three additional pits added to the scope by us to verify underlying geology and provide additional infiltration data. Test pits were logged onsite by a suitably qualified technician. Copies of our Test pit logs are provided in Attachment Two.
	Filling of Test Pits	We filled the test pits between one and three occasions over the course of two days, subject to the infiltration rates of the soils within each pit, with fresh-water from a refillable water bowser. Moderate infiltration rates were initially recorded in TP001 and TP006, however as testing progress and surrounding soils became increasingly saturated, infiltration rates reduced significantly and in agreement with the client, testing was suspended at the end of the second day. In agreement with the client, we suspended testing in the remaining pits due to the slow infiltration rates recorded. All test pits will backfilled with arisings at the end of our works.

Table Four: Our Methodologies

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2.3 Test Pit Locations



Figure One: Approximate Test Pit Locations

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2.4 Site Geology

As anticipated from our desk based review, geology across the site is variable and was encountered as described below:

- Topsoil was encountered in all test pits, with the exception of TP002 and TP003, to a maximum depth of 0.4m.
- Glaciofluvial deposits were encountered in TP001 to a depth of 1m. This comprised medium dense to dense sandy gravel, with occasional cobbles and chalk flints throughout. This unit was not identified elsewhere.
- Head deposits were encountered in TP005 to depth of 1m. This comprised firm brown clay with frequent gravel and occasional chalk flints. The clay became slightly sandy and gravels became less frequent with depth. This unit was not identified elsewhere.
- Lowestoft Formation was encountered in all other test pits, to a maximum depth of 3m. This comprised a mixture of sandy clay and clayey sand with occasional to frequent gravels and chalk flints.

No groundwater was encountered during the excavation of the test pits.

Copies of our test pit logs are included as Attachment Two.

2.5 Infiltration Test Results

Location	Test Pit Dimension L x W x D (m)	Soil Infiltration Rate (m/sec)		
		First Fill	Second Fill	Third Fill
TP001	1.8m x 0.5m x 1m	7.44 x 10 ⁻⁶ *	Tested up to the end of day one however insufficient time in the day to complete second fill. Test pit was empty the following morning (~17 hours after last measurement).	Infiltration rate significantly decreased and too slow to complete test or provide interpolation. Soil infiltration likely to be <10 ⁻⁷ m/sec
TP002	1.7m x 0.5m x 1m	Infiltration too slow to complete first fill or provide interpolation. Soil infiltration likely to be <10 ⁻⁷ m/sec		
TP003	1.7m x 0.5m x 1m			
TP004	1.8m x 0.6m x 0.9m			
TP005	2m x 0.6m x 1m			
TP006	2.1m x 0.5m x 3m	4.14 x 10 ⁻⁶ *	Insufficient time to commence second fill.	
TP007	2m x 0.5m x 3m	Infiltration too slow to complete first fill or provide interpolation. Soil infiltration likely to be <10 ⁻⁷ m/sec.		
TP008	2.1m x 0.6m 2.8m			

*= interpolated data

Table Five: Soakaway Test Results

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3 Conclusions and Recommendations

The results of our infiltration testing indicate the following:

- We understand our infiltration testing data is to be used to assist with informing the design of the surface water drainage strategy for the construction of a solar farm;
- We have encountered varied geology across the site. Topsoil was encountered in all test pits, with the exception of TP002 and TP003, to a maximum depth of 0.4m. Glaciofluvial Deposits (sandy gravel) were encountered in TP001 to a depth of 1m. Head Deposits (brown clay with gravel) was encountered in TP005 to depth of 1m. Lowestoft Formation (mix of sandy clay and clayey sand) was encountered in all other test pits, to a maximum depth of 3m.
- No groundwater was encountered during the excavation of the test pits.
- All test pits were abandoned by the end of day two due to slow infiltration rates and were backfilled with arisings at the end of the works.

Based on test results, the use of conventional soakaways is unlikely to be a viable drainage solution at the locations and effective depths tested.

Your attention is drawn to the Notice to Interested Parties included as Attachment One.

Table Six: Conclusions

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**ATTACHMENT ONE:
NOTICE TO INTERESTED PARTIES**

Client: Weetwood Services Ltd

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NOTICE TO INTERESTED PARTIES

The purpose of our work is to provide general information on the environmental And/OR geotechnical conditions existing at the site And related to soil And/OR groundwater. The Client Or others specified the scope of the investigation And the validity of our conclusions is limited by the scope of work specified. We are Not responsible for any such limitations Or omissions.

Where stated in this report, we have used information supplied by third parties. While we have evaluated As far As possible the validity Of this information, we cannot guarantee its accuracy In any way whatsoever.

No investigation technique is capable Of completely identifying all Of the contaminants that might be present In the soil Or groundwater under a site. Where specified In our report, we have examined the ground by constructing a number Of boreholes And/OR trial pits. We recovered samples Of soil And/OR groundwater from available exposures.

The depth And spacing Of our Sampling locations were selected To ensure With a reasonable probability that they would be representative Of the actual conditions across the whole site. However, safety considerations relating To existing site infrastructure may have restricted our ability To investigate all potential contaminant sources. Specifically, we were unable To investigate the soil And groundwater condition immediately adjacent To the underground structures And/OR buried services. These limitations must be borne In mind When considering the conclusions reached In this report.

Soil is intrinsically variable And the spread Of contaminants within the soil is therefore subject To a degree Of non-uniformity. For these reasons no sampling technique can completely eliminate the possibility Of obtaining samples that are Not representative Of the actual conditions. Our sampling techniques are intended To reduce the possibility To an acceptable level, within the limits imposed by the scope of the investigation.

Groundwater levels And soil vapour levels that we report were accurate at the time of the investigation. Groundwater And soil vapour levels are variable. Long term monitoring may be required to ensure that the levels recorded during our investigation are representative of long term And possible 'worst case' conditions. In accepting our recommendations and/or conclusions the Client acknowledges that further, more detailed investigation would allow a more accurate assessment of site conditions to be made and that this would reduce any consequential risk to the Client.

Our investigation was carried out to assess the significance of contamination resulting from use of the site as identified in this report. Unless we have indicated otherwise, no assessment of the potential impact of any other previous uses has been made. No investigation was carried out to determine whether or not any deleterious or hazardous materials (such as asbestos) have been used in the construction of the buildings present on the site. Unless otherwise stated no investigation or assessment has been made of the presence or otherwise of invasive plant species including but not limited to Japanese Knotweed.

Unless specifically stated otherwise, we have not assessed the effect of any proposed future construction activities on existing structures on or near to the site. Nor, unless stated otherwise, have we assessed the likely effect of trees on existing or proposed structures on or near the site.

We do not accept any responsibility for the cost of remedial works or other costs incurred in whatever way whatsoever as a result of any omissions, errors or other shortcomings in this report unless we have been given reasonable opportunity to verify ourselves that such faults exist and we have been given a reasonable opportunity to carry out works to remedy such faults ourselves using the most practicable means available to us. We do not accept liability for any consequential losses incurred by you while either we or others carry out any remedial works we deem necessary.

This report has been prepared for the Client, as specified on the cover page of this report. In accepting our recommendations and/or conclusions the Client accepts that the terms of our appointment were as detailed in the Proposal, or Proposals, that we provided to the Client before being appointed and that these terms supersede any other terms and/or conditions set out in any contracts agreed between ourselves and the Client, regardless of when such terms and/or conditions were agreed to by us and/or signed by us.

Use of, and reliance on, this report by other third parties will be at such third parties own risk, and we do not accept any liability or responsibility to them.

Neither the whole nor any part of this report, or any reference to it, may be included in any published document circular or statement or published in any way without our prior written approval.

This report and its contents, together with any supporting correspondence or other documentation, remain the property of Subadra Consulting Limited until paid for in full. The copyright to this report remains vested in Subadra Consulting Ltd at all times.

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**ATTACHMENT TWO:
TEST PIT LOGS**

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Borehole Log
TP001

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Tel: 01296 739400 Email: consultants@subadra.com

Project Name	IN23854 Graveley Road	Coordinates	
Date	9th-10th February 2023	Ground Level	
Site Engineer	Megan Chan	Drilling Method	Excavator

Depth (m)	Well	Water Level	Log	Sample	Laboratory Analysis	Headspace (ppm)	SPT 'N' or Su (kPa)	Description
1								0.00m - 0.30m Made Ground Brown topsoil with rootlets.
								0.30m - 1.00m Glaciofluvial Deposits MEDIUM DENSE light brown very sandy GRAVEL. Chalk and flint noted.
								Borehole terminated at 1.00m
2								
3								
4								
5								
6								
7								
8								
9								
10								

 Prism.NET www.prismerp.co.uk	Well Diameter		Depth of Borehole	1.00m
	Well Casing Length		Depth to Groundwater	Dry
	Well Screen Length		Page	One of One

Borehole Log TP002

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Project Name	IN23854 Graveley Road	Coordinates	
Date	9th February 2023	Ground Level	
Site Engineer	Megan Chan	Drilling Method	Excavator

Depth (m)	Well	Water Level	Log	Sample	Laboratory Analysis	Headspace (ppm)	SPT 'N' or Su (kPa)	Description
1								0.00m - 0.20m Lowestoft Formation SOFT TO FIRM brown sandy CLAY. Rootlets observed.
2								0.20m - 0.90m Lowestoft Formation FIRM light brown sandy CLAY with frequent medium gravel. Cobbles with chalk and flints noted throughout.
3								0.90m - 1.00m Lowestoft Formation FIRM light brown sandy CLAY with occasional fine gravel.
4								Borehole terminated at 1.00m
5								
6								
7								
8								
9								
10								

 Prism.NET www.prismerp.co.uk	Well Diameter		Depth of Borehole	1.00m
	Well Casing Length		Depth to Groundwater	Dry
	Well Screen Length		Page	One of One

Borehole Log TP003

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Project Name	IN23854 Graveley Road	Coordinates	
Date	9th February 2023	Ground Level	
Site Engineer	Megan Chan	Drilling Method	Excavator

Depth (m)	Well	Water Level	Log	Sample	Laboratory Analysis	Headspace (ppm)	SPT 'N' or Su (kPa)	Description
1								0.00m - 0.70m Lowestoft Formation MEDIUM DENSE brown very clayey SAND with occasional fine gravel.
2								0.70m - 1.00m Lowestoft Formation FIRM brown sandy CLAY with occasional fine gravel.
3								Borehole terminated at 1.00m
4								
5								
6								
7								
8								
9								
10								

 Prism.NET www.prismerp.co.uk	Well Diameter		Depth of Borehole	1.00m
	Well Casing Length		Depth to Groundwater	Dry
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Borehole Log TP004

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Project Name	IN23854 Graveley Road	Coordinates	
Date	9th February 2023	Ground Level	
Site Engineer	Megan Chan	Drilling Method	Excavator

Depth (m)	Well	Water Level	Log	Sample	Laboratory Analysis	Headspace (ppm)	SPT 'N' or Su (kPa)	Description
1								0.00m - 0.40m Made Ground Brown topsoil with rootlets.
								0.40m - 0.80m Lowestoft Formation FIRM brown sandy CLAY with occasional fine gravel.
								0.80m - 0.90m Lowestoft Formation FIRM brown slightly sandy CLAY with occasional medium gravel. Chalk and flint noted.
								Borehole terminated at 0.90m
2								
3								
4								
5								
6								
7								
8								
9								
10								

 Prism.NET www.prismerp.co.uk	Well Diameter		Depth of Borehole	0.90m
	Well Casing Length		Depth to Groundwater	Dry
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Borehole Log TP005

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Project Name	IN23854 Graveley Road	Coordinates	
Date	9th February 2023	Ground Level	
Site Engineer	Megan Chan	Drilling Method	Excavator

Depth (m)	Well	Water Level	Log	Sample	Laboratory Analysis	Headspace (ppm)	SPT 'N' or Su (kPa)	Description
1								0.00m - 0.30m Made Ground Brown topsoil with rootlets.
2								0.30m - 1.00m Lowestoft Formation FIRM brown slightly sandy CLAY with frequent medium gravel. Chalk and flint noted.
3								Borehole terminated at 1.00m
4								
5								
6								
7								
8								
9								
10								

 Prism.NET www.prismerp.co.uk	Well Diameter		Depth of Borehole	1.00m
	Well Casing Length		Depth to Groundwater	Dry
	Well Screen Length		Page	One of One

Borehole Log TP006

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Project Name	IN23854 Graveley Road	Coordinates	
Date	10th February 2023	Ground Level	
Site Engineer	Tsungai Mudarikwa	Drilling Method	Excavator

Depth (m)	Well	Water Level	Log	Sample	Laboratory Analysis	Headspace (ppm)	SPT 'N' or Su (kPa)	Description
1								0.00m - 0.10m Made Ground Topsoil with rootlets.
2								0.10m - 3.00m Lowestoft Formation MEDIUM DENSE brown very clayey SAND. Chalk and flint noted.
3								Borehole terminated at 3.00m
4								
5								
6								
7								
8								
9								
10								

 Prism.NET www.prismerp.co.uk	Well Diameter		Depth of Borehole	3.00m
	Well Casing Length		Depth to Groundwater	
	Well Screen Length		Page	One of One

Borehole Log TP007

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Project Name	IN23854 Graveley Road	Coordinates	
Date	10th February 2023	Ground Level	
Site Engineer	Tom Petzing	Drilling Method	Excavator

Depth (m)	Well	Water Level	Log	Sample	Laboratory Analysis	Headspace (ppm)	SPT 'N' or Su (kPa)	Description
1								0.00m - 0.10m Made Ground Brown topsoil with rootlets.
2								0.10m - 3.00m Lowestoft Formation FIRM brown sandy CLAY with occasional medium gravel. Chalk and flint noted.
3								Borehole terminated at 3.00m
4								
5								
6								
7								
8								
9								
10								

 Prism.NET www.prismerp.co.uk	Well Diameter		Depth of Borehole	3.00m
	Well Casing Length		Depth to Groundwater	Dry
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Borehole Log TP008

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Tel: 01296 739400 Email: consultants@subadra.com

Project Name	IN23854 Graveley Road	Coordinates	
Date	10th February 2023	Ground Level	
Site Engineer	Tsungai Mudarikwa	Drilling Method	Excavator

Depth (m)	Well	Water Level	Log	Sample	Laboratory Analysis	Headspace (ppm)	SPT 'N' or Su (kPa)	Description
1								0.00m - 0.10m Made Ground Brown topsoil with rootlets.
2								0.10m - 2.80m Lowestoft Formation FIRM brown slightly sandy CLAY with occasional fine gravel.
3								Borehole terminated at 2.80m
4								
5								
6								
7								
8								
9								
10								

 Prism.NET www.prismerp.co.uk	Well Diameter		Depth of Borehole	2.80m
	Well Casing Length		Depth to Groundwater	Dry
	Well Screen Length		Page	One of One

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**ATTACHMENT THREE:
INFILTRATION TEST DATA**

Client: Weetwood Services Ltd

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Soakaway Test - TP001

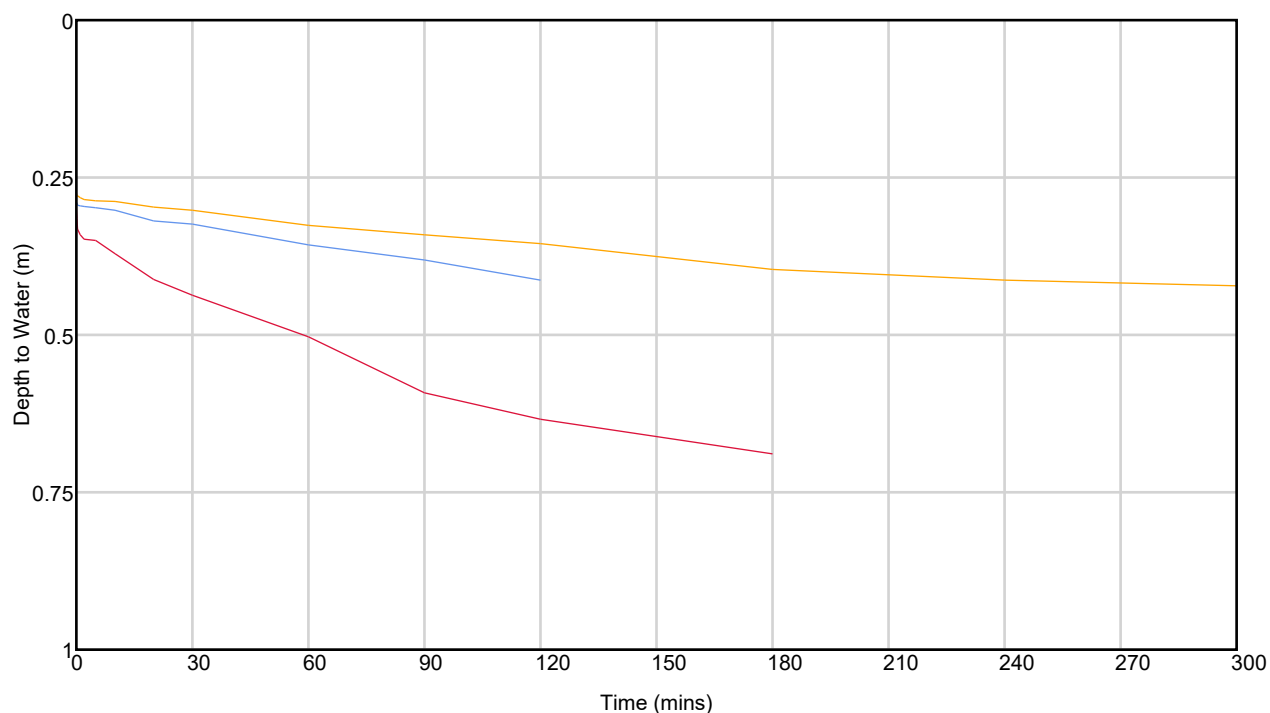
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13 Triangle Business Park, Stoke Mandeville, HP22 5BL

Tel: 01296 739400 Email: consultants@subadra.com

Project Name	Graveley Road, Great Wymondeley	Date	9th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	0.643m/day*



First Fill		Second Fill		Third Fill	
Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)
0.00	0.300	0.00	0.290	0.00	0.275
0.15	0.315	0.15	0.290	0.15	0.279
0.30	0.332	0.30	0.294	0.30	0.279
1.00	0.341	1.00	0.295	1.00	0.282
2.00	0.348	2.00	0.296	2.00	0.285
5.00	0.350	5.00	0.298	5.00	0.287
10.00	0.371	10.00	0.302	10.00	0.288
20.00	0.412	20.00	0.319	20.00	0.297
30.00	0.437	30.00	0.324	30.00	0.302
60.00	0.503	60.00	0.357	60.00	0.326
90.00	0.592	90.00	0.381	90.00	0.341
120.00	0.634	120.00	0.413	120.00	0.355
180.00	0.689			180.00	0.396

 Prism.NET www.prismerp.co.uk	Pit Length	1.80m	Backfill	None
	Pit Width	0.50m	Number of Cycles	Three
	Pit Depth	1.00m	Page	One of Two

Soakaway Test - TP001

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Environmental - Geotechnical - Laboratory - Foundations

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Tel: 01296 739400 Email: consultants@subadra.com

Project Name	Graveley Road, Great Wymondeley	Date	9th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	0.643m/day*

				240.00	0.413
				300.00	0.422
T75 (mins)	47.27				
T25 (mins)	328.36*				
Permeability (m/day)	0.64*				

* Interpolated data. Insufficient time to complete test.

 Prism.NET www.prismerp.co.uk	Pit Length	1.80m	Backfill	None
	Pit Width	0.50m	Number of Cycles	Three
	Pit Depth	1.00m	Page	Two of Two

Soakaway Test - TP002

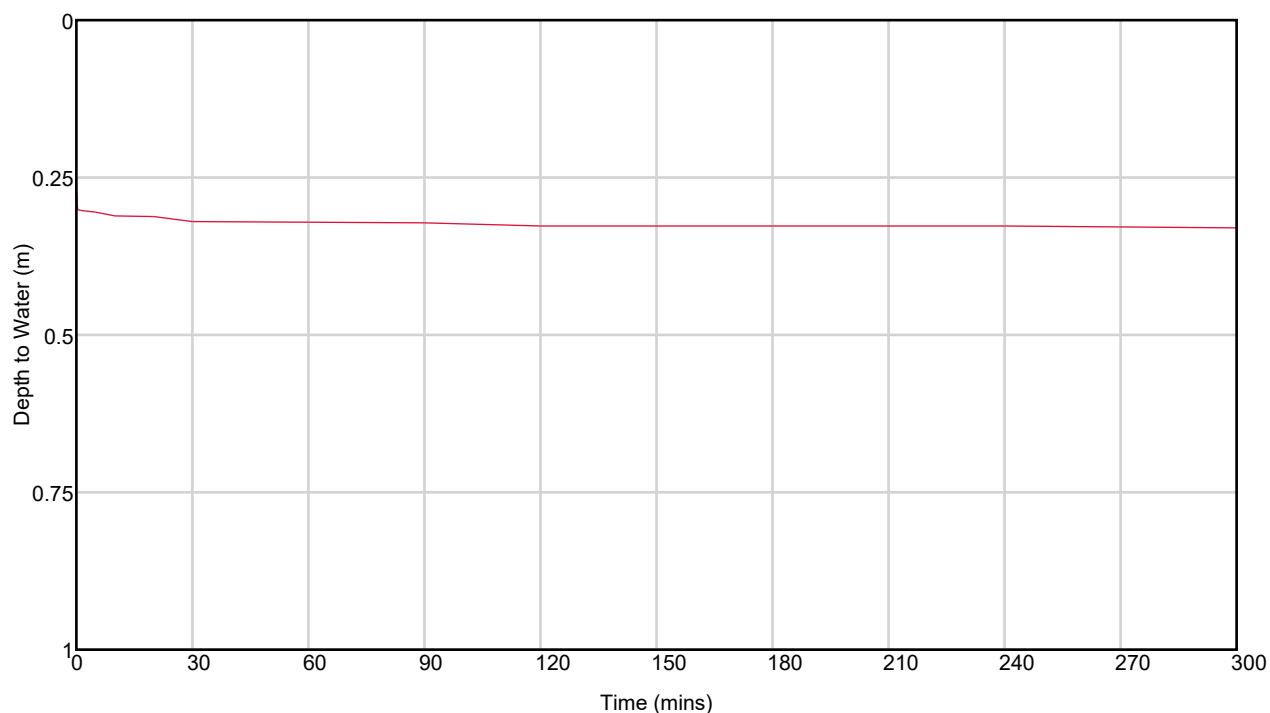
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Environmental - Geotechnical - Laboratory - Foundations

13 Triangle Business Park, Stoke Mandeville, HP22 5BL

Tel: 01296 739400 Email: consultants@subadra.com

Project Name	Graveley Road, Great Wymondeley	Date	9th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.



First Fill		Second Fill		Third Fill	
Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)
0.00	0.270				
0.15	0.278				
0.30	0.301				
1.00	0.302				
2.00	0.303				
5.00	0.305				
10.00	0.311				
20.00	0.312				
30.00	0.320				
60.00	0.321				
90.00	0.322				
120.00	0.327				
180.00	0.327				

 Prism.NET www.prismerp.co.uk	Pit Length	1.70m	Backfill	None
	Pit Width	0.50m	Number of Cycles	One
	Pit Depth	1.00m	Page	One of Two

Soakaway Test - TP002

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Project Name	Graveley Road, Great Wymondeley	Date	9th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.

240.00	0.327				
300.00	0.330				
* Interpolated data. Insufficient time to complete test.					

 Prism.NET www.prismerp.co.uk	Pit Length	1.70m	Backfill	None
	Pit Width	0.50m	Number of Cycles	One
	Pit Depth	1.00m	Page	Two of Two

Soakaway Test - TP003

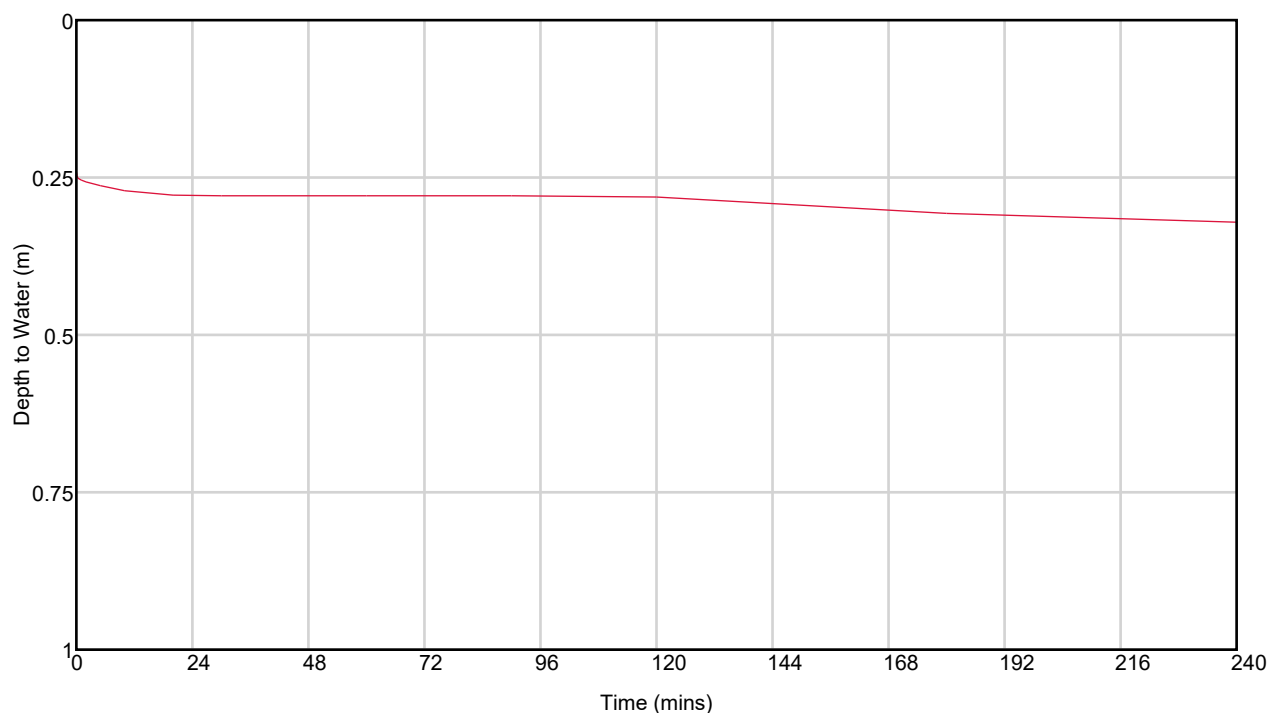
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Project Name	Graveley Road, Great Wymondeley	Date	9th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.



First Fill		Second Fill		Third Fill	
Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)
0.00	0.241				
0.15	0.247				
0.30	0.251				
1.00	0.254				
2.00	0.257				
5.00	0.263				
10.00	0.271				
20.00	0.278				
30.00	0.279				
60.00	0.279				
90.00	0.279				
120.00	0.281				
180.00	0.307				

 Prism.NET www.prismerp.co.uk	Pit Length	1.70m	Backfill	None
	Pit Width	0.50m	Number of Cycles	One
	Pit Depth	1.00m	Page	One of Two

Soakaway Test - TP003

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Project Name	Graveley Road, Great Wymondeley	Date	9th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.

240.00	0.321				
* Interpolated data. Insufficient time to complete test.					

 Prism.NET www.prismerp.co.uk	Pit Length	1.70m	Backfill	None
	Pit Width	0.50m	Number of Cycles	One
	Pit Depth	1.00m	Page	Two of Two

Soakaway Test - TP004

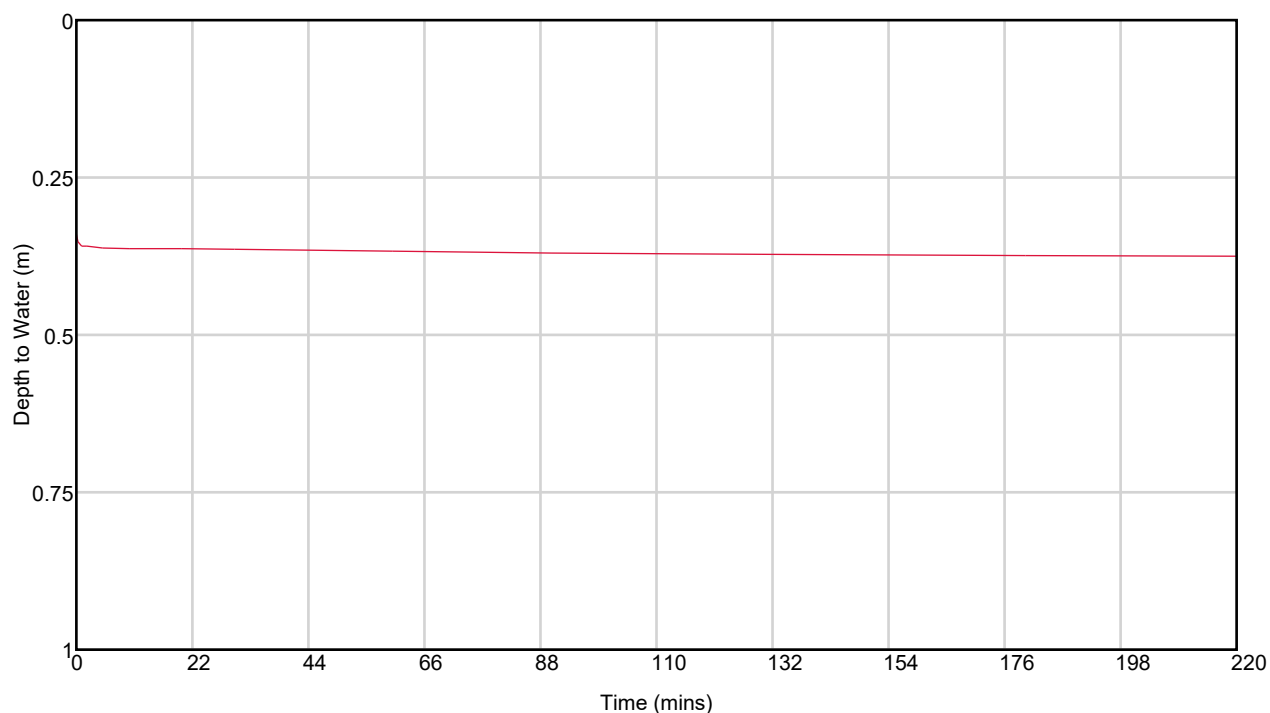
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Project Name	Graveley Road, Great Wymondeley	Date	9th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.



First Fill		Second Fill		Third Fill	
Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)
0.00	0.340				
0.30	0.352				
1.00	0.359				
2.00	0.359				
5.00	0.362				
10.00	0.363				
20.00	0.363				
30.00	0.364				
60.00	0.367				
90.00	0.370				
130.00	0.372				
180.00	0.374				
220.00	0.375				

 Prism.NET www.prismerp.co.uk	Pit Length	1.80m	Backfill	None
	Pit Width	0.60m	Number of Cycles	One
	Pit Depth	0.90m	Page	One of Two

Soakaway Test - TP004

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Project Name	Graveley Road, Great Wymondeley	Date	9th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.

* Interpolated data. Insufficient time to complete test.					

	Pit Length	1.80m	Backfill	None
	Pit Width	0.60m	Number of Cycles	One
	Pit Depth	0.90m	Page	Two of Two

Soakaway Test - TP005

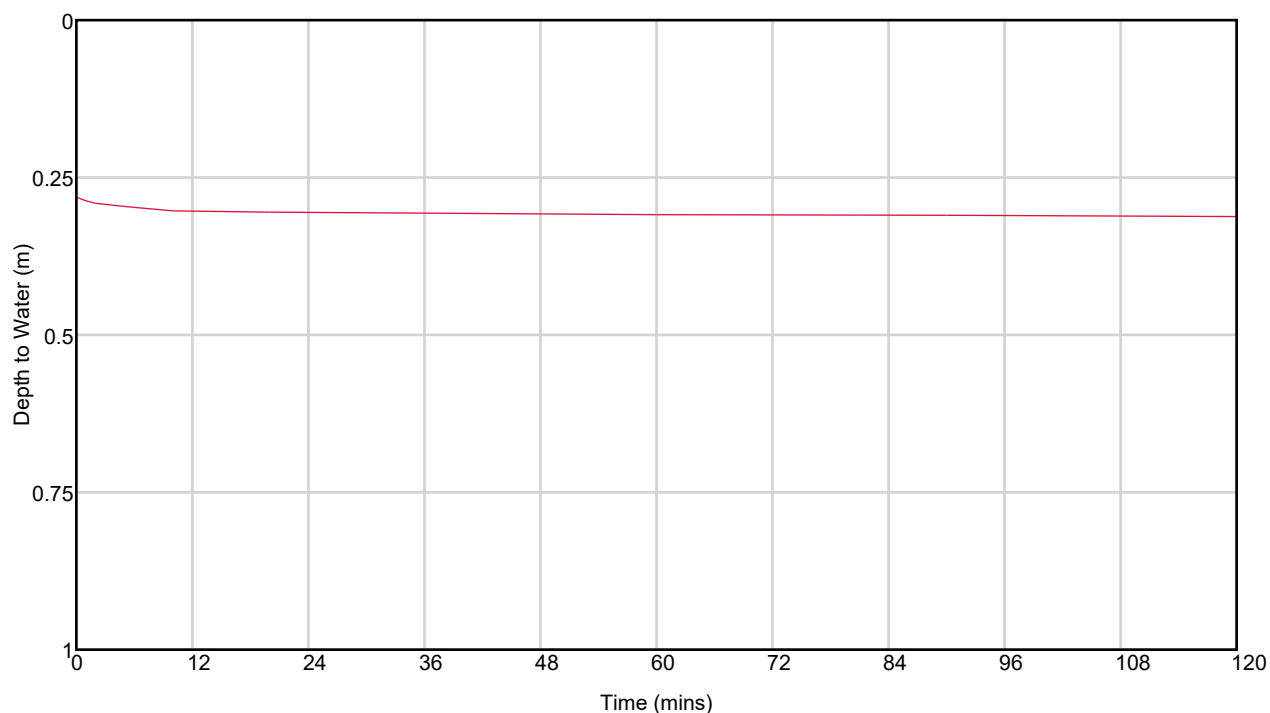
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Project Name	Graveley Road, Great Wymondeley	Date	9th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.



First Fill		Second Fill		Third Fill	
Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)
0.00	0.281				
0.30	0.283				
1.00	0.287				
2.00	0.291				
5.00	0.296				
10.00	0.303				
20.00	0.305				
30.00	0.306				
60.00	0.309				
90.00	0.310				
120.00	0.312				
* Interpolated data. Insufficient time to complete test.					

Pit Length		2.00m	Backfill		None
Pit Width		0.60m	Number of Cycles		One
Pit Depth		1.00m	Page		One of One



Prism.NET
www.prismerp.co.uk

Soakaway Test - TP006

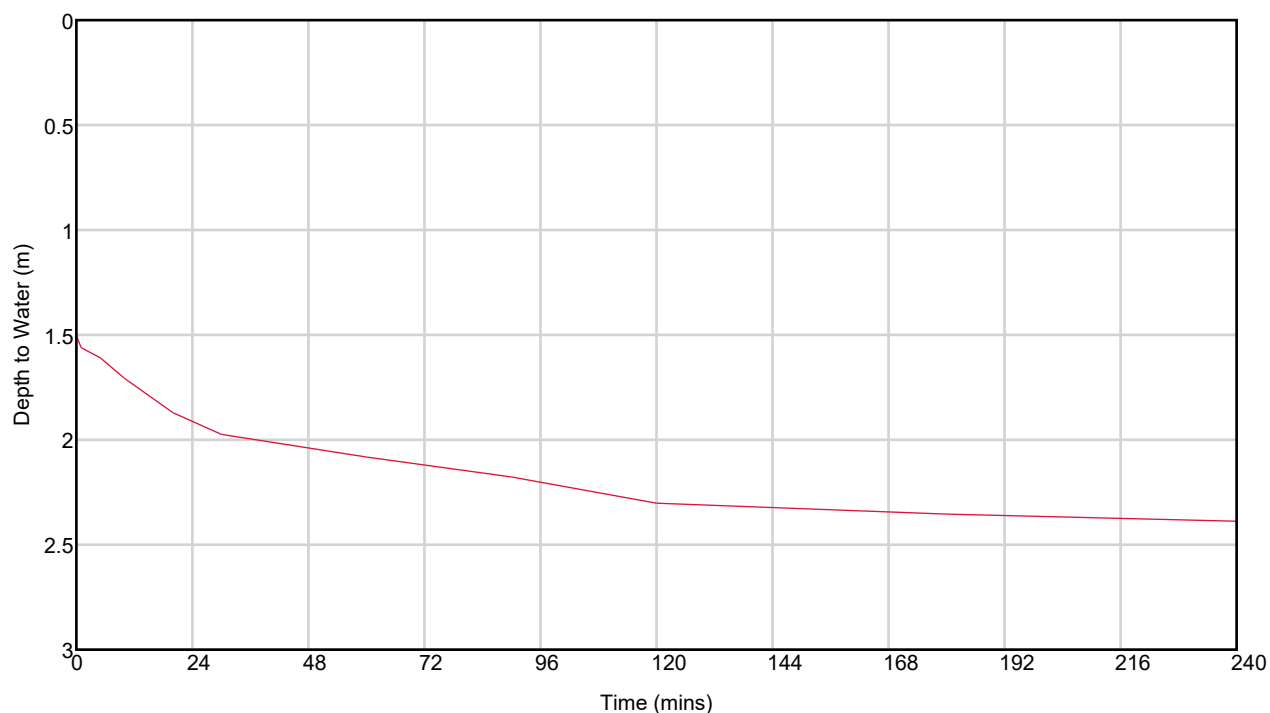
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13 Triangle Business Park, Stoke Mandeville, HP22 5BL

Tel: 01296 739400 Email: consultants@subadra.com

Project Name	Graveley Road, Great Wymondeley	Date	10th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	0.484m/day*



First Fill		Second Fill		Third Fill	
Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)
0.00	1.504				
0.15	1.513				
0.30	1.521				
1.00	1.561				
5.00	1.610				
10.00	1.708				
20.00	1.871				
30.00	1.974				
60.00	2.082				
90.00	2.177				
120.00	2.302				
180.00	2.354				
240.00	2.388				

 Prism.NET www.prismerp.co.uk	Pit Length	2.10m	Backfill	None
	Pit Width	0.50m	Number of Cycles	One
	Pit Depth	3.00m	Page	One of Two

Soakaway Test - TP006

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Project Name	Graveley Road, Great Wymondeley	Date	10th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	0.484m/day*

T75 (mins)	20.68				
T25 (mins)	493.85*				
Permeability (m/day)	0.48*				

* Interpolated data. Insufficient time to complete test.

 Prism.NET www.prismerp.co.uk	Pit Length	2.10m	Backfill	None
	Pit Width	0.50m	Number of Cycles	One
	Pit Depth	3.00m	Page	Two of Two

Soakaway Test - TP007

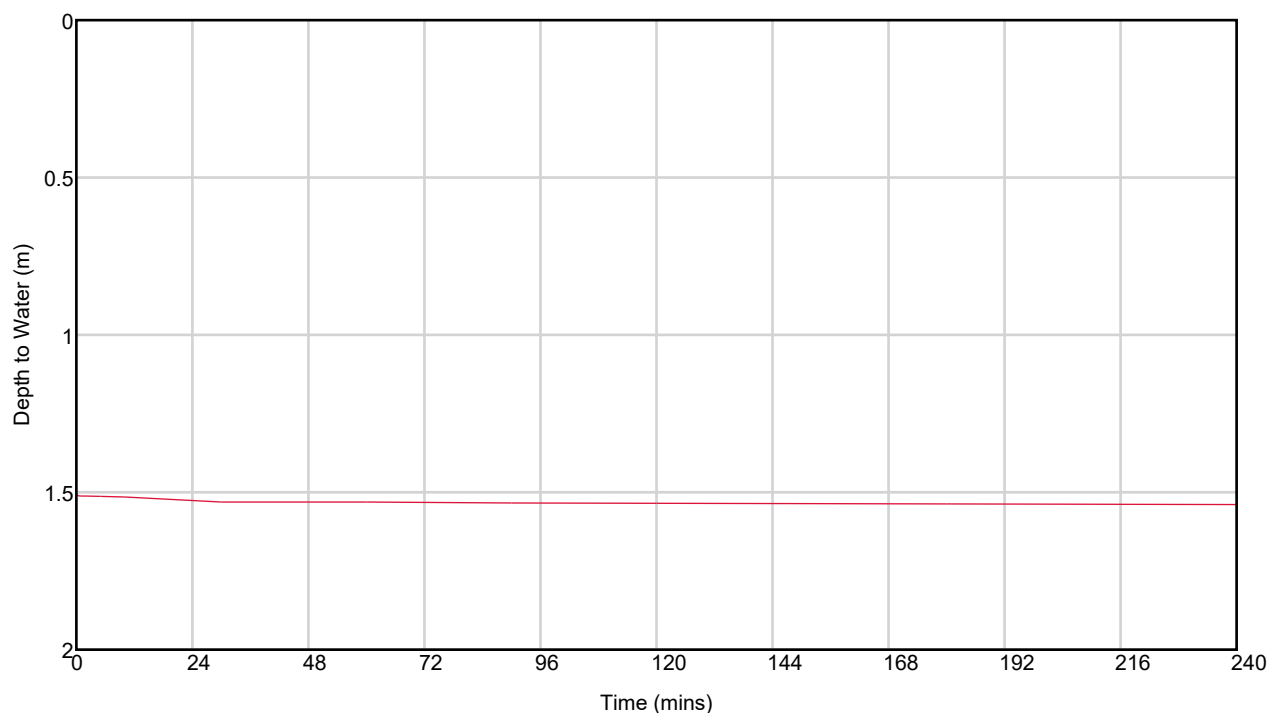
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13 Triangle Business Park, Stoke Mandeville, HP22 5BL

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Project Name	Graveley Road, Great Wymondeley	Date	10th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.



First Fill		Second Fill		Third Fill	
Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)
0.00	1.502				
0.15	1.509				
0.30	1.511				
1.00	1.512				
2.00	1.512				
5.00	1.513				
10.00	1.515				
30.00	1.531				
60.00	1.531				
90.00	1.534				
120.00	1.535				
180.00	1.537				
240.00	1.539				

 Prism.NET www.prismerp.co.uk	Pit Length	2.00m	Backfill	None
	Pit Width	0.50m	Number of Cycles	One
	Pit Depth	3.00m	Page	One of Two

Soakaway Test - TP007

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Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.

* Interpolated data. Insufficient time to complete test.					

	Pit Length	2.00m	Backfill	None
	Pit Width	0.50m	Number of Cycles	One
	Pit Depth	3.00m	Page	Two of Two

Soakaway Test - TP008

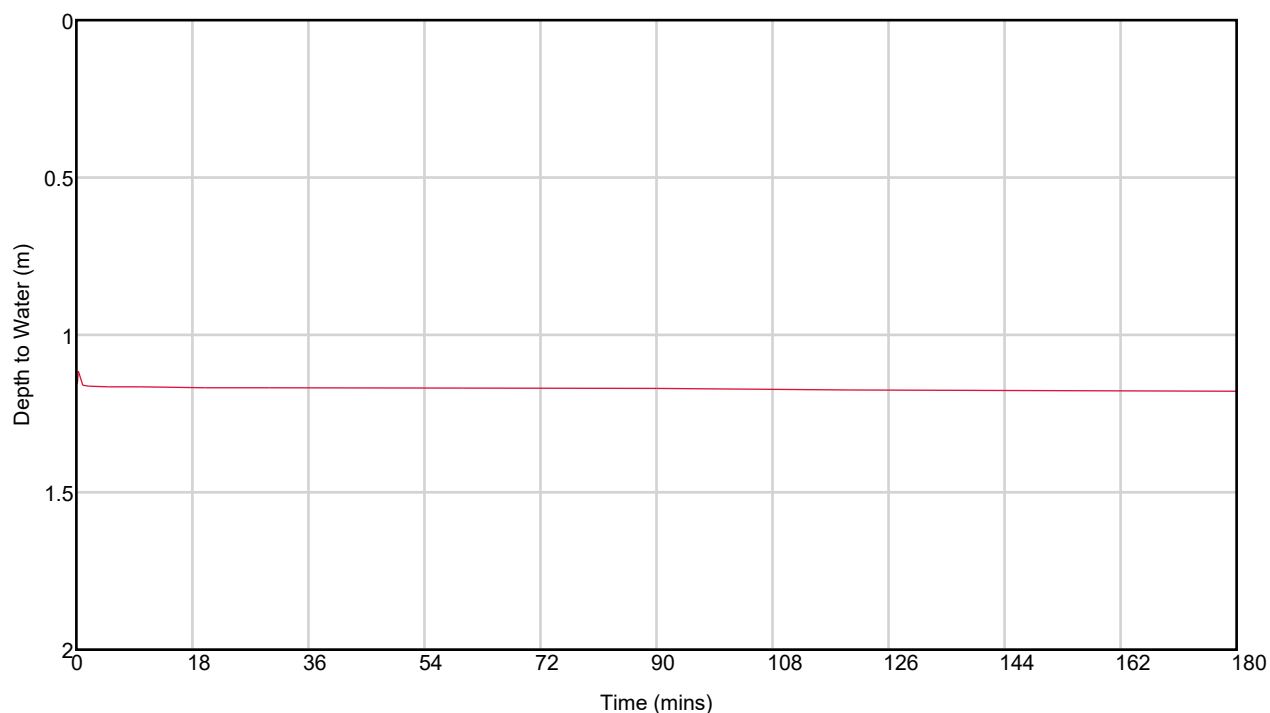
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Project Name	Graveley Road, Great Wymondeley	Date	10th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.



First Fill		Second Fill		Third Fill	
Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)	Time (mins)	Depth to Water (m)
0.00	1.153				
0.15	1.155				
0.30	1.115				
1.00	1.160				
2.00	1.163				
5.00	1.165				
10.00	1.165				
20.00	1.168				
30.00	1.168				
60.00	1.169				
90.00	1.170				
120.00	1.175				
180.00	1.179				

 Prism.NET www.prismerp.co.uk	Pit Length	2.10m	Backfill	None
	Pit Width	0.60m	Number of Cycles	One
	Pit Depth	2.80m	Page	One of Two

Soakaway Test - TP008

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Project Name	Graveley Road, Great Wymondeley	Date	10th February 2023
Project Code	IN23854	Technician	Tsungai Mudarikwa
Test	BRE Special Digest 365	Permeability	Insufficient data.

* Interpolated data. Insufficient time to complete test.					

 Prism.NET www.prismerp.co.uk	Pit Length	2.10m	Backfill	None
	Pit Width	0.60m	Number of Cycles	One
	Pit Depth	2.80m	Page	Two of Two