

David Lawn
Macar Homes (Rustington) Ltd



13 May 2025

Our ref. PM/25/3750892/R1

Dear David,

Re: Convalescent Home, Sea Road, Rustington – Additional BRE365 Infiltration Testing & Foul Water Sewer Survey

1. INTRODUCTION

Leap Environmental, a trading name of RSK Environment Ltd (hereafter referred to as **LEAP**) was appointed by Macar Homes (Rustington) Ltd (hereafter referred to as 'the client') to undertake BRE365 infiltration testing and survey the route and depth of an existing foul water sewer at the site referred to as Convalescent Home, Sea Road, Rustington. A site location plan is presented in **Appendix B** Drawing 11101.

The works were undertaken by means of **LEAP**'s fee proposal dated 25 February 2025 ref LPQ12079 including RSK Standard Terms and Conditions which forms the appointment between **LEAP** and the Client.

References in this report to 'we', 'us' or 'our' shall mean Leap Environmental as a trading name of RSK Environment Limited (company no.SC115530) at registered address 65 Sussex Street Glasgow G41 1DX.

The report should be read and used in accordance with the limitations and constraints identified in the report text, and at **Appendix A** – Service Constraints.

1.1 Objectives

It is understood by **LEAP** that Odyssey Consult LLP are in the process of drainage design for the proposed redevelopment of the northern part of the site by Macar Homes (Rustington) Ltd. To inform the design additional BRE365 infiltration testing was required at specified depths in six locations. Odyssey Consult LLP also required information on the route and invert level of an existing foul water sewer in the north of the site. The objectives of the works were as follows:

- GPS setting out, elevation measurement and GPR/EML service avoidance at six proposed trial pit locations as specified by Odyssey Consult LLP.
- Machine excavation of trial pits to depths specified by Odyssey Consult LLP (referenced to OD) and preparation for BRE365 infiltration testing with standpipes installed and gravel backfill.

RSK Group Crawley office
1 Forest Park Way,
Pease Pottage, West Sussex,
RH11 9ZG

- Infiltration testing in accordance with BRE365 with time allowance to achieve full compliance.
- Investigation to confirm route and invert level of existing foul water sewer.

1.2 Previous Reports

The site has been the subject of previous investigations by **LEAP** and others.

Infiltration testing in general accordance with BRE365 had previously been carried out by **LEAP** as part of the previous Phase III Site Investigation at the site for Sigma Homes Ltd (Report Reference LP3667/Ph3, June 2024). However, due to time constraints, in some locations at least one of the fills was not fully compliant with some only falling to 50%. Additional BRE365 infiltration testing was therefore required with sufficient time allowance to achieve full compliance.

2. BACKGROUND

2.1 Site Setting

The site is located within the rear garden of Rustington Convalescent Home Sea Road, Rustington Littlehampton BN16 2LZ (Appendix B Drawing 11101).

The approximate National Grid Reference of the site is 504337, 101526 and lies at an approximate elevation of 5 m Above Ordnance Datum (mAOD).

The site is located north of Sea Road and comprises an approximately triangular shaped area of gardens with three listed derelict buildings in the centre with a paved area in between.

The garden areas in the south of the site are divided into three by hedgerows. The most western garden of the three comprises of denser vegetation including mature trees which extend along the southern boundary. The other two garden areas in the south of the site are mainly grass areas.

A garden area is located north of the buildings on site. This area comprises dense overgrown vegetation in the northernmost part with a concreted area in the centre. A hedgerow and mature trees are located in the west of this area and a large pit was noted north of the smaller building.

The topography of the site is generally flat. In the south of the site the ground levels are slightly elevated (by approx. 1 m) along the eastern site boundary.

The site is bounded by Rustington Convalescent Home and gardens to the south with Sea Road beyond this and Rustington beach approximately 130m to the south. Mewsbrook Park is located to the north of the site and Mewsbrook lake is located 20m to the west. Residential housing bounds the site to the east.

2.2 Environmental Setting

The geology of the site has been ascertained by reference to the 1:50,000 British Geological Survey sheet EW317/322, solid and drift edition, the BGS website (www.bgs.ac.uk) and Groundsure.io. The site is mapped as being underlain by River Terrace Deposits, over Raised Beach Deposits over the

Undifferentiated White Chalk Subgroup. The boundary of River Terrace Deposits is mapped just outside the site's western boundary beyond which the Raised Beach Deposits are mapped at surface.

The superficial River Terrace Deposits soils which are mapped beneath the site are classified as a Secondary A aquifer whilst the underlying Chalk Formation is classed as Principal aquifer. The site is not situated within groundwater Source Protection Zone.

Works carried out during the previous site investigation (LP3667) confirmed the geological sequence and identified that groundwater was tidally influenced and levels fluctuate significantly over time.

3. FIELDWORK

3.1 Methodology

LEAP attended site from 10 March to 13 March 2025.

Trial pits T1 to T6 for BRE365 infiltration testing were excavated after GPS setting out and GPR/EML service avoidance on 11 March. Locations and depths were specified by Odyssey Consult LLP as shown on the client supplied Site Investigation and Infiltration Features drawing 25-043-SK001 (February 2025). T1 and T2 were initially positioned close to existing services; after discussion with the client and drainage engineer, they were moved slightly and the new coordinates recorded. Final position coordinates and elevations are shown on the Infiltration Test Locations T1 to T6 drawing 22201 in **Appendix B**.

After excavation to the required depth each pit was installed with a slotted standpipe and backfilled with 10 mm gravel ready for infiltration testing to be carried out.

Infiltration testing was carried out with the pits being filled with water on 11, 12 and 13 March. Manual measurements were made at frequent time intervals for the initial two hours after filling with a final measurement made after approximately 24 hours immediately prior to the next fill.

GPS and GPR/EML in combination with a tracer sonde were also used to trace the route of the foul water sewer in the north of the site. Depths of the invert level of the pipe within two chambers were determined by measuring from cover level at each manhole location as opposed to relying on the GPR/EML measurements. The manhole cover in the north of the site was found to be seized within its frame and so the excavator was used to slide off the entire frame. The frame and cover were moved back into place once measurements had been made.

Photographs taken during the foul water sewer investigation are included within **Appendix E**.

3.2 Ground Conditions

Trial pit logs for T1 to T6 are included in **Appendix C**. The ground conditions encountered are summarised below.

Table 1: Summary of Ground Conditions Encountered

Depth From (m)	Depth To (m)	Soil Type	Description
GL	0.2 – 0.3	TOPSOIL	Dark brown silty clay TOPSOIL
0.2	0.5	MADE GROUND	MADE GROUND comprising compacted chalk. Encountered only at position T1.
0.25 – 0.5	0.70 – 1.50	CLAY	Orange brown gravelly sandy CLAY and orange brown very sandy CLAY. RIVER TERRACE DEPOSITS
0.20 – 0.30	1.00- 1.10	SAND	Orange clayey silty SAND. Encountered at positions T4 and T5. RIVER TERRACE DEPOSITS.

4. DISCUSSION

4.1 Infiltration Testing

Infiltration testing in accordance with BRE365 was carried out at locations T1 to T6 (**Appendix B** Drawing 22201), with three tests carried out at each location.

Preliminary infiltration test results and calculations were issued to the Macar Homes (Rustington) Ltd and their drainage engineer (Odyssey Consult) on 9th April 2025. The technical review subsequently identified that the gravel backfill cell of the calculation sheet had not populated. The correct revised test results are included as **Appendix D**.

In all cases the water level fell to below 25% prior to the test being repeated and the tests are compliant. At positions T1, T3 and T4 each test was complete within approximately three hours.

4.2 Foul Water Sewer

The route of the foul water sewer in the north of the site was traced along the interconnecting pipe between two chambers, indicated as MH A and MH B on (Appendix B Drawing 12701). The tracer sonde confirmed continuation of the route in a straight line beyond MH B to the point where it is shown on the client supplied UGS (underground utilities survey) to exit the site.

The invert level of the pipe at MH A was confirmed to be 1.85 mAOD as shown on the client supplied UGS. The invert level at MH B was not recorded as part of client supplied UGS. Upon location and removal of the cover and frame during this current phase of work, the invert level at MH B was measured as 1.54 mAOD (2.18 m below the 3.72 mAOD CL).

Given the flow of water through the pipe at the time of the measurements, that the chamber at MH B contains no standing water and the short distance between the chamber and the point where the foul water sewer exits the north of the site, it is assumed that the invert level of the pipe where it exits the site is lower than the invert level at the exit of MH B.

Please do not hesitate to contact the undersigned if you require any further information.

Yours sincerely,

Author:	Technical Review:	QA/QC Check:
Peter Millis DPhil BSc	Tim Thorpe MSci ARSM FGS	Terri Hocken Administrator
01/05/2025	12/05/25	12/05/25

Enc.

- Appendix A Service Constraints
- Appendix B Figures and Drawings
- Appendix C Trial Pit Logs
- Appendix D BRE365 Infiltration Test Results
- Appendix E Photographs

APPENDIX A SERVICE CONSTRAINTS

APPENDIX A

SERVICE CONSTRAINTS

1. Service Constraints for all Reports

1.1. This Report (the "Report") and any study, inspection, investigation, sampling, testing and or interpretation carried out in connection with the Report (together the "Services") were compiled and carried out by RSK Environment Limited (RSK) trading as Carbon Zero Consulting, Leap Environmental or RSK Geosciences, for the Client named in the first paragraph of the Report (the "Client") in accordance with the terms of an RSK Fee Proposal including RSK Environment Standard Terms and Conditions (the "Appointment") between RSK and the Client, unless otherwise stated in the first paragraph of the Report. The Services were performed by RSK with the reasonable skill and care ordinarily exercised by a geo-environmental consultant at the time the Services were performed. Nothing in this Report shall be construed as imposing any fitness for purpose obligation. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the Client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the Client.

1.2 Other than that, expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services. RSK shall not be liable in respect of any action or proceedings arising out of or in connection with this Report whether in contract, in tort, for breach of statutory duty or otherwise after the expiry of six (6) years from either (i) the date of the Report or (ii) such earlier date as prescribed by law, unless varied in the terms of the Appointment.

1.3 Unless otherwise agreed in writing, the Services were performed by RSK exclusively for the purposes of the Client. RSK is not aware of any interest of or reliance by any party other than the Client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent, or condone any party, other than the Client relying upon the Services. Should this Report or any part of this Report, or details of the Services or any part of the Services, be made known to any such party, and such party relies thereon, that party does so wholly at its own and sole risk, and RSK disclaims any liability to such parties. Any such party would be well advised to seek independent advice from a competent geo-environmental consultant and/or lawyer.

1.4 The Client shall not, without the prior written consent of RSK, assign, transfer, charge, mortgage, subcontract, or deal in any other manner with all or any of the benefits provided in this Report. Unless specified in the Appointment, RSK shall not be obliged to assign the benefit of the Report whether by collateral warranty, third party rights pursuant to the Contracts (Rights of Third Parties) Act 1999, letter of reliance or otherwise. If RSK agrees to any assignment of the benefit of this Report, in whatever form, benefits to third parties through collateral warranties, third party rights or letters of reliance shall not be provided unless a fee for each right, warranty or letter is agreed. The form of wording used in the warranty or letter shall be provided by RSK for agreement by the Client. Any reasonable changes to the form of wording will be implemented by mutual agreement, however the terms in the warranty or letter cannot offer the third party any greater benefit than the Appointment offered to the Client.

1.5 It is the understanding of RSK that this Report is to be used for the purpose described in the introduction to the Report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the Report is used, or the proposed use of the site change, this Report may no longer be valid and any further use of or reliance upon the Report in those circumstances by the Client without the review and advice of RSK shall be at the Client's sole and own risk. RSK shall not be liable for any use of this Report for any purpose other than that for which it was provided.

1.6 The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the Report inaccurate or unreliable. The information and conclusions contained in this Report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the Report in the future shall be at the Client's own and sole risk.

1.7 The observations and conclusions described in this Report are based solely upon the Services which were provided pursuant to the agreement between the Client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out, or required by the Appointment between the Client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this Report, RSK did not seek to evaluate the presence on or off site of asbestos, invasive plants, electromagnetic fields, lead paint, heavy metals, radon gas, fuel storage, persistent bio-accumulative or toxic chemicals (including PFAS and related compounds) or other radioactive or hazardous materials, unless specifically identified in the Services.

1.8 The Services are based upon RSK's observations of existing physical conditions at the Site gained from a visual inspection of the site together with RSK's interpretation of desk based publicly available information, including documentation, obtained from third parties and from the Client on the history and usage of the site, unless specifically identified in the Services and the limitations below:

- a. The Services were based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely.
- b. The Services were limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the visual inspection.
- c. The Services did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the Client or third parties, including laboratories and information services, during the performance of the Services.
- d. The Client has identified in writing to RSK, the information, reports, findings, surveys and preliminary works RSK may not rely upon when providing the Services.

RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK, and including the doing of any independent investigation of the information provided to RSK, save as otherwise provided in the terms of the Appointment between the Client and RSK.

1.9 Any site drawing(s) provided in this Report is (are) not meant to be an accurate base plan for scale measurement but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for accurate setting out and should be considered indicative only.

1.10 Should RSK be requested to review the Report after the date of issue of this Report, RSK shall be entitled to additional payment at the existing rates, or such other terms as agreed between RSK and the Client.

2. Service Constraints where the Report provides an intrusive assessment of ground conditions:

2.1 The intrusive environmental ground investigation aspects of the Services are a limited sampling of soil from the site, at pre-determined locations based on the known historic / operational configuration of the site. The conclusions given in this Report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the properties of the materials adjacent and local conditions, together

with the position of any current structures and underground utilities and facilities, and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters (as stipulated in the scope agreed between the Client and RSK, based on an understanding of the available operational and historical information) and it should not be inferred that other chemical species (not tested) are not present.

2.2 The comments given in this Report and the opinions expressed are based on the ground conditions encountered during the site work and on the results of tests made in the field and in the laboratory. The extent of the exploratory holes, laboratory testing and monitoring undertaken may have been restricted due to a number of factors including accessibility, the presence of buried or overhead services, current development, site usage, timescales or the Client's specification. The exploratory holes only assess a small proportion of the site area with respect to the site as a whole, and as such may only provide an indicative assessment of ground conditions on site. There may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account. In particular, it should be noted that there may be areas of made ground not detected due to the limited nature of the investigation or the thickness and quality of made ground across the site may be variable. In addition, groundwater levels and ground gas concentrations and flows, may vary from those reported due to seasonal, or other, effects and the limitations stated in the data should be recognised. The presence of hotspots of undisclosed contamination or exceptional and unforeseen ground conditions cannot be discounted.

2.3 Where the Services include Investigation of an exploratory nature or relating to physical ground works, any costings and prices provided in the Report are estimated and provided for guidance purposes only. The actual cost and time quantities shall be remeasured and shall be dependent upon the ground or other conditions, constraints present, and number and depth of the investigation locations, which shall influence the number of samples and tests required, and the quantities of soil being classified.

2.4 Asbestos is often observed to be present in soils in discrete areas. Whilst asbestos-containing materials may have been locally encountered during the fieldworks or supporting laboratory analysis, the history of brownfield and demolition sites indicates that asbestos fibres may be present more widely in soils and aggregates, which could be encountered during more extensive ground works. However, this Report does not constitute an asbestos survey. On this basis, the presence of asbestos on site cannot be discounted and a full asbestos survey should be undertaken.

2.5 Unless stated otherwise, only preliminary geotechnical recommendations are presented in this Report and these should be verified in a Geotechnical Design Report, once proposed construction and structural design proposals are confirmed. Eurocode 7 gives guidance on the type of sampling, sample quality, number and spacing of intrusive investigations, and number of laboratory tests required. It is intended that the Geotechnical Information section of this Report will fulfil the general requirements of the Ground Investigation Report as set out in section 6 of Eurocode7, although this is subject to the restrictions imposed on the investigation, as listed above. For geotechnical design, Eurocode 7 requires the Geotechnical Design Report to address both the geotechnical and structural aspects of the geotechnical design for both the limit and serviceability states. The Geotechnical Appraisal section of this Report will not meet the requirements of a Geotechnical Design Report (GDR) and should therefore be used for preliminary guidance only.

3. Service Constraints where the Report relates to Surface Water Management:

3.1 The Surface Water Management Inspection (SWMI) Report, documents provided, observations, actions, and recommendations, with respect to the management of potential pollution issues to surface waters, made during the site Inspection visit, are those present at the time of the visit, and may not represent those recorded by others on the same day.

3.2 The comments given in this Report and the opinions expressed are based on the weather, ground and ground water conditions encountered during the site work and on the results of tests made in the field and in the laboratory. However, there may be conditions pertaining to the site that have not

been disclosed by the inspection and therefore could not be taken into account. In addition, groundwater levels and flows, may vary from those Reported due to seasonal, or other, effects and the limitations stated in the data should be recognised.

3.3 RSK places a degree of dependence upon oral information provided by site representatives, which is not readily verifiable through visual inspection, or supported by any available written documentation. RSK shall not be held responsible for conditions or consequences arising from relevant facts that were not fully disclosed by facility or site representatives at the time this Report was prepared.

3.4 This Report is a live document, to be continually reviewed and updated as the development progresses or other changes occur on site. RSK can only maintain the currency of this Report through the Client requesting support with supplementary site visits or attendance at meetings ahead of key stages of the development in relation to surface water management. Our risk rating assesses a number of risk factors in line with the source-pathway- receptor model and is therefore subject to constant change.

3.5 Standard design drawings are indicative. Material types, dimensions and construction details will need to be adjusted by the Client to suit the specific conditions / flows on Site.

3.6 The full responsibility for implementing the site-specific protection and maintenance measures to protect the surface water system as stated in this Report, remains with the Client and their site management team. Additional control measures may be required to achieve the objectives set out in the Surface Water Management Plan to be implemented and financed by the Client.

4. Service Constraints where the Report relates to Waste Management:

4.1 In accordance with the definition provided in the Waste Framework Directive (WFD), materials are only considered waste if 'they are discarded, intended to be discarded or required to be discarded, by the holder'. Naturally occurring soils are not considered waste if re-used on the site of origin for the purposes of development. Soils such as made ground that are not of clean and natural origin (irrespective of whether they are contaminated or not) and other materials such as recycled aggregate, do not necessarily become waste until the criteria above are met. Excavation arisings from the development may therefore be classified as waste if surplus to requirements and/or unsuitable for re-use.

4.2 It is the duty of the waste producer, to ensure that all waste is accurately classified prior to waste disposal. Technical Guidance WM3 (EA, 2018) sets out in its Appendix D requirements for waste sampling. It is a legal requirement to correctly assess and classify waste. The level of sampling should be proportionate to the volume of waste and its heterogeneity. Unless otherwise stated, the waste assessment presented in this Report should be considered as preliminary and further testing and assessment of the waste under the provisions of a Waste Sampling Plan may be required to obtain the necessary level of data required for basic characterisation of the waste in support of disposal.

4.3 Unless stated otherwise in the Report, information relating to historical operations at the site was not reviewed as part of the assessment by RSK. In addition, unless otherwise stated in the Services, RSK was not present during the collection of the samples nor had any input on the chemical testing suite. Therefore, the waste assessment and classification detailed in this Report are based solely on any information that were provided to RSK (e.g., laboratory chemical data, exploratory hole records) and were completed without prejudice for our Client.

4.4 RSK's assumes that any ground investigation data, chemical testing results etc., that were provided by the Client to inform the waste assessment and supporting review were carried out in accordance with current best practice and relevant guidance/ standards, where applicable. Thus, the comments given in this Report and the opinions expressed are based solely on the information provided by the Client. However, it is noted that there may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account as part of the RSK assessment.

5. Service Constraints for Construction Environmental Management Plan Reports:

5.1 This Report should be considered in the light of any changes in legislation, statutory requirement or industry practices that may have occurred subsequent to the date of issue.

5.2 The measures and comments outlined in this Report and any opinions expressed are based on the plans provided at the time and discussions with relevant parties. However, there may be conditions pertaining to the site that have not been disclosed by investigations and therefore could not be taken into account.

5.3 This CEMP is a live document and is subject to change throughout the project, as and when necessary, to ensure management of environmental aspects remains relevant, and to ensure continued compliance with legislation and commitments as they may change. RSK understands that this CEMP will be reviewed by the Client every six months and updated as and when necessary.

5.4 It is the full responsibility of the Principal Contractor/ Client to ensure that their works do not contravene legal requirements, and adherence to this CEMP alone cannot be a full defence regarding legal action against the Principal Contractor.

6. Service Constraints where the Report relates to Ground Gas Membrane Verification:

6.1 This Report is limited to the verification of the gas resistant membrane/vapour membrane/radon barrier after installation and no inspections were undertaken of the substrate (i.e. prepared ground). The Report therefore does not constitute as a full verification of ground gas protection system.

6.2 The comments given in this Report and the opinions expressed, are based on the condition of the ground gas membrane as encountered at the time of inspection by suitably qualified personnel. RSK cannot accept liability for any subsequent change to the status of the gas membrane by follow-on trades or other construction activity.

6.3 Where not designed by RSK, the verification of protection measures is carried out with reference to the gas protection design provided by the Client. RSK assume the scope of gas protection measures as determined by third parties to be correct and to have achieved any required approval from authorities.

6.4 The Ground Gas Design Report/Remediation Strategy and Verification Plan contains details of the procedures to be adopted for inspection and validation of the works. However, it should be noted that responsibility for the correct implementation of the strategy lies with the appointed contractor. RSK cannot be held responsible for any remedial works that are carried out without the agreed procedures involving either direct supervision by RSK, or inspection and validation of the works by a representative from RSK.

7. Service Constraints for Environmental Due Diligence (EDD) Reports:

7.1 The comments given in this Report and the opinions expressed are based on the information obtained and reviewed as part of the desk-based assessment. However, there may be conditions pertaining to the Site that have not been disclosed by the assessment and therefore could not be taken into account. Furthermore, no intrusive investigations, monitoring or sampling have been undertaken to confirm the environmental status of the site, therefore any comments relating to ground conditions and subsurface contamination are based solely on a review of desk-based information.

7.2 This Report describes the results of the EDD exercise. The scope of this EDD Report, where appropriate, covers legal or regulatory compliance with respect to UK or international regulations associated with environmental matters.

7.3 As with any EDD exercise, there is a certain degree of dependence upon information provided by the target company. The EDD does not include a site walkover / visit or liaison with site representatives unless identified in the Services. Therefore, the assessment is based on the available desk study information. Also, there is a certain degree of dependence upon oral information provided

by site representatives, which is not readily verifiable through visual inspection, or supported by any available written documentation. RSK shall not be held responsible for conditions or consequences arising from relevant facts that were not fully disclosed by facility or site representatives at the time this EDD exercise was performed.

7.4 This Report, including all supporting data and notes (collectively referred to hereinafter as "information"), was prepared or collected by RSK for the benefit of its Client.

7.5 The comments given in this Report and the opinions expressed are based on the information obtained and reviewed as part of the desk-based assessment and the site inspection visit. However, there may be conditions pertaining to the Site that have not been disclosed by the assessment and therefore could not be taken into account. Furthermore, no intrusive investigations, monitoring or sampling have been undertaken to confirm the environmental status of the Site therefore any comments relating to ground conditions and subsurface contamination are based solely on a review of desk-based information and observations collected during the site inspection visit.

8. Service Constraints for Ground source heat energy Reports:

8.1 It is understood that this is a desktop survey only and that there are no requirements for a site walkover, service utility survey, or provision of service plans. These services can be provided upon request if required.

8.2 At a later stage, it is possible that a thermal response test (TRT) will need to be completed, for which a test borehole will have to be drilled, and these would be costed at the time. RSK can provide all aspects of subsequent site work for a GSHP system if required.

9. Service Constraints for Water Abstraction Borehole Reports:

9.1 The Report aims principally to only identify and assess the suitability of the site for a water abstraction borehole. This Report should be considered in the light of any changes in legislation, statutory requirements, and industry practices, that have occurred subsequent to the date of the Report.

9.2 Unless stated in the Report, the opinions expressed in this Report including all comments and recommendations provided are on the basis of the information obtained from a desk-based assessment.

APPENDIX B FIGURES AND DRAWINGS



C01	12.05.25	First Issue	RT	PM	PM
Rev	Date	Amendment	Drawn	Chkd	Appd

Contains Ordnance Survey data © Crown copyright and database right 2023



1 Forest Park Way, Pease Pottage,
West Sussex, RH11 9ZG

Client	Macar Homes (Rustington) Ltd						
Project Name	Convalescent Home, Rustington						
Description	Site Location Plan						
Dimension	Size	Scale	Geolocation	Project ID	Drawing no	Rev	File name
m	A4	1:25,000	504340, 101514	3750892	11101	C01	3750892-LW-111-XX-D-G-11101-C01

DO NOT SCALE FROM THIS DRAWING



LEGEND

- Site Boundary
- Infiltration Test Location (Elevation, Eastings, Northings)

Notes:
© OpenStreetMap contributors

Rev	Date	First Issue	Amendment	RT	Drawn	PM	Chkd	Appd
C01	12.05.25							



leap
environmental

part of RSK Group
1 Forest Park Way, Peace Pottage,
West Sussex, RH11 9ZG

Client	Macar Homes (Rustington) Ltd									
Project Name	Convalescent Home, Rustington									
Description	Infiltration Test Locations T1 to T6									
Project ID	3750892	Drawing no.	22201	Revision	C01					
File name	3750892-LW-222-XX-D-G-22201-C01									
Dimensions	m		Scale	1:800	Size	A3				
0		9	18	27	36	45 m				

DO NOT SCALE FROM THIS DRAWING



LEGEND

- Site Boundary
- Investigation Location
- Sewer Pipe

Notes:
Base map provided by the client.
Drawing Ref: Rustington Convalescent Home, Sea Road, Littlehampton
UGS

Rev	Date	First Issue	RT	PM	PM
C01	12.05.25				
Amendment	Drawn	Chkd	Appd		

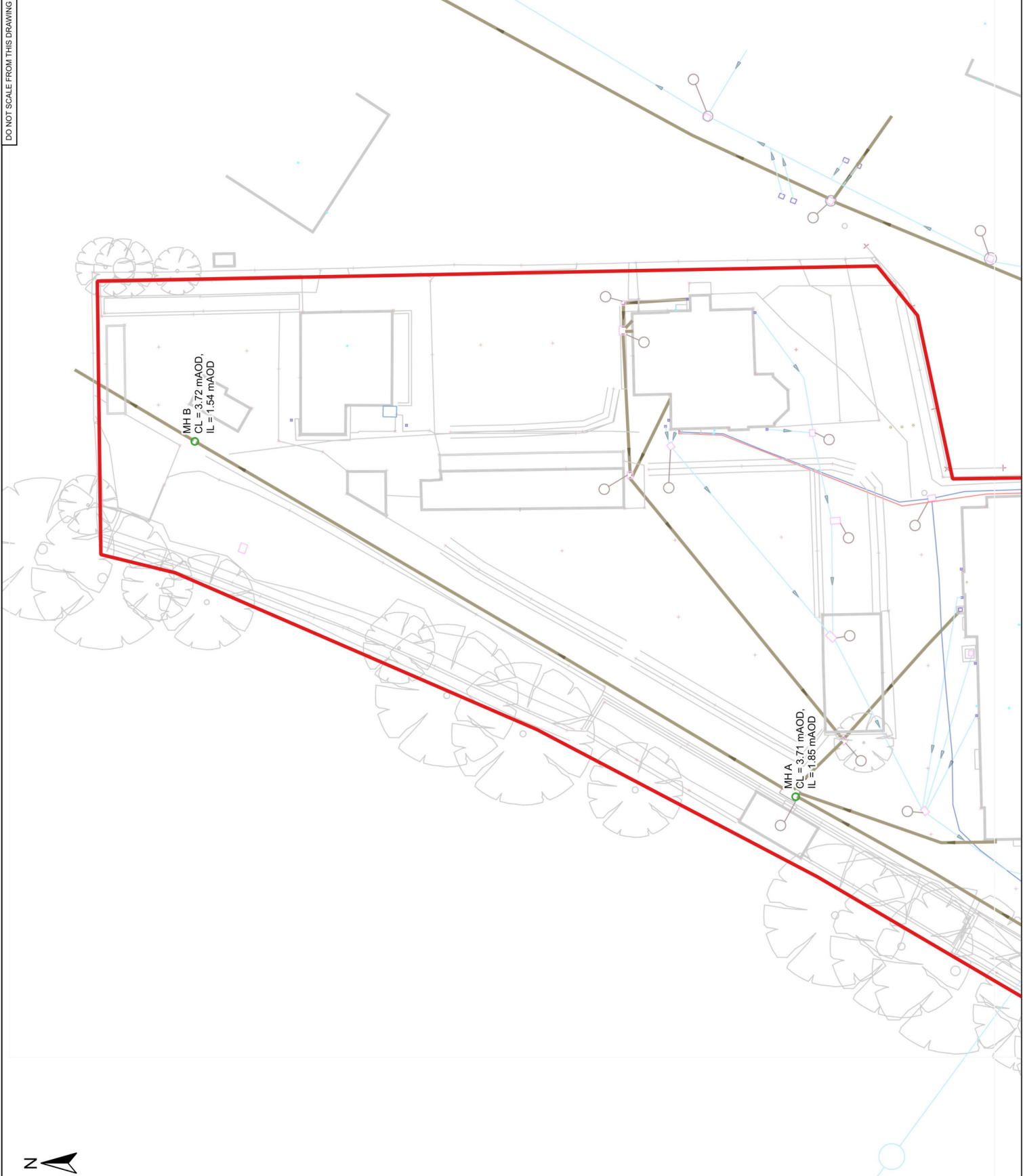


leap
environmental

part of RSK Group

1 Forest Park Way, Peace Pottage,
West Sussex, RH11 9ZG

Client	Macar Homes (Rustington) Ltd				
Project Name	Convalescent Home, Rustington				
Description	FW Sewer Investigation				
Project ID	3750892	Drawing no.	12701	Revision	C01
File name	3750892-LW-127-XX-D-G-12701-C01				
Dimensions	m	Scale	1:300	Size	A3
	0 3 6 9 12 15 m				



APPENDIX C TRIAL PIT LOGS

Trial Pit Log

Trialpit No

T1

Sheet 1 of 1

Project Name:	Convalescent Home	Additional BRE testing
---------------	-------------------	------------------------

Project No.
3750892

Co-ords: 504324 - 101571

Level: 3.66

Date _____

11/03/2025

Location: Sea Road, Rustlington, Littlehampton

Dimensions
(m):

1.5

Depth
0.76

“

Scale
1:25

Logged
PM

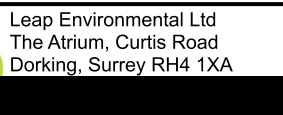
Client: Macar Developments Ltd

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
				0.20	3.46		Grass over TOPSOIL: Dark brown silty CLAY with rootlets.	1 -
							MADE GROUND: Compacted chalk.	
				0.50	3.16		Orangish brown gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse angular to sub-angular of flint.	
				0.76	2.90		----- End of pit at 0.76 m	
								2 -
								3 -
								4 -
								5 -

Remarks:	Position scanned with a CAT, Genny and GPR prior to excavation. Trial pit remained dry and stable during excavation. Trial pit terminated at 0.76m as specified by the client. Trial pit backfilled with gravel from GL to 0.76m and 150mm diameter standpipe in order to undertake soakage testing.
----------	--

Stability:

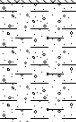




Trialpit No
T2
Sheet 1 of 1

Date	11/03/2025
------	------------

Scale 1:25
Logged PM

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
				0.30	3.19		Grass over TOPSOIL: Dark brown silty CLAY with rootlets.	1 2 3 4 5
							Orangish brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to coarse sub-rounded to sub-angular of flint.	
				0.70	2.79	End of pit at 0.70 m		



leap environmental Leap Environmental Ltd The Atrium, Curtis Road Dorking, Surrey RH4 1XA				Trial Pit Log				Trialpit No T3 Sheet 1 of 1	
Project Name: Convalescent Home Additional BRE 365 testing				Project No. 3750892		Co-ords: 504332 - 101551 Level: 3.72		Date 11/03/2025	
Location: Sea Road, Rustlington, Littlehampton						Dimensions (m): 1.5		Scale 1:25	
Client: Macar Developments Ltd						Depth 0.75		Logged PM	
Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description		
	Depth	Type	Results						
				0.25	3.47		Grass over TOPSOIL: Dark brown silty CLAY with rootlets.		
				0.75	2.97		Orangish brown very sandy CLAY. Sand is fine to coarse.		
							End of pit at 0.75 m		
							1		
							2		
							3		
							4		
							5		
Remarks:				Position scanned with a CAT, Genny and GPR prior to excavation. Trial pit remained dry and stable during excavation. Trial pit terminated at 0.75m as specified by the client. Trial hole backfilled with gravel from GL to 0.75m and 150mm diameter standpipe in order to undertake soakage testing.					
Stability:									



Trialpit No

Sheet 1 of 1

Date
10/03/2025

Logged
PM

5

Stability:





Trialpit No

Sheet 1 of 1

Date
10/03/2025

Scale
1:25

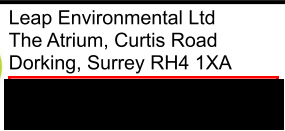
“C”

Logged
PM

5

Stability:



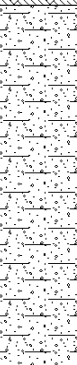


Trialpit No
T6
Sheet 1 of 1

Date
10/03/2025

Scale
1:25

Logged
PM

Water Strike	Samples and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
	Depth	Type	Results					
				0.30	4.15		Grass over TOPSOIL: Dark brown silty CLAY with rootlets.	1
							Orange silty gravelly sandy CLAY. Sand is fine to coarse. Gravel is fine to medium sub-rounded to sub-angular of flint.	
				1.50	2.95		End of pit at 1.50 m	2
								3
								4
								5

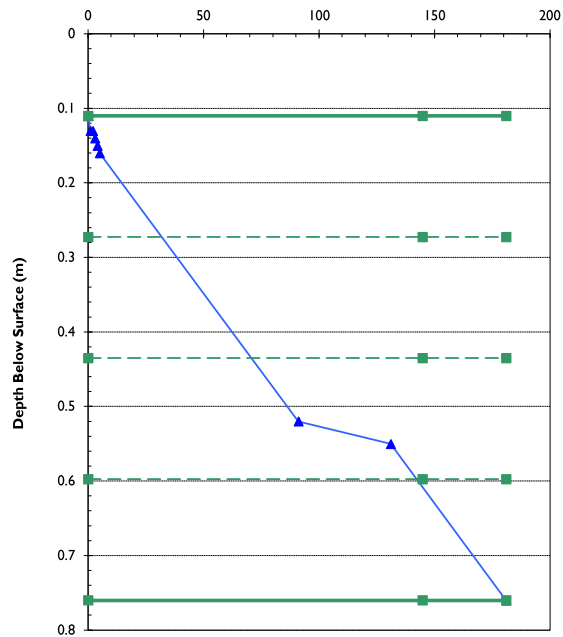
Stability:



APPENDIX D BRE365 INFILTRATION TEST RESULTS

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T1
Test No: Test No 1



Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	0.76
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.11
Max Water Dropdown during Test (m)	0.65
Total Soakage Test Time (min)	181
Mean Internal Discharge Area (m2)	2.265
Discharge Rate (litre/min)	0.92702
Soakage Rate (litre/m2/min)	0.40928
BRE Soil Infiltration Rate (m/sec)	6.82E-06

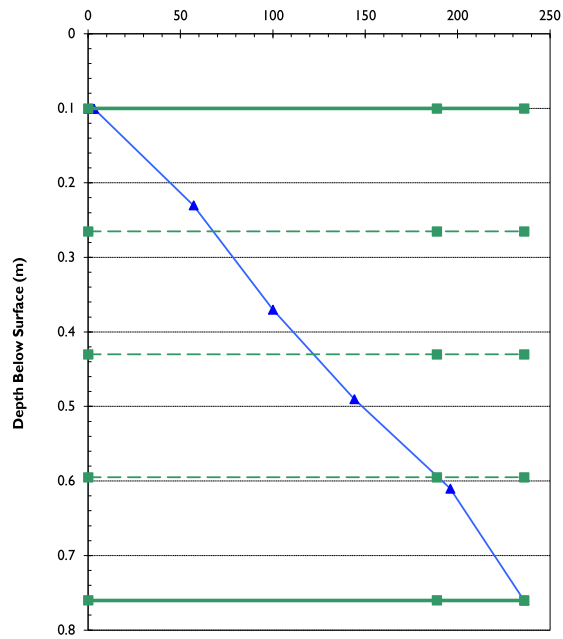
Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 11/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T1
Test No: Test No 2



Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	0.76
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
VOIDS ASSUMED FOR GRANULAR FILL (%)	35%
Depth of Water at Start of Test (m)	0.1
Max Water Dropdown during Test (m)	0.66
Total Soakage Test Time (min)	236
Mean Internal Discharge Area (m2)	2.286
Discharge Rate (litre/min)	0.853799
Soakage Rate (litre/m2/min)	0.37349
BRE Soil Infiltration Rate (m/sec)	6.22E-06

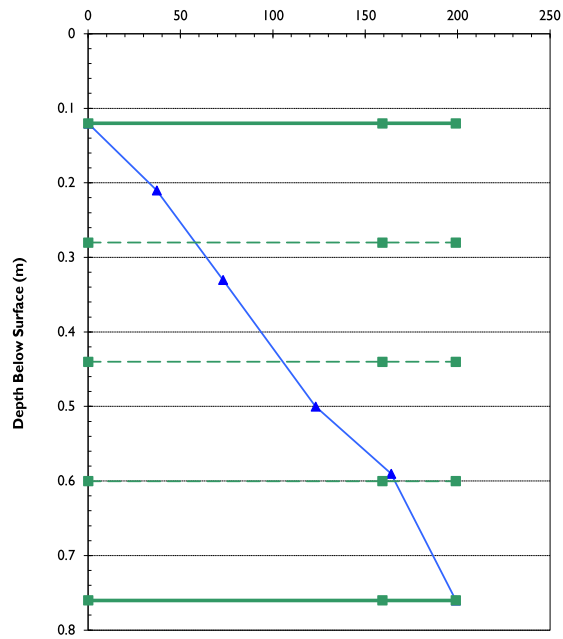
Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 12/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T1
Test No: Test No 3



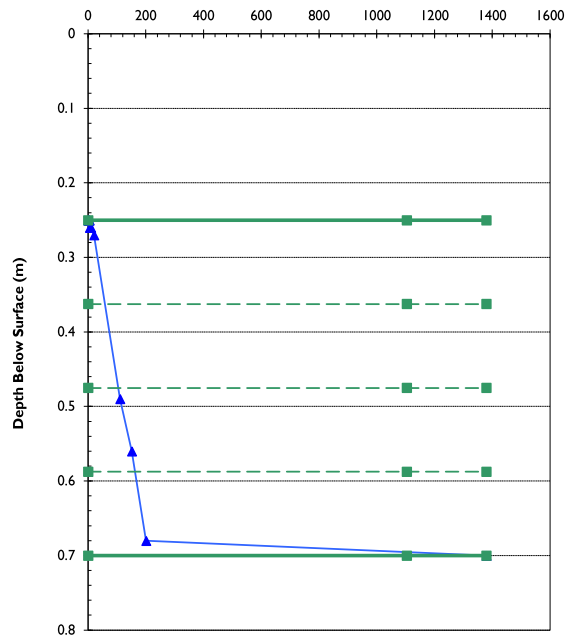
Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	0.76
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
VOIDS ASSUMED FOR GRANULAR FILL (%)	35%
Depth of Water at Start of Test (m)	0.12
Max Water Dropdown during Test (m)	0.64
Total Soakage Test Time (min)	199
Mean Internal Discharge Area (m2)	2.244
Discharge Rate (litre/min)	0.932825
Soakage Rate (litre/m2/min)	0.415698
BRE Soil Infiltration Rate (m/sec)	6.93E-06

Comments:
Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 13/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T2
Test No: Test No 1



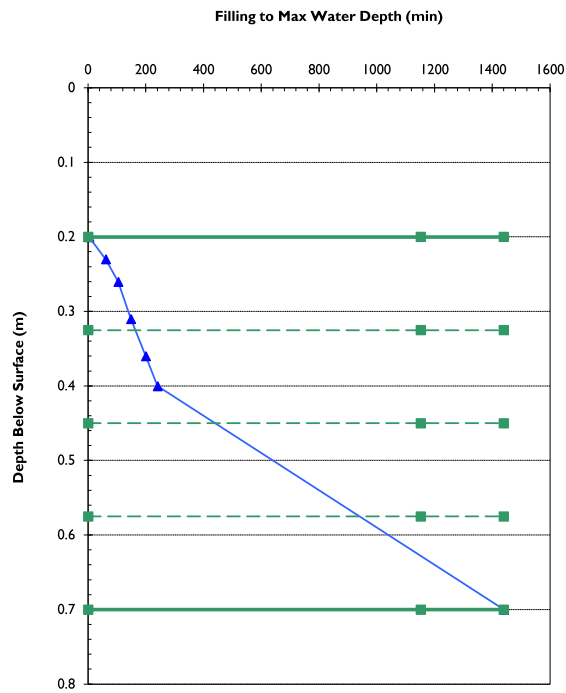
Pit Length (m)	1.2
Pit Width (m)	0.6
Depth to Pit Base (m)	0.7
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.25
Max Water Dropdown during Test (m)	0.45
Total Soakage Test Time (min)	1380
Mean Internal Discharge Area (m2)	1.53
Discharge Rate (litre/min)	0.544162
Soakage Rate (litre/m2/min)	0.355661
BRE Soil Infiltration Rate (m/sec)	5.93E-06

Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 11/03/25

BRE Digest 365 - Soakage Test



Test Hole No: T2
Test No: Test No 2



Pit Length (m)	1.2
Pit Width (m)	0.6
Depth to Pit Base (m)	0.7
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
VOIDS ASSUMED FOR GRANULAR FILL (%)	35%
Depth of Water at Start of Test (m)	0.2
Max Water Dropdown during Test (m)	0.5
Total Soakage Test Time (min)	1440
Mean Internal Discharge Area (m2)	1.62
Discharge Rate (litre/min)	0.081144
Soakage Rate (litre/m2/min)	0.050089
BRE Soil Infiltration Rate (m/sec)	8.35E-07

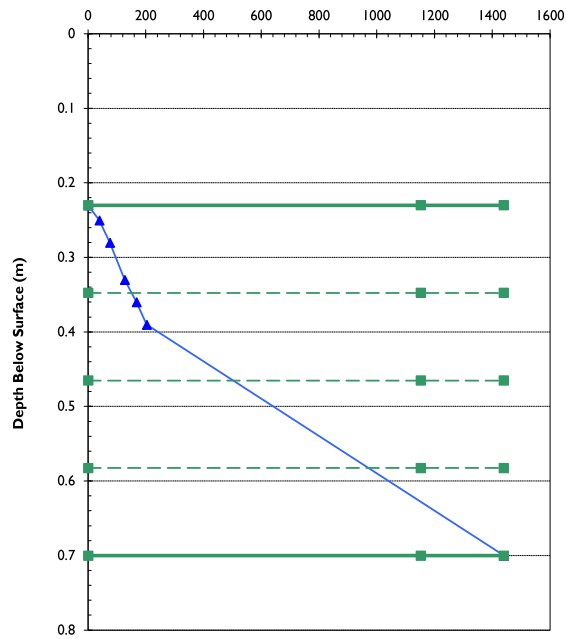
Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 12/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T2
Test No: Test No 3



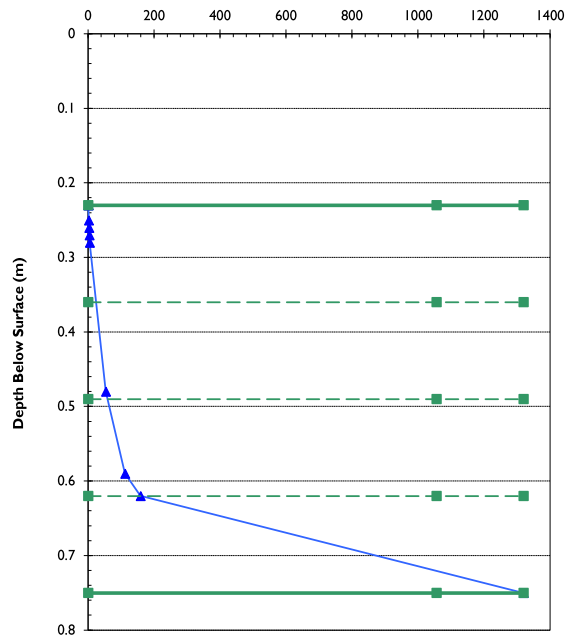
Pit Length (m)	1.2
Pit Width (m)	0.6
Depth to Pit Base (m)	0.7
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
VOIDS ASSUMED FOR GRANULAR FILL (%)	35%
Depth of Water at Start of Test (m)	0.23
Max Water Dropdown during Test (m)	0.47
Total Soakage Test Time (min)	1440
Mean Internal Discharge Area (m2)	1.566
Discharge Rate (litre/min)	0.072149
Soakage Rate (litre/m2/min)	0.046072
BRE Soil Infiltration Rate (m/sec)	7.68E-07

Comments:
Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 13/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T3
Test No: Test No 1



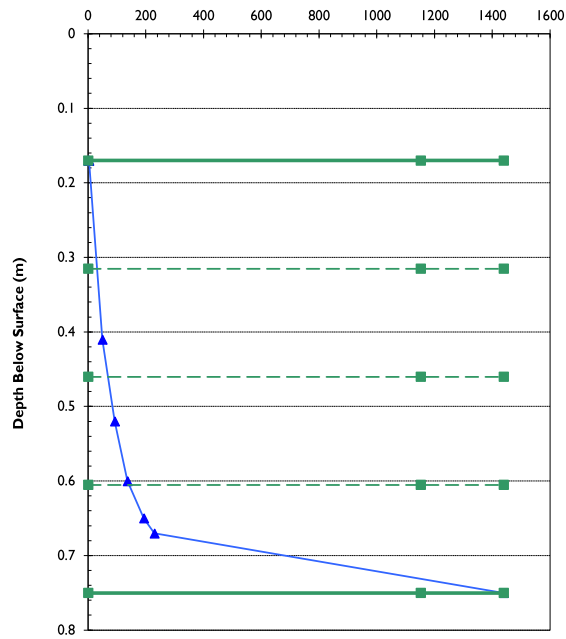
Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	0.75
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
Void Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.23
Max Water Dropdown during Test (m)	0.52
Total Soakage Test Time (min)	1320
Mean Internal Discharge Area (m2)	1.992
Discharge Rate (litre/min)	0.609375
Soakage Rate (litre/m2/min)	0.305911
BRE Soil Infiltration Rate (m/sec)	5.1E-06

Comments:
Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 11/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T3
Test No: Test No 2



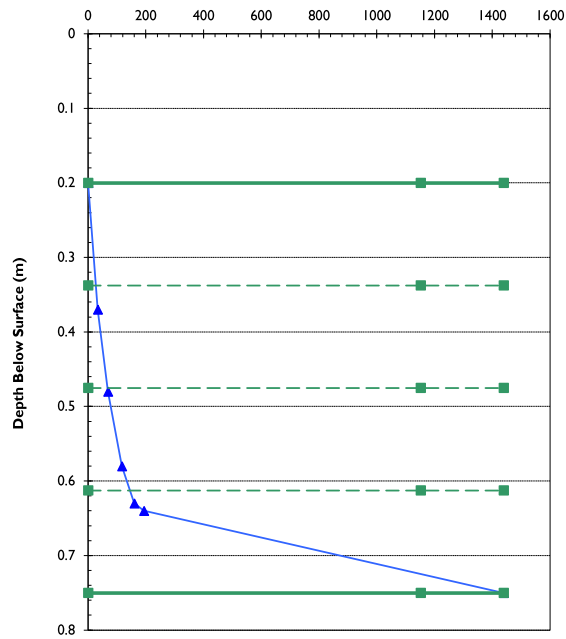
Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	0.75
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.17
Max Water Dropdown during Test (m)	0.58
Total Soakage Test Time (min)	1440
Mean Internal Discharge Area (m2)	2.118
Discharge Rate (litre/min)	0.828165
Soakage Rate (litre/m2/min)	0.391013
BRE Soil Infiltration Rate (m/sec)	6.52E-06

Comments:
Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 12/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T3
Test No: Test No 3



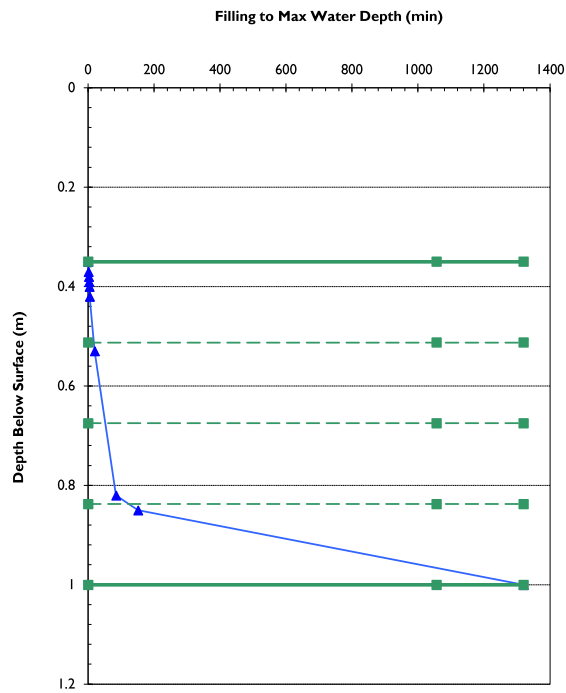
Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	0.75
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.2
Max Water Dropdown during Test (m)	0.55
Total Soakage Test Time (min)	1440
Mean Internal Discharge Area (m2)	2.055
Discharge Rate (litre/min)	0.732503
Soakage Rate (litre/m2/min)	0.356449
BRE Soil Infiltration Rate (m/sec)	5.94E-06

Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 13/03/25

BRE Digest 365 - Soakage Test



Test Hole No: T4
Test No: Test No 1



Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	1
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%

Depth of Water at Start of Test (m)	0.35
Max Water Dropdown during Test (m)	0.65
Total Soakage Test Time (min)	1320
Mean Internal Discharge Area (m2)	2.265
Discharge Rate (litre/min)	0.966838
Soakage Rate (litre/m2/min)	0.42686

BRE Soil Infiltration Rate (m/sec)	7.11E-06
------------------------------------	----------

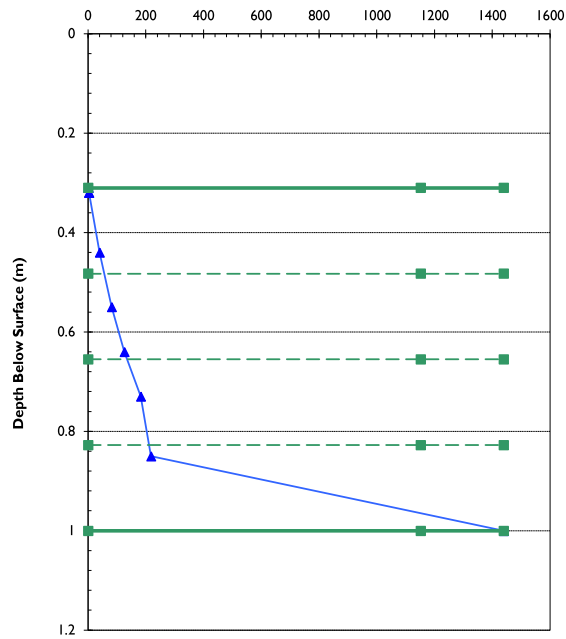
Comments:

Pit was emptied at finish of test.

Client:	Macar Developments
Site:	Convalescent Homes
Tested By:	
Test Date:	11/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T4
Test No: Test No 2



Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	1
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.31
Max Water Dropdown during Test (m)	0.69
Total Soakage Test Time (min)	1440
Mean Internal Discharge Area (m2)	2.349
Discharge Rate (litre/min)	0.701026
Soakage Rate (litre/m2/min)	0.298436
BRE Soil Infiltration Rate (m/sec)	4.97E-06

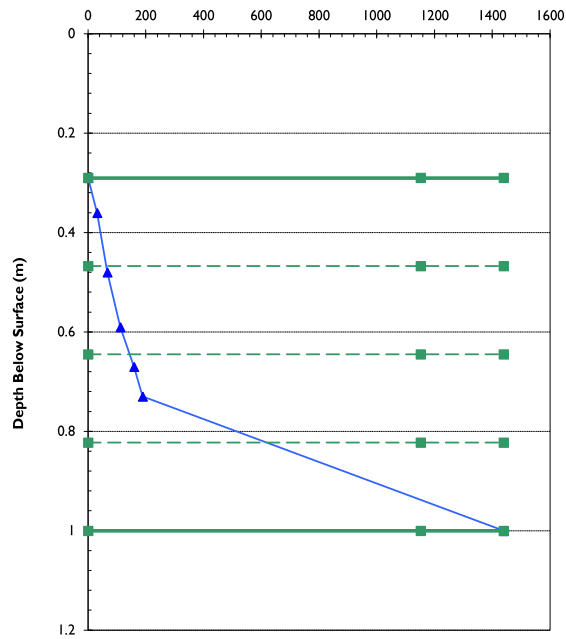
Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 12/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T4
Test No: Test No 3



Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	1
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.29
Max Water Dropdown during Test (m)	0.71
Total Soakage Test Time (min)	1440
Mean Internal Discharge Area (m2)	2.391
Discharge Rate (litre/min)	0.201729
Soakage Rate (litre/m2/min)	0.08437
BRE Soil Infiltration Rate (m/sec)	1.41E-06

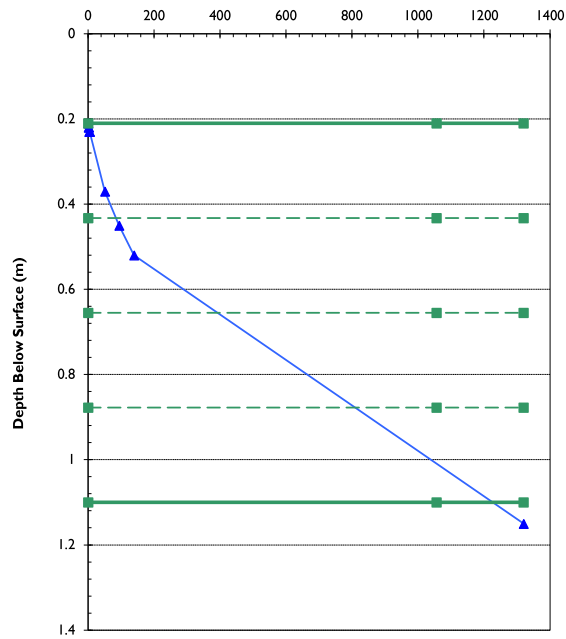
Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 13/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T5
Test No: Test No 1



Pit Length (m)	1.2
Pit Width (m)	0.6
Depth to Pit Base (m)	1.1
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.21
Max Water Dropdown during Test (m)	0.94
Total Soakage Test Time (min)	1320
Mean Internal Discharge Area (m2)	2.322
Discharge Rate (litre/min)	0.154766
Soakage Rate (litre/m2/min)	0.066652
BRE Soil Infiltration Rate (m/sec)	1.11E-06

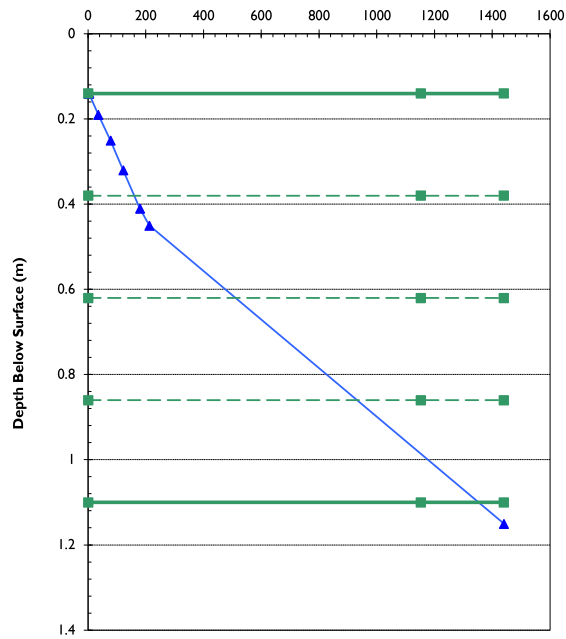
Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 11/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T5
Test No: Test No 2



Pit Length (m)	1.2
Pit Width (m)	0.6
Depth to Pit Base (m)	1.1
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.14
Max Water Dropdown during Test (m)	1.01
Total Soakage Test Time (min)	1440
Mean Internal Discharge Area (m2)	2.448
Discharge Rate (litre/min)	0.156767
Soakage Rate (litre/m2/min)	0.064039
BRE Soil Infiltration Rate (m/sec)	1.07E-06

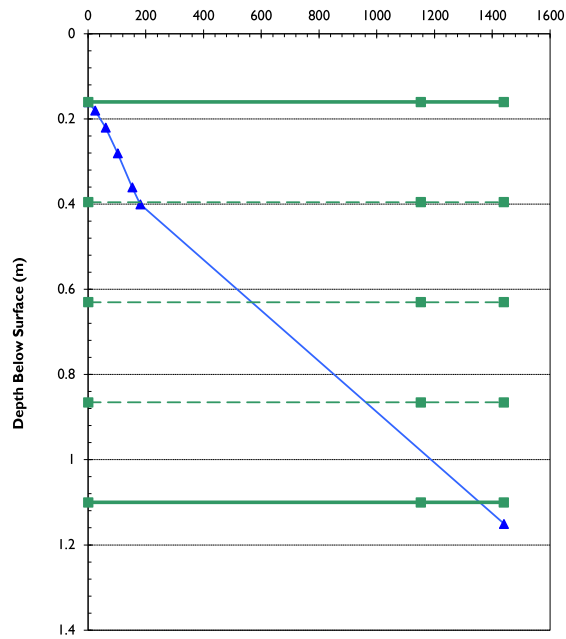
Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 12/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T5
Test No: Test No 3



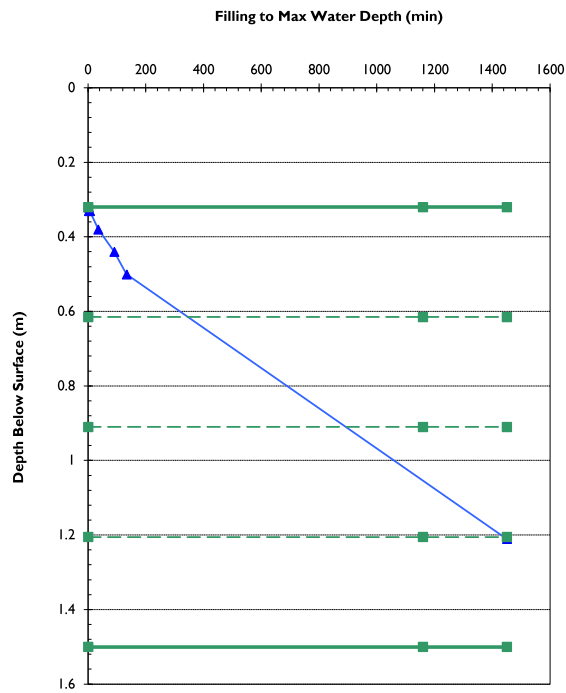
Pit Length (m)	1.2
Pit Width (m)	0.6
Depth to Pit Base (m)	1.1
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.16
Max Water Dropdown during Test (m)	0.99
Total Soakage Test Time (min)	1440
Mean Internal Discharge Area (m2)	2.412
Discharge Rate (litre/min)	0.150937
Soakage Rate (litre/m2/min)	0.062577
BRE Soil Infiltration Rate (m/sec)	1.04E-06

Comments:

Pit was emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 13/03/25

BRE Digest 365 - Soakage Test



Test Hole No: T6
Test No: Test No 1



Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	1.5
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
VOIDS Assumed for Granular Fill (%)	35%

Depth of Water at Start of Test (m)	0.32
Max Water Dropdown during Test (m)	0.89
Total Soakage Test Time (min)	1450
Mean Internal Discharge Area (m2)	3.378
Discharge Rate (litre/min)	0.169818
Soakage Rate (litre/m2/min)	0.050272

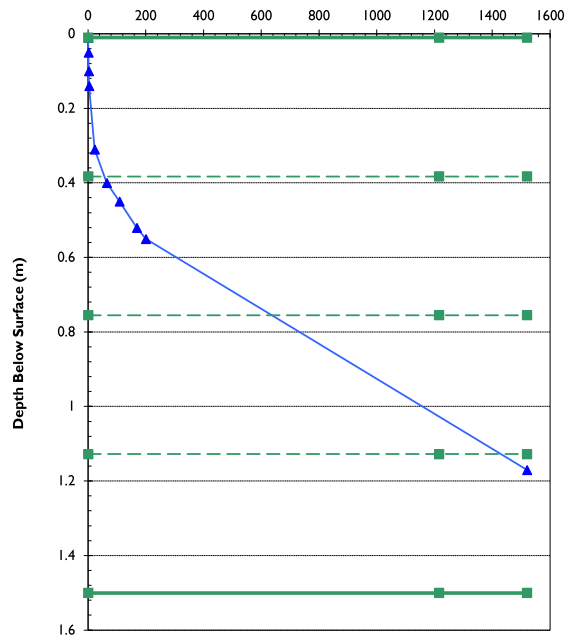
BRE Soil Infiltration Rate (m/sec)	8.38E-07
------------------------------------	----------

Comments:
Pit was nearly emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 13/03/25

BRE Digest 365 - Soakage Test

Filling to Max Water Depth (min)



Test Hole No: T6
Test No: Test No 2

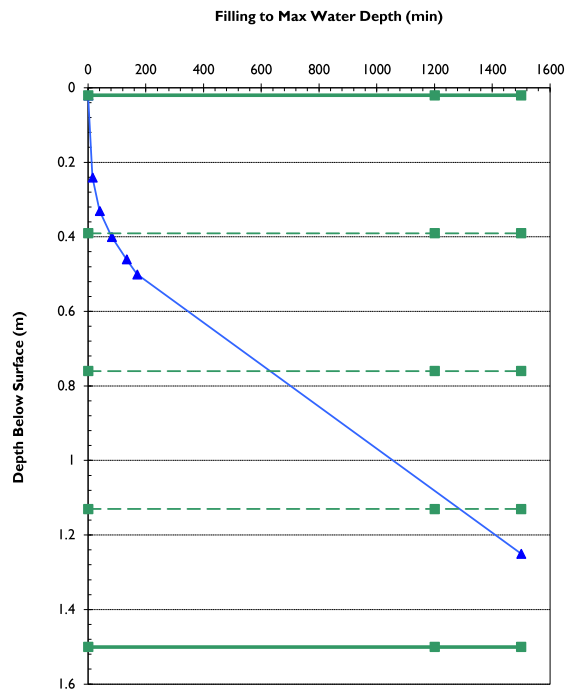


Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	1.5
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.01
Max Water Dropdown during Test (m)	1.16
Total Soakage Test Time (min)	1520
Mean Internal Discharge Area (m2)	4.029
Discharge Rate (litre/min)	0.170961
Soakage Rate (litre/m2/min)	0.042433
BRE Soil Infiltration Rate (m/sec)	7.07E-07

Comments:
Pit was nearly emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 12/03/25

BRE Digest 365 - Soakage Test



Test Hole No: T6
Test No: Test No 3



Pit Length (m)	1.5
Pit Width (m)	0.6
Depth to Pit Base (m)	1.5
Depth to Top of Permeable Soils (m)	
Depth to Groundwater Surface (m)	
Depth to Top of Granular Fill (m)	
voids Assumed for Granular Fill (%)	35%
Depth of Water at Start of Test (m)	0.02
Max Water Dropdown during Test (m)	1.23
Total Soakage Test Time (min)	1500
Mean Internal Discharge Area (m2)	4.008
Discharge Rate (litre/min)	0.192454
Soakage Rate (litre/m2/min)	0.048017
BRE Soil Infiltration Rate (m/sec)	8E-07

Comments:
Pit was nearly emptied at finish of test.

Client: Macar Developments
Site: Convalescent Homes
Tested By:
Test Date: 13/03/25

APPENDIX E PHOTOGRAPHS

PHOTOGRAPHIC LOG

Contract Reference: 3750892

Site Location: Rustington Convalescent Home, Sea Road, Rustington BN16 2LZ

MH FW

Photo No. 1

Date 10/03/2025 12:56:00

Description

FW MH seized, impossible to lift.
Unable to to up any FW pipe
from surface with GPR

Co-ordinates

50.804964913:-0.520185335



Photo No. 2

Date 10/03/2025 12:57:00

Description

Area of FW MH

Co-ordinates

50.804939202:-0.520238875



Photo No. 3

Date 10/03/2025 12:57:00

Description

Location of metal pipe picked up on GPR approx 2 m w of assumed route of FW.

Co-ordinates

50.805:-0.520269412

**Photo No. 4**

Date 10/03/2025 12:59:00

Description

Metal pipe, top at 0.88 mbgl, is either gas or DW. Diameter 100 mm.

Co-ordinates

50.804927518:-0.520285112



Photo No. 5 Date 10/03/2025 13:04:00 Description Co-ordinates 50.804959818:-0.520163209	
Photo No. 6 Date 10/03/2025 13:04:00 Description Route of FW picked up with tracer at 1.15 m Co-ordinates 50.804959818:-0.520163209	

Photo No. 7

Date 10/03/2025 14:52:00

Description

Co-ordinates

50.804949702:-0.520169615



Photo No. 8

Date 10/03/2025 14:53:00

Description

Co-ordinates

50.804976179:-0.52015378



Photo No. 9

Date 10/03/2025 14:53:00

Description

Invert level northern FW MH
1.95 + 0.18 m + 0.05 brick and
pug total invert level 2.18 m. CL
from topo is 3.72 mAOD

Co-ordinates

50.804989179:-0.520161652

**Photo No. 10**

Date 10/03/2025 14:55:00

Description

Cover 0.18 m

Co-ordinates

50.804985833:-0.520149969



Photo No. 11

Date 10/03/2025 15:02:00

Description

Cover replaced

Co-ordinates

50.804898776:-0.520170583

**Photo No. 12**

Date 10/03/2025 15:04:00

Description**Co-ordinates**

50.804966428:-0.520194198



Photo No. 13

Date 10/03/2025 15:10:00

Description**Co-ordinates**

50.804549607:-0.520600719

**Photo No. 14**

Date 10/03/2025 15:10:00

Description

Traced from this MH outside small building to MH in north of site and beyond follows straight line as shown on client supplied drawing. From topo CL 3.71 mAOD

Co-ordinates

50.804550074:-0.520600847



Photo No. 15

Date 10/03/2025 15:10:00

Description

Location of MH where tracer
inserted

Co-ordinates

50.804550223:-0.520600786

