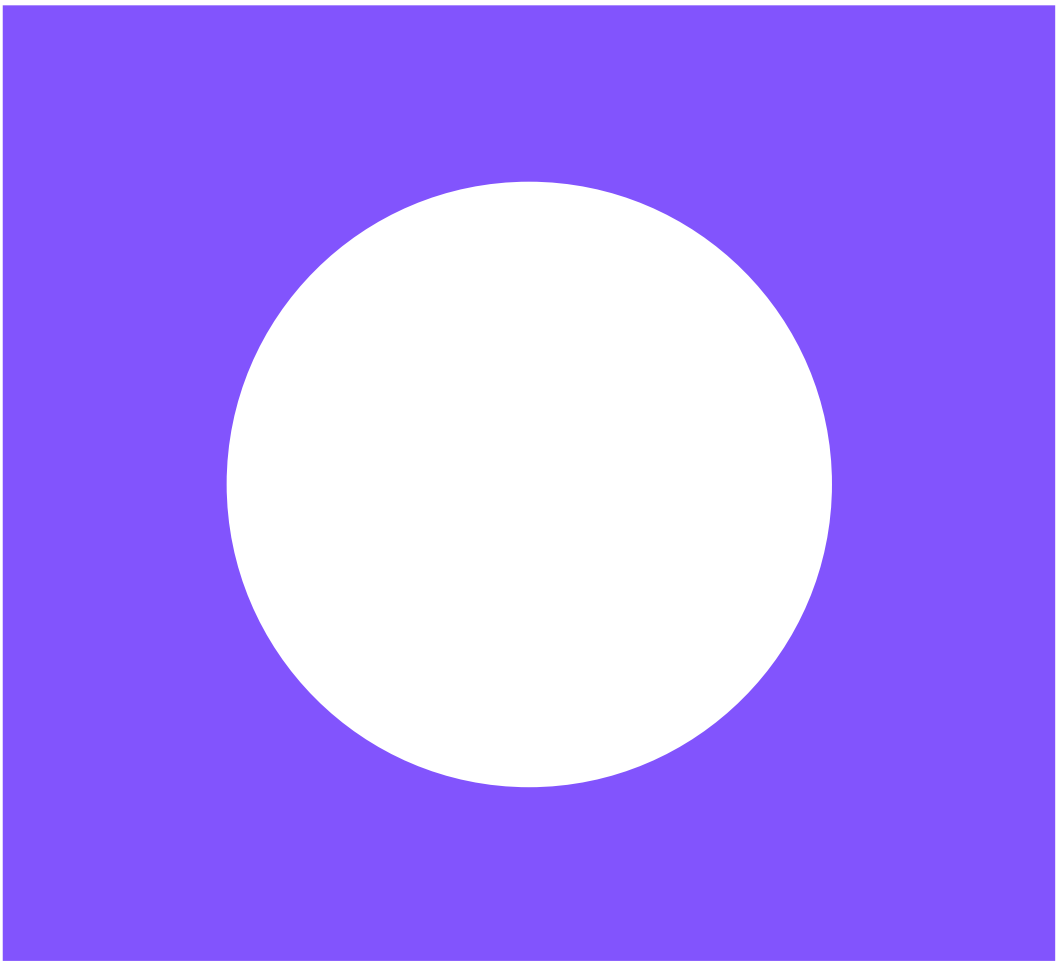
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Salisbury DASH

Ground Investigation Report

July 2026

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Salisbury DASH

Ground Investigation Report

July 2026

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1 Introduction

Salisbury National Health Service (NHS) Foundation Trust has commissioned Mott MacDonald Limited (MML) to complete RIBA 3 design works for the development of a new Diagnostic and Surgical Hub (DASH) located at Salisbury District Hospital. The location of the site in context to the wider area and Salisbury District Hospital is shown in Figure 1.1.

As part of the commission, Mott MacDonald Limited was required to scope, design, supervise and report on the findings of a Ground Investigation (GI) undertaken to characterise the ground and groundwater conditions at the proposed site, and provide an interpretation of the geotechnical and geo-environmental information to inform the design of the proposed development.

Figure 1.1: Site Location Plan



Source: Mott MacDonald Limited 2026

1.1 Proposed Development

The proposed works comprises a split-level building due to the site's topography, presenting as two storeys in the southern side increasing to three storeys in the north.

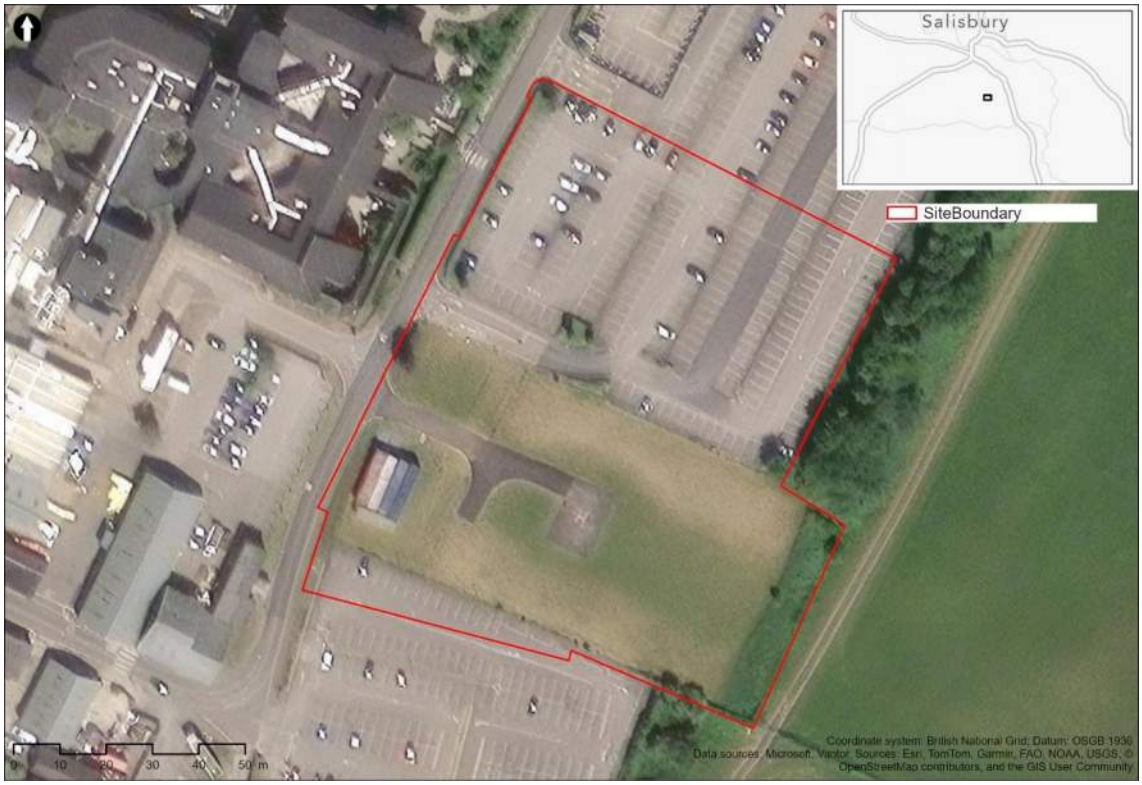
The proposed works will consist of;

- A diagnostics and surgical hub which includes imaging, endoscopy unit, theatres, staff spaces, plant room and an entrance with associated infrastructure such as access roads and external plant compound.

- Soakaways will be utilised to disperse surface water run-off from buildings and hardstanding areas.

The site layout at the time of investigation can be seen in Figure 1.2 with the layout for the proposed presented in Figure 1.3 below.

Figure 1.2: Site Layout Plan



Source: Mott MacDonald Limited 2026

Figure 1.3: Proposed Layout Drawing



Source: Annotated excerpt from Colour-udl Landscape General Arrangement Plan Cost Reduction Option, drawing reference no. STECC-COL-XX-XX-D-L-1001, P122, dated 13th July 2026

1.2 Objectives of the Report

The objectives of this report are as follows:

- Summarise the site-specific GI data, including laboratory test data, for works undertaken at the site in January 2026, as well as consideration of historical site information to inform the understanding of the site;
- Present a ground model in accordance with Eurocode 7 (BS EN 1997-1:2024) based on information provided from the ground investigation data;
- Present and evaluate the results of geotechnical in-situ and laboratory tests on soil samples obtained during the GI.
- Provide an evaluation and summary of groundwater monitoring information.
- Highlight geotechnical risks or considerations for the proposed development and provide recommendations for high-level mitigation measures to any ground related risks.
- Provide a geoenvironmental assessment for the site.

- Provide conclusions and recommendations in relation to the proposed development and outline any additional assessment/investigations required.

1.3 Sources of Information

This report includes, or refers to, information from the following key reference documents:

- Mott MacDonald Limited, 'Salisbury Diagnostic and Surgical Hub, Geotechnical and Geo-environmental Desk Study' (report ref: STECC-MMD-XX-XX-RP-GE-100001, P08, dated July 2026)
- Mott MacDonald Limited, 'Salisbury Diagnostic and Surgical Hub, Ground Investigation Specification' (report ref: STECC-MMD-ZZ-ZZ-RP-GE-92001, P04, dated February 2026)
- Geotechnics, 'Salisbury District Hospital Elective Care Centre, Ground Investigation Factual Report', (report ref: PE262018, dated June 2026)

1.4 Limitations and Responsibilities for Information

The following limitations are associated with the discussion and evaluation described herein and conclusions drawn from this report.

To the extent that this GIR is based on information gathered during the GI works, persons using or relying on it should recognise that any such investigation can examine only a fraction of the subsurface conditions which have inherent natural variability. Intrusive investigations are based on sampling at localised points and as such there remains a risk that unforeseen ground conditions or ground contamination may not be identified.

This report is based on the development proposals described in Section 1.1. Should the development proposals change during design development or new information become available, then the recommendations and conclusions of this report should be re-assessed.

A review of potential impacts from climate change on controlled waters at the proposed development has been undertaken in accordance with current best practice in brownfield risk assessment. Mott MacDonald Limited have not undertaken any climate modelling and rely solely on freely available data on climate projections, nor has independently verified the observational or projection data and does not accept responsibility or liability for any inaccuracies or shortcomings in this information.

2 Site Description

A Geotechnical and Geo-environmental Desk Study Report was produced by Mott MacDonald Limited in June 2026. Reference should be made to the Desk Study for further details; however, a summary of pertinent information including the site and surrounding setting, walkover observations and historical site development and usage is included below.

2.1 Site Details and History

A general description of the site and a summary of pertinent site information is provided in Table 2.1 below.

Table 2.1: Site Details

Aspect		Comment
Site Location		Salisbury District Hospital situated approximately 3km south of Salisbury city centre.
National Grid Reference (NGR)		The site is centred at approximately 415121,127244.
Ground Cover and Land Use		The southern portion of the subject site comprised a Helipad with a surrounding soft landscaping area. The northern portion of the subject site comprised a staff car park referred to as 'Car park 9' and part of the patient/visitor 'Car park 8'.
Site Area		Approximately 0.82 hectares (ha)
Topography		The topography of the subject site ranges from approximately 87m to 80 OD (Meters above Ordnance Datum) sloping down from southwest to northeast.
Site Access		Access to the site can be gained via an access road named Vicotria Drive East which forms the main road through the Salisbury District Hospital site.
Environmental Designations		The site is located within a Nitrate Vulnerable Zone. There are no noted Special Protection Areas (SPA) within 1km of the site.
UXO		Preliminary UXO Threat Assessment indicates that it is likely for UXO to be encountered on the site.
Surrounding Area	North	The northern portion of the site forms part of a car park (Car Park 8 & 9) which continues to extend to the northeast parallel to Victoria Drive East.
	South	Staff Car Park 10 is present to the south of the site which is bound by a vegetated bund to the east and south.
	East	The eastern site boundary of the existing Car Park 8 & 9 is partially formed of a dense tree lined bund .
	West	Victoria Drive East forms the western boundary with Car Park 7 and hospital buildings situated immediately beyond this.
Site History	On-site	A review of earliest available mapping (from 1886) indicates that the site comprised undeveloped agricultural land until 1992 when a helipad is first shown on the mapping to occupy the southern portion of the site. By 1993 a car park is shown to form the northern portion of the site with a bund and tree line forming the eastern boundary of the car park. The helipad is seen to evolve in size with online aerial imagery from 2024 showing a much larger helipad extended southwards towards the site boundary.
	Off-site	From the earliest available mapping (1886), the surrounding area is shown to comprise vacant, presumably agricultural land. A road forms the western site boundary, and a footpath forms the southern boundary extents. The town of Britford can be seen located approximately 1km northeast and the town of Odstock located approximately 1km south of the site. Four pits can also be seen within 1km of the site with the closest noted as a gravel pit approximately 500m north of the site. By 1962 Odstock General Hospital was developed west of the site with associated buildings and infrastructure denoted on mapping. Three tanks were noted to be located approximately 200m and 250m southwest of the site associated with the hospital. In addition, a sewage works was situated approximately 400m southeast of the site.

Aspect	Comment
	The hospital expanded over the years and was renamed as Salisbury District Hospital from 1996. Land immediately surrounding the hospital site has remained as agricultural since the time of earliest mapping.

2.2 Published Geology

A review of published geology beneath the site has been summarised below based on the findings from the Mott MacDonald Desk Study, and references therein.

2.2.1 Artificial / Made Ground

The British Geological Survey (BGS) 1:10,000 scale geological mapping shows the presence of Landscaped Ground across the site and immediate surrounding area. Landscaped Ground is defined by the BGS as an area where the land surface (natural or artificial) has been lowered or raised because of man-made excavations such as roads and pavements. Based on the site current use it is likely that reworked materials will be encountered on site in relation to the car parks and helipad.

2.2.2 Superficial Deposits

BGS mapping indicates that there are no mapped superficial strata within the footprint of the proposed site. The closest mapped superficial deposits are noted approximately 350m northeast of the site as Head Deposits. These are defined by the BGS Lexicon as "*Head is poorly sorted and poorly stratified, angular rock debris and/or clayey hillwash and soil creep. Polymict deposit: comprises gravel, sand and clay depending on upslope source and distance from source. Locally with lenses of silt, clay or peat and organic material.*"

The absence of mapped superficial deposits across the site suggests that bedrock geology could be at or near to current ground levels, directly underlying any Worked Ground that may present.

2.2.3 Bedrock Geology

The BGS mapping indicates that the entire site and the surrounding area is underlain by the Culver Chalk Formation, likely at or near surface due to the absence of mapped superficial deposits. The unit is gently dipping to the southeast.

The Culver Chalk Formation forms part of the White Chalk Subgroup and is composed of soft white Chalk with large nodular flint seams and many thin marl seams, as defined by the BGS. The lower boundary is conformable where the unit overlies the Newhaven Chalk Formation. The upper boundary is conformable at the Portsdown Marls of the overlying Portsdown Chalk Formation. The BGS geological memoir indicates that the unit is between 35 and 45m thick within the Salisbury area.

2.2.4 Structural Geology

BGS mapping does not detail the presence of any structural features (e.g. faults) within the site boundary or within a 500m radius of the site, with the nearest fault (Mere Fault) mapped approximately 900m south of the site. Although no features are recorded, this does not preclude the potential presence of small and/or unmapped faults and folds.

2.2.5 Mining and Quarrying

2.2.5.1 Coal Mining

The Mining Remediation Authority online viewer indicates that the site is not located within a Coal Mining Reporting Area or a development high risk area.

2.2.5.2 Non-Coal Mining

No mining or quarrying is recorded beneath the site or in the immediate surrounding area. BGS records indicate the presence of one disused workings located 350m east of the site. In addition, there are two BGS recorded mineral sites within 1km of the site. These comprise Manor Farm Gravel Pit 545m north of the site and Bridge Farm Chalk Pit 797m northwest of the site.

2.2.6 Ground Dissolution

Consideration should be given to the weathering of the Chalk bedrock (Culver Chalk Formation) underlying the site location, and the variable depth to rockhead across the site area. Weathering of this Chalk surface can result in the formation of dissolution features on varying size and scale which can lead to variable strata elevations, the potential for encountering loose deposits, changes in groundwater inflow and possible uncontrolled surface settlement. The BGS Karst Report Series has been reviewed for the Salisbury area and shows that surface depressions, cavities and karst features have variably been identified within the wider Salisbury area within the Culver Chalk Formation.

2.3 Preliminary Ground Model

A review of the BGS database details there are no historical borehole records for the site or immediate area. However, two historical ground investigations have been undertaken approximately 110m northwest on the wider Salisbury District Hospital site by CJ Associates Geotechnical Limited in 2008 and 2022. A detailed review of these investigations is presented within the Geotechnical and Geo-environmental Desk Study; however, the relevant information to better understand the site ground model has been utilised within this report.

Table 2.2 presents the preliminary ground model derived for the site area. It should however be noted that due to the distance of the historical ground investigation from the subject site, the data is indicative only of what conditions could be encountered on site.

Table 2.2: Preliminary Ground Model Considering Historical GI Data

Strata	Top of Strata (m bgl)	Anticipated Thickness (m)	Typical Description
Made/ Worked Ground ● Grass over Topsoil ● Hardstanding (Asphalt and/or Concrete). ● Cohesive/ granular Made Ground/ Worked Ground.	0.00	0.15 – 1.0	Grass underlain by Topsoil expected to be encountered at the proposed site. Asphalt and concrete are likely to be encountered, due to the presence of a car park and helipad in the north and south of the site respectively. Made Ground/ Worked Ground composition likely to be variable. Nearby GI recorded: ● SAND with occasional fragments of wood, red brick, and porcelain. ● CLAY / clayey SILT with gravel of chalk, flint and brick.

Strata	Top of Strata (m bgl)	Anticipated Thickness (m)	Typical Description
Possible Reworked Culver Chalk Formation	0.5 – 0.6	0.8 – 0.9	Cream and light brown slightly clayey sandy angular to sub-angular fine to coarse GRAVEL of Chalk and occasional flint.
Culver Chalk Formation (Grade Dc)	0.36 – 1.4	6.0* - 8.0*	Structureless CHALK comprising of extremely weak to very weak slightly clayey sandy angular to subangular fine to coarse gravel of Chalk and occasional flint.

* Depth and thickness are unproven

2.3.1 Groundwater

Groundwater monitoring records from the historical GI indicate that there could be shallow groundwater within the chalk less than 5m bgl, however there could also be perched ground water present beneath the proposed site.

2.4 Preliminary Contaminated Land Considerations

A preliminary geoenvironmental risk assessment was undertaken as part of the Mott MacDonald Geotechnical and Geo-environmental Desk Study Report, a summary of which is presented below.

2.4.1 Sources, Pathways and Receptors

The following preliminary sources, pathways and receptors were identified at the site as part of the preliminary contaminated land risk assessment.

Table 2.3: Sources, Pathways and Receptors

Sources, Pathways and Receptors	Details	Contaminants of Concern
Sources	**S1**: Made Ground associated with mapped 'Worked Ground' and subsequent construction of existing carpark and helipad (On site)	Heavy metals, Total Petroleum Hydrocarbons (TPH), Polycyclic Aromatic Hydrocarbons (PAH), Inorganics, asbestos, pH, ground gas/vapours
	S2: Spillages and leakages of fuel, oil and lubricants from parked vehicles or helicopters.(On site)	TPH, PAH, vapours, organics
	S3: Spillages of unknown contaminants from on-site storage containers.(On site)	
	S4: Spillages and leakages of fuel, oil and lubricants from parked vehicles in adjacent carpark.(Offsite)	
	S5: Leakages of tanks associated with hospital site.(Offsite)	
Pathways	**P1**: Human health uptake pathways (inhalation, ingestion and direct contact) **P2**: Direct contact with buried structures and services **P3**: Surface water run-off **P4**: Vertical/horizontal contaminant migration in groundwater **P5**: Plant uptake	

Sources, Pathways and Receptors	Details	Contaminants of Concern
Receptors	**R1:** Construction workers **R2:** Site personnel and future site users **R3**: Buried structures and services (e.g. buried concrete, utilities) **R4:** Groundwater (Principal aquifer) **R5:** Landscaping and Planting	

2.4.2 Preliminary Risk Assessment

The preliminary contaminated land risk assessment concluded the following potential risks to be present within the site:

- The risk to construction workers via human health uptake was considered to be low.
- The risk to site personnel and future site users via human health update was considered to be moderate/low.
- The site to landscaping/planting and site personnel and future site users via plant uptake was considered to be very low.
- The risk to buried structures was considered to be moderate/low.
- The risk to the groundwater environment (principal aquifer) via surface run-off and migration was considered to be low.

3 Interpretation of Ground Investigation

To support the proposed development, a GI was scoped by Mott MacDonald Limited (document reference: STECC-MMD-ZZ-ZZ-RP-GE-920001, P04, dated February 2026) to characterise the ground and groundwater conditions.

The GI was undertaken between 25 February and 3 March 2026 by Geotechnics. Mott MacDonald Limited acted as Investigation Supervisor and provided remote support throughout the fieldworks. The GI works involved intrusive fieldworks with in-situ testing. Subsequent post-fieldwork activities include ground gas monitoring, groundwater level monitoring, geo-environmental and geotechnical laboratory testing, and the production of a factual ground investigation report.

The ground investigation findings are detailed in the Geotechnics Factual Report (document reference: PE262018, Rep003 Rev 11.3, dated June 2026) which can be found within Appendix A.

This report presents a summary of the geotechnical findings of the ground investigation works undertaken. The geo-environmental findings are discussed within Section 5 of this report.

3.1 Overview of Site-specific Ground Investigation

The site-specific ground investigation works were completed between 25 February and 3 March 2026 and comprised the following:

- 4 No. Dynamic Sampling with Rotary follow-on boreholes (BH01 – BH04) advanced to depths of up to 15.00m;
- 3 No. Machine Excavated Trial Pits (TP01, TP02 & TP02A) advanced to depths between 2.00 – 3.00m;
- 1 No. Soakaway Test to BRE DG365 methodology was undertaken within TP02A location between 1.00 – 2.00m depth to provide information for drainage design;
- Dynamic Cone Penetration Tests (DCP01 – DCP03) were undertaken at 3 No. locations with 2 No. tests per location to provide values to inform on pavement design;
- In-situ testing comprising Standard Penetration Tests (SPT) undertaken in each borehole and Hand Shear Vane and Hand Penetrometer testing within Inspection Pits and Trial Pits;
- 4 No. Borehole groundwater monitoring installations with eight subsequent monitoring rounds between 4 March and 28 May 2026;
- Geotechnical and geo-environmental laboratory testing of soil and groundwater samples;
- Figure 3.2 below indicates the locations of the exploratory holes undertaken as part of the site-specific GI works.

Figure 3.1: Exploratory Hole Plan



Source: Mott MacDonald 2026

3.2 Ground Model

A review of the recent site-specific GI data has been undertaken and is summarised in the following sections below. This has been used alongside existing data available for the wider hospital site area to formulate a high-level ground model for the subject site area, as summarised in

Table 3.1: Ground Model

Strata	Top Level (m OD)	Top Depth (m bgl)	Thickness (m)	Remarks
Made Ground: Asphalt – up to 0.12m thickness (Locations DCP01 – DCP03, BH01 and BH02 only). Overlying; Slightly sandy slightly clayey GRAVEL of fine to coarse angular to subangular limestone. Locally recorded as very sandy and clayey to very clayey. Unit considered representative of hardstanding subbase material Overlying; Material described as 'Probable Made Ground' comprising firm brown slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to coarse flint and chalk with localised flint cobble content. BH04 - Where hardstanding was absent: Grass over firm to stiff brown slightly sandy slightly gravelly CLAY with occasional rootlets. Gravel is angular to subangular fine to coarse flint.	82.98 – 85.61	0.00	0.45 – 0.65	Layer of Asphalt recorded within positions within north of the site up to 0.12m thickness. Subbase unit only encountered within positions undertaken within the north of the site where Asphalt was encountered. Noted up to 0.41m thickness. Probable Made Ground' termed by GI contractor within BH02, DCP01 and DCP03.
Topsoil: Dark brown sightly sandy gravelly CLAY with occasional rootlets. Gravel is subangular fine to coarse Chalk and flint.	84.98 – 86.63	0.00 – 0.30	0.15 – 0.30	Only encountered within TP locations and BH03 within the southern extents of the site. Low cobble content of angular flint recorded within BH03 0.00 – 0.30m.
Head Deposits: Firm light brown slightly sandy slightly gravelly CLAY with low cobbles content of subangular to angular flint. Gravel is of subangular to angular fine to coarse flint and Chalk.	84.84 – 86.48	0.15 – 0.35	0.15 – 0. 20	Only encountered within TP01, TP02 and TP02A.
Chalk: Structureless: Structureless CHALK mainly composed of slightly sandy silty GRAVEL (Grade Dc) and minor slightly gravelly to gravelly SILT (Grade Dm). Clasts are extremely weak to very weak low to medium density. Occasional fine to coarse flint gravel throughout. Transition Zone from structureless to structured chalk around 3-4m bgl. Structured: Very weak, locally extremely weak, low density white with frequent black specs CHALK. Observable fractures extremely closely to closely spaces. Nodular flint noted locally throughout. (Grades B3-B4, C5). *Intact structured Chalk locally encountered within BH01 – BH03 described as:* Very weak low density, locally medium density, white CHALK. Observable fractures closely spaced. (Grades A2, B3, B4 and C2)	86.28 – 82.80	0.30 – 0.65	>15.00*	BH04 dynamically sampled to 10.0m bgl thus any structure was not discernible due to disturbance. Structured Chalk recovered as non-intact due to drilling disturbance in rotary cored boreholes BH01 – BH03, typically from approximately 4.00m bgl (~82.00 – 80.00m AOD). Where Dm Chalk encountered, likely a result of exploratory method used, reducing Chalk to Dm grade. Varying degrees of uncertainty with designation of gradings due to non-intact Chalk recovery.

*Base of unit not encountered.

.

A variable but limited thickness of Made Ground was encountered from surface in all exploratory locations except from the trial pit locations (TP01, TP02 and TP02A) and BH03 where Topsoil was encountered from surface. A thin layer of cohesive Head Deposits was locally encountered underlying Topsoil within the trial pit locations. Where these deposits were absent, bedrock deposits comprising Chalk of the Culver Chalk Formation, herein referred to as Chalk, were encountered directly beneath Made Ground or Topsoil and was proven within all exploratory locations.

Chalk was found to have a variable weathering profile based on the engineering descriptions, with structured Chalk consistently found from approximately 4.00m bgl. It should be noted that where Chalk materials have been recovered by dynamic sampling methods or from trial pit excavation, their classification in accordance with CIRIA C574 Engineering in Chalk should be treated with caution given the levels of disturbance induced by these excavation methods.

3.2.1 Ground Model

Table 3.1: Ground Model

Strata	Top Level (m OD)	Top Depth (m bgl)	Thickness (m)	Remarks
Made Ground: Asphalt – up to 0.12m thickness (Locations DCP01 – DCP03, BH01 and BH02 only). Overlying; Slightly sandy slightly clayey GRAVEL of fine to coarse angular to subangular limestone. Locally recorded as very sandy and clayey to very clayey. Unit considered representative of hardstanding subbase material Overlying; Material described as 'Probable Made Ground' comprising firm brown slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to coarse flint and chalk with localised flint cobble content. BH04 - Where hardstanding was absent: Grass over firm to stiff brown slightly sandy slightly gravelly CLAY with occasional rootlets. Gravel is angular to subangular fine to coarse flint.	82.98 – 85.61	0.00	0.45 – 0.65	Layer of Asphalt recorded within positions within north of the site up to 0.12m thickness. Subbase unit only encountered within positions undertaken within the north of the site where Asphalt was encountered. Noted up to 0.41m thickness. Probable Made Ground' termed by GI contractor within BH02, DCP01 and DCP03.
Topsoil: Dark brown sightly sandy gravelly CLAY with occasional rootlets. Gravel is subangular fine to coarse Chalk and flint.	84.98 – 86.63	0.00 – 0.30	0.15 – 0.30	Only encountered within TP locations and BH03 within the southern extents of the site. Low cobble content of angular flint recorded within BH03 0.00 – 0.30m.
Head Deposits: Firm light brown slightly sandy slightly gravelly CLAY with low cobbles content of subangular to angular flint. Gravel is of subangular to angular fine to coarse flint and Chalk.	84.84 – 86.48	0.15 – 0.35	0.15 – 0. 20	Only encountered within TP01, TP02 and TP02A.
Chalk: Structureless: Structureless CHALK mainly composed of slightly sandy silty GRAVEL (Grade Dc) and minor slightly gravelly to gravelly SILT (Grade Dm). Clasts are extremely weak to very weak low to medium density. Occasional fine to coarse flint gravel throughout. Transition Zone from structureless to structured chalk around 3-4m bgl. Structured: Very weak, locally extremely weak, low density white with frequent black specs CHALK. Observable fractures extremely closely to closely spaces. Nodular flint noted locally throughout. (Grades B3-B4, C5). *Intact structured Chalk locally encountered within BH01 – BH03 described as:* Very weak low density, locally medium density, white CHALK. Observable fractures closely spaced. (Grades A2, B3, B4 and C2)	86.28 – 82.80	0.30 – 0.65	>15.00*	BH04 dynamically sampled to 10.0m bgl thus any structure was not discernible due to disturbance. Structured Chalk recovered as non-intact due to drilling disturbance in rotary cored boreholes BH01 – BH03, typically from approximately 4.00m bgl (~82.00 – 80.00m AOD). Where Dm Chalk encountered, likely a result of exploratory method used, reducing Chalk to Dm grade. Varying degrees of uncertainty with designation of gradings due to non-intact Chalk recovery.

*Base of unit not encountered.

below presents the ground model based on the exploratory holes undertaken as part of the site-specific GI works only, and does not include the historical information as its no longer pertinent.

Table 3.1: Ground Model

Strata	Top Level (m OD)	Top Depth (m bgl)	Thickness (m)	Remarks
Made Ground: Asphalt – up to 0.12m thickness (Locations DCP01 – DCP03, BH01 and BH02 only). Overlying; Slightly sandy slightly clayey GRAVEL of fine to coarse angular to subangular limestone. Locally recorded as very sandy and clayey to very clayey. Unit considered representative of hardstanding subbase material Overlying; Material described as 'Probable Made Ground' comprising firm brown slightly sandy slightly gravelly CLAY. Gravel is angular to subrounded fine to coarse flint and chalk with localised flint cobble content. BH04 - Where hardstanding was absent: Grass over firm to stiff brown slightly sandy slightly gravelly CLAY with occasional rootlets. Gravel is angular to subangular fine to coarse flint.	82.98 – 85.61	0.00	0.45 – 0.65	Layer of Asphalt recorded within positions within north of the site up to 0.12m thickness. Subbase unit only encountered within positions undertaken within the north of the site where Asphalt was encountered. Noted up to 0.41m thickness. Probable Made Ground' termed by GI contractor within BH02, DCP01 and DCP03.
Topsoil: Dark brown sightly sandy gravelly CLAY with occasional rootlets. Gravel is subangular fine to coarse Chalk and flint.	84.98 – 86.63	0.00 – 0.30	0.15 – 0.30	Only encountered within TP locations and BH03 within the southern extents of the site. Low cobble content of angular flint recorded within BH03 0.00 – 0.30m.
Head Deposits: Firm light brown slightly sandy slightly gravelly CLAY with low cobbles content of subangular to angular flint. Gravel is of subangular to angular fine to coarse flint and Chalk.	84.84 – 86.48	0.15 – 0.35	0.15 – 0. 20	Only encountered within TP01, TP02 and TP02A.
Chalk: Structureless: Structureless CHALK mainly composed of slightly sandy silty GRAVEL (Grade Dc) and minor slightly gravelly to gravelly SILT (Grade Dm). Clasts are extremely weak to very weak low to medium density. Occasional fine to coarse flint gravel throughout. Transition Zone from structureless to structured chalk around 3-4m bgl. Structured: Very weak, locally extremely weak, low density white with frequent black specs CHALK. Observable fractures extremely closely to closely spaces. Nodular flint noted locally throughout. (Grades B3-B4, C5). *Intact structured Chalk locally encountered within BH01 – BH03 described as:* Very weak low density, locally medium density, white CHALK. Observable fractures closely spaced. (Grades A2, B3, B4 and C2)	86.28 – 82.80	0.30 – 0.65	>15.00*	BH04 dynamically sampled to 10.0m bgl thus any structure was not discernible due to disturbance. Structured Chalk recovered as non-intact due to drilling disturbance in rotary cored boreholes BH01 – BH03, typically from approximately 4.00m bgl (~82.00 – 80.00m AOD). Where Dm Chalk encountered, likely a result of exploratory method used, reducing Chalk to Dm grade. Varying degrees of uncertainty with designation of gradings due to non-intact Chalk recovery.

*Base of unit not encountered.

It should be noted that no groundwater was observed during the intrusive works however was recorded during subsequent monitoring of installations within BH01 and BH02 at depths of 14.65m and 14.67m bgl (69.75 and 69.31m AOD) respectively on three separate visits. It is uncertain however that given the inconsistency of the groundwater observations that whether these may representative of perched water within the base of the installations and should be treated with caution.

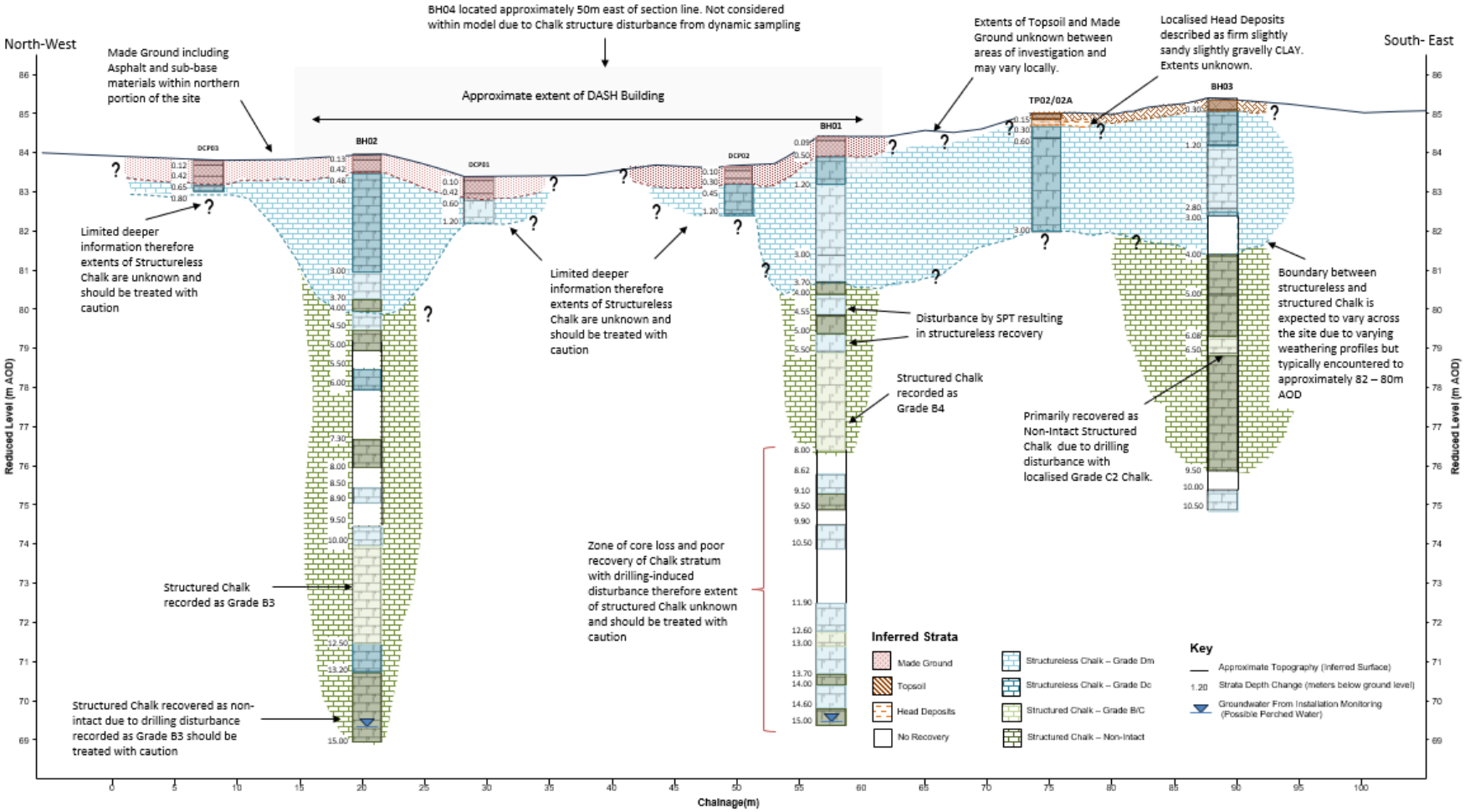
3.2.2 Sketch Geological Cross Section

A sketch geological cross section has been produced for the site using the information obtained from the Geotechnics GI works a, as presented in Figure 3.2**Error! Reference source not found.** below and within Appendix B. The section line used is presented in Figure 3.1 above. The following points have been considered in the production of the section:

- The section alignment of northwest to southeast has been selected considering the footprint of the proposed DASH building. The section shows a variation in the thickness of Made Ground beneath and thickness of Topsoil and Head Deposits, where present.
- The section alignment has not considered information from BH04 which was dynamically sampled rather than rotary cored resulting in unsuitable core recovery enabling any determination of the interface between structureless and structured Chalk deposits.
- No groundwater was encountered during drilling/ excavation however was encountered within subsequent monitoring of deep borehole installations BH01 and BH02. It is not certain however if this represents perched water within the base of the installations and should be treated with caution.
- Despite background geological mapping indicating the presence of Worked Ground/ Made Ground across the entire site area, Made Ground soils were only encountered beneath the area of existing car parking within the north of the site. However, their potential presence in between locations of investigation cannot be discounted.
- The weathering profile of the Chalk was variable. Typically, a structureless profile is seen to extend from the surface of the Chalk comprising initially Grade Dc materials. Structured Chalk was recovered from c. 3.70 and 4.00m bgl (approximately 80 – 82m AOD) within each borehole and was given Grades B3 - B4 and C2 – C5 with the account of Grade A2 Chalk having been discounted due to not being deemed representative.

It should be noted that the topography included on the section has only been inferred and the proposed DASH building depicted on the section is for graphical representation only.

Figure 3.2: Sketch Geological Cross Section



4 Material Properties and Design Parameters

4.1 Topsoil

Topsoil was only encountered within locations TP01, TP02, TP02A and BH03 which were undertaken across existing areas of soft landscaping. These deposits were described to comprise slightly sandy gravelly CLAY with occasional rootlets. Gravel constituents were described to comprise subangular fine to coarse chalk and flint with localised cobbles content. Overall, this unit was encountered to depths between 0.15 – 0.30m bgl.

It should be noted that no geotechnical testing was undertaken on these deposits are these are assumed to be removed prior to construction.

4.2 Made Ground

Made Ground deposits were found to extend from surface within each exploratory except for the trial pit locations (TP01, TP02 and TP02A) and BH03 location, where Topsoil was initially encountered as described above.

An initial layer of asphalt was encountered within positions undertaken within the north of the site through the existing car park extending to a maximum depth of 0.13m bgl within BH02.

Underlying this asphalt a layer generally described as slightly sandy slightly clayey GRAVEL of fine to coarse angular to subangular limestone was typically encountered. This unit is considered representative of subbase materials used within the existing car park construction and was encountered at a maximum thickness of 0.41m within BH01. Deposits described as ‘Probable Made Ground’ were encountered underlying the subbase materials within DCP01, DCP03 and BH02 to a maximum depth of 0.65m and were generally described as firm slightly sandy slightly gravelly CLAY with gravel of flint. Within DCP02 a layer of very sandy very clayey GRAVEL of flint and Chalk was encountered beneath the subbase materials to a maximum of 0.45m.

Where existing hardstanding was absent in the southern portion of the site, Made Ground deposits were only encountered within BH04 comprising firm to stiff brown slightly sandy gravelly CLAY with gravel of subangular to angular flint. Overall, the Made Ground deposits were encountered to a maximum depth of 0.65m bgl.

4.2.1 Soil Classification Testing

Soil classification testing was undertaken on two samples of the Made Ground as summarised within Table 4.1 below.

Table 4.1: Made Ground – Soil Classification Testing Summary

Parameter	No. of tests	Minimum	Maximum	Mean	Median
Water Content (%)	2	7.4	21.9	14.7	14.7
Plastic Limit (%)	1	20	-	-	--
Liquid Limit (%)	1	42	-	-	

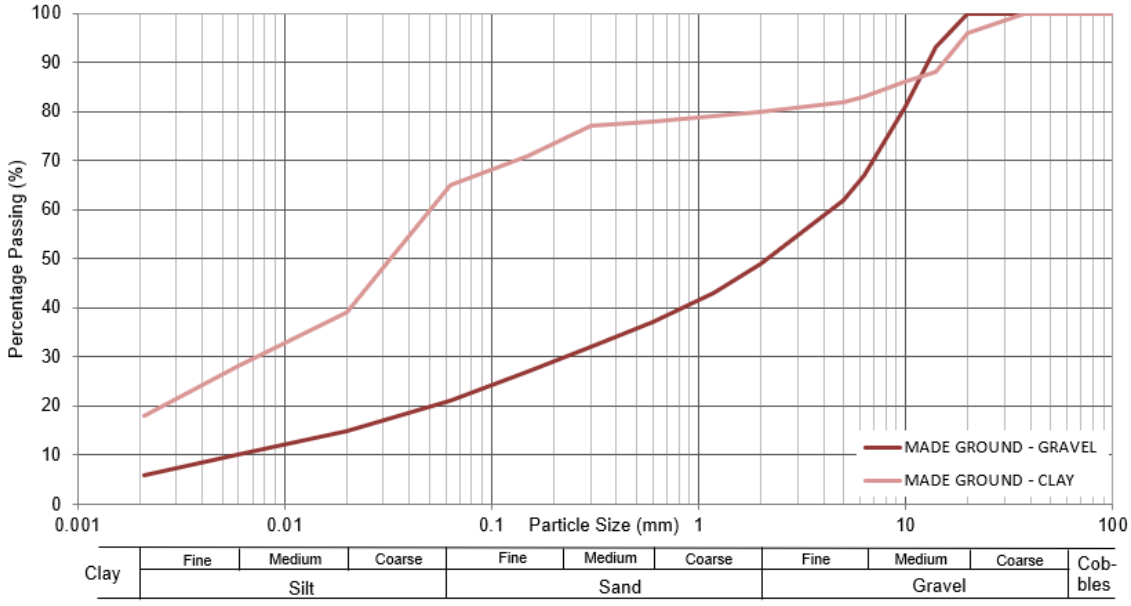
The two water content tests both returned differing values reflective of the variability of the Made Ground units analysed. The lower value of 7.4% was obtained a sample of coarse-grained material described as very sandy clayey GRAVEL of flint and Chalk where gravel constituents,

in particular flint, do not typically retain a significant water content. The higher value of 21.9% was obtained on fine grained material described as slightly sandy slightly gravelly CLAY where the finer particle sizes typically exhibit a higher water content retention. As such the differences in water content between these two values samples analysed is considered a function of the dominant particle size for the material rather than anomalous values. However, due to the limited dataset to provide further confidence in the range of water contents representative for these differing Made Ground materials, these values should be treated with a degree of caution.

A single Atterberg test was undertaken on Made Ground described as slightly sandy slightly gravelly CLAY with the sample plotting above the A-Line indicating the material is consistent with a clay of medium plasticity. However, given the limited dataset these results should be treated with a degree of caution.

Two particle size distribution tests were undertaken on the differing Made Ground units showing distinctly different grading characteristics, as presented in Figure 4.1 below. One test undertaken on material described as very sandy very clayey GRAVEL demonstrates a well graded profile across the coarser sand and gravel fractions with limited fines content. In contrast, the sample described as slightly sandy slightly gravelly CLAY indicates a fines-dominated distribution with some sand and minor gravel fractions. Overall, these two results highlight the heterogeneous nature of the Made Ground beneath the area of the existing car park.

Figure 4.1: Made Ground – Particle Size Distribution Testing



4.2.2 In-Situ Testing – Dynamic Cone Penetrometer

Made Ground was encountered within each of the dynamic cone penetrometer (DCP) test locations (DCP01 – DCP03).

CD225 Design for New Pavement Foundations and the Transport and Road Research Laboratory (TRRL) Laboratory Report 1132 (The Structural Design of Bituminous Roads) has been used to derive California Bearing Ratio (CBR) values obtained from DCP testing using the equation below:

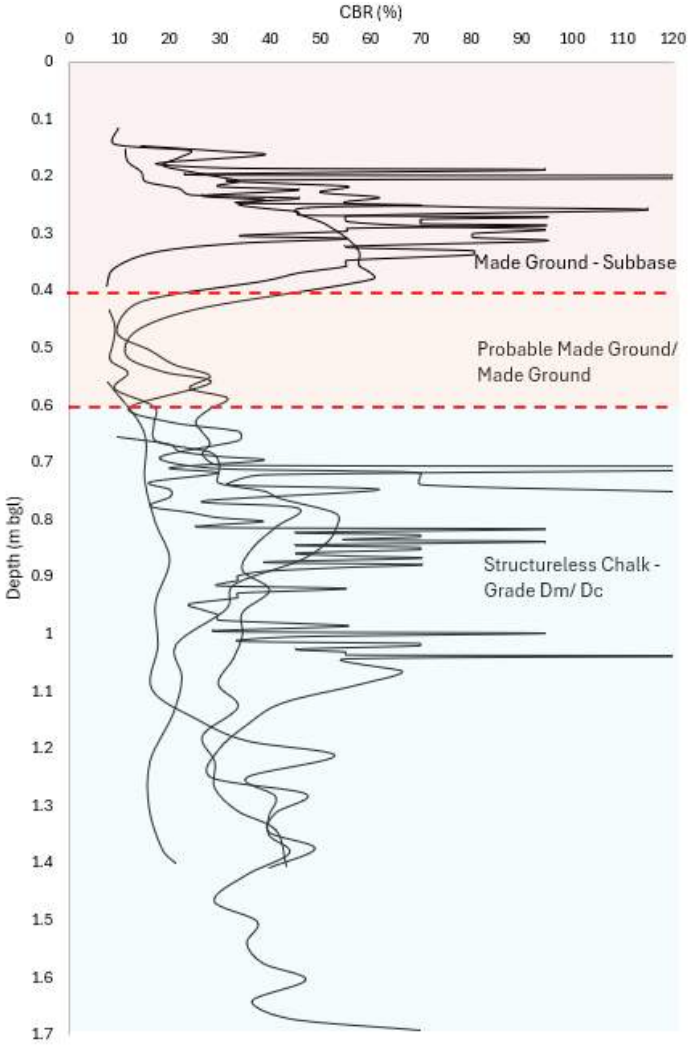
$$\mathrm{Log}_{10}(\mathrm{CBR}) = 2.48 - 1.057 \times \mathrm{Log}_{10}(\mathrm{mm/blow})$$

With correlation of the test data against the logged stratum from each corresponding inspection pit engineering log, DCP test data demonstrates that CBR values typically greater than 20% were obtained throughout the Made Ground comprising gravel considered to be representative of the existing car park subbase.

Values obtained throughout deposits described as Probable Made Ground and Made Ground up to a depth of 0.65m bgl returned values typically between 7 – 21% with some localised higher values likely attributed to the presence of gravel constituents. It should be acknowledged that these values only represent the short term CBR value and design should consider the long-term equilibrium value.

Figure 4.2 summarises derived CBR against cumulative penetration below ground level.

Figure 4.2: Dynamic Penetration Testing – CBR vs Depth



4.3 Head Deposits

Deposits considered representative of Head Deposits were only encountered within the trial pit locations (TP01, TP02 & TP02A) underlying the Topsoil deposits within the southeast of the site. This unit was described to comprise firm slightly sandy slightly gravelly CLAY with gravel constituents comprising flint and chalk and a low flint cobble content. Overall, this unit was found at maximum thickness of 0.2m within TP02 and TP02A.

4.3.1 Soil Classification Testing

Soil classification testing was undertaken on two samples from the Head Deposits as summarised within Table 4.2 below.

Table 4.2: Head Deposits – Soil Classification Testing Summary

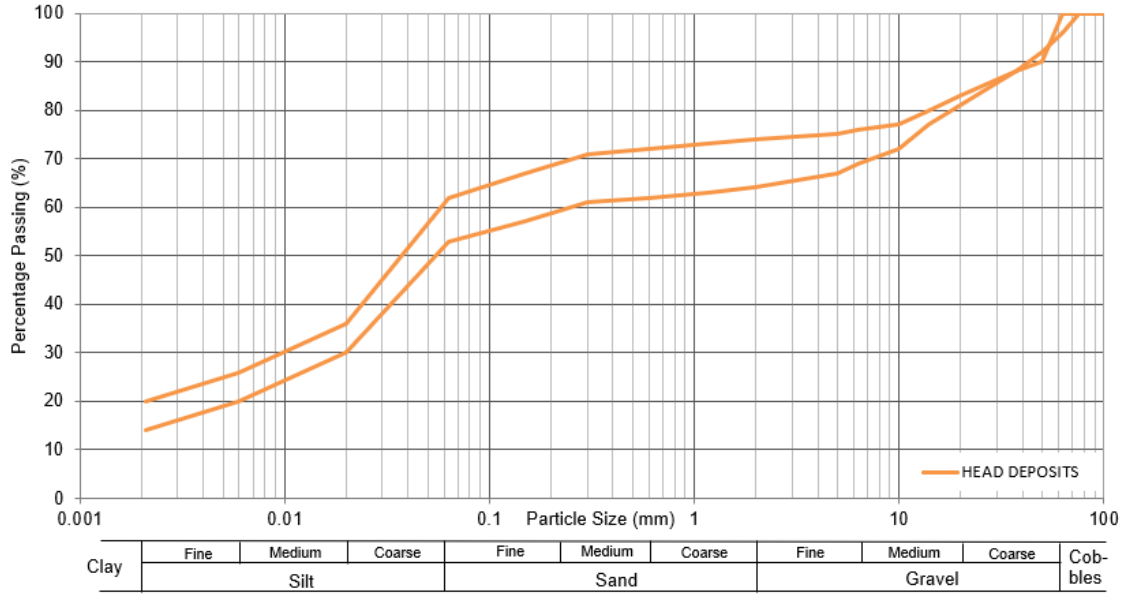
Parameter	No. of tests	Minimum	Maximum	Mean	Median
Water Content (%)	2	24.2	26.2	-	-
Plastic Limit (%)	2	23	24	-	-
Liquid Limit (%)	2	51	54	-	-

The two water content tests both returned values within 2% of each other, which may suggest limited variability within the material, however, due to the limited dataset this should be treated with a degree of caution.

The LL and PL (liquid limit and plastic limit) tests both returned plastic and liquid limit values which were in close range to each other. Both samples plotted above the A-Line indicating the material is consistent with a clay of high plasticity. However, given the limited dataset these results should be treated with a degree of caution.

Two particle size distribution tests were undertaken on samples of the Head Deposits and demonstrate a mixed but generally well-graded soil comprising a combination of fines, sand and gravel fractions, as demonstrated within Figure 4.3 below. Both gradation curves are broadly similar, suggesting consistency between the samples, with only minor variation in the proportions of fines and sand fractions. The PSD plots suggest the material is more sandy and gravelly, rather than the logged description of slightly sandy and gravelly.

Figure 4.3: Head Deposits – Particle Size Distribution



4.4 Chalk

Chalk was encountered within all exploratory locations from depths between 0.30 and 0.65m bgl and was encountered to the maximum depth of the investigation at 15.00m bgl.

The top of the Chalk was recovered as structureless Chalk comprising silty GRAVEL locally with a sand constituent and overall considered indicative of Grade Dc. Where Chalk was recorded as

slightly gravelly SILT (Grade Dm), this is likely a result of the exploratory methods reducing the grade of the Chalk, i.e recovered as a grade Dm. Overall, these initial structureless Chalk deposits were typically encountered from the chalk surface and transitioning to structured chalk between 3-4m bgl.

It should be noted that structureless Chalk was logged to the full depth of 10.00m bgl within BH104 due to the dynamic sampling methodology used for drilling which disturbs any potential structure within the Chalk during recovery making it difficult to grade. Chalk deposits from this location were recovered as a primarily Chalk gravel dominant material considered representative of structureless Grade Dc Chalk however could also potentially represent disturbed structured Chalk, however is not be possible to ascertain.

Chalk deposits deemed to have potentially been structured but recovered in a disturbed condition by rotary drilling techniques, have been classified as non-intact recovery. These deposits were recorded within BH01 – BH03 over variable depths throughout the entirety of each borehole. Assumed grades of B3, B4 and C5 were variably assigned on the engineering logs; however, due to the method of recovery should be treated with caution.

Structured Chalk deposits were encountered within BH01 – BH03. These were encountered from depths of 5.50m and 6.08m bgl within BH01 and BH02 respectively and from 10.00m bgl within BH03. However, the recovery of these deposits was intermittent with interspersed non-intact recovery, possibly due to poor drilling technique. Structured Chalk material was described as very weak, low to medium density, white CHALK with variable fracture sets observed, typically closely spaced. Grading of these deposits was variable and comprised Grades B3, B4 and C2 Chalk with one account of Grade A2 Chalk between 12.60 – 13.00m depth within BH01.

Areas of no recovery or assumed zones of core loss (AZCL) were recorded intermittently within BH01 – BH03 over the depth of each borehole. Review of a majority of these zones demonstrate that these coincided with where an SPT had been undertaken and where nodular flint interfered with the drilling head recovery of the core run. These areas of absent core are therefore considered to be likely a result of disturbance from this testing.

4.4.1 Chalk – Classification Testing

Classification testing undertaken on samples of the Chalk stratum is summarised in Table 4.3 below.

Table 4.3: Chalk – Classification Testing Summary

Parameter	No. of Tests	Minimum	Maximum	Mean	Median
Saturated Moisture Content (%)	15	26.0	33.0	28.9	29.0
Dry Density (Mg/m^3)	15	1.43	1.59	1.51	1.51
Point Load Strength ($Is_{50,}$ MPa)	46	0.00	0.20	0.09	0.10
Water Content (%)	1	21.3	-	-	-

4.4.1.1 Saturated Moisture Content

Fifteen saturated moisture content (SMC) tests were undertaken on samples of intact Chalk gravel, as presented within Figure 4.4 below. The SMC results indicate a range between 26.0 – 33.0% with no apparent trend with depth. Dry density analysis was also undertaken on the same samples and presents a results range between 1.43 – 1.59Mg/m^3 with no apparent trend.

The engineering logs suggest a relatively consistent density of Chalk, described as low to medium density and no discernible correlation with depth. Typically, within Chalk the SMC is found to decrease with increasing competency/ Grade of Chalk.

Based on CIRIA C574 the dry density results suggests the Chalk is of low to medium density Chalk, as shown in Figure 4.4 below. Figure 4.5 presents the variation of SMC with dry density. The data indicates that higher moisture contents coupled with lower dry densities are characteristic of weaker Chalk, whereas increased density and reduced moisture content correspond to a stronger and more competent Chalk material. This can particularly be seen with the highlighted outliers to the dataset within the figures below.

Figure 4.4: Chalk – Saturated Moisture Content and Dry Density vs Reduced Level

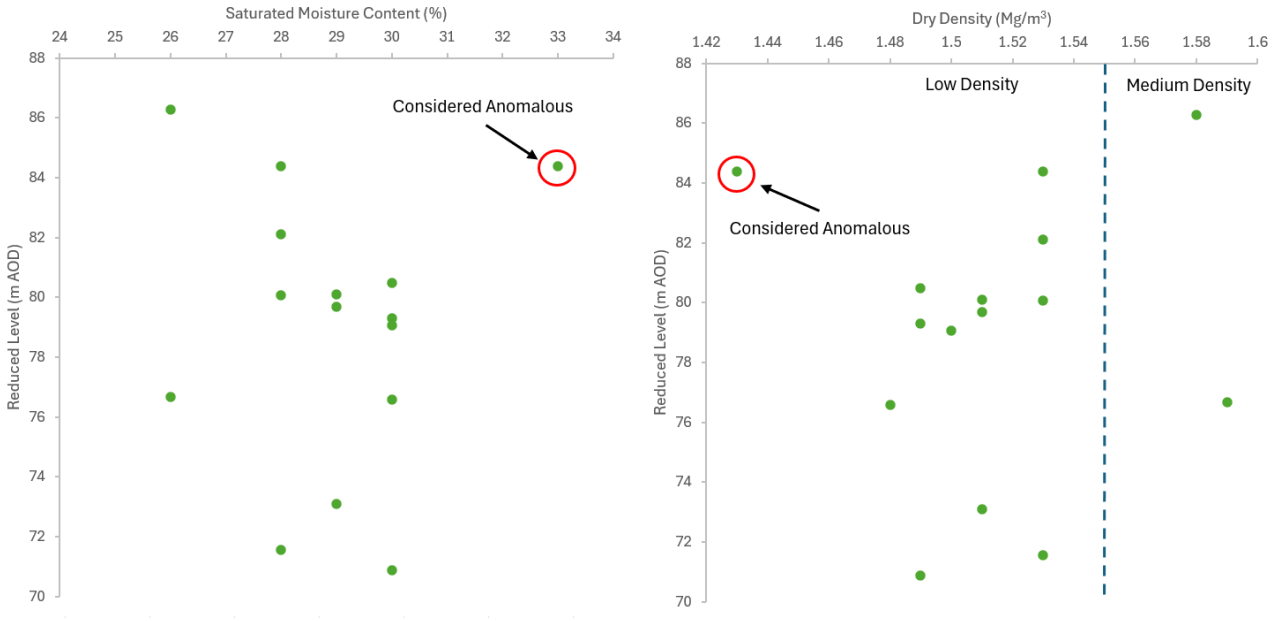
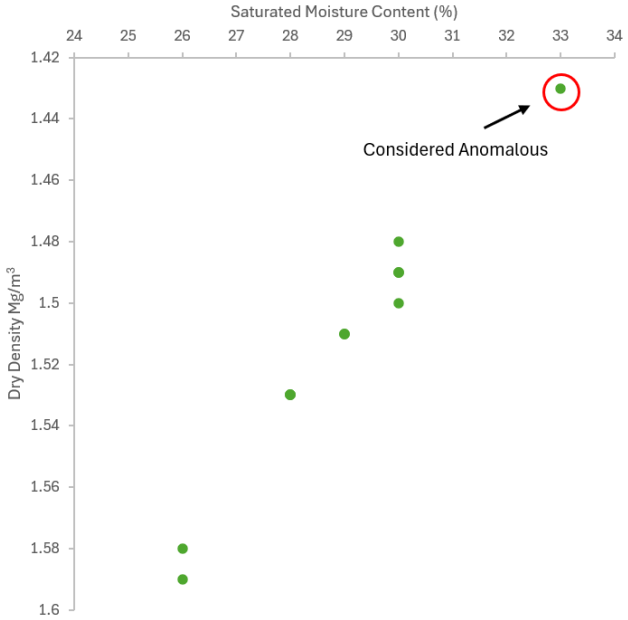


Figure 4.5: Chalk – Saturated Moisture Content vs Dry Density



4.4.1.2 Point Load Testing

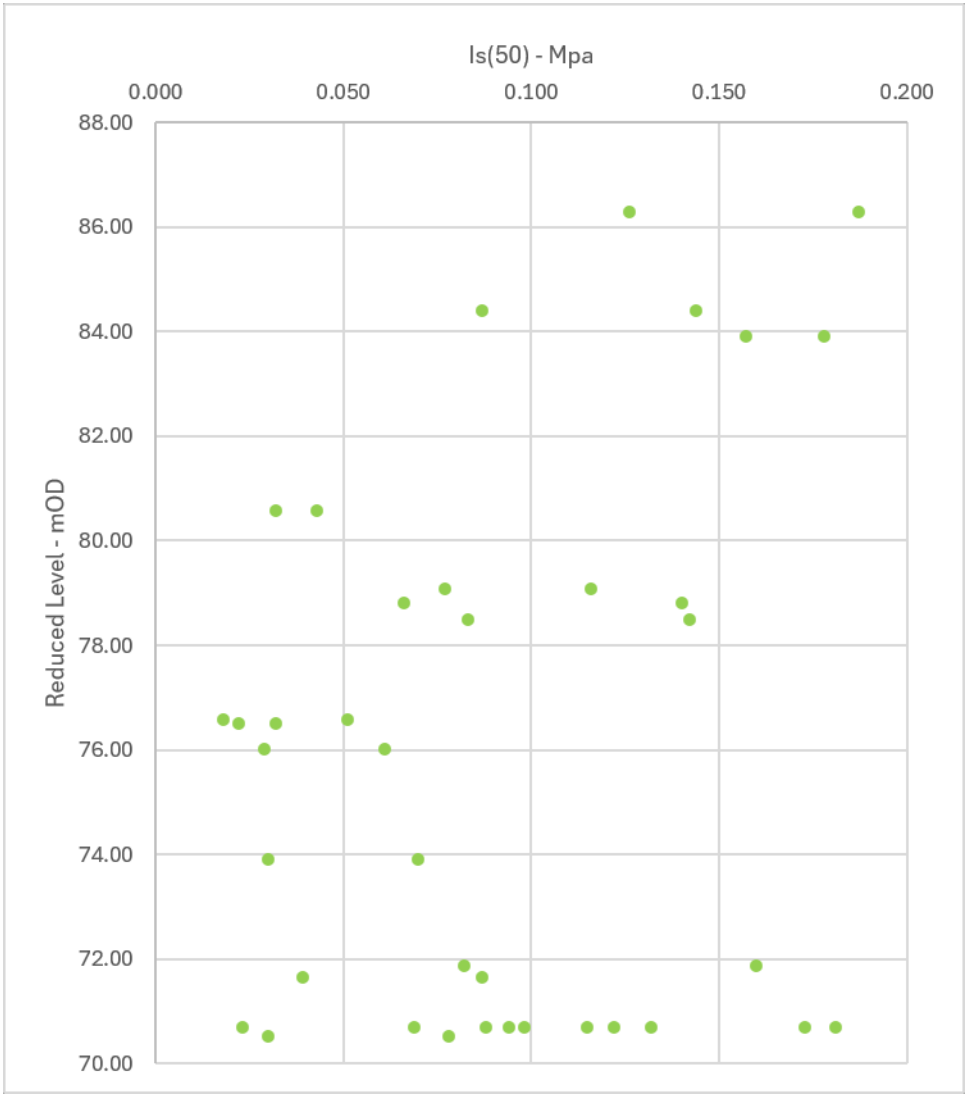
A total of 38 point load tests were undertaken on intact pieces of Chalk gravel, with recorded point load strengths (Is_{50}) of between 0.13 and 0.26MPa, as presented within Figure 4.6. The dataset does not indicate a specific trend with strength values returned being low to very low.

The lack of trend may be indicative of differences in testing behaviour, sample conditions and Chalk fabric within the clasts analysed.

Specimen water contents reported along with the point load test indicates that the samples were tested at a range similar to that of the saturated moisture contents. With review of the dataset against index properties presented in CIRIA C574, the reported values fall outside and within the bottom end of the typical expected range for Chalk, correlating its extremely weak to very weak nature which is consistent with descriptions of the Chalk from the engineering logs.

Note that no Unconfined Compressive Strenght (UCS) testing was possible due to the lack of appropriate samples and therefore no correlation between point loads and UCS was possible.

Figure 4.6: Chalk - Point Load Is_{50} (MPa) vs Reduced Level



4.4.2 Chalk Crushing Value

Two tests to determine the Chalk Crushing Value (CVV) were undertaken on bulk samples of the structureless Chalk deposits. Results returned values of 3.0 and 3.3 for the CVV for saturated moisture contents of 26% and 28% respectively. These results demonstrate that the material has a low resistance to crushing which is indicative of very weak to weak Chalk

materials. As such any handling of these materials during construction and earthworks will require care and consideration during excavation and compaction.

4.4.3 In-Situ Testing – Dynamic Cone Penetrometer

Chalk was encountered within each of the DCP tests undertaken across the area of existing car park within the north of the site. Chalk was encountered beneath the Made Ground at depths between 0.45m and 0.65m bgl and was recovered from the corresponding test inspection pits as silt dominant within DCP01 and gravel dominant within DCP02 and DCP03, considered indicative of structureless Chalk Grade Dm and Dc respectively.

As discussed in Section 4.2.2, CD225 has been used to derive California Bearing Ratio (CBR) values from the DCP testing. Figure 4.2 summarises derived CBR against cumulative penetration below ground level. The general trend through the structureless Chalk demonstrates a variable calculated CBR typically between 10 – 70% with localised variability. Some tests show sharp increases which may be indicative of either contact with flint or Chalk gravel resulting a temporary increased resistance to penetration. Calculated CBR values associated with these increases returned values greater than 100% and are thus not considered representative of the unit. A short-term design value of 10% could be considered for pavement foundations within the Chalk stratum. It should however be acknowledged that the long-term equilibrium CBR value should also be considered within the design.

During construction works, the surface of the chalk is required to be protected. If due care and careful handling is not completed, then the condition of the chalk could deteriorate significantly such that a more onerous design solution may be required.

4.4.4 In-Situ Testing – Infiltration Testing

Infiltration testing was undertaken in accordance with BRE DG365 methodology at the location of TP02A between approximately 2.00 and 3.00m bgl. The material within this test zone was described to comprise structureless Chalk composed of silty GRAVEL with low cobble content. Testing was undertaken within an open pit which was subsequently backfilled upon completion of the three infillings forming the test. The soil infiltration rate considered representative of this test (and in accordance with BRE DG365) is the lowest infiltration rate from each of the three infillings which returned a value of 2.90 x10^{-5} m/sec (meters per second).

4.4.5 In-Situ Testing – Standard Penetration Testing

Forty standard penetration tests (SPT) were undertaken within the Chalk. Testing was undertaken in accordance with BS EN ISO 22476:3: 2005+A1:2011 thus the raw N values have been converted to N_{60} values using the following equation:

$$N_{60} = \frac{E_r}{60} N$$

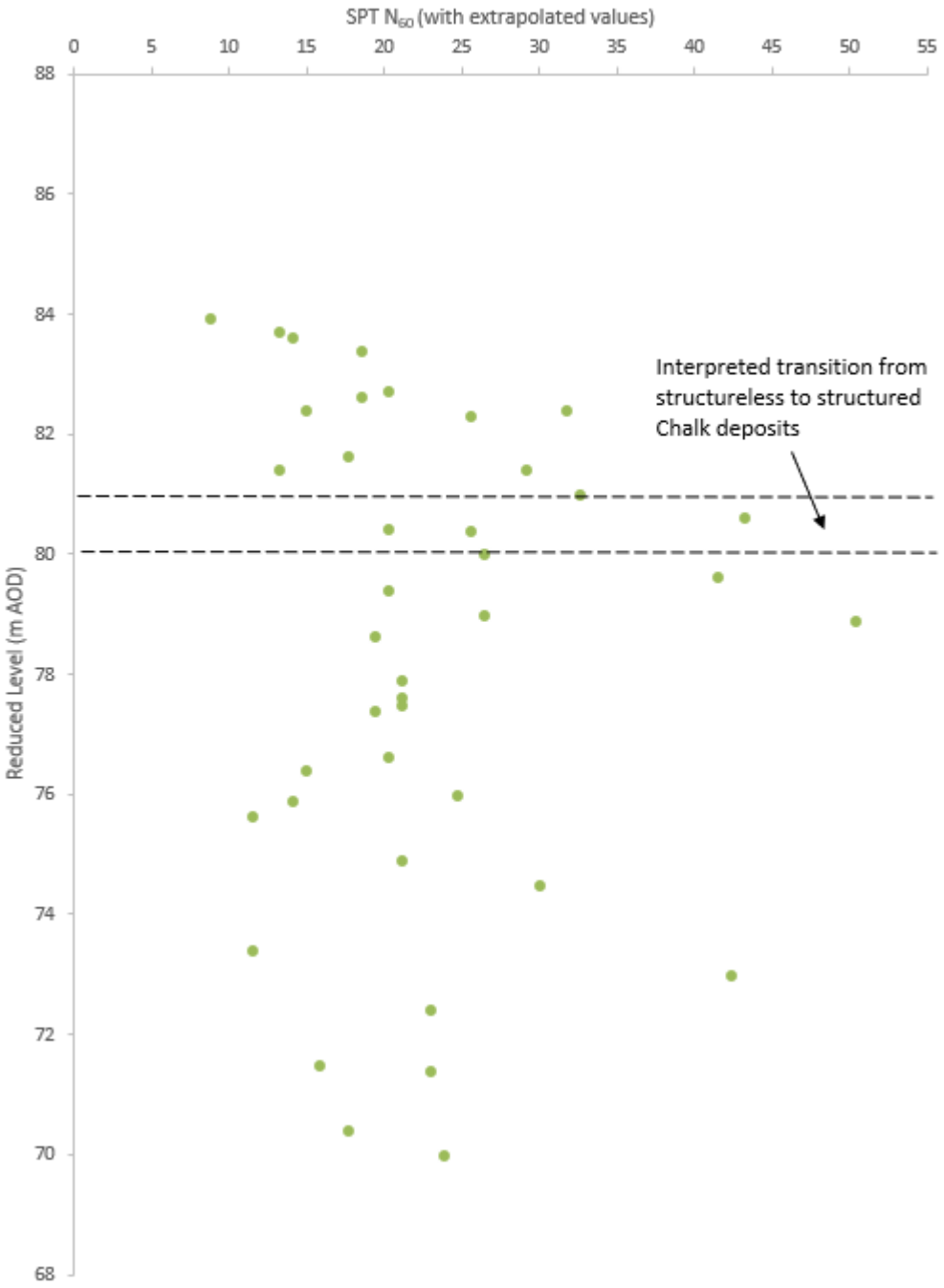
In addition, a one of the tests within the unit returned a value exceeding 50 blows thus in accordance with CIRIA R143 these values have been extrapolated.

SPT results are summarised in Table 4.4 and presented in Figure 4.7 below. The testing indicates a general trend of increasing N_{60} values to approximately 80m AOD with a majority of these tests undertaken within structureless Chalk. Testing beneath this does not show any particular trend with depth. The interpreted transition from structureless to structured Chalk has been indicated on the figure, however as aforementioned does not display a particular trend.

Table 4.4: Chalk – SPT Testing Summary

Parameter	No. of Tests	Minimum	Maximum	Mean	Median
Extrapolated SPT N value	40	10	57	26	24
Extrapolated SPT N_{60} value	40	9	50	23	21

Figure 4.7: Chalk – SPT N_{60} vs Reduced Level



4.5 Ground Aggressivity Testing

According to BRE Special Digest 1:2005 (Concrete in Aggressive Ground), sulphates from UK soils and groundwater can chemically attack concrete, resulting in expansion and softening of the material.

A series of laboratory tests were undertaken on samples of the Made Ground and Chalk. Testing was undertaken in order to determine the ground aggressivity at the site, with results summarised Table 4.5 below.

No testing was undertaken on samples of the Head Deposits due to their limited extents and assumption of removal prior to construction. No groundwater was encountered during the intrusive works and only limited groundwater was encountered in two installations on three occasions but not a sufficient quantities to sample thus has not been analysed.

Table 4.5: Summary of Soil Sulphate and pH Analysis

Strata	Parameter	No. of Tests	Minimum	Maximum	Mean	Median
Made Ground	pH	2	7.8	9.0	8.4	8.4
	Water Soluble Sulphate (mg/l)	2	9.0	16.8	12.9	12.9
Chalk	pH	7	8.6	9.4	8.9	8.9
	Water Soluble Sulphate (mg/l)	7	4.3	47.9	17.9	12.8

The results from the analysis undertaken on both the Made Ground and Chalk indicate that a Design Sulfate class of DS-1 and ACEC class of AC-1s may be considered appropriate for concrete in contact with the soils at this site.

4.6 Groundwater

No groundwater was encountered during the investigation however it was recorded during subsequent monitoring of BH01 and BH02 installations on three separate occasions at depths of 14.65m and 14.67m bgl (69.75 and 69.31m AOD) respectively. However, due to the inconsistency in the readings with the remainder of the monitoring rounds recording conditions as dry and limited volume of water present to the base of the installation, the readings may be indicative of perched water present within the base of the installations.

5 Geo-environmental Assessment

5.1 Introduction

Geo-environmental testing has been undertaken to confirm the assessment presented in Section 2.4.

The GI did not record the presence of significant made ground deposits within the site. However, this does not preclude the presence of localised deeper made ground within the site boundaries.

5.2 Contamination Screening

5.2.1 Contaminants Concentration Guidance Values

5.2.1.1 Human Health

Following development, the proposed end use of the site will largely remain the same as the current land use i.e., the hardstanding areas and undeveloped grassed land within the grounds of the existing Sailsbury District Hospital.

In the absence of generic assessment criteria for a hospital end use, and given the sensitive nature of the future site users (in particular patients with weakened immune systems), chemical test data has been screened against LQM/CIEH 'Suitable for Use Levels (S4ULs)' (Land Quality Management Limited) for 'Public Open Space - Residential and 'Residential with produce' land use. The values have been selected for a soil organic matter (SOM) concentration of 1% based upon the average SOM values measured within the samples. The screening values are referred to as generic assessment criteria (GAC).

The S4ULs have been used as the default GAC in this human health risk assessment. Where LQM S4ULs are not available, CLEA derived GACs published in CL:AIRE document 'Soil Generic Assessment Criteria for Human Health Risk Assessment' have been used (CL:AIRE, 2010).

5.2.1.2 Water Environment

Soil leachate data has been screened against UK Drinking Water Standards (UK Water Supply (Water Quality) Regulations 2018), WHO Drinking Water Standards (World Health Organization, 2017) and Environmental Quality Standards (EQS) for Surface Freshwaters (The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015).

5.3 Results Summary

A factual summary of the recent ground investigation geo-environmental data is presented in the following sections. The results have been compared to the human health and controlled waters GACs.

5.3.1 Soil Screening

Soil testing was undertaken on 11 samples from the following strata:

- 3 from Topsoil
- 5 from Made Ground

- 1 from natural soils (Head Deposits)
- 2 from bedrock (Structureless Chalk)

No asbestos was recorded in any of the samples, and no exceedances of the GACs were recorded for any of the determinants when screened against the GACs, with 84% the results being below the laboratory LOD.

Elevated levels of Iron were identified in all soil samples at concentrations between 2000 mg/kg to 26000 mg/kg. Given that the levels are consistently high across the site and have been identified in both Made Ground and natural soils, it is considered that these levels represent natural background concentrations and do not pose a risk to human health.

5.3.2 Soil Leachate Screening

Soil leachate testing was undertaken on four soil samples from the following strata:

- 2 from Made Ground
- 1 from natural soils (Head Deposits)
- 1 from bedrock (Structureless Chalk)

No exceedances of the GACs were recorded for any of the determinants when screened against the GACs, with 49% the results being below the laboratory LOD.

5.4 Ground Gas and Vapours

As a gas source and pollutant linkage is present, ground gas generation and ingress have the potential to impact the new development as this structure will include enclosed spaces.

The following potential ground gas and vapours sources have been identified by the desk study:

- S1: Made Ground associated with mapped ‘Worked Ground’ and subsequent construction of existing carpark and helipad (On site)
- S2: Spillages and leakages of fuel, oil and lubricants from parked vehicles or helicopters.(On site)
- S3: Spillages of unknown contaminants from on-site storage containers.(On site)
- S4: Spillages and leakages of fuel, oil and lubricants from parked vehicles in adjacent carpark.(Offsite)
- S5: Leakages of tanks associated with hospital site.(Offsite)

In addition, due to the presence of shallow weathered chalk being encountered during the ground investigation, this could also present itself as a source of ground gas.

5.4.1 Ground Gas

As a result of these potential gas sources, as well as identified made ground, ground gas and groundwater level monitoring was completed after the fieldwork period from borehole installations located across the site. A total of eight rounds of monitoring were completed.

The gas monitoring data is summarised in

Table 5.1. There were no instances of flooded wells.

Table 5.1: Ground Gas Summary

BH ID	Stratum	Max. CO_2 (% v/v)	Max. CH_4 (% v/v)	Min. O_2 (% v/v)	Flow rate (l/hr)	GSV (l/hr)	CS
BH01	Chalk	2.3	<0.1	19.7	<0.1	0.0023	1
BH02	Chalk	2.5	<0.1	18.2	<0.1	0.0025	1
BH03	Chalk	1.9	<0.1	18.5	<0.1	0.0019	1
BH04	Chalk	0.9	<0.1	20.3	<0.1	0.0009	1

The maximum carbon dioxide concentration recorded was 2.5%; and methane, carbon monoxide and hydrogen sulphide were not recorded above detection limit. Atmospheric pressure ranged from 997mb to 1012mb.

The available gas monitoring data has been used to calculate a worst case Gas Screening Value (GSV) as per the guidance presented in CIRIA C665. The calculated worst case methane GSV for the site for steady state flow is 0.0001 l/hr and corresponding value for carbon dioxide is 0.0025 l/hr, both of which result in the ground gas regime being classified as Characteristic Situation (CS) 1 – Very Low ground gas generation potential, where no remedial measures are required.

It is also noted that only the Chalk was targeted during monitoring. There was not a sufficient thickness of made ground encountered to consider made ground as a viable ground gas source.

5.4.2 Vapours

Photo Ionising Detector (PID) readings were collected during monitoring, and all records were not above 1ppm for hydrogen sulphide and carbon monoxide.

Volatile determinands (Volatile Organic Compounds and light-end TPH) were all below laboratory detection limit in soils, which does not indicate the presence of a significant soil vapour source on-site.

5.5 Summary

Given the sensitive nature of the proposed development, conservative screening values have been used to assess the contaminated land risk at the site.

No contaminant exceedances have been recorded for soil or leachate testing against human health or controlled waters GACs.

5.6 Contaminated Land Risk Assessment

Following completion of the geoenvironmental assessment of the site, the preliminary qualitative contaminated land risk assessment presented within the Geotechnical and Geoenvironmental Desk Study Report have been revised as displayed in Table 5.2.

The following assumptions, limitations and exclusions are included for this assessment:

- It is assumed that a robust Construction Environmental Management Plan (CEMP) will be adopted for the construction works, and as a result, no contamination will occur during construction (e.g. fuel leaks and spills). It is assumed that no contaminated material will be brought onto site for the proposed development which may act as a potential contaminant source, with only clean, inert materials used.

- It is assumed that construction workers will adhere to site specific risk assessment which may include use of Personal Protective Equipment (PPE) as per the Construction Design and Management (CDM) Regulations 2015.
- Mott MacDonald is not insured to undertake surveys or assess the risks relating to asbestos. As such, the risk ratings do not include the assessment of risks from asbestos. A suitably qualified asbestos specialist should be contacted to advise and manage the risks of asbestos on-site.
- Ground gas and vapour risks are excluded from the CSM, based on the assessment of monitoring data in Section 5.4 (very low risk).

Table 5.2: Revised Contaminated Land Risk Assessment and Conceptual Site Model

Source	Pathway	Receptor	Risk Classification	Comment
On Site Sources				
S1: Made Ground associated with mapped 'Worked Ground' and subsequent construction of existing carpark and helipad.	**P1**: Human health uptake pathways (inhalation, ingestion and direct contact)	**R1**: Construction workers	No pollutant linkage identified	1. As detailed in Section 5.3.1, a total of 14 soil samples from across the site from topsoil, Made Ground and natural deposits were screened against GACs for commercial, residential and public open space land uses to assess the risk to human health of construction workers and future site users. Even when screened against conservative screening criteria, no exceedances against the GACs were identified within any of the samples across the site. As such, no pollutant linkages from a human health perspective are present within the site. However, it should be noted that the geoenvironmental assessment only investigates a small portion of the subsurface conditions and as such contamination hotspots may be present within the site. Regardless of the above, a construction Environmental Management Plan (CEMP) should be developed prior to any intrusive works to ensure that the risk of direct contact with contaminated materials is mitigated for the duration of the works. Contractor RAMS should also detail a site-specific risk assessment with appropriate safe workings practices such as the use of PPE and regular handwashing. Given that it is currently proposed that made ground it to be removed it is considered unlikely that site personnel and future site users will not come into direct contact with any potentially contaminated soils. However, note that if topsoil from the mian site is to be reused in soft landscaping areas, then this will required to be reviewed.
		R2: Site personnel and future site users	No pollutant linkage identified	
	P2: Direct contact with buried structures and services	**R3**: Buried structures and services (e.g. buried concrete, utilities)	Probability: Unlikely Consequence: Medium Risk: **Low**	2. An assessment of risk to buried structures and services from aggressive ground in accordance with BRE Special Digest:2005 have been undertaken and presented within Section 4.5, which concludes that Design Sulphate class of DS-1 and ACEC class of AC-1s is suitable for use within the site. Following finalisation of the development layout, an UKWIR assessment should also be undertaken to inform water pipe selection. This will require additional soil samples to be obtained from the site along the proposed alignment to facilitate that assessment. .
	P3: Surface water run-off **P4**: Vertical/horizontal contaminant migration in groundwater	**R4**: Groundwater environment (Principal aquifer)	No pollutant linkage identified	3. No exceedances of leachate test results against the controlled water GACs were identified within the site, with 49% of the results being below the LOD. Where above the LOD, the results are generally several orders of magnitude below the GAC thereby suggesting that leachable contaminants are not present within the site. Note that no groundwater was identified within the site to a depth of 15m bgl during the fieldworks or subsequent monitoring period.
	P5: Plant uptake	**R2**: Site personnel and future site users **R5:** Landscaping and Planting	No pollutant linkage identified	4. As noted in Comment 1, no exceedances against the GACs were identified within any of the samples across the site. As such, it is considered unlikely that any plants on site will uptake any contaminants. Additionally, any plants present on site post-development are considered to be within soft landscaping areas rather than allotments or produce gardens and therefore the likelihood of future site users ingesting the plants is considered very low.
S2: Spillages and leakages of fuel, oil and lubricants from parked vehicles or helicopters. **S3**: Spillages of unknown contaminants from on-site storage containers.	**P1**: Human health uptake pathways (inhalation, ingestion and direct contact)	**R1**: Construction workers	No pollutant linkage identified	5. Hydrocarbon testing was undertaken as part of the soil and leachate testing suites to assess the risk of potential fuel, oil and lubricant spills. Of the 11 soil samples, 94% of the TPH results are below the LOD with the remaining 6 % being several orders of magnitude below the relevant GACs. As such, hydrocarbon contamination is not considered to pose a risk to human health or the controlled water environments.
		R2: Site personnel and future site users	No pollutant linkage identified	
	P3: Surface water run-off **P4**: Vertical/horizontal contaminant migration in groundwater	**R4**: Groundwater environment (Principal aquifer)	No pollutant linkage identified	
Off Site Sources				
S4: Spillages and leakages of fuel, oil and lubricants from parked vehicles in adjacent carpark. **S5**: Leakages of tanks associated with hospital site	**P3**: Surface water run-off **P4**: Vertical/horizontal contaminant migration in groundwater	**R4**: Groundwater environment (Principal aquifer) Then **R1**: Construction workers	No pollutant linkage identified	As per Comment 5.

6 Ground Engineering Considerations

6.1 Preliminary Design Ground Model

Table 6.1 below provides a summary of the preliminary design ground model. The preliminary design ground model has been based on the most onerous ground conditions in relation to the proposed design. Topsoil has been omitted from the ground model as it is assumed that this will be stripped prior to construction.

Table 6.1: Summary of Preliminary Design Ground Model

Stratum	Depth top (m bgl)	Depth Base (m bgl)	Thickness (m)	Remark
Made Ground	0.00	0.65	0.65	Made Ground and Head Deposits assume to be removed during construction.
Head Deposits	0.15	0.35	0.20	
Structureless Chalk – Grade Dc	0.50	3.70	3.20	Based on considered worst case scenario from BH01 located beneath eastern extent of proposed building. A zone to 3-4m bgl has been adopted to capture the uncertainty in the level change from structureless to structured chalk.
Structured Chalk – Grade B3/4 – C2/5	3.70	15.00	>11.30	

The greatest extent of Made Ground was encountered within the north of the site associated with the areas of existing car park however has been assumed as a conservative thickness of 0.65m across the site area as this may also be locally present within areas to the south.

Groundwater was not encountered during the intrusive works however was encountered at depth of 14.65m and 14.67m bgl (69.75 and 69.31m AOD) within BH01 and BH02 installations respectively during three out of eight monitoring rounds. These observations however could be indicative of perched water within the base of the standpipe installations and should be treated with caution. Summer groundwater conditions are not anticipated to be above this level, however, could be higher during the wettest part of the year, often around spring time.

6.2 Preliminary Engineering Considerations

With review of the ground conditions present it is considered that a traditional shallow strip or pad foundation solution should be appropriate for the currently proposed scheme. Alternatively, the use of a piled founding solution could be considered if significant structural loads are anticipated or settlement tolerances are restrictive with loads transferred deeper into more competent Chalk stratum.

Any design should take into consideration the potential risks posed by the variability of the depth of the weathered surface of the Chalk and the potential for fracturing, possible dissolution and localised zones of weaker material. Some of these are low to very low in terms of risk profile, but cannot be discounted due to the effect they can have. Careful consideration should also be given to the selection of design parameters for each formation unit when considering various aspects of design.

The use of ground bearing floor slabs should be appropriate following the removal of Made Ground and Head Deposits and replacement with an appropriate thickness engineered fill as required to provide the required engineering solution and protection against frost heave. Should significant variability in the thickness or composition of the Made Ground or Head Deposits, or

other soft spots be encountered then excavation and replacement to greater depth could be required. Again if differential settlement tolerances are stringent, then a suspended floor slab could be considered.

Chalk materials are likely to be frost susceptible and to ensure mitigation against frost heave should be suitably protected during site works and appropriately protected as part of the permanent solution. Chalk is also sensitive to moisture change and should be treated with care during construction to ensure it does not deteriorate, with the potential for strength and stiffness to reduce dramatically.

In terms of re-use potential, the Chalk could be suitable for re-use on site, likely as a general Class 3 fill or landscape fill, but not as any form of structural fill. Careful review of the properties of the material required, together with a likely requirement for further testing prior to re-use to fully understand this.

7 Geotechnical Risk Register

The Geotechnical Risk Register is detailed in Table 7.4, and should be considered as a live document and updated throughout the course of the scheme. It is incumbent on all parties involved in the scheme to advise the other member when the risk changes.

Various threats are identified, and the potential consequences of these occurring are described. The risk is derived by considering the severity and likelihood for each threat and opportunity. Both the severity and likelihood have been assessed using a scale of 1 to 5. Corresponding to "Minor" to "Catastrophic" for severity and "Extremely Unlikely" to "Almost Certain" for likelihood. These rating are summarised in Table 7.1 - Table 7. below.

Table 7.1: Risk Level Matrix

Likelihood	Severity				
	1	2	3	4	5
	Minor	Moderate	Serious	Major	Catastrophic
1 Extremely Unlikely	1	2	3	4	5
2 Unlikely	2	4	6	8	10
3 Likely	3	6	9	12	15
4 Extremely Likely	4	8	12	16	20
5 Almost Certain	5	10	15	20	25

Table 7.2: Hazard Severity Table

Potential Severity of Harm Occurring		
1	Minor	Minor damage or loss – (No human injury)
2	Moderate	Moderate damage or loss – (Slight injury or illness)
3	Serious	Substation damage or loss – (Serious injury or illness)
4	Major	Major damage or loss – (Fatal injury)
5	Catastrophic	Catastrophic loss or damage – (Multiple fatalities)

Table 7.3: Risk Classification Table

Risk Classification	
Low (1 – 8)	Ensure assumed control measures are maintained and reviewed as necessary
Medium (9 – 19)	Additional control measures needed to reduce risk rating to a level that is equivalent to a test of "reasonably required" for.
High (20 – 25)	Activity not permitted. Hazard to be avoided or risk to be reduced to tolerable level.

Ground investigation can help to mitigate ground and groundwater risks; however, these risks cannot be eliminated. Ground investigations by their nature can only investigation and monitor a small part of the sub-surface conditions for a limited duration. Conditions on site identified during construction could reveal ground conditions that could not have been taken into account from the results of the ground investigation.

It is recommended that adequate and appropriate supervision must be provided during construction to assess the ground conditions encountered and interpret the results of the site testing. When appropriate this supervision during construction should be undertaken by a suitably experienced and qualified Engineering Geologist/ Geotechnical Engineer.

Table 7.4 highlights the potential hazards that could be encountered during site investigation and/or construction. The consequence of the hazard is outlined, and a score is given for the impact and likelihood for this hazard, giving an overall risk. From this potential control measures are stated to alleviate hazard, leading to a resourcing of the impact and likelihood, resulting in a residual risk.

As summarised within Table 7.4, assuming that mitigation measures are implemented, the residual risk for those hazards identified could be perceived as low..

Table 7.4: Geotechnical Risk Register

No	Hazard	Consequence	Severity	Likelihood	Risk	Mitigation	Severity	Likelihood	Risk
1	Made Ground	Made Ground has been encountered beneath the existing car parking and also locally beneath areas of soft landscaping. This may result in the following: ● Varying engineering properties and settlements of material due to composition and thickness. ● Potential for shallow/perched groundwater to be encountered within the unit (although this has not been encountered during the GI works) ● Potential for contaminated Made Ground – See Soil Contamination [12] ● Risk of encountering buried known / unknown obstructions or services during intrusive works. ● Potential for the unit to be aggressive to concrete elements – See Aggressive Ground Conditions [See Hazard 9] ● Potential for instability of excavations formed throughout this unit.	3	3	9	● Removal of Made Ground during construction. ● Excavation supervision by a suitably qualified engineering geologist/ geotechnical engineer. ● Use of appropriate Personal Protective Equipment (PPE). ● Construction strategy to be in place by Contractor to eliminate risk of contaminant migrations. ● Contractor to carry out temporary works design, including design of any necessary excavation support.	1	3	3
2	Head Deposits	Head Deposits only encountered within the southeast of the site during the GI works however may be present between areas of investigation across the remainder of the site and to varying depths. Unit may therefore be vertically and laterally variable. ● Potential for shallow/perched groundwater to be encountered within the unit (although this has not been encountered during the GI works) ● Potential for variability in the engineering behaviour and settlement/ heave. ● Potential for the unit to be aggressive to concrete elements – See Aggressive Ground Conditions [See Hazard 9] ● Unit likely to be frost susceptible/ moisture sensitive due to the cohesive nature of the deposits. See moisture sensitivity and frost susceptibility for mitigation [See Hazard 6 & 7].	3	3	9	● Removal of Head Deposits beneath areas of pavement and foundation during construction. ● Excavation supervision by a suitably qualified engineering geologist/ geotechnical engineer.	1	3	3
3	Culver Chalk Formation	Encountered across the entire investigation area. ● Variable weathering and strength which may affect foundation capacity – See weathering profile [See Hazard 4] ● Chalk materials are likely to be moisture sensitive and frost susceptible. See moisture sensitivity and frost susceptibility [See Hazards 6 & 7]. ● Potential pathways for contamination migration and impact on the Principal Aquifer. See groundwater [See Hazard 8] and soil and groundwater contamination [See Hazard 11 & 12]. ● Solubility risk leading to possible ground dissolution and variable permeability due to weathering profiles. See potential solution features [See Hazard 5]. ● Potential presence of flint bands within the unit causing difficulty of excavation.	2	3	6	● Design to consider information obtained from GI and observed weathering profile. ● Contractor to ensure plant and equipment appropriate to the ground conditions are utilised for construction practices.	4	2	8
4	Variable weathering profile of the Culver Chalk Formation	The unit has a variable weathering profile with depth with weathered structureless chalk transitioning to structured chalk between approximately 3.0 – 4.0m bgl, which may result in the following: ● Reduced bearing capacity and variable total/differential settlement. ● Constraint to suitability of shallow foundations for structure.	3	3	9	● Detailed design to consider information obtained from GI and the observed weathering profile. Design calculations to include settlement analysis.	3	2	6
5	Presence of solution features within soluble bedrock	No evidence of ground dissolution has been encountered during the GI works however review of the BGS Karst Report series indicates these have been identified across the wider Salisbury area. ● Potential remains for undetected cavities or surface dissolution within the Chalk bedrock leading to reduced strength, subsidence or collapse. Potential for requirement for additional ground investigation if found to be present, to determine their potential impact and mitigation measures.	5	3	15	● Groundworkers to remain vigilant for possible infilled features during removal of Made ground and Head Deposits to expose surface of Chalk bedrock. ● Excavation supervision by a suitably qualified engineering geologist/ geotechnical engineer. ● Should unexpected ground conditions be encountered during construction the Designer should be contacted immediately.	5	1	5
6	Frost susceptibility	Units with high frost susceptibility e.g. Chalk or Head Deposits have the potential to heave and affect pavements if not dealt with accordingly.	3	2	6	● A suitably qualified engineering geologist/ geotechnical engineer should supervise excavation of materials. ● Removal of Head Deposits prior to construction of pavement and foundation structures. ● Pavement design to consider minimum 450mm founding depth within design to account for frost susceptible materials.	1	2	1

No	Hazard	Consequence	Severity	Likelihood	Risk	Mitigation	Severity	Likelihood	Risk
7	Sensitivity of units to moisture	Trafficability and strength of units ● Chalk may reduce with changes in water content. Higher risk during winter working.	2	3	6	● Material to be suitably protected from moisture ingress during construction and inclement weather. Sub-formation only to be exposed immediately prior to construction. ● Temporary drainage to be installed during construction as required.	1	3	3
8	Groundwater	No groundwater encountered during the intrusive GI works but was encountered at 14.65m and 14.67m bgl within BH01 and BH02 deep installations on three out of eight monitoring occasions. ● Localised perched water may be present within Made Ground or Head Deposits. ● Potential for groundwater contamination impacting the Culver Chalk Principal Aquifer – See Groundwater Contamination [See Hazard 11]	1	2	2	● If shallow groundwater/ perched water be encountered during construction, contractor to adopt suitable dewatering techniques, including during any temporary works.	1	2	2
9	Aggressive Ground Conditions	● Based on the laboratory analysis from the current GI, the Made Ground and Chalk units are not considered to pose a risk of aggressive ground conditions. ● Aggressivity characteristics of the Head Deposits were not analysed due to their limited nature and hence remain unknown.	2	3	6	● Removal of limited Head Deposits during construction on concrete below ground structures i.e. foundations. ● Consideration shall be given for suitable concrete grades within construction to prevent any potential sulphate attack on design elements.	1	3	6
10	Overhead / buried services	● Potential serious injury to construction workers and disruption of service. ● Delays to construction, severe financial and political repercussion.	5	3	15	● Thorough review of detailed service records prior to any intrusive works. ● Carry out a GPR survey to identify and locate existing services. ● Contractor to check each proposed excavation for buried services prior to intrusive works.	5	1	5
11	Groundwater Contamination – Only limited groundwater was identified, insufficient volumes for sampling, and as such an assessment of contamination within groundwater could not be undertaken. However, no exceedances against GACs were identified associated with soil leachate testing suggesting that leachable contaminants are not present within the site area and therefore won't be mobilised within groundwaters, where present.	Potential risk to human health of construction workers if they come into contact with contaminated waters on site. Risk of contamination of surface waters and/or groundwaters (principal aquifer) if contamination is mobilised off site due to construction works.	2	2	4	● Contractor RAMS to include for contamination mitigation measures to mitigate risk if unidentified contamination is identified during construction. ● Best practice regarding use of PPE and regular hand washing to be adhered to.	2	1	2
12	Soil Contamination – No exceedances of GACs protective of human health were identified within the site.	Potential risk to human health of construction workers if they come into contact with contaminated soils. ● Materials may not be suitable for re-use within the site.	2	2	4	● Contractor RAMS to include for contamination mitigation measures to mitigate risk if unidentified contamination is identified during construction. ● Best practice regarding use of PPE and regular hand washing to be adhered to.	2	1	2
13	Unexploded Ordnance (UXO)	Preliminary UXO Threat Assessment indicates that it is likely for UXO to be encountered on the site. ● Severe injury and death to construction workers.	5	4	20	● Undertake a detailed UXO Risk Assessment before commencement of construction works to further elucidate the risk and ascertain mitigation measures for construction as required.	5	1	5
14	Design elements - soakaways	● Potential for localised dissolution, subsidence and ground collapse particularly in low density chalk. ● Potential for differential settlement of structures, if soakaways are sited close to foundations.	3	3	9	● Soakaways should be sited at least 10m away from the edge of foundations and ground bearing elements.	3	1	3

8 Conclusions and Recommendations

The below summary presents an overview of the key findings and conclusions of this report. However, no reliance should be placed on the summary without referring to the relevant Sections within this report.

8.1 Geotechnical

8.1.1 Conclusions

The geology at the site comprised Made Ground extending from surface to variable depths between 0.45m and 0.65m bgl beneath both the existing car park within the north and localised Made Ground beneath soft landscaping within the south. Where Made Ground was absent Topsoil was encountered between 0.15 – 0.30m bgl, within the southern and southeastern portions of the site set to soft landscaping.

Head Deposits were found underlying Topsoil within the southern and southeastern of the site only up to 0.2m thickness.

The underlying bedrock comprised Chalk with a weathered structureless profile comprising predominantly Grade Dc Chalk which goes though a transition zone around 3.00 – 4.00m bgl (~82 – 80m AOD) to structured Chalk. Structured Chalk was proven to depths up to 15.00m bgl.

No groundwater was encountered during the intrusive GI works but encountered between 14.65m and 14.67m bgl (69.75 and 69.31m AOD) during monitoring although these readings may be indicative of perched water within deep borehole installations.

The Made Ground or Chalk bedrock deposits are not considered to be aggressive to any concrete used as part of the construction works. The ground aggressivity characteristics of the Head Deposits were not evaluated as part of the GI; however, this is considered less critical due to their shallow and limited nature, it being unlikely to be the founding stratum for foundations and the likelihood of these being removed during excavations as part of the proposed works.

There is a residual risk of UXO on-site thus the risk should be further elucidated by undertaking a Detailed UXO risk assessment and seeking specialist advice to mitigate any risk posed to construction works.

8.1.2 Recommendations

The following recommendations have been concluded at this stage:

- Due consideration should be given to drainage design and the risk this poses to ground dissolution. Given the low-density Chalk encountered beneath the site, a minimum off set of 10m for the placement of infiltration drainage tanks from foundations and ground bearing structural elements should be adopted in accordance with guidance from CIRIA C574 and Wiltshire Council.
- During detailed design, all characteristic geotechnical parameters recommended within this report require suitable review. They should be also factored with appropriate partial safety factors as per Eurocode 7 and UK Annexes to comply with current design standards.
- With review of the ground conditions present it is considered that a traditional shallow strip or pad foundation solution should be appropriate for the currently proposed scheme at this stage of design.

- Any design should take into consideration the potential risks posed by the variability of the depth of the weathered surface of the Chalk and the potential for fracturing, possible dissolution and localised zones of weaker material. Some of these are low to very low in terms of risk profile, but cannot be discounted due to the effect they can have.
- The use of ground bearing floor slabs could be appropriate, however if differential settlement tolerances are stringent, then a suspended floor slab could be considered.
- Chalk materials are likely to be frost susceptible and to ensure mitigation against frost heave should be suitably protected during site works and appropriately protected as part of the permanent solution.
- Chalk is also sensitive to water content change and should be treated with care during construction to ensure it does not deteriorate, with the potential for strength and stiffness to reduce dramatically. This deterioration could also adversely impact the requirements for capping layers on pavements.
- In terms of re-use potential, the Chalk could be suitable for re-use on site, likely as a general Class 3 fill or landscape fill, but not as any form of structural fill. Careful review of the properties of the material required, together with a likely requirement for further testing prior to re-use to fully understand this.

8.2 Geoenvironmental Conclusions

8.2.1 Conclusions

There are no exceedances of GACs protective of human health for public open space and residential end uses within the site area. Additionally, there are no exceedances of GACs relating to controlled waters. As such, it is concluded that the soils present on site do not pose a contaminated land risk to the proposed development.

Given the lack of exceedances identified within the site, the contaminated land assessment has determined that there are no active pollutant linkages present within the site area.

There risk from ground gas and vapours has been assessed as low.

Only limited groundwater was encountered during the post-fieldwork monitoring, not in amounts sufficient for sampling, and as such an assessment of contamination within groundwater could not be undertaken.

A waste classification assessment has not been undertaken for the site.

8.2.2 Recommendations

The following recommendations have been concluded at this stage:

- If any excavated soils are proposed for reuse on site during construction, additional risk assessment, which may include detailed modelling, may be required to define site specific criteria for re-use of material that will ensure hazardous substances are not introduced to the groundwater at unacceptable concentrations as per Environment Agency guidelines and waste management guidelines.
- A UKWIR assessment should be undertaken to assess suitable materials for water pipes associated with the proposed development
- A Construction Environmental Management Plan should be in place manage/mitigate potential unforeseen risks to receptors during construction.
- There is the potential for undiscovered contamination to be encountered during the development works. An unexpected contamination protocol should be produced and adhered to throughout the development works.

- Construction workers should use site specific risk assessments and method statements and, where necessary, the use of personal protective equipment (PPE) where residual risks remain.
- A licenced waste carrier should be consulted if removal of soils is required during the site development.

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A. Factual Ground Investigation Report

GEOTECHNICS

BUILD ON CONFIDENCE

Ground Investigation

at

Salisbury District Hospital Elective Care Centre

Project No:	PE262018
Client:	Salisbury NHS Foundation Trust
Engineer:	Mott MacDonald Ltd
Date:	June 2026

Factual Report

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GEOTECHNICS
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1.0 INTRODUCTION

A geotechnical and geoenvironmental investigation was undertaken by Geotechnics Limited at the site of a proposed Elective Care Centre at Salisbury District Hospital. The investigation was carried out to the instructions of the Engineer, Mott MacDonald Ltd. on behalf of the Client, Salisbury NHS Foundation Trust. This report describes the work undertaken and presents the data obtained.

2.0 OBJECT AND SCOPE OF THE INVESTIGATION

The object of the investigation was to obtain information on the ground and groundwater conditions relating to the design of the proposed works the problems which have been experienced and their solution within the limitations posed by exploratory hole numbers, locations, depths, methods adopted and the scope of approved in situ and laboratory testing. The Brief for the project is included in Appendix 1. The investigation comprised dynamic sampling and rotary drilling boreholes, trial pits, hand excavated inspection pits, in situ and laboratory testing and reporting. A Factual Report was also commissioned.

3.0 PRESENTATION

A description of the site and a summary of the procedures followed during the investigation process are presented in Sections 4 to 6. The factual data so obtained are presented in Appendices 4 to 12 of this report. Attention is drawn to the General Notes and Investigation Procedures presented in Appendix 15 to aid an understanding of the procedures followed and the context in which the report should be read.

In addition, the report is presented in electronic format in accordance with "The Electronic Transfer of Geotechnical Data from Ground Investigations" published by the AGS (the AGS Format) are presented separately as a digital file.

4.0 THE SITE

4.1 Location

The site is located approximately within the ground of Salisbury District Hospital, approximately 3km south of the centre of Salisbury, Wiltshire. The approximate Ordnance Survey National Grid Reference for the centre of the site is SU 15062 27237 and an extract from the relevant 1:50,000 Scale O.S. Map (Sheet No. 130) is included as Appendix 2.

4.2 Description

The site is approximately square in shape and comprises of the entire helipad area and southern section of the hospital's staff car park 9. Surrounding the helipad is a fenced exclusion zone of grass, with some active containers in the southwestern corner. The northeastern edge of the staff car park is a vegetated bank with trees. To the east, the site is adjacent to numerous agricultural fields. The hospital is to the west of the site across the main access road, Victoria Drive East.

4.3 Site Geology

The British Geological Survey website, https://geologyviewer.bgs.ac.uk/?_ga=2.114029319.1655714609.1723029244-800715464.1723029244, accessed on the 12th March 2026, shows the site to be underlain by chalk bedrock of the Culver Chalk formation. Due to the current use of the land, there is hardstanding across a majority of the site.

4.4 Hydrogeology

The British Geological Survey GeoIndex Onshore website, https://mapapps2.bgs.ac.uk/geoindex/home.html?_ga=2.217725392.773576511.1773320849-676156479.1773320849, accessed on the 12th March 2026, shows the site to be underlain by the White Chalk Subgroup, a highly productive principal aquifer up to 450m thick.

5.0 PROCEDURE

5.1 Commissioning

The work was awarded following submission of a tender by the Engineer for ground investigation of the site in accordance with the Client's requirements (see Appendix 1).

5.2 General

The procedures followed in this site investigation are based on BS 5930: 2015+A1:2020 – Code of Practice for Site Investigations. The soils and rocks encountered have been described in accordance with BS5930:2015+A1:2020, BS EN ISO 14688-1:2018 and BS EN ISO 14689:2018. The dynamic sample with rotary borehole, trial pit and hand excavated inspection pit records are included in Appendices 4 to 9 and their approximate positions are shown on the Exploratory Hole Location Plan in Appendix 3.

The Exploratory Hole locations were selected by the Engineer, Mott MacDonald Ltd. The co-ordinates and levels shown on the Exploratory Hole Records were measured using a Leica GPS survey device. The depths quoted on the exploratory hole records are in metres below ground level.

Prior to the investigation, a PAS 128 Type B survey was carried out by MapTec Ltd. utilising GPR to check for the presence of buried services at the proposed exploratory hole locations.

At each exploratory hole location, with the exception of the trial pits, an inspection pit was excavated using insulated hand tools to a depth of 1.20m below ground level to check for the presence of underground services. Prior to and on completion of the excavation, the location was scanned using a cable avoidance tool (CAT). At those locations where hardstanding was present at ground level, insulated power tools were used to advance the exploratory hole through the hardstanding and facilitate the excavation of the inspection pit.

5.3 Explosive Ordnance Clearance

Historical information provided by the Engineer highlighted the potential risk of the presence of unexploded bombs/ordnance beneath the site and in order to reduce the risk of them being found during drilling or excavation, each exploratory hole location was cleared by a Specialist Company, EOD Contracts Limited, before commencement of the ground investigation operations. The clearance works were carried out by an Explosive Ordnance Detection (EOD)

Engineer. Observational methods, in conjunction with careful excavation and the use of a hand-held magnetometer were used for the trial pits and hand dug trial pits. The dynamic sample and rotary boreholes were cleared progressively in 1.00 and 1.50m stages. This continued until a depth was reached at which the EOD Engineer judged that the risk of ordnance being present was low and the drilling could continue in the usual manner to the scheduled depth.

5.4 Dynamic Sampling and Rotary Boreholes

Four (4 No.) boreholes (numbered BH01 to BH04), up to 168mm in diameter, were sunk utilising either dynamic sampling or a combination of dynamic sampling and rotary coring techniques to depths varying between 10.00 and 15.00m below ground level. The work was carried out between the 25th February to the 3rd of March 2026.

The dynamic sample sections of the boreholes were carried out using a hydraulic percussive apparatus fitted to the rotary drilling rig which drives lined steel tubes into the ground in 1.00m lengths. Samples are retrieved in plastic liners. The liners are extruded from the sampler and placed into suitable core boxes. The retrieved liners were split and the recovered soils described before being sub-sampled into ES, D and B samples as shown on the Borehole Records.

Rotary coring,108mm diameter, commenced in boreholes BH01, BH02 and BH03 at depths of 3.00m below ground level. The drilling equipment used in the rotary sections of the boreholes on this particular contract utilised water as the flushing medium. Rock cores were extruded horizontally in transparent liners and placed into suitable core boxes. Photographs of the individual core boxes are included in Appendix 5.

Standard Penetration Tests (SPTs) were undertaken at the depths indicated on the borehole records in accordance with BS EN ISO 22476-3:2005+A1:2011 to obtain a measure of the engineering properties of the proved strata.

Groundwater observations are included on the Borehole Records where appropriate and any rise in water level was recorded over 20 minutes whilst drilling operations were suspended. It should be noted that the addition of water to the borehole as part of the drilling process may have masked the presence of groundwater in the borehole.

On completion, standpipes were installed in Boreholes BH01 to BH04 (see Section 5.5).

5.5 Instrumentation and Monitoring

Long-term monitoring of the gas and groundwater levels was made possible by the installation of standpipes as follows:

Exploratory Hole	Standpipe Slotted Pipe & Filter Zone (m) 19mm	Standpipe Slotted Pipe & Filter Zone (m) 50mm
BH01	1.00 to 2.00m	9.80 to 14.80m
BH02	1.00 to 2.00m	2.00 to 10.00m
BH03	1.00 to 2.00m	3.00 to 10.00m
BH04	N/A	2.00 to 10.00m

On each of the monitoring visits a record of the groundwater level in the standpipes was obtained.

In addition to the groundwater levels, the following parameters were measured and recorded in each standpipe using a Gas Data GFM436 Gas Analyser:-

- Concentrations (% Vol) of CH4, O2, CO2, along with (% LEL) CH4, PID (ppm), H2S, CO
- Flow Rate
- Differential Pressure
- Barometric Pressure
- Air Temperature
- Down Hole Temperature

The results of the eight (8 No.) monitoring visits are presented in Appendix 12. The calibration certificate can be found in Appendix 12.

5.6 Trial Pits

Two (2 No.) Trial Pits (numbered TP01 and TP02) were excavated to a depth of 3.00m below ground level using a JCB 3CX excavator on the 26th February 2026. One (1 No.) Trial Pit (numbered TP02A) was excavated to 2.00m below ground level using a JCB 3CX to carry out Soakaway tests. This work was supervised on site by a geotechnical engineer.

The profiles of strata or other features were recorded as excavation proceeded and measurements taken from ground level. Representative samples were taken, where appropriate, for laboratory examination and analysis and in addition, Environmental samples (ES) were recovered at the depths indicated on the Trial Pit Records in Appendix 6. Samples were taken directly from excavated materials deposited at the surface. Groundwater observations and trench stability notes are included on the Trial Pit Records. Photographs of the pits are presented in Appendix 7.

5.7 Soakaway Tests

One (1 No.) soakaway test was carried out in Trial Pit TP02A, 1.00m away from the initial Trial Pit TP02 location, at depths between 1.00 and 2.00m below ground level in accordance with the method given in BRE Digest 365 "Soakaway Design", 2016. Following the test procedures in the Digest the tests were repeated three times. The results of the tests are presented in Appendix 10.

5.8 Dynamic Cone Penetration Tests and Hand Excavated Inspection pits

Six (6 No.) Dynamic Cone Penetration (DCP) tests were carried out in total. Two (2 no.) DCP tests in each of the three (3 No.) 'L' shaped hand excavated inspection pits (numbered DCP01 to DCP03) marked on the Exploratory Hole Location Plan (see Appendix 3). The tests were commenced at depths between 0.09 to 0.63m below ground level and were performed to give an indication of CBR values at shallow depths to aid pavement design.

The test comprises the measurement of increments of penetration of a 60° cone driven into the ground using an 8kg hammer falling a distance of 575mm. The CBR is obtained from the relationship between the CBR and the DCP readings.

$$\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$$

as defined in the Design Manual for Roads and Bridges Document CS229 Revision 0, March 2020, published by Highways England. The test results are presented in Appendix 11.

5.9 In-Situ Testing

Hand vane tests and pocket penetrometer tests were carried out where appropriate to obtain a measure of the undrained shear strength of cohesive soils within the inspection pits at the depths indicated on the Borehole Records. Typically, each test comprised three readings with their mean value being reported. The results of these tests can be seen in the exploratory hole logs (See appendices 4 and 8).

Photo-ionisation detection (PID) tests were undertaken on the Environmental Samples (ES) collected from each exploratory location, by testing the headspace of the soil samples taken. The tests were carried out using a suitably calibrated ION Science Tiger XTL PID Meter fitted with a 10.6eV UV lamp. The results of the PID tests are presented on the exploratory hole records, with the readings reported as Volatile Organic Compounds (VOCs) recorded in parts per million. The calibration certificate can be found in Appendix 12.

6.0 LABORATORY TESTING

6.1 Geotechnical

The laboratory testing schedule was specified by the Engineer in order to relate to the proposed development. Unless otherwise stated, the tests were carried out in Geotechnics Limited's UKAS accredited Laboratory (Testing No. 1365) and were undertaken in accordance with the appropriate Standards as indicated below and on the Laboratory Test Certificate in Appendix 13. Any descriptions, opinions and interpretations are outside the scope of UKAS accreditation.

The tests undertaken can be summarised as follows:-

Standard	Test Description	Quantity
BS EN ISO 17892-1:2014	Water Content Determination	5
BS EN ISO 17892-4:2016	Particle Size Distribution Determination – Sieving Method	4
	Particle Size Distribution Determination – Pipette Method	4
BS 1377:1990 Part 2: 3.3	Saturation Moisture Content of Chalk	15
BS5930:2015+A1:2020	Extrude, Split, Photograph and Describe Undisturbed Sample	1
BS 1377:1990 Part 4: 6	Chalk Crushing Value Determination	2
ISRM Testing Methods	Point Load Determination	15
BS EN ISO 17892-12:2018 Cl. 5.3 & 5.5	Liquid Limit and Plastic Limit (4 Points Method)	3

The following testing was carried out at the laboratories of Normec DETS (UKAS Accredited Laboratory, Number 2139).

Test Description	Quantity
BRE Special Digest 1 Suite comprising:- Soluble Sulphate Acid Soluble Sulphate Total Sulphur	9

Soluble Magnesium Ammonium Nitrate Chloride pH	
BS 1377:1990 Part 3: 3: Organic Matter Content	3

The following testing was carried out at the laboratories of MATtest Ltd (UKAS Accredited Laboratory, Number 2643).

Unconfined Compressive Strength (UCS) testing was initially scheduled on four (4 No.) core samples, but samples did not meet the dimension criteria to perform the test in accordance with ISRM Testing Methods. Alternative testing, Axial and Diametral Point Load Determination, was instructed and scheduled by the Engineer.

Standard	Test Description	Quantity
ISRM Testing Methods	Point Load Determination	4
ISRM Testing Methods	Water Content and Density Test	1

6.2 Contamination

Selected samples of soil were tested at the laboratories of Normec DETS Ltd. for a number of determinands in order to check on potential site contamination. The determinands were specified by the Engineer and are detailed on the results sheets in Appendix 14 together with the test result as well as the test method, accreditation and detection limit.

In addition, a number of leachate samples were also prepared from selected soil samples in accordance with the NRA Leachate Protocol and analysed for the determinants detailed on the results sheets in Appendix 14.

Signed for and on behalf of Geotechnics Limited.

Prepared by:

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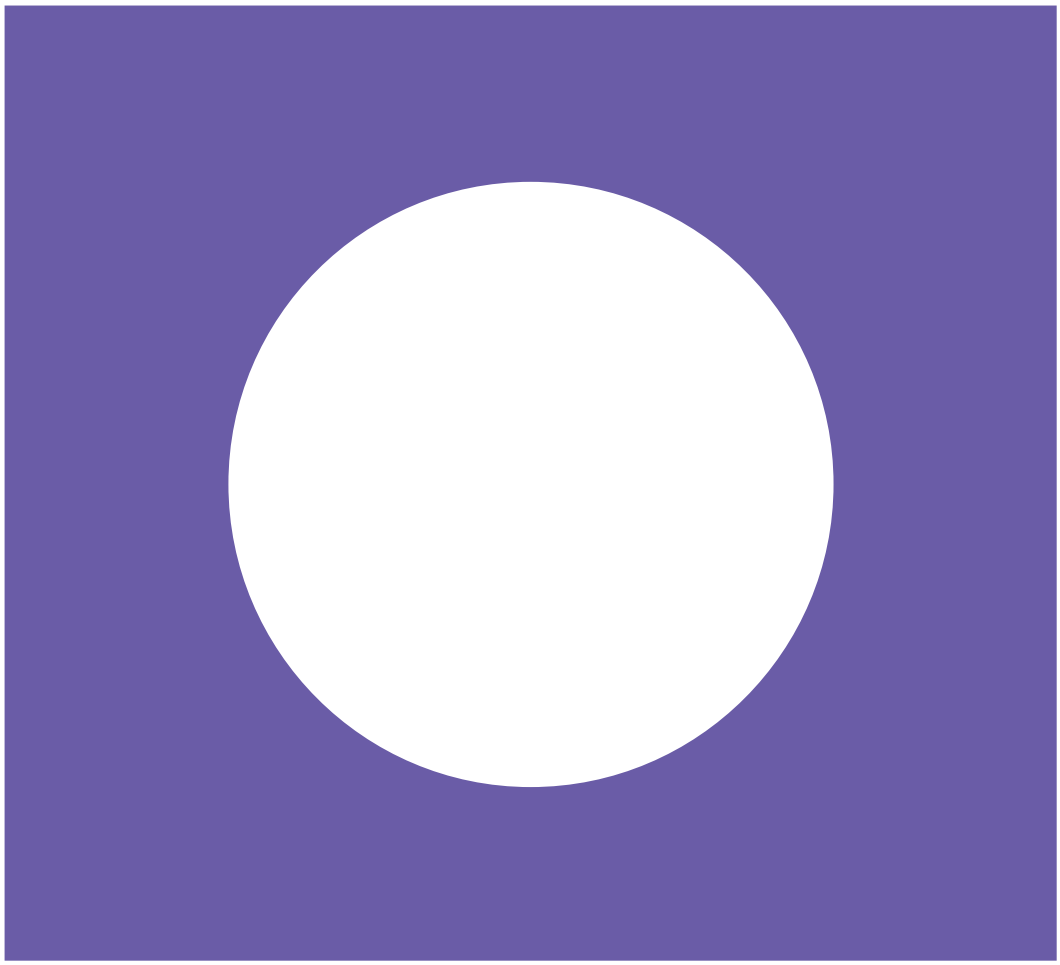
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APPENDIX 1

The Brief

MOTT MACDONALD



Salisbury Diagnostic and Surgical Hub

Ground Investigation Specification

February 2026

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Executive summary

The Technical Specification shall be the UK Specification for Ground Investigation, Third Edition (2022) published by the Institution of Civil Engineers with information, amendments and additions as described in the accompanying Schedules below.

Schedule 1. Information and site-specific requirements

Schedule 2. Exploratory Holes

Schedule 3. Investigation Supervisor's Facilities

In so far as any of the numbered Appendices, Substitute, Additional or Amended Clauses may conflict or be inconsistent with any provisions of the above-mentioned Specification, then the numbered Appendices, Substitute, Additional or Amended Clauses shall always prevail. For ease of reference the numbering system used in these schedules corresponds to that used in the published specification.

Any Clause in the Specification, which relates to the work or materials not required for the Investigation shall be deemed not to apply.

The Conditions of Contract are to be confirmed with the Client. It is recommended that these shall be the Infrastructure Condition of Contract ("ICC") – Ground Investigation Version, August 2011 published by the Association of Construction Engineers ("ACE") and Civil Engineering Contractors' Association ("CECA") (herein after referred to as "ICC Conditions") save in so far as the same are hereby expressly varied herewith and shall form part of these Conditions.

S1 Schedule S1. Introduction

S1.1 General

S1.1.1 Name of Contract

The name of the contract shall be “Salisbury District Hospital Elective Care Centre – Ground Investigation Specification”.

S1.1.2 Employer

The Employer for the Project will be Salisbury NHS Foundation Trust.

Address: Salisbury NHS Foundation Trust
Odstock Road
Salisbury
Wiltshire, SP2 8BJ
United Kingdom

S1.1.3 Project Information

In the previous versions of this Ground investigation Specification, Mott MacDonald Limited was originally commissioned to provide a GI scope of the proposed Salisbury Elective Care Centre now termed the ‘Diagnostic and Surgical Hub (DASH)’ in this report (shown in Figure 1.1). Following stakeholder engagement as the project progressed, a new option for the Diagnostic and Surgical Hub was proposed with new structural elements added to the original design. The GI scope has been expanded to accommodate these additions to the design.

Details of the site location and project objectives are provided in Sections S1.3 and S1.5.

S1.2 Investigation Supervisor

The ‘Investigation Supervisor’ is hereby defined in accordance with Clause 2.2 of the main specification ‘Site Investigation in Construction – UK Specification for Ground Investigation, Third Edition’ (ICE, 2022).

The Investigation Supervisor for the Project will be Mott MacDonald Limited.

Address: Mott MacDonald Limited
1st Floor, Lakeside 300
Broadland Business Park
Norwich NR7 0WG
United Kingdom

Telephone: +44 (0) 20 8774 2000

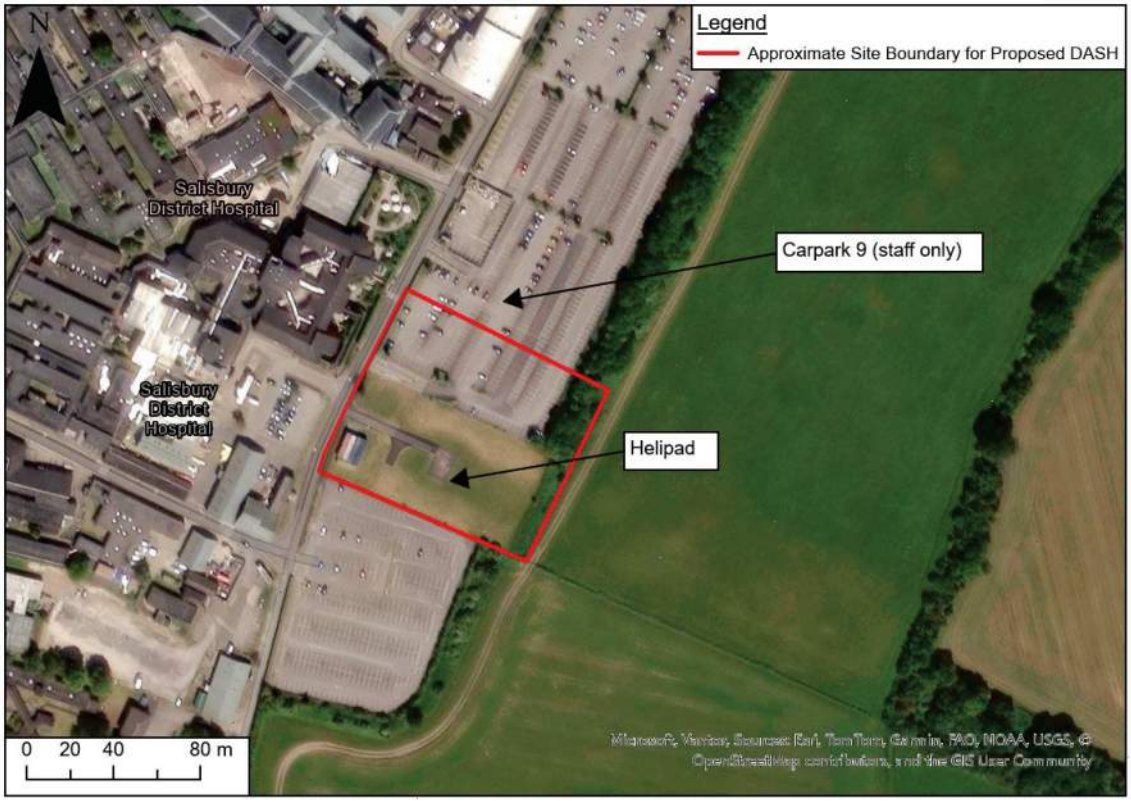
S1.3 Location and Description of the Sites

Both sites is within the grounds of Salisbury District Hospital which is approximately 3km south of the centre of the city of Salisbury, Wiltshire, England.

The proposed Diagnostic and Surgical Hub (DASH) is located within the area demarked by the red line boundary in Figure 1.1. It is centred at an approximate NGR of 415060E and 127250N.

The land use in the southern half of the site comprises of the hospital's emergency helipad surrounded by grassland with some containers present in the southwestern corner. The hospital's Car Park 9 makes up the northern half of the site, with some dense tree vegetation present at the northeastern boundary. Review of aerial imagery indicates some reworked areas around the helipad in the southern half of the site.

Figure 1.1: General Site Layout



Source: Produced by Mott MacDonald Ltd (2026), Contains OS Data © Crown Copyright and database right 2026. Contains data from OS Zoomstack, Esri UK, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS.

S1.4 Main works proposed and purpose of this contract

The project is funded by NHSE to support a return to constitutional standards, reducing patient waiting times and improving the quality of care. The scheme involves building a new elective care centre to replace the existing day surgery unit to help reduce backlogs and provide a greater efficiency in the healthcare delivery for patients.

The proposed works in the DASH are expected to take the form of three and two storey buildings comprising of new a theatre building, pre/post op recovery centres, energy centre, community diagnostic centres (CDC), hotel block and an entrance with associated infrastructure such as access roads and sustainable drainage ponds.

S1.5 Objectives and scope of investigation

This investigation is to confirm the geotechnical and geo-environmental conditions on site, informing design and mitigating risks outlined in the Geotechnical and Geoenvironmental Desk Study (Salisbury Elective Care Centre, Geotechnical and Geoenvironmental Desk Study, Doc. ID - STECC-MMD-ZZ-ZZ-RP-GE-910001).

The proposed scope of investigations includes exploratory holes scoped by Mott MacDonald Limited (MML). Reference should be made to Schedule 2 and the exploratory hole plans within Appendix A which provide further details. The proposed GI includes:

- 2 No. of Dynamic sampling with rotary follow-on boreholes to a depth up to 10m bgl.
- 2 No. of Dynamic sampling with rotary follow-on boreholes to a depth up to 15m bgl.
- 2 No. of machine excavated trial pits up to 3m bgl for assessment of ground conditions (specifically Chalk classification), as well as possible earthworks acceptability testing, and infiltration tests.
- 3 No. of hand dug inspection pits to a depth of 1.2mbgl with associated Dynamic Cone Penetrometer testing to assess material at sub-grade below the access road.
- In-situ Testing to include SPT's and sampling specified within the document.
- Geotechnical and geo-environmental laboratory testing on soil samples.
- BRE chemical laboratory testing on soils and groundwater.
- Establishing ground levels and locations of exploratory holes.
- Factual reporting to BS EN 1997-2-2007 incorporating corrigendum June 2010.
- Groundwater and ground gas monitoring proposed to be for a minimum period of three months (anticipated to comprise of eight visits) following completion of fieldwork.

S1.6 Geology and ground conditions

The following general assessment of the geology of the site and ground conditions has been inferred from available information. No assurance is given to its accuracy. This is detailed within the site-specific desk study:

- Salisbury Elective Care Centre, Geotechnical and Geoenvironmental Desk Study, Doc. ID – STECC-MMD-ZZ-ZZ-RP-GE-910001, June 2025. (updated revision to be issued in due course, and this document updated if required).
- The British Geological Survey (BGS) of England and Wales 1: 50,000 scale paper map (sheet no. 298), British Geological Survey of Great Britain National Grid Series 1:10,000 (SU12NE) and BGS GeoIndex Onshore (2025) have been consulted.

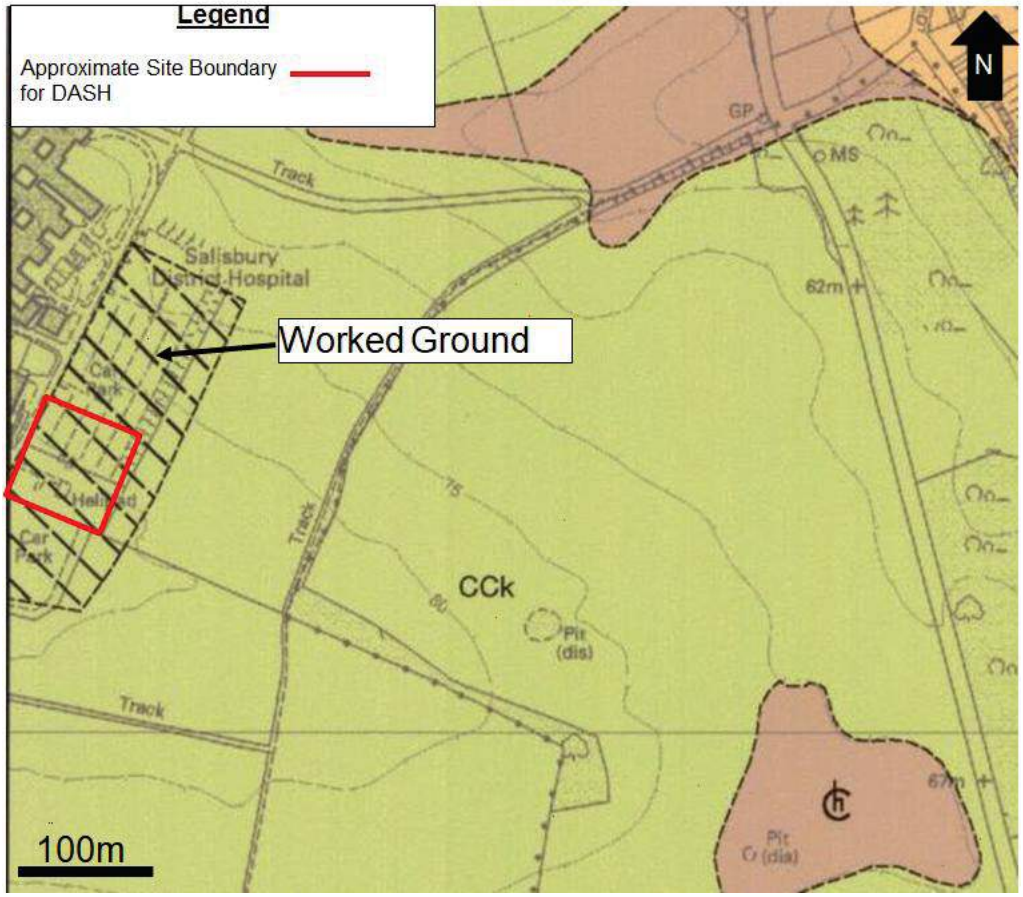
In addition to the above sources, factual reports from ground investigations undertaken approximately 110m northwest of the site have also been examined. The references for these documents are provided below, and the desk study should be consulted for further details.

- Ground Investigation No W0929B Factual and Interpretative Draft Report, Salisbury District Hospital 'Site B' - CJ Associates Geotechnical Limited, January 2009.
- Ground Investigation Report – Elective Surgery Recovery Ward, Salisbury Hospital. Doc ID - 081703.300-CUR-00-XX-RP-GE-0001-V03.

S.1.6 1 Artificial Ground

Made Ground/Worked Ground/Landscaped Ground/Disturbed Ground is not shown as being present on the site in the 1:50,000 scale map, however, BGS mapping only indicates artificial deposits where they occur above a thickness of 2.5m. However, the 1:10,000 map (see Figure 1.2 below) records that the site is underlain by Worked Ground. Worked Ground is defined by the BGS as an area where the land surface (natural or artificial) has been lowered because of man-made excavations such as roads and pavements.

Figure 1.2: 1:10,000 BGS Geological Map Extract

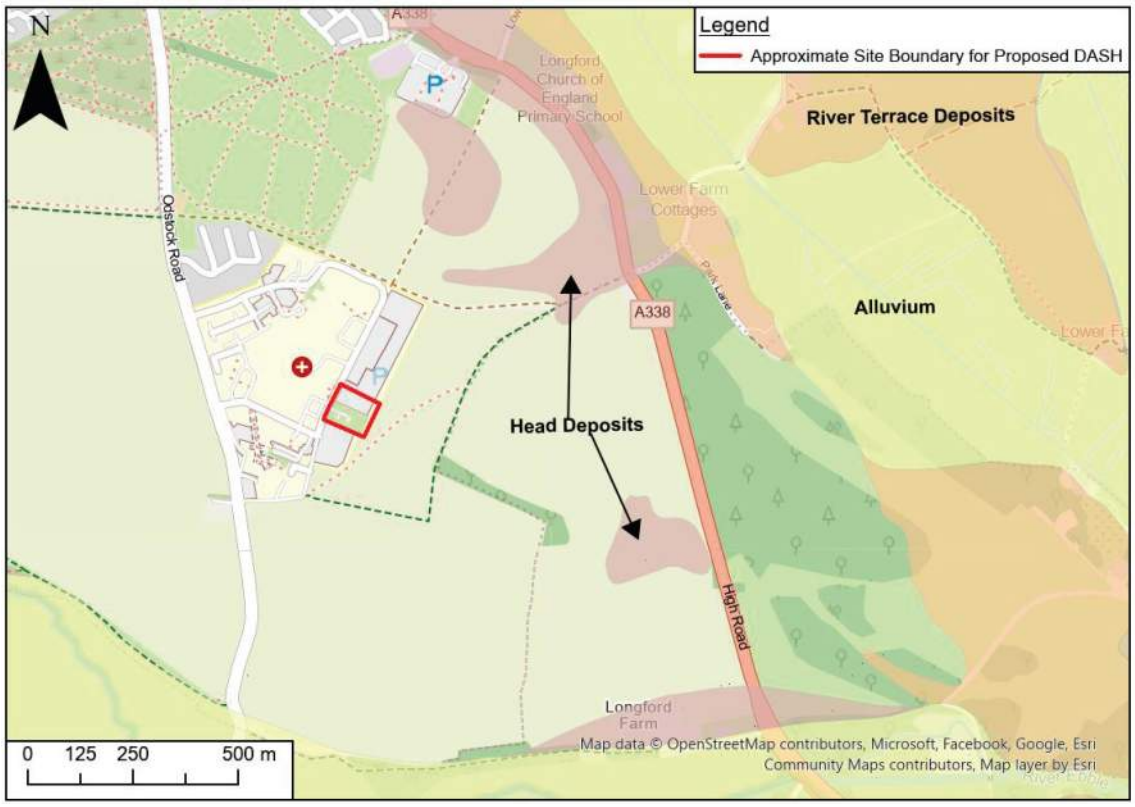


Source: British Geological Survey, 1:10,000 Geology Series Sheet SU12NE (Alderbury) included in 1:50,000 Geological Sheet 298 (Salisbury).

S1.6.1 Superficial deposits

The BGS mapping indicates that there are no mapped superficial geological deposits are within the footprint of the site, with the closest superficial deposits mapped approximately 350m northeast of the site (Head Deposits). Lack of mapped superficial strata suggests that rockhead could be at or near the current ground level.

Figure 1.3: Superficial Geology



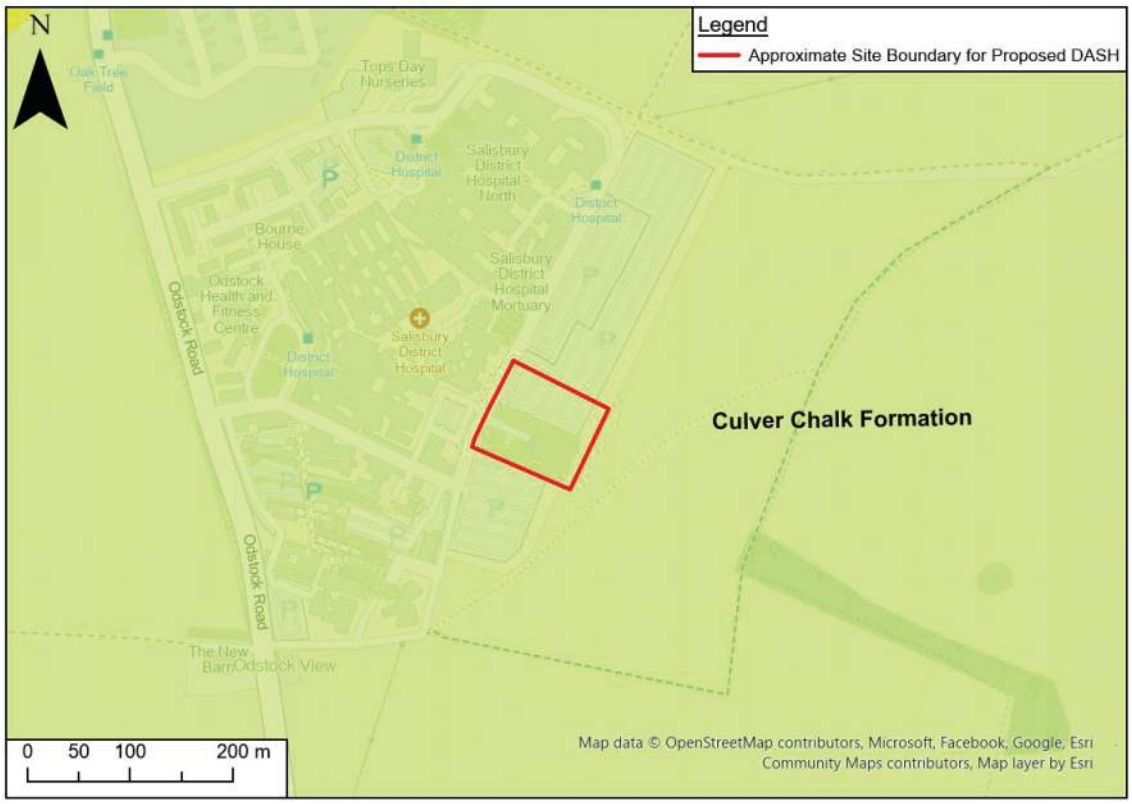
Source: Produced by Mott MacDonald Limited (2026), Contains OS Data © Crown Copyright and database right 2026. Contains data from OS Zoomstack, Esri UK, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS. Contains British Geological Survey materials © NERC [2026] .

S1.6.2 Bedrock geology

The BGS mapping indicates that the site and immediate surrounding area are underlain by the Culver Chalk Formation.

The Culver Chalk Formation is part of the White Chalk Subgroup is composed of soft white chalks without significant marl seams, but with some very strongly developed nodular and semi tabular flints. The Thickness of the unit is between 35 and 45m within the Salisbury district. The lower boundary is conformable.

Figure 1.4: Bedrock Geology



Source: Produced by Mott MacDonald Limited (2026), Contains OS Data © Crown Copyright and database right 2026. Contains data from OS Zoomstack, Esri UK, Esri, HERE, Garmin, Foursquare, METI/NASA, USGS. Contains British Geological Survey materials © NERC [2026] .

S1.6.3 Structural geology

According to 1:50,000 and 1:10,000 BGS maps, no structural features (e.g. faults) are recorded on or within a 500m radius of the site, with the nearest fault mapped approximately 900m south of the site. Although no features are recorded, this does not preclude the potential presence of small and/or unmapped faults and folds.

S1.6.4 Previous Ground Investigation

There are no BGS Boreholes within the boundary of the site with the closest BGS boreholes approximately 500m north/northwest of the site. However, Client provided information based on two previous ground Investigations undertaken on a site approximately 110m northwest have been reviewed from the documents stated above in this Section. A summary of the encountered geology is provided below.

Table 1.1: Encountered Geology – 2009 Ground Investigation

Strata	Top Depth (m bgl)	Bottom Depth (m bgl)	Thickness (m)
Made Ground Grass/Hedge over brown with white mottling slightly gravelly very clayey fine to medium Sand with occasional fragments of wood, red brick, and porcelain. Gravel is subangular to subrounded fine to coarse of chalk.	0	0.36 – 1.4*	0.3 – 1.4*

Strata	Top Depth (m bgl)	Bottom Depth (m bgl)	Thickness (m)
Culver Chalk Formation (Grade Dc) Structureless CHALK composed of cream slightly clayey slightly sandy subangular to subrounded fine to coarse GRAVEL. Clasts are very weak and weak, low and medium density, white with occasional black specks. Matrix is uncompacted, light brown occasional subrounded flint cobles present Clasts becoming weak and medium density between 2.16 and 2.61, 3.5 and 3.99, 4.22 and 4.5, 4.87 – 5.29, 5 and 5.23, 5.7 and 6.5m bgl.	0.36 – 0.84	6.0 – 8.	5.2* – 7.2*

* Depth and thickness are unproven.

Table 1.2: Encountered Geology - 2022 Ground Investigation

Strata	Top Depth (m bgl)	Bottom Depth (m bgl)	Thickness (m)
Made Ground *Encountered as both cohesive and Granular constituents.* Firm brown and light brown slightly sandy gravelly silty CLAY/clayey SILT with low cobble content and many rootlets. Gravel is angular to sub-angular Fine to coarse of chalk, Flint and occasional brick. Cobbles are very strong angular of flint. Cream to light brown to greyish brown silty sandy angular to sub-angular Fine to coarse GRAVEL of limestone, chalk and flint with low cobble content.	0	0.55 – 0.66	0.55 – 0.66
Possible Reworked Culver Chalk Formation Cream and light brown slightly clayey sandy angular to sub-angular fine to coarse GRAVEL of chalk and occasional flint.	0.5 - 0.6	1.4 – 1.5	0.8 – 0.9
Culver Chalk Formation (Grade Dc) Cream and light brown slightly clayey sandy angular to sub-angular Fine to coarse GRAVEL of chalk and occasional flint. Extremely weak to very weak of white and cream clayey structureless CHALK.	0.6 – 1.4	1.5* - 6.2*	0.9* - 3.6*

* Depth and thickness are unproven.

S1.6.5 Contamination

Potential sources of on-site contamination identified from the desk study includes:

- Existing site use as a helipad (with potential associated contamination sources including spillages and leakages of fuel, oil, and lubricants from helicopters);
- Existing site use as a carpark (with potential associated contamination sources including spillages and leakages of fuel, oil, and lubricants from parked vehicles);
- Made Ground associated with Worked Ground and subsequent construction of existing carpark and helipad; and
- Spillages of unknown contaminants from on-site storage containers.

Whilst not site specific, the historical reports available record some information on contaminated land. This is summarised below, for full details please refer to the original reports.

The Curtins Consulting Limited Ground Investigation Report reported the following:

- A total of 3no soil samples were recovered from exploratory holes advanced as part of the ground investigation. Concerning the proposed end use of the soil, the contamination testing results recorded no exceedances for contaminants tested regarding ‘Commercial’ GACs. No occurrences of asbestos were recorded in the samples submitted for testing.
- Gas flow was rarely recorded on site and in boreholes where the flow has been shown to have low comparative values of elevated gas. Therefore, the site's Gas Screening Value (GSV) has adopted the worst credible scenario. Following an assessment by CIRIA C665, the GSV indicates a Characteristic Situation 1 (CS1) gas regime which does not require any gas protection measures.
- UK Radon Mapping confirms the site is situated in a radon area where less than 1% of homes are at or above the radon action level. Therefore, Radon protective measures are unnecessary for constructing new school buildings or extensions.

The CJ Associates Geotechnical Limited Factual and Interpretative Report reported the following:

- Contaminated soils – the contamination tests indicate generally low concentration of the potential contaminants.
- Contaminated Groundwater - Due to the low level of contamination found at the site, it is not considered likely that there would be a hazard to the groundwater beneath the site.
- Land Gas – based on ground conditions it is not considered gas protection measures will be required for new buildings.

S1.7 Schedule of drawing(s) and documents

The proposed ground investigation layout plan/s showing the indicative exploratory hole positions are included in Appendix A and requirements are provided in Schedule 2.

The following documents are available on request:

- Salisbury Elective Care Centre, Geotechnical and Geoenvironmental Desk Study, Doc. ID - SECC-MMD-XX-XX-T-G-0001, (updated revision to be issued in due course, and this document updated if required).
- CJ Associates Geotechnical Limited, Ground Investigation N0. W0929B Factual and Interpretative Report Salisbury District Hospital.- January 2009.
- Curtins Consulting Limited, Salisbury Hospital, Elective Surgery Recovery Ward, Ground Investigation Report, Doc Ref: 81703.300-CUR-00-XX-RP-GE-0001-V03, December 2022.
- Landmark Information Group, Site off Odstock Road, Nunton, Digital Utility Overview Plan. DWG Reference: 377078935_2.
- Salisbury Diagnostic and Surgical Hub (DASH), Massing and Stacking Options. Document Reference: SNHSC-PHS-XX-XX-A-PR-00005.
- RSK Geosciences Safe ground, Salisbury NHS Foundation Trust, PAS 128 M30-M1P* GPR Utility Survey. Drawing No: 4340819-SG-XX-00-2D-U-0003-C01 (Sheet1 – 8).

S1.8 General requirements (Specification Section 3 and 4) – particular restrictions/relaxations

S1.8.1 Data management plan (Clause 3.2)

As specified in Clause 3.2, a Data Management Plan shall be prepared in accordance with BS 8574: 2014, 'Code of practice for the management of geotechnical data for ground engineering projects' and used throughout the project.

S1.8.2 Quality management system (Clause 3.3)

Quality management to BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 ad BS OHSAS 18001: 2007/ BS ISO 45001: 2018 is required. Records of demonstrating compliance shall be made available to the Investigation Supervisor on request.

Laboratory testing shall be undertaken by a UKAS accredited laboratory. The Contractor shall provide with the tender return, copies of UKAS certificates for all tests scheduled within this specification.

S1.8.3 Project management, supervision and execution personnel (Clause 3.2, 4.4 and 4.5)

The Contractor shall provide full time professional attendance on site for the duration of the ground investigation works with a suitably qualified and experienced engineering geologist or geotechnical engineer nominated to act as Site Agent. The technical direction of all fieldwork shall be their responsibility. Additional supervision of a single activity may be required where constant supervision is required. As a minimum, the nominated Site Agent shall have at least 5 years' experience of delivering similar ground investigation projects and/or scope of works.

The description of soils and logging of dynamic sampling and rotary follow-on boreholes, and observation pits shall be carried out by a graduate engineer or engineering geologist with experience in the examination and logging of soil and rock cores in accordance with:

- BS EN ISO 14688‑1:2002 (+A1 2013),
- BS EN ISO 14688‑2:2004 (+A1:2013),
- BS EN ISO 14689‑1:2013,
- Spinks T.W. and Norbury D.R. (1993) the engineering geological description of weak rocks and over consolidated soils, Proc. Conf Engineering.
- In addition, the description and logging of chalk should be in accordance with Lord et al., CIRIA C574 Engineering in Chalk.

All Contractors' supervisory staff shall be acceptable to the Investigation Supervisor. The Investigation Supervisor may reject a nominated person after arriving at site, if he/she considers that the person does not have the necessary skill, knowledge, or experience to carry out the required work. The geo-environmental sampling and testing, and geotechnical personnel may be one and the same person if suitable qualifications and experience can be demonstrated.

All site operatives should have undertaken CSCS training and certification before working on the Site.

In addition, at least one member of the Contractor's site personnel must be trained and competent in accordance with the Health and Safety Executive documentation, **HS(G)47: Avoiding Danger from Underground Services**.

CVs of all supervisory staff and copies of all current training certificates/records for operatives undertaking the works shall be submitted to the Investigation Supervisor and Client approval 5 working days prior to commencement of the site works.

The Contractor shall give written instructions to the site staff on all relevant aspects of the specification and sampling requirements.

The Investigation Supervisor will confirm any changes to scope or variance from instructions contained within this specification.

The Contractor will be expected to maintain close liaison with the Investigation Supervisor and be in close attendance on the Site to ensure that the highest quality of sampling and testing is achieved.

At least one representative of the Contractor's staff shall be a fully trained first aider and hold a current certificate. Should this person not be in attendance for the whole of the works, a replacement first aider shall form part of the Contractor's staff.

All drillers employed on the contract shall be British Drillers Association (BDA) accredited, with preference given to those with local experience in drilling. If required, drilling supervisors shall hold, as a minimum, a Level 3 Diploma in Advanced Land Drilling for the drilling activity being supervised. This includes sub-contractor drillers, the details of whom shall be sent to the Investigation Supervisor for approval prior to the commencement of the works. No sub-contract staff will be permitted without prior approval of the Employer/ Investigation Supervisor.

S1.8.4 Provision of ground practitioners and other personnel for technical support (Clause 4.3.6, 4.4.7, 4.5.4)

As specified in Clauses 4.3.6, 4.4.7 and 4.5.4.

S1.8.5 Hazardous ground, land affected by contamination and notifiable and invasive weeds (Clauses 3.5.2 and 3.5.4)

The proposed investigation area has been categorised as 'Yellow' in accordance with the British Drilling Association (BDA) document "Guidance for Safe Intrusive Activities on Contaminated land or Potentially Contaminated Land" (2008). The Contractor shall ensure that all working practices, equipment, PPE etc. satisfy the requirements of this categorisation. Should contaminants be encountered that warrant an increase in this classification then works shall stop and advice sought from the Investigation Supervisor.

It is currently understood that there are no notifiable or invasive weed species are known to be present on site. If notifiable or invasive weeds are encountered during the investigation, they shall be left undisturbed, an appropriate exclusion zone established around the infestation and the Investigation Supervisor notified immediately.

S1.8.6 Additional information on utilities not shown on Contract drawings (Clauses 3.5.1 and 5.5)

Responsibility for confirming the locations and protecting services on site rests with the Contractor regardless of any information provided to assist in identifying its location. A hand dug inspection pit shall be excavated for all exploratory holes, with all locations following required easements from existing utilities.

It is a requirement that a PAS 128:2022 Type B compliant survey is undertaken to identify existing utilities.

All available information obtained by the Employer / Investigation Supervisor during the Statutory Services Infrastructure Search shall be made available to the Contractor prior to commencement on-site. The Contractor shall also be made aware of all outstanding enquiries.

However, information on buried services may be incomplete and the Contractor must satisfy themself that adequate documentary searches have been undertaken.

Irrespective of the above, the Contractor will be required to use an appropriate device, such as a Cable Avoidance Tool (CAT) to check for buried services before commencing each exploratory location and undertake his own safe digging practices.

Where works are proposed to take place in close proximity to services, positive identification of each service should be provided prior to commencement of excavation by mechanical means.

All proposed works for the site and operatives working on the site must follow the requirements of the HSE Guidance Notes **HSG47 – 'Avoiding Danger from Underground Services'** and **GS6 – 'Avoidance of danger from overhead electrical power lines'**. These documents can be downloaded free of charge from http://www.hse.gov.uk/.

The available utility plan along with the topographic survey details, are provided in Appendix F. The utility survey covers the southern part of the wider

S1.8.7 Known/suspected mine workings, mineral extractions, etc. (Clause 3.5.2 and 3.5.5)

No record exists of a Coal Mining Reporting Area on the site or within a 1000m proximity (The Coal Authority, 2026).

The Envirocheck report indicates that there are BGS recorded mineral sites located approximately 545m northeast (Manor Farm Gravel Pit) and 797m north (Bridge Farm Chalk Pit) of the site.

S1.8.8 Protected species (Clause 3.5.3)

The Client is to advise whether there are any particular environmental or ecological, legislation or restrictions that the GI works are required to adhere to.

S1.8.9 Archaeological remains (Clause 3.5.6)

The Client is to advise whether there are any particular archaeological requirements or restrictions that the GI works will need to adhere to.

S1.8.10 Security of site (Clause 4.3.5)

As specified in Clause 4.3.5.

It is the GI Contractor's responsibility to ensure that the site is kept secure during the contract period. This includes all pedestrian safety controls.

Trial pits remaining open overnight (e.g., for the purpose of soakaway testing) shall be securely fenced off and where required covered to prevent access using Heras fencing or equal equivalent.

The Client is to advise where there are any other particular requirements with respect to site security that need to be adhered to as part of the GI works.

S1.8.11 Traffic safety and management (Clause 4.3.6)

Site access should be agreed with the Investigation Supervisor, Contractor and the Client and/or landowner and Tenant. The Contractor shall be responsible for minimising and reinstating damage to the site made during access.

It is anticipated that traffic management will be required to access the site. The exact requirements are to be confirmed by the Contactor.

The locations for investigation shall be accessed using those routes as may be agreed with Investigation Supervisor, Contractor, Tenant and the Client.

S1.8.12 Working hours (Clause 4.3.7)

The Contractor is responsible for ascertaining any local authority conditions in relation to Section 60 and 61 of the Control of Pollution Act 1974 which may limit working hours.

Unless otherwise specified the working hours will be 08:00 to 18:00, Monday to Friday, and are subject to confirmation with the Client, landowner and/or Tenant.

S1.8.13 Trainee site operative (Clause 4.5.2)

Trainee operatives will be permitted but only as an addition to a fully qualified Lead Driller. If the Contractor chooses to have trainee site operatives on site, they shall notify the Principal Contractor and the Investigation Supervisor 48 hours before the trainees attend site and demonstrate that appropriate safety measures are in place

Trainee operatives in boring and drilling may hold a red CSCS trainee card but must be under the direct supervision on site of a CSCS Land Drilling (Lead Driller) cardholder and under any other constraints set by the induction at works commencement.

S1.8.14 Contamination avoidance and/or aquifer protection measures required (Clauses 3.6.7, 3.6.8, 6.1)

The Contractor shall develop and implement as necessary any contingency measures for the control of spillages of hazardous substances either on land or into local watercourses. Preventative measures to avoid any such spillages should be reviewed to avoid any recurrences.

In executing any ground investigation works precautions must be taken to secure the complete protection of rivers, streams, ditches other watercourses and water in underground strata against silting, erosion or pollution. If notwithstanding these precautions, such silting, erosion or pollution does take place then the Environment Agency should be advised immediately, and immediate action should be agreed and taken to minimise the effect on the watercourse or aquifer.

No material intended for or arising from the ground investigation works and no equipment or other items for use in executing the works shall be stored or disposed of in a watercourse or in a position where it may fall or be washed into a watercourse or water body. Any such material or equipment that gets into a water body shall be removed immediately.

Wash waters from mobile pressure washers shall not be discharged to surface water drains, watercourses or soakaways. Detergents, including those described as bio-degradable shall not be discharged into surface water drains. Where possible washing activities shall be carried out in a designated area draining to the foul sewer or contained within a sealed drainage system or catchpit for offsite disposal by a licensed waste Contractor. It is the responsibility of the GI Contractor to obtain authorisation to discharge to the foul sewer from the sewerage undertaker.

The Contractor shall obtain approval for all temporary discharges to and abstractions from watercourses from the appropriate Agency and other appropriate bodies and shall comply in all respects with their requirements.

No water shall be discharged from the site to any watercourse, drain or soakaway without obtaining the appropriate consents, permissions or licences.

The GI Contractor shall use bio-degradable hydraulic oils in equipment working over or adjacent to water, and within aquifers.

S1.8.14.1 Prevention and minimisation of pollution of controlled waters

The Contractor shall develop and implement as necessary any contingency measures for the control of spillages of hazardous substances either on land or into local watercourses. Preventative measures to avoid any such spillages should be reviewed to avoid any recurrences.

In executing any ground investigation works precautions must be taken to secure the complete protection of rivers, streams, ditches other watercourses and water in underground strata against silting, erosion, or pollution. If not withstanding these precautions, such silting, erosion, or pollution does take place then the Environment Agency should be advised immediately, and immediate action should be agreed and taken to minimise the effect on the watercourse.

No material intended for or arising from the ground investigation works and no equipment or other items for use in executing the works shall be stored or disposed of in a watercourse or in a position where it may fall or be washed into a watercourse or water body. Any such material or equipment that gets into a water body shall be removed immediately.

Wash waters from mobile pressure washers shall not be discharged to surface water drains, watercourses, or soakaways. Detergents, including those described as bio-degradable shall not be discharged into surface water drains. Where possible washing activities shall be carried out in a designated area draining to the foul sewer or contained within a sealed drainage system or catchpit for offsite disposal by a licensed waste Contractor. It is the responsibility of the Contractor to obtain authorisation to discharge to the foul sewer from the sewerage undertaker.

The Contractor shall obtain approval for all temporary discharges to and abstractions from watercourses from the appropriate Agency and other appropriate bodies and shall comply in all respects with their requirements.

No water shall be discharged from the site to any watercourse, drain or soakaway without obtaining the appropriate consents, permissions, or licences.

The Contactor shall use bio-degradable hydraulic oils in equipment working over or adjacent to water, and within aquifers.

S1.8.15 Maximum period for boring, pitting or trenching through hard material or obstruction (Clauses 2.11, 6.3.5 and 7.5)

As specified in Clauses 2.11, 6.3.5 and 7.5.

Where a hard stratum or obstruction is encountered, the Contractor shall employ hard boring techniques for a period of up to 1 hour. Should this not penetrate through the hard stratum or obstruction the Contractor shall immediately inform the Investigation Supervisor and await instruction. The Contractor shall not terminate exploratory holes before reaching the proposed depth without the prior approval of the Investigation Supervisor

S1.8.16 Reinstatement requirements (Clauses 3.6.5 and 4.3.2)

The Investigation Supervisor shall be consulted prior to backfilling of any exploratory excavation, or demobilisation of the plant at any location. On completion of drilling or excavation works all exploratory holes, trench locations and access ways shall be reinstated to the satisfaction of the Investigation Supervisor. Reinstatement to the previous condition will be required.

Arisings requiring disposal may only be disposed of on-site with prior agreement from the Investigation Supervisor.

At all exploratory hole locations, turf should be carefully lifted and kept separate from topsoil and other arisings. Trial pits shall be neatly backfilled and left slightly proud of the ground surface to allow for settlement.

Prior to the commencement of the works, a pre-entry photographic survey of all investigation works, and access routes shall be undertaken by the Contractor. Upon completion, an exit survey shall also be undertaken.

On completion of the site works, or at other periods if required by the Investigation Supervisor, the GI Contractor shall reinstate the site and access routes and remove all plant, equipment, surplus material, spoil etc. to the satisfaction of the Investigation Supervisor. The expense of reinstating avoidable damage shall be borne by the Contractor. The Contractor shall be responsible for removing and disposal off-site of all spoil and contaminated materials, including all costs, arising from the works. Contaminated samples and arisings shall where necessary be disposed of at an appropriate licensed landfill site

S1.8.17 Welfare and other facilities required (Clauses 2.25, 4.3.2 and 4.3.4)

As a minimum, welfare facilities are required as per Clause 2.25 and shall be in accordance with CDM 2015 Regulations.

Welfare facilities must meet the requirements set out in Schedule 2 of CDM (2015) regardless of whether an investigation is notifiable or not.

Activities which involve hand to mouth contact, such as eating and smoking, shall be restricted to designated “clean” areas where hygiene facilities are provided.

S1.8.18 Unavoidable damage to be reinstated by Contractor (Clauses 4.3.1 and 13.1)

Clause 13.1 should be upheld by the contractor where unavoidable damage occurs onsite.

Appropriate amendments shall be made by the Contractor to the Bill of Quantities to ensure the appropriate plant, equipment and utilities are included as specified in Clause 4.3.1, including any additional items to complete the work.

S1.8.19 Surveys (Clauses 5.1, 5.3, 5.3, 5.4, 5.6, 5.7, 5.8 and 5.9)

As specified in Section 5, Clauses 5.1 – 5.9 have been outlined below:

Site inspection (Clause 5.1)

As specified in Clause 5.1.

Pre-condition and post-condition surveys (Clause 5.2)

As specified in Clause 5.2.

Topographical surveys (Clause 5.3)

Available details are provided in Appendix G.

The topography survey indicates that site is sloping from southwest to northeast, with the topography of the site ranging approximately between 87 and 80m AOD.

Exploratory hole location surveys (Clause 5.4)

As specified in Clauses 5.4. Unless approved by the Investigation Supervisor in writing prior to the commencement of works, all boreholes shall be positioned within 0.5m in plan from the scheduled locations.

The approximate locations of the exploratory holes are shown on the drawings within Appendix A, and the final locations are to be agreed with the Investigation Supervisor. The Investigation Supervisor may, after consultation with the Contractor, vary the location and depth of any exploratory work and the sequence or quantity of in-situ testing depending upon the actual site or ground conditions encountered.

The Contractor is required to set out the exploratory holes prior to drilling by locating all positions within agreement of the Investigation Supervisor.

The Contractor shall be responsible for determining the location of all exploratory holes with respect to the indicated positions. The co-ordinates of the exploratory hole locations with respect to the National Grid Co-ordinate system shall be recorded to an accuracy of ±0.1m.

The Contractor shall be responsible for recording ground elevations of all the exploratory holes to an accuracy of ±0.01 metre. Ground elevations shall be based on London Grid for final deliverables, with records to be kept of Ordnance Datum (Newlyn).

Utility Survey (Clause 5.5)

The available utility survey plans for the site are provided in Appendix H.

The Contractor shall satisfy themselves that the results of the latest survey are sufficient for their requirements and if required complete further surveys.

A PAS 128 GPR survey will need to be carried out by the contractor prior to establishment of exploratory hole locations.

GPR Survey (Clause 5.5)

A GPR clearance survey will be required at exploration hole locations during GI works.

Unexploded Ordnance (UXO) Avoidance Surveys (Clause 5.6)

A preliminary UXO risk assessment was undertaken for the site (see Appendix F), this indicated that it is likely that UXO may be encountered on-site. This is due to military activity in the immediate vicinity of the hospital during World War II. It is recommended that a detailed UXO Threat and Risk Assessment is carried out.

Given that military activity was recorded in the vicinity of hospital, it is reasonably foreseeable that a UXO contamination threat might have been generated at the site. Consequently, and in accordance with CIRIA C681 Chapter 5 on managing UXO risks, it is recommended to undertake a detailed UXO risk assessment on site prior to any intrusive works.

Unmanned Aerial Vehicle (UAV)/Drone Surveys (Clause 5.7)

Not required.

Cavity Surveys (Clause 5.8)

Not required.

S1.8.20 Inspection and survey records requirements (Clauses 5.2 and 5.10)

As specified in Clause 5.2. The Contractor shall take the photographs as detailed in Clause 5.10. The photographs should be provided to the Investigation Supervisor on a regular basis during works. Once the raw files have been approved by the Investigation Supervisor, the Contractor should present them with the Ground Investigation Factual Report.

Photographic records of the exploratory hole locations and access routes shall be taken before and after the works. These photographs will be used by the Client and other stakeholders to determine the acceptability of the reinstatement works undertaken by the Contractor.

S1.8.21 Disposal of Arisings

The Contractor shall comply with Waste Management Regulations in respect of the handling and disposal of all waste.

S1.8.22 Contractor's Key Programme Dates

The Contractor shall agree a date of mobilisation, programme, sequence of implementing the fieldworks and dates of submissions of preliminary engineering logs, draft and final factual reports with the Employer and Investigation Supervisor's Representative in accordance with the timescales given in Table 1.3 below.

Table 1.3: Contractors key programme timescales

Work Item	Reporting & Timescales
Clause 14 Programme*	7 days after award of the Contract
Contractor tender period	To be confirmed (TBC)
MML and Client review of tender returns	1 week
Appointment of GI Contractor	To be confirmed
Production of Method Statements and Work package Plans. Completion of the safe Start Process	1 week
Review period for MML / Client of methods, Statements and Work Package Plans	1 week
Approval to be granted by Client	To be confirmed
Mobilisation	TBC after Contract Award
Submission of CDM 2015 and Environmental Protection Documentation*	1 week
Duration of Fieldworks	1 week (TBC by GI Contractor)
Daily report (e.g.: drilling, sampling, backfilling, installation, groundwater measures, testing records)	1 week
Preliminary records (including exploratory holes, in-situ test results and geoenvironmental laboratory schedule)	Submission within 1 working days of completion of the exploratory hole

Work Item	Reporting & Timescales
Laboratory Test Schedules	Submission of geotechnical laboratory test schedules for the Investigation Supervisor's representative to Schedule within 3 working days of completion of the exploratory hole
Laboratory Testing (contamination)**	Provide within 10 working days of the completed schedule being submitted to the contactor
Laboratory Testing (geotechnical and chemical)**	Provide within 20 working days of the completed schedule being submitted to the contractor
Health and Safety file (in accordance with CDM 2015)	Provide within 5 working days after the completion of the laboratory testing
Draft Factual Report (including AGS data) **	Provide within 5 working days after the completion of the laboratory testing
Final Factual Report (including AGS data) ***	Provide within 5 working days after comments from the Investigation Supervisor's Representative

Programme periods are total days for the completion of each work item. Programme periods are set on the assumption that all information required by the Contractor in order to provide the necessary services is available prior to commencing the work activity (e.g., Pre-Construction Information, Schedule of Works, etc.).
The first work Item listed will generally commence once the Contract is formally agreed.
*- After award of contract
** - After completion of field work
*** - After the Engineer has issued comments on draft report

S1.8.23 Liquidated damages

To be confirmed by the Client.

S1.8.24 Collateral Warranty

To be confirmed by the Client.

S1.8.25 Order of carrying out work

The works are to be undertaken as agreed with the Client, Investigation Supervisor, and other stakeholders.

S1.8.26 Land entry, Access Routes and Restrictions (Clause 3.6.3)

The Contractor will be responsible for notifying all landowners or stakeholders of the commencement date of the ground investigation works and anticipated occupation period.

Day to day liaison with the Client, landowners or stakeholders including agreeing access times, access routes, working space requirements and protection measures will be the responsibility of the Contractor.

S1.8.27 Sub-contractors

Particular details of the Nominated Sub-Contractor(s) and the services they will provide to the ground investigation shall be stipulated by the Contractor prior to commencement of the works.

Any sub-contractor not nominated by the Investigation Supervisor, to be engaged by the Contractor shall require the prior approval of the Client and the Investigation Supervisor.

The Contractor shall be responsible for the services to be provided by the sub-contractor, whether nominated or not and shall be liable for defects and omissions from them.

S1.8.28 General safety requirements (Clause 3.4)

S1.8.28.1 Safety legislation (Clause 3.4.2)

The investigation shall comply with all relevant safety legislation as stated in the ICE Specification, in addition account should also be taken of the guidance contained in:

- Health and Safety Manual for Land Drilling: A Code of Safe Drilling Practice (BDA, 2002).
- Guidance notes for the protection of persons from rotating parts and ejected or falling material – involved in the drilling process (BDA).
- Guidance for safe intrusive activities on contaminated or potentially contaminated land (BDA, 2008).
- Working practices shall conform with the Health and Safety Executive Guide "Protection of Workers and the General Public during Development of Contaminated Land, 1991" and the "Site Investigation in Construction Part 4: Guidelines for the safe investigation by drilling of landfills and contaminated land" published by Thomas Telford in 1993.
- The contractor shall draw the attention of all personnel working on the chemical investigation to the nature of the possible contamination and the need to take any precautionary measures in handling the material.

S1.8.28.2 Construction (Design and Management) Regulations (2015)

Ground Investigation falls within the CDM 2015 definition of "construction work" and apply to ground investigation projects.

The Contractor shall allow within their rates, for compliance with their obligations under CDM 2015 as 'Contractor' or 'Principal Contractor' to include but not limited to the production of all supporting health and safety documentation, and provision of sufficient welfare facilities in respect of the number of personnel, type and duration of works.

S1.8.28.3 Risk assessment and method statements (Clause 3.4.3)

Prior to the start of site operations, the Contractor shall provide to the Investigation Supervisor risk assessments and method statements covering all aspects of the work to be carried out. A Construction Phase Plan shall be prepared in accordance with CDM 2015 and submitted to the Investigation Supervisor whether the project is notifiable or not. Mott MacDonald shall provide to the Contractor their design CDM risk register for the GI highlighting any residual risks that may not be obvious to a competent Contractor.

The Contractor's risk assessment and method statement should address, but not limited to:

- All Site Operations activities (e.g., Cable Percussion Drilling, Inspection Pits, and sampling for in situ testing, etc.).
- Safe use of machinery during ground investigation operations.
- Provisions for dealing with ground gas.
- Working on land affected by contamination.
- Working safely in the vicinity of the buried services.
- Working on/in derelict sites and structures.
- Provisions for dealing with mine workings, mineral extractions, quarries, shafts or similar works within the area and at a depth likely to affect the proposed investigation.
- Provisions for dealing with asbestos.
- Biological hazards (e.g., Weil's disease, tetanus).
- Exposure to noise.

- Manual handling.
- The proposals for restoration of exploratory holes so that they do not become a hazard to the public or the environment; backfilling with arisings may not be acceptable.
- Provision for the collection and safe disposal of contaminated soil and liquid arisings from exploratory holes.
- Procedures to be adopted to protect the environment (e.g., not to place contaminated soil onto unprotected ground and aquifer protection).
- Procedures to be adopted where routine geotechnical testing is required on samples suspected or known to be contaminated.

NO WORK SHALL BE CARRIED OUT WITHOUT RECORDED EVIDENCE THAT A RISK ASSESSMENT HAS BEEN CARRIED OUT AND METHOD STATEMENTS HAVE BEEN PREPARED AND ARE AVAILABLE.

S1.8.28.4 Buried and overhead services detection (Clause 5.5, 3.4.3 and 3.5.1)

Buried and overhead services present a risk to safety, especially where work involves penetrating the ground. Where such work is undertaken precautions must be implemented to manage and/or reduce the risk of encounter with services.

The key elements of the Contractor's Safe System of Work shall include but not be limited to the following:

- Planning and risk assessment.
  - The works shall be carefully planned, and risk assessed before it commences.
- Obtaining buried and overhead services maps and plans.
  - CDM 2015 places duties on Clients to 'provide appropriate pre-construction information to designers and contractors' and task all parties with 'allowing sufficient time to obtain vital pre-construction safety information'. Services maps and plans shall be available at the respective worksite at all times.
- Scanning with a Cable Avoidance Tool and generator by a Qualified Operator
  - Cable Avoidance tools and signal generators should be selected as appropriate to the site conditions and services expected. All staff that uses such tools/equipment must be competent to do so and similarly must understand the limitations of the equipment. CAT scanning shall be carried out prior to commencement, at frequent intervals during and on completion of the inspection pit.
- Safe digging practices.
  - Where the presence of services is suspected or known to be within an area likely to be disturbed by the works, it must be positively located and identified PAS 128:2022 compliant survey, shall be undertaken by the Contractor). Such works shall be undertaken by operatives who are trained and competent in safe digging practices. Further guidance on safe digging practices and avoiding the dangers from underground services is given in the HSE publication HSG 47.
  - Excavations should be risk assessed prior to commencement and monitored during excavation by a Qualified Operator.
  - Perform a GPR survey as specified in S1.8.19.

S1.8.28.5 Permit to dig system

Client requirement to be confirmed.

A “Permit to Dig” system shall form part of the ‘safe digging practices’ and be employed for all exploratory holes. The details of the Contractor’s proposed “Permit to Dig” system shall be provided with the necessary health and safety documentation.

Copies of the Permit to Dig shall be provided with the respective method statement. Copies of the permit to dig and service location plans shall be held at each exploratory hole location and be readily available for inspection. Consultation of service drawings, GPR survey, CAT scanning and hand excavation of an inspection pit shall be considered by the Contractor for all excavations.

A PAS128:2022 Type B compliant survey must be completed before any intrusive works can commence.

S1.8.28.6 Specific rig and equipment safety requirements

Hazards related to drill rig operations are included in BS EN 791:1996, Drill Rigs – Safety. These should be referred to when the Contractor undertakes any risk assessment for any specific drill rig type.

Rig examination report (LOLER)

- The Lifting Operations and Lifting Equipment Regulations (LOLER) define lifting equipment as:
  - “Work equipment for lifting and lowering loads and includes its attachments used for anchoring, fixing or supporting it”.
- Therefore, LOLER applies to the drilling rigs included in the Ground Investigation Services Framework Agreement Document (2014). As such, the following requirements apply as a minimum:
  - The rig must be thoroughly examined in accordance with an examination scheme drawn up by a competent person/Qualified Operator, or, in the absence of such an examination scheme, at least every 12 months (Regulation 9 of LOLER).
  - The rig must be accompanied by a certificate to the effect that the last thorough examination has been carried out and has not expired.
  - Accessories for lifting (e.g., shackles, swivels, etc) are subject to a regular examination scheme by a competent person, or, in the absence of such an examination scheme, at least every 6 months (Regulation 9 of LOLER).
  - Lifting accessories must be accompanied by a certificate to the effect that the last thorough examination has been carried out.
  - All lifting accessories must have sufficient load-carrying capacity for the operation to be undertaken safely and should be tagged with their Safe Working Load (SWL) and a unique identification mark.
  - Wire ropes in use with the rig shall be thoroughly inspected, before each shift, by a competent person/ Qualified Operator, and the results recorded and readily available.

Rotating transmission parts (PUWER)

- Access to dangerous parts of machinery must be prevented by using “fixed guards where practicable” under the Provision and Use of Work Equipment Regulations 1998 (PUWER)
- PUWER lays out a clear hierarchy of protective measures to prevent access to EVERY dangerous part of the machinery. This is further clarified with direct reference to the drilling industry in “Guidance Notes for the Protection of Persons from Rotating Parts & Ejected or Falling Material Involved in the Drilling Process” (BDA). The hierarchy is as follows:
  - A fixed guard that requires physically unbolting.

- A moveable guard with an interlock cutting rotational power or significantly reducing rotational speed, when opened.
- An adjustable guard (i.e., a fixed or moveable guard with adjustable parts or whole), the adjustable part must be interlocked. These are commonly described as “telescopic”.
- A caged working area that is interlocked thus preventing risk from rotation when anyone is in the area.

Each worksite shall be kept tidy with the Contractor paying particular attention to eliminating slip and trip hazards. The Contractor shall ensure, before work commences:

- That work area is cleared of debris, brambles and the like.
- Drill equipment (e.g., SPT hammers, drill rods, casings, etc) are kept clear of the working area.
- Arisings are kept clear of the working area.
- Where ground protection is required by the Contract that the working surface is covered with a suitable non-slip covering (e.g., “Mayo mats”). Plastic sheeting alone is not acceptable as these create severe slip hazards.

The Investigation Supervisor may reject the rig and/ or equipment after arriving at the site if it is considered that the rig and/or equipment fails to comply with the rig and equipment safety requirements.

S1.8.28.7 Personal Protective Equipment

All site staff shall be provided with, and properly use, the Personal Protective Equipment (PPE) appropriate to the work involved and the categorisation of the site as per Guidance for safe intrusive activities on contaminated or potentially contaminated land (BDA, 2008). This site has been classified as “Yellow”.

Where the Investigation Supervisor is aware of the need for PPE over and above statutory requirements, this shall be identified. If additional PPE is to be provided by the Contractor for the sole use of the Investigation Supervisor, this shall be identified in Schedule S3.4.

S1.8.28.8 Task/Activity Briefing

The Contractor shall prepare Task/Activity Briefing sheets describing both the site-specific information and task/activity details. This will include but not be limited to the management and control of health, safety, and environmental protection. This information is required to be briefed by the Contractor’s Agent for the Works to all personnel on site involved in the works.

S1.8.28.9 Health and Safety Monitoring and Reporting

Where required a health and safety report shall be submitted to the Investigation Supervisor on completion of key stages of the Contract or at set Contract intervals. The report shall include the requirements set out below, as appropriate to the Contract.

- Statutory Reporting ‑ Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR).
- Details of accidents and incidents as reportable under RIDDOR. This information shall identify:
  - Fatalities in the period.
  - Reportable injuries as defined under RIDDOR regulations.
  - Lost Time Reportable Injuries other than those reported as a Specified Injury (above) – i.e., over seven-day injuries.

- Other non-RIDDOR events
  - Accidents Lost Time – Accidents where an employee is absent from work for part of a shift but less than 3 days.
  - Accidents are other – all accidents involving personal injury.
  - Incidents – All other incidents, irregular working and near misses.
- Hours Worked
  - All contractors' hours worked at all work site locations by permanent, temporary and subcontract staff on activities directly delivering, or in support of, the Contract.
- Other
  - Records of drills, testing, Fire Officer visits, etc.
  - Toolbox talks, task/activity briefings, etc records.

S1.8.29 British Standards and Equivalent (Clause 3.1)

As specified in Clause 3.1.

The Works shall be carried out in accordance with relevant British Standards or equivalent European Standards. The suite of applicable British Standards is undergoing a change in light of the publication of new European Standards.

These include, but are not limited to, the following:

- BS EN 1997-2:2024 – Ground Investigation and Testing.
  - NA to BS EN 1997-2:2007:2009 – UK National Annex to Eurocode 7: Geotechnical design. Ground investigation and testing.
- BS EN ISO 14688‑1 Identification and classification of soil.
  - BS EN ISO 14688-2:2018 – Identification and description.
  - BS EN ISO 14688-2:2018 – Principles for classification.
- BS EN ISO 22475‑1 Sampling Methods and Groundwater Measurement.
  - BS EN ISO 22475-1:2006 – Technical principles for execution.
  - BS EN ISO 22475-2:2011 – Qualification criteria for enterprises and personnel.
  - BS EN ISO 22475-3:2011- Conformity assessment of enterprises and personnel by a third party.
- BS EN ISO 22476‑1 Field Testing.
  - BS EN ISO 22476-3+A1:2011 – Standard Penetration Test.
- BS 5930:2015 + A1 2020 - Code of practice for site investigations.
- BS 1377:1990 Parts 1 to 9 - Methods of test for soils for civil engineering purposes. [With the exception of the following which partially supersede BS 1377-2]
  - BS EN ISO 17892-1:2014 Geotechnical Investigation and Testing – Laboratory testing of soil. Determination of water content.
  - BS EN ISO 17892-2:2014 Geotechnical Investigation and Testing – Laboratory testing of soil. Determination of bulk density.
  - BS EN ISO 17892-3:2014 Geotechnical Investigation and Testing – Laboratory testing of soil. Determination of particle density.
  - BS EN ISO 17892-7:2018 Geotechnical Investigation and Testing – Laboratory testing of soil. Unconfined Compression Test.
- BS 10175:2011+A2 2017 – Investigation of potentially contaminated sites – Code of Practice.

- BS EN 12475-3:2002 ‑ Characterisation of waste. Leaching. Compliance test for leaching of granular waste materials and sludges. Two-stage batch tests at a liquid-to-solid ratio of 2 l/kg and 8 l/kg for materials with high solid content and with a particle size below 4 mm (without or with size reduction).
- BS EN ISO 5667 (also BS 6068-6-11:2009) ‑ Water Quality Sampling.
  - BS EN ISO 5667-3:2012 – Preservation and handling of water samples.
  - BS EN ISO 5667-11:2009 – Guidance on sampling of groundwaters.
- BS EN ISO 18512:2008 - Soil quality - Guidance on long- and short-term storage of soil samples.
- BS EN ISO/IEC 17025:2017 - General requirements for the competence of testing and calibration laboratories.
- EN 791:1996 - Drill Rigs ‑ Safety.
- BS EN 953:1998 – Safety of Machinery – Safety of machinery. Guards. General requirements for the design and construction of fixed and movable guards (Incorporating Amendment No. 1, 2009)
- BS 5228 ‑ Code of practice for noise and vibration control on construction and open sites.
  - BS 5228-1:2009 (+A1:2014) – Noise.
  - BS 5228-2:2008 (+A1:2014) – Vibration.
- BS EN ISO 9001 - Quality
- BS EN ISO 14001 - Environmental Management Systems
- BS OHSAS 18001 - Management systems – requirements
- BRE Special Digest (SD) 1 - Concrete in Aggressive Ground

S1.8.30 Care in Executing the Work (Clause 3.6)

As specified in Clause 3.6.

S1.8.31 Engineer to be Consulted Prior to Backfilling

The investigation Supervisor shall be consulted prior to backfilling of any exploratory hole, or demobilisation of the plant at the location.

S1.8.32 General Environmental Requirements

The Contractor shall include pollution, noise and vibration, dust, dirt and emissions management and prevention measures within the site planning and implement an Environment Protection Plan (EPP), which must be submitted to the Investigation Supervisor prior to the commencement of the Site Operations. The form and extent of the EPP should reflect the size and environmental risks associated with the particular Contract.

The Contractor must provide recorded evidence that an environmental risk assessment (ERA) identifying what aspects of the Contractor’s work on the Contract will have an environmental impact and require action by the Contractor. The ERA shall be included within the EPP.

S1.8.32.1 Control of Pollution

The Contractor shall include pollution prevention measures within the site planning and implement an EPP.

In executing any works, precautions must be taken to ensure the complete protection of encountered watercourses and water in underground strata against silting, erosion, or pollution.

Notwithstanding these precautions, if such silting, erosion or pollution does take place then the Environment Agency should be advised immediately, and immediate action should be taken to minimise the effect on the watercourse.

The Contractor must implement measures to prevent and minimise pollution of surface water.

These shall include, but not be limited to:

- No material intended for or arising from the Works and no equipment or other items for use in executing the works shall be stored or disposed of in the watercourse or in a position where it may fall or be washed into the watercourse. Any such material or equipment that gets into a watercourse shall be removed immediately.
- Wash waters from mobile pressure washers shall not be discharged to surface water drains, watercourses, or soakaways.
- Detergents, including those described as biodegradable, shall not be discharged to surface water drains.
- Where possible, washing activities shall be carried out in a designated area draining to the foul sewer or contained within a sealed drainage system or catch pit for offsite disposal by a licensed waste contractor.
- It is the responsibility of the Contractor to obtain authorisation to discharge to the foul sewer from the sewerage undertaker.
- No water shall be discharged from the site to any watercourse, drain, or soakaway without obtaining the appropriate consents, permissions, or licences.
- The Contactor shall use biodegradable hydraulic oils in equipment.
- All oil stored on site shall comply with the Control of Pollution (Oil Storage) Regulations 2001 and the guidance contained within Environment Agency Pollution Prevention Guidance Note 2 (PPG2).
- Only construction equipment and vehicles free of all oil and/or fuel leaks will be permitted on site.
- All stationary plants shall be positioned on drip trays to contain oil leaks.
- Development of a refuelling protocol for the Site Operations.
- All site personnel shall be aware of the appropriate action in the event of an emergency, such as the spillage of potentially polluting substances.
- Spill kits are available on-site.

S1.8.32.2 Noise and Vibration

The Contractor shall include noise and vibration prevention measures within the site planning and implement an EPP. The Contractor must also confirm that consultation with the Local Authority has taken place to ascertain local authority conditions to Sections 60 and 61 of The Control of Pollution Act 1974.

Mitigation measures should include, but not be limited to:

- The Contractor will as a minimum comply with BS 5228 ‘Code of practice for noise and vibration control on construction and open sites.
- Avoid unnecessary revving on engines and switch off equipment when not required.
- Ensure plant and vehicles are properly maintained to meet the manufacturers’ noise rating levels.
- Keep all access/egress routes well maintained.
- Use enclosures for noisy plant such as pumps or generators.

- Minimise drop height of materials.
- Ensure that plant and vehicles operate with noise control hoods closed.

The Contractor shall maintain a record of all complaints received concerning noise and shall promptly notify the Investigation Supervisor of such complaints.

If complaints about excessive noise and/or vibration are received, the Contractor shall immediately take all measures necessary to demonstrate to the Investigation Supervisor that all requirements are being complied with not more than 24 hours after notification of the complaint.

S1.8.32.3 Dust/Dirt and Emissions

The Contractor shall include measures to reduce as low as reasonably practicable (ALARP) the generation/spread of dust/dirt and emissions associated with the Site Operations. Such measures shall be presented in the Environment Protection Plan (EPP).

Such measures shall include, but not be limited to:

- Clean the wheels of vehicles leaving the site so that mud is not spread onto the highways.
- Ensure all plant and vehicles are in good working order with an up-to-date maintenance log.
- Vehicles shall keep to a maximum site speed limit of 5mph.
- Vehicles shall meet European Union (EU) emissions standard Euro 3 for particulate matter as a minimum.

S1.8.32.4 Complaints and interaction with the Local Community and/or Site Users

The Contractor shall maintain a record of all complaints received regarding the site operations and shall promptly notify the Investigation Supervisor and Client of any complaints.

All enquiries by site users and/or the local community regarding the Site Operations shall be referred to the Investigation Supervisor and Client.

S1.8.32.5 Environmental Monitoring and Reporting

Where required an Environment report shall be submitted to the Investigation Supervisor on completion of key stages of the Contract or at set Contract intervals. The report shall include the requirements set out below, as appropriate to the Contract.

- Pollution Incidents
  - The number of major pollution incidents e.g., oil/diesel spill more than 20 litres.
  - The number of minor pollution incidents e.g., oil/diesel spill less than 20 litres.
  - The number of other types of contravention of environmental law, including the subcategories:
    - Disturbance to protected species.
    - Damage to protected sites.
  - All other incidents, irregular working and near misses.
- Complaints/ Enquiries
  - The number of approaches (including complaints and enquires) from environmental regulators.
  - The number of complaints/enquiries from Local Authorities (Including Section 60). – The number of Section 60 notices received.
  - The number of complaints/enquiries from other stakeholders including the general public.
- Other

– Toolbox talks, task/activity briefings, etc records.

S1.8.33 Unexploded Ordnance (Clause 5.6)

As stated in S1.18.19, a Preliminary UXO Threat Assessment has been undertaken for the site. The UXO PRA indicated that it is likely that UXO may be encountered on the proposed site. This is due to military activity in the immediate vicinity of the hospital during World War II. It is recommended that a detailed UXO Threat and Risk Assessment is carried out (see Appendix F).

The Contractor shall nevertheless provide a method statement for action to be undertaken in the event of suspected UXO being encountered..

S1.8.34 Other Contract Restrictions/Relaxations and Requirements

Not required.

S1.9 Dynamic sampling (Clause 6.2) – particular restrictions/relaxations

S1.9.1 Permitted methods and restrictions (Clauses 6.1, 6.2.1, 6.2.2, 6.2.3, 6.2.4 and 6.2.5)

As specified in Clauses 6.2.1 – 6.2.5

Dynamic sampling is required. A schedule of provisional boreholes depths and locations is provided in Schedule 2. All dynamic sampler boreholes shall be commenced by a hand dug inspection pit 1.2 depth. All inspection pits shall be scanned with a cable avoidance tool (CAT) prior to commence boring. Should services be encountered, the borehole position shall be moved in accordance with requirements of the Principal Contractor and Investigation Supervisor. The Location and depth of any services or features encountered within the inspection pit shall be recorded and shown as sketch to be presented in the borehole log.

The starting diameter shall be sufficient to allow UT100 sampling at the base of the hole.

Where instructed by the Investigation Supervisor, destructive logging shall be undertaken such that the logging description meets the requirements of the Specification. Where destructive logging is undertaken the liner section shall be split, effort shall be made as to not smear the sample whilst splitting it. One side of the sample can be further split to aid in logging, the other side as far as practicably possible, should be left undisturbed. Effort shall be made to not break/spilt samples without the purpose of aiding in the logging description.

S1.9.2 Backfilling (Clauses 6.1.2 and 6.2.6)

As specified in Clause 6.1.2 and 6.2.6. All boreholes without instrumentation shall be backfilled to the satisfaction of the Investigation Supervisor. Reference should be made to S1.8.32.

S1.10 Cable percussion boring (Clause 6.3) – particular restrictions/relaxations

Not required

S1.11 Rotary drilling (Clauses 6.1, 6.4 and 6.4.6) – particular restrictions/relaxations

Rotary drilling is required as a follow on from exploratory holes commenced utilising dynamic sampling techniques. A schedule of provisional rotary drilled boreholes, and depth is provided in Schedule 2.

S1.11.1 Augering requirements and restrictions

Not required

S1.11.2 Particular rotary drilling techniques (Clauses 6.1 and 6.4.1)

The aim of the rotary drilling is:

- To obtain continuous high-quality cores that can be used for detailed logging and from which subsamples can be selected for laboratory testing
- To obtain samples for contamination analysis (if required).

The rotary drilling procedures shall be aimed at minimising the mechanical disturbance and the changes in water content and suction in the sample caused by the sampling process.

The equipment used shall incorporate triple-tube core barrels capable of obtaining cores from which Class 1 samples may be taken.

Rotary core drilling shall be carried out by incorporating a semi-rigid removable inner liner to improve core recovery. A minimum Total Core Recovery of 95% is required for each run.

The Contractor should have access to a combination of methods, equipment and flushes to enable the coring technique to be varied to obtain maximum core recovery and minimise environmental impact. A method statement for drilling techniques and the range of equipment is to be maintained on-site.

S1.11.3 Drilling fluid type and collection (Clause 6.4.2)

The Contractor shall give due consideration to appropriate flush method to maximise core recovery based the anticipated ground conditions at each drilling location and taking cognisance of environmental sensitivities (i.e. Source Protection Zones).

The GI Contractor shall confirm his proposed drilling flush medium within his RAMS, to be agreed with the Investigation Supervisor prior to commencement of drilling operations.

The Contractor is required to demonstrate in advance, to the satisfaction of the Investigation Supervisor, his proposals for containing borehole fluids / groundwater.

S1.11.4 Rotary core drilling equipment and core diameter (Clauses 6.4.1 and 6.4.4.1)

The Contractor shall be responsible for identifying the most appropriate equipment for achieving the core recovery requirements and scheduled drillhole depths of the Contract.

Initial drillhole diameters shall allow for casing through voids, wastes and highly fractured zones and allow for reducing equipment diameters to ensure scheduled depths are achieved.

Minimum hole diameter for rotary drilling should be 146 mm to produce cores of minimum diameter of 102 mm for conventional double barrel drilling, unless otherwise approved by the Investigation Supervisor. To maximise core recovery, core liners are to be used, unless otherwise agreed with the Investigation Supervisor.

Care shall be taken to maintain recovered core in a condition as near as possible to its natural state.

The Contractor shall have access to a combination of methods, equipment and flush mediums to enable the coring technique to be varied to obtain maximum core recovery and minimise environmental impact. A method statement for drilling techniques and the range of equipment, flush medium is to be maintained on site.

A 95% core recovery is required, with the first drill-run to not exceeding 0.5m and subsequent runs not exceeding 3m. If 95% core recovery cannot be achieved, the contractor must notify the Investigation supervisor immediately, with his proposals for alternative drilling methods.

S1.11.5 Core logging (Clause 6.4.4.5)

The Contractor's site compound shall include all necessary facilities for core logging to be carried out on-site. These shall include but not be limited to the following:

- Sheltered area to protect the logging engineer and the cores from the elements, with appropriate temperature control to allow for comfortable working conditions.
- Suitable lighting to allow for examination of the cores within the sheltered area.
- Suitable array of benches or stools to allow for comfortable working conditions for the logging engineer.
- Access to a water supply.

Logging of rock shall be as per BS 5930:2015+A1:2020 and BS EN ISO 14689:2018. Chalk is to be logged to the requirements of CIRIA Guide C574. The core is to be cleaned of excess drilling fluid, labelled and photographed prior to examination, sub-sampling and logging. The preparation of cores for photography and subsampling shall be undertaken without compromising the quality of the samples.

All logging, including that of cores shall include a full factual description of the degree, extent and nature of weathering as per BS 5930:2015+A1:2020. As a minimum, Approach 1 shall be undertaken, and where required by the Investigation Supervisor, a further classification approach may be required (selected from Approaches 2 to 5). Further guidance on physical and chemical weathering processes is given in “Soil and Rock description in Engineering practice” 3rd edition 2020.

Destructive logging should be undertaken throughout the entirety of the core as directed by the Investigation Supervisor, such that the material can be properly logged in accordance with the Specification. Where destructive logging is undertaken the core sections shall be split, effort shall be made as to not smear the sample whilst splitting it. One side of the split sample can be further split to aid in logging. The other side, as far as practicably possible, should be left undisturbed.

All logging, including that of cores, shall include geological unit identification which shall be included within the borehole logs and AGS data.

S1.11.6 Core Subsamples for the laboratory testing (Clause 8.7.8)

Core subsamples shall be chosen in consultation with the Investigation Supervisor without delay following core retrieval (maximum of 2 days, assuming they are stored in a sealed liner) and avoiding any visible areas of drilling disturbance.

Core sub-samples should be sampled prior to any destructive logging.

Methodology for sealing samples as set out in Clause 8.7.8 is to be followed, but the Contractor can supply changes/amendments to this methodology for the Investigation Supervisor's approval.

When transporting samples to the laboratory, the samples shall be handled with great care and be protected from vibration, sudden movement and excessive changes in temperature or humidity.

S1.11.7 Address for delivery of selected cores (Clause 6.4.4.8)

To be confirmed by the Investigation Supervisor.

S1.11.8 Rotary open-hole drilling general requirements (Clauses 6.4.5 and 6.4.6)

Not required.

S1.11.9 Rotary open-hole drilling for locating mineral seams, mine workings, etc. (Clauses 6.4.6 and 6.7)

Not required

S1.11.10 Core photographic requirements (Clause 6.4.4.6)

Photographs shall be taken using a minimum camera resolution of 10 megapixels. This photography shall be carried out in controlled conditions such that the colour temperature of the lighting can be maintained at a constant level. Each frame shall contain one core box only. Photographs shall be in focus with colour charts and core box labels clearly set out. Sample photos shall be provided to the Investigation Supervisor for review and acceptance.

All cores shall be photographed with consistent lighting in a fresh condition. All excess flush shall be removed, as well as any smearing or surface disturbance. The photographs shall be photographed to meet the requirements in Clause 6.4.4.6.

Photographs are required of core material prior to, and post, destructive logging.

S1.11.11 Core scanning requirements (Clause 6.4.4.7)

Not required.

S1.11.12 Backfilling (Clauses 6.1.2 and 6.4.7)

Approval shall be sought from the Investigation Supervisor prior to the backfilling of each borehole. All boreholes without instrumentation shall be backfilled with bentonite pellets to the satisfaction of the Investigation Supervisor.

Groundwater monitoring installations shall have response zones that do not cross geological boundaries unless instructed by the Investigation Supervisor and shall be adequately sealed through all strata to minimise leakage and/or potential cross-contamination across geological strata.

S1.12 Sonic drilling (Clause 6.5) – particular restrictions/relaxations

Not required.

S1.13 Pavement/concrete or structural coring (Clause 6.6) – particular restrictions/relaxations

Not required.

S1.14 Pitting and trenching (Specification Section 7) – particular restrictions/relaxations

All excavation works shall be undertaken in accordance with safe practices set out within HS(G)47 'Avoiding Danger from Underground Services'. Reasons for the premature termination of trial pits in soil strata above the scheduled depths shall be clearly shown on the trial pit logs and shall be subject to the agreement of the Investigating Supervisor. Exposed services, obstruction, groundwater conditions and excavation stability shall be recorded and included in the exploratory hole records.

S1.14.1 PAS 128:2022 survey and inspection pits (Clauses 5.5 and 7.1)

A PAS 128:2022 Type B compliant survey is required to be undertaken to identify existing utilities on site at each proposed exploratory hole location for the detection of buried services.

All exploratory boreholes shall include an inspection pit to 1.2 m depth by hand prior to beginning drilling works. The area around the pit shall be scanned using a Cable Avoidance Tool prior to beginning excavation. If services are encountered in the pit, their location and depth shall be recorded and shown as a sketch to be presented with the exploratory hole log. The exploratory hole shall then be moved to an alternative position as instructed by the Investigation Supervisor.

The Contractor shall make all reasonable on-site checks for buried services. The Contractor shall take all reasonable precautions to avoid damage to ducts, pipes or cables which are present on site in carrying out the works and shall protect and support them adequately during the contract and reinstate them on completion of the site operations to the satisfaction of the Investigation Supervisor.

S1.14.2 Restrictions on machines or pitting/trenching methods (Clauses 7.2 and 7.4)

As specified in Clauses 7.2 and 7.4.

S1.14.3 Utility pits and trenches (Clauses 7.3.)

Not required.

S1.14.4 Alternative pit and trench dimensions (Clause 7.7)

In the absence of dimensions in Schedule 2, complete to specification in Clause 7.7.

S1.14.5 Groundwater (Clause 7.9)

Groundwater abstracted from land suspected to be contaminated should be contained and should not be allowed to penetrate potentially non-contaminated strata and disposed of appropriately, as specified in Clause 7.9.

S1.14.6 Backfilling (Clause 6.1.2 and 7.10)

Excavations shall be backfilled with the arisings in the reverse order to which they were excavated (i.e., last out, first in) corresponding to their excavated location. Topsoil (if present,

however not anticipated) shall be kept separate from the other soil layers. Backfill shall be nominally compacted in layers not greater than 200mm thick and the area left at approximate grade with the surrounding area. Excess arisings must be removed and not spread around the pit location. Where possible, turf shall be carefully replaced on top.

S1.14.7 Photographic requirements (Clauses 7.8 and 7.12)

Trial pits shall be examined and described in accordance with BS EN ISO 14688-1:2018, BS EN ISO 14688-2:2018 and BS 5930:2015+A1:2020 by an experience ground practitioner meeting the requirements of Clause 2.3 item (b) or (c), depending on the complexity and nature of the works, and photographed.

Photographs shall be taken using a minimum camera resolution of 10 megapixels. Three photographs per trial pit should be taken; 1 x short face, 1 x long face and 1 x excavated spoil.

These should be clear, not heavily shadowed, with a legible scale and colour board

Photograph records of the exploratory hole location shall be taken before and after the works.

S1.14.8 Artificial lighting (Clause 7.12)

Not anticipated to be required.

S1.14.9 Daily provision of trial pitting/trenching machine, equipment and crew (Clause 7.13)

A suitably experienced ground practitioner is required for sampling and logging purposes.

S1.14.10 Other Pitting and Trenching Restrictions/Relaxations and Requirements

S1.14.10.1 Protection to Trial Pits and Trenches Left Open (Clause 7.11)

As specified in Clause 7.11.

All trial pits and trenches that have been left open and unattended must be protected by HERAS fencing or similar.

S1.14.10.2 Excavation on Land Affected by Contamination (Clause 7.6)

On land affected by contamination, the excavation shall proceed in a series of shallow 0.2–0.3m thick ‘scrapes’. Arisings from distinctly different soil strata shall be stockpiled on separate polythene sheets.

S1.15 Sampling and monitoring during intrusive investigation (Specification Section 8) – particular restrictions/relaxations

This schedule addresses sampling during the Site Operations phase of an investigation. Sampling from installations during and beyond the Site Operations phase of the investigation shall be addressed in Schedule S1.18.

The following sample types shall be collected:

- Small disturbed samples;
- Bulk disturbed samples;

- Rotary core sub-samples;
- Plastic liner samples, continuous or discrete
- Environmental soil samples and groundwater samples.

Samples shall be taken in accordance with:

- BS EN 1997-2:2007 – Ground Investigation and Testing.
- NA to BS EN 1997-2:2007:2009 - UK National Annex to Eurocode 7: Geotechnical design. Ground investigation and testing.
- BS EN ISO 22475 – Sampling Methods and Groundwater Measurement.
- BS EN ISO 22475-1:2021 - Technical principles for execution.
- BS EN ISO 22475-2:2011 - Qualification criteria for enterprises and personnel.
- BS EN ISO 22475-3:2011 - Conformity assessment of enterprises and personnel by third party.
- BS 10175:2011+A2 2017 – Investigation of potentially contaminated sites – Code of Practice

Refer to Schedule 2 and Appendix F for sampling requirements and Schedules 4 and 5 respectively for specification amendments and additions.

S1.15.1 Retention and disposal of geotechnical samples (Clauses 8.10.3 and 8.10.4)

The Contractor shall take full responsibility for the care and storage of all samples for a minimum of 3 months after issue of the Final Factual Report. Thereafter, the Contractor shall seek instruction from the Investigation Supervisor regarding arrangements to continue with the storage requirements, or for sample disposal.

S1.15.2 Frequency of sampling for geotechnical purposes (Clauses 8.2 and 8.7.2)

The sampling requirements detailed below shall be observed unless otherwise instructed by the Investigation Supervisor. Sampling for chemical testing for land affected by contamination shall be as detailed in S1.15.9.2.

Attention is drawn to the sample storage and handling requirements of the “Concrete in Aggressive Ground, BRE Special Digest No. 1 (2005)” and the “Sulphate specification for structural backfills, TRL Report 447 (2005)” in respect of sulphate and pH testing. Suitable storage facilities appropriate to the proposed time of on-site storage shall be provided.

S1.15.2.1 Boreholes

The sampling to be undertaken in soil is as follows:

Dynamic sampling

The sampling to be undertaken shall be as follows:

- Small, disturbed samples at 0.5m intervals.
- Bulk disturbed samples at 1m intervals
- The first Standard Penetration Test (SPT) shall be taken 500mm below the base of the inspection pit and thereafter at 1.0 m depth intervals.

Rotary Core:

The sampling to be undertaken shall be as follows:

- Small, disturbed samples at 0.5m intervals.
- Bulk disturbed samples at 1m intervals (only to be taken where UCS/ PLT or SMC/DD samples cannot be taken)
- Samples suitable for UCS testing and/ or Point Load testing, as well as SMC and DD testing should be taken at approximately 1m intervals.
- The first Standard Penetration Test (SPT) shall be taken at the start of the rotary run thereafter after 1.5 m intervals.

S1.15.2.2 Machine excavated trial pits

The sampling undertaken in the trial pits shall be as follows:

- Small, disturbed samples at 0.5m intervals;
- Bulk disturbed samples at 1m intervals;

S1.15.2.3 Hand dug inspection pits

The sampling undertaken in the inspection pits shall be as follows:

- Small, disturbed samples at 0.5m intervals;
- Bulk disturbed samples at 1m intervals.

S1.15.2.4 Groundwater

Groundwater samples shall be taken where there is sufficient ingress to permit samples to be collected. Where more than one groundwater level is found, each one shall be sampled separately.

S1.15.3 Open-tube and piston sample diameters (Clauses 8.7.3.1, 8.7.3.2 and 8.7.3.3)

As specified in Clauses 8.7.3.1, 8.7.3.2 and 8.7.3.3.

Thin-walled open-tube samples (UT100) should be taken within soft to very stiff cohesive deposits to achieve Class 1 quality samples in accordance with Eurocode 7.

S1.15.4 Retention of cutting shoe samples (Clauses 8.7.3.2 and 8.7.3.3)

Soil from the cutting shoe of an open tube shall be retained as an additional small, disturbed sample. These samples should be collected in tubs suitable for moisture content testing.

S1.15.5 Mostap sampling (Clause 8.7.10)

Not required.

S1.15.6 Groundwater samples and groundwater level measurements during exploratory hole formation (Clauses 8.7.11 and 8.8.1)

When groundwater in encountered in exploratory holes, the depth from the ground level of the point of entry shall be recorded together with depth of any casing. Exploratory hole operations shall be stopped and the depth from ground level to water level with an approved instrument at 5-minute intervals for a period of 20 minutes should be recorded. If after 20 minutes the water level is still rising, this shall be recorded together with the depth to water below ground level unless otherwise instructed by the Investigation Supervisor. The exploratory hole operations shall then be continued. If casing is used and this forms a seal against the entry of groundwater, the Contractor should record the depth of casing at which no further entry or only insignificant

infiltration of water occurred. Where applicable, every effort should be made to seal off each water strike.

Water levels shall be measured at the beginning and end of each shift or other rest periods during the work.

On each occasion when groundwater is recorded, the depth of the exploratory hole, the depth of any casing and the time on a 24-hour clock shall also be recorded.

S1.15.7 Special geotechnical and sampling (Clause 8.7.12)

Not required.

S1.15.8 Address for delivery of selected samples (Clauses 8.10.2 and 8.10.3)

As specified in Clauses 8.10.2 and 8.10.3. Address is to be confirmed by the GI Contractor.

Geotechnical samples shall be protected to ensure that their temperature is kept the range of 5-25°C. Samples shall also be protected from frost, precipitation, direct heat and sunlight.

S1.15.8.1 Labelling, Protection and Transportation of Samples

- Samples shall be securely packaged with clear labelling to minimise the risk of damage or loss during transit through improper handling.
- Where ice packs are included with the samples, then care shall be taken to ensure that condensation or melt water does not contact the samples and does not affect the legibility of the sample labels / documentation.
- Each sample box will contain a Chain of Custody form signed by the Contractors representative and the courier. A copy of the chain of custody document shall be available for inspection by the Investigation Supervisor. The form will document the following:
  - All the samples in the box.
  - The exploratory hole location number and depth and a unique sample reference number.
  - The type of sample contained.
  - A note of any special sample handling, preservation or storage requirements.
  - Date and time of sampling.
  - Date and time of delivery to the courier.
- The maximum transit time is dictated by the period over which the samples can be kept cool but should be less than 24 hours.
- Samples from land affected by contamination are likely to be of a hazardous nature. The transport of `dangerous' samples is controlled by statutory regulations. The Contractor shall be aware of such restrictions and accommodate them within the investigation plan at the outset of the project. These restrictions may include, for example, the requirement to use approved carriers only and to ensure that the sample transport vehicle displays appropriate hazard warning diamonds. The outside of the shipping container shall be labelled in such a way as to comply with current legislation. In the UK, the relevant legislation is the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009.
- Samples due for testing shall generally not be stored on site for more than eight hours. Samples should be despatched to the laboratory at the earliest opportunity, preferably at the end of each working shift, so as to minimise the time between collection and analysis or storage at the laboratory.
- Water and soil samples containing biodegradable contaminants shall be stored at a temperature below 4°C. Such samples may be temporarily stored in insulated cooler boxes

with ice packs during the course of the working shift. For extended periods of on-site storage greater than 8 hours, they shall be kept in a refrigerator at below 4°C. Care shall be taken to avoid rupturing of sample bottles when refrigerating, (glass containers are generally unsuitable for freezing).

- The onsite storage facility shall protect all samples from extreme fluctuations in temperature and direct sunlight.
- The storage facility shall be secure with access to the samples restricted to authorised personnel only.
- Arrangements for sample collection and delivery to the laboratory should be made at least one day in advance of the anticipated collection.

S1.15.9 Retention and disposal of contamination/waste acceptance criteria (WAC) samples (Clause 8.10.3)

As specified in Clause 8.10.3.

Environmental samples shall be protected to ensure that their temperature is kept within a range of 4 ± 2°C. Samples shall also be protected from frost, direct heat and sunlight. The requirement to record the daily temperature of the sample storage area(s) is to be confirmed.

S1.15.10 Frequency of sampling for Geo-environmental purposes (Clause 8.9.2)

Geo-environmental samples shall be taken at: 0.10, 0.20, and 0.50m bgl and at 1.00m bgl intervals within the Made Ground. One sample shall be taken at the change to natural soils and at every change in strata thereafter. Additional sampling shall also be taken upon visual/olfactory evidence of contamination and if directed by the Investigation Supervisor.

The Contractor shall use sample containers as specified by the laboratory where the testing is to be undertaken. This is likely to include:

- 1 x 1kg sample in a plastic tub.
- 1 x 250g sample in a borosilicate jar; and
- 1 x 60g VOC vial.

Soil samples shall be collected for WAC testing (if material is known to be removed during construction), as directed by the Investigation Supervisor. These samples are anticipated to be representative of potential material to be removed.

Any debris of suspected asbestos-containing material shall be separately sampled and double bagged for submission to laboratory, marked as “suspected asbestos”.

During works the Contractor shall record visual and olfactory evidence of contamination on the daily record (borehole / trial pit). This shall include the presence of anthropogenic materials such as ash, unusual odours, colours or sheens, and hydrocarbon staining. Where contaminated horizons are encountered, the start and end of each horizon shall be noted.

The Contractor shall ensure the integrity of all geo-environmental samples during transit from the investigation site to the chemical testing laboratory, as specified by the Investigation Supervisor.

Groundwater samples should generally be taken from standpipes or standpipe piezometers and requirements for that are detailed in S1.18.

S1.15.11 Sampling method for Contamination/WAC samples (Clause 8.9.3)

Samples taken from exploratory positions shall use the procedures identified in BS 10175:2011+A2:2017 to avoid cross-contamination between samples, the spreading of existing contamination and the introduction of external contamination.

Geo-environmental sampling to be under the supervision of a Geo-Environmental Engineer meeting the requirements of Clause 2.3.

The Ground Investigation Contractor shall be responsible for providing laboratory analytical services for the analysis of samples and shall be responsible for collecting and dispatching samples to a UKAS and MCERTS accredited laboratory.

Suitable sample quantities and containers shall be selected in consultation with the analytical laboratory, applicable to the proposed suites such that all analysis can be completed.

Note: Each sample of soil should be of sufficient volume and in appropriate containers to enable both solid analysis, soil leachate preparation and analysis and WAC to be scheduled.

All samples shall be placed in sample containers provided by the specified laboratory; sample containers shall be filled to the brim to reduce headspace to an absolute minimum.

Samples for geo-environmental testing shall be stored in cool boxes provided by the analytical laboratory and kept away from direct sunlight at all times.

Samples shall be dispatched to the analytical laboratory on the day they are collected. The Investigation Supervisor shall schedule the laboratory tests and the Ground Investigation. Contractor shall submit the samples to the nominated laboratory.

Deviating (or non-conforming) samples

The Contractor shall ensure that no samples are recorded as ‘deviating’. Deviating (or non-conforming) samples are defined as those which may have been compromised in some way during sampling, transportation, storage, or analysis, and which may cause the integrity of the data to be questioned. Examples of deviating samples include:

- No separate volatile container supplied;
- Headspace present in volatile container;
- Holding time exceeded
- Temperature exceeded
- No sampling date supplied (mandatory for MCERTS)
- AQC failed during run and sample cannot be repeated
- Deviation from method, e.g., limited sample size or matrix issues

Should samples be recorded as ‘deviating’ then the Contractor shall be responsible for repeating the sampling and analysis at their own cost.

S1.15.12 Headspace testing (Clause 8.9.6)

As specified in Clause 8.9.6. Headspace testing should be undertaken using a photoionization detector (PID). Screening of samples shall be carried out for each geo-environmental sample and if visual or olfactory evidence of contamination is identified in natural soils.

S1.15.13 Other Sampling and Monitoring Restrictions/Relaxations and Requirements

S1.15.13.1 Description of Contamination/WAC Samples

Descriptions should generally be in accordance with BS 5930:2015 (+A1:2020) – Code of practice for site investigations.

S1.15.13.2 Long Term Storage of Samples

Not required.

S1.15.13.3 Decontamination

- All equipment to be reused at different sampling locations shall be decontaminated. Sampling equipment should also be decontaminated in between the collection of samples to prevent cross-contamination.
- Decontamination shall comprise, as a minimum, the washing of collection vessels and instrument probes with de-ionised water; however, the use of decontamination fluids is preferable, such as a phosphate-free detergent solution (e.g. Deacon 90, Camtex or similar). For larger equipment and plant, a portable power washer, or steam cleaning machine may be used. Washing shall be undertaken only at locations to be agreed upon with the Investigation Supervisor.
- Equipment should be rinsed with control water (uncontaminated water from a known source). Where required by the Investigation Supervisor a sample of control water shall be collected for analysis.
- Where necessary provision shall be made for the collection and disposal of contaminated wash water and groundwater in a contained area and disposal of to an approved disposal site.

S1.16 Field testing (Specification Section 9) – particular restrictions/relaxations

S1.16.1 Tests in accordance with British standards or other standards or methods (Clause 9.1)

Tests shall be carried out in accordance with:

- BS EN ISO 22476 – Field Testing.
  - BS EN ISO 22476-3:2005 +A1:2011 – Standard Penetration Test.

Relevant calibration certificates, including SPT hammer efficiency certificates, shall be submitted to the Investigation Supervisor prior to any testing being undertaken.

During SPT testing a solid cone shall not be used instead of a split spoon unless otherwise agreed with the Investigation Supervisor.

S1.16.2 Cone Penetration Testing (CPT) (Clause 9.2) – particular restrictions/relaxations

Not required

S1.16.3 Capacity and equipment requirements for cone penetration testing (Clause 9.2.2)

Not required

S1.16.4 Reporting of cone penetration testing parameters (Clause 9.2.3)

Not required

S1.16.5 Seismic cone equipment requirements (Clause 9.2.4)

Not required

S1.16.6 Interpretation of cone tests (Clause 9.2.3)

Not required

S1.16.7 Other cones or specialist probes (Clauses 9.2.5, 9.2.6 and 9.2.7)

Not required.

S1.16.8 Standard Penetration Tests and reporting requirements (Clause 9.3)

A specified in Clause 9.3.

Relevant calibration certificates, including SPT hammer efficiency certificates, shall be submitted to the Investigation Supervisor prior to any testing being undertaken.

During SPT testing a solid cone shall not be used instead of a split spoon unless otherwise agreed with the Investigation Supervisor.

S1.16.9 Types(s) and reporting of dynamic probing (Clause 9.4)

Nor required.

S1.16.10 Self-boring pressuremeter and high-pressure dilatometer testing and reporting (Clause 9.5.1)

Not required.

S1.16.11 Full-displacement driven or push-in pressuremeter testing and reporting requirements (Clause 9.5.2)

Not required.

S1.16.12 Menard pressuremeter tests and reporting requirements (Clause 9.5.3)

Not required.

S1.16.13 Flat plate dilatometer tests and reporting requirements (Clause 9.5.4)

Not required.

S1.16.14 Hand or torsion vane tests and reporting requirements (Clause 9.6.1.1 and 9.6.1.2)

Hand vane test

S1.16.15 Penetration/borehole vane for shear strength (Clause 9.6.1.1 and 9.6.1.3)

Not required.

S1.16.16 Hand penetrometer tests and reporting requirements (Clause 9.6.2)

As per Clause 9.6.2.

Hand penetrometer tests may be undertaken upon instruction by the Investigation Supervisor.

S1.16.17 Plate load tests and reporting requirements (Clause 9.6.3)

Not required .

S1.16.18 Density tests and reporting requirements (Clause 9.7.1)

Not required.

S1.16.19 Permeability tests and reporting requirements (Clause 9.8.1 and 9.8.2)

Not Required.

S1.16.20 Packer tests and reporting requirements (Clause 9.8.3)

Not required.

S1.16.21 Pumping tests and reporting requirements (Clause 9.8.4)

Not required.

S1.16.22 California bearing ratio tests and reporting requirements (Clause 9.9.1)

Not required.

S1.16.23 Dynamic cone penetrometer tests and reporting requirements (Clause 9.9.2)

The dynamic cone penetrometer (DCP)/TRL probe test is typically used to obtain data for materials in the top few metres. The test provides a continuous record of the penetration resistance of each layer. The DCP test shall be carried out in accordance with DMRB CS 229.

There are considerable risks to damage the buried utilities. Further information on the method, use and interpretation of DCP tests in UK practice can be found in DMRB CS 229, Assessment, and previously TRL Report 587, The Correlation Between the CBR Value and Penetrability of Pavement Construction Material (Zohrabi and Scott, 2003).

S1.16.24 Deflectometer tests and reporting requirements (Clause 9.9.3)

Not required.

S1.16.25 Soil infiltration tests and reporting requirements (Clause 9.10.1 and 9.10.2)

As specified in Clause 9.10.1, soakaway or soil infiltration tests should be carried out in accordance with BRE DG 365 at the proposed locations of Attenuation/Detention or Biodiversity basins as specified in Schedule 2.

S1.16.26 Contamination screening tests and reporting requirements (Clause 9.11)

Soil samples of Made Ground are to be headspace tested at using a PID meter as specified in Clause 8.9.6.

PID testing of soils should also be undertaken in natural strata in the event of encountering any unusual odours, staining or other potential indicators of contamination.

S1.16.27 Interface probe tests and reporting requirements (Clause 9.12)

Not required

S1.16.28 Special field testing and reporting requirements (Clause 9.13)

Not required.

S1.17 Geophysical testing (Specification Section 10) – particular restrictions/relaxations

Not required

S1.18 Instrumentation (Specification Section 11) – particular restrictions/relaxations

S1.18.1 Protective covers and terminal boxes for installations (Clauses 11.2, 11.4.2 and 11.4.3)

Lockable raised covers shall be installed as part of any monitoring well installation, with the exact requirements subject to confirmation with the Client, Landowner and/ Tennant.

S1.18.2 Protective fencing (Clauses 11.3, 11.4.2 and 11.4.3)

As specified in Clause 11.3. Subject to confirmation with the Client, Landowner and/ Tennant.

S1.18.3 Groundwater observation wells and piezometer installations (Clauses 11.4.1, 11.4.2 and 11.4.3)

The installation of 50mm HDPE groundwater monitoring standpipes shall be in accordance with Clause 11.4. Just before the full depth of each hole where an instrument is to be installed, the Contractor should inform the Investigation Supervisor of the sequence of materials encountered and water strike/standing water levels. Details of installation location, diameter, depth and other details shall be instructed by the Investigation Supervisor.

The filter material surrounding the response zone should be clean and comprise a selected grain size of known chemistry (e.g., non-carbonaceous pea gravel).

S1.18.4 Other types of observation wells and piezometer installations (Clauses 11.4.1, 11.4.2, 11.4.3 and 11.4.4)

Not required.

S1.18.5 Development of observation wells and standpipe piezometers (Clause 11.4.6)

As specified in Clause 11.4.6 and BS ISO 14686:2003.

All groundwater monitoring wells shall be developed by the Contractor in accordance with Sections 8.3.3.3 and 8.3.3.4 of BS 10175:2011+A2:2017. The Contractor shall provide details of the method for well development and the disposal of arisings in his method statement.

The Contractor shall prove hydraulic continuity between standpipes/standpipe piezometers and the groundwater within 5 days following installation, reference should be made to Clause 11.4.5.

The proof of operation of the standpipes/ standpipe piezometers shall form part of the installation process and therefore be included in the rates for the installation.

The Contractor shall submit for approval to the Investigation Supervisor their RAMS for well development. As a minimum, the Contractors RAMS must specify:

- The proposed method of well development and justification for the specific method.
- Details on the proposed storage and disposal of well development water.

S1.18.6 Ground gas observation wells (Clause 11.5)

Observation wells for monitoring ground gas concentration in exploratory holes shall be installed based on the guidance provided in CIRIA Report C665 and BS 8576:2013 or as instructed by the Investigation Supervisor.

In general, it is preferable to use dedicated ground gas monitoring instruments, with the response zone above the groundwater.

Combined groundwater and ground gas monitoring observation wells may be used. In this case the response zone should be designed to extend from the unsaturated zone to below the phreatic surface, and allow for variation in groundwater level to ensure, as much as possible, that the instrument functions reliably as both a ground gas and a groundwater instrument at all times. Where the response zone of a gas monitoring well extends below the groundwater, consideration should be given to the influence of dissolved-phase materials on any gas monitoring results.

S1.18.7 Vapour observation wells (Clause 11.6)

Not required.

S1.18.8 Inclinometer installations (Clause 11.7)

Not required.

S1.18.9 Extensometers and settlement gauges (Clause 11.8)

Not required.

S1.18.10 Settlement monuments (Clause 11.9)

Not required.

S1.18.11 Other instrumentations (Clause 11.10)

Not required.

S1.18.12 Decommissioning and removal of installations (Clause 11.11)

As specified in Clause 11.11.

Requirements for the removal of installations are to be determined by the Contractor following consultation with the Client. Where installations are not to be removed by the Contractor on completion of the contract, the details of the installation shall be provided for inclusion in project Health and Safety File. Details of the decommissioning of installations shall also be provided, where applicable, for the project Health and Safety File.

Where installations are to be removed, the decommissioning process will aim to ensure all pathways are sealed to prevent possible future migration of contaminants. As such, all works are to be undertaken in line with the Environment Agency's "Good Practice for Decommissioning Redundant Boreholes and Wells' guide, 2012 (see Appendix G). Methodology C, comprising low permeability backfill is the selected option as it presents the lowest risk overall. The low permeability backfill shall be a grout comprising cement bentonite slurry formed from water (w), Portland cement (c) and bentonite (b) slurry in the ratio, by weight of 4:1:1 (w : c : b). The hydraulic conductivity of the grout will be less than $1x10^{-9}m/s^3$. This grout shall be pumpable and shall be introduced through an appropriate delivery pipe (e.g., tremie pipe), to ensure that voids do not form and grout remains in place as the casing is removed. The water-cement ratio shall be controlled by mixing the cement with the water before the bentonite is added. If bentonite slurry is mixed first, the water-cement ratio cannot be controlled accurately. Grout shall be installed to a level above the base of any casing at all times to ensure the borehole is sealed as the casing is removed. In line with EA requirements, a cap comprising material of suitable strength for trafficking shall then be installed at each borehole location. This shall be to the requirements of the Client.

S1.19 Installation monitoring and sampling (Specification Section 12) – particular restrictions/relaxations

S1.19.1 Groundwater readings in installations (Clause 12.1 and 12.2)

A programme of groundwater monitoring shall be undertaken by the Contractor. Groundwater levels shall be monitored on a weekly basis for the duration of the fieldwork operations and on completion of the site works. Groundwater monitoring shall then be undertaken on subsequent visits after the site works have been completed. It is envisaged that groundwater monitoring will take place for 3 months (or longer if possible) following completion of the ground investigation works. Visits will be at weekly intervals within the first month, and fortnightly following, totalling eight visits, or as amended by the Investigation Supervisor. The number of visits and duration will be confirmed following completion of the GI works.

Each monitoring visit shall include recording the depth of water (m bgl) and depth to the base of installation (m bgl). Additionally, visual or olfactory evidence of contamination should be recorded.

Should free product be suspected within any exploratory position an interface probe (Clause 9.12) shall be used to record the thickness of any DNAPL or LNAPL, or as instructed by the Investigation Supervisor.

S1.19.2 Groundwater sampling from installations (Clause 12.3.1)

Sampling shall be undertaken as specified within Clause 12.3.1. Groundwater sampling should be undertaken on eight return visits over a minimium period of three months, or as directed by the Investigation Supervisor.

Groundwater samples shall be retrieved from installations selected by the Investigation Supervisor for chemical analysis. Installations shall be purged, tested and samples preserved and stored in accordance with the requirements set out in Clause 12.3.1.

S1.19.3 Purging/low-flow purging (Clause 12.3.2)

Installations shall be purged as detailed in Clause 12.3.2 and groundwater removed and stored.

The Contractor shall submit for approval to the Investigation Supervisor their RAMS (Risk Assessments Method Statements) for purging. As a minimum, the Contractors RAMS must specify:

- The proposed method of purging and a justification for the specified method.
- Details on the proposed storage and disposal of purge water.

Low flow sampling shall be used to retrieve groundwater samples and is to be completed in accordance with the guidance in BS 5667-11(2009).

Groundwater samples shall be retrieved from all installations selected for chemical analysis upon completion during the first two post-site monitoring visits following development of the wells, or as instructed by the Investigation Supervisor.

Each monitoring visit shall include for the following from each installation:

Water level recording including:

- Visual and/ or olfactory evidence of contamination.
- Colour of sample.
- Depth of free phase product (if any).
- Depth of water (m bgl and m AOD).
- Depth to base of installation (m bgl and m AOD).

The locations requiring groundwater sampling are specified within Schedule 2 or shall be instructed by the Investigation Supervisor.

S1.19.4 Multi-parameter meter (Clause 12.3.3)

As specified in Clause 12.3.3.

During water quality sampling, the following should be recorded:

- pH
- Electrical conductivity
- Dissolved oxygen
- Temperature
- Turbidity
- Redox potential.

S1.19.5 Ground gas monitoring (Clause 12.4)

The Contractor shall undertake a total of eight rounds of ground gas monitoring over a minimum period of three months, as part of the post fieldwork activities. At least one visit shall be undertaken during periods of low and falling atmospheric pressure (i.e. less than 1000mb). It is possible that further monitoring rounds could be required, if required, these are to be instructed by the Investigation Supervisor.

The measurements shall include:

- atmospheric pressure,
- ground gas pressure,
- flow rate(s) and
- methane, oxygen, carbon dioxide, carbon monoxide, nitrogen, hydrogen sulphide
- VOCs using a PID.

The depth to water, atmospheric pressure, atmospheric temperature, ground conditions and weather shall be measured and recorded at the time of taking gas measurements. As noted in Clause 12.1, ground gas or vapour measurements should precede measurement of the depth to water. PID measurements are to be recorded prior to completing measurements for permanent gases.

S1.19.6 Continuous gas monitoring (Clause 12.5)

Not required.

S1.19.7 Sampling from ground gas installations (Clause 12.6)

Not required.

S1.19.8 Vapour sampling (Clause 12.4 and 12.7)

Not required.

S1.19.9 Monitoring of ground movements (Clause 12.8)

Not required.

S1.19.10 Other monitoring (Clause 12.9)

Not required.

S1.19.11 Sampling and testing of surface waterbodies (Clause 12.10)

Not required.

S1.20 Reinstatement (Specification Section 13) – particular restrictions/relaxations

S1.20.1 General reinstatement (Clause 13.1)

Ground should be reinstated to a similar condition prior to the works, using the same materials, following the backfilling of exploratory holes, according to the standards and satisfaction of the Client / Investigation Supervisor.

Reinstatement to previous condition will be required and backfilling should be carried out using excavated material and compacted in layers to approximately 95% relative compaction (subject to the approval of the Client and Investigation Supervisor) to minimise future settlement.

S1.20.2 Turf and topsoil surfacing (13.2)

After completion of an exploratory hole through a turf or topsoil surfaced area and subsequent backfilling, a layer of topsoil equivalent to that displaced at commencement shall be gently placed into the exploratory hole and gently tampered and raked to form a level surface. Should any topsoil be imported, it should be certified as suitable for use.

If the land use is a track, road or parking area, particular attention shall be made to backfilling the exploratory hole in such a way as to eliminate settlement.

S1.20.3 Gravel or rubble surfacing (Clause 13.3)

Not required.

S1.20.4 Paved surfacing (Clause 13.4)

All requirements are to be agreed with the Client

Backfilling of paved surface areas shall be specified in such a way that no subsequent settlement or collapse of the backfill can occur beneath the surfacing layers. A proposal of how exploratory holes, including those with the area of the helipad are to be reinstated to comply with the requirements of the Client shall be included within the tender proposal.

S1.21 Daily records (Specification Section 14) – particular restrictions/relaxations

S1.21.1 Information for daily record (Clause 14.2)

The Contractor shall maintain daily contact with the Investigation Supervisor on occasions when the Investigation Supervisor is not present on site. The Contractor shall contact the Investigation Supervisor without delay to report any incident, accident, disruption to progress, or completion or termination of an exploratory hole.

The Contractor shall also provide the Investigation Supervisor with daily site records, preliminary logs, environmental sample schedules (as detailed in Clause 14.2) and journals within 1 working day of the period to which they relate. Daily reports and logs should include preliminary in situ test data and results undertaken. Alternatively, should the Contractor have access to email facilities, electronic copies of the daily site records may be sent directly to the Investigation Supervisor.

S1.21.2 Chain of custody (Clause 14.3)

Chain of custody shall be maintained for all geo-environmental samples and for selected geotechnical samples. All samples shall be clearly labelled in accordance with BS 5930:2015+A1:2020 and BS EN ISO 22475-1:2021, as specified in Clause 8.4.

The Contractor is required to ensure that environmental samples collected are labelled and stored correctly while on site (S1.15.8), contain a chain of custody and are collected by the laboratory within 24 hours of sampling.

It will be the responsibility of the Contractor to maintain contact with the laboratory in order to arrange timely collections and ensure sampling containers are available on-site.

It is the responsibility of the Contractor to ensure that each batch of samples collected from the site contains a chain of custody detailing all the environmental samples within that batch.

Should any potentially hazardous material be encountered and sampled on site (e.g., asbestos), this should also be detailed on the chain of custody.

A copy of the chain of custody and the exploratory hole logs should be provided to the Investigation Supervisor within 24 hours of collection to enable the scheduling of analysis as per S1.21.1.

The Contractor shall be responsible for any incurred resampling costs should they be found to be at fault for failing to ensure environmental samples are collected by the laboratory within the 24-hour time scale.

Appropriate records (copies of the chain of custody) should be retained by the Contractor to ensure they have sufficient evidence they have sufficient evidence to demonstrate they are not at fault in the event of any batch samples being damaged/misplaced.

The chain of custody process details the links in the transfer of samples between the time of collection and their arrival at the laboratory. The minimum information to be included on the form is listed below.

The sender of Chain of Custody

- Mandatory information:
  - name of organisation carrying out the sampling;
  - name of organisation receiving samples;
  - time and date of sampling;
  - Contractor name and contact details;
  - Contract identifier and site name;
  - details of the samples (location, depth, etc.).
- Additional information:
  - other information for the safe handling of potentially hazardous samples, (e.g., special safety precautions) samples that might contain high levels of substances that might interfere with analysis (if known)
  - test turnaround times required.

Receiver of Chain of Custody

- Mandatory information:
  - time and date samples are received by the laboratory

S1.22 Geotechnical laboratory testing (Specification Section 15) – particular restrictions/relaxations

S1.22.1 Investigation Supervisor or Contactor to schedule testing (Clause 15.1)

As specified in Clause 15.1. The Investigation Supervisor will schedule all testing.

The Contractor shall supply blank test schedule forms, along with the preliminary engineering logs within one working day of completion of the exploratory hole, which should include the following information:

- Project details.

- Exploratory hole details; and,
- Sample types and depths together with sample recovery details as applicable.

Additional testing may be specified by the Investigation Supervisor if appropriate.

S1.22.2 Tests required (Clause 15.4)

All soil testing shall be carried out in accordance with Eurocode 7 and BS 1377:1990 (or BS EN ISO 1789 where this has replaced sections of BS 1377) unless otherwise indicated in the Schedules.

The following geotechnical tests may be carried out:

- Saturated Moisture Content (SMC) Tests;
- Intact Dry Density tests;
- Moisture Content Tests;
- Saturated Moisture Content Tests;
- Particle Density;
- Bulk Density (Unit Weight) Tests;
- Liquid Limit, Plastic Limit and Plasticity Index Tests; Particle Size Distribution (Mechanical sieving and sedimentation as applicable);
- Shear box Tests (up to 300x300mm);
- Dry Density / Moisture Content Relationship Testing;
- Oedometer Consolidation Tests;
- Total Stress Triaxial Tests;

The requirements for laboratory testing are given in the Bill of Quantities (Appendix E). The Investigation Supervisor will prepare a schedule of tests following receipt of the provisional borehole logs. The Contractor shall list all available samples per borehole on a convenient schedule for this purpose.

S1.22.3 Specifications for tests that vary or are not covered by the British standards (Clause 15.2.1 and 15.4)

Not required.

S1.22.4 Accreditation to be adopted (Clauses 3.3 and 15.3)

The Contractor shall submit information regarding the extent of UKAS accreditation with the tender documentation.

The laboratory undertaking the laboratory testing shall be UKAS accredited, where applicable, to:

- BS EN ISO/IEC 17025:2017 - General requirements for the competence of testing and calibration laboratories.

The precise scope of a laboratory’s accreditation shall be submitted to the Investigation Supervisor with the test schedules.

Where UKAS/MCERTS accreditation has not been achieved for a specific test, approval to undertake the test shall be sought from the Investigation Supervisor prior to the test being undertaken.

S1.22.5 Rock testing requirements (Clause 15.5)

All rock testing shall be carried out in accordance with Eurocode 7 and BS 1377:1990 or ISRM unless otherwise indicated in the Schedules.

The following geotechnical tests may be carried out:

- Point Load tests;
- Uniaxial Compressive Strength tests; and,
- Dry Density and Saturated Moisture Content tests.
- Chalk Crushing Value (CCV) tests.

S1.22.6 Geo-environmental testing for aggressive ground/groundwater for concrete (Clause 15.6) (Test Suites A-D)

Geochemical testing will be required for soil and groundwater samples, including the following:

- TRL Report 447 Test No's 1, 2 and 4 and pH;
- BRE SD1 (for Brownfield Sites) – Soil; and,
- BRE SD1 (for Brownfield Sites) – Water.

The full screen of aggressive ground contaminants contained within BRE Suite D (for Brownfield) (as derived from BRE Special Digest SD:1) may be scheduled to include pH, water soluble sulphate, acid soluble sulphate, total sulphur, Mg, N_2, nitrate, chloride and carbonate content, upon the Investigations Supervisor's instruction.

Testing will be undertaken on samples from the exploratory holes and on groundwater samples retrieved from boreholes. Upon receipt of initial testing, the Investigation Supervisor may revise the suite in use. A breakdown of testing is presented in Appendix C.

S1.22.7 Laboratory testing on site (Clause 15.8)

Not required.

S1.22.8 Special laboratory testing (Clause 15.9)

Not required.

S1.22.9 Specimen preparation and abortive tests (Clause 15.10)

As specified in Clause 15.10.

S1.23 Geo-environmental laboratory testing (Specification Section 16) – particular restrictions/relaxations

The Contractor shall provide the Investigation Supervisor with blank testing schedules showing a full list of all geo-environmental samples taken within 24 hours of completion of each day's work.

S1.23.1 Investigation Supervisor or Contractor to schedule testing (Clause 16.1)

The Investigation Supervisor shall schedule all geo-environmental tests upon receipt of the blank testing schedules and the daily reports. The completed schedules shall be returned to the Contractor for testing at the selected laboratory (laboratory to be accepted by the Employer before the ground investigation works commence).

S1.23.2 Accreditation required (Clause 3.3 and 16.2)

Information regarding the extent of UKAS accreditation of the Contractor shall be submitted with the tender documentation and shall be in accordance with Clauses 3.3 and 16.2.

Chemical laboratory testing shall be carried out to:

- BS EN ISO/IEC 17025:2017 – General requirements for the competence of testing and calibration laboratories.

Any laboratory test data on soil samples that is to be submitted to the Environment Agency shall conform to Monitoring Certification Scheme (MCERTS) accredited by UKAS where applicable. In accordance with The Control of Asbestos Regulations 2012 asbestos testing shall be accredited. Precision and bias data for tests on reference control samples shall be provided in each report. All tests not MCERTS certified shall be clearly identified.

The scope of a laboratory's accreditation shall be submitted to the Investigation Supervisor with the test schedule.

S1.23.3 Chemical testing for contamination (Clauses 8.9.4 and 16.3) (Test Suites E-I)

Laboratory testing suites for geo-environmental samples shall be specified by the Investigation Supervisor. A testing turnaround time of 5 days from receipt of the testing schedule is generally expected and should be specified, except Waste Acceptance Criteria Testing which has a normal turnaround time of 10 days. If guaranteed turnaround time of 5 days or 10 days or less are required by the Contract this shall be stated.

Full details of each of the testing suites and the required limits of detection are included in Appendix B. The testing suite will likely comprise the following as a minimum:

Table 1.4: Geoenvironmental analytical suites

Analytical Suite	Determinants and Detection Limits
MM Comprehensive Soil Suite	See Table B.1 in Appendix B
MM Comprehensive Leachate Suite	See Table B.3 in Appendix B
MM Comprehensive Water Suite	See Table B.4 in Appendix B
MM Waste Acceptance Suite	See Table B.5 in Appendix B

S1.23.4 Waste characterisation and hazardous classification of soils (Clause 16.4)

Not required.

S1.23.5 Waste Acceptance Criteria testing (Clause 8.9.4 and 16.5) (Test Suits J-L)

As specified in Clause 16.5. Where directed by the Investigation Supervisor, Waste Acceptance Criteria testing comprising the test suites detailed below shall be carried out.

S1.23.6 Laboratory testing on site (Clause 16.6)

Not required.

S1.23.7 Special laboratory testing (Clause 16.7

Not required.

S1.24 Reporting (Specification Section 17) – particular restrictions/relaxations

S1.24.1 Raw data (Clause 17.2.2)

As specified in Clause 17.2.2, raw data shall be made available to the Investigation Supervisor upon request.

S1.24.2 Preliminary exploratory hole logs (Clause 17.2.3)

As specified in Clause 17.2.3.

Preliminary logs shall be submitted to the Investigation Supervisor within 1 working day of completion of the exploratory hole to which they refer.

S1.24.3 Exploratory hole logs (Clause 17.2.4)

As specified in Clause 17.2.4.

The Contractor is to submit a proforma or an example record for approval by the Investigation Supervisor.

S1.24.4 Field results (Clause 17.2.5)

As specified in Clause 17.2.5.

S1.24.5 Laboratory test results (Clause 17.2.6)

As specified in Clause 17.2.6.

S1.24.6 Plans and drawings (Clause 17.2.7)

The site plan may be provided as an AutoCAD DWG or DXF drawing file. Where such digital information is provided the Contractor's exploratory hole layout drawing shall be returned in a similar digital format.

Drawings are to be provided in an AutoCAD DWG or DXF CAD format. Drawings shall present the actual as-built locations in their proper surveyed location.

S1.24.7 Types of reports required (Clause 17.3)

The Contractor is required to submit both a Draft and Final Factual Report for investigation works.

An electronic copy of the factual part of the Geotechnical Investigation Report shall be submitted to the Investigation Supervisor, in both Draft and Final form on the dates agreed.

All analytical testing results shall also be provided to the Investigation Supervisor in Excel and AGS format.

S1.24.8 Desk study (Clause 17.3.2)

Not required.

S1.24.9 Ground Investigation Report (GIR) (or specified part thereof) (Clause 4.4.7, 17.3.3 and 17.3.5)

Not required.

S1.24.10 Geotechnical Design Report (GDR) (or specified part thereof) (Clause 4.4.7 and 17.3.4)

Not required.

S1.24.11 Report approval (Clause 17.3.6)

The draft factual report shall be submitted to the Investigation Supervisor as an electronic copy within 5 working days of the completion of laboratory testing. The Investigation Supervisor will approve the draft report (or instruct any required revisions or amendments) within 5 working days following its receipt.

Refer to S1.8.22 for key programme dates.

S1.24.12 Digital data (Clause 5.10 and 17.4.4)

As specified in Clauses 5.10 to 17.4.1.

S1.24.13 Data format (Clauses 17.2.7, 17.3.1, 17.3.5, 17.4.1 and 17.4.2)

Timely submission of complete, combined and correct digital data is considered to be of paramount importance. The digital data shall comply with the requirements of “Electronic Transfer of Geotechnical & Geo-environmental Data” published by the Association of Geotechnical and Geo-environmental Specialists (AGS). The data shall comply with Version 4.0 or newer. In addition, where in situ monitoring or testing is carried out, digital data shall be submitted in compliance with “The AGS-M Format for the electronic transfer of monitoring data” edition 3M published by the AGS.

S1.24.14 Preliminary data (Clause 17.4.3)

As detailed in Clause 17.4.3. Preliminary AGS data should be provided with the draft factual report.

S1.24.15 Data submissions (Clause 17.4.4)

As specified in Clause 17.4.4.

All AGS format data shall be checked using AGS format-checking software. The data shall comply with Version 4.0 or newer.

One electronic copy of the final report shall be submitted to the Investigation Supervisor within 5 working days of draft copy approval or receipt of instructed revisions / amendments.

S1.24.16 Timing for submission of digital information files (Clause 17.4.5)

As specified in Clause 17.4.5.

S1.24.17 File transfer (Clause 17.4.6)

As specified in Clause 17.4.6.

Prior to issue of electronic data, the files shall be checked for AGS compliance by a Format Checker program and for viruses by a commercial anti-virus program that has been updated within the previous three months.

S2 Schedule S2. Exploratory Holes

Table 2.1 outlines the proposed exploratory holes and in-situ testing of the design ground investigation at the site based on the proposed permanent works. Refer Appendix A for the indicative exploratory hole locations. Exact co-ordinates are subjected to confirmation prior to intrusive works.

Table 2.1: Proposed Exploratory Holes – Diagnostic and Surgical Hub

Exploratory Hole ID	Hole Type	Easting (X)	Northing (Y)	Depth (m bgl)	Install	Remarks
BH01	DS - RC	415091	127249	15	TBC – dual gas and groundwater installation	• Boreholes to inform shallow foundations design • Geotechnical sampling outlined in S1.15. • In-situ testing as detailed in Specification S1.22. • Dynamic sampling will be up to a depth where competent Chalk is encountered, thereafter rotary core drilling shall commence.
BH02	DS - RC	415069	127277	15		
BH03	DS - RC	415087	127212	10		
BH04	DS - RC	415033	127258	10		
TP01	Machine Dug Trial Pit	415023	127223	3	None	To log the larger scale structure of the Chalk and assess ground conditions for earthworks cut and fill.
TP02	Machine Dug Trial Pit	415093	127229	3	None	To log the larger scale structure of the Chalk and complete earthworks acceptability testing for the area of the infiltration sustainable drainage ponds.
DCP01	DCP with Hand Dug Inspection Pit	415090	127276	1.5	None	To assess the sub-grade conditions below the proposed access road
DCP02	DCP with Hand Dug Inspection Pit	415101	127259	1.5	None	To assess the sub-grade conditions below the proposed access road
DCP03	DCP with Hand Dug Inspection Pit	415058	127290	1.5	None	To assess the sub-grade conditions below the proposed access road

DS-RC – Rotary Core with Dynamic Sampling capability

Notes:

Reference should be made to the Technical Specification Schedules

- The number of exploratory holes may be changed based on the ground conditions encountered and amendment to the proposed scheme.

- All exploratory hole locations are to be checked for services prior to the commencement of the intrusive works by hand dug inspection pits. The base of the hand dug pit is also to be CAT scanned prior to commencing boring.
- Chalk is to be logged in accordance with the requirements of CIRIA Guide C574.
- Installation details will be confirmed by the Investigation Supervisor dependent upon ground conditions and whether groundwater is encountered.
- A programme of groundwater and ground gas monitoring shall be undertaken by the Contractor. Groundwater and ground gas monitoring proposed to be for a minimum period of three months (anticipated to comprise of eight visits) following completion of fieldwork. At least one round of ground gas monitoring to be undertaken during low and falling atmospheric pressure. However, the number of monitoring visits is to be confirmed by the Investigation Supervisor.
- In general, the following standard geotechnical sequences shall be adopted in boreholes:
  - Dynamic Sampling
  - The sampling undertaken in dynamic sampling are as follows:
    - Small, disturbed samples at 0.5m intervals.
    - Bulk disturbed samples at 1m intervals
    - The first Standard Penetration Test (SPT) shall be taken 500mm below the base of the inspection pit and thereafter at 1.0 m depth intervals.
  - Rotary Core
    - Small, disturbed samples at 0.5m intervals.
    - Bulk disturbed samples at 1m intervals (only to be taken where UCS/ PLT or SMC/DD samples cannot be taken)
    - Samples suitable for UCS testing and/ or Point Load testing, as well as SMC and DD testing should be taken at approximately 1m intervals.
    - The first Standard Penetration Test (SPT) shall be taken at the start of the rotary run thereafter after 1.5m intervals.
  - Machine Excavated Trial Pits
    - Small, disturbed samples at 0.5m intervals;
    - Bulk disturbed samples at 1m intervals;
  - Hand dug inspection pits
    - Small, disturbed samples at 0.5m intervals;
    - Bulk disturbed samples at 1m intervals.
- Geo-environmental samples shall be taken at: 0.10, 0.20, and 0.50m bgl and at 1.00m bgl intervals within the Made Ground. One sample shall be taken at the change to natural soils and at every change in strata thereafter. Additional sampling shall also be taken upon visual/olfactory evidence of contamination and if directed by the Investigation Supervisor.

S3 Schedule 3 – Investigation Supervisor's Facilities

The Contractor shall provide accommodation ready for occupation and use by the Investigation Supervisor from the commencement of Site Operations.

S3.1 Accommodation

Refer to the ICE UK Specification for Ground Investigation, Third Edition (2022).

S3.2 Furnishings and Equipment

Not required. Part-time supervision only.

S3.3 Utilities

The Contractor shall also provide for maintenance and cleaning of the accommodation, and for supplying all necessary lighting and heating so that the office fulfils the reasonable requirements of full-time staff. Supply drinking water, tea, coffee, milk, sugar as required.

Access to welfare facilities shall be provided by the Contractor.

The Contractor shall provide the following additional services for use by the Investigation Supervisor from commencement of Site Operations.

S3.4 Equipment

The Contractor shall ensure that the correct equipment is brought to site to carry out the work accurately and safety.

S3.5 Transport

Not required.

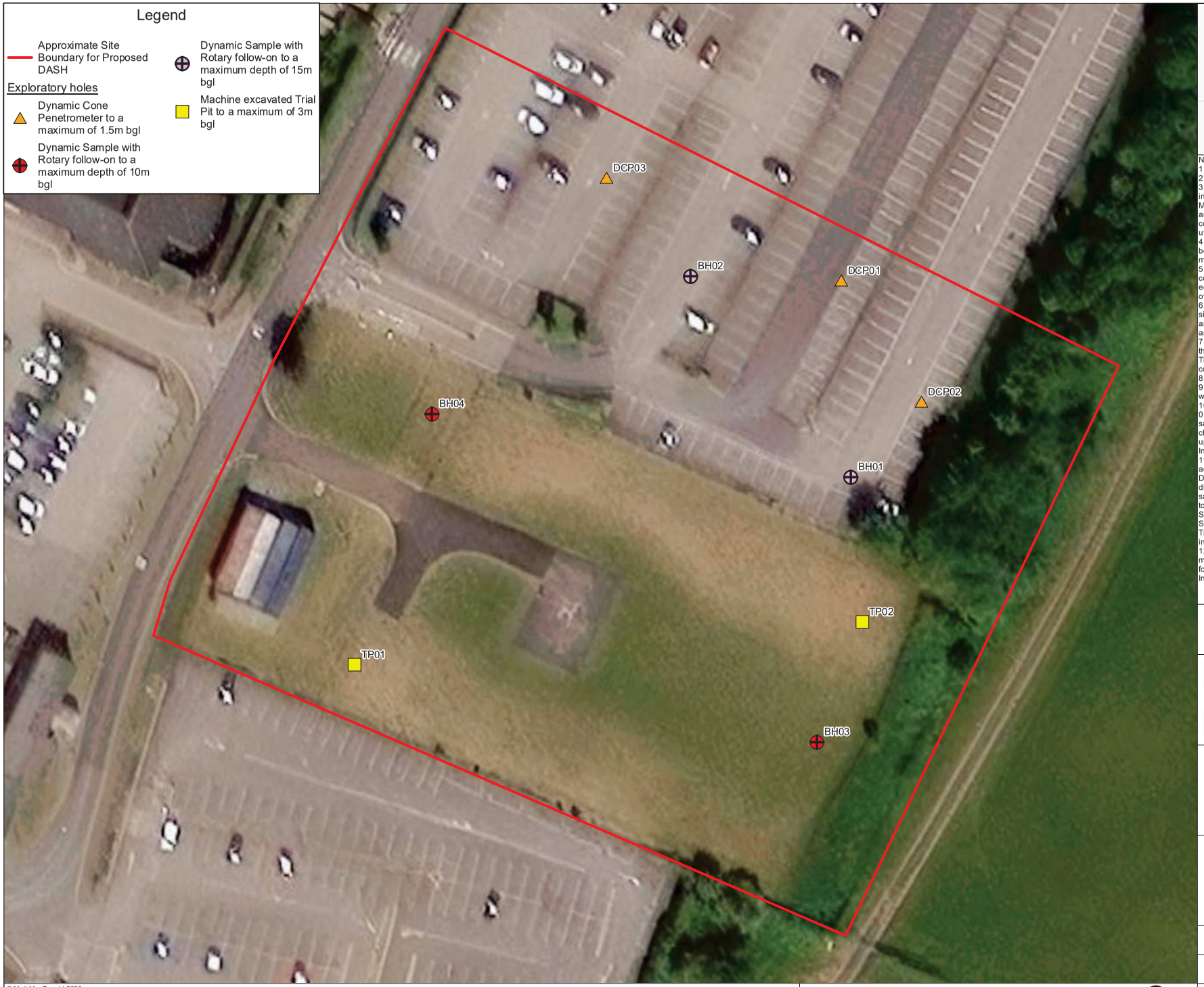
S3.6 Personal Protective Equipment for the Investigation Supervisor

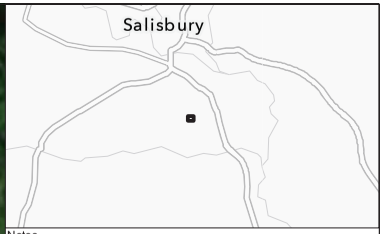
The category of the site in accordance with the BDA site classification system criteria as presented within the British Drilling Association Publication Guidance for Safe Intrusive Activities on Contaminated or Potentially Contaminated Land (2008) is as "Yellow". Reference should be made to S1.8.28.7 for further details.

Appendices

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A. Proposed Ground Investigation Layout





Notes
1. This drawing is for information only.
2. This drawing is not for construction.
3. This drawing relates to an indicative level GI only and should be read in conjunction with the GI Specification (Document reference: STECC-MMD-ZZ-ZZ-RP-GE-920001/P04). The locations shown are indicative and are subject to confirmation after a site walkover, and following a comprehensive review of client provided information, easement from utilities, and further design development.
4. Access routes to be agreed with the Client/ landowner. Efforts shall be made to minimise damage to the site and damage caused shall be made good.
5. The proposed exploratory hole locations assume that there are no constraints with regard to aspects such as planning, archaeology, ecology, access, unexploded ordnance, underground services, and overhead services. These are to be confirmed prior to the works.
6. At the time of writing, a utility survey has been undertaken for the site. Required offsets from utilities (both below ground and overhead) are to be checked and the proposed exploratory hole locations adjusted as required.
7. All exploratory hole locations are to be checked for services prior to the commencement of the intrusive works by hand dug inspection pits. The base of the hand dug pit is also to be CAT scanned prior to commencing boring.
8. Reinstatement is required to original condition.
9. Inspection Pits are assumed to be carried as standard in conjunction with exploratory holes.
10. Geo-environmental samples shall be taken at: 0.10, 0.20, and 0.50m bgl and at 1.00m bgl intervals within the Made Ground. One sample shall be taken at the change to natural soils and at every change in strata thereafter. Additional sampling shall also be taken upon visual/olfactory evidence of contamination and if directed by the Investigation Supervisor.
11. The following standard geotechnical sampling sequences shall be adopted in inspection pits and trial pits:
Dynamic Sampling - Small disturbed samples at 0.5m intervals; Bulk disturbed samples at 1m intervals; Rotary Core - Small, disturbed samples at 0.5m intervals; Bulk disturbed samples at 1m intervals (only to be taken where UCS/ PLT or SMC/DD samples cannot be taken); Samples suitable for UCS testing and/ or Point Load testing, as well as SMC and DD testing should be taken at approximately 1m intervals.
Trial Pits and Inspection Pits - Small disturbed samples at 0.5m intervals; Bulk disturbed samples at 1m intervals.
12. Groundwater and ground gas monitoring proposed to be for a minimum period of three months (anticipated to comprise of eight visits) following completion of fieldwork. This is subject to confirmation by the Investigation Supervisor.

Coordinate system: British National Grid; Datum: OSGB 1936

Data sources: Microsoft, Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

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Salisbury Diagnostic and Surgical Hub Ground Investigation Scope Proposed Exploratory Hole Location Plan

Drawn	GIS Checked	Checked	Approved
E Obiora	M Gipson	M Gipson	M Webb
Scale at A3	Status	Revision	Security
1:500	INF	03	STD

SECC-MMMD-XX-XX-D-G-0001

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B. Chemical Testing Suites for Land affected by Contamination

B.1 General

The following are generic MM chemical testing suites. The testing suites present the recommended required detection limits for the testing. The Contractor should complete the "offered" columns to demonstrate compliance.

B.2 Soil Suites

B.2.1 Mott MacDonald Comprehensive Soil Suite

Table B.1: Comprehensive Soil Suite

Determinand	Unit	Detection Limits		Accreditation	
		Required	Offered	Required	Offered
Antimony	mg/kg	1		*	
Arsenic	mg/kg	1		*	
Asbestos Screen	Type and presence	N/A	N/A	*	
Barium	mg/kg	1		*	
Beryllium	mg/kg	1		*	
Boron	mg/kg	1		*	
BTEX (speciated)	mg/kg	0.02		*	
Cadmium	mg/kg	1		*	
Chromium (III)	mg/kg	1		*	
Chromium (VI)	mg/kg	1		*	
Copper	mg/kg	1		*	
Cyanide (Free)	mg/kg	1		*	
Fraction of Organic Carbon	%	0.1		*	
Iron	mg/kg	36		*	
Lead	mg/kg	1		*	
Manganese	mg/kg	1		*	
Mercury	mg/kg	1		*	
Methylmercury	mg/kg	1		*	
Elemental Mercury	mg/kg	1		*	
Molybdenum	mg/kg	1mg/kg		*	
Nickel	mg/kg	1		*	
pH	N/A	-	N/A	N/A	
Phenols (speciated: phenol, cresols, dimethylphenols, trimethylphenols)	mg/kg	0.6		*	
Polyaromatic Hydrocarbons (USEPA 16 speciated),	mg/kg	0.1		*	
Selenium	mg/kg	1		*	

Determinand	Unit	Detection Limits		Accreditation	
		Required	Offered	Required	Offered
Sulphate (Water soluble),	mg/l	10		*	
Sulphur (Total),	%	0.01		*	
Total Petroleum Hydrocarbon – Criteria Working Group: Ali-Aro Split, TPHCWG Bands	mg/kg	4		*	
Vanadium	mg/kg	1		*	
Volatile Organic Compounds, (Speciated USEPA Method 8260 Target List – Refer to Table B.2	µg/kg	1		*	
Zinc	mg/kg	3		*	

* = BS EN ISO/IEC 17025:2005 / MCERTS unless otherwise stated

B.2.2 Mott MacDonald VOC Soil Suite

Table B.2: VOC Soil Suite Speciated USEPA Method 8260 Target List

Determinand	Unit	Detection Limits		Accreditation	
		Required	Offered	Required	Offered
C10-13 Chloroalkanes	µg/kg	1		*	
Benzene	µg/kg	1		*	
Bromobenzene	µg/kg	1		*	
Bromochloromethane	µg/kg	1		*	
Bromodichloromethane	µg/kg	1		*	
Bromoform	µg/kg	1		*	
Bromomethane	µg/kg	1		*	
n-Butylbenzene	µg/kg	1		*	
sec-Butylbenzene	µg/kg	1		*	
tert-Butylbenzene	µg/kg	1		*	
Carbon tetrachloride	µg/kg	1		*	
Chlorobenzene	µg/kg	1		*	
Chlorodibromomethane	µg/kg	1		*	
Chloroethane	µg/kg	1		*	
Chloroform	µg/kg	1		*	
Chloromethane (methyl chloride)	µg/kg	1		*	
2-Chlorotoluene	µg/kg	1		*	
4-Chlorotoluene	µg/kg	1		*	
1,2-Dibromo-3-chloropropane	µg/kg	1		*	
1,2-Dibromoethane	µg/kg	1		*	
Dibromomethane	µg/kg	1		*	
1,2-Dichlorobenzene	µg/kg	1		*	
1,3-Dichlorobenzene	µg/kg	1		*	
1,4-Dichlorobenzene	µg/kg	1		*	
Dichlorodifluoromethane	µg/kg	1		*	
1,1-Dichloroethane	µg/kg	1		*	
1,2-Dichloroethane	µg/kg	1		*	

Determinand	Unit	Detection Limits		Accreditation	
		Required	Offered	Required	Offered
1,1-Dichloroethene	µg/kg	1		*	
cis-1,2-Dichloroethene	µg/kg	1		*	
trans-1,2-Dichloroethene	µg/kg	1		*	
1,2-Dichloropropane	µg/kg	1		*	
2,2-Dichloropropane	µg/kg	1		*	
1,3-Dichloropropane	µg/kg	1		*	
1,1-Dichloropropene	µg/kg	1		*	
Ethylbenzene	µg/kg	1		*	
Hexachlorobutadiene	µg/kg	1		*	
Isopropylbenzene	µg/kg	1		*	
p-Isopropyltoluene	µg/kg	1		*	
Methylene chloride (dichloromethane)	µg/kg	1		*	
Naphthalene	µg/kg	1		*	
n-Propylbenzene	µg/kg	1		*	
Styrene	µg/kg	1		*	
1,1,1,2-Tetrachloroethane	µg/kg	1		*	
1,1,2,2-Tetrachloroethane	µg/kg	1		*	
Tetrachloroethene	µg/kg	1		*	
Toluene	µg/kg	1		*	
1,2,4-Trichlorobenzene	µg/kg	1		*	
1,2,3-Trichlorobenzene	µg/kg	1		*	
1,1,1-Trichloroethane	µg/kg	1		*	
1,1,2-Trichloroethane	µg/kg	1		*	
Trichloroethene	µg/kg	1		*	
Trichlorofluoromethane	µg/kg	1		*	
1,2,3-Trichloropropane	µg/kg	1		*	
1,2,4-Trimethylbenzene	µg/kg	1		*	
1,3,5-Trimethylbenzene	µg/kg	1		*	
Vinyl chloride	µg/kg	1		*	
o-Xylene	µg/kg	1		*	
m-Xylene	µg/kg	1		*	
p-xylene	µg/kg	1		*	
Methyl-t-butyl ether	µg/kg	1		*	
Dichlorofluoromethane	µg/kg	1		*	

* = BS EN ISO/IEC 17025:2005 / MCERTS unless otherwise stated

B.2.3 Mott MacDonald Comprehensive Leachate Suite (BS EN 12457)

Table B.3: Comprehensive Leachate Suite: All Testing to Liquid: Solid Ratio 2:1

Determinand	Unit	Detection Limits		Accreditation	
		Required	Offered	Required	Offered
Arsenic	mg/l	0.001		*	

Determinand	Unit	Detection Limits		Accreditation	
		Required	Offered	Required	Offered
Ammoniacal Nitrogen	mg/l	0.01		*	
Antimony	mg/l	0.005		*	
Barium	mg/l	0.01		*	
Beryllium	mg/l	0.01		*	
Boron	mg/l	0.01		*	
Cadmium	mg/l	0.00008		*	
Calcium	mg/l	1		*	
Chloride	mg/l	1		*	
Chromium (III)	mg/l	0.004		*	
Chromium (VI)	mg/l	0.0006		*	
Copper	mg/l	0.001		*	
Cyanide (Free)	mg/l	0.001		*	
Cyanide (Complex)	mg/l	0.02		*	
Fluoride	mg/l	1		*	
Iron	mg/l	0.01		*	
Lead	mg/l	0.001		*	
Magnesium	mg/l	1		*	
Manganese	mg/l	0.002		*	
Mercury	mg/l	0.00001		*	
Molybdenum	mg/l	0.07		*	
Nickel	mg/l	0.001		*	
pH		-		*	
Phenols (speciated: phenol, cresols, dimethylphenols, trimethylphenols)	mg/l	0.0005		*	
Selenium	mg/l	0.001		*	
Sulphate	mg/l	3		*	
Vanadium	mg/l	0.001		*	
Zinc	mg/l	0.001		*	

* = BS EN ISO/IEC 17025:2005 / MCERTS unless otherwise stated

B.3 Water Suites

B.3.1 Mott MacDonald Comprehensive Water Suite

Table B.4: Comprehensive Water Suite

Determinand	Unit	Detection Limits		Accreditation	
		Required	Offered	Required	Offered
Ammoniacal Nitrogen	mg/l	0.01mg/l		*	
Antimony	mg/l	0.005mg/l		*	
Arsenic	mg/l	0.001mg/l		*	
Barium	mg/l	0.01mg/l		*	
Beryllium	mg/l	0.01mg/l		*	

Determinand	Unit	Detection Limits		Accreditation	
		Required	Offered	Required	Offered
Boron	mg/l	0.01mg/l		*	
Cadmium	mg/l	0.00008mg/l		*	
Calcium	mg/l	1mg/l		*	
Chloride	mg/l	1mg/l		*	
Chromium (III)	mg/l	0.004mg/l		*	
Chromium (VI)	mg/l	0.0006mg/l		*	
Copper	mg/l	0.001mg/l		*	
Cyanide (Free)	mg/l	0.001mg/l		*	
Cyanide (Total)	mg/l	0.02mg/l		*	
Fluoride	mg/l	1mg/l		*	
Hardness ($CaCO_3$)	mg/l	10mg/l		*	
Iron	mg/l	0.01mg/l		*	
Lead	mg/l	0.001mg/l		*	
Magnesium	mg/l	1mg/l		*	
Manganese	mg/l	0.002mg/l		*	
Mercury	mg/l	0.00005mg/l		*	
Molybdenum	mg/l	0.07mg/l		*	
Nickel	mg/l	0.001mg/l		*	
Nitrate as NO_3	mg/l	1mg/l		*	
pH		-		*	
Phenols (speciated: phenol, cresols, dimethylphenols, trimethylphenols)	mg/l	0.0005mg/l		*	
Polyaromatic Hydrocarbons (USEPA 16 speciated)	µg/l	0.002µg/l (each and every PAH)		*	
Selenium	mg/l	0.001mg/l		*	
Sodium	mg/l	1mg/l		*	
Sulphate	mg/l	3mg/l		*	
Sulphur	mg/l	3mg/l		*	
Total Petroleum Hydrocarbon – Criteria Working Group: Ali-Aro Split TPHCWG Bands	µg/l	10µg/l (each and every TPH Band)		*	
Vanadium	mg/l	0.001mg/l		*	
Volatile Organic Compounds, (Speciated USEPA Method 8260 Target List)	mg/l	Various: See Table 24		*	
Zinc	mg/l	0.001mg/l		*	
Total Dissolved Solids	mg/l	0.1		*	
Alkalinity – Bicarbonate	Mg/l	1		*	

* = UKAS (BS EN ISO/IEC 17025:2005 unless otherwise stated)

B.4 Waste Acceptance Criteria

Table B.5: Waste Acceptance Criteria

Determinand	Unit	Detection Limits		Accreditation	
		Required	Offered	Required	Offered
Total organic carbon	%	3		*	
Loss on ignition	%	10		*	
BTEX	mg/kg	6		*	
PCB's (7 congeners)	mg/kg	1		*	
Mineral Oil, C10 – C40	mg/kg	500		*	
PAH's (Total of 17)	mg/kg	100		*	
pH	N/A	N/A			
Arsenic, As	mg/kg	0.5		*	
Barium, Ba	mg/kg	20		*	
Cadmium, Cd	mg/kg	0.04		*	
Chromium, Cr	mg/kg	0.5		*	
Copper, Cu	mg/kg	2		*	
Mercury, Hg	mg/kg	0.01		*	
Molybdenum, Mo	mg/kg	0.5		*	
Nickel, Ni	mg/kg	0.4		*	
Lead, Pb	mg/kg	0.5		*	
Antimony, Sb	mg/kg	0.06		*	
Selenium, Se	mg/kg	0.1		*	
Zinc, Zn	mg/kg	4		*	
Chloride, Cl	mg/kg	800		*	
Fluoride, F	mg/kg	10		*	
Sulphate, SO_4	mg/kg	1000		*	
Total dissolved Solids (TDS)	mg/kg	4000		*	
Phenol index	mg/kg	1		*	
Dissolved organic carbon	mg/kg	500		*	

* = UKAS (BS EN ISO/IEC 17025:2005 unless otherwise stated)

C. Chemical Testing Suites for Potentially Aggressive Ground/Groundwater

C.1 General

The following are potentially aggressive ground/ groundwater testing suites. The testing suites present the recommended required detection limits for the testing. The Contractor should complete the "offered" columns to demonstrate compliance.

C.2 Soil Suites

C.2.1 BRE SD1 Soils Suite A (Greenfield site – pyrite absent)

Table C.1: BRE SD1 Soils Suite A (Greenfield site – pyrite absent)

Determinand	Test Method	Accreditation	
		Required	Offered
pH in 2.5:1 water/soil extract	BR 279 BS1377 Part 3, Section 9	**	
SO_4 in 2:1 water/soil extract	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 1	**	

** = UKAS (BS EN ISO/IEC 17025:2005)

C.2.2 BRE SD1 Soils Suite B (Greenfield site – pyrite present)

Table C.2: BRE SD1 Soils Suite B (Greenfield site – pyrite present)

Determinand	Test Method	Accreditation	
		Required	Offered
pH in 2.5:1 water/soil extract	BR 279 BS1377 Part 3, Section 9	**	
SO_4 in 2:1 water/soil extract	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 1	**	
Acid Soluble SO_4	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 2	**	
Total sulphur	BR 279 TRL Report 447, Test 4A TRL Report 447, Test 4B	**	

** = UKAS (BS EN ISO/IEC 17025:2005)

C.2.3 BRE SD1 Soils Suite C (Brownfield site – pyrite absent)

Table C.3: BRE SD1 Soils Suite C (Brownfield site – pyrite absent)

Determinand	Test Method	Accreditation	
		Required	Offered
pH in 2.5:1 water/soil extract	BR 279 BS1377 Part 3, Section 9	**	
SO_4 in 2:1 water/soil extract	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 1	**	
Mg (only required if water soluble SO_4 >3000mg/l)	BR 279 – AAS method BR 297 – ISP-AES	**	
NO_3 in 2:1 water/soil extract (only required if pH <5.5)	BR 279	**	
Cl in 2:1 water/soil extract (only required if pH <5.5)	BR 279 BS 1377-3:2018+A1:2021	**	

** = UKAS (BS EN ISO/IEC 17025:2005)

C.2.4 BRE SD1 Soils Suite D (Brownfield site – Pyrite present)

Table C.4: BRE SD1 Soils Suite D (Brownfield site – pyrite present)

Determinand	Test Method	Accreditation	
		Required	Offered
pH in 2.5:1 water/soil extract	BR 279 BS1377 Part 3, Section 9	**	
SO_4 in 2:1 water/soil extract	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 1	**	
Acid Soluble SO_4	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 2	**	
Total sulphur	BR 279 TRL Report 447, Test 4A TRL Report 447, Test 4B	**	
Mg (only required if water soluble SO_4 >3000mg/l)	BR 279 – AAS method BR 297 – ISP-AES	**	
NO_3 in 2:1 water/soil extract (only required if pH <5.5)	BR 279	**	
Cl in 2:1 water/soil extract (only required if pH <5.5)	BR 279 BS 1377-3:2018+A1:2021	**	

** = UKAS (BS EN ISO/IEC 17025:2005)

C.2.5 TRL447 Test 1

Table C.5: TRL Test 1

Determinand	Test Method	Accreditation	
		Required	Offered
Water Soluble Sulphur (WSS)	TRL447: Test 1	**	

** = UKAS (BS EN ISO/IEC 17025:2005)

C.2.6 TRL447 Test 2

Table C.6: TRL Test 2

Determinand	Test Method	Accreditation	
		Required	Offered
Acid Soluble Sulphur (ASS)	TRL447: Test 2	**	

** = UKAS (BS EN ISO/IEC 17025:2005)

C.2.7 TRL447 Test 4

Table C.7: TRL Test 4

Determinand	Test Method	Accreditation	
		Required	Offered
Total Sulphur (TS)	TRL447: Test 4	**	

** = UKAS (BS EN ISO/IEC 17025:2005)

C.3 Waters/Leachate Suites

C.3.1 BRE SD1 Waters / Leachate Suite A (Greenfield Site - pyrite absent)

Table C.8: BRE SD1 Waters / Leachate Suite A (Greenfield site – pyrite absent)

Determinand	Test Method	Accreditation	
		Required	Offered
pH	BR 279 BS1377 Part 3, Section 9	**	
SO_4	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 1	**	

** = UKAS (BS EN ISO/IEC 17025:2005)

C.3.2 BRE SD1 Waters / Leachate Suite B (Greenfield Site - pyrite present)

Table C.9: BRE SD1 Waters / Leachate Suite B (Greenfield site – pyrite present)

Determinand	Test Method	Accreditation	
		Required	Offered
pH	BR 279 BS1377 Part 3, Section 9	**	
SO_4	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 1	**	
Acid Soluble SO_4	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 2	**	
Total sulphur	BR 279 TRL Report 447, Test 4A TRL Report 447, Test 4B	**	

** = UKAS (BS EN ISO/IEC 17025:2005)

C.3.3 BRE SD1 Waters / Leachate Suite C (Brownfield Site - pyrite absent)

Table C.10: BRE SD1 Waters / Leachate Suite C (Brownfield site - pyrite absent)

Determinand	Test Method	Accreditation	
		Required	Offered
pH	BR 279 BS1377 Part 3, Section 9	**	
SO_4	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 1	**	
Mg (only required if water soluble SO_4 >3000mg/l)	BR 279 – AAS method BR 297 – ISP-AES	**	
NO_3 (only required if pH <5.5)	BR 279	**	
Cl (only required if pH <5.5)	BR 279 BS 1377-3:2018+A1:2021	**	

** = UKAS (BS EN ISO/IEC 17025:2005

C.3.4 BRE SD1 Waters / Leachate Suite D (Brownfield Site - pyrite present)

Table C.11: BRE SD1 Waters / Leachate Suite D (Brownfield site - pyrite present)

Determinand	Test Method	Accreditation	
		Required	Offered
pH in 2.5:1 water/soil extract	BR 279 BS1377 Part 3, Section 9	**	
SO_4 in 2:1 water/soil extract	BR 279 BS1377 Part 3, Section 5 TRL Report 447, Test 1	**	

Determinand	**Test Method**	**Accreditation**	
		Required	Offered
Mg (only required if water soluble SO_4 >3000mg/l)	BR 279 – AAS method BR 297 – ISP-AES	**	
NO_3 (only required if pH <5.5)	BR 279	**	
Cl (only required if pH <5.5)	BR 279 BS 1377-3:2018+A1:2021	**	

** = UKAS (BS EN ISO/IEC 17025:2005

D. Made Ground Logging System

Description of Made Ground	
Material	**Descriptive procedure**
Reworked natural soil with minor man-made material	Standard soil description: man-made component quantified with little, some, much or rare, occasional, frequent
Granular composed of man-made material	Standard soil description: emphasise composition of particles
Non-granular composed of man-made material	Made Ground descriptive scheme

Colour		
Shade	**Tint**	**Colour**
Light	Red (ish)	Brown
Dark	Yellow (ish)	Grey
Mottled	Brown (ish)	White
	Orange (ish)	Black
	Green (ish)	(Purple)
	Blue (ish)	(Pink)
	Grey (ish)	(Cream)

Density of Made Ground	
Term	**Field Identification**
Loose	Trial pit collapses
Dense	Trial pit stable

Odour	
strength	**smell**
Odourless	Organic
Slight	Malodorous
Moderate	Sulphurous
Strong	Petrochemical
	(Ketone, phenol creosote etc.)
	etc.

Made Ground composed of …

Amount	Material	Describe
Visually assessed percentage by volume	Solid objects	Size in m using soil particle sizes
		Material
	Hollow objects	Empty, infilled, crushed or broken
		Material
	Organic matter, paper, wood and other decomposable material	Degree of decomposition
		Material

Degree of Decomposition	
Degree of Decomposition	**Material Identification**
Undecomposed	Green vegetation; fresh paper
Slightly decomposed	Vegetation or paper discoloured; structure visible
Moderately decomposed	Structure visible in part, destroyed in part
Highly decomposed	Structure barely distinguishable
Completely decomposed	Material reduced to amorphous mass

Note Also ….
Structure (layered, with lenses, bagged)
Indication of age or date (e.g., on bottle types, newspapers, papers)
Identifiable chemicals or hazardous materials
Heat generation or combustion
Gas evolution (measure and analyse)

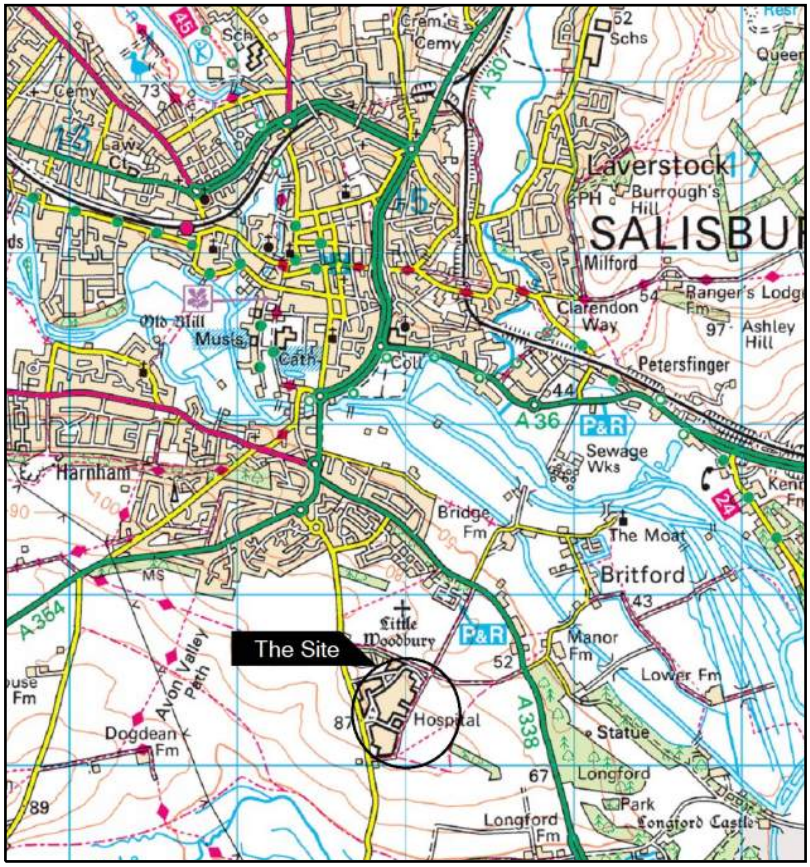
APPENDIX 2

Site Location Plan

APPENDIX 2

GEOTECHNICS
BUILD ON CONFIDENCE

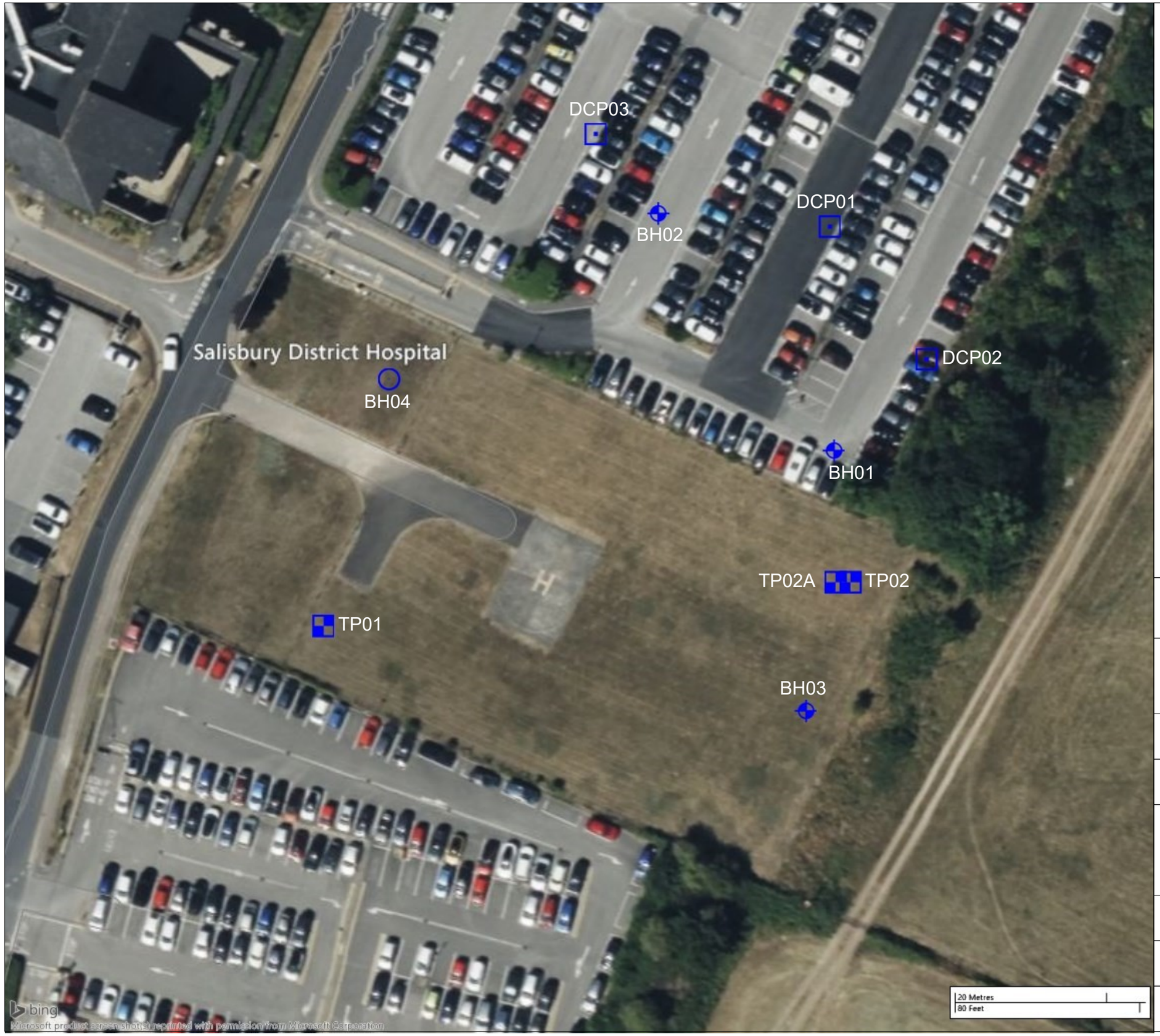
Site Location Plan



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APPENDIX 3

Exploratory Hole Location Plan



N

Legend

- Locations By Type - DS
- Locations By Type - DS+RC
- Locations By Type - IP
- Locations By Type - TP

GEOTECHNICS

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Engineer:
Mott MacDonald

Client:
Salisbury NHS Foundation Trust

Project:
SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Drawing Title:
Exploratory Hole Location Plan

Scale:	Date:
1:500 at A3	**28/05/2026**

Project No.:	
PE262018	**Exploratory Hole Location Plan**

APPENDIX 4

Dynamic Sample and Rotary Borehole Records

DATA SHEET - Symbols and Abbreviations used on Records

Sample Types

B	Bulk disturbed sample
BLK	Block sample
C	Core sample
D	Small disturbed sample (tub/jar)
E	Environmental test sample
ES	Environmental soil sample
EW	Environmental water sample
G	Gas sample
L	Liner sample
LB	Large bulk disturbed sample
P	Piston sample (PF - failed P sample)
TW	Thin walled push in sample
U	Open Tube - 102mm diameter with blows to take sample. (UF - failed U sample)
UT	Thin wall open drive tube sampler - 102mm diameter with blows to take sample. (UTF - failed UT sample)
V	Vial sample
W	Water sample
#	Sample Not Recovered

Insitu Testing / Properties

CBRP	CBR using TRL probe
CHP	Constant Head Permeability Test
COND	Electrical conductivity
TC	Thermal Conductivity
TR	Thermal Resistivity
HV	Strength from Hand Vane
ICBR	CBR Test
IDEN	Density Test
IRES	Resistivity Test
MEX	CBR using Mexecone Probe Test
PKR	Packer Permeability Test
PLT	Plate Load Test
PP	Strength from Pocket Penetrometer
Temp	Temperature
VHP	Variable Head Permeability Test
VN	Strength from Insitu Vane
w%	Water content

(All other strengths from undrained triaxial testing)

S	Standard Penetration Test (SPT)
C	SPT with cone
N	SPT Result
-/-	Blows/penetration (mm) after seating drive
-*/- (mm)	Total blows/penetration
( )	Extrapolated value

Groundwater

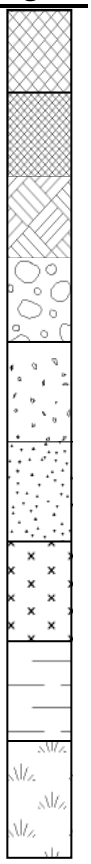
Water Strike

Depth Water Rose To

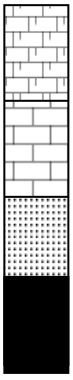
Instrumentation



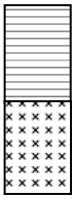
Strata



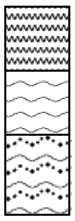
Note: Composite soil types shown by combined symbols



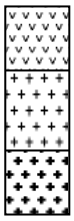
Strata, Continued



Metamorphic Rock



Igneous Rock



Backfill Materials



Rotary Core

RQD	Rock Quality Designation (% of intact core >100mm)
FRACTURE INDEX	Fractures/metre
NI	Non-intact core
NR	No core recovery
AZCL	Assumed zone of core loss

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415090.6 E 127246.4 N	**Borehole**	BH01
				Ground Level	84.40 m OD

Scale 1:20

Sampling/Testing		Drilling					Strata			
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Level (m OD)
0.00 - 0.10	B						MADE GROUND: Asphalt.			
0.10	ES						MADE GROUND: Reddish brown sandy clayey angular to subangular fine to coarse gravel of limestone and asphalt.		0.09	84.31
0.10	PID: 0.6 ppm							At 0.35m, layer of fabric geotextile. Between 0.35 to 0.50m, becomes very clayey.		
0.20	ES									
0.20 - 0.40	B						Structureless CHALK composed of cream silty GRAVEL. Clasts are very weak to extremely weak low density cream angular to subangular. Matrix is white. (Grade Dc)		0.50	83.90
0.20	PID: 0.6 ppm									
0.50	ES									
0.50	PID: 0.4 ppm									
0.80 - 1.20	B									
1.00	ES									
1.00	PID: 0.4 ppm	1.20 - 2.00 (117mm)	(Dry)	90			CHALK, recovered as cream off white slightly gravelly SILT. Clasts are very weak low to medium density whitish cream subangular. Occasional subangular to angular fine to coarse gravel of flint.		1.20	83.20
1.20 - 1.65	UT									
1.20 - 2.00	B									
1.70 - 2.15	S23									
1.70	D									
1.90	D									
2.00 - 2.45	S36	2.00 - 3.00 (117mm)	(Dry)	100						
2.00	D									
2.00 - 3.00	B									
2.10	ES									
2.10	PID: 0.4 ppm									
2.80	D							From 2.80m, becomes gravelly.		
3.00 - 3.45	S33	3.00 - 4.00 (102mm) (15mins)	3.00 (Dry)	90 0	0	AZCL	CHALK, recovered as white gravelly SILT. Clasts are very weak low density white angular to subangular.		3.00	81.40
3.00	D									
3.00 - 3.50	B					NA	Very weak medium density white with occasional black specks CHALK. Recovered as non-intact (drilling disturbed). Observable fractures are: dipping approx. 35-40 deg., very closely-spaced (20/30/80), undulatory, smooth, partly open to incipient (0/1/2), occasional black specks, no infill. Other fractures are randomly orientated, extremely closely-spaced, undulatory and planar, smooth, partly open to incipient, occasional black specks and slight silty coating. (Culver Chalk Formation, Grade B4)	At 3.70m, 1 No. fragmented cobble of medium nodular flint (up to 100 x 70 x 60mm). Between 3.70 to 4.00m, 1 No. fracture dipping approx. between 60 to 85 deg., undulatory, smooth, partly open, (0/0.5/1), orange and yellowish brown staining and occasional black specks and slight silty coating.		
3.50	D								3.70	80.70
						NI				
4.00 - 4.45	S23								4.00	80.40

Boring

Depth	Hole Dia.	Technique	Crew
1.20	0.30	Inspection Pit	M.D
3.00	0.17	Dynamic Sample	M.D
15.00	0.13	Rotary Core	M.D

Progress

Depth of Hole	Depth Cased	Depth to Water	Date	Time
1.20		Dry	27/02/26	09:30
12.00	3.00	Dry	27/02/26	15:00
15.00	3.00	Dry	02/03/26	10:30

Groundwater

Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
					No groundwater observed during drilling.

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Prior to and on completion of inspection pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Inspection pit hand excavated to 1.20m depth and no services were found. UT100 at 1.20m recovery 450mm. Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. The borehole was cleared progressively in 1.00 and 1.50m stages by the UXO engineer to a scheduled depth. A 50mm standpipe was installed to 14.80m with a geowrapped slotted section from 9.80m to 14.80m. A 19mm standpipe was installed to 2.00m with a slotted section from 1.00m to 2.00m. Backfill details from base of hole: gravel filter up to 9.80m, bentonite seal up to 2.00m, gravel filter up to 1.00m, bentonite seal up to 0.20m, concrete and flush cover up to ground level.

Logged in accordance with BS5930:2015 + A1:2020

Logged by LP

Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE
Client Salisbury NHS Foundation Trust
Engineer Mott MacDonald
National Grid Coordinates 415090.6 E 127246.4 N
Project No. PE262018
Borehole BH01
Ground Level 84.40 m OD

Scale 1:20

Sampling/Testing: Sample / SPT Depth	SPT N / Type	Drilling: Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	Strata: General	Detail	Depth	Legend	Level (m OD)
4.00	D	4.00 - 5.00 (102mm) (15mins)	3.00 (Dry)	80 9	0	AZCL	CHALK, recovered as white gravelly SILT. Clasts are very weak low density white angular to subangular.				
						NA		Between 4.20 to 4.40m, occasional very angular to angular medium to coarse gravel of fragmented nodular flint.			
									4.55		79.85
4.60 - 5.00	B					NI	Extremely weak to very weak low density white with occasional black specks CHALK. Recovered as non-intact (drilling disturbed). Flints absent.				
4.70	D										
4.80 - 4.86	C							At 4.90m, 1 No. fracture inclined 30 deg., planar, smooth, clean.			
5.00 - 5.45	S23	5.00 - 6.50 (102mm) (30mins)	3.00 (Dry)	100 43	9				5.00		79.40
5.00	D					NA	CHALK, recovered as white gravelly SILT. Clasts are very weak low density white angular to subangular.				
5.50 - 6.50	B					NI	Very weak low to medium density white CHALK. Fractures are: Set 1 - dipping approx. 10-20 deg., closely-spaced (30/100/200), undulatory, smooth, partly open to incipient (0/1/2), occasional orangish brown staining with black specks and slight silty coating. Set 2 - dipping approx. 60-70 deg., probably medium-spaced, planar, smooth, open to incipient, (0/2/3), occasional black specks and slight silty coating. Set 3 - dipping approx. 80-90 deg., closely-spaced (50/80/100), undulatory, smooth, open to incipient (0/2/4), frequent black specks and orangish brown staining, no infill. Flints absent. (Culver Chalk Formation, Grade B4)		5.50		78.90
5.70	D					20					
						NI					
5.90 - 6.05	C					20					
						NI					
						31					
6.50 - 6.95	S24	6.50 - 8.00 (102mm) (30mins)	3.00 (Dry)	100 35	27			Between 6.50 to 6.95m, SPT disturbed - recovered as silty GRAVEL.			
6.50	D					NA					
6.50	D										
6.50 - 7.00	B										
7.05	D					NI					
7.30 - 7.48	C										
						6					
7.60	D										
7.72 - 7.86	C										
						NI					
7.90 - 8.00	C										
8.00 - 8.45	S17								8.00		76.40

Boring

Depth	Hole Dia.	Technique	Crew

Progress

Depth of Hole	Depth Cased	Depth to Water	Date	Time

Groundwater

Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

Logged by LP

Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415090.6 E 127246.4 N	**Borehole**	BH01
				Ground Level	84.40 m OD

Scale 1:20

Sampling/Testing		Drilling					Strata				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
8.00	D	8.00 - 9.50 (102mm) (30mins)	3.00 (Dry)	55 0	0	AZCL	ASSUMED ZONE OF CORE LOSS.				
8.70	D					NA	CHALK, recovered as white slightly gravelly SILT. Clasts are very weak low to medium density white angular to subangular.		8.62		75.78
						NI	Very weak medium density white CHALK. Recovered as non-intact (drilling disturbed). Flints absent.		9.10		75.30
9.50 - 9.95	S24	9.50 - 11.00 (102mm) (30mins)	3.00 (Dry)	40 0	0	AZCL	ASSUMED ZONE OF CORE LOSS.		9.50		74.90
9.50	D										
9.50	D										
10.00 - 10.50	B					NI	CHALK, recovered as white gravelly SILT. Clasts are extremely weak to very weak low density white angular to subangular. Occasional fragmented cobbles of medium nodular flint (up to 80 x 50 x 30mm) with white chalky cortexes up to 2mm thick.		9.90		74.50
10.60	D					AZCL	ASSUMED ZONE OF CORE LOSS.		10.50		73.90
11.00 - 11.45	S13	11.00 - 12.00 (102mm) (20mins)	3.00 (Dry)	80 0	0			At 11.00m, 1 No. cobble of medium nodular flint (90 x 50 x 30mm).			
11.00	D										
						NA	CHALK, recovered as white gravelly SILT. Clasts are very weak low to medium density white angular to subangular. Occasional angular to subangular medium to coarse gravel of fragmented nodular flint.		11.90		72.50
12.00 - 12.45	S26										

Boring

Depth	Hole Dia.	Technique	Crew

Progress

Depth of Hole	Depth Cased	Depth to Water	Date	Time

Groundwater

Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

Logged by LP

Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415090.6 E 127246.4 N	**Borehole**	BH01
				Ground Level	84.40 m OD

Scale 1:20

Sampling/Testing		Drilling					Strata				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
12.00	D	12.00 - 13.00 (102mm) (30mins)	3.00 (Dry)	80 22	0	AZCL		At 12.00m, 1 No finger flint (70 x 20 x 15mm). Between 12.00 to 12.60m, SPT disturbed - recovered as gravelly SILT.			
12.00	D										
12.30	D					NA					
							Very weak low density white CHALK. (Culver Chalk Formation, Grade A2)		12.60		71.80
12.75 - 12.84	C					0					
12.85 - 12.96	C										
13.00 - 13.45	S26	13.00 - 14.00 (102mm) (30mins)	3.00 (Dry)	80 0	0	AZCL	CHALK, recovered as white gravelly SILT. Clasts are very weak low to medium density white angular to subangular. Occasional angular to subangular medium to coarse gravel of fragmented nodular flint.		13.00		71.40
13.00	D										
13.50	D					NA					
13.70 - 14.00	B					NI	Very weak medium density white CHALK. Recovered as non-intact (drilling disturbed). Occasional angular to subangular medium to coarse gravel of fragmented nodular flint.	At 13.80m, 1 No finger flint (80 x 30 x 20mm).	13.70		70.70
14.00 - 14.45	S20	14.00 - 15.00 (102mm) (30mins)	3.00 (Dry)	78 0	0	AZCL	CHALK, recovered as white gravelly SILT. Clasts are very weak low to medium density white speckled black angular to subangular. Occasional angular to subangular medium to coarse gravel of fragmented nodular flint.		14.00		70.40
14.00	D										
14.00	D					NA					
14.50	D										
						NI	Very weak medium density white speckled black CHALK. Recovered as non-intact (drilling disturbed). Occasional angular to subangular medium to coarse gravel of fragmented nodular flint.		14.60		69.80
15.00	D							End of Borehole	15.00		69.40

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

Logged by LP

Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415067.4 E 127277.7 N	**Borehole**	BH02
				Ground Level	83.98 m OD

Scale 1:20

Sampling/Testing		Drilling					Strata				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
							MADE GROUND: Asphalt.				
0.15	D								0.13		83.85
0.15	ES						MADE GROUND: Light brown very sandy slightly clayey gravel. Sand is fine to medium. Gravel is angular to subangular fine to coarse of limestone.	From 0.25m, becomes reddish brown.			
0.15 - 0.25	B										
0.15	PID: 0.4 ppm										
							PROBABLE MADE GROUND: Firm brown slightly sandy slightly gravelly clay. Sand is fine. Gravel is angular to subrounded fine to medium of flint.	At 0.42m, layer of fabric geotextile.	0.42 0.48		83.56 83.50
0.30	D										
0.30	ES							At 0.60m, 1 No. of subangular cobble of flint (up to 120 x 80 x 60mm).			
0.30	PID: 0.6 ppm						CHALK, recovered as creamish white slightly sandy silty GRAVEL. Clasts are extremely weak to very weak low density white angular to subangular. Matrix is creamish white.				
0.45	D										
0.45	ES										
0.45	PID: 0.2 ppm										
0.50	ES										
0.50 - 1.10	B										
0.60	D										
1.00	ES										
1.00	PID: 0.10 ppm										
1.10 - 1.55	UT	1.70 - 2.00 (117mm)	(Dry)	100							
1.60	D										
1.70 - 2.15	S29										
1.70	D										
1.70 - 2.00	B										
1.80	D										
2.00 - 2.45	UT91										
2.50	D										
2.50 - 2.95	UT136										
3.00 - 3.45	S37	3.00 - 4.00 (102mm) (30mins)	3.00 (Dry)	80 0	0	AZCL	CHALK, recovered as white slightly gravelly SILT. Clasts are very weak low density white angular to subangular.		3.00		80.98
3.00	D							At 3.20m, 1 No. fragmented cobble of a nodular flint (up to 60 x 40 x 20mm).			
3.40	D					NA					
							Very weak low density white with frequent black specks CHALK. Recovered as non-intact (drilling disturbed). Other fractures are randomly orientated, extremely closely-spaced, undulatory and planar, open to incipient, occasional black specks.	Between 3.70 to 4.00m, 1 No. fracture dipping approx. 80-90 deg., undulatory and planar, smooth, open, frequent black specks, no infill. Between 3.80 to 3.90m, 2 No. small nodular flints, locally staining chalk orangish brown (up to 30 x 20 x 15mm).	3.70		80.28
3.90	D					3					
4.00 - 4.45	S30								4.00		79.98

Boring

Depth	Hole Dia.	Technique	Crew
1.10	0.30	Inspection Pit	M.D
3.00	0.17	Dynamic Sample	M.D
15.00	0.13	Rotary Core	M.D

Progress

Depth of Hole	Depth Cased	Depth to Water	Date	Time
1.10		Dry	02/03/26	14:00
4.00	3.00	Dry	02/03/26	17:00
15.00	3.00	Dry	03/03/26	16:00

Groundwater

Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
					No groundwater observed during drilling.

Remarks

Prior to and on completion of inspection pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Inspection pit hand excavated to 1.10m depth and no services were found. UT100 at 1.10m recovery (rec.) 330mm, at 2.00m rec. 400mm, at 2.50m rec. 375mm. Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. The borehole was cleared progressively in 1.00 and 1.50m stages by the UXO engineer to a scheduled depth. A 50mm standpipe was installed to 15.00m with a geowrapped slotted section from 10.00m to 15.00m. A 19mm standpipe was installed to 2.00m with a slotted section from 1.00m to 2.00m. Backfill details from base of hole: gravel filter up to 10.00m, bentonite seal up to 2.00m, gravel filter up to 1.00m, bentonite seal up to 0.20m, gravel, concrete and flush cover up to ground

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

*Logged in accordance with BS5930:2015 + A1:2020

Logged by LP

Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Borehole	BH02
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415067.4 E 127277.7 N	**Ground Level**	83.98 m OD

Scale 1:20

Sampling/Testing		Drilling				Strata				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend / Level (m OD)
4.00	D	4.00 - 5.00 (102mm) (20mins)	3.00 (Dry)	100 0	0	NA	CHALK, recovered as white slightly gravelly SILT. Clasts are very weak low density white angular to subangular.			
4.30	D									
4.50 - 5.00	B					5	Very weak low density white with frequent black specks CHALK. Recovered as non-intact (drilling disturbed).	Between 4.50 to 4.70m, 1 No. fracture dipping approx. 80 to 90 deg., planar, smooth, open, frequent black specks, no infill.	4.50	79.48
4.90	D					NI				
5.00 - 5.45	S30	5.00 - 6.50 (102mm) (30mins)	3.00 (Dry)	33 0	0	AZCL	ASSUMED ZONE OF CORE LOSS.		5.00	78.98
5.00	D									
						NI	Chalk recovered as white very silty GRAVEL. Clasts are extremely weak to very weak, low density white angular to subangular. Matrix is white.		5.50	78.48
5.80	D									
						AZCL	ASSUMED ZONE OF CORE LOSS.	At 6.00m, 1 No. fragmented cobble of a large nodular flint (up to 130 x 100 x 90mm) with white chalky cortex up to 8mm thick.	6.00	77.98
6.50 - 6.95	S24	6.50 - 8.00 (102mm) (30mins)	3.00 (Dry)	73 10	10					
6.50	D									
7.00	D					NA	Very weak to extremely weak medium density white with occasional black specks CHALK. Recovered as non-intact (drilling disturbed). Observable fractures are: Set 1 - dipping approx. 60 to 70 deg., medium spaced, planar, smooth, partially open to incipient, unstained with slightly silty coating. Set 2 - dipping approx. 10 to 20 deg., closely spaced (50/100/200), undulatory, smooth, open to incipient (0/2/3), orangish brown staining and coating of uncompact white silt sized comminuted of chalk (up to 2mm thick). (Culver Chalk Formation, Grade B? 3?)			
						NI			7.30	76.68
7.40 - 7.55	C									
7.60 - 8.00	B					6		From 7.80m, 1 No. small nodular flint (40 x 30 x 20mm) and occasional angular to subangular medium to coarse gravel of fragmented nodular flint.		
7.90	D									
						NI				
8.00 - 8.45	S28								8.00	75.98

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks AGS level.

Logged by LP

Figure Sheet 2 of 4

02/06/2026

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Borehole	BH02
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415067.4 E 127277.7 N	**Ground Level**	83.98 m OD

Scale 1:20

Sampling/Testing		Drilling					Strata				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
8.00	D	8.00 - 9.50 (102mm) (30mins)	3.00 (Dry)	26 0	0	AZCL	ASSUMED ZONE OF CORE LOSS.				
						NA	CHALK, recovered as white slightly gravelly SILT. Clasts are extremely weak, low density white angular to subangular.		8.50		75.48
8.80	D					AZCL	ASSUMED ZONE OF CORE LOSS	At 8.90m, 1 no. fragmented cobble of large nodular flint (110 x 90 x 60mm).	8.90		75.08
9.50 - 9.95	S34	9.50 - 11.00 (102mm) (30mins)	3.00 (Dry)	100 33	8	NA	CHALK, recovered as white gravelly SILT. Clasts are extremely weak to very weak, low to medium density white angular to subangular.		9.50		74.48
9.50	D										
9.50 - 10.00	B										
9.90	D					NI	Very weak low density white CHALK with occasional black specks. Observable fractures are: Set 1 - dipping approx. 80-90 deg., closely spaced (80/100/?), undulatory and planar, smooth, partly open to incipient (0/0.50/1), occasional black specks and slightly silty coating. Set 2 - dipping approx. 30-40 deg., medium spaced undulatory and planar, smooth, open to partly open (0.50/1/2), orangish brown staining frequent black specks, no infill. Other fractures are randomly orientated very closely spaced, undulatory and planar, smooth, partly open to incipient, unstained, no infill. (Culver Chalk Formation, Grade B3).	At 10.10m, sheet flints dipping approx. 40 deg., (up to 8mm thick) locally staining chalk orangish brown.	10.00		73.98
10.07 - 10.17	C					7					
10.80	D					NI					
10.87 - 11.00	C					10					
11.00 - 11.45	S48	11.00 - 12.50 (102mm) (30mins)	3.00 (Dry)	100 30	13	NA		Between 11.00 to 11.40m, SPT disturbed. Recovered as gravelly SILT.			
11.00	D										
11.30	D										
11.65 - 11.87	C					3					

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

Logged by LP

Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Borehole	BH02
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415067.4 E 127277.7 N	**Ground Level**	83.98 m OD

Sampling/Testing | Drilling | Strata — Scale 1:20

Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
12.10	D	11.00 - 12.50 (102mm) (30mins)	3.00 (Dry)	100 30	13	NI		At 12.00m, 1 No. fragmented cobble of nodular flint (up to 90 x 50 x 50mm).			
12.25 - 12.41	C					0		At 12.30m, 1 No. finger flint (60 x 15 x 10mm).			
12.50 - 12.95	S18	12.50 - 14.00 (102mm) (30mins)	3.00 (Dry)	73 26	0	AZCL	CHALK, recovered as white silty GRAVEL. Clasts are extremely weak to very weak low density white angular to subangular occasional very angular to angular fine to coarse gravel of fragmented nodular flint.		12.50		71.48
12.50	D										
13.10	D					NA					
							Extremely weak to very weak, low density, white, locally stained orangish brown CHALK. Recovered as non-intact (drilling disturbed). Observable fractures are: dipping approx. 80-90 deg., closely spaced, undulatory and planar, smooth, partially open to incipient (0/0.5/1), frequent black specks, slight silty coating. Other fractures are randomly orientated, very closely spaced, undulatory and planar, smooth, partially open to incipient, unstained, no infill. (Culver Chalk Formation, Grade B? 3?)		13.20		70.78
13.45 - 13.71	C					2					
13.75	D										
14.00 - 14.45	S27	14.00 - 15.00 (102mm) (30mins)	3.00 (Dry)	100 0	0						
14.00	D										
14.00	D					NI					
14.50	D										
14.50 - 15.00	B							From 14.70m, becoming very weak medium density.			
								End of Borehole	15.00		68.98

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

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Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Borehole	BH03
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415087.0 E 127212.0 N	**Ground Level**	85.39 m OD

Scale 1:20

Sampling/Testing		Drilling					Strata				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
0.00 - 0.30	B						Grass over TOPSOIL comprised of firm dark brown slightly sandy slightly gravelly clay with a low cobble content of angular flint (up to 230 x 160 x 100mm in size).				
0.10	ES										
0.10	PID: 0.1 ppm										
0.20	D						Structureless CHALK composed of silty GRAVEL. Clasts are extremely weak to very weak low density white angular to subangular. Matrix is white. (Grade Dc)	Between 0.30 to 0.50m, low cobble content of angular to subangular flint (up to 60 x 30 x 30mm in size).	0.30		85.09
0.20	ES										
0.20	PID: 0.1 ppm										
0.20	HV: 41 kPa (Avg) R: 3 kPa (Avg)										
0.40 - 1.20	B										
0.50	ES										
0.50	PID: 0.2 ppm						CHALK, recovered as white mottled beige slightly gravelly SILT. Clasts are very weak low to medium density white angular to subangular.		1.20		84.19
1.00	D										
1.00	ES										
1.00	PID: 0.2 ppm										
1.20 - 1.65	UT	1.70 - 2.20 (117mm)	(Dry)	80							
1.20 - 2.00	B										
1.70 - 2.15	S15							Between 2.00 to 2.20m, becomes gravelly, and with rare subangular to subrounded fine to coarse gravel of flint.			
1.70	D										
1.90	D										
2.00 - 2.45	S21	2.20 - 3.00 (117mm)	(Dry)	100							
2.00	D										
2.00 - 2.70	B										
2.20	ES										
2.20	PID: 0.1 ppm										
2.50	D										
2.90	D						CHALK, recovered as white slightly silty GRAVEL. Clasts are very weak to weak medium density white speckled black angular to subangular. Matrix is white.		2.80		82.59
3.00 - 3.45	S17	3.00 - 4.00 (102mm) (5mins)	3.00 (Dry)	0 0	0		ASSUMED ZONE OF CORE LOSS - medium nodular flint recovered at top of next run.		3.00		82.39
3.00	D										
4.00 - 4.45	S15								4.00		81.39

Boring

Depth	Hole Dia.	Technique	Crew
1.20	0.30	Inspection Pit	Geo.
3.00	0.17	Dynamic Sample	M.D
10.50	0.13	Rotary Core	M.D

Progress

Depth of Hole	Depth Cased	Depth to Water	Date	Time
1.20		Dry	25/02/26	14:30
10.50	3.00	Dry	26/02/26	13:00

Groundwater

Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
					No groundwater observed during drilling.

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Prior to and on completion of inspection pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Inspection pit hand excavated to 1.20m depth and no services were found. UT100 at 1.20m recovery 420mm. Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. The borehole was cleared progressively in 1.00 and 1.50m stages by the UXO engineer to a scheduled depth. A 50mm standpipe was installed to 10.00m with a geowrapped slotted section from 3.00m to 10.00m. A 19mm standpipe was installed to 2.00m with a slotted section from 1.00m to 2.00m. Backfill details from base of hole: bentonite seal from 10.50 to 10.00m, gravel filter up to 3.00m, bentonite seal up to 2.00m, gravel filter up to 1.00m, bentonite seal up to 0.20m, gravel, concrete and flush cover up to ground level.

Logged in accordance with BS5930:2015 + A1:2020

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Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415087.0 E 127212.0 N	**Borehole**	BH03
				Ground Level	85.39 m OD

Scale 1:20

Sampling/Testing		Drilling					Strata				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
4.00	D	4.00 - 5.00 (102mm) (5mins)	3.00 (Dry)	100 31	18	NA	Extremely weak to very weak low density CHALK. Recovered as non-intact, likely drilling disturbed. Observable discontinuities are dipping approx. 70 to 80 degrees, extremely closely spaced (15/17/20), undulating, rough to smooth, open up to 4mm with comminuted chalk infill, with occasional orange discolouration on surfaces and frequent black specks. (Culver Chalk Formation, Grade C? 5?)	Between 4.00 and 4.45m, SPT undertaken - chalk is disturbed recovered as sandy silty GRAVEL.			
4.00 - 4.50	B										
4.45	D					NI		Between 4.49 and 4.55m, band of small to medium nodular flints. Between 4.60 and 4.80m, observable discontinuities are dipping approx. 40 to 45 degrees, very closely to closely spaced, undulating, rough and smooth, with frequent black specks on surfaces.			
4.82 - 5.00	C					0					
4.90	D										
5.00 - 5.45	S29	5.00 - 6.50 (102mm) (10mins)	3.00 (Dry)	100 34	28	NA	Very weak low density white CHALK. Recovered as non-intact, likely drilling disturbed. Observable discontinuities are dipping approx. 65 to 75 degrees, extremely closely to very closely spaced (20/25/30), undulating, rough to smooth, partly open to open (0.5/2/3) with comminuted chalk infill with occasional black specks, possibly incipient but drilling disturbed. (Culver Chalk Formation, Grade B? 4?)	Between 5.00 and 5.45m, SPT undertaken - chalk is disturbed recovered as sandy silty GRAVEL.	5.00		80.39
5.00	D										
5.00 - 6.00	B										
5.50	D					NI					
6.08 - 6.30	C					2	Very weak low density white CHALK. Fractures are dipping approx. 5 to 10 degrees, closely spaced (220/240), undulating, rough, unstained with gravel infill up to 10mm thickness. (Culver Chalk Formation, Grade C2)		6.08		79.31
6.10	D										
6.30 - 6.50	C										
6.50 - 6.95	S57	6.50 - 8.00 (102mm) (10mins)	3.00 (Dry)	84 17	17	AZCL	Extremely weak to very weak low density white CHALK. Recovered as non-intact, likely drilling disturbed. Observable fractures are dipping approx. 60 to 85 degrees, extremely closely spaced (5/10/17), undulating to planar, rough to smooth, moderately wide with comminuted chalk infill (3 to 5mm) and frequent black specks. (Culver Chalk Formation, Grade C? 5?)	Between 6.50 and 6.95m, SPT undertaken - recovery impacted with material recovered as GRAVEL.	6.50		78.89
6.50	D					NA		Between 6.80 and 6.92m, band of nodular flints recovered as fractured.			
7.00 - 8.00	B										
7.30	D					NI		Between 7.30 and 7.60m, observable fracture set, 2 no. fractures are dipping approx. 50 to 60 degrees, closely spaced (100mm), undulating and smooth with black specks and minor orange staining on surfaces. At 7.63m, band of fine gravel sized fragments of broken flints.			
8.00 - 8.45	S22										

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

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Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler and Rotary Core*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415087.0 E 127212.0 N	**Borehole**	BH03
				Ground Level	85.39 m OD

Scale 1:20

Sampling/Testing		Drilling					Strata				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
8.00	D	8.00 - 9.50 (102mm) (10mins)	3.00 (Dry)	100 25	25			Between 8.00 and 8.45m, SPT undertaken - chalk is disturbed recovered as sandy silty GRAVEL.			
8.20	D					NA					
								Between 8.45 and 8.60m, 1 no. vertical fracture, undulating, rough, unstained and clean.			
8.80	D					NI					
9.38 - 9.50	C					0					
9.50 - 9.95	S16	9.50 - 10.50 (102mm) (10mins)	3.00 (Dry)	60 12	0		ASSUMED ZONE OF CORE LOSS	Between 9.50 and 9.95m, SPT undertaken - chalk is disturbed and recovery likely impacted.	9.50		75.89
9.50	D					AZCL					
10.00	D						CHALK, recovered as slightly gravelly SILT. Gravel is white, very weak, low density, subangular to rounded fine to coarse.		10.00		75.39
10.40	D					NA					
								End of Borehole	10.50		74.89

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

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Figure Sheet 3 of 3

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Borehole	BH04
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415031.8 E 127255.7 N	**Ground Level**	85.61 m OD

Scale 1:20

Sampling Depth	Sample Type	Depth Cased & (to Water)	Properties Results	SPT N	Strata Description	Depth	Legend	Level (m OD)
0.10	ES				MADE GROUND: Grass over firm to stiff brown slightly sandy slightly gravelly clay with occasional rootlets. Sand is fine. Gravel is subangular to angular fine to coarse of flint. Between 0.00 to 0.10m, frequent rootlets. At 0.05m, layer of green plastic membrane. From 0.50m, low cobble content of angular flint (up to 65 x 55 x 50mm in size).			
0.10			PID: <0.1 ppm					
0.20	ES							
0.20 - 0.50	B							
0.20			PID: <0.1 ppm					
0.20	HV		44 kPa (Avg) R: 17 kPa (Avg)					
0.20	PP		250 kPa (Avg)					
0.40	D							
0.50	ES							
0.50			PID: 0.1 ppm		Structureless CHALK composed of white mottled cream silty GRAVEL. Clasts are very weak low to medium density white angular to subangular. Matrix is white. (Grade Dc)	0.65		84.96
0.50	PP		240 kPa (Avg)					
0.80 - 1.20	B							
1.00	ES				At 1.00m, 1 No. cobble of subangular flint (100 x 80 x 70mm in size).			
1.00			PID: 0.1 ppm					
1.10	D							
1.20 - 1.65	UT				CHALK, recovered as white slightly gravelly SILT. Clasts are extremely weak white, angular to subangular. Rare angular to subangular fine to coarse gravel of flint.	1.20		84.41
1.70 - 2.20			Rec: 100%					
1.70 - 2.15		(Dry)	(117mm)	S10				
1.70	D							
1.70 - 2.20	B							
1.90	ES							
1.90			PID: 0.2 ppm					
2.00 - 2.45		(Dry)		S16				
2.00	D							
2.20 - 3.00			Rec: 100% (117mm)					
2.30 - 2.70	B							
2.50	D							
2.80					CHALK, recovered as white silty GRAVEL. Clasts are extremely weak low density white angular to subangular. Rare angular to subangular fine to coarse of flint. Matrix is white.	2.80		82.81
2.90	D							
3.00 - 4.00			Rec: 100%					
3.00 - 3.45		(Dry)	(117mm)	S21				
3.00	D							
3.20	D							
3.50 - 4.00	B							
3.70	ES							
3.70			PID: 0.1 ppm					
4.00 - 5.00			Rec: 100%					
4.00 - 4.45		(Dry)	(117mm)	S20				

Boring

Depth	Hole Dia.	Technique	Crew
1.20	0.30	Inspection Pit	Geo.
7.00	0.12	Dynamic Sample	M.D
10.00	0.09		

Progress

Depth of Hole	Depth Cased	Depth to Water	Date	Time
1.20		Dry	25/02/26	10:45
7.00		Dry	25/02/26	14:00
10.00		Dry	25/02/26	16:45

Groundwater

Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
					No groundwater observed during drilling.

Remarks

Prior to and on completion of inspection pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Inspection pit hand excavated to 1.20m depth and no services were found. UT100 at 1.20m recovery 355mm. Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. The borehole was cleared progressively in 1.00m stages by the UXO engineer to a scheduled depth. A 50mm standpipe was installed to 10.00m with a geowrapped slotted section from 2.00m to 10.00m. Backfill details from base of hole: gravel filter up to 2.00m, bentonite seal up to 0.20m, gravel, concrete and flush cover up to ground level.

Logged in accordance with BS5930:2015 + A1:2020

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged by EB

Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Borehole	BH04
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415031.8 E 127255.7 N	**Ground Level**	85.61 m OD

Sampling			Properties		Strata			Scale 1:20
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
4.00	D							
4.10	D							
4.50 - 5.00	B							
4.90	D							
5.00 - 6.00			Rec: 100%					
5.00 - 5.45		(Dry)	(117mm)	S49				
5.00	D							
5.00 - 6.00	B							
5.50	D							
6.00 - 7.00			Rec: 100%					
6.00 - 6.45		(Dry)	(117mm)	S47	CHALK, recovered as white slightly gravelly SILT. Clasts are extremely weak low density white speckled black angular to subangular fine to coarse of chalk.	6.00		79.61
6.00	D							
6.00 - 6.50	B							
6.20	D							
6.60	D							
					Between 6.70 to 7.00m, locally recovered as very silty gravel of chalk.			
6.80	D							
7.00 - 8.00			Rec: 100%					
7.00 - 7.45		(Dry)	(94mm)	S22				
7.00	D							
7.00 - 7.50	B							
					CHALK, recovered as slightly silty GRAVEL. Clasts are very weak low to medium density white angular to subangular.	7.50		78.11
7.70 - 8.00	B							
7.90	D							
8.00 - 9.00			Rec: 100%					
8.00 - 8.45		(Dry)	(94mm)	S24		8.00		77.61

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

Logged by EB

Figure

02/06/2026

GEOTECHNICS

BOREHOLE RECORD - *Dynamic Sampler*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Borehole	BH04
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415031.8 E 127255.7 N	**Ground Level**	85.61 m OD

Sampling			Properties		Strata			Scale 1:20
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
8.00	D				CHALK, recovered as white locally stained orange sandy silty GRAVEL. Clasts are very weak medium density white angular to subangular. Occasional angular fine to coarse gravels of fragmented nodular flint randomly disseminated throughout the stratum. Between 8.00 and 8.45m, material is drilling disturbed recovered as slightly gravelly SILT.			
8.00 - 9.00	B							
9.00 - 10.00			Rec: 100% (94mm)	S23	Between 9.00 and 9.45m, material is drilling disturbed recovered as slightly gravelly SILT.			
9.00 - 9.45		(Dry)						
9.00	D							
9.00 - 10.00	B							
10.00 - 10.45		(Dry)		S13	End of Borehole	10.00		75.61
10.00	D							

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

Logged by EB

Figure

02/06/2026

GEOTECHNICS

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Marshall drilling
Unit 17 & 18
Woodlands industrial estate
Eden vale road
Westbury
Wilthire

SPT Hammer Ref:	MDL.01
Test Date:	16/11/2025
Report Date:	16/11/2025
File Name:	MDL.01.spt
Test Operator:	JOE

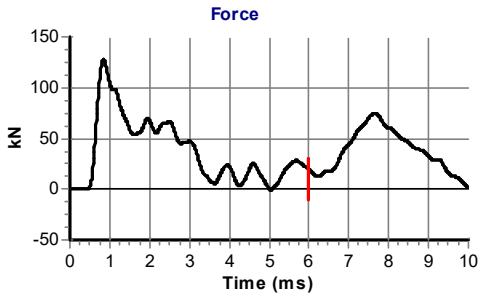
Instrumented Rod Data

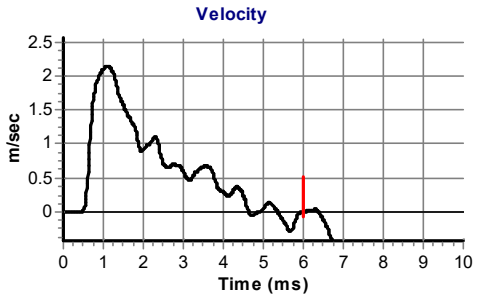
Diameter d_r (mm):	67
Wall Thickness t_r (mm):	9.2
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	73545
Accelerometer No.2:	73546

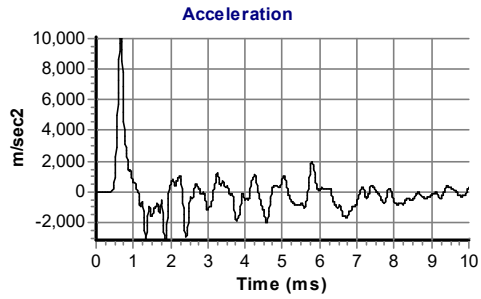
SPT Hammer Information

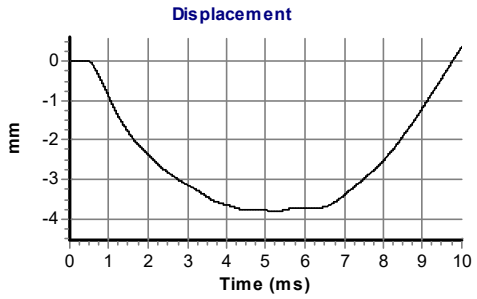
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	10.0

Comments / Location









Calculations

Area of Rod A (mm2):	1671
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	253

Energy Ratio E_r (%): **53**

Signed: J.Kearney

Title: Plant manager

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FIELDWORK RESULTS - *SPT Results Summary*

Project SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE **Engineer** Mott MacDonald **Project No.** PE262018

Client Salisbury NHS Foundation Trust

Borehole	Depth (m bgl)	Level (m OD)	SPT Type	SWP (mm)	Seating Drive		Test Drive				SPT *N* -value	Uncorrected SPT *N*
					0 - 75 (mm)	75 - 150 (mm)	0 - 75 (mm)	75 - 150 (mm)	150 - 225 (mm)	225 - 300 (mm)		10 20 30 40 50
BH01	1.70	82.70	S		4	5	5	5	6	7	23	
BH01	2.00	82.40	S		6	7	8	11	8	9	36	
BH01	3.00	81.40	S		4	5	6	10	9	8	33	
BH01	4.00	80.40	S		2	3	6	6	6	5	23	
BH01	5.00	79.40	S		3	4	5	6	6	6	23	
BH01	6.50	77.90	S		5	6	5	5	7	7	24	
BH01	8.00	76.40	S		5	5	5	5	4	3	17	
BH01	9.50	74.90	S		4	2	4	5	7	8	24	
BH01	11.00	73.40	S		3	3	4	4	3	2	13	
BH01	12.00	72.40	S		5	8	6	6	7	7	26	
BH01	13.00	71.40	S		4	4	8	8	5	5	26	
BH01	14.00	70.40	S		5	5	5	5	5	5	20	

Hammer No.:	MDL01	**Remarks**
Energy Ratio, Er (%):	53	

-/- Blows / penetration (mm) -*/- Total blows / total penetration (mm) SWP Penetration under own weight (mm)

S - SPT with split spoon sampler C - SPT with cone L - Split Spoon liner used

FIELDWORK RESULTS - *SPT Results Summary*

Project SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE **Engineer** Mott MacDonald **Project No.** PE262018

Client Salisbury NHS Foundation Trust

Borehole	Depth (m bgl)	Level (m OD)	SPT Type	SWP (mm)	Seating Drive		Test Drive				SPT *N* -value	Uncorrected SPT *N*
					0 - 75 (mm)	75 - 150 (mm)	0 - 75 (mm)	75 - 150 (mm)	150 - 225 (mm)	225 - 300 (mm)		10 20 30 40 50
BH02	1.70	82.28	S		6	6	7	7	7	8	29	
BH02	3.00	80.98	S		7	7	10	9	9	9	37	
BH02	4.00	79.98	S		1	3	6	8	8	8	30	
BH02	5.00	78.98	S		3	5	6	6	10	8	30	
BH02	6.50	77.48	S		4	5	6	7	5	6	24	
BH02	8.00	75.98	S		4	4	5	8	8	7	28	
BH02	9.50	74.48	S		6	5	6	8	8	12	34	
BH02	11.00	72.98	S		4	4	5	8	20	15	48	
BH02	12.50	71.48	S		2	3	4	4	5	5	18	
BH02	14.00	69.98	S		4	5	6	7	6	8	27	

Hammer No.:	MDL01	**Remarks**
Energy Ratio, Er (%):	53	

-/- Blows / penetration (mm) -*/- Total blows / total penetration (mm) SWP Penetration under own weight (mm)

S - SPT with split spoon sampler C - SPT with cone L - Split Spoon liner used

FIELDWORK RESULTS - *SPT Results Summary*

Project SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE **Engineer** Mott MacDonald **Project No.** PE262018

Client Salisbury NHS Foundation Trust

Borehole	Depth (m bgl)	Level (m OD)	SPT Type	SWP (mm)	Seating Drive		Test Drive				SPT *N* -value	Uncorrected SPT *N*
					0 - 75 (mm)	75 - 150 (mm)	0 - 75 (mm)	75 - 150 (mm)	150 - 225 (mm)	225 - 300 (mm)		10 20 30 40 50
BH03	1.70	83.69	S		2	3	3	4	4	4	15	
BH03	2.00	83.39	S		4	4	5	5	5	6	21	
BH03	3.00	82.39	S		7	4	4	3	5	5	17	
BH03	4.00	81.39	S		3	4	3	4	4	4	15	
BH03	5.00	80.39	S		4	5	6	7	8	8	29	
BH03	6.50	78.89	S		4	5	12	15	11	19	57	
BH03	8.00	77.39	S		4	5	4	5	5	8	22	
BH03	9.50	75.89	S		3	4	3	4	5	4	16	

Hammer No.:	MDL01
Energy Ratio, Er (%):	53

Remarks

-/- Blows / penetration (mm) -*/- Total blows / total penetration (mm) SWP Penetration under own weight (mm)

S - SPT with split spoon sampler C - SPT with cone L - Split Spoon liner used

FIELDWORK RESULTS - *SPT Results Summary*

Project SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE **Engineer** Mott MacDonald **Project No.** PE262018

Client Salisbury NHS Foundation Trust

Borehole	Depth (m bgl)	Level (m OD)	SPT Type	SWP (mm)	Seating Drive		Test Drive				SPT *N* -value	Uncorrected SPT *N*
					0 - 75 (mm)	75 - 150 (mm)	0 - 75 (mm)	75 - 150 (mm)	150 - 225 (mm)	225 - 300 (mm)		10 20 30 40 50
BH04	1.70	83.91	S		3	2	2	2	3	3	10	
BH04	2.00	83.61	S		3	3	4	4	3	5	16	
BH04	3.00	82.61	S		5	6	5	5	6	5	21	
BH04	4.00	81.61	S		2	4	6	4	5	5	20	
BH04	5.00	80.61	S		8	12	20	12	9	8	49	
BH04	6.00	79.61	S		6	10	11	9	11	16	47	
BH04	7.00	78.61	S		5	5	5	5	6	6	22	
BH04	8.00	77.61	S		6	6	6	6	6	6	24	
BH04	9.00	76.61	S		5	6	7	5	5	6	23	
BH04	10.00	75.61	S		4	4	4	4	3	2	13	

Hammer No.:	MDL01	**Remarks**
Energy Ratio, Er (%):	53	

-/- Blows / penetration (mm) -*/- Total blows / total penetration (mm) SWP Penetration under own weight (mm)

S - SPT with split spoon sampler C - SPT with cone L - Split Spoon liner used

APPENDIX 5

Dynamic Sample and Rotary Borehole Photographs

BH01 Inspection pit 0.00-1.20m



BH01 Inspection pit side walls



BH01 Inspection pit arisings



BH01 DS 1.20-3.00m



BH01 RC 3.00-5.00m



BH01 RC 5.00-8.00m



BH01 RC 8.00-11.00m



BH01 RC 11.00-13.00m



BH01 RC 13.00-15.00m



BH02 Inspection pit 0.00-1.10m



BH02 Inspection pit side walls



BH02 Inspection pit arisings



BH02 DS 1.70-2.00m



BH02 RC 3.00-5.00m



BH02 RC 5.00-8.00m



BH02 RC 8.00-11.00m



BH02 RC 11.00-14.00m



BH02 RC 14.00-15.00m



BH03 Inspection pit 0.00-1.20m



BH03 Inspection pit side walls



BH03 Inspection pit arisings



BH03 DS 1.20-2.00m



BH03 RC (NR 3.00-4.00) 4.00-6.50m



BH03 RC: 6.50-9.50m



BH03 RC 9.50-10.50m



BH04 Inspection pit 0.00-1.20m



BH04 Inspection pit side walls



BH04 Inspection pit arisings



BH04 DS 1.20-2.00m



BH04 DS 2.00-5.00m



BH04 DS 5.00-8.00m



BH04 DS 8.00-10.00m



APPENDIX 6

Trial Pit Records

TRIAL PIT RECORD - *Trial pit/trench*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Location ID	TP01
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415023.0 E 127223.0 N	**Ground Level**	86.63 m OD

Samples and Tests | Strata | Scale 1:20

Depth	Sample Type	Stratum No.	Results	Description	Depth	Legend	Level (m OD)
0.00 - 0.15	LB			Grass over TOPSOIL comprised of firm dark brown slightly sandy slightly gravelly clay with occasional rootlets. Sand is fine. Gravel is subangular fine to coarse of chalk and flint.			
0.10	D						
0.10	ES				0.15		86.48
0.10			PID: 0.1 ppm	Firm light brown slightly sandy slightly gravelly CLAY with a low cobble content of subangular flint (up to 100 x 40 x 30mm in size). Sand is fine. Gravel is subangular fine to coarse of chalk.			
0.15 - 0.35	LB						
0.20	D		w: 24 %		0.35		86.28
0.20	ES			Structureless CHALK composed of white silty GRAVEL with a low cobble content. Clasts and cobbles are extremely weak to very weak medium density white and angular to subangular (up to 60 x 30 x 30mm in size). Occasional flint gravels are subangular to angular fine to coarse. Matrix is white. (Grade Dc)			
0.20			PID: 0.1 ppm				
0.35 - 1.00	LB						
0.50	D						
0.50	ES						
0.50			PID: 0.2 ppm				
1.00	D						
1.00	ES						
1.00 - 1.60	LB						
1.00			PID: 0.2 ppm				
1.60 - 2.00	LB			CHALK recovered as white gravelly SILT with a low cobble content. Clasts and cobbles are very weak low density white angular to subangular (up to 100 x 60 x 30mm in size). Occasional subangular nodular flint cobbles (up to 200 x 100 x 80mm in size).	1.60		85.03
2.00	D						
2.00	ES						
2.00 - 3.00	B						
2.00			PID: 0.2 ppm				
				End of Excavation	3.00		83.63

Excavation

Plant	JCB 3CX	**Width (B)**	0.40
Date	26/02/2026	**Length (C)**	2.00
Shoring	None.	**Date Backfilled**	26/02/2026
Stability	Stable during excavation.		

Groundwater

Depth Observed	Depth of Pit	Rose to	in Mins	Remarks
	3.00			No groundwater observed during excavation.

Remarks

Prior to and on completion of trial pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. Trial pit excavated to 3.00m depth and no services were found. Trial pit excavated using JCB 3CX. Upon completion, trial pit backfilled with arisings.

Logged by AD

Figure Sheet 1 of 1

15/06/2026

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

GEOTECHNICS

TRIAL PIT RECORD - *Trial pit/trench*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Location ID	TP02
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415093.0 E 127229.0 N	**Ground Level**	84.99 m OD

Samples and Tests | Strata | Scale 1:20

Depth	Sample Type	Stratum No.	Results	Description	Depth	Legend	Level (m OD)
0.00 - 0.15	LB			Grass over TOPSOIL comprised of firm to stiff brown slightly sandy slightly gravelly clay with occasional rootlets. Gravel is subangular fine to coarse of chalk and flint.			
0.10	D						
0.10	ES				0.15		84.84
0.10			PID: 0.6 ppm	Firm light brown slightly sandy slightly gravelly CLAY with a low cobble content of angular to subangular flint (up to 110 x 100 x 100mm in size). Sand is fine to coarse. Gravel is angular to subangular fine to coarse of chalk and flint.			
0.15 - 0.30	LB				0.30		84.69
0.20	D		w: 26 %	Structureless CHALK composed of white slightly sandy silty GRAVEL. Clasts are very weak low density white angular. Matrix is white. (Grade Dc)			
0.20	ES						
0.20			PID: 0.1 ppm				
0.30 - 0.60	LB						
0.50	D				0.60		84.39
0.50	ES			Structureless CHALK composed of silty GRAVEL with a low cobble content. Clasts and cobbles are very weak, low density, white and angular to subangular (up to 150 x 80 x 60mm in size). Matrix is white. (Grade Dc)			
0.50			PID: 0.2 ppm				
0.60 - 1.00	LB						
1.00	D						
1.00	ES						
1.00 - 2.00	LB						
1.00			PID: 0.3 ppm				
2.00	D						
2.00	ES						
2.00 - 3.00	B						
2.00			PID: 0.4 ppm				
3.00	D			End of Excavation	3.00		81.99

Excavation

Plant	JCB 3CX	**Width (B)**	0.40
Date	26/02/2026	**Length (C)**	2.00
Shoring	None.	**Date Backfilled**	26/02/2026
Stability	Stable during excavation.		

Groundwater

Depth Observed	Depth of Pit	Rose to	in Mins	Remarks
	3.00			No groundwater observed during excavation.

Remarks

Prior to and on completion of trial pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. Trial pit excavated to 3.00m depth and no services were found. Trial pit excavated using JCB 3CX. Scheduled Soakaway Tests completed in trial pit TP02A.

Logged by AD

Figure Sheet 1 of 1

15/06/2026

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

GEOTECHNICS

TRIAL PIT RECORD - *Trial pit/trench*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Location ID	TP02A
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415091.0 E 127229.0 N	**Ground Level**	84.99 m OD

Samples and Tests | Strata | Scale 1:20

Depth	Sample Type	Stratum No.	Results	Description	Depth	Legend	Level (m OD)
				Grass over TOPSOIL comprised of firm to stiff brown slightly sandy slightly gravelly clay with occasional rootlets. Gravel is subangular fine to coarse of chalk and flint	0.15		84.84
				Firm light brown slightly sandy slightly gravelly CLAY with a low cobble content of angular to subangular flint. Sand is fine to coarse. Gravel is angular to subangular fine to coarse of chalk and flint.	0.30		84.69
				Structureless CHALK composed of white slightly sandy silty GRAVEL. Clasts are very weak low density white and angular. The matrix is white. (Grade Dc)	0.60		84.39
				Structureless CHALK composed of silty GRAVEL with a low cobble content. Clasts and cobbles are very weak low density white and angular to subangular. The matirx is white. (Grade Dc)			
				End of Excavation	2.00		82.99

Excavation

Plant	JCB 3CX	**Width (B)**	0.40
Date	26/02/2026	**Length (C)**	2.30
Shoring	None.	**Date Backfilled**	26/02/2026
Stability	Stable during excavation.		

Groundwater

Depth Observed	Depth of Pit	Rose to	in Mins	Remarks
	2.00			No groundwater observed during excavation.

Remarks

Prior to and on completion of trial pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. Trial pit excavated to 2.00m depth and no services were found. Trial pit excavated using JCB 3CX. Soakaway tests carried out between 1.00m to 2.00m. Upon completion, trial pit backfilled with arisings.

Logged by AD

Figure Sheet 1 of 1

15/06/2026

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

GEOTECHNICS

APPENDIX 7

Trial Pit Photographs

TP01 Trial pit 0.00-3.00m



TP01 Trial pit arisings



TP01 Trial pit side walls



TP02 Trial pit 0.00-3.00m



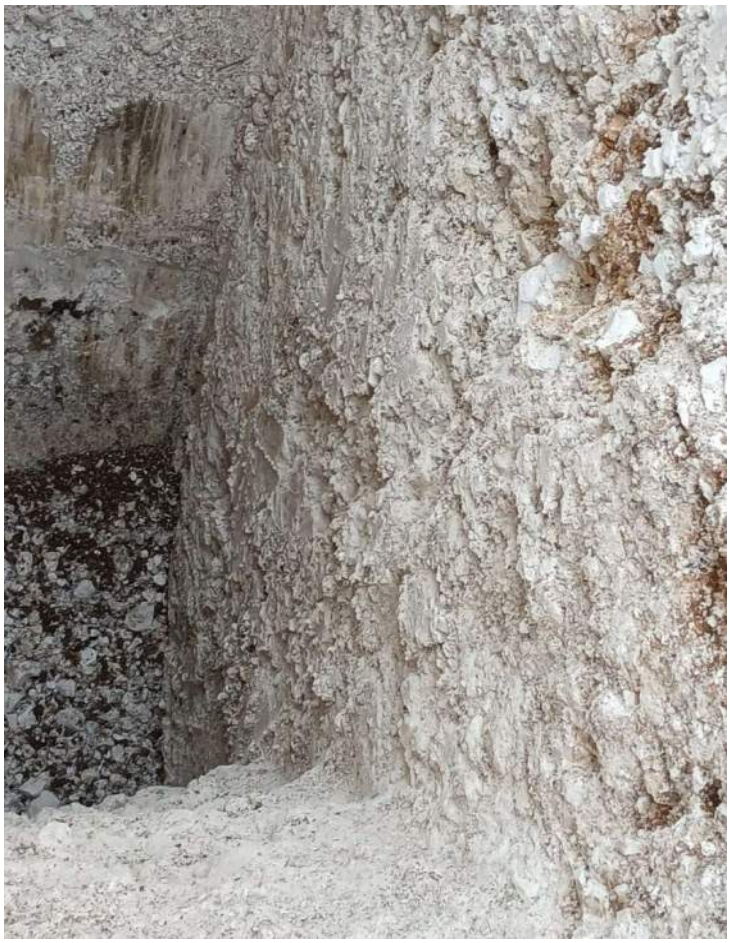
TP02 Trial pit arisings



TP02 Trial pit side walls



TP02 Trial pit side walls close-up



APPENDIX 8

Inspection Pit Records

TRIAL PIT RECORD - *Inspection pit*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Location ID	DCP01
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415090.0 E 127276.0 N	**Ground Level**	83.40 m OD

Samples and Tests | Strata | Scale 1:10

Depth	Sample Type	Stratum No.	Results	Description	Depth	Legend	Level (m OD)
				MADE GROUND: Asphalt.			
0.10 0.10	ES		PID: 0.5 ppm	MADE GROUND: Brown sandy slightly clayey gravel. Sand is fine. Gravel is angular to subangular fine to coarse of limestone.	0.10		83.30
0.20 0.20	ES		PID: 0.3 ppm				
				PROBABLE MADE GROUND: Firm brown slightly sandy slightly gravelly clay with a low cobble content. Sand is fine. Gravel is angular to subangular fine to coarse of chalk and flint. Cobbles are subangular of flint (up to 80 x 50 x 20mm). At 0.42m, layer of fabric geotextile.	0.42		82.98
0.50 0.50	ES		PID: 0.3 ppm				
				CHALK, recovered as creamy beige slightly gravelly SILT with a low cobble content. Clasts are extremely weak to very weak low density white angular to subangular of. Rare angular to subangular fine to coarse gravel of flint. Cobbles are subangular (up to 70 x 50 x 30mm) of nodular flint.	0.60		82.80
1.00 1.00	ES		PID: 0.2 ppm				
				End of Excavation	1.20		82.20

Excavation

Plant	Hand Tools	**Width (B)**	0.60
Date	27/02/2026	**Length (C)**	0.60
Shoring	None.	**Date Backfilled**	27/02/2026
Stability	Stable during excavation.		

Groundwater

Depth Observed	Depth of Pit	Rose to	in Mins	Remarks
	1.20			No groundwater observed during excavation.

Remarks

Prior to and on completion of inspection pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. 'L' shaped pit hand excavated to clear ground for adjacent Dynamic Cone Penetration Test. Inspection pit hand excavated to 1.20m depth and no services were found. Backfill details from base of hole: arisings up to 0.40m, MOT type 1 to 0.10m, asphalt up to ground level.

Logged by AD

Figure Sheet 1 of 1

01/06/2026

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

GEOTECHNICS

TRIAL PIT RECORD - *Inspection pit*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Location ID	DCP02
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415103.0 E 127258.5 N	**Ground Level**	83.63 m OD

Samples and Tests | Strata | Scale 1:10

Depth	Sample Type	Stratum No.	Results	Description	Depth	Legend	Level (m OD)
0.00 - 0.10	B			MADE GROUND: Asphalt.			
0.10	ES				0.10		83.53
0.10			PID: 0.6 ppm	MADE GROUND: Orangish brown slightly sandy slightly clayey gravel. Sand is fine. Gravel is angular to subangular fine to coarse of limestone.			
0.20	ES						
0.20			PID: 0.4 ppm				
0.30 - 0.45	B				0.30		83.33
0.35	D		w: 7 %	MADE GROUND: Brown very sandy very clayey gravel. Sand is fine. Gravel is angular to subangular fine to coarse of flint and chalk. At 0.30m, layer of fabric geotextile.			
					0.45		83.18
0.50	D			CHALK, recovered as creamish white very sandy silty GRAVEL. Clasts are very weak medium density creamish white angular. Matrix is creamish white. Occasional angular to subangular fine to coarse gravel of nodular flint.			
0.50	ES						
0.50 - 0.70	B						
0.50			PID: 0.4 ppm				
0.70 - 1.20	B			From 0.70m, becomes sandy.			
1.00	D						
1.00	ES						
1.00			PID: 0.3 ppm				
				End of Excavation	1.20		82.43

Excavation

Plant	Hand Tools	**Width (B)**	0.60
Date	27/02/2026	**Length (C)**	0.60
Shoring	None.	**Date Backfilled**	27/02/2026
Stability	Stable during excavation.		

Groundwater

Depth Observed	Depth of Pit	Rose to	in Mins	Remarks
	1.20			No groundwater observed during excavation.

Remarks

Prior to and on completion of inspection pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. 'L' shaped pit hand excavated to clear ground for adjacent Dynamic Cone Penetration Test. Inspection pit hand excavated to 1.20m depth and no services were found. Backfill details from base of hole: arisings up to 0.40m, MOT type 1 to 0.10m, asphalt up to ground level.

Logged by AD

Figure Sheet 1 of 1

01/06/2026

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

GEOTECHNICS

TRIAL PIT RECORD - *Inspection pit*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Engineer**	Mott MacDonald	**Project No.**	PE262018
				Location ID	DCP03
Client	Salisbury NHS Foundation Trust	**National Grid Coordinates**	415058.9 E 127288.2 N	**Ground Level**	83.82 m OD

Samples and Tests | Strata | Scale 1:10

Depth	Sample Type	Stratum No.	Results	Description	Depth	Legend	Level (m OD)
				MADE GROUND: Asphalt.	0.12		83.70
0.15 - 0.30	B			MADE GROUND: Light brown very sandy slightly clayey gravel. Sand is fine to medium. Gravel is angular to subangular fine to coarse of limestone.			
0.20	D						
0.20	ES						
0.20			PID: 0.5 ppm	From 0.25m, becoming reddish brown.			
0.45	ES			PROBABLE MADE GROUND: Firm brown slightly sandy slightly gravelly clay. Sand is fine. Gravel is subangular to subrounded fine to coarse of flint and chalk. At 0.42m, layer of fabric geotextile.	0.42		83.40
0.45 - 0.60	B						
0.45			PID: 0.4 ppm				
0.50	D		w: 22 %				
0.50	HV		101 kPa (Avg) R: 33 kPa (Avg)				
0.60	ES						
0.60			PID: 0.4 ppm	CHALK recovered as white slightly sandy silty GRAVEL with a low cobble content. Gravel is very weak low density white angular to subrounded chalk. Cobbles are subangular (up to 80 x 60 x 40mm) of nodular flint. Matrix is white.	0.65		83.17
0.70 - 0.80	B						
0.75	D						
0.80	ES			End of Excavation	0.80		83.02
0.80			PID: 0.4 ppm				

Excavation

Plant	Hand Tools	**Width (B)**	0.60
Date	03/03/2026	**Length (C)**	0.60
Shoring	None.	**Date Backfilled**	03/03/2026
Stability	Stable during excavation.		

Groundwater

Depth Observed	Depth of Pit	Rose to	in Mins	Remarks
	0.80			No groundwater observed during excavation.

Remarks

Prior to and on completion of inspection pit, exploratory hole location was scanned for services using a Cable Avoidance Tool (CAT) and Signal Generator (Genny). Unexploded Ordnance (UXO) clearance and supervision was provided by an Explosive Ordnance Detection (EOD) Engineer. 'L' shaped pit hand excavated to clear ground for adjacent Dynamic Cone Penetration Test. Inspection pit hand excavated to 0.80m depth and no services were found. Backfill details from base of hole: arisings up to 0.40m, MOT type 1 to 0.12m, asphalt up to ground level.

Logged by LP

Figure Sheet 1 of 1

01/06/2026

Symbols and abbrevations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

GEOTECHNICS

APPENDIX 9

Inspection Pit Photographs

DCP01 Inspection pit 0.00-1.20m



DCP01 Inspection pit side walls



DCP01 Inspection pit arisings



DCP02 Inspection pit 0.00-1.20m



DCP02 Inspection pit side walls



DCP02 Inspection pit arisings



DCP03 Inspection pit 0.00-0.80m



DCP03 Inspection pit side walls



DCP03 Inspection pit arisings



APPENDIX 10

Soakaway Test Results

APPENDIX 10

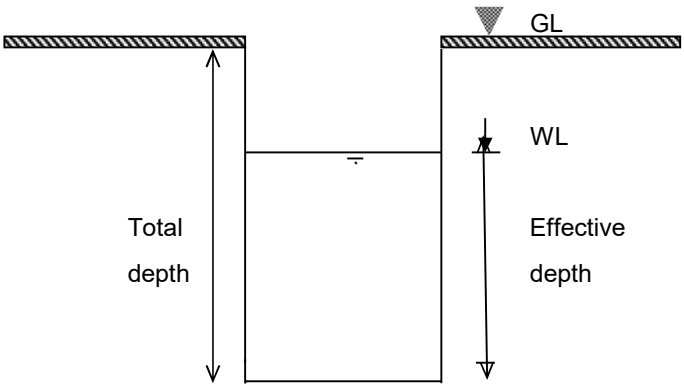
INSITU TESTING - Soakaway Test

Form INS009 Rev 6

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Trial Pit	TP02A
		Test No	1
		Project No	PE262018
Client	Mott McDonald	Date	26/02/2026

ELAPSED TIME (mins)	DEPTH of water below ground level (m)	HEAD (m)	HEAD (%)
0.00	0.84	1.16	100.00
0.50	0.87	1.13	97.41
1.00	0.87	1.13	97.41
1.50	0.90	1.10	94.83
2.00	0.94	1.06	91.38
2.50	0.96	1.04	89.66
3.00	0.99	1.01	87.07
3.50	1.03	0.97	83.62
4.00	1.08	0.92	79.31
5.00	1.13	0.87	75.00
6.00	1.17	0.83	71.55
7.00	1.20	0.80	68.97
8.00	1.23	0.77	66.38
9.00	1.26	0.74	63.79
10.00	1.29	0.71	61.21
11.00	1.31	0.69	59.48
12.00	1.33	0.67	57.76
13.00	1.35	0.65	56.03
14.00	1.37	0.63	54.31
15.00	1.39	0.61	52.59
16.00	1.40	0.60	51.72
17.00	1.42	0.58	50.00
18.00	1.43	0.57	49.14
19.00	1.45	0.55	47.41
20.00	1.46	0.54	46.55
21.00	1.46	0.54	46.55
22.00	1.48	0.52	44.83

TRIAL PIT SOAKAWAY



Trial pit length	=	2.300	m
Trial pit width	=	0.400	m
Trial pit depth	=	2.000	m
Effective depth (Head of Water)	=	1.160	m

Initial depth from GL	=	0.840m		
% of effective depth	Head (m)	Depth from GL (m)		Time (mins)
75%	0.870	1.130		5.00
25%	0.290	1.710		60.00
Vp75-25	=	0.534	m3	
ap50	=	4.052	m2	
tp75-25	=	55.000	min	
Soil Infiltration, f	=	**3.99E-05**	m/sec	

Remarks

GEOTECHNICS

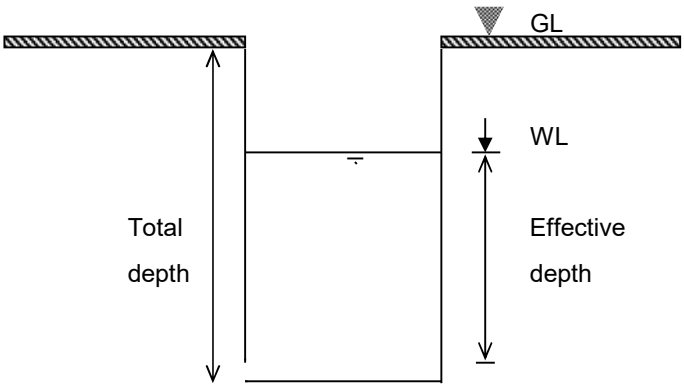
INSITU TESTING - Soakaway Test

Form INS009 Rev 6

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Trial Pit	TP02A
		Test No	1
		Project No	PE262018
Client	Mott McDonald	Date	26/02/2026

ELAPSED TIME (mins)	DEPTH of water below ground level (m)	HEAD (m)	HEAD (%)
23.00	1.49	0.510	44.0
24.00	1.50	0.500	43.1
25.00	1.51	0.490	42.2
26.00	1.53	0.470	40.5
27.00	1.53	0.470	40.5
30.00	1.55	0.450	38.8
32.00	1.57	0.430	37.1
34.00	1.59	0.410	35.3
36.00	1.60	0.400	34.5
38.00	1.61	0.390	33.6
40.00	1.62	0.380	32.8
45.00	1.64	0.360	31.0
50.00	1.67	0.330	28.4
55.00	1.69	0.310	26.7
60.00	1.71	0.290	25.0
65.00	1.72	0.280	24.1

TRIAL PIT SOAKAWAY



Trial pit length	=	2.300	m
Trial pit width	=	0.400	m
Trial pit depth	=	2.000	m
Effective depth (Head of Water)	=	1.160	m

Initial depth from GL	=	0.840m	
% of effective depth	Head (m)	Depth from GL (m)	Time (mins)
75%	0.870	1.130	5.00
25%	0.290	1.710	60.00
Vp75-25	=	0.534	m3
ap50	=	4.052	m2
tp75-25	=	0.000	min
Soil Infiltration, f	=	**3.99E-05**	m/sec

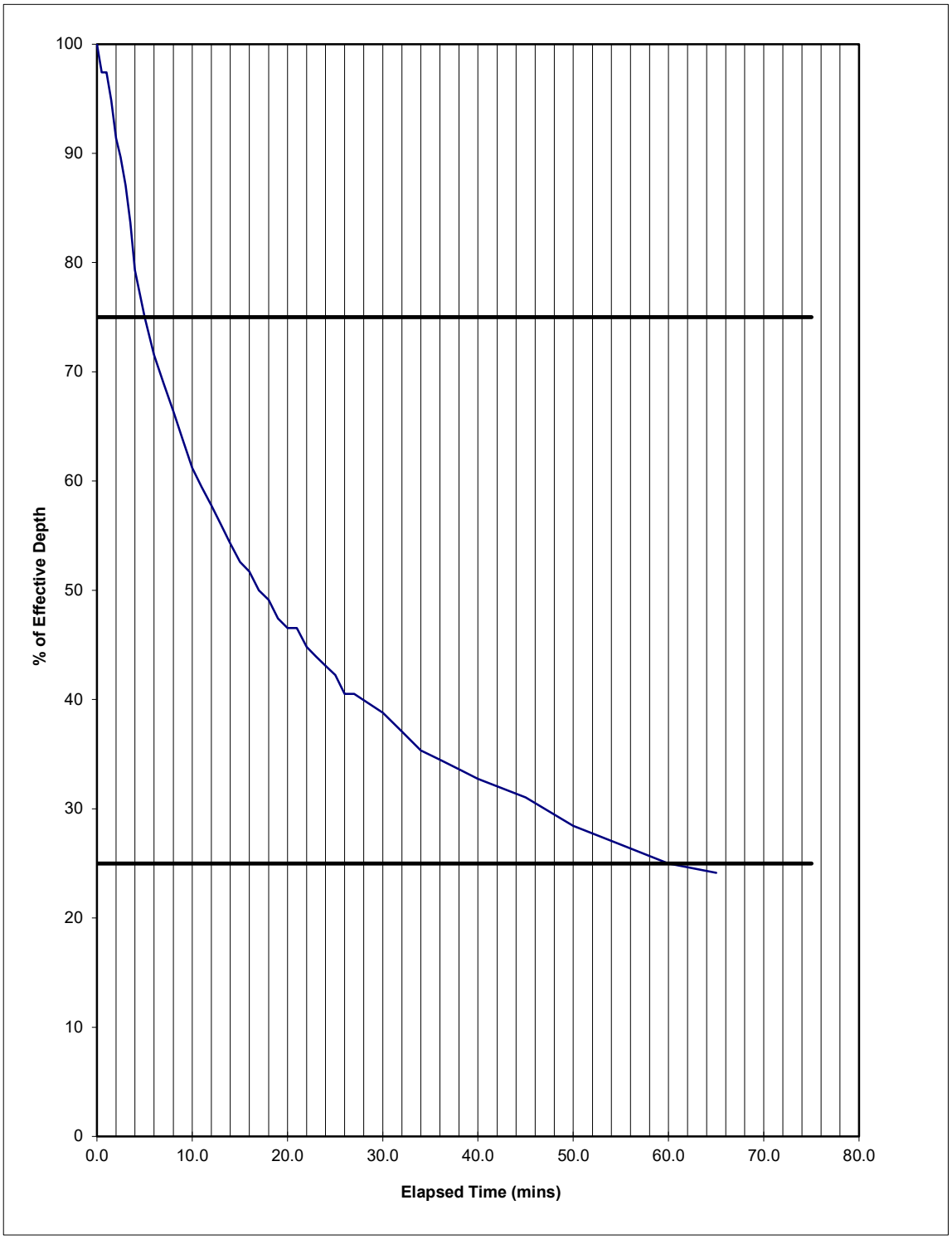
Remarks

GEOTECHNICS

INSITU TESTING - Soakaway Test

Form INS009 Rev 6

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Trial Pit	TP02A
		Test No	1
		Project No	PE262018
Client	Mott McDonald	Date	26/02/2026



tp75	=	5.00
tp25	=	60.00

Remarks

GEOTECHNICS

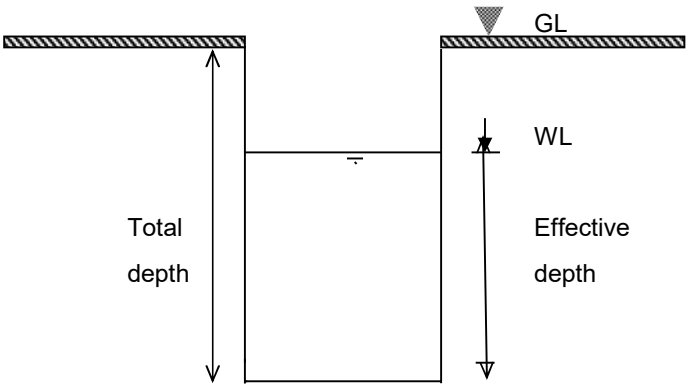
INSITU TESTING - Soakaway Test

Form INS009 Rev 6

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Trial Pit	TP02A
		Test No	2
		Project No	PE262018
Client	Mott McDonald	Date	26/02/2026

ELAPSED TIME (mins)	DEPTH of water below ground level (m)	HEAD (m)	HEAD (%)
0.00	0.90	1.10	100.00
0.50	0.91	1.09	99.09
1.00	0.93	1.07	97.27
1.50	0.96	1.04	94.55
2.00	0.98	1.02	92.73
2.50	1.01	0.99	90.00
3.00	1.02	0.98	89.09
3.50	1.05	0.95	86.36
4.00	1.07	0.93	84.55
5.00	1.10	0.90	81.82
6.00	1.14	0.86	78.18
7.00	1.18	0.82	74.55
8.00	1.21	0.79	71.82
9.00	1.23	0.77	70.00
10.00	1.26	0.74	67.27
11.00	1.28	0.72	65.45
12.00	1.31	0.69	62.73
13.00	1.33	0.67	60.91
14.00	1.36	0.64	58.18
15.00	1.36	0.64	58.18
16.00	1.38	0.62	56.36
17.00	1.39	0.61	55.45
18.00	1.40	0.60	54.55
19.00	1.42	0.58	52.73
20.00	1.43	0.57	51.82
21.00	1.44	0.56	50.91
22.00	1.45	0.55	50.00

TRIAL PIT SOAKAWAY



Trial pit length	=	2.300 m
Trial pit width	=	0.400 m
Trial pit depth	=	2.000 m
Effective depth (Head of Water)	=	1.100 m

Initial depth from GL	=	0.900m	
% of effective depth	Head (m)	Depth from GL (m)	Time (mins)
75%	0.825	1.175	7.00
25%	0.275	1.725	77.00
Vp75-25	=	0.506	m3
ap50	=	3.890	m2
tp75-25	=	70.000	min
Soil Infiltration, f	=	**3.10E-05**	m/sec

Remarks

GEOTECHNICS

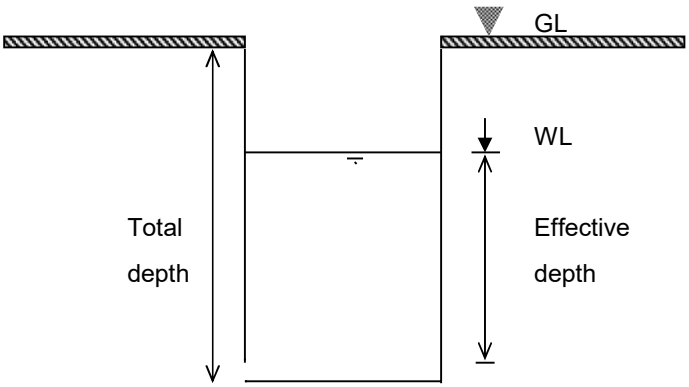
INSITU TESTING - Soakaway Test

Form INS009 Rev 6

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Trial Pit	TP02A
		Test No	2
		Project No	PE262018
Client	Mott McDonald	Date	26/02/2026

ELAPSED TIME (mins)	DEPTH of water below ground level (m)	HEAD (m)	HEAD (%)
23.00	1.46	0.540	49.1
24.00	1.47	0.530	48.2
25.00	1.48	0.520	47.3
26.00	1.49	0.510	46.4
27.00	1.50	0.500	45.5
28.00	1.50	0.500	45.5
29.00	1.51	0.490	44.5
30.00	1.52	0.480	43.6
32.00	1.53	0.470	42.7
34.00	1.55	0.450	40.9
36.00	1.56	0.440	40.0
39.00	1.58	0.420	38.2
43.00	1.60	0.400	36.4
45.00	1.61	0.390	35.5
50.00	1.63	0.370	33.6
55.00	1.64	0.360	32.7
61.00	1.66	0.340	30.9
65.00	1.68	0.320	29.1
70.00	1.70	0.300	27.3
75.00	1.72	0.280	25.5
80.00	1.73	0.270	24.5

TRIAL PIT SOAKAWAY



Trial pit length	=	2.300	m
Trial pit width	=	0.400	m
Trial pit depth	=	2.000	m
Effective depth (Head of Water)	=	1.100	m

Initial depth from GL	=	0.900m	
% of effective depth	Head (m)	Depth from GL (m)	Time (mins)
75%	0.825	1.175	7.00
25%	0.275	1.725	77.00
Vp75-25	=	0.506	m3
ap50	=	3.890	m2
tp75-25	=	0.000	min
Soil Infiltration, f	=	**3.10E-05**	m/sec

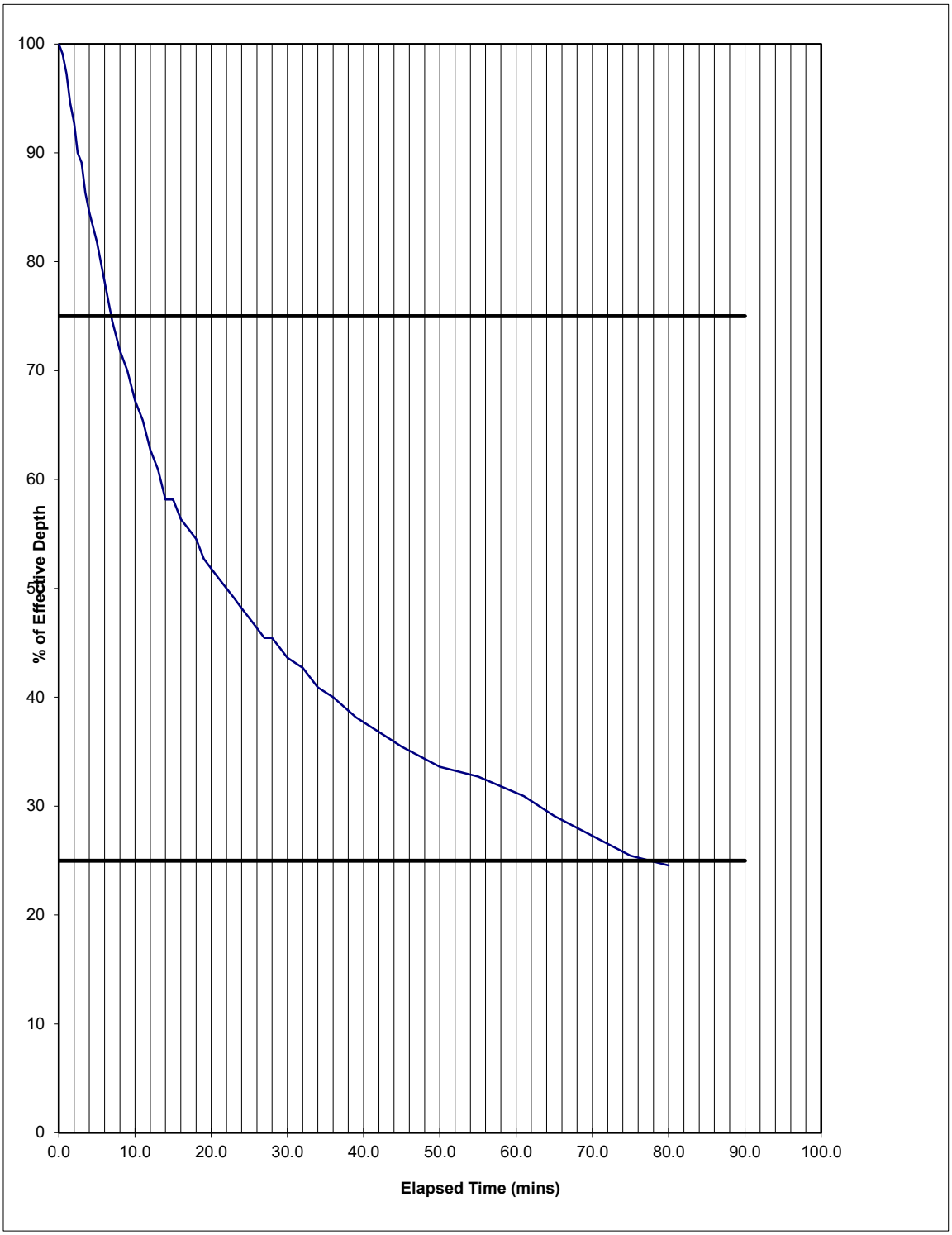
Remarks

GEOTECHNICS

INSITU TESTING - Soakaway Test

Form INS009 Rev 6

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Trial Pit	TP02A
		Test No	2
		Project No	PE262018
Client	Mott McDonald	Date	26/02/2026



tp75	=	7.00
tp25	=	77.00

Remarks

GEOTECHNICS

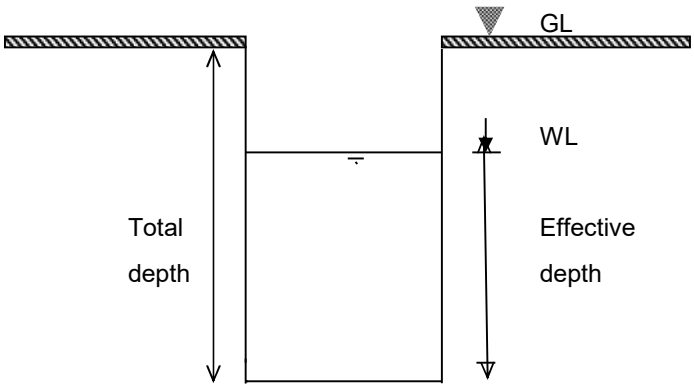
INSITU TESTING - Soakaway Test

Form INS009 Rev 6

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Trial Pit	TP02A
		Test No	3
		Project No	PE262018
Client	Mott McDonald	Date	26/02/2026

ELAPSED TIME (mins)	DEPTH of water below ground level (m)	HEAD (m)	HEAD (%)
0.00	1.00	1.00	100.00
0.50	1.01	0.99	99.00
1.00	1.04	0.96	96.00
1.50	1.07	0.93	93.00
2.00	1.10	0.90	90.00
2.50	1.12	0.88	88.00
3.00	1.14	0.86	86.00
3.50	1.15	0.85	85.00
4.00	1.17	0.83	83.00
5.00	1.19	0.81	81.00
6.00	1.22	0.78	78.00
7.00	1.25	0.75	75.00
8.00	1.27	0.73	73.00
9.00	1.30	0.70	70.00
10.00	1.30	0.70	70.00
11.00	1.32	0.68	68.00
12.00	1.34	0.66	66.00
13.00	1.36	0.64	64.00
14.00	1.38	0.62	62.00
15.00	1.39	0.61	61.00
16.00	1.41	0.59	59.00
17.00	1.41	0.59	59.00
18.00	1.43	0.57	57.00
19.00	1.44	0.56	56.00
20.00	1.45	0.55	55.00
21.00	1.45	0.55	55.00
22.00	1.46	0.54	54.00

TRIAL PIT SOAKAWAY



Trial pit length	=	2.300	m
Trial pit width	=	0.400	m
Trial pit depth	=	2.000	m
Effective depth (Head of Water)	=	1.000	m

Initial depth from GL	=	1.000m	
% of effective depth	Head (m)	Depth from GL (m)	Time (mins)
75%	0.750	1.250	7.00
25%	0.250	1.750	80.00
Vp75-25	=	0.460	m3
ap50	=	3.620	m2
tp75-25	=	73.000	min
Soil Infiltration, f	=	**2.90E-05**	m/sec

Remarks

GEOTECHNICS

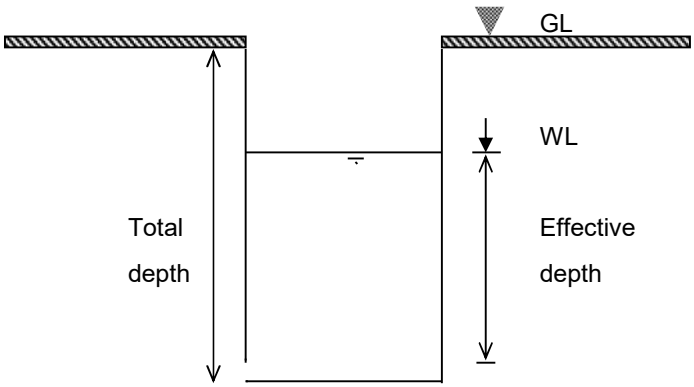
INSITU TESTING - Soakaway Test

Form INS009 Rev 6

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Trial Pit	TP02A
		Test No	3
		Project No	PE262018
Client	Mott McDonald	Date	26/02/2026

ELAPSED TIME (mins)	DEPTH of water below ground level (m)	HEAD (m)	HEAD (%)
23.00	1.46	0.540	54.0
24.00	1.48	0.520	52.0
25.00	1.50	0.500	50.0
26.00	1.51	0.490	49.0
27.00	1.52	0.480	48.0
28.00	1.52	0.480	48.0
29.00	1.52	0.480	48.0
30.00	1.53	0.470	47.0
31.00	1.53	0.470	47.0
32.00	1.54	0.460	46.0
33.00	1.54	0.460	46.0
34.00	1.55	0.450	45.0
35.00	1.55	0.450	45.0
36.00	1.55	0.450	45.0
37.00	1.56	0.440	44.0
38.00	1.57	0.430	43.0
40.00	1.58	0.420	42.0
42.00	1.59	0.410	41.0
45.00	1.62	0.380	38.0
50.00	1.65	0.350	35.0
55.00	1.67	0.330	33.0
60.00	1.68	0.320	32.0
70.00	1.72	0.280	28.0
80.00	1.750	0.250	25.0
90.00	1.770	0.230	23.0
100.00	1.790	0.210	21.0

TRIAL PIT SOAKAWAY



Trial pit length	=	2.300	m
Trial pit width	=	0.400	m
Trial pit depth	=	2.000	m
Effective depth (Head of Water)	=	1.000	m

Initial depth from GL	=	1.000m	
% of effective depth	Head (m)	Depth from GL (m)	Time (mins)
75%	0.750	1.250	7.00
25%	0.250	1.750	80.00
Vp75-25	=	0.460	m3
ap50	=	3.620	m2
tp75-25	=	0.000	min
Soil Infiltration, f	=	**2.90E-05**	m/sec

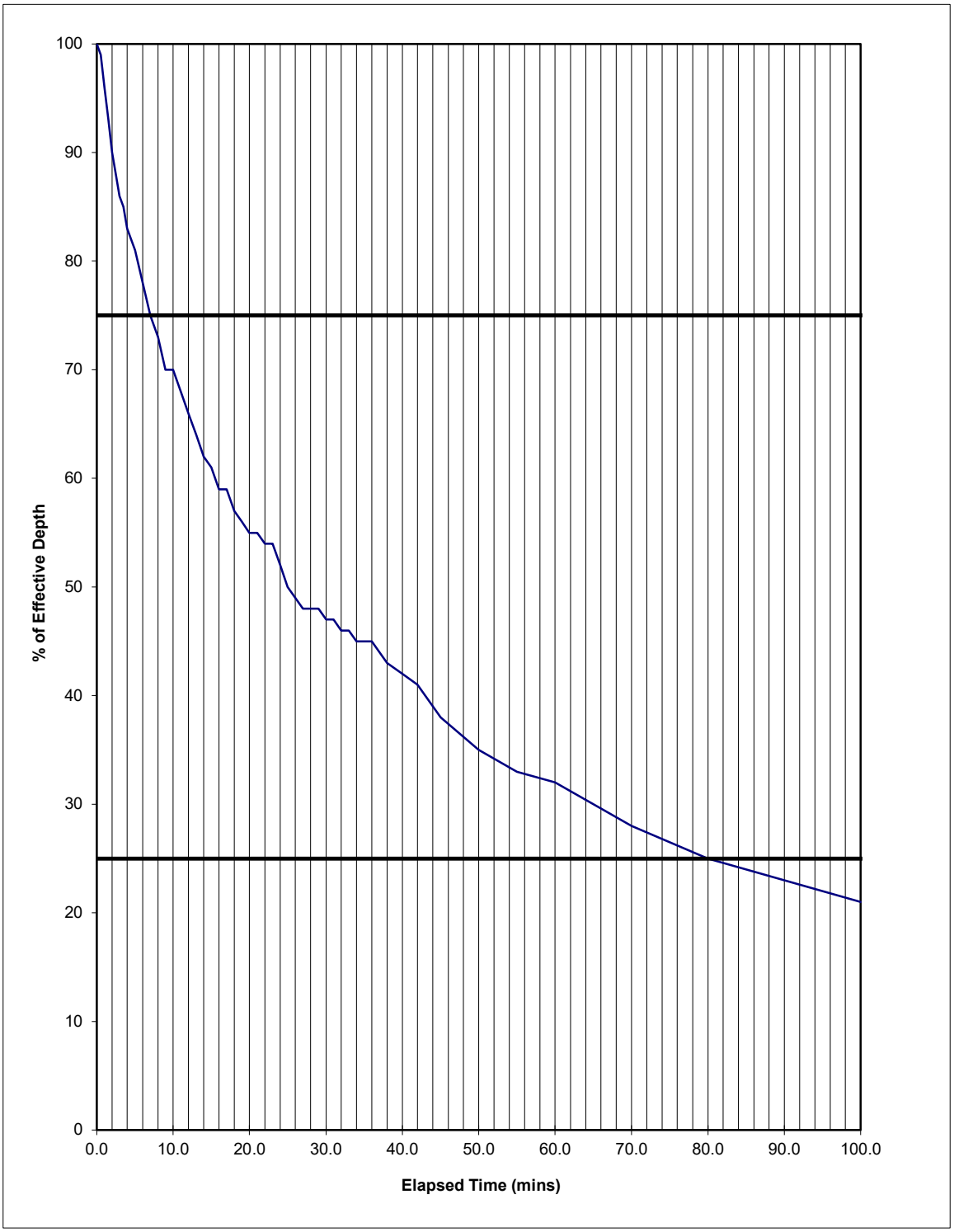
Remarks

GEOTECHNICS

INSITU TESTING - Soakaway Test

Form INS009 Rev 6

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Trial Pit	TP02A
		Test No	3
		Project No	PE262018
Client	Mott McDonald	Date	26/02/2026



tp75	=	7.00
tp25	=	80.00

Remarks

GEOTECHNICS

APPENDIX 11

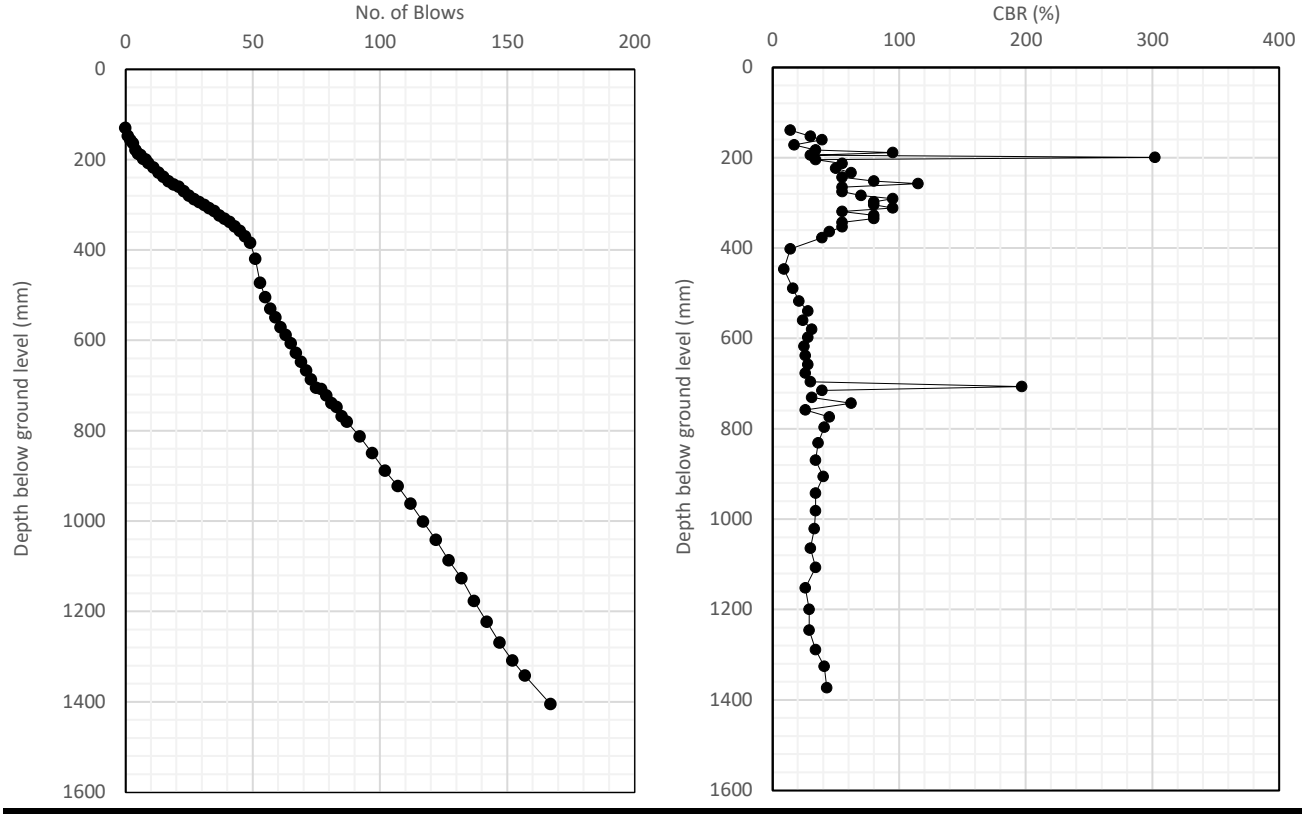
Dynamic Cone Penetration Test Records

In Situ Testing - *Dynamic Cone Penetration Test*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Location No.**	DCP01
		Project No.	PE262018
Client	Salisbury NHS Foundation Trust	**Test No.**	1
Coordinates	415090.0 E, 127276.0 N **Ground Level** 83.40 m OD	**Test Date**	27/02/2026

Test started at	0.13m bgl	**Operator**	AD	**Checked By**	LP

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)
0	0	62	130	2	31	233	301	2	71	599	667
1	1	80	148	2	33	240	308	2	73	619	687
1	2	89	157	2	35	246	314	2	75	637	705
1	3	96	164	2	37	256	324	2	77	640	708
1	4	111	179	2	39	263	331	2	79	654	722
1	5	119	187	2	41	270	338	2	81	671	739
1	6	122	190	2	43	280	348	2	83	680	748
1	7	131	199	2	45	290	358	2	85	700	768
1	8	132	200	2	47	302	370	2	87	712	780
1	9	140	208	2	49	316	384	5	92	745	813
2	11	150	218	2	51	352	420	5	97	782	850
2	13	161	229	2	53	405	473	5	102	821	889
2	15	170	238	2	55	437	505	5	107	855	923
2	17	180	248	2	57	462	530	5	112	894	962
2	19	187	255	2	59	481	549	5	117	933	1001
2	21	192	260	2	61	503	571	5	122	974	1042
2	23	202	270	2	63	520	588	5	127	1019	1087
2	25	212	280	2	65	539	607	5	132	1059	1127
2	27	220	288	2	67	560	628	5	137	1109	1177
2	29	226	294	2	69	580	648	5	142	1155	1223



Remarks

CBR estimated using the correlation in the HA Manual for Roads and Bridges, CS229, Rev. 0, 2020 between each test point on the 'No. of Blows vs. Depth' plot.

In Situ Testing - *Dynamic Cone Penetration Test*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Location No.**	DCP01
		Project No.	PE262018
Client	Salisbury NHS Foundation Trust	**Test No.**	1
Coordinates	415090.0 E, 127276.0 N **Ground Level** 83.40 m OD	**Test Date**	27/02/2026

Test started at	0.13m bgl

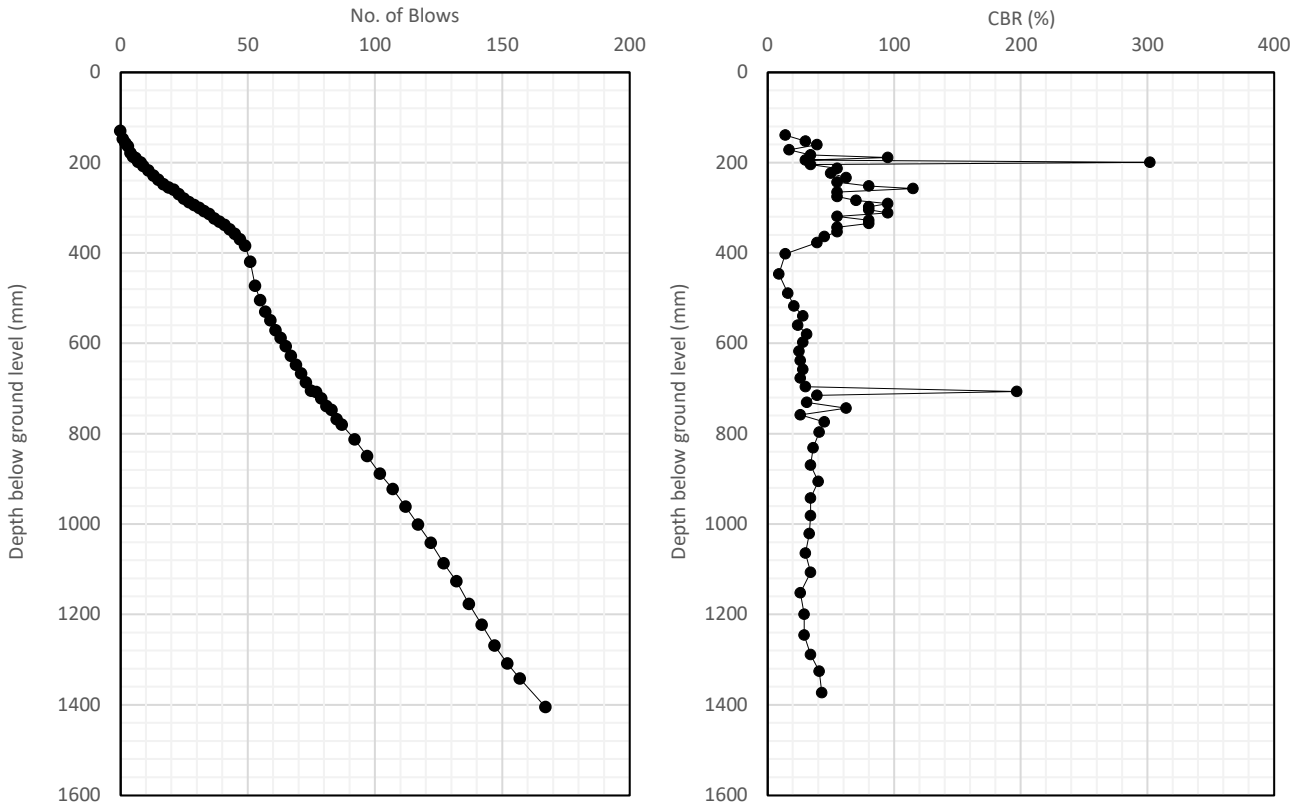
Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)
5	147	1201	1269
5	152	1241	1309
5	157	1274	1342
10	167	1337	1405

Operator	AD

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)

Checked By	LP

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)



Remarks

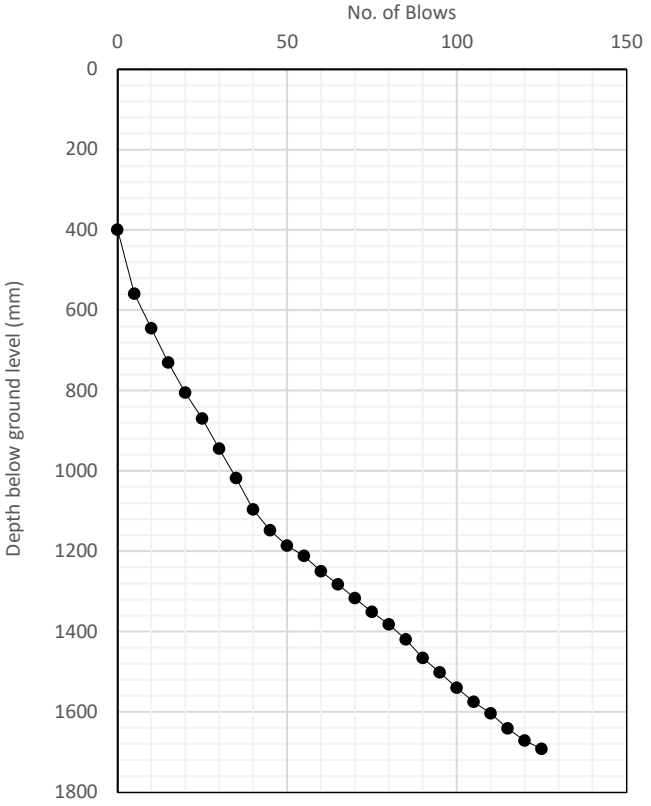
CBR estimated using the correlation in the HA Manual for Roads and Bridges, CS229, Rev. 0, 2020 between each test point on the 'No. of Blows vs. Depth' plot.

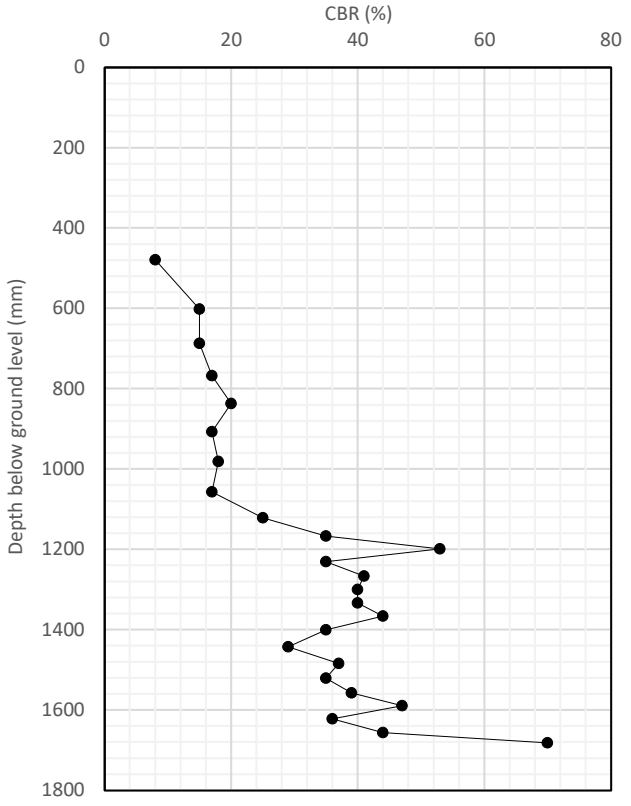
In Situ Testing - *Dynamic Cone Penetration Test*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Location No.**	DCP01
		Project No.	PE262018
Client	Salisbury NHS Foundation Trust	**Test No.**	2
Coordinates	415090.0 E, 127276.0 N **Ground Level** 83.40 m OD	**Test Date**	27/02/2026

Test started at	0.40m bgl	**Operator**	AD	**Checked By**	LP

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)
0	0	55	400	5	100	1195	1540				
5	5	214	559	5	105	1230	1575				
5	10	300	645	5	110	1259	1604				
5	15	385	730	5	115	1296	1641				
5	20	460	805	5	120	1327	1672				
5	25	525	870	5	125	1347	1692				
5	30	600	945								
5	35	673	1018								
5	40	751	1096								
5	45	803	1148								
5	50	841	1186								
5	55	867	1212								
5	60	905	1250								
5	65	938	1283								
5	70	972	1317								
5	75	1006	1351								
5	80	1037	1382								
5	85	1075	1420								
5	90	1121	1466								
5	95	1157	1502								





Remarks

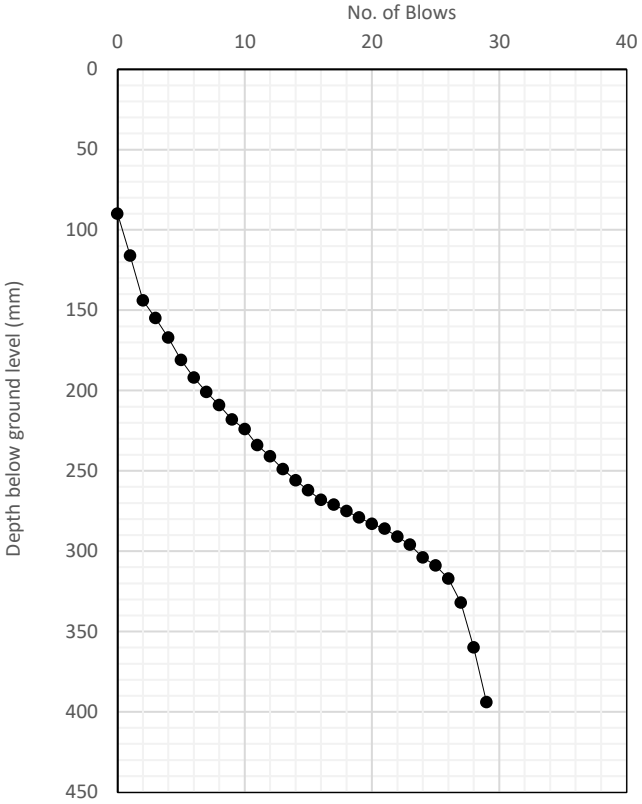
CBR estimated using the correlation in the HA Manual for Roads and Bridges, CS229, Rev. 0, 2020 between each test point on the 'No. of Blows vs. Depth' plot.

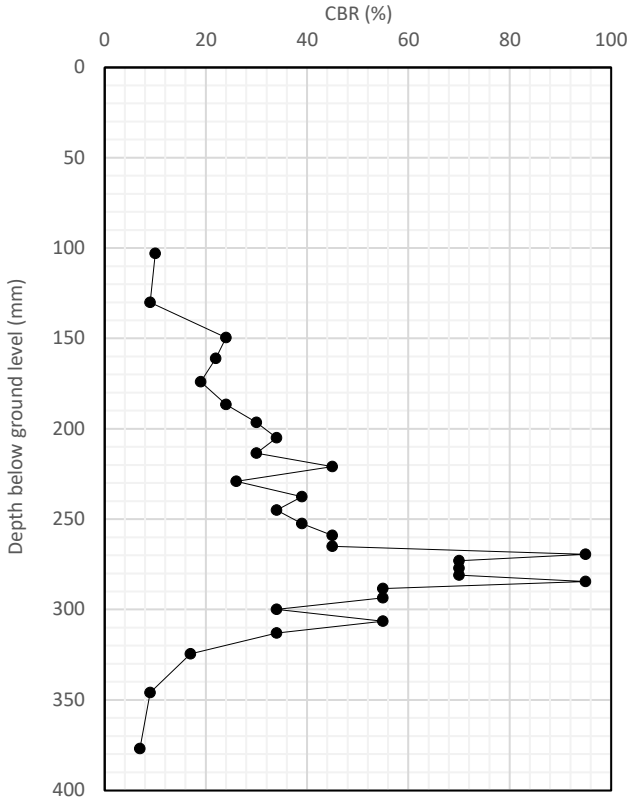
In Situ Testing - *Dynamic Cone Penetration Test*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Location No.**	DCP02
		Project No.	PE262018
Client	Salisbury NHS Foundation Trust	**Test No.**	1
Coordinates	415103.0 E, 127258.5 N **Ground Level** 83.63 m OD	**Test Date**	27/02/2026

Test started at	0.09m bgl	**Operator**	AD	**Checked By**	LP

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)
0	0	90	90	1	20	283	283				
1	1	116	116	1	21	286	286				
1	2	144	144	1	22	291	291				
1	3	155	155	1	23	296	296				
1	4	167	167	1	24	304	304				
1	5	181	181	1	25	309	309				
1	6	192	192	1	26	317	317				
1	7	201	201	1	27	332	332				
1	8	209	209	1	28	360	360				
1	9	218	218	1	29	394	394				
1	10	224	224								
1	11	234	234								
1	12	241	241								
1	13	249	249								
1	14	256	256								
1	15	262	262								
1	16	268	268								
1	17	271	271								
1	18	275	275								
1	19	279	279								





Remarks

Test terminated due to excessive curvature of rods.

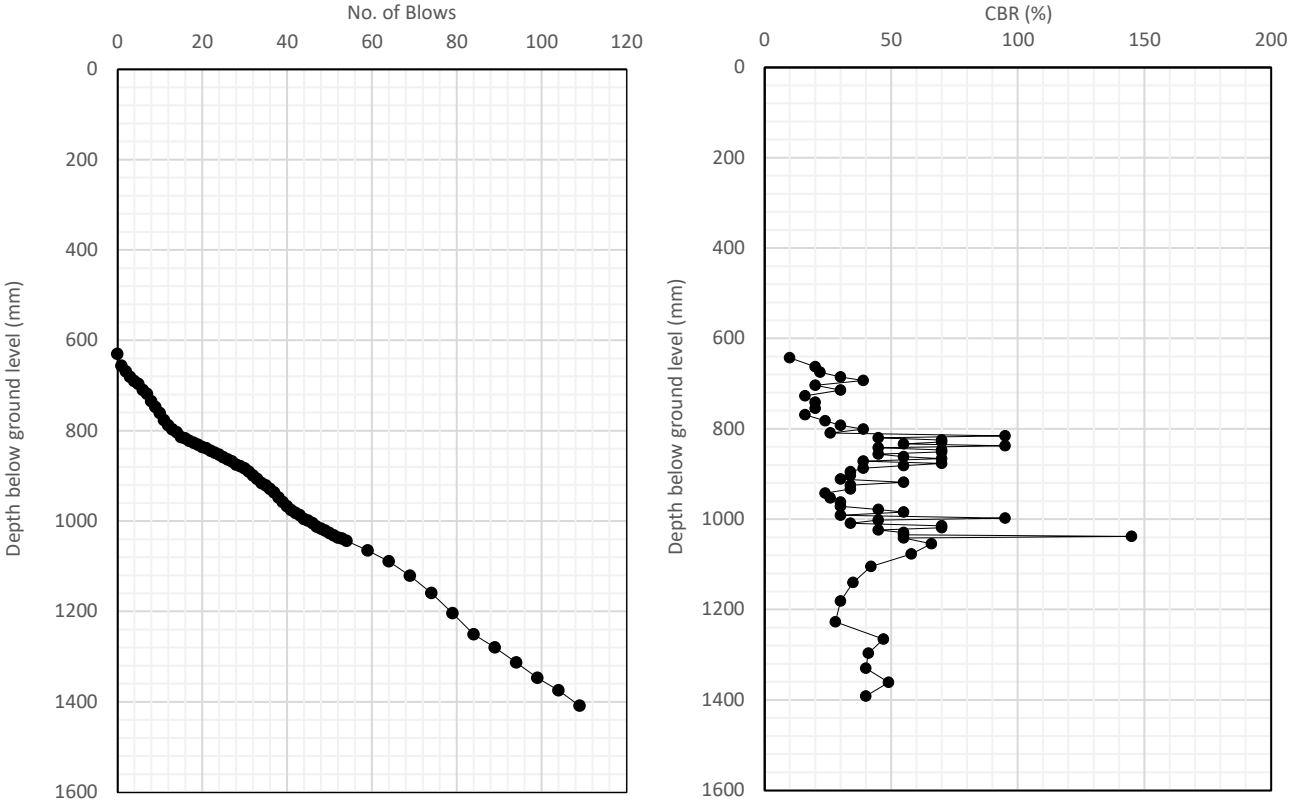
CBR estimated using the correlation in the HA Manual for Roads and Bridges, CS229, Rev. 0, 2020 between each test point on the 'No. of Blows vs. Depth' plot.

In Situ Testing - *Dynamic Cone Penetration Test*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Location No.**	DCP02
		Project No.	PE262018
Client	Salisbury NHS Foundation Trust	**Test No.**	2
Coordinates	415103.0 E, 127258.5 N **Ground Level** 83.63 m OD	**Test Date**	27/02/2026

Test started at	0.63m bgl	**Operator**	AD	**Checked By**	LP

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)
0	0	53	630	1	20	259	836	1	40	390	967
1	1	79	656	1	21	262	839	1	41	399	976
1	2	92	669	1	22	268	845	1	42	405	982
1	3	104	681	1	23	272	849	1	43	410	987
1	4	113	690	1	24	276	853	1	44	419	996
1	5	120	697	1	25	282	859	1	45	422	999
1	6	133	710	1	26	287	864	1	46	428	1005
1	7	142	719	1	27	291	868	1	47	436	1013
1	8	158	735	1	28	298	875	1	48	440	1017
1	9	171	748	1	29	302	879	1	49	444	1021
1	10	184	761	1	30	307	884	1	50	450	1027
1	11	200	777	1	31	314	891	1	51	455	1032
1	12	211	788	1	32	322	899	1	52	460	1037
1	13	220	797	1	33	330	907	1	53	462	1039
1	14	227	804	1	34	339	916	1	54	467	1044
1	15	237	814	1	35	344	921	5	59	488	1065
1	16	240	817	1	36	352	929	5	64	512	1089
1	17	246	823	1	37	360	937	5	69	544	1121
1	18	250	827	1	38	371	948	5	74	582	1159
1	19	254	831	1	39	381	958	5	79	627	1204



Remarks

CBR estimated using the correlation in the HA Manual for Roads and Bridges, CS229, Rev. 0, 2020 between each test point on the 'No. of Blows vs. Depth' plot.

In Situ Testing - *Dynamic Cone Penetration Test*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Location No.**	DCP02
		Project No.	PE262018
Client	Salisbury NHS Foundation Trust	**Test No.**	2
Coordinates	415103.0 E, 127258.5 N **Ground Level** 83.63 m OD	**Test Date**	27/02/2026

Test started at	0.63m bgl

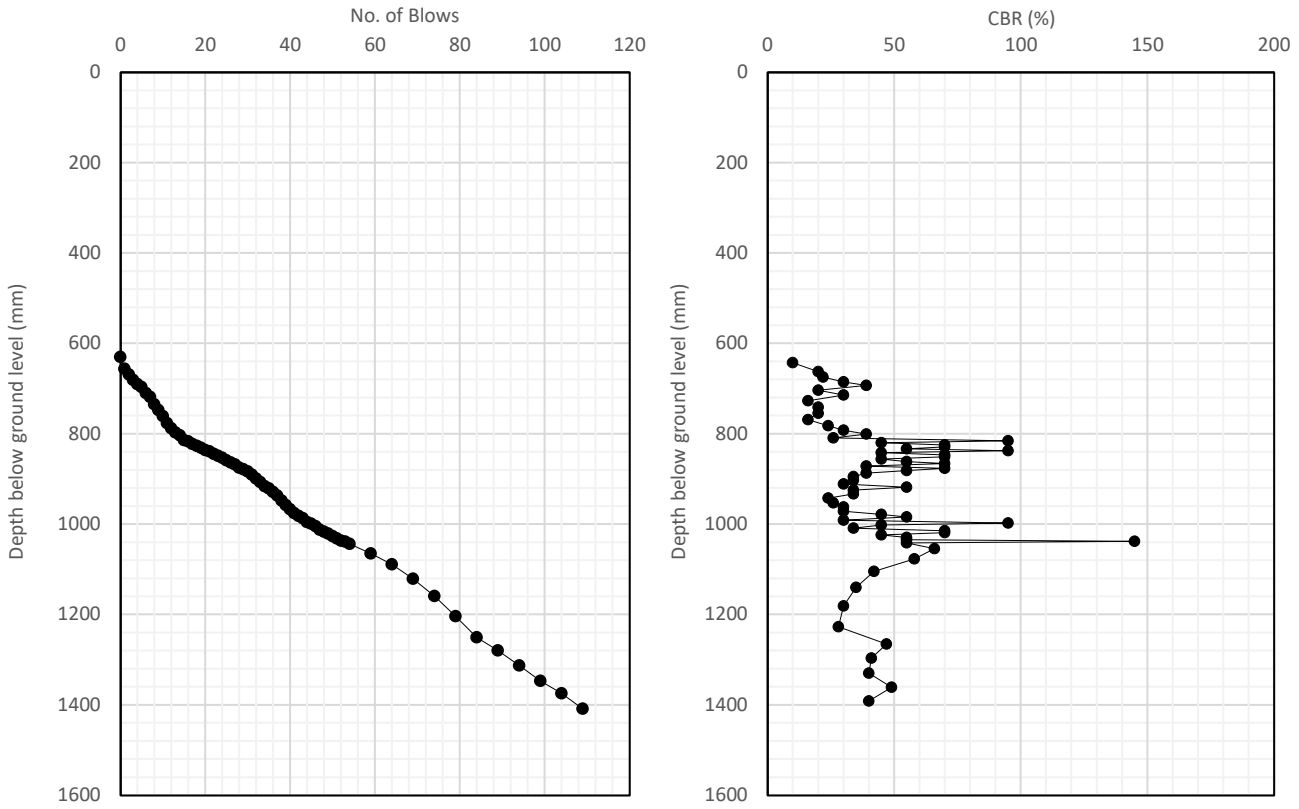
Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)
5	84	674	1251
5	89	703	1280
5	94	736	1313
5	99	770	1347
5	104	798	1375
5	109	832	1409

Operator	AD

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)

Checked By	LP

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)



Remarks

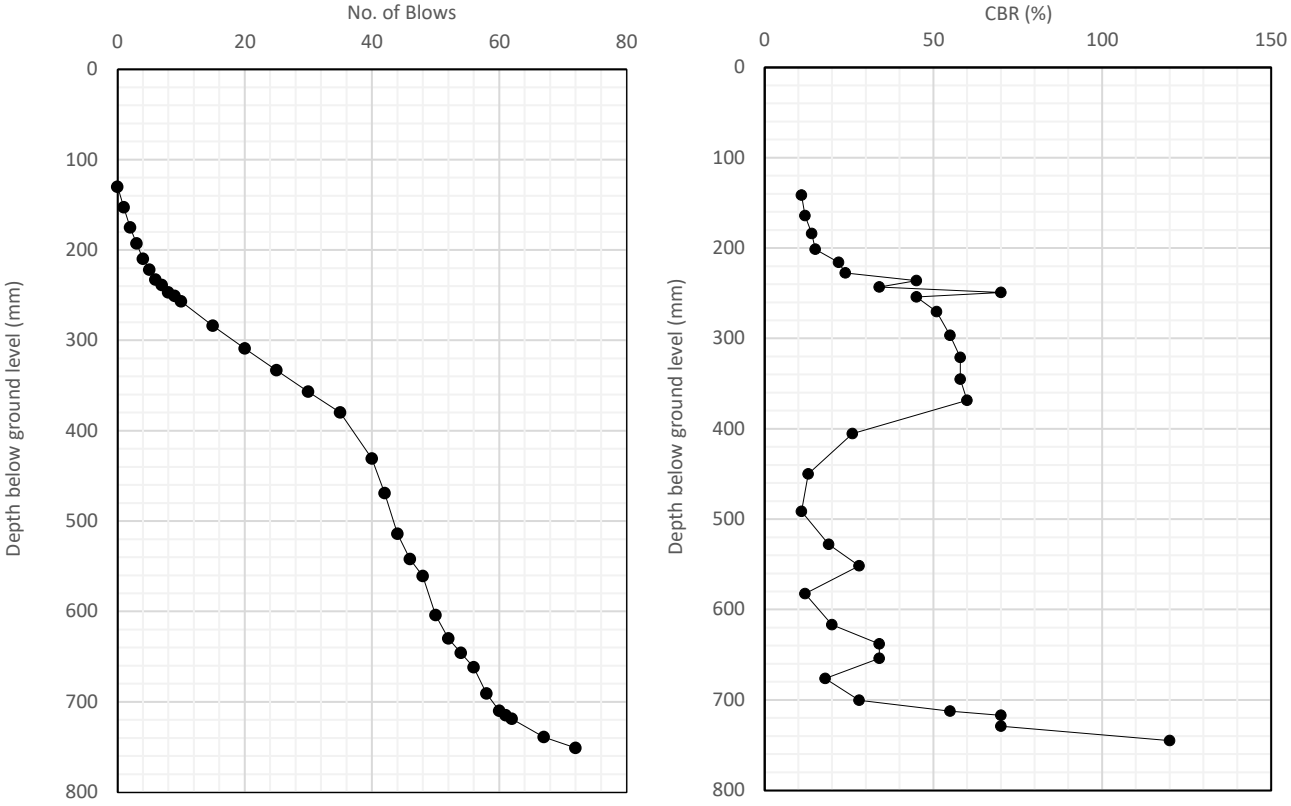
CBR estimated using the correlation in the HA Manual for Roads and Bridges, CS229, Rev. 0, 2020 between each test point on the 'No. of Blows vs. Depth' plot.

In Situ Testing - *Dynamic Cone Penetration Test*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Location No.**	DCP03
		Project No.	PE262018
Client	Salisbury NHS Foundation Trust	**Test No.**	1
Coordinates	415058.9 E, 127288.2 N **Ground Level** 83.82 m OD	**Test Date**	03/03/2026

Test started at	0.13m bgl	**Operator**	LP	**Checked By**	EB

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)
0	0	612	130	2	48	1043	561				
1	1	635	153	2	50	1086	604				
1	2	657	175	2	52	1112	630				
1	3	675	193	2	54	1128	646				
1	4	692	210	2	56	1144	662				
1	5	704	222	2	58	1173	691				
1	6	715	233	2	60	1192	710				
1	7	721	239	1	61	1197	715				
1	8	729	247	1	62	1201	719				
1	9	733	251	5	67	1221	739				
1	10	739	257	5	72	1233	751				
5	15	766	284								
5	20	791	309								
5	25	815	333								
5	30	839	357								
5	35	862	380								
5	40	913	431								
2	42	951	469								
2	44	996	514								
2	46	1024	542								



Remarks

Test terminated due to excessive curvature of rods.

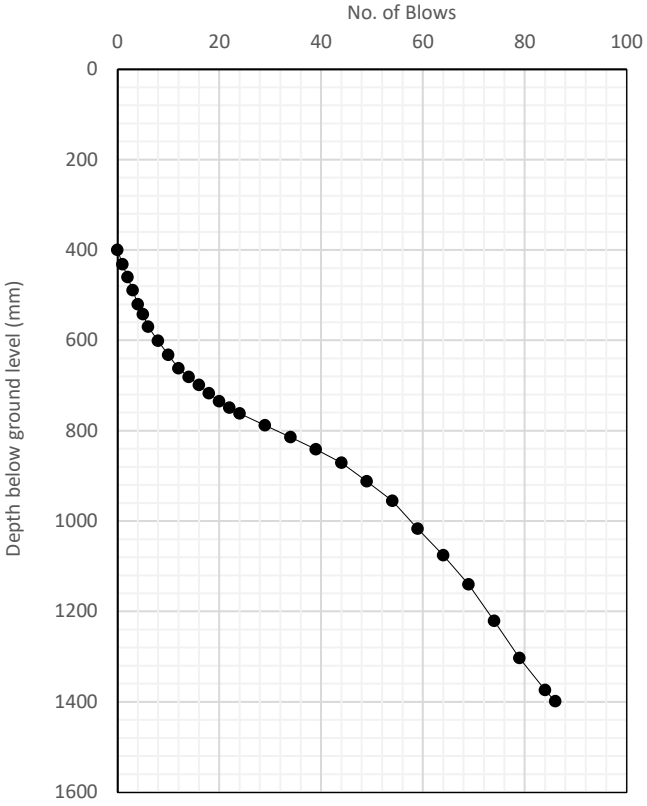
CBR estimated using the correlation in the HA Manual for Roads and Bridges, CS229, Rev. 0, 2020 between each test point on the 'No. of Blows vs. Depth' plot.

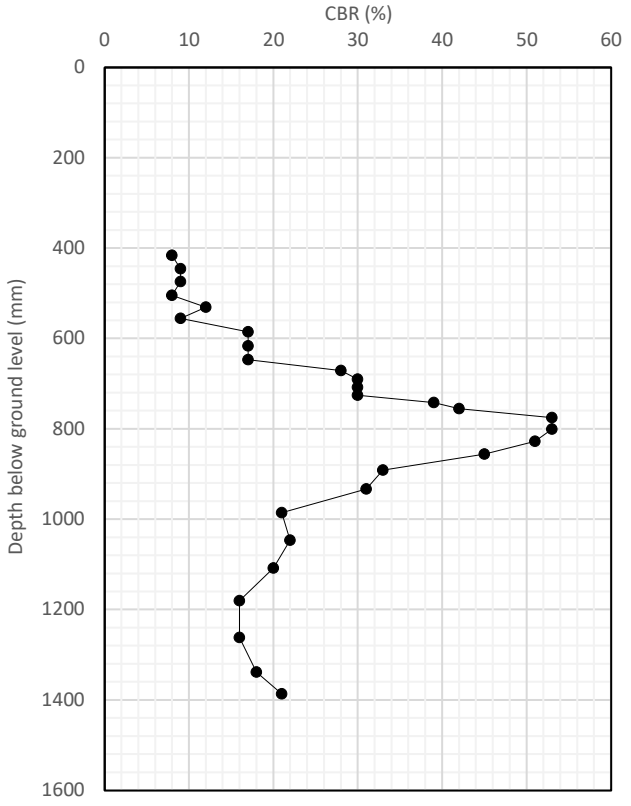
In Situ Testing - *Dynamic Cone Penetration Test*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Location No.**	DCP03
		Project No.	PE262018
Client	Salisbury NHS Foundation Trust	**Test No.**	2
Coordinates	415058.9 E, 127288.2 N **Ground Level** 83.82 m OD	**Test Date**	03/03/2026

Test started at	0.40m bgl	**Operator**	LP	**Checked By**	EB

Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)	Blows No.	Blows Total	Reading (mm)	Corrected Depth (mm)
0	0	91	400	5	49	603	912				
1	1	123	432	5	54	646	955				
1	2	151	460	5	59	708	1017				
1	3	180	489	5	64	767	1076				
1	4	211	520	5	69	831	1140				
1	5	233	542	5	74	912	1221				
1	6	261	570	5	79	994	1303				
2	8	292	601	5	84	1065	1374				
2	10	323	632	2	86	1090	1399				
2	12	353	662								
2	14	372	681								
2	16	390	699								
2	18	408	717								
2	20	426	735								
2	22	440	749								
2	24	453	762								
5	29	479	788								
5	34	505	814								
5	39	532	841								
5	44	562	871								





Remarks

CBR estimated using the correlation in the HA Manual for Roads and Bridges, CS229, Rev. 0, 2020 between each test point on the 'No. of Blows vs. Depth' plot.

APPENDIX 12

Monitoring Records

APPENDIX 12

FIELDWORK - *Water Level Monitoring*

Project SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE **Project No.** PE262018

Client Salisbury NHS Foundation Trust **Sheet No.** 1

Location ID		**BH01**		**BH01**		**BH02**		**BH02**			
Instrument diameter		50 mm		19 mm		50 mm		19 mm			
Depth to base (m bgl)		14.80		2.00		15.00		2.00			
Filter zone (m bgl)		9.80 - 14.80		1.00 - 2.00		10.00 - 15.00		1.00 - 2.00			
Level (m OD)		84.40		84.40		83.98		83.98		Remarks	
Date	Time	Depth (m)	Level (m OD)	Depth (m)	Level (m OD)	Depth (m)	Level (m OD)	Depth (m)	Level (m OD)		
04 Mar 2026	10:30					Dry		Dry			
04 Mar 2026	10:35	Dry		Dry							
16 Mar 2026	12:41					Dry					
16 Mar 2026	12:53							Dry			
16 Mar 2026	13:00	Dry									
16 Mar 2026	13:10			Dry							
24 Mar 2026	12:00					Dry					
24 Mar 2026	12:10							Dry			
24 Mar 2026	12:30	Dry									
24 Mar 2026	12:40			Dry							
01 Apr 2026	13:30	Dry									
01 Apr 2026	13:40			Dry							
01 Apr 2026	13:45					Dry					
01 Apr 2026	13:55							Dry			
08 Apr 2026	11:30	Dry									
08 Apr 2026	11:40			Dry							
08 Apr 2026	11:45					Dry					
08 Apr 2026	11:55							Dry			
20 Apr 2026	13:41					Dry		Dry			
20 Apr 2026	14:05	Dry		Dry							
05 May 2026	13:25	14.65	69.75							Not enough water to sample.	
05 May 2026	13:35			Dry							
05 May 2026	13:45					14.67	69.31			Not enough water to sample.	
05 May 2026	13:55							Dry			
18 May 2026	11:50					Dry					
18 May 2026	12:00							Dry			
18 May 2026	12:05	14.65	69.75							Not enough water to sample.	
18 May 2026	12:15			Dry							
28 May 2026	09:45					Dry		Dry			
28 May 2026	10:05	Dry		Dry							

Symbols and abbrevations are explained on the accompanying key sheets.

GEOTECHNICS

FIELDWORK - *Water Level Monitoring*

Project SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE **Project No.** PE262018

Client Salisbury NHS Foundation Trust **Sheet No.** 1

Location ID		**BH03**		**BH03**		**BH04**							
Instrument diameter		50 mm		19 mm		50 mm							
Depth to base (m bgl)		10.00		2.00		10.00							
Filter zone (m bgl)		3.00 - 10.00		1.00 - 2.00		2.00 - 10.00							
Level (m OD)		85.39		85.39		85.61							
Date	Time	Depth (m)	Level (m OD)	Depth (m)	Level (m OD)	Depth (m)	Level (m OD)						
04 Mar 2026	10:50					Dry							
04 Mar 2026	11:00	Dry		Dry									
16 Mar 2026	13:17	Dry											
16 Mar 2026	13:27			Dry									
16 Mar 2026	13:41					Dry							
24 Mar 2026	11:10					Dry							
24 Mar 2026	11:30	Dry											
24 Mar 2026	11:40			Dry									
01 Apr 2026	13:10					Dry							
01 Apr 2026	13:15	Dry											
01 Apr 2026	13:25			Dry									
08 Apr 2026	11:00					Dry							
08 Apr 2026	11:10	Dry											
08 Apr 2026	11:20			Dry									
20 Apr 2026	12:55					Dry							
20 Apr 2026	13:15	Dry		Dry									
05 May 2026	12:30	Dry											
05 May 2026	12:40			Dry									
05 May 2026	13:10					Dry							
18 May 2026	12:30	Dry											
18 May 2026	12:40			Dry									
18 May 2026	13:00					Dry							
28 May 2026	10:25	Dry		Dry									
28 May 2026	10:40					Dry							

Symbols and abbrevations are explained on the accompanying key sheets.

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH01	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	02/03/2026	**Ground Level (m OD)**	84.40

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
16/03/2026	13:00	0.0	0.0								1004	0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:01	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:02	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:03	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:03			0.0	0.0	20.1	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:03			0.0	0.0	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:03			0.0	0.0	20.3	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:04			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:04			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:04			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:04			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:05			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:05			0.0	0.0	20.1	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:05			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:05			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:06			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:06			0.0	0.0	20.1	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:07			0.0	0.0	20.1	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:07			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:08			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:09			0.0	0.0	20.2	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:10			0.0	0.0	20.2	0	0	1.0				Water Level Meter	Moist	Light	Overcast	None	Rising	Dry	1.93	

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH01	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	02/03/2026	**Ground Level (m OD)**	84.40

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
24/03/2026	12:30	0.0	0.0								1001	0	Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:31	0.0	0.0									0	Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:32			0.0	0.0	20.8	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:32			0.0	0.7	20.0	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:32			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:33			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:33			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:33			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:33			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:34			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:34			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:34			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:34			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:35			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:35			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:36			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:36			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:37			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:38			0.0	0.7	19.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:40												Water Level Meter	Dry	Moderate	Overcast	None	Steady	Dry	1.95	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH01	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	02/03/2026	**Ground Level (m OD)**	84.40

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
01/04/2026	13:30	0.0	0.0								1009	0	Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:31	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:31			0.0	0.5	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:31			0.0	0.6	20.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:31			0.0	0.6	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:32			0.0	0.6	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:32			0.0	0.6	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:32			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:32			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:33			0.0	0.6	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:33			0.0	0.6	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:33			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:33			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:34			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:34			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:35			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:35			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:36			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:37			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:40												Water Level Meter	Dry	Light	Cloudy	None	Falling	Dry	1.95	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH01	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	02/03/2026	**Ground Level (m OD)**	84.40

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
08/04/2026	11:30	0.0	0.0								1011	0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:31	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:31			0.0	0.7	20.8	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:31			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:31			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:32			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:32			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:32			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:32			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:33			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:33			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:33			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:33			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:34			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:34			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:35			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:35			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:36			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:36			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:37			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:38			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:40												Water Level Meter	Dry	Light	Cloudy	None	Steady	Dry	1.94	

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH01	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	02/03/2026	**Ground Level (m OD)**	84.40

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
20/04/2026	13:55	0.0	0.0								1008	0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:56	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:56			0.0	0.7	20.3	0	0	0.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:56			0.0	0.7	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:56			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:57			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:57			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:57			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:57			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:58			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:58			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:58			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:58			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:59			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:59			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	14:00			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	14:00			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	14:01			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	14:01			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	14:02			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	14:03			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	14:05												Water Level Meter	Dry	Light	Cloudy	None	Steady	Dry	1.94	

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH01	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	02/03/2026	**Ground Level (m OD)**	84.40

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
05/05/2026	13:25	0.0	0.0								998	0	Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:25			0.0	0.6	20.9	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:25			0.0	0.9	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:26			0.0	0.9	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:27			0.0	0.9	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:28			0.0	0.9	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:29			0.0	0.9	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:30			0.0	0.9	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:31			0.0	0.9	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:32			0.0	0.9	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:33			0.0	0.9	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:35												Water Level Meter	Dry	Light	Cloudy	None	Falling	Dry	1.97	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH01	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	02/03/2026	**Ground Level (m OD)**	84.40

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
18/05/2026	12:05	0.0	0.0								998	0	Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:05			0.0	1.0	19.7	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:05			0.0	0.9	19.6	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:06			0.0	0.9	19.6	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:07			0.0	0.9	19.6	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:08			0.0	0.9	19.6	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:09			0.0	0.9	19.6	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:10			0.0	0.9	19.7	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:11			0.0	0.9	19.6	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:12			0.0	1.0	19.5	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:13			0.0	0.9	19.7	0	0	1.0				Gas Data GFM436	Dry	Moderate	Cloudy	None	Steady			
18/05/2026	12:15												Water Level Meter	Dry	Moderate	Cloudy	None	Steady	Dry	1.87	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH01	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	02/03/2026	**Ground Level (m OD)**	84.40

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
28/05/2026	10:05	0.0	0.0								1009	0	Gas Data GFM436	Dry	Light	Slight	None	Steady	Dry	1.91	
28/05/2026	10:05			0.0	2.3	19.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:05			0.0	0.9	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:06			0.0	0.9	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:07			0.0	0.9	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:08			0.0	0.9	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:09			0.0	0.9	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:10			0.0	0.9	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:11			0.0	0.9	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:12			0.0	0.9	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:13			0.0	0.9	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:15												Water Level Meter	Dry	Light	Slight	None	Steady	Dry	1.91	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH02	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	03/03/2026	**Ground Level (m OD)**	83.98

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
16/03/2026	12:43	0.0	0.0								1005	0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:44	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:45	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:46	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:46			0.0	0.0	20.3	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:46			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:46			0.0	0.0	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:47			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:47			0.0	0.0	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:47			0.0	0.0	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:47			0.0	0.0	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:48			0.0	0.0	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:48			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:48			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:48			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:49			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:49			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:50			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:50			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:51			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:52			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	12:53			0.0	0.0	20.4	0	0	1.0				Water Level Meter	Moist	Light	Overcast	None	Rising	Dry	2.02	

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH02	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	03/03/2026	**Ground Level (m OD)**	83.98

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
24/03/2026	12:00	0.0	0.0								1000	0	Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:01	0.0	0.0									0	Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:02			0.0	1.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:02			0.0	1.8	18.5	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:02			0.0	2.0	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:03			0.0	2.0	17.8	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:03			0.0	2.0	17.5	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:03			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:03			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:04			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:04			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:04			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:04			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:05			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:05			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:06			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:06			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:07			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:08			0.0	2.0	17.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	12:10												Water Level Meter	Dry	Moderate	Overcast	None	Steady	Dry	2.03	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH02	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	03/03/2026	**Ground Level (m OD)**	83.98

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
01/04/2026	13:35	0.0	0.0								1009	0	Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:36	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:36			0.0	1.1	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:36			0.0	1.1	20.0	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:36			0.0	1.2	19.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:37			0.0	1.3	18.9	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:37			0.0	1.4	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:37			0.0	1.4	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:37			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:38			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:38			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:38			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:38			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:49			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:49			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:50			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:50			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:51			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:52			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:53			0.0	1.4	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:55												Water Level Meter	Dry	Light	Cloudy	None	Falling	Dry	2.03	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH02	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	03/03/2026	**Ground Level (m OD)**	83.98

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
08/04/2026	11:45	0.0	0.0								1009	0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:46	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:46			0.0	1.6	19.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:46			0.0	1.7	18.9	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:46			0.0	1.7	18.9	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:47			0.0	1.7	18.8	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:47			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:47			0.0	1.7	18.8	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:47			0.0	1.7	18.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:48			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:48			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:48			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:48			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:49			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:49			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:50			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:50			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:51			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:52			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:53			0.0	1.7	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:55												Water Level Meter	Dry	Light	Cloudy	None	Steady	Dry	2.03	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH02	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	03/03/2026	**Ground Level (m OD)**	83.98

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
20/04/2026	13:31	0.0	0.0								1008	0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:32	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:32			0.0	1.9	18.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:32			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:32			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:33			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:33			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:33			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:33			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:34			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:34			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:34			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:34			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:35			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:35			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:36			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:36			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:37			0.0	1.8	18.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:38			0.0	1.8	18.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:39			0.0	1.8	18.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:41												Water Level Meter	Dry	Light	Cloudy	None	Steady	Dry	2.00	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH02	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	03/03/2026	**Ground Level (m OD)**	83.98

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
05/05/2026	13:45	0.0	0.0								997	0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:45			0.0	0.8	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:45			0.0	2.1	18.8	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:46			0.0	2.2	18.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:47			0.0	2.2	17.9	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:48			0.0	2.3	17.9	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:49			0.0	2.2	17.9	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:50			0.0	2.2	17.9	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:51			0.0	2.2	17.9	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:52			0.0	2.2	18.0	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:53			0.0	2.2	18.0	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:54			0.0	2.2	18.0	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
05/05/2026	13:55												Water Level Meter	Dry	Light	Cloudy	None	Steady	Dry	2.02	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH02	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	03/03/2026	**Ground Level (m OD)**	83.98

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
18/05/2026	11:50	0.0	0.0								998	0	Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:50			0.0	1.5	20.4	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:50			0.0	1.5	19.0	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:51			0.0	1.5	18.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:52			0.0	1.4	18.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:53			0.0	1.4	18.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:54			0.0	1.4	18.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:55			0.0	1.3	18.9	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:56			0.0	1.2	18.8	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:57			0.0	1.3	19.0	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:58			0.0	1.2	19.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	11:59			0.0	1.2	19.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	Moderate	Steady			
18/05/2026	12:00												Water Level Meter	Dry	Moderate	Overcast	Moderate	Steady	Dry	2.01	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH02	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	03/03/2026	**Ground Level (m OD)**	83.98

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
28/05/2026	09:45	0.0	0.0								1009	0	Gas Data GFM436	Dry	Still	Slight	None	Steady	Dry	2.00	
28/05/2026	09:45			0.0	0.1	20.0	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:45			0.0	2.2	19.2	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:46			0.0	2.4	18.0	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:47			0.0	2.5	17.8	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:48			0.0	2.5	17.7	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:49			0.0	2.5	17.7	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:50			0.0	2.5	17.7	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:51			0.0	2.4	17.8	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:52			0.0	2.5	17.8	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:53			0.0	2.5	17.8	0	0	1.0				Gas Data GFM436	Dry	Still	Slight	None	Steady			
28/05/2026	09:55												Water Level Meter	Dry	Still	Slight	None	Steady	Dry	2.00	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH03	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	26/02/2026	**Ground Level (m OD)**	85.39

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
16/03/2026	13:17	0.0	0.0								1003	0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:18	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:19	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:20	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:20			0.0	1.7	18.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:20			0.0	1.7	18.1	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:20			0.0	1.7	18.0	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:21			0.0	1.7	17.9	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:21			0.0	1.7	17.9	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:21			0.0	1.7	17.9	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:21			0.0	1.7	17.9	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:22			0.0	1.7	18.0	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:22			0.0	1.7	17.9	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:22			0.0	1.7	17.9	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:22			0.0	1.7	17.9	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:23			0.0	1.7	17.9	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:23			0.0	1.7	17.8	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:24			0.0	1.7	17.8	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:24			0.0	1.7	17.8	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:25			0.0	1.7	17.8	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:26			0.0	1.7	17.8	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:27			0.0	1.7	17.8	0	0	1.0				Water Level Meter	Moist	Light	Overcast	None	Rising	Dry	1.94	

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH03	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	26/02/2026	**Ground Level (m OD)**	85.39

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
24/03/2026	11:30	0.0	0.0								1000	0	Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:31	0.0	0.0									0	Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:32			0.0	0.0	20.6	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:32			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:32			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:33			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:33			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:33			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:33			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:34			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:35			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:35			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:36			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:37			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:38			0.0	1.9	18.1	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:40												Water Level Meter	Dry	Moderate	Overcast	None	Steady	Dry	1.95	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH03	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	26/02/2026	**Ground Level (m OD)**	85.39

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
01/04/2026	13:15	0.0	0.0								1008	0	Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:16	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:16			0.0	0.5	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:16			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:16			0.0	0.7	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:17			0.0	0.7	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:17			0.0	0.7	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:17			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:17			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:18			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:18			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:18			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:18			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:19			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:19			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:20			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:20			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:21			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:22			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:23			0.0	0.7	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:25												Water Level Meter	Dry	Light	Cloudy	None	Falling	Dry	1.95	

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH03	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	26/02/2026	**Ground Level (m OD)**	85.39

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
08/04/2026	11:10	0.0	0.0								1011	0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:11	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:11			0.0	1.0	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:11			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:11			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:12			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:12			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:12			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:12			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:13			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:13			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:13			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:13			0.0	1.0	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:20												Water Level Meter	Dry	Light	Cloudy	None	Steady	Dry	1.93	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH03	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	26/02/2026	**Ground Level (m OD)**	85.39

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
20/04/2026	13:05	0.0	0.0								1009	0	Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:06	0.0	0.0									0	Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:06			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:06			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:06			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:07			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:07			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:07			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:07			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:08			0.0	0.8	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:08			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:08			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:08			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
20/04/2026	13:09			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:09			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:10			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:10			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:11			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:12			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:13			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	13:15												Water Level Meter	Dry	Light	Slight	None	Steady	Dry	1.91	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH03	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	26/02/2026	**Ground Level (m OD)**	85.39

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
05/05/2026	12:30	0.0	0.0								1001	0	Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:30			0.0	0.6	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:30			0.0	1.1	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:31			0.0	1.6	21.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:32			0.0	1.5	20.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:33			0.0	1.2	20.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:34			0.0	1.1	18.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:35			0.0	1.2	20.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:36			0.0	1.2	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:37			0.0	1.4	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:38			0.0	1.3	20.1	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:39			0.0	1.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	12:40												Water Level Meter	Dry	Light	Cloudy	None	Falling	Dry	1.95	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH03	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	26/02/2026	**Ground Level (m OD)**	85.39

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
18/05/2026	12:30	0.0	0.0								998	0	Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:30			0.0	0.8	20.0	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:30			0.0	0.7	20.1	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:31			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:32			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:33			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:34			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:35			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:36			0.0	0.6	20.3	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:37			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:38			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:39			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:40												Water Level Meter	Moist	Moderate	Cloudy	Slight	Steady	Dry	1.70	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH03	**Installation Type**	Standpipe
Depth to Base (m bgl)	2.00	**Diameter**	19mm
Filter Zone	1.00 - 2.00	**Cover Type**	Flush lockable
Date Installed	26/02/2026	**Ground Level (m OD)**	85.39

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
28/05/2026	10:25	0.0	0.0								1009	0	Gas Data GFM436	Dry	Light	Slight	None	Steady	Dry	1.00	
28/05/2026	10:25			0.0	0.9	20.9	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:25			0.0	0.9	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:26			0.0	1.0	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:27			0.0	1.0	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:28			0.0	1.0	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:29			0.0	1.0	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:30			0.0	1.0	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:31			0.0	1.0	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:32			0.0	1.0	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:33			0.0	1.0	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:35												Water Level Meter	Dry	Light	Slight	None	Steady	Dry	1.00	

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH04	**Installation Type**	Standpipe
Depth to Base (m bgl)	10.00	**Diameter**	50mm
Filter Zone	2.00 - 10.00	**Cover Type**	Flush lockable
Date Installed	25/02/2026	**Ground Level (m OD)**	85.61

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
16/03/2026	13:31	0.0	0.0								1003	0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:32	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:33	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:34	0.0	0.0									0	Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:34			0.0	0.1	20.1	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:34			0.0	0.1	20.3	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:34			0.0	0.1	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:35			0.0	0.1	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:35			0.0	0.1	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:35			0.0	0.1	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:35			0.0	0.1	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:36			0.0	0.0	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:36			0.0	0.0	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:36			0.0	0.1	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:36			0.0	0.1	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:37			0.0	0.0	20.3	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:37			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:38			0.0	0.0	20.3	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:38			0.0	0.1	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:39			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:40			0.0	0.0	20.4	0	0	1.0				Gas Data GFM436	Moist	Light	Overcast	None	Rising			
16/03/2026	13:41			0.0	0.0	20.4	0	0	1.0				Water Level Meter	Moist	Light	Overcast	None	Rising	Dry	9.88	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH04	**Installation Type**	Standpipe
Depth to Base (m bgl)	10.00	**Diameter**	50mm
Filter Zone	2.00 - 10.00	**Cover Type**	Flush lockable
Date Installed	25/02/2026	**Ground Level (m OD)**	85.61

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
24/03/2026	11:00	0.0	0.0								1001	0	Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:01	0.0	0.0									0	Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:02			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:02			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:02			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:03			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:03			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:03			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:03			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:04			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:04			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:04			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:04			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:05			0.0	0.3	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:05			0.0	0.3	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:06			0.0	0.3	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:06			0.0	0.3	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:07			0.0	0.3	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:08			0.0	0.3	20.2	0	0	1.0				Gas Data GFM436	Dry	Moderate	Overcast	None	Steady			
24/03/2026	11:10												Water Level Meter	Dry	Moderate	Overcast	None	Steady	Dry	9.89	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH04	**Installation Type**	Standpipe
Depth to Base (m bgl)	10.00	**Diameter**	50mm
Filter Zone	2.00 - 10.00	**Cover Type**	Flush lockable
Date Installed	25/02/2026	**Ground Level (m OD)**	85.61

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
01/04/2026	13:00	0.0	0.0								1011	0	Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:01	0.0	0.0									0	Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:01			0.0	0.2	20.7	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:01			0.0	0.2	20.7	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:01			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:02			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:02			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:02			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:02			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:03			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:03			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:03			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:03			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Moist	Light	Cloudy	None	Falling			
01/04/2026	13:04			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:04			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:05			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:06			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:07			0.0	0.2	20.5	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
01/04/2026	13:10												Water Level Meter	Moist	Light	Cloudy	None	Falling	Dry	9.88	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH04	**Installation Type**	Standpipe
Depth to Base (m bgl)	10.00	**Diameter**	50mm
Filter Zone	2.00 - 10.00	**Cover Type**	Flush lockable
Date Installed	25/02/2026	**Ground Level (m OD)**	85.61

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
08/04/2026	10:50	0.0	0.0								1010	0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:51	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:51			0.0	0.2	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:51			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:51			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:52			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:52			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:52			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:52			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:53			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:53			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:53			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:53			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:54			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:54			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:55			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:55			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:56			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:56			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:57			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	10:58			0.0	0.2	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
08/04/2026	11:00												Water Level Meter	Dry	Light	Cloudy	None	Steady	Dry	9.89	

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH04	**Installation Type**	Standpipe
Depth to Base (m bgl)	10.00	**Diameter**	50mm
Filter Zone	2.00 - 10.00	**Cover Type**	Flush lockable
Date Installed	25/02/2026	**Ground Level (m OD)**	85.61

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
20/04/2026	12:45	0.0	0.0								1012	0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:46	0.0	0.0									0	Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:46			0.0	0.5	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:46			0.0	0.5	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:46			0.0	0.5	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:47			0.0	0.5	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:47			0.0	0.5	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:47			0.0	0.5	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:47			0.0	0.5	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:48			0.0	0.5	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:48			0.0	0.5	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:48			0.0	0.5	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:48			0.0	0.5	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:49			0.0	0.5	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:49			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:50			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:50			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:51			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:51			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:52			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:53			0.0	0.2	20.2	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Steady			
20/04/2026	12:55												Water Level Meter	Dry	Light	Cloudy	None	Steady	Dry	9.91	

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH04	**Installation Type**	Standpipe
Depth to Base (m bgl)	10.00	**Diameter**	50mm
Filter Zone	2.00 - 10.00	**Cover Type**	Flush lockable
Date Installed	25/02/2026	**Ground Level (m OD)**	85.61

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
05/05/2026	13:00	0.0	0.0								999	0	Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:00			0.0	0.8	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:00			0.0	0.8	20.3	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:01			0.0	0.8	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:02			0.0	0.8	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:03			0.0	0.9	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:04			0.0	0.8	20.4	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:05			0.0	0.8	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:06			0.0	0.8	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:07			0.0	0.8	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:08			0.0	0.6	20.6	0	0	1.0				Gas Data GFM436	Dry	Light	Cloudy	None	Falling			
05/05/2026	13:10												Water Level Meter	Dry	Light	Cloudy	None	Falling	Dry	9.87	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH04	**Installation Type**	Standpipe
Depth to Base (m bgl)	10.00	**Diameter**	50mm
Filter Zone	2.00 - 10.00	**Cover Type**	Flush lockable
Date Installed	25/02/2026	**Ground Level (m OD)**	85.61

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
18/05/2026	12:50	0.0	0.0								998	0	Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:50			0.0	0.6	20.5	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:50			0.0	0.5	20.3	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:51			0.0	0.5	20.3	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:52			0.0	0.6	20.3	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:53			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:54			0.0	0.6	20.3	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:55			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:56			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:57			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	12:58			0.0	0.6	20.2	0	0	1.0				Gas Data GFM436	Moist	Moderate	Cloudy	Slight	Steady			
18/05/2026	13:00												Water Level Meter	Moist	Moderate	Cloudy	Slight	Steady	Dry	9.86	

GEOTECHNICS

FIELDWORK - *In Situ Gas Monitoring - Instrument Record*

Project	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	**Project No.**	PE262018
Client	Salisbury NHS Foundation Trust		

Installation Details

Location ID	BH04	**Installation Type**	Standpipe
Depth to Base (m bgl)	10.00	**Diameter**	50mm
Filter Zone	2.00 - 10.00	**Cover Type**	Flush lockable
Date Installed	25/02/2026	**Ground Level (m OD)**	85.61

Date of Reading	Time of Reading	Flow (Peak) (l/hr)	Flow (Steady)	Methane (% v/v)	Carbon Dioxide	Oxygen (% v/v)	Carbon Monoxide	Hydrogen Sulphide	PID (ppm)	Air Temperature	Atmospheric Pressure	Diff. Pressure	Equipment used	Ground Conditions	Wind	Cloud Cover	Precipitation	Atmospheric Pressure	Depth to Water	Depth to Base	Remarks
28/05/2026	10:40	0.0	0.0								1006	0	Gas Data GFM436	Dry	Light	Slight	None	Steady	Dry	9.86	
28/05/2026	10:40			0.0	0.7	21.0	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:40			0.0	0.7	20.9	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:41			0.0	0.7	21.0	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:42			0.0	0.8	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:43			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:44			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:45			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:46			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:47			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:48			0.0	0.7	20.7	0	0	1.0				Gas Data GFM436	Dry	Light	Slight	None	Steady			
28/05/2026	10:50												Water Level Meter	Dry	Light	Slight	None	Steady	Dry	9.86	

GEOTECHNICS

TEST DATE AND CONDITIONS	
Date	29/10/25
Atmospheric pressure	985 mb
Ambient Temp	19.8 °C
Environics Serial No.	2633

GAS DATA LTD
Unit D,
Earlplace Business Park,
Coventry,
CV4 9XL, UK
+44 (0) 24 7630 3311

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GFM436-1 OUTWARD INSPECTION & QUALITY CHECK SHEET

INSTRUMENT DETAILS					
SO Number	Instrument Banner	Instrument Serial Number + SW Version	Job Number(s)		
34504-1	GFM436	13208/27-1	31390		

Calibration Technician [redacted] **DATE** 28-10-25

Inspection Technician [redacted] **DATE** 29/10/25

INSTRUMENT CHECKS		Pass (P), Fail (F) or not applicable(NA)	INSTRUMENT PACKING LIST		Tick if included
Function Tests	Dust Caps Fitted	P	Instrument		✓
	Keyboard Test (All keys)	P	Leather Case		✓
	Backlight Test	P	Instrument Strap		✓
	Clock Set / Running	P	AC Battery Charger (UK)		X
	Comms Test	P	AC Battery Charger (EURO)		X
	Pump Flow Test (In & Out)	P	AC Battery Charger (US)		X
	Overall Leak Test (30mb)	N/A	AC Battery Charger (AUS)		X
	Battery Charge Test	P	Gas Sample Pipe		✓
	Service Date set to?	28/10/26.	Hard Carry Case		✓
Channel Tests	Data Logging Enabled?	P	Spares Pot		✓
	Verify CH4/LEL/Hexane/PID	P	Allen Key		X
	Verify CO2	P	Flow Sample Pipe		✓
	Verify O2	P	Temperature Probe		X
	Verify H2S	P	Vane Anemometer		X
	Verify CO	P	USB Cable		X
	Verify LEL	P	USB Memory Stick		✓
	Verify 1st Option gas	N/A	SM V5 Software	Ver 6.005	✓
	Verify atmospheric pressure	P	Internal Filter Pack	Qty 1	✓
	Verify differential pressure	P	External Filter Pack	Qty	X
	Verify flow	P	Field Guide		X
	Verify temperature probe input	P	EX Safety Flier		X
	Verify vane anemometer input	P	Extra Items:		
DataBase Checks	Jobcard(s) completed and signed	P			
	Jobcard(s) booked off database	P			
	Calibration certificate completed	P			
	Complete & print QI record	N/A			
Label Checks	No. of Calibration label fitted	14277	Comments		
	MCERTS label not displayed	P			
	Warranty label fitted	P			
H2S Range	H2S Range from SO	5000ppm			
	H2S Range from cal cert	5000ppm			
	Over-range value correct?	P			

TEST DATE AND CONDITIONS	
Date	28/10/25
Atmospheric pressure	990mb
Ambient Temp	20.2°C
Environics Serial No.	2518

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GFM436-1 FINAL INSPECTION & CALIBRATION CHECK CERTIFICATE

INSTRUMENT DETAILS	
Serial No	Customer
13208	Geotechnics Ltd (Exeter)

INSTRUMENT CHECKS			
Keyboard	✓	Pump Flow	500cc/min
Display Contrast	✓	Pump Flow @ -200mB	300cc/min
Clock Set / Running	✓	S/W Version	G436-00.0027/0010
Labels Fitted	✓	Recalibration Date	28/10/26

GAS CHECKS							
Calibration Gas		Instrument Gas Channels Read					
Gas Type	Applied Conc.	CH4 (%)	tol. (% vol.)	CO2 (%)	tol. (% vol.)	O2 (%)	tol. (% vol.)
N2	100%	0.0	0.0	0.0	0.0	0.0	+/-0.1
CH4	5%	4.9	+/-0.3	0.0	0.0	0.0	+/-0.1
	60%	59.9	+/-3.0	0.0	0.0	0.0	+/-0.1
CO2	5%	0.0	0.0	4.9	+/-0.3	0.0	+/-0.1
	40%	0.0	0.0	40.1	+/-3.0	0.0	+/-0.1
O2	20.9%	0.0	0.0	0.1	+0.1	20.9	+/-0.5

OPTIONAL GAS CHECKS								
Calibration Gas		Instrument Gas Channels Read						
Gas Type	Applied Conc.	Label	H2S	CO			Hexane	tol. (% vol.)
		Range	5000ppm	2000ppm			2.00%	
N2	100%		0	0			0.000	0.0
H2S	1500ppm		1500	0				+/- 5.0
CO	1000ppm		60	998				+/- 5.0
Hexane	2.00%						1.966	+/- 10.0

PRESSURE CHECKS							
Calibration Pressure		Instrument Pressure Channels Read					
Pressure @	Applied Pressure	Atmospheric [Ap] (mB)	tol. (mB)				
All Ports	Current Atmospheric	989	+/-2.0				
Ap Port (Internal)	+800mB(a)	799	+/-5.0				
	+1200mB(a)	1201	+/-5.0				

TEST DATE AND CONDITIONS	
Date	28/10/25
Atmospheric pressure	990mb
Ambient Temp	20.2°C
Environics Serial No.	2518

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GFM436-1 FINAL INSPECTION & CALIBRATION CHECK CERTIFICATE

FLOW CHECKS					
Calibration Flow		Instrument Flow Channels Read			
Applied Flow (l/hour)	Applied Pressure (Pa)	Flow [Flow] (l/hour)	tol. (l/hour)	Differential Pressure [Dp] (Pa)	tol. (Pa)
-30.0	-450	-30.3	+/-3.0	-456	+/-50
-3.0	-19	-3.0	+/-1.0	-20	+/-6
0.0	0	0.0	0.0	0	0.0
+3.0	16	3.0	+/-0.5	17	+/-3
+30.0	355	29.6	+/-3.0	353	+/-50
+60.0	1099	60.1	+/-6.0	1083	+/-130
+90.0	2202	89.1	+/-9.0	2206	+/-250

TEMPERATURE CHECK		
Calibration Temperature	Instrument Temperature Channel Read	
Applied Equivalent Temperature (°C)	Temperature [Temp] (°C)	tol. (°C)
-10.0	-10.0	+/- 2.0
0.0	0.0	+/- 1.0
30.0	30.0	+/- 1.0
60.0	60.0	+/- 1.0
100.0	99.5	+/- 1.0

Notes:

The instrument identified by the serial number stated above has been tested by Gas Data personnel for calibration accuracy on the date and under the ambient conditions stated. Gas Data Ltd internal BS EN ISO9001:2015, BS EN ISO 14001:2015 and BS EN ISO 45001:2018 compliant workshop procedures were followed to apply known calibration test gases, gas flow rates, pressures and temperatures of the values stated. The results displayed on the instrument at each stage are recorded above.

Gas Data Ltd is certified to: BS EN ISO 9001:2015
BS EN ISO 14001:2015
BS EN ISO 45001:2018

Instrument House
91-92 Shrivenham Hundred Business Park
Watchfield
Oxfordshire
SN6 8TY
Fax: 01793 784466
service@shawcity.co.uk

SERVICE / INSPECTION SHEET

JOB NUMBER: 83606
INSTRUMENT: Tiger XTL

SERIAL NUMBER: XT-102135
DATE RECEIVED: 31/07/2025

FIRMWARE: 0.6.06
UPGRADED TO: 0.6.9

CUSTOMER: Geotechnics Limited

ITEMS RECEIVED	RECEIVED?	RTN?
Instrument	yes	
Rubber Boot		
Battery Charger		
Charging Cradle		
Operation Manual		
Quick Start Guide		
Spares Kit		
Comms Cable		
Probe		
Peli Case		
Tubing		
Regulator		
Software (Memory Stick)		
Software Version		
	SIGNED:	

TESTS	Pre Service	Post Service
Charger Test		Ok
Battery charge Test		Ok
Lamp Test		Ok
Air Flow Test ≥ 220ml/min		283ml/min
Block Flow Test ≤ 15ml/min		9ml/min
Moisture Sensitivity = 0.0ppm		0.0ppm
Switch Test		Ok
Sensor Test		Ok
Alarm Test		Ok
PC Comms Test		Ok
Datalog Test		Ok
Display Test		Ok
Physical Inspection		Ok
PAT Test		n/a
Firmware Upgrade		updated to 0.6.9
Software Upgrade (usb)		n/a
Function Test		Ok
Run Time		10hours 58mins

Comments:
Unit came in for service, cal and repair - customer reported battery would not stay in the unit
Connected to Tiger pc and clock set to real time
Stack and PTFE filter replaced as per service
Lamp cleaned as per biennial service
Probe replaced as damaged
Airflow 283ml/min, 9ml/min - pump works correctly
User and factory calibration passed as per service

Customer battery issue not replicated. Battery is not being put into the unit correctly.Correctly connected during service and used without issue. PSM to advise on possible instument training.

TECHNICIAN: Daniel Hunter [redacted] DATE: 31/07/2025

shawcity
Life-saving solutions

CERTIFICATE OF CALIBRATION
Tiger Select

CALIBRATION CERTIFICATE NO: 83606

ISSUED BY:	SHAWCITY LIMITED
DATE:	31-Jul-25
APPROVED SIGNATORY:	[redacted]
NAME:	Daniel Hunter
CUSTOMER:	Geotechnics Limited
INSTRUMENT:	Tiger XTL
SERIAL NUMBER:	XT-102135
CALIBRATION METHOD:	CM03
AMBIENT CONDITIONS:	20°C ± 2°C and 50% (± 20%) RH

S500123-1	WO372412-3

The instrument has been factory calibrated to documented procedures in accordance with ISO9001:2015 Quality Management System.
The instrument is calibrated following manufacturer guidance.
Measurement standards are derived from volumetric and time sources which have been calibrated at an accredited laboratory traceable to national or international standards.

CALIBRATION RESULTS

REF. VALUE	INDICATED VALUE
100 ppm Isobutylene	100 ppm
5000 ppm Isobutylene	5000 ppm

Prior to calibration, the instrument was allowed to stabilise in the laboratory for at least 30 minutes.
The instrument was calibrated by exposing the sensor to known values of gas concentrations.
All gases were sampled through the complete probe and in line filter, where applicable.
The reference value is that generated by the certified source and the indicated value is that measured by the instrument.
Gas mixture prepared using equipment traceable to N.P.L standards against suppliers' certificate No.
On the day of calibration, the instrument was working according to the manufacturer's original specifications.

COMMENTS:
The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor of $k=2$.
This provides a level of confidence of uncertainty of approximately 95%.
The uncertainty of measurement is ±2 %
The results indicate that the instrument conforms to the applicable parts of the published specification.

Tel: 01793 780622
www.shawcity.co.uk
Instrument House, 91-92 Shrivenham Hundred Business Park
Watchfield, Oxfordshire, SN6 8TY
Fax: 01793 784466
service@shawcity.co.uk

APPENDIX 13

Geotechnical Laboratory Results

DATA SHEET - Laboratory Test Symbols

Classification and Strength

Symbol	**C - Clay**	**M - Silt**
	(0 - containing organic matter)	
	Plasticity	L - Low
		I - Intermediate
		H - High
		V - Very High
		E - Extremely High
Ip	Plasticity Index	
%	% retained on 425 µm sieve, shown under Ip value	
w_L	Liquid Limit	
w_P	Plastic Limit	
NP	Non-Plastic	
NAT	Sample tested in natural state	
w	Water Content	
P_d	Particle Density	
Test	**Quick undrained triaxial tests**	
	SS	Single stage - 102mm diameter.
	S3	Single stage - set of 3 38mm diameter.
	MS	Multistage - 102mm diameter.
	D	Drained Test
	HV	Hand Vane
	PP	Pocket Penetrometer (kg/cm²)
	NST	Not suitable for test
γ_b	Bulk Density	
σ_3	Triaxial Cell Pressure	
$\sigma_1 - \sigma_3$	Deviator Stress	
##	Excessive Strain	
c_u	Undrained Cohesion	
c	Cohesion Intercept	
ϕ	Angle of Shearing Resistance	
Linear Shrink	Linear Shrinkage	
Stab add-	Stabiliser which is added	

Consolidation

m_v	Coefficient of Volume Compressibility
c_{v50}	Coefficient of Consolidation - Log t
c_{v90}	Coefficient of Consolidation - $\sqrt{t}$

Rock

UF	Unacceptable Failure

Chemical Analysis

Acid Soluble	Total sulphate in specimen, expressed as SO_3 %, value in brackets expressed as SO_4 %
Water Soluble	Soluble sulphate in 2:1 water : soil extract, expressed as SO_3 g/l, value in brackets expressed as SO_4 g/l
In Water	Sulphate content of groundwater, expressed as SO_3 g/l, value in brackets expressed as SO_4 g/l
pH	pH value
Organic content	Organic content expressed as a percentage of dry weight
Chloride	Chloride Ion content expressed as a percentage of dry weight

MCV, Compaction, CBR

MCV	Moisture Condition Value at natural water content
MCC	Moisture Condition Calibration
CCV	Chalk Crushing Value

Compaction

Type	2.5	= 2.5 kg Rammer
	4.5	= 4.5 kg Rammer
	V	= Vibrating Hammer
γ_b	Bulk Density	
γ_d	Dry Density	

CBR California Bearing Ratio

Type	2.5	= Test on Specimen Recompacted using 2.5 kg Rammer
	4.5	= As above but using 4.5 kg Rammer
	V	= As above but using Vibrating Hammer
	M	= Test on open drive mould specimen cut in field
	S	= Soaked Specimen
Top	CBR at top of mould	
Bottom	CBR at bottom of mould	
ND	None Detected	
*	In the Sample Description denotes a laboratory only description	

Laboratory Test Certificate

Issued from:	Geotechnics Ltd The Geotechnical Centre 203 Torrington Avenue Tile Hill Coventry, CV4 9AP	**Date of issue**	27/04/2026
		Issue No.	1
		Client Ref. No.	N/A
		Samples / Material Source	
		Samples Rec'd	01/04/2026
		Final Sch Rec'd	N/A
Testing Start Date	09/04/2026	Sample State	As received
Testing Complete	24/04/2026	Sampled by	Geotechnics Limited
Comments	*Specimen descriptions, opinions or interpretations are outside the scope of UKAS accreditation.* *The results within this report(s) relate only to the samples tested as received from the customer.* *The reports shall not be reproduced, except in full, without approval of the laboratory.*		
Project No	PE262018		
Project Name	Salisbury District Hospital Elective Care Centre		

Summary of Tests

Standard	Test Description	Test Quantity	UKAS
BS EN ISO 17892-1:2014	Water Content	5	Yes
BS EN ISO 17892-12:2018 Cl. 5.3 & 5.5	Liquid Limit and Plastic Limit (4 Points Method)	3	Yes
BS EN ISO 17892-4:2016 Cl. 5.2	Particle Size Distribution by Sieving Method	4	Yes
BS EN ISO 17892-4:2016 Cl. 5.4	Particle Size Distribution by Pipette Method	4	Yes
BS 1377-2:1990 Cl. 3.3	Saturation Moisture Content of Chalk	15	Yes
BS 1377-4:1990 Cl. 6	Chalk Crushing Value (CCV)	2	Yes
ISRM Suggested Method (1985)	Point Load Strength of Rock (up to 3 Determination)	14	Yes
ISRM Suggested Method (1985)	Point Load Strength of Rock (up to 10 Determination)	1	Yes
BS5930:2015+A1:2020	Extrude, Spilt, Photograph and Describe Undisturbed Sample	1	No

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Test Results checked and approved for issue.
Signed for, and on behalf of Geotechnics Limited

[redacted]

Paul Smart (Laboratory Manager)



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Summary of Classification Test Results

Project Number: PE262018

Project Name: SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Hole Number	Sample				Specimen Description	*W* Water Content %	Passing 425µm %	LL Liquid Limit %	PL Plastic Limit %	PI Plasticity Index %	Particle Density Mg/m³	Remarks
	Sample ID	Top (m)	Base (m)	Type								
BH03		6.10		D	White CHALK.	21.3						
DCP02		0.35		D	MADE GROUND: Brown very sandy very clayey gravel.	7.4						
DCP03		0.50		D	MADE GROUND: Brown slightly sandy slightly gravelly clay.	21.9	69	42 4pt	20	22		
TP01		0.20		D	Brown slightly sandy slightly gravelly CLAY.	24.2	74	51 4pt	23	28		
TP02		0.20		D	Brown slightly sandy slightly gravelly CLAY.	26.2	65	54 4pt	24	30		

All tests performed in accordance with BS EN ISO 17892 unless specified otherwise.

Key:

Liquid Limit

80g / 30deg fall cone with increasing water content unless specified otherwise

Sample washed through 0.425mm sieve unless specified otherwise

1pt - single point test (including factor)

* BS1377 method

Particle density

sp - small pycno

gj - gas jar BS1377

Plastic Limit

NP - Non Plastic

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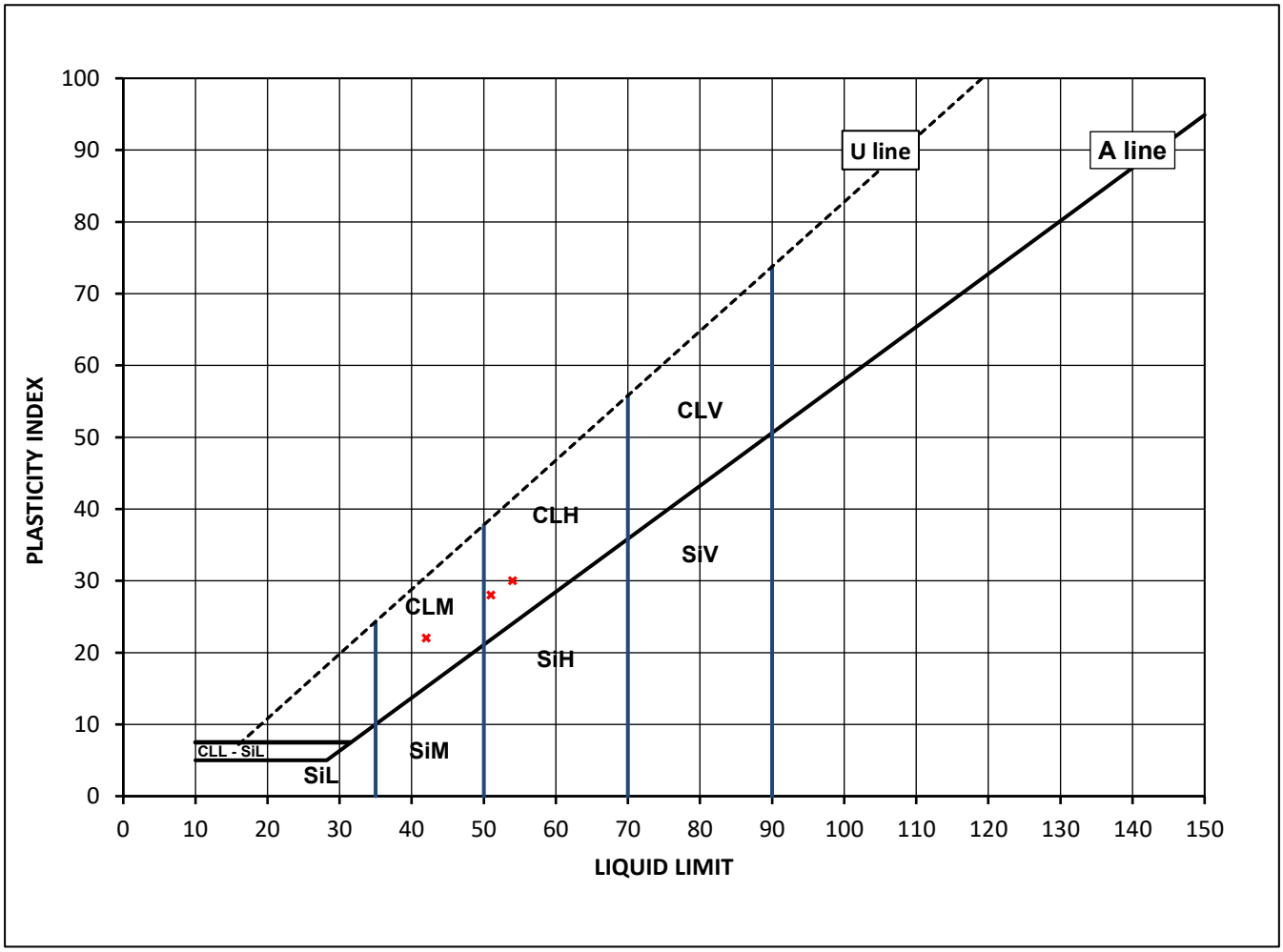
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Plasticity (A-line) Chart

Project No.	Project Name
PE262018	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE



Legend based on BS EN ISO 14688-2:2018

		Plasticity		Liquid Limit
CL	Clay	L	Low	below 35
Si	Silt	I	Medium	35 to 50
		H	High	50 to 70
		V	Very high	70 to 90
	Organic	O	append to classification for organic material (eg CHO)	

Notes

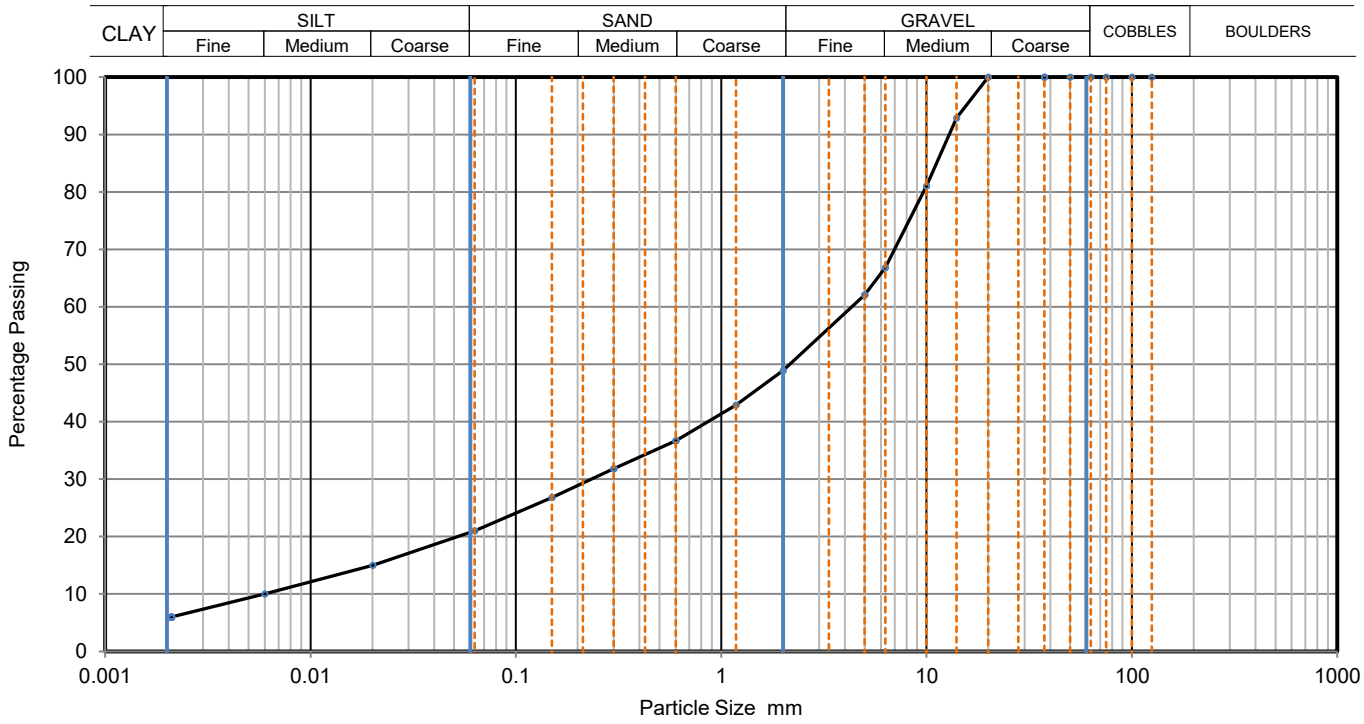
Plotted Test results from BS EN ISO 17892-12 include 4pt and 1pt tests, unless otherwise detailed on the classification summary report. See individual results for more detail.

A' line derivation above PI of 6, PI = 0.73 (LL-20)

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GEOTECHNICS	PARTICLE SIZE DISTRIBUTION	Hole No.	DCP02
		Sample No.	
Project Number:	PE262018	Depth m	0.30 - 0.45
Project Name:	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Sample Type	B
Specimen Description	MADE GROUND: Brown very sandy very clayey gravel.	Specimen Depth m	
Test Method	BS EN ISO 17892 -4:2016, by sieving and pipette sedimentation		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.020	15
100	100	0.006	10
75	100	0.002	6
63	100		
50	100		
37.5	100		
20	100		
14	93		
10	81		
6.3	67		
5	62		
2	49		
1.18	43		
0.6	37		
0.3	32		
0.15	27	Particle density	(assumed)
0.063	21	2.65	Mg/m3

Sample Proportions	% dry mass
Cobbles	0
Gravel	51
Sand	28
Silt	15
Clay	6

Grading Analysis		*Not UKAS accredited*
D100	mm	20
D60	mm	4.33
D30	mm	0.234
D10	mm	0.00563
Uniformity Coefficient		770

Grading analysis values are not part of BS EN 17892, and are provided for user interpretation only.

Remarks

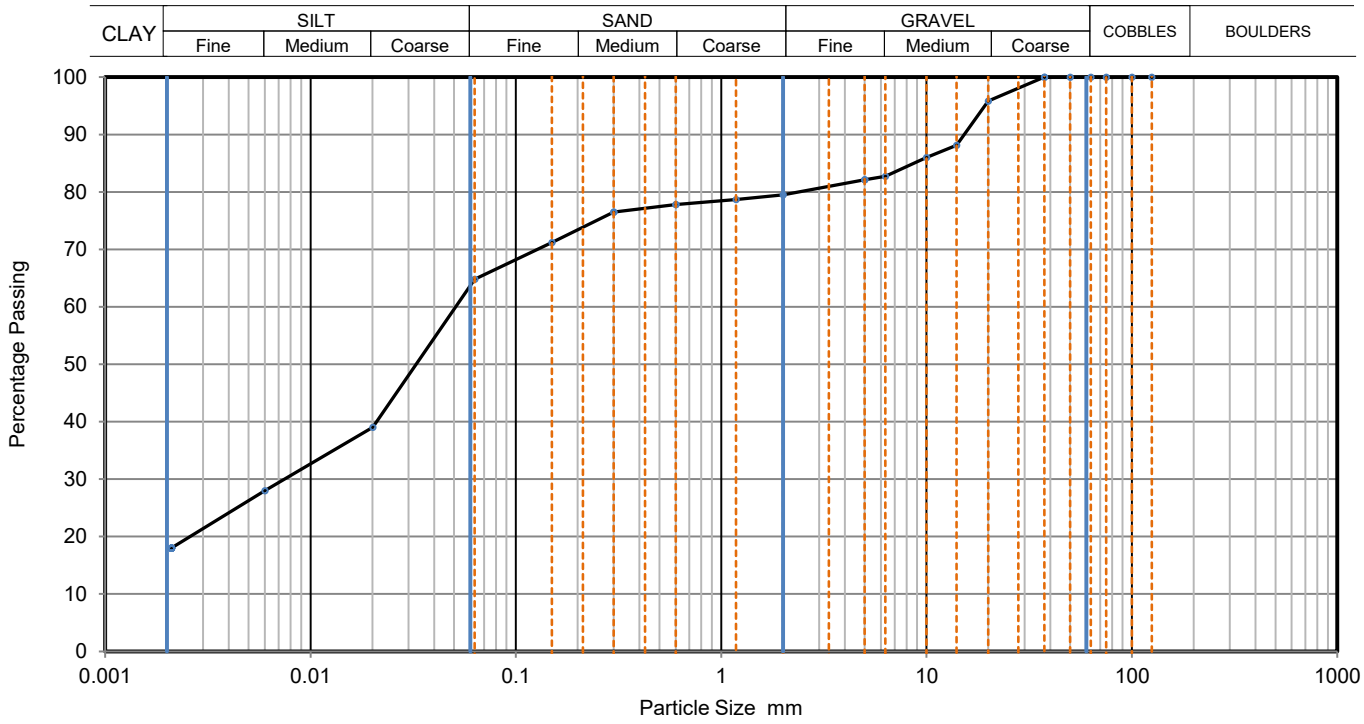
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GEOTECHNICS	PARTICLE SIZE DISTRIBUTION	Hole No.	DCP03
		Sample No.	
Project Number:	PE262018	Depth m	0.45 - 0.60
Project Name:	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Sample Type	B
Specimen Description	MADE GROUND: Brown slightly sandy slightly gravelly clay.	Specimen Depth m	
Test Method	BS EN ISO 17892 -4:2016, by sieving and pipette sedimentation		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.020	39
100	100	0.006	28
75	100	0.002	18
63	100		
50	100		
37.5	100		
20	96		
14	88		
10	86		
6.3	83		
5	82		
2	80		
1.18	79		
0.6	78		
0.3	77		
0.15	71	Particle density (assumed)	
0.063	65	2.65	Mg/m3

Sample Proportions	% dry mass
Cobbles	0
Gravel	20
Sand	15
Silt	47
Clay	18

Grading Analysis		Not UKAS accredited
D100	mm	37.5
D60	mm	0.051
D30	mm	0.00782
D10	mm	
Uniformity Coefficient		

Grading analysis values are not part of BS EN 17892, and are provided for user interpretation only.

Remarks

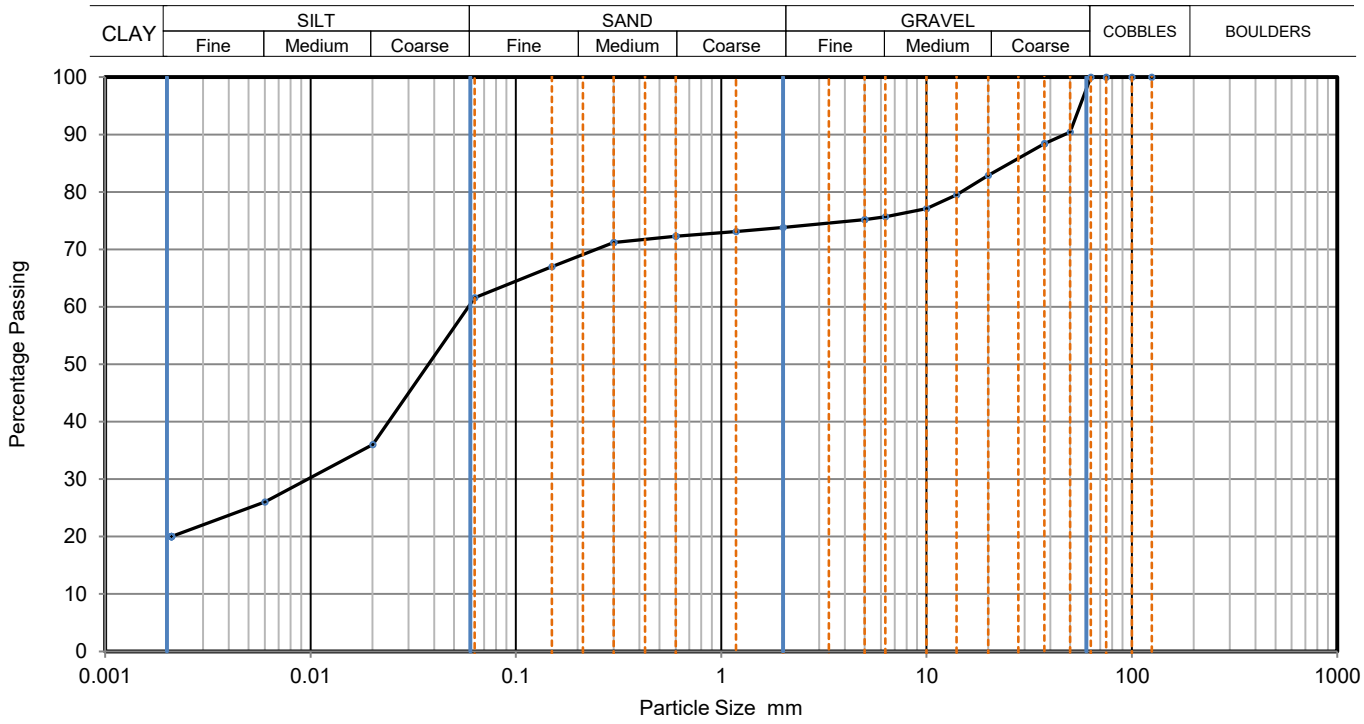
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GEOTECHNICS	PARTICLE SIZE DISTRIBUTION	Hole No.	TP01
		Sample No.	
Project Number:	PE262018	Depth m	0.15 - 0.35
Project Name:	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Sample Type	LB
Specimen Description	Brown slightly sandy slightly gravelly CLAY.	Specimen Depth m	
Test Method	BS EN ISO 17892 -4:2016, by sieving and pipette sedimentation		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.020	36
100	100	0.006	26
75	100	0.002	20
63	100		
50	90		
37.5	88		
20	83		
14	80		
10	77		
6.3	76		
5	75		
2	74		
1.18	73		
0.6	72		
0.3	71		
0.15	67	Particle density (assumed)	
0.063	62	2.65 Mg/m3	

Sample Proportions	% dry mass
Cobbles	0
Gravel	26
Sand	12
Silt	42
Clay	20

Grading Analysis		*Not UKAS accredited*
D100	mm	63
D60	mm	0.0586
D30	mm	0.00974
D10	mm	
Uniformity Coefficient		

Initial sample mass less than BS EN ISO 17892 requirements
Grading analysis values are not part of BS EN 17892, and are provided for user interpretation only.

Remarks

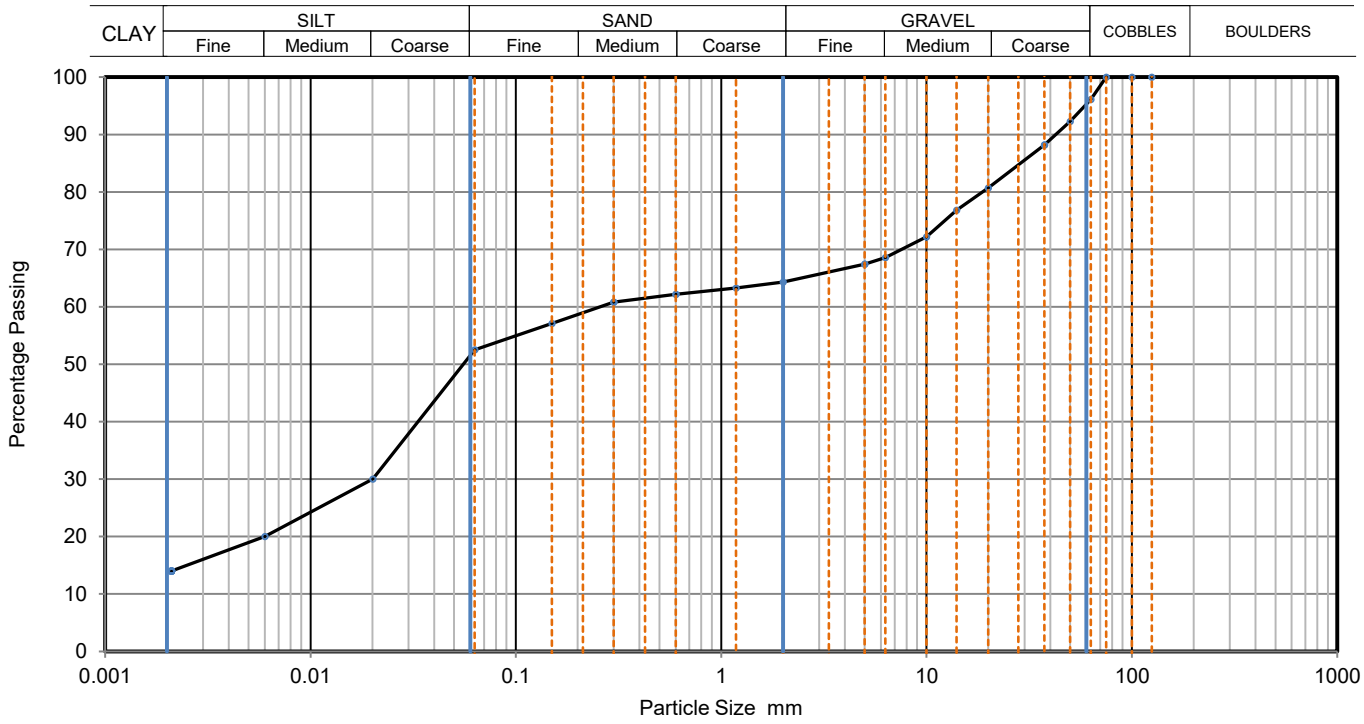
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GEOTECHNICS	PARTICLE SIZE DISTRIBUTION	Hole No.	TP02
		Sample No.	
Project Number:	PE262018	Depth m	0.15 - 0.30
Project Name:	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE	Sample Type	LB
Specimen Description	Brown slightly sandy slightly gravelly CLAY.	Specimen Depth m	
Test Method	BS EN ISO 17892 -4:2016, by sieving and pipette sedimentation		



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.020	30
100	100	0.006	20
75	100	0.002	14
63	96		
50	92		
37.5	88		
20	81		
14	77		
10	72		
6.3	69		
5	67		
2	64		
1.18	63		
0.6	62		
0.3	61		
0.15	57	Particle density (assumed)	
0.063	53	2.65	Mg/m3

Sample Proportions	% dry mass
Cobbles	4
Gravel	32
Sand	12
Silt	38
Clay	14

Grading Analysis		*Not UKAS accredited*
D100	mm	75
D60	mm	0.257
D30	mm	0.0194
D10	mm	
Uniformity Coefficient		

Initial sample mass less than BS EN ISO 17892 requirements
Grading analysis values are not part of BS EN 17892, and are provided for user interpretation only.

Remarks

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Saturation Moisture Content - Summary of Results

Project No.: PE262018

Project Name: SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Hole No.	Sample				Spec Ref.	Specimen description	SMC	Bulk Density	Dry Density	Remarks
	Ref	Top (m)	Base (m)	Type			%	Mg/m³	Mg/m³	
BH01		4.70		D	3	White CHALK.	29	1.94	1.51	
BH01		7.72	7.86	C	3	White CHALK.	26	2.00	1.59	
BH01		12.85	12.96	C	3	White CHALK.	28	1.96	1.53	
BH02		3.90		D	3	White CHALK.	28	1.95	1.53	
BH02		4.90		D	6	White CHALK.	30	1.89	1.50	
BH02		10.87	11.00	C	3	White CHALK.	29	1.95	1.51	
BH02		13.10		D	3	White CHALK.	30	1.93	1.49	
BH03		1.00		D	3	White CHALK.	33	1.97	1.43	
BH03		4.90		D	3	White CHALK.	30	1.88	1.49	
BH03		6.10		D	5	White CHALK.	30	1.91	1.49	
BH03		8.80		D	3	White CHALK.	30	1.92	1.48	
BH04		3.50	4.00	B	1	White CHALK.	28	1.93	1.53	
BH04		5.50		D	1	White CHALK.	29	1.93	1.51	
TP01		0.35	1.00	LB	8	White CHALK.	26	1.99	1.58	
TP02		0.60	1.00	LB	8	White CHALK.	28	1.96	1.53	

Notes

Tested in accordance with BS1377 : Part 2 : 1990, clause 3.3 unless specified otherwise.

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CHALK CRUSHING VALUE - Summary of results

Project No.	Project Name
PE262018	SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Hole No.	Sample				Specimen		Description	Material >10mm	Specimen Moisture Content	Saturated Moisture Content	Chalk Crushing Value	Remarks
	Ref	Depth Top m	Depth Base m	Type	Ref	Depth m		%	%	%	CCV	
TP01		0.35	1.00	LB			White CHALK	28		26.0	3.0	
TP02		0.60	1.00	LB			White CHALK	55		28.0	3.3	

Notes

Tests performed in accordance with BS 1377 : Part 4 : 1990, clause 6.

Moisture contents are only reported if scheduled

Date Printed

27/04/2026

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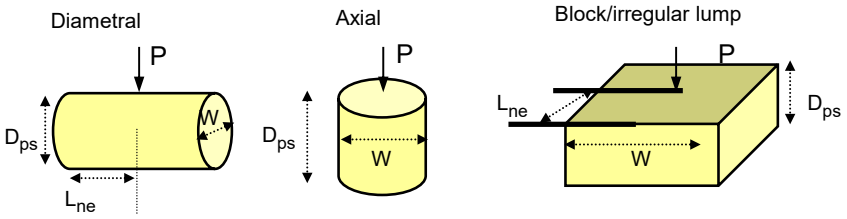
Point Load Strength Index Tests
Summary of Results

Project No.: PE262018

Project Name: SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Hole No.	Sample			Description and Test Condition	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P	Equivalent diameter De	Point Load Strength Index		Remarks including water content (w) if measured
	Top (m)	Base (m)	Type		Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Length mm	Dps mm	kN	mm	Is MPa	Is(50) MPa	
BH01	5.90	6.05	C	White CHALK.	I	U	YES	40.0	50.0		37.0	0.34	48.5	0.143	0.142	w = 28.9%
BH01	5.90	6.05	C	White CHALK.	I	U	YES	50.0	70.0		48.0	0.32	65.4	0.074	0.083	w = 28.9%
BH01	7.90	8.00	C	White CHALK.	I	L	YES	45.0	70.0		41.0	0.11	60.4	0.029	0.032	w = 30.5%
BH01	7.90	8.00	C	White CHALK.	A	L	YES		100.0	70.0	69.0	0.14	93.7	0.016	0.022	w = 30.5%
BH01	12.75	12.84	C	White CHALK.	A	U	YES		100.0	60.0	56.0	0.22	84.4	0.031	0.039	w = 28.1%
BH01	12.75	12.84	C	White CHALK.	I	U	YES	50.0	60.0		52.0	0.31	63.0	0.079	0.087	w = 28.1%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	25.0	35.0		29.0	0.13	35.9	0.102	0.088	w = 29.0%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	20.0	30.0		27.0	0.15	32.1	0.149	0.122	w = 29.0%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	40.0	60.0		34.0	0.06	51.0	0.022	0.023	w = 29.0%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	20.0	25.0		26.0	0.10	28.8	0.126	0.098	w = 29.0%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	15.0	25.0		19.0	0.08	24.6	0.129	0.094	w = 28.5%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	15.0	30.0		25.0	0.16	30.9	0.163	0.132	w = 28.5%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	15.0	25.0		29.0	0.08	30.4	0.087	0.069	w = 29.0%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	15.0	30.0		26.0	0.14	31.5	0.141	0.115	w = 28.5%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	20.0	20.0		22.0	0.14	23.7	0.253	0.181	w = 28.5%
BH01	13.70	14.00	B	White CHALK.	I	U	YES	15.0	20.0		16.0	0.11	20.2	0.260	0.173	w = 28.5%
BH02	4.90		D	White CHALK.	I	U	YES	25.0	35.0		31.0	0.12	37.2	0.088	0.077	w = 27.9%
BH02	4.90		D	White CHALK.	I	U	YES	30.0	40.0		27.0	0.18	37.1	0.132	0.116	w = 27.9%
BH02	7.40	7.55	C	White CHALK.	A	L	YES		101.0	70.0	74.0	0.36	97.6	0.038	0.051	w = 28.6%

Test Type
D - Diametral, A - Axial, I - Irregular Lump, B - Block
Direction
L - parallel to planes of weakness
P - perpendicular to planes of weakness
U - unknown or random
Dimensions
Dps - Distance between platens (platen separation)
Lne - Length from platens to nearest free end
W - Width of shortest dimension perpendicular to load, P



Notes

Test performed in accordance with ISRM Suggested Methods : 1985, unless specified otherwise

Detailed legend for test and dimensions, based on ISRM, is shown above.

Water Content In house method based on ISRM

Size factor, F = (De/50)0.45 for all tests.

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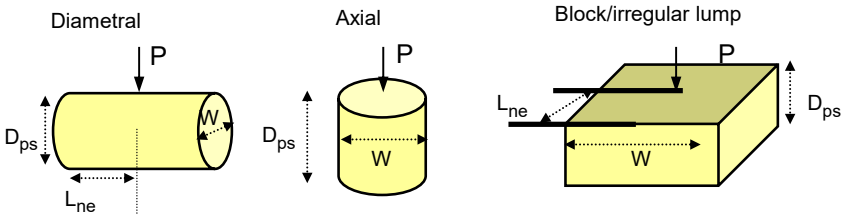
Point Load Strength Index Tests
Summary of Results

Project No.: PE262018

Project Name: SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Hole No.	Sample			Description and Test Condition	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P	Equivalent diameter De	Point Load Strength Index		Remarks including water content (w) if measured
	Top (m)	Base (m)	Type		Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Length mm	Dps mm	kN	mm	Is MPa	Is(50) MPa	
BH02	7.40	7.55	C	White CHALK.	D	L	YES	60.0	100.0		101.0	0.13	100.5	0.013	0.018	w = 28.6%
BH02	10.07	10.17	C	White CHALK.	I	U	YES	45.0	70.0		51.0	0.28	67.4	0.061	0.070	w = 29.1%
BH02	10.07	10.17	C	White CHALK.	A	U	YES		100.0	70.0	72.0	0.20	95.7	0.022	0.030	w = 29.1%
BH02	12.10		D	White CHALK.	I	U	YES	20.0	35.0		26.0	0.22	34.0	0.190	0.160	w = 29.8%
BH02	12.10		D	White CHALK.	I	U	YES	40.0	60.0		28.0	0.18	46.2	0.085	0.082	w = 29.8%
BH02	13.45	13.71	C	White CHALK.	D	U	YES	60.0	101.0		101.0	0.22	101.0	0.022	0.030	w = 30.2%
BH02	13.45	13.71	C	White CHALK.	A	U	YES		101.0	60.0	63.0	0.49	90.0	0.060	0.078	w = 30.2%
BH03	4.82	5.00	C	White CHALK.	D	U	YES	70.0	101.0		101.0	0.24	101.0	0.023	0.032	w = 31.6%
BH03	4.82	5.00	C	White CHALK.	A	U	YES		101.0	70.0	72.0	0.30	96.2	0.032	0.043	w = 31.6%
BH03	9.38	9.50	C	White CHALK.	D	U	YES	60.0	101.0		101.0	0.22	101.0	0.021	0.029	w = 30.2%
BH03	9.38	9.50	C	White CHALK.	A	U	YES		101.0	60.0	54.0	0.34	83.3	0.049	0.061	w = 30.2%
BH04	1.70	2.20	B	White CHALK.	I	U	YES	15.0	25.0		27.0	0.17	29.3	0.200	0.157	w = 26.0%
BH04	1.70	2.20	B	White CHALK.	I	U	YES	25.0	45.0		32.0	0.35	42.8	0.191	0.178	w = 26.0%
BH04	6.80		D	White CHALK.	I	U	YES	25.0	35.0		74.0	0.21	57.4	0.062	0.066	w = 27.7%
BH04	6.80		D	White CHALK.	I	U	YES	30.0	40.0		25.0	0.21	35.7	0.163	0.140	w = 27.7%
TP01	0.35	1.00	LB	White CHALK.	I	U	YES	20.0	40.0		27.0	0.20	37.1	0.144	0.126	w = 26.7%
TP01	0.35	1.00	LB	White CHALK.	I	U	YES	25.0	30.0		18.0	0.17	26.2	0.250	0.187	w = 26.7%
TP02	0.60	1.00	LB	White CHALK.	I	U	YES	35.0	40.0		30.0	0.15	39.1	0.097	0.087	w = 28.2%
TP02	0.60	1.00	LB	White CHALK.	I	U	YES	15.0	20.0		27.0	0.13	26.2	0.192	0.144	w = 28.2%

Test Type
D - Diametral, A - Axial, I - Irregular Lump, B - Block
Direction
L - parallel to planes of weakness
P - perpendicular to planes of weakness
U - unknown or random
Dimensions
Dps - Distance between platens (platen separation)
Lne - Length from platens to nearest free end
W - Width of shortest dimension perpendicular to load, P



Notes

Test performed in accordance with ISRM Suggested Methods : 1985, unless specified otherwise

Detailed legend for test and dimensions, based on ISRM, is shown above.

Water Content In house method based on ISRM

Size factor, F = (De/50)0.45 for all tests.

Date Printed: 27/04/2026

UKAS TESTING
1365

Sample Information

Project:	Salisbury District Hospital Elective Care Centre
Project No:	PE262018
Borehole:	BH02
Sample Depth:	2.50-2.95m

Extruded Sample Photo



Sample Description

2.50-2.70m CHALK, recovered as creamish white slightly sandy silty GRAVEL. Clasts are extremely weak low density white angular to subangular. Matrix is white and creamish white and occasional black specks.

2.70-2.95m. CHALK, recovered as white slightly gravelly SILT. Clasts are extremely weak low density white angular to subangular with rare black specks.

.

Certificate of Analysis

Certificate Number	26-07387-1	*Issued:*	29-May-26

Client Geotechnics LTD
Unit 5 Orchard Court
Heron Road
Sowton Industrial Estate
Exeter
Devon
EX2 7NR

Our Reference 26-07387-1

Client Reference ~ OE47118

Order No ~ OE47118

Contract Title ~ Salisbury District Hospital Elective Care Centre

Description 11 Soil samples.

Date Received 27-Mar-26

Date Started 27-Mar-26

Date Completed 29-May-26

Test Procedures Identified by prefix DETSn (details on request).

Notes **This report supersedes 26-07387; Sample info updated at client request**

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By [redacted]

Reyhan Irfan
Operations Manager

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Summary of Chemical Analysis
Soil Samples

Our Ref 26-07387-1
Client Ref ~ OE47118
Contract Title ~ Salisbury District Hospital Elective Care Centre

			Lab No	2662965	2662966	2662967	2662968	2662969	2662970	2662971	2662972	2662973	2662974	2662975
			Sample ID ~	BH01	BH01	BH01	BH02	BH02	BH02	BH02	BH02	BH04	BH04	BH04
			Depth ~	1.90	5.70	12.30	0.30	0.45	0.60	3.00	14.50	0.40	1.10	6.80
			Other ID ~											
			Sample Type ~	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Sampling Date ~	25/03/2026	25/03/2026	25/03/2026	25/03/2026	25/03/2026	25/03/2026	25/03/2026	25/03/2026	25/03/2026	25/03/2026	25/03/2026
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**											
Metals														
Magnesium Aqueous Extract (2:1)	DETSC 2076*	10	mg/l	< 10	< 10	< 10	< 10			< 10	< 10	< 10	< 10	< 10
Inorganics														
pH	DETSC 2008#		pH	9.4	8.6	9.1	9.0			8.7	8.9	7.8	8.7	9.0
Organic matter	DETSC 2002#	0.1	%					0.9	3.1			1.6		
Chloride Aqueous Extract (2:1)	DETSC 2055	1	mg/l	33	21	9.9	38			37	37	7.8	7.6	3.9
Nitrate Aqueous Extract as NO3 (2:1)	DETSC 2055	1	mg/l	3.5	2.8	5.2	9.1			30	30	8.5	4.9	< 1.0
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	17	48	< 10	17			24	13	< 10	11	< 10

Information in Support of the Analytical Results

Our Ref 26-07387-1
Client Ref ~ OE47118
Contract ~ Salisbury District Hospital Elective Care Centre

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2662965	BH01 1.90 SOIL	25/03/26	PT 1L		
2662966	BH01 5.70 SOIL	25/03/26	PT 1L		
2662967	BH01 12.30 SOIL	25/03/26	PT 1L		
2662968	BH02 0.30 SOIL	25/03/26	PT 1L		
2662969	BH02 0.45 SOIL	25/03/26	GJ 250ml		
2662970	BH02 0.60 SOIL	25/03/26	GJ 250ml		
2662971	BH02 3.00 SOIL	25/03/26	PT 1L		
2662972	BH02 14.50 SOIL	25/03/26	PT 1L		
2662973	BH04 0.40 SOIL	25/03/26	GJ 250ml, PT 1L		
2662974	BH04 1.10 SOIL	25/03/26	PT 1L		
2662975	BH04 6.80 SOIL	25/03/26	PT 1L		

Key: P-Plastic T-Tub G-Glass J-Jar

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

LABORATORY TEST CERTIFICATE

10 Queenslie Point
Queenslie Industrial Estate
120 Stepps Road
Glasgow
G33 3NQ

Tel: 0141 774 4032

email: info@mattest.org
Website: www.mattest.org

Certificate No : **26/374 - 01-1**

To : **Emma Bateson**

Client : **Geotechnics Limited**
The Geotechnical Centre
5 Orchard Court
Heron Road
Exeter
EX2 7LL

LABORATORY TESTING OF ROCK

Introduction

We refer to samples taken from Salisbury District Hospital Elective Care Centre and delivered to our laboratory on 30th March 2026.

Material & Source

Sample Reference	:	See Report Plates
Sampled By	:	Client
Sampling Certificate	:	Not Supplied
Location	:	See Report Plates
Description	:	Rock Cores
Date Sampled	:	Not Supplied
Date Tested	:	30th March 2026 Onwards
Source	:	PE262018 - Salisbury District Hospital Elective Care Centre

Test Results

As Detailed On Page 2 to Page 5 inclusive

Comments

The results contained in this report relate to the sample(s) as received
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation
This report should not be reproduced except in full without the written approval of the laboratory
All remaining samples for this project will be disposed of 28 days after issue of this test certificate

Remarks

Approved for Issue [redacted]

T McLelland (Director)

Date 14/04/2026

UKAS TESTING
2643

MATtest Limited
materials testing & consultancy

BOREHOLE	SAMPLE	DEPTH (m)	WATER CONTENT (%)	BULK DENSITY (Mg/m^3)	DRY DENSITY (Mg/m^3)
BH01	C	7.30-7.48	25.6	-	-

Tested in accordance with ISRM (2007)

SUMMARY OF WATER CONTENT AND DENSITY TEST RESULTS

MATtest Limited
materials testing & consultancy

BOREHOLE	SAMPLE	DEPTH (m)	MOISTURE CONTENT (%)	TYPE OF TEST * (see below)	CORE DIAMETER (mm)	EQUIVALENT DIAMETER (mm)	PLATEN SEPARATION (mm)	FAILURE LOAD (kN)	Is (MPa)	Is(50) (MPa)
BH01	C	7.30-7.48	As Received	D	101.63	101.63	101.63	0.52	0.05	0.07
				A	101.63	69.32	37.13	0.47	0.10	0.11

NOTE: N/M - Not measured
NOTE: A dash (-) signifies that scale did not register a reading

* I = IRREGULAR TEST
D = DIAMETRAL TEST
A = AXIAL TEST

Mean Is(50) - Axial tests	0.11
Mean Is(50) - Diametrical tests	0.07
Ia(50)	1.66

Tested in accordance with ISRM (2007)

SUMMARY OF POINT LOAD TEST RESULTS

MATtest Limited
materials testing & consultancy

BOREHOLE	SAMPLE	DEPTH (m)	MOISTURE CONTENT (%)	TYPE OF TEST * (see below)	CORE DIAMETER (mm)	EQUIVALENT DIAMETER (mm)	PLATEN SEPARATION (mm)	FAILURE LOAD (kN)	Is (MPa)	Is(50) (MPa)
BH02	C	11.65-11.87	As Received	D	101.58	101.58	101.58	0.58	0.06	0.08
				A	101.58	70.80	38.76	0.42	0.08	0.10

NOTE: N/M - Not measured
NOTE: A dash (-) signifies that scale did not register a reading

* I = IRREGULAR TEST
D = DIAMETRAL TEST
A = AXIAL TEST

Mean Is(50) - Axial tests	0.10
Mean Is(50) - Diametrical tests	0.08
Ia(50)	1.25

Tested in accordance with ISRM (2007)

SUMMARY OF POINT LOAD TEST RESULTS

MATtest Limited
materials testing & consultancy

BOREHOLE	SAMPLE	DEPTH (m)	MOISTURE CONTENT (%)	TYPE OF TEST * (see below)	CORE DIAMETER (mm)	EQUIVALENT DIAMETER (mm)	PLATEN SEPARATION (mm)	FAILURE LOAD (kN)	Is (MPa)	Is(50) (MPa)
BH03	C	6.08-6.30	As Received	D	101.66	101.66	101.66	0.69	0.07	0.09
				A	101.66	64.50	32.14	0.58	0.14	0.16
	C	6.30-6.50	As Received	D	101.61	101.61	101.61	0.38	0.04	0.05
				A	101.61	67.95	35.69	0.39	0.08	0.10

NOTE: N/M - Not measured
NOTE: A dash (-) signifies that scale did not register a reading

* I = IRREGULAR TEST
D = DIAMETRAL TEST
A = AXIAL TEST

Mean Is(50) - Axial tests	0.13
Mean Is(50) - Diametrical tests	0.07
Ia(50)	1.77

Tested in accordance with ISRM (2007)

SUMMARY OF POINT LOAD TEST RESULTS

APPENDIX 14

Geoenvironmental Laboratory Results

Certificate of Analysis

Certificate Number	26-05167	*Issued:*	18-Mar-26

Client Geotechnics LTD
Unit 5 Orchard Court
Heron Road
Sowton Industrial Estate
Exeter
Devon
EX2 7NR

Our Reference 26-05167

Client Reference ~ PE262018

Order No ~ OE46862

Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Description 3 Soil samples, 1 Leachate prepared by DETS sample.

Date Received 04-Mar-26

Date Started 04-Mar-26

Date Completed 18-Mar-26

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By [redacted]

Reyhan Irfan
Operations Manager

2139

Sample Deviations present. See Deviation Table Section for details.

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05167
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2650793	2650794	2650795
			Sample ID ~	BH04	BH03	BH03
			Depth ~	0.20	0.10	0.20
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	25/02/2026	25/02/2026	25/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
Metals						
Antimony	DETSC 2301*	1	mg/kg	1.0	3.5	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	9.1	10	8.2
Barium	DETSC 2301#	1.5	mg/kg	72	110	72
Beryllium	DETSC 2301#	0.2	mg/kg	0.9	1.1	0.7
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.6	0.5	0.6
Cadmium	DETSC 2301#	0.1	mg/kg	0.9	1.7	1.0
Chromium III	DETSC 2301*	0.15	mg/kg	23	25	18
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	17	14	9.8
Iron	DETSC 2301	25	mg/kg	21000	24000	17000
Lead	DETSC 2301#	0.3	mg/kg	20	43	19
Manganese	DETSC 2301#	20	mg/kg	830	1400	840
Mercury (Elemental)	DETSC 2333*	0.0006	mg/kg	< 0.0006	< 0.0006	< 0.0006
Mercury (Methyl)	DETSC 2332*	0.1	mg/kg	< 0.10	< 0.10	< 0.10
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Nickel	DETSC 2301#	1	mg/kg	18	20	14
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301#	0.8	mg/kg	35	40	30
Zinc	DETSC 2301#	1	mg/kg	69	69	53
Inorganics						
pH	DETSC 2008#		pH	7.8	9.1	9.9
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1
FOC	DETSC 2084#	0.001		0.017	0.025	0.039
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	25	17	16
Sulphur as S, Total	DETSC 2320	0.01	%	0.02	0.04	0.04
Petroleum Hydrocarbons						
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic >EC10-EC12	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50
Aliphatic >EC12-EC16	DETSC 3521#	1.2	mg/kg	< 1.20	< 1.20	< 1.20
Aliphatic >EC16-EC21	DETSC 3521#	1.5	mg/kg	2.37	6.28	< 1.50
Aliphatic >EC21-EC35	DETSC 3521#	3.4	mg/kg	< 3.40	< 3.40	< 3.40
Aliphatic >EC35-EC40	DETSC 3521*	3.4	mg/kg	< 3.40	< 3.40	< 3.40
Aliphatic >EC40-EC44	DETSC 3521*	3.4	mg/kg	< 3.40	< 3.40	< 3.40
Aliphatic C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic >EC10-EC12	DETSC 3521#	0.9	mg/kg	< 0.90	< 0.90	< 0.90

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05167
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2650793	2650794	2650795
			Sample ID ~	BH04	BH03	BH03
			Depth ~	0.20	0.10	0.20
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	25/02/2026	25/02/2026	25/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
Aromatic >EC12-EC16	DETSC 3521#	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Aromatic >EC16-EC21	DETSC 3521#	0.6	mg/kg	0.85	1.25	< 0.60
Aromatic >EC21-EC35	DETSC 3521#	1.4	mg/kg	< 1.40	< 1.40	< 1.40
Aromatic >EC35-EC40	DETSC 3521*	1.4	mg/kg	< 1.40	< 1.40	< 1.40
Aromatic >EC40-EC44	DETSC 3521*	1.4	mg/kg	< 1.40	< 1.40	< 1.40
Aromatic C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00
TPH Ali/Aro C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00
PAHs						
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	< 0.10
Phenols						
Cresols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Naphthols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Phenol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Resorcinol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Trimethylphenol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Xylenols & Ethylphenols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Phenols, Total	DETSC 3451*	5	mg/kg	< 5.0	< 5.0	< 5.0

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05167
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2650793	2650794	2650795
			Sample ID ~	BH04	BH03	BH03
			Depth ~	0.20	0.10	0.20
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	25/02/2026	25/02/2026	25/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
VOCs						
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05167
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2650793	2650794	2650795
			Sample ID ~	BH04	BH03	BH03
			Depth ~	0.20	0.10	0.20
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	25/02/2026	25/02/2026	25/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
VOC TICs - Semi Quant	DETSC 3431*			N	N	N

Summary of Chemical Analysis
Leachate Samples

Our Ref 26-05167
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Lab No	2650796
Sample ID ~	BH03
Depth ~	0.50
Other ID ~	
Sample Type ~	ES
Sampling Date ~	25/02/2026
Sampling Time ~	n/s

Test	Method	LOD	Units	
Preparation				
Leachate 2:1 250g Non-WAC	DETSC 1009*			Y
Metals				
Antimony, Dissolved	DETSC 2306	0.17	ug/l	< 0.17
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.92
Barium, Dissolved	DETSC 2306	0.26	ug/l	11.72
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	0.12
Boron, Dissolved	DETSC 2306*	12	ug/l	< 12.00
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03
Calcium, Dissolved	DETSC 2306	0.09	mg/l	2.8
Chromium III, Dissolved	DETSC 2306*	1	ug/l	2.98
Chromium, Hexavalent	DETSC 2203	7	ug/l	< 7.0
Copper, Dissolved (Low Level)	DETSC 2306	0.3	ug/l	1.67
Iron, Dissolved	DETSC 2306	5.5	ug/l	1633
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.68
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	1.5
Manganese, Dissolved	DETSC 2306	0.22	ug/l	20.67
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l	< 1.10
Nickel, Dissolved	DETSC 2306	0.5	ug/l	1.89
Selenium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	4.02
Zinc, Dissolved	DETSC 2306	1.3	ug/l	3.66
Inorganics				
pH	DETSC 2008		pH	6.9
Cyanide, Free Low Level	DETSC 2131	0.1	ug/l	< 0.1
Cyanide, Complex Low Level	DETSC 2131	0.1	ug/l	< 0.1
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	< 0.015
Chloride	DETSC 2055	0.1	mg/l	0.93
Fluoride	DETSC 2055*	0.1	mg/l	< 0.10
Sulphate as SO4	DETSC 2055	0.1	mg/l	1.2
Phenols				
Cresols	DETSC 3451*	0.1	ug/l	< 0.10
Naphthols	DETSC 3451*	0.1	ug/l	< 0.10
Phenol	DETSC 3451*	0.1	ug/l	< 0.10
Resorcinol	DETSC 3451*	0.1	ug/l	< 0.10
Trimethylphenol	DETSC 3451*	0.1	ug/l	< 0.10
Xylenols & Ethylphenols	DETSC 3451*	0.1	ug/l	< 0.10
Phenols, Total	DETSC 3451*	2	ug/l	< 2.0

Summary of Asbestos Analysis
Soil Samples

Our Ref 26-05167
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2650793	BH04 0.20	SOIL	NAD	none	Lee Kerridge
2650794	BH03 0.10	SOIL	NAD	none	Lee Kerridge
2650795	BH03 0.20	SOIL	NAD	none	Lee Kerridge

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 26-05167
Client Ref ~ PE262018
Contract ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2650793	BH04 0.20 SOIL	25/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2		
2650794	BH03 0.10 SOIL	25/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2		
2650795	BH03 0.20 SOIL	25/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2		
2650796	BH03 0.50 LEACHATE	25/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2	Chromium, Hexavalent (4 days), Kone (4 days), pH/Cond (1 days)	

Key: G-Glass P-Plastic J-Jar T-Tub

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Key:
~ Sample details are provided by the client and can affect the validity of the results
***** -not accredited.
-MCERTS (accreditation only applies if report carries the MCERTS logo).
$ -subcontracted.
n/s -not supplied.
I/S -insufficient sample.
U/S -unsuitable sample.
t/f -to follow.
nd -not detected.

End of Report Ver 25.10.03

Certificate of Analysis

Certificate Number	26-05170-1	*Issued:*	29-May-26

Client Geotechnics LTD
Unit 5 Orchard Court
Heron Road
Sowton Industrial Estate
Exeter
Devon
EX2 7NR

Our Reference 26-05170-1

Client Reference ~ PE262018

Order No ~ OE46862

Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Description 3 Soil samples, 1 Leachate prepared by DETS sample.

Date Received 04-Mar-26

Date Started 04-Mar-26

Date Completed 29-May-26

Test Procedures Identified by prefix DETSn (details on request).

Notes **This report supersedes 26-05170; Sample info updated at client request**
Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By [redacted]

Reyhan Irfan
Operations Manager

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Sample Deviations present. See Deviation Table Section for details.

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05170-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2650804	2650805	2650806
			Sample ID ~	TP01	TP01	TP02
			Depth ~	0.10	0.20	0.50
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	26/02/2026	26/02/2026	26/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
Metals						
Antimony	DETSC 2301*	1	mg/kg	< 1.0	1.1	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	9.2	11	3.6
Barium	DETSC 2301#	1.5	mg/kg	83	91	34
Beryllium	DETSC 2301#	0.2	mg/kg	0.9	1.2	0.4
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.8	0.6	0.4
Cadmium	DETSC 2301#	0.1	mg/kg	1.1	1.2	0.7
Chromium III	DETSC 2301*	0.15	mg/kg	23	30	11
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	14	23	6.2
Iron	DETSC 2301	25	mg/kg	20000	26000	9100
Lead	DETSC 2301#	0.3	mg/kg	23	17	5.8
Manganese	DETSC 2301#	20	mg/kg	1000	1100	390
Mercury (Elemental)	DETSC 2333*	0.0006	mg/kg	< 0.0006	< 0.0006	< 0.0006
Mercury (Methyl)	DETSC 2332*	0.1	mg/kg	< 0.10	< 0.10	< 0.10
Mercury	DETSC 2325#	0.05	mg/kg	0.08	0.06	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Nickel	DETSC 2301#	1	mg/kg	18	25	7.5
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301#	0.8	mg/kg	36	46	16
Zinc	DETSC 2301#	1	mg/kg	63	71	31
Inorganics						
pH	DETSC 2008#		pH	8.8	8.6	8.9
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1
FOC	DETSC 2084#	0.001		0.025	0.018	0.035
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	35	13	33
Sulphur as S, Total	DETSC 2320	0.01	%	0.04	0.03	0.02
Petroleum Hydrocarbons						
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic >EC10-EC12	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50
Aliphatic >EC12-EC16	DETSC 3521#	1.2	mg/kg	< 1.20	< 1.20	< 1.20
Aliphatic >EC16-EC21	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50
Aliphatic >EC21-EC35	DETSC 3521#	3.4	mg/kg	< 3.40	< 3.40	< 3.40
Aliphatic >EC35-EC40	DETSC 3521*	3.4	mg/kg	< 3.40	< 3.40	< 3.40
Aliphatic >EC40-EC44	DETSC 3521*	3.4	mg/kg	< 3.40	< 3.40	< 3.40
Aliphatic C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic >EC10-EC12	DETSC 3521#	0.9	mg/kg	< 0.90	< 0.90	< 0.90

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05170-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2650804	2650805	2650806
			Sample ID ~	TP01	TP01	TP02
			Depth ~	0.10	0.20	0.50
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	26/02/2026	26/02/2026	26/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
Aromatic >EC12-EC16	DETSC 3521#	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Aromatic >EC16-EC21	DETSC 3521#	0.6	mg/kg	0.77	< 0.60	< 0.60
Aromatic >EC21-EC35	DETSC 3521#	1.4	mg/kg	2.07	< 1.40	< 1.40
Aromatic >EC35-EC40	DETSC 3521*	1.4	mg/kg	< 1.40	< 1.40	< 1.40
Aromatic >EC40-EC44	DETSC 3521*	1.4	mg/kg	< 1.40	< 1.40	< 1.40
Aromatic C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00
TPH Ali/Aro C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00
PAHs						
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	< 0.10
Phenols						
Cresols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Naphthols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Phenol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Resorcinol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Trimethylphenol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Xylenols & Ethylphenols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Phenols, Total	DETSC 3451*	5	mg/kg	< 5.0	< 5.0	< 5.0

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05170-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2650804	2650805	2650806
			Sample ID ~	TP01	TP01	TP02
			Depth ~	0.10	0.20	0.50
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	26/02/2026	26/02/2026	26/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
VOCs						
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05170-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2650804	2650805	2650806
			Sample ID ~	TP01	TP01	TP02
			Depth ~	0.10	0.20	0.50
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	26/02/2026	26/02/2026	26/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
VOC TICs - Semi Quant	DETSC 3431*			N	N	N

Summary of Chemical Analysis
Leachate Samples

Our Ref 26-05170-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Lab No	2650807
Sample ID ~	TP02
Depth ~	0.20
Other ID ~	
Sample Type ~	ES
Sampling Date ~	26/02/2026
Sampling Time ~	n/s

Test	Method	LOD	Units	
Preparation				
Leachate 2:1 250g Non-WAC	DETSC 1009*			Y
Metals				
Antimony, Dissolved	DETSC 2306	0.17	ug/l	< 0.17
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.28
Barium, Dissolved	DETSC 2306	0.26	ug/l	5.80
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.10
Boron, Dissolved	DETSC 2306*	12	ug/l	< 12.00
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03
Calcium, Dissolved	DETSC 2306	0.09	mg/l	3.5
Chromium III, Dissolved	DETSC 2306*	1	ug/l	< 1.00
Chromium, Hexavalent	DETSC 2203	7	ug/l	< 7.0
Copper, Dissolved (Low Level)	DETSC 2306	0.3	ug/l	0.95
Iron, Dissolved	DETSC 2306	5.5	ug/l	531.1
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.84
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	0.33
Manganese, Dissolved	DETSC 2306	0.22	ug/l	5.72
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l	< 1.10
Nickel, Dissolved	DETSC 2306	0.5	ug/l	0.61
Selenium, Dissolved	DETSC 2306	0.25	ug/l	< 0.25
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	1.38
Zinc, Dissolved	DETSC 2306	1.3	ug/l	3.40
Inorganics				
pH	DETSC 2008		pH	7.3
Cyanide, Free Low Level	DETSC 2131	0.1	ug/l	< 0.1
Cyanide, Complex Low Level	DETSC 2131	0.1	ug/l	< 0.1
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	< 0.015
Chloride	DETSC 2055	0.1	mg/l	0.70
Fluoride	DETSC 2055*	0.1	mg/l	0.11
Sulphate as SO4	DETSC 2055	0.1	mg/l	0.72
Phenols				
Cresols	DETSC 3451*	0.1	ug/l	< 0.10
Naphthols	DETSC 3451*	0.1	ug/l	< 0.10
Phenol	DETSC 3451*	0.1	ug/l	< 0.10
Resorcinol	DETSC 3451*	0.1	ug/l	< 0.10
Trimethylphenol	DETSC 3451*	0.1	ug/l	< 0.10
Xylenols & Ethylphenols	DETSC 3451*	0.1	ug/l	< 0.10
Phenols, Total	DETSC 3451*	2	ug/l	< 2.0

Summary of Asbestos Analysis

Soil Samples

Our Ref 26-05170-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2650804	TP01 0.10	SOIL	NAD	none	James Heath
2650805	TP01 0.20	SOIL	NAD	none	James Heath
2650806	TP02 0.50	SOIL	NAD	none	James Heath

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 26-05170-1
Client Ref ~ PE262018
Contract ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests	Headspace in container for tests
2650804	TP01 0.10 SOIL	26/02/26	GJ 250ml, GJ 60ml ((Headspace)) x2, PT 1L x2			BTEX/C5-10, VOC, HS
2650805	TP01 0.20 SOIL	26/02/26	GJ 250ml, GJ 60ml ((Headspace)) x2, PT 1L x2			BTEX/C5-10, VOC, HS
2650806	TP02 0.50 SOIL	26/02/26	GJ 250ml, GJ 60ml ((Headspace)) x2, PT 1L x2			BTEX/C5-10, VOC, HS
2650807	TP02 0.20 LEACHATE	26/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2	Chromium, Hexavalent (4 days), Kone (4 days), pH/Cond (1 days)		

Key: G-Glass P-Plastic J-Jar T-Tub

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Certificate of Analysis

Certificate Number	26-05446-1	*Issued:*	29-May-26

Client Geotechnics LTD
Unit 5 Orchard Court
Heron Road
Sowton Industrial Estate
Exeter
Devon
EX2 7NR

Our Reference 26-05446-1

Client Reference ~ PE262018

Order No ~ OE46893

Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Description 2 Soil samples.

Date Received 06-Mar-26

Date Started 06-Mar-26

Date Completed 29-May-26

Test Procedures Identified by prefix DETSn (details on request).

Notes **This report supersedes 26-05446; Sample info updated at client request**

Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By [redacted]

Reyhan Irfan
Operations Manager

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Summary of Chemical Analysis
Soil Samples

Our Ref 26-05446-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2652318	2652319
			Sample ID ~	BH02	DCP03
			Depth ~	0.30	0.45
			Other ID ~		
			Sample Type ~	ES	ES
			Sampling Date ~	02/03/2026	03/03/2026
			Sampling Time ~	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Metals					
Antimony	DETSC 2301*	1	mg/kg	< 1.0	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	5.4	8.0
Barium	DETSC 2301#	1.5	mg/kg	840	210
Beryllium	DETSC 2301#	0.2	mg/kg	< 0.2	0.8
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.2	0.3
Cadmium	DETSC 2301#	0.1	mg/kg	1.2	1.0
Chromium III	DETSC 2301*	0.15	mg/kg	6.5	19
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	9.7	7.4
Iron	DETSC 2301	25	mg/kg	4700	19000
Lead	DETSC 2301#	0.3	mg/kg	65	21
Manganese	DETSC 2301#	20	mg/kg	240	890
Mercury (Elemental)	DETSC 2333*	0.0006	mg/kg	< 0.0006	< 0.0006
Mercury (Methyl)	DETSC 2332*	0.1	mg/kg	< 0.10	< 0.10
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	1.3	< 0.4
Nickel	DETSC 2301#	1	mg/kg	5.0	16
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5
Vanadium	DETSC 2301#	0.8	mg/kg	8.8	32
Zinc	DETSC 2301#	1	mg/kg	170	64
Inorganics					
pH	DETSC 2008#		pH	9.3	8.5
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1
FOC	DETSC 2084#	0.001		0.056	0.008
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	36	26
Sulphur as S, Total	DETSC 2320	0.01	%	0.04	0.02
Petroleum Hydrocarbons					
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aliphatic >EC10-EC12	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50
Aliphatic >EC12-EC16	DETSC 3521#	1.2	mg/kg	< 1.20	< 1.20
Aliphatic >EC16-EC21	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50
Aliphatic >EC21-EC35	DETSC 3521#	3.4	mg/kg	< 3.40	< 3.40
Aliphatic >EC35-EC40	DETSC 3521*	3.4	mg/kg	< 3.40	< 3.40
Aliphatic >EC40-EC44	DETSC 3521*	3.4	mg/kg	< 3.40	< 3.40
Aliphatic C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aromatic >EC10-EC12	DETSC 3521#	0.9	mg/kg	< 0.90	< 0.90

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05446-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2652318	2652319
			Sample ID ~	BH02	DCP03
			Depth ~	0.30	0.45
			Other ID ~		
			Sample Type ~	ES	ES
			Sampling Date ~	02/03/2026	03/03/2026
			Sampling Time ~	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Aromatic >EC12-EC16	DETSC 3521#	0.5	mg/kg	< 0.50	< 0.50
Aromatic >EC16-EC21	DETSC 3521#	0.6	mg/kg	1.03	1.07
Aromatic >EC21-EC35	DETSC 3521#	1.4	mg/kg	< 1.40	< 1.40
Aromatic >EC35-EC40	DETSC 3521*	1.4	mg/kg	< 1.40	< 1.40
Aromatic >EC40-EC44	DETSC 3521*	1.4	mg/kg	< 1.40	< 1.40
Aromatic C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00
TPH Ali/Aro C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00
PAHs					
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10
Phenols					
Cresols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50
Naphthols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50
Phenol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50
Resorcinol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50
Trimethylphenol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50
Xylenols & Ethylphenols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50
Phenols, Total	DETSC 3451*	5	mg/kg	< 5.0	< 5.0

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05446-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Lab No	2652318	2652319
Sample ID ~	BH02	DCP03
Depth ~	0.30	0.45
Other ID ~		
Sample Type ~	ES	ES
Sampling Date ~	02/03/2026	03/03/2026
Sampling Time ~	n/s	n/s

Test	Method	LOD	Units		
VOCs					
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05446-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2652318	2652319
			Sample ID ~	BH02	DCP03
			Depth ~	0.30	0.45
			Other ID ~		
			Sample Type ~	ES	ES
			Sampling Date ~	02/03/2026	03/03/2026
			Sampling Time ~	n/s	n/s
Test	**Method**	**LOD**	**Units**		
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01
VOC TICs - Semi Quant	DETSC 3431*			N	N

Summary of Asbestos Analysis

Soil Samples

Our Ref 26-05446-1
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2652318	BH02 0.30	SOIL	NAD	none	Lucy Lindsley
2652319	DCP03 0.45	SOIL	NAD	none	Lucy Lindsley

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 26-05446-1
Client Ref ~ PE262018
Contract ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2652318	BH02 0.30 SOIL	02/03/26	GJ 250ml, GJ 60ml x2, PT 1L x2		
2652319	DCP03 0.45 SOIL	03/03/26	GJ 250ml, GJ 60ml x2, PT 1L x2		

Key: G-Glass P-Plastic J-Jar T-Tub
Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Certificate of Analysis

Certificate Number	26-05447-2	*Issued:*	29-May-26

Client Geotechnics LTD
Unit 5 Orchard Court
Heron Road
Sowton Industrial Estate
Exeter
Devon
EX2 7NR

Our Reference 26-05447-2

Client Reference ~ PE262018

Order No ~ OE46893

Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Description 3 Soil samples, 2 Leachate prepared by DETS samples.

Date Received 06-Mar-26

Date Started 06-Mar-26

Date Completed 29-May-26

Test Procedures Identified by prefix DETSn (details on request).

Notes **This report supersedes 26-05447-1; Sample info updated at client request**
Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By [redacted]

Reyhan Irfan
Operations Manager

2139

Sample Deviations present. See Deviation Table Section for details.

Normec DETS Limited
Unit 2, Park Road Industrial Estate South, Consett, Co Durham, DH8 5PY
Tel: 01207 582333 • email: info-dets@normecgroup.com • normecdets.com

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05447-2
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

	Lab No	2652320	2652321	2652322
	Sample ID ~	BH01	DCP01	DCP02
	Depth ~	1.00	0.50	0.20
	Other ID ~			
	Sample Type ~	ES	ES	ES
	Sampling Date ~	27/02/2026	27/02/2026	27/02/2026
	Sampling Time ~	n/s	n/s	n/s

Test	Method	LOD	Units			
Metals						
Antimony	DETSC 2301*	1	mg/kg	< 1.0	< 1.0	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	1.0	4.8	5.7
Barium	DETSC 2301#	1.5	mg/kg	26	42	680
Beryllium	DETSC 2301#	0.2	mg/kg	< 0.2	0.2	< 0.2
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	< 0.2	0.3	< 0.2
Cadmium	DETSC 2301#	0.1	mg/kg	0.5	0.6	1.1
Chromium III	DETSC 2301*	0.15	mg/kg	1.7	6.7	4.2
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	1.5	3.8	5.3
Iron	DETSC 2301	25	mg/kg	2000	7700	3700
Lead	DETSC 2301#	0.3	mg/kg	3.4	4.1	110
Manganese	DETSC 2301#	20	mg/kg	170	310	310
Mercury (Elemental)	DETSC 2333*	0.0006	mg/kg	< 0.0006	< 0.0006	< 0.0006
Mercury (Methyl)	DETSC 2332*	0.1	mg/kg	< 0.10	< 0.10	< 0.10
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	< 0.4	< 0.4	1.9
Nickel	DETSC 2301#	1	mg/kg	2.7	6.6	5.4
Selenium	DETSC 2301#	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vanadium	DETSC 2301#	0.8	mg/kg	3.4	12	8.4
Zinc	DETSC 2301#	1	mg/kg	16	28	120
Inorganics						
pH	DETSC 2008#		pH	9.7	9.4	9.7
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1
FOC	DETSC 2084#	0.001		0.043	0.055	0.067
Sulphate Aqueous Extract as SO4 (2:1)	DETSC 2076#	10	mg/l	13	24	1200
Sulphur as S, Total	DETSC 2320	0.01	%	0.01	0.01	0.03
Petroleum Hydrocarbons						
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aliphatic >EC10-EC12	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50
Aliphatic >EC12-EC16	DETSC 3521#	1.2	mg/kg	< 1.20	< 1.20	< 1.20
Aliphatic >EC16-EC21	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50
Aliphatic >EC21-EC35	DETSC 3521#	3.4	mg/kg	< 3.40	< 3.40	< 3.40
Aliphatic >EC35-EC40	DETSC 3521*	3.4	mg/kg	< 3.40	< 3.40	< 3.40
Aliphatic >EC40-EC44	DETSC 3521*	3.4	mg/kg	< 3.40	< 3.40	< 3.40
Aliphatic C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Aromatic >EC10-EC12	DETSC 3521#	0.9	mg/kg	< 0.90	< 0.90	< 0.90

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05447-2
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2652320	2652321	2652322
			Sample ID ~	BH01	DCP01	DCP02
			Depth ~	1.00	0.50	0.20
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	27/02/2026	27/02/2026	27/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
Aromatic >EC12-EC16	DETSC 3521#	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Aromatic >EC16-EC21	DETSC 3521#	0.6	mg/kg	1.21	1.08	0.93
Aromatic >EC21-EC35	DETSC 3521#	1.4	mg/kg	< 1.40	< 1.40	< 1.40
Aromatic >EC35-EC40	DETSC 3521*	1.4	mg/kg	< 1.40	< 1.40	< 1.40
Aromatic >EC40-EC44	DETSC 3521*	1.4	mg/kg	< 1.40	< 1.40	< 1.40
Aromatic C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00
TPH Ali/Aro C5-C44	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00
PAHs						
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	< 0.10
Phenols						
Cresols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Naphthols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Phenol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Resorcinol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Trimethylphenol	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Xylenols & Ethylphenols	DETSC 3451*	0.5	mg/kg	< 0.50	< 0.50	< 0.50
Phenols, Total	DETSC 3451*	5	mg/kg	< 5.0	< 5.0	< 5.0

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05447-2
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2652320	2652321	2652322
			Sample ID ~	BH01	DCP01	DCP02
			Depth ~	1.00	0.50	0.20
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	27/02/2026	27/02/2026	27/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
VOCs						
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 26-05447-2
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

			Lab No	2652320	2652321	2652322
			Sample ID ~	BH01	DCP01	DCP02
			Depth ~	1.00	0.50	0.20
			Other ID ~			
			Sample Type ~	ES	ES	ES
			Sampling Date ~	27/02/2026	27/02/2026	27/02/2026
			Sampling Time ~	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**			
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01
VOC TICs - Semi Quant	DETSC 3431*			N	N	N

Summary of Chemical Analysis
Leachate Samples

Our Ref 26-05447-2
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Lab No	2652323	2652324
Sample ID ~	BH01	DCP02
Depth ~	0.20	0.10
Other ID ~		
Sample Type ~	ES	ES
Sampling Date ~	27/02/2026	27/02/2026
Sampling Time ~	n/s	n/s

Test	Method	LOD	Units		
Preparation					
Leachate 2:1 250g Non-WAC	DETSC 1009*			Y	Y
Metals					
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.21	< 0.17
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.94	0.92
Barium, Dissolved	DETSC 2306	0.26	ug/l	11.71	74.91
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	0.13	< 0.10
Boron, Dissolved	DETSC 2306*	12	ug/l	< 12.00	< 12.00
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	0.06	< 0.03
Calcium, Dissolved	DETSC 2306	0.09	mg/l	12	4.9
Chromium III, Dissolved	DETSC 2306*	1	ug/l	3.90	1.05
Chromium, Hexavalent	DETSC 2203	7	ug/l	< 7.0	< 7.0
Copper, Dissolved (Low Level)	DETSC 2306	0.3	ug/l	2.23	0.96
Iron, Dissolved	DETSC 2306	5.5	ug/l	1517	75.48
Lead, Dissolved	DETSC 2306	0.09	ug/l	2.95	1.36
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	0.69	0.47
Manganese, Dissolved	DETSC 2306	0.22	ug/l	21.52	1.21
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l	< 1.10	< 1.10
Nickel, Dissolved	DETSC 2306	0.5	ug/l	2.57	< 0.50
Selenium, Dissolved	DETSC 2306	0.25	ug/l	0.31	< 0.25
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	5.15	0.77
Zinc, Dissolved	DETSC 2306	1.3	ug/l	14.39	4.40
Inorganics					
pH	DETSC 2008		pH	8.3	8.6
Cyanide, Free Low Level	DETSC 2131	0.1	ug/l	< 0.1	< 0.1
Cyanide, Complex Low Level	DETSC 2131	0.1	ug/l	< 0.1	< 0.1
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.021	0.035
Chloride	DETSC 2055	0.1	mg/l	19	4.8
Fluoride	DETSC 2055*	0.1	mg/l	0.33	0.39
Sulphate as SO4	DETSC 2055	0.1	mg/l	5.9	4.6
Phenols					
Cresols	DETSC 3451*	0.1	ug/l	< 0.10	< 0.10
Naphthols	DETSC 3451*	0.1	ug/l	< 0.10	< 0.10
Phenol	DETSC 3451*	0.1	ug/l	< 0.10	< 0.10
Resorcinol	DETSC 3451*	0.1	ug/l	0.17	< 0.10
Trimethylphenol	DETSC 3451*	0.1	ug/l	< 0.10	< 0.10
Xylenols & Ethylphenols	DETSC 3451*	0.1	ug/l	< 0.10	< 0.10
Phenols, Total	DETSC 3451*	2	ug/l	< 2.0	< 2.0

Summary of Asbestos Analysis

Soil Samples

Our Ref 26-05447-2
Client Ref ~ PE262018
Contract Title ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2652320	BH01 1.00	SOIL	NAD	none	James Heath
2652321	DCP01 0.50	SOIL	NAD	none	James Heath
2652322	DCP02 0.20	SOIL	NAD	none	James Heath

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 26-05447-2
Client Ref ~ PE262018
Contract ~ SALISBURY DISTRICT HOSPITAL ELECTIVE CARE CENTRE

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2652320	BH01 1.00 SOIL	27/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2		
2652321	DCP01 0.50 SOIL	27/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2		
2652322	DCP02 0.20 SOIL	27/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2		
2652323	BH01 0.20 LEACHATE	27/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2	Chromium, Hexavalent (4 days), Kone (4 days), pH/Cond (1 days)	
2652324	DCP02 0.10 LEACHATE	27/02/26	GJ 250ml, GJ 60ml x2, PT 1L x2	Chromium, Hexavalent (4 days), Kone (4 days), pH/Cond (1 days)	

Key: G-Glass P-Plastic J-Jar T-Tub

Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

APPENDIX 15

Investigation Technical & General Notes

INVESTIGATION TECHNIQUES

INTRODUCTION

The following brief review of Ground Investigation techniques, generally used as part of most Site Investigations in the UK, summarises their methodology, advantages and limitations. Detailed descriptions of the techniques are available and can be provided on request. This review should be read in conjunction with the accompanying General Notes.

TRIAL PITS

The trial pit is amongst the simplest yet most effective means of identifying shallow ground conditions on a site. Its advantages include simplicity, speed, potential accuracy and cost-effectiveness. The trial pit is most commonly formed using a back-acting excavator which can typically determine ground conditions to some 4 metres below ground level. Hand excavation is often used to locate, expose and detail existing foundations, features or services. In general, it is difficult to extend pits significantly below the water table in predominantly granular soils, where flows can cause instability. Unless otherwise stated, the trial pits will not have been provided with temporary side support during their construction. Under such circumstances, entrance into the pit is not permitted and hence observations will have been made from the ground surface and samples taken from the excavator bucket.

Where access for personnel is required to allow close observation of the exposed strata, the taking of samples and the carrying out of in situ tests, the sides of the trial pits (Observation Pits in BS 5930:2015) will be made safe using temporary supports or the sides battered back to a stable angle. Some limited access to such Trial Pits (Observation Pits) at depths less than 1m may be allowed in stable conditions or where the sides are benched or battered back to a safe angle.

Trends in strata type, level and thickness can be determined, shear surfaces identified and the behaviour of plant, excavation sides and excavated materials can be related to the construction process. They are particularly valuable in land slip investigations. Some types of in situ test can be undertaken in such pits and large disturbed or block samples obtained.

CABLE PERCUSSION BORING

The light Cable Percussion technique of soft ground boring, typically at a diameter of 150mm, is a well-established simple and flexible method of boring vertical holes and generally allows data to be obtained in respect of strata conditions other than rock. A tubular cutter (for cohesive soils) or shell with a flap valve (for granular soils) is repeatedly lifted and dropped using a winch and rope operating from an "A" frame. Soil which enters these tools is regularly removed and either sampled for subsequent examination or test, or laid to one side for later removal off site and licensed disposal or, if permitted by the Client, use as backfill. Steel casing will have been used to prevent collapse of the borehole sides where necessary. A degree of disturbance of soil and mixing of layers is inevitable and the presence of very thin layers of different soils within a particular stratum may not be identified. Changes in strata type can only be detected on recognition of a change in soil samples at the surface, after the interface has been passed. For the foregoing reasons, depth measurements should not be considered to be more accurate than 0.10 metre. The technique can determine ground conditions to depths in excess of 30 metres under suitable circumstances and usually causes less surface disturbance than trial pitting.

In cohesive soils cylindrical samples are retrieved by driving or pushing in 100mm nominal diameter tubes. In soft soils, piston sampling or vane testing may be undertaken. In granular soils and often in cohesive materials, in situ Standard Penetration Tests (SPT's) are performed. The SPT records the number of standard blows required to drive a 50mm diameter open or cone ended probe for 300mm after an initial 150mm penetration. A modified method of recording is used in denser strata. Small disturbed samples are obtained throughout.

ROTARY DRILLING

Rotary Drilling to produce cores by rotating an annular diamond-impregnated tube or barrel into the ground is the technique most appropriate to the forming of site investigation boreholes through rock or other hard strata. It has the advantage of being able to be used vertically or at an angle. Core diameters of less than 100mm are most common for site investigation purposes. Core is normally retrieved in plastic lining tubes. A flushing fluid such as air, water or foam is used to cool the bit and carry cuttings to the surface. Depths in excess of 60 metres can be achieved under suitable circumstances using rotary techniques, with minimal surface disturbance.

Examination of cores allows detailed rock description and generally enables angled discontinuity surfaces to be observed. However, vertical holes do not necessarily reveal the presence of vertical or near-vertical fissures or joint discontinuities. The core type and/or techniques used will depend on the ground conditions. Where open hole rotary drilling is employed, descriptions of strata result from examination at the surface of small particles ejected from the borehole in the flushing medium. In consequence, no indication of fissuring, bedding, consistency or degree of weathering can be obtained.

DYNAMIC SAMPLING

This technique involves the driving of an open-ended tube into the ground and retrieval of the soil which enters the tube. It was previously called window or windowless sampling. The term "window sample" arose from the original device which had a "window" or slot cut into the side of the tube through which samples were taken. This was superseded by the use of a thin-walled plastic liner to retrieve the soil sample from within a sampler (windowless sampling) which has a solid wall. Line diameters range from 36 to 86mm. Such samples can be used for qualitative logging, selection of samples for classification and chemical analysis and for obtaining a rudimentary assessment of strength.

Driving devices can be hand-held or machine mounted and the drive tubes are typically in 1m lengths. Depending on the type of rig used, the hole formed can be cased to prevent collapse of the borehole sides. Where the type of rig does not allow the insertion of casing, the success of this technique can be limited when soils and groundwater conditions are such that the sides of the hole collapse on withdrawal of the sampler. Obstructions within the ground, the density of the material or its strength can also limit the depth and rate of penetration of this light-weight investigation technique. Nevertheless, it is a valuable tool where access is constrained such as within buildings or on embankments. Depths of up to 10m can be achieved in suitable circumstances depending on the rig type but depths of 5m to 6m are more common.

EXPLORATORY HOLE RECORDS

The data obtained by these techniques are generally presented on Trial Pit, Borehole, Drillhole or Dynamic Sample Records. The descriptions of strata result from information gathered from a number of sources which may include published geological data, preliminary field observations and descriptions, in situ test results, laboratory test results and specimen descriptions. A key to the symbols and abbreviations used accompanies the records. The descriptions on the exploratory hole records accommodate but may not necessarily be identical to those on any preliminary records or the laboratory summaries.

The records show ground conditions at the exploratory hole locations. The degree to which they can be used to represent conditions between or beyond such holes, however, is a matter for geological interpretation rather than factual reporting and the associated uncertainties must be recognised.

DYNAMIC PROBING

This technique typically measures the number of blows of a standard weight falling over a standard height to advance a cone-ended rod over sequential standard distances (typically 100mm). Some devices measure the penetration of the probe per standard blow. It is essentially a profiling tool and is best used in conjunction with other investigation techniques where site-specific correlation can be used to delineate the distribution of soft or loose soils or the upper horizon of a dense or strong layer such as rock.

Both machine-driven and hand-driven equipment is available, the selection depending upon access restrictions and the depth of penetration required. It is particularly useful where access for larger equipment is not available, disturbance is to be minimised or where there are cost constraints. No samples are recovered and some techniques leave a sacrificial cone head in the ground. As with other lightweight techniques, progress is limited in strong or dense soils. The results are presented both numerically and graphically. Depths of up to 10m are commonly achieved in suitable circumstances.

The hand-driven DCP probing device has been calibrated by the Highways Agency to provide a profile of CBR values over a range of depths.

INSTRUMENTATION

The most common form of instrument used in site investigation is either the standpipe or else the standpipe piezometer which can be installed in investigation holes. They are used to facilitate monitoring of groundwater levels and water sampling over a period of time following site work. Normally a standpipe would be formed using rigid plastic tubing which has been perforated or slotted over much of its length whilst a standpipe piezometer would have a filter tip which would be placed at a selected level and the hole sealed above and sometimes below to isolate the zone of interest. Groundwater levels are determined using an electronic "dip meter" to measure the depth to the water surface from ground level. Piezometers can also be used to measure permeability. They are simple and inexpensive instruments for long term monitoring but response times can limit their use in tidal areas and access to the ground surface at each instrument is necessary. Remote reading requires more sophisticated hydraulic, electronic or pneumatic equipment.

Settlement can be monitored using surface or buried target plates whilst lateral movement over a range of depths is monitored using slip indicator or inclinometer equipment.

GENERAL NOTES

1. The report is prepared for the exclusive use of the Client named in the document and copyright subsists with Geotechnics Limited. Prior written permission must be obtained to reproduce all or part of the report. It is prepared on the understanding that its contents are only disclosed to parties directly involved in the current investigation, preparation and development of the site.

2. Further copies may be obtained with the Client's written permission, from Geotechnics Limited with whom the master copy of the document will be retained.

3. The report and/or opinion is prepared for the specific purpose stated in the document and in relation to the nature and extent of proposals made available to Geotechnics Limited at that time. Re-consideration will be necessary should those details change. The recommendations should not be used for other schemes on or adjacent to the site without further reference to Geotechnics Limited.

4. The assessment of the significance of the factual data, where called for, is provided to assist the Client and their Engineer and/or Advisers in the preparation of their designs.

5. The report is based on the ground conditions encountered in the exploratory holes together with the results of field and laboratory testing in the context of the proposed development. The data from any commissioned desk study and site reconnaissance are also drawn upon. There may be special conditions appertaining to the site, however, which are not revealed by the investigation and which may not be taken into account in the report.

6. Methods of construction and/or design other than those proposed by the designers or referred to in the report may require consideration during the evolution of the proposals and further assessment of the geotechnical and any geoenvironmental data would be required to provide discussion and evaluations appropriate to these methods.

7. The accuracy of results reported depends upon the technique of measurement, investigation and test used and these values should not be regarded necessarily as characteristics of the strata as a whole (see accompanying notes on Investigation Techniques). Where such measurements are critical, the technique of investigation will need to be reviewed and supplementary investigation undertaken in accordance with the advice of the Company where necessary.

8. The samples selected for laboratory test are prepared and tested in accordance with the relevant Clauses and Parts of BS EN ISO 17892 and BS 1377 Parts 1 to 8, where appropriate, in Geotechnics Limited's UKAS accredited Laboratory, where possible. A list of tests is given.

9. Tests requiring the use of another laboratory having UKAS accreditation where possible are identified.

10. Any unavoidable variations from specified procedures are identified in the report.

11. Specimens are cut vertically, where this is relevant and can be identified, unless otherwise stated

12. All the data required by the test procedures are recorded on individual test sheets but the results in the report are presented in summary form to aid understanding and assimilation for design purposes. Where all details are required, these can be made available.

13. Whilst the report may express an opinion on possible configurations of strata between or beyond exploratory holes, or on the possible presence of features based on either visual, verbal, written, cartographical, photographic or published evidence, this is for guidance only and no liability can be accepted for its accuracy.

14. The Code of Practice for Ground Investigations – BS 5930:2015 calls for man-made soils to be described as Anthropogenic Ground with soils placed in an un-controlled manner classified as Made Ground and soils placed in a controlled manner as Fill. In view of the difficulty in always accurately determining the origin of man-made soils in exploratory holes, Geotechnics Limited classify such materials as Made Ground. Where soils can be clearly identified as being placed in a controlled manner then further classification of the soils as Fill has been added to the Exploratory Hole Records.

15. Classification of man-made soils is based on the inspection of retrieved samples or exposed excavations. Where it is obvious that foreign matter such as paper, plastic or metal is present, classification is clear. Frequently, however, for man-made soils that arise from the adjacent ground or from the backfilling of excavations, their visual characteristics can closely resemble those of undisturbed ground. Other evidence such as site history, exploratory hole location or other tests may need to be drawn upon to provide clarification. For these reasons, classification of soils on the exploratory hole records as either Made Ground or naturally occurring strata, the boundary between them and any interpretation that this gives rise to should be regarded as provisional and subject to re-evaluation in the light of further data.

16. The classification of materials as Topsoil is generally based on visual description and should not be interpreted to mean that the material so described complies with the criteria for Topsoil used in BS 3882:2015. Specific testing would be necessary where such a definition is a requirement.

17. Ground conditions should be monitored during the construction of the works and the report should be re-evaluated in the light of these data by the supervising geotechnical engineers.

18. Any comments on groundwater conditions are based on observations made at the time of the investigation, unless specifically stated otherwise. It should be noted, however, that the observations are subject to the method and speed of boring, drilling or excavation and that groundwater levels will vary due to seasonal or other effects.

19. Any bearing capacities for conventional spread foundations which are given in the report and interpreted from the investigation are for bases at a minimum depth of 1m below finished ground level in naturally occurring strata and at broadly similar levels throughout individual structures, unless otherwise stated. Typically they are based on serviceability criteria taking account of an assessment of the shear strength and/or density data obtained by the investigation. The foundations should be designed in accordance with the good practice embodied in BS 8004:2015 - Foundations, supplemented for housing by NHBC Standards. Foundation design is an iterative process and bearing pressures may need adjustment or other measures may need to be taken in the context of final layouts and levels prior to finalisation of proposals.

20. Unless specifically stated, the investigation does not take account of the possible effects of mineral extraction or of gases from fill or natural sources within, below or outside the site.

21. The costs or economic viability of the proposals referred to in the report, or of the solutions put forward to any problems encountered, will depend on very many factors in addition to geotechnical or geoenvironmental considerations and hence their evaluation is outside the scope of the report.

B. Schematic Geological Cross Section

North-West

South- East

BH04 located approximately 50m east of section line. Not considered within model due to Chalk structure disturbance from dynamic sampling

Approximate extent of DASH Building

Made Ground including Asphalt and sub-base materials within northern portion of the site

Extents of Topsoil and Made Ground unknown between areas of investigation and may vary locally.

Localised Head Deposits described as firm slightly sandy slightly gravelly CLAY. Extents unknown.

Limited deeper information therefore extents of Structureless Chalk are unknown and should be treated with caution

Limited deeper information therefore extents of Structureless Chalk are unknown and should be treated with caution

Disturbance by SPT resulting in structureless recovery

Structured Chalk recorded as Grade B4

Boundary between structureless and structured Chalk is expected to vary across the site due to varying weathering profiles but typically encountered to approximately 82 – 80m AOD

Primarily recovered as Non-Intact Structured Chalk due to drilling disturbance with localised Grade C2 Chalk.

Zone of core loss and poor recovery of Chalk stratum with drilling-induced disturbance therefore extent of structured Chalk unknown and should be treated with caution

Structured Chalk recorded as Grade B3

Structured Chalk recovered as non-intact due to drilling disturbance recorded as Grade B3 should be treated with caution

Reduced Level (m AOD)

Chainage(m)

Inferred Strata

- Made Ground
- Topsoil
- Head Deposits
- No Recovery
- Structureless Chalk – Grade Dm
- Structureless Chalk – Grade Dc
- Structured Chalk – Grade B/C
- Structured Chalk – Non-Intact

Key

- Approximate Topography (Inferred Surface)
- 1.20 Strata Depth Change (meters below ground level)
- Groundwater From Installation Monitoring (Possible Perched Water)

SECTION		
M MOTT MACDONALD M	VERTICAL SCALE 1:92	HORIZONTAL SCALE 1:288
PROJECT Salisbury DASH	PROJECT NUMBER 100123741 CS03	
LOCATION Salisbury	CLIENT P + HS Architects	

Produced on: June 24 2026 by OpenGround. Section Length: 98.8 m. Section Height: 18 m.

Mott MacDonald Restricted

C. Contaminated Land Risk Methodology

The following Contaminated Land Risk Assessment methodology is based on the National House Building Council (NHBC), Environment Agency (EA) and Chartered Institute of Environmental Health (CIEH) document, *Guidance for the safe development of housing on land affected by contamination* (NHBC, 2008), in order to quantify potential risk via **risk estimation** and **risk evaluation**, which can be adopted at the Phase I stage. This will then determine an overall risk category which can be used to identify likely actions. This methodology uses qualitative descriptors and therefore is a qualitative approach.

The methodology requires the classification of:

- the magnitude of the **consequence** (severity) of a risk occurring, and
- the magnitude of the **probability** (likelihood) of a risk occurring.

The potential consequences of contamination risks occurring at this site are classified in accordance with Table C.1 below, which is adapted from the CIRIA guidance.

Table C.1: Classification of Consequence

Classification	Definition of Consequence
Severe	Highly elevated concentrations likely to result in "significant harm" to human health as defined by the EPA 1990, Part 2A, if exposure occurs. Equivalent to EA Category 1 pollution incident including persistent and/or extensive effects on water quality; leading to closure of a potable abstraction point; major impact on amenity value or major damage to agriculture or commerce. Major damage to aquatic or other ecosystems, which is likely to result in a substantial adverse change in its functioning or harm to a species of special interest that endangers the long-term maintenance of the population. Catastrophic damage to crops, buildings or property.
Medium	Elevated concentrations which could result in "significant harm" to human health as defined by the EPA 1990, Part 2A if exposure occurs. Equivalent to EA Category 2 pollution incident including significant effect on water quality; notification required to abstractors; reduction in amenity value or significant damage to agriculture or commerce. Significant damage to aquatic or other ecosystems, which may result in a substantial adverse change in its functioning or harm to a species of special interest that may endanger the long-term maintenance of the population. Significant damage to crops, buildings or property.
Mild	Exposure to human health unlikely to lead to "significant harm". Equivalent to EA Category 3 pollution incident including minimal or short-lived effect on water quality; marginal effect on amenity value, agriculture, or commerce. Minor or short-lived damage to aquatic or other ecosystems, which is unlikely to result in a substantial adverse change in its functioning or harm to a species of special interest that would endanger the long-term maintenance of the population. Minor damage to crops, buildings or property
Minor	No measurable effect on humans. Equivalent to insubstantial pollution incident with no observed effect on water quality or ecosystems. Repairable effects of damage to buildings, structures, and services

The probability of contamination risks occurring at this site will be classified in accordance with Table C.2 below which is also adapted from the CIRIA guidance. Note that for each category, it is assumed that a pollution linkage exists. Where a pollution linkage does not exist, the likelihood is zero, as is the risk.

Table C.2: Classification of Probability

Classification	Definition of Probability
High Likelihood	There is pollutant linkage, and an event would appear very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.
Likely	There is pollutant linkage, and all the elements are present and in the right place which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.
Low Likelihood	There is pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a long period such an event would take place and is less likely in the shorter term.
Unlikely	There is pollutant linkage, but circumstances are such that it is improbable that an event would occur even in the very long-term.

For each possible pollution linkage (source-pathway-receptor) identified, the potential risk can be evaluated, based on the following principle:

Contamination risk = Probability of event occurring x Consequence of event occurring

This relationship can be represented graphically as a matrix Table C.3 which is adapted from the CIRIA guidance.

Table C.3: Overall Contamination Risk Matrix

		Consequence			
		Severe	**Medium**	**Mild**	**Minor**
Probability	**High Likelihood**	Very high risk	High risk	Moderate risk	Low risk
	Likely	High risk	Moderate risk	Moderate/ low risk	Low risk
	Low Likelihood	Moderate risk	Moderate/ low risk	Low risk	Very low risk
	Unlikely	Moderate/ Low risk	Low risk	Very low risk	Very low risk

The definitions of the risk categories identified in the above matrix are given in Table C.4, together with the investigatory and remedial actions that are likely to be necessary in each case. The risk categories apply to each pollutant linkage, not just to each hazard or receptor.

Table C.4: Definition of Risk Categories and Likely Action Required

Risk Category	Definition and likely actions required
Very high	There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without remediation action OR there is evidence that severe harm to a designated receptor is already occurring. Realisation of that risk is likely to present a substantial liability to be site owner/or occupier. Investigation is required as a matter of urgency and remediation works likely to follow in the short-term.
High	Harm is likely to arise to a designated receptor from an identified hazard at the site without remediation action. Realisation of the risk is likely to present a substantial liability to the site owner/or occupier. Investigation is required as a matter of urgency to clarify the risk. Remediation works may be necessary in the short-term and are likely over the longer term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely, that the harm would be relatively mild. Further investigative work is normally required to clarify the risk and to determine the potential liability to site owner/occupier. Some remediation works may be required in the longer term.
Low	It is possible that harm could arise to a designated receptor from identified hazard, but it is likely at worst, that this harm if realised would normally be mild. It is unlikely that the site owner/or occupier would face substantial liabilities from such a risk. Further investigative work (which is likely to be limited) to clarify the risk may be required. Any subsequent remediation works are likely to be relatively limited.
Very low	It is a low possibility that harm could arise to a designated receptor, but it is likely at worst, that this harm if realised would normally be mild or minor.

D. Key Regulatory Legislation, Drivers and Contamination Assessment Criteria

Environmental Protection Act, Part IIA

The primary regulatory regime, under which contaminated land in the UK is managed is Part IIA of the Environmental Protection Act (EPA) 1990, although numerous other subsidiary Regulations are also relevant (including Land Contamination: Risk Management – LCRM). This report adopts a strategy for the assessment of potential land contamination based on current guidance documents related to Part II A of the EPA. Particular reference is made to CIRIA Report C552 (CIRIA, 2001) and Land Contamination: Risk Management (LCRM) (Environment Agency, 2024).

New development is regulated under the Town and Country Planning Act 1990 (as amended). This regime provides a mechanism for the planning authority to enforce the proper investigation of a development site in order to ensure that once development has occurred, it is suitable for its intended use. In England the National Planning Policy Framework (NPPF) provides guidance on the implementation of contaminated land and pollution management requirements to address contamination risks associated with future site uses through the planning system. Paragraphs 187, 196, and 197 of the NPPF state the following:

187 Planning policies and decisions should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
- minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

196. Planning policies and decisions should ensure that:

- a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);
- after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and

- adequate site investigation information, prepared by a competent person, is available to inform these assessments.

197. Where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.

Risks to Human Health

This part of the risk assessment process uses a comparison of measured concentrations of contaminants in soil samples against conservative generic screening criteria. The generic screening criteria are selected based upon the industry-accepted hierarchy, as follows: Land Quality Management (LQM) Suitable for Use Values (S4UL's) 2014, Defra Category 4 Screening Levels (C4SL's) 2014 then other UK standards, followed by European standards, then US standards and then standards from the rest of the world. The most relevant of these criteria are now discussed.

Suitable for Use Levels (S4ULs)

In the UK, the most authoritative standards are those which were published by Land Quality Management Ltd (LQM) in 2014. LQM has revised their guidance values for soils to produce 'Suitable for Use' levels (S4ULs) for the additional land uses and exposure assumptions presented in Defra's recent C4SL guidance (Nathanail, McCaffrey, Gillett, Ogden, & Nathanail, 2015) - Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3420. All rights reserved. The S4ULs however, are all based on Health Criteria that represent minimal or tolerable levels of risks to health as described in the Environment Agency's SR2 guidance, ensuring that the resulting assessment criteria are 'suitable for use' under planning. Whilst representing a tolerable risk level they are generally less conservative than the previous Soil Guidance Values (SGVs) produced by CLEA. These revised values were released for use in 2014.

The S4ULs replace the previous LQM Generic Assessment Criteria which were published in 2009. S4ULs are available for residential, allotments. commercial and public open space land uses and for a variety of soil organic contents.

Category 4 Screening Levels (C4SLs)

To support Defra's revised Statutory Guidance (SG) for Part 2A of the Environmental Protection Act 1990 (Part 2A) (Defra, 2012a) a methodology for deriving Category 4 Screening Levels (C4SLs) was presented by CL:AIRE in 2014. C4SLs have been derived using this methodology for six contaminants (arsenic, benzene, benzo(a)pyrene, cadmium, chromium VI, and lead) to date and act as guidance values to determine if sites fall into Category 4 of Part 2A. These were produced to support the planning process in determining which sites fall into 'Category 4' of Part IIA of the Environmental Protection Act. Category 4 refers to sites where there is no risk that land poses a significant possibility of significant harm (SPOSH), or the level of risk is low. Sites with contaminant concentrations below these levels would therefore be classified as low level of toxicological concern.

Other Criteria

In the absence of S4Uls and C4SLs, results have been assessed using:

Contaminated Land Applications in Real Environments (CL:AIRE) Soil Generic Assessment Criteria (CL:AIRE, 2009).

CL:AIRE GAC

A range of GACs for 35 contaminants have been derived by a collection of scientific professionals under the oversight of Contaminated Land Applications in Real Environments (CL:AIRE, 2009).

E. Geoenvironmental Analysis Results

Soils Testing

Determinant Name	Units	PoS Residential 1% SOM	Residential without Produce 1% SOM	Residential with Produce 1% SOM	BH01	BH02	BH03	BH03	BH04	DCP01	DCP02	DCP03	TP01	TP01	TP02
					1	0.3	0.1	0.2	0.2	0.5	0.2	0.45	0.1	0.2	0.5
					STRUCTURELESS CHALK - GRADE DC	MADE GROUND	TOPSOIL	TOPSOIL	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	TOPSOIL	HEAD DEPOSITS	STRUCTURELESS CHALK - GRADE DC
1,1,1,2-Tetrachloroethane	mg/kg	1400	1.5	1.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1-Trichloroethane	mg/kg	140000	9	8.8	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,2-Trichloroethane	mg/kg	990	1.2	0.74	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1-Dichloroethane	mg/kg	45900	3.5	3.3	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1-Dichloroethene	mg/kg	10200	0.32	0.32	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1-Dichloropropene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,3 Trichlorobenzene	mg/kg	1800	1.5	1.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,3-Trichloropropane	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-Trichlorobenzene	mg/kg	15000	2.6	2.6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-Trimethylbenzene	mg/kg	250	0.57	0.46	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-Dibromo-3-Chloropropane	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-Dibromoethane	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-Dichlorobenzene	mg/kg	90000	24	23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-Dichloroethane	mg/kg	300	0.16	0.11	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-Dichloropropane	mg/kg	1720	0.033	0.033	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3,5-Trimethylbenzene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3-Dichlorobenzene	mg/kg	300	0.44	0.4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3-Dichloropropane	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,4-Dichlorobenzene	mg/kg	17000	61	61	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2,2-Dichloropropane	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Chlorotoluene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Chlorotoluene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
4-Isopropyltoluene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthene	mg/kg	15000	3000	210	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Acenaphthylene	mg/kg	15000	2900	170	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Aliphatics & Aromatics >C5-44	mg/kg	-	-	-	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
Aliphatics >C10-12	mg/kg	13000	130	130	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50
Aliphatics >C12-16	mg/kg	13000	1100	1100	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
Aliphatics >C16-21	mg/kg	-	-	-	<1.50	<1.50	6.28	<1.50	2.37	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50
Aliphatics >C21-35	mg/kg	-	-	-	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40
Aliphatics >C35-40	mg/kg	-	-	-	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40
Aliphatics >C40-44	mg/kg	-	-	-	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40	<3.40
Aliphatics >C5-44	mg/kg	-	-	-	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
Aliphatics >C5-6	mg/kg	570000	42	42	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C6-8	mg/kg	600000	100	100	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aliphatics >C8-10	mg/kg	13000	27	27	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	mg/kg	74000	31000	2400	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Antimony	mg/kg	1070	620	-	<1.00	<1.00	3.5	<1.00	1	<1.00	<1.00	<1.00	<1.00	1.1	<1.00
Aromatics >C10-12	mg/kg	5000	250	74	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90
Aromatics >C12-16	mg/kg	5100	1800	140	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aromatics >C16-21	mg/kg	3800	1900	260	1.21	1.03	1.25	<0.60	0.85	1.08	0.93	1.07	0.77	<0.60	<0.60
Aromatics >C21-35	mg/kg	3800	1900	1100	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	2.07	<1.40	<1.40
Aromatics >C35-40	mg/kg	-	-	-	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40
Aromatics >C40-44	mg/kg	-	-	-	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40	<1.40
Aromatics >C5-7	mg/kg	56000	370	70	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >C6-44	mg/kg	-	-	-	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00
Aromatics >C7-8	mg/kg	56000	860	130	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aromatics >C8-10	mg/kg	5000	47	34	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic	mg/kg	79	40	37	1	5.4	10	8.2	9.1	4.8	5.7	8	9.2	11	3.6
Asbestos (Presence of)!	---	-	-	-	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Asbestos Analysts Comments!	---	-	-	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Barium	mg/kg	2680	1300	-	26	840	110	72	72	42	680	210	83	91	34
Benzene	mg/kg	72	0.38	0.087	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (g,h,i) perylene	mg/kg	640	360	320	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Benzo(a)anthracene	mg/kg	29	11	7.2	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Benzo(a)pyrene	mg/kg	5.7	3.2	2.2	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Benzo(b)fluoranthene	mg/kg	7.1	3.9	2.6	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Benzo(k)fluoranthene	mg/kg	190	110	77	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Beryllium	mg/kg	2.2	1.7	1.7	<0.20	<0.20	1.1	0.7	0.9	0.2	<0.20	0.8	0.9	1.2	0.4
Boron	mg/kg	21000	11000	290	<0.20	0.2	0.5	0.6	0.6	0.3	<0.20	0.3	0.8	0.6	0.4
Bromobenzene	mg/kg	5200	1.3	1.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromochloromethane	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromodichloromethane	mg/kg	73	0.027	0.021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	mg/kg	220	150	22	0.5	1.2	1.7	1	0.9	0.6	1.1	1	1.1	1.2	0.7
Chlorobenzene	mg/kg	11000	0.46	0.46	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chloroethene	mg/kg	7.8	0.015	0.0064	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chloroform	mg/kg	2500	1.2	0.91	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium (Hexavalent)	mg/kg	21	21	21	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium (Trivalent)	mg/kg	1500	910	910	1.7	6.5	25	18	23	6.7	4.2	19	23	30	11
Chrysene	mg/kg	57	30	15	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
cis-1,2-Dichloroethene	mg/kg	3800	0.5	0.46	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
cis1,3-Dichloropropene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	mg/kg	12000	7100	2400	1.5	9.7	14	9.8	17	3.8	5.3	7.4	14	23	6.2
Cresols!	mg/kg	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cyanide Free!	mg/kg	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Dibenz-a-h-anthracene	mg/kg	0.57	0.31	0.24	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dibromochloromethane	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibromomethane	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Elemental Mercury	mg/kg	-	-	-	<0.00	<0.00	<0.00	<0.00	<0.00	<0.00	<0.00	<0.00	<0.00	<0.00	<0.00
Ethylbenzene	mg/kg	24000	83	47	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
F.O.C %!	---	-	-	-	0.043	0.056	0.025	0.039	0.017	0.055	0.067	0.008	0.025	0.018	0.035
Fluoranthene	mg/kg	3100	1500	280	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	<0.03	0.03	<0.03	<0.03
Fluorene	mg/kg	9900	2800	170	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Hexachlorobutadiene (HCBD)	mg/kg	25	0.32	0.29	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	mg/kg	82	45	27	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Iron	mg/kg	-	-	-	2000	4700	24000	17000	21000	7700	3700	19000	20000	26000	9100
Isopropylbenzene	mg/kg	25000	17	15	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Lead	mg/kg	630	310	200	3.4	65	43	19	20	4.1	110	21	23	17	5.8
m,p xylenes	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Manganese	mg/kg	-	-	-	170	240	1400	840	830	310	310	890	1000	1100	390
Mercury	mg/kg	16	1.2	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	0.06	<0.05
Methyl Mercury	mg/kg	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Methyl tert-butyl ether (MTBE)	mg/kg	75000	100	62	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	mg/kg	-	670	-	<0.40	1.3	<0.40	<0.40	<0.40	<0.40	1.9	<0.40	<0.40	<0.40	<0.40
Naphthols (2-Naphthalenesulfonic acid, 1-hydroxy-)	mg/kg	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Soils Testing

Determinant Name	Units	PoS Residential 1% SOM	Residential without Produce 1% SOM	Residential with Produce 1% SOM	BH01	BH02	BH03	BH03	BH04	DCP01	DCP02	DCP03	TP01	TP01	TP02
					1	0.3	0.1	0.2	0.2	0.5	0.2	0.45	0.1	0.2	0.5
					STRUCTURELESS CHALK - GRADE DC	MADE GROUND	TOPSOIL	TOPSOIL	MADE GROUND	MADE GROUND	MADE GROUND	MADE GROUND	TOPSOIL	HEAD DEPOSITS	STRUCTURELESS CHALK - GRADE DC
Napthalene	mg/kg	11000	15	15	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-Butylbenzene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nickel	mg/kg	230	180	130	2.7	5	20	14	18	6.6	5.4	16	18	25	7.5
n-propylbenzene	mg/kg	24900	56	48	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Organic matter!	%	-	-	-											
O-Xylene	mg/kg	41000	88	60	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
PAH 16 Total (USEPA)	mg/kg	-	-	-	<0.10	<0.10				<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Pah,Total!	mg/kg	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
pH	pH Units	-	-	-	9.7	9.3	9.1	9.9	7.8	9.4	9.7	8.5	8.8	8.6	8.9
Phenanthrene	mg/kg	3100	1300	95	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Phenol	mg/kg	440	440	120	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Phenols, Total!	mg/kg	-	-	-	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Pyrene	mg/kg	7400	3700	620	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Resorcinol	mg/kg	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sec-Butylbenzene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	mg/kg	1100	430	250	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	mg/kg	3020	50	8.6	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sulphate	mg/l	-	-	-	13	36	17	16	25	24	1200	26	35	13	33
Sulphur!	%	-	-	-	0.01	0.04	0.04	0.04	0.02	0.01	0.03	0.02	0.04	0.03	0.02
Tert-Butylbenzene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tetrachloroethene	mg/kg	3200	0.32	0.31	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tetrachloromethane (Carbon Tetra Chloride)	mg/kg	890	0.026	0.026	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Toluene	mg/kg	56000	880	130	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
trans-1,2-Dichloroethene	mg/kg	13000	0.93	0.9	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
trans-1,3-Dichloropropene	mg/kg	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tribromomethane	mg/kg	3930	7.2	3.4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Trichloroethene	mg/kg	76	0.0097	0.0093	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Trimethylphenol	mg/kg	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Vanadium	mg/kg	2000	1200	410	3.4	8.8	40	30	35	12	8.4	32	36	46	16
Xylenols & Ethylphenols	mg/kg	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Zinc	mg/kg	81000	40000	3700	16	170	69	53	69	28	120	64	63	71	31
FOC to SOM conversion factor 1.724					0.074132	0.096544	0.0431	0.067236	0.029308	0.09482	0.115508	0.013792	0.0431	0.031032	0.06034

Leachate Testing

Determinant Name	Units	UK DW Standards	WHO Drinking Water Standards	Environmental Quality Standards (Annual Average, Surface Freshwaters)	BH01	TP02	BH03	DCP02
					0.2	0.2	0.5	0.1
					MADE GROUND	HEAD DEPOSITS	STRUCTURELESS CHALK - GRADE DC	MADE GROUND
Ammoniacal Nitrogen as N	mg/l	0.38	-	0.6	0.021	<0.02	<0.02	0.035
Antimony	mg/l	0.005	0.02	-	0.00021	<0.00	<0.00	<0.00
Arsenic	mg/l	0.01	0.01	0.05	0.00094	0.00028	0.00092	0.00092
Barium	mg/l	1	0.7	-	0.01171	0.0058	0.01172	0.07491
Beryllium	mg/l	-	-	-	0.00013	<0.00	0.00012	<0.00
Boron	mg/l	1	2.4	-	<0.01	<0.01	<0.01	<0.01
Cadmium	mg/l	0.005	0.003	0.00015	0.00006	<0.00	<0.00	<0.00
Calcium	mg/l	250	-	-	12	3.5	2.8	4.9
Chloride	mg/l	250	-	-	19	0.7	0.93	4.8
Chromium (Hexavalent)	mg/l	-	-	0.0034	<0.01	<0.01	<0.01	<0.01
Chromium (Trivalent)	mg/l	-	-	0.0047	0.0039	<0.00	0.00298	0.00105
Complex Cyanide!	mg/l	-	-	-	<0.00	<0.00	<0.00	<0.00
Copper	mg/l	2	2	0.01	0.00223	0.00095	0.00167	0.00096
Cresols!	mg/l	-	-	-	<0.00	<0.00	<0.00	<0.00
Cyanide Free!	mg/l	-	-	-	<0.00	<0.00	<0.00	<0.00
Fluoride	mg/l	1.5	1.5	5	0.33	0.11	<0.10	0.39
Iron (Soluble)!	mg/l	-	-	-	1.517	0.5311	1.633	0.07548
Lead	mg/l	0.01	0.01	0.0048545	0.00295	0.00084	0.00068	0.00136
Magnesium	mg/l	50	-	-	0.69	0.33	1.5	0.47
Manganese	mg/l	-	-	-	0.02152	0.00572	0.02067	0.00121
Mercury	mg/l	0.001	0.006	0.00007	<0.00	<0.00	<0.00	<0.00
Molybdenum	mg/l	0.07	-	-	<0.00	<0.00	<0.00	<0.00
Naphthols (2-Naphthalenesulfonic acid, 1-hydroxy-)	mg/l	-	-	-	<0.00	<0.00	<0.00	<0.00
Nickel	mg/l	0.02	0.07	0.01	0.00257	0.00061	0.00189	<0.00
pH	pH Units	-	-	-	8.3	7.3	6.9	8.6
Phenol	mg/l	0.0005	-	0.0077	<0.00	<0.00	<0.00	<0.00
Phenols, Total!	mg/l	-	-	-	<0.00	<0.00	<0.00	<0.00
Resorcinol	mg/l	-	-	-	0.00017	<0.00	<0.00	<0.00
Selenium	mg/l	0.01	0.04	-	0.00031	<0.00	<0.00	<0.00
Sulphate	mg/l	250	-	400	5.9	0.72	1.2	4.6
Trimethylphenol	mg/l	-	-	-	<0.00	<0.00	<0.00	<0.00
Vanadium	mg/l	-	-	0.06	0.00515	0.00138	0.00402	0.00077
Xylenols & Ethylphenols	mg/l	-	-	-	<0.00	<0.00	<0.00	<0.00
Zinc	mg/l	5	-	0.03	0.01439	0.0034	0.00366	0.0044

Ground Gas Maximum Readings

Max. of Reading	Column Labels												
Row Labels	Barometric pressure at time of monitoring	Differential Pressure	Depth to water from LOCA_ID datum	Depth to base of installation on monitoring round	Peak gas flow rate	Steady gas flow rate	Total methane concentration	Carbon dioxide concentration	Oxygen concentration	Carbon monoxide concentration	Hydrogen sulphide concentration	Measured methane as percentage of LEL	Photo Ionisation Detector Reading
BH01	**1011**	**0**	**14.65**	**14.8**	**0**	**0**	**0**	**2.3**	**20.9**	**0**	**0**	**0**	**1**
Mar	**1004**	**0**		**14.8**	**0**	**0**	**0**	**0.7**	**20.8**	**0**	**0**	**0**	**1**
16-Mar	1004	0		14.8	0	0	0	0	20.5	0	0	0	1
24-Mar	1001	0		14.77	0	0	0	0.7	20.8	0	0	0	1
Apr	**1011**	**0**		**14.8**	**0**	**0**	**0**	**0.7**	**20.8**	**0**	**0**	**0**	**1**
01-Apr	1009	0		14.77	0	0	0	0.6	20.7	0	0	0	1
08-Apr	1011	0		14.77	0	0	0	0.7	20.8	0	0	0	1
20-Apr	1008	0		14.8	0	0	0	0.7	20.4	0	0	0	1
May	**1009**	**0**	**14.65**	**14.8**	**0**	**0**	**0**	**2.3**	**20.9**	**0**	**0**	**0**	**1**
05-May	998	0	14.65	14.8	0	0	0	0.9	20.9	0	0	0	1
18-May	998	0	14.65	14.74	0	0	0	1	19.7	0	0	0	1
28-May	1009	0		14.75	0	0	0	2.3	20.4	0	0	0	1
BH02	**1009**	**0**	**14.67**	**14.98**	**0**	**0**	**0**	**2.5**	**20.7**	**0**	**0**	**0**	**1**
Mar	**1005**	**0**		**14.98**	**0**	**0**	**0**	**2**	**20.5**	**0**	**0**	**0**	**1**
16-Mar	1005	0		14.98	0	0	0	0	20.5	0	0	0	1
24-Mar	1000	0		14.78	0	0	0	2	20.3	0	0	0	1
Apr	**1009**	**0**		**14.79**	**0**	**0**	**0**	**1.9**	**20.6**	**0**	**0**	**0**	**1**
01-Apr	1009	0		14.76	0	0	0	1.4	20.6	0	0	0	1
08-Apr	1009	0		14.79	0	0	0	1.7	19.4	0	0	0	1
20-Apr	1008	0		14.79	0	0	0	1.9	18.2	0	0	0	1
May	**1009**	**0**	**14.67**	**14.82**	**0**	**0**	**0**	**2.5**	**20.7**	**0**	**0**	**0**	**1**
05-May	997	0	14.67	14.82	0	0	0	2.3	20.7	0	0	0	1
18-May	998	0		14.77	0	0	0	1.5	20.4	0	0	0	1
28-May	1009	0		14.8	0	0	0	2.5	20	0	0	0	1
BH03	**1011**	**0**		**9.9**	**0**	**0**	**0**	**1.9**	**21.4**	**0**	**0**	**0**	**1**
Mar	**1003**	**0**		**9.87**	**0**	**0**	**0**	**1.9**	**20.6**	**0**	**0**	**0**	**1**
16-Mar	1003	0		9.82	0	0	0	1.7	18.5	0	0	0	1
24-Mar	1000	0		9.87	0	0	0	1.9	20.6	0	0	0	1
Apr	**1011**	**0**		**9.87**	**0**	**0**	**0**	**1**	**20.7**	**0**	**0**	**0**	**1**
01-Apr	1008	0		9.86	0	0	0	0.7	20.7	0	0	0	1
08-Apr	1011	0		9.87	0	0	0	1	20.4	0	0	0	1
20-Apr	1009	0		9.79	0	0	0	0.8	20.4	0	0	0	1
May	**1009**	**0**		**9.9**	**0**	**0**	**0**	**1.6**	**21.4**	**0**	**0**	**0**	**1**
05-May	1001	0		9.9	0	0	0	1.6	21.4	0	0	0	1
18-May	998	0		9.83	0	0	0	0.8	20.3	0	0	0	1
28-May	1009	0		9.85	0	0	0	1	20.9	0	0	0	1
BH04	**1012**	**0**		**9.91**	**0**	**0**	**0**	**0.9**	**21**	**0**	**0**	**0**	**1**
Mar	**1003**	**0**		**9.89**	**0**	**0**	**0**	**0.3**	**20.6**	**0**	**0**	**0**	**1**
16-Mar	1003	0		9.88	0	0	0	0.1	20.5	0	0	0	1
24-Mar	1001	0		9.89	0	0	0	0.3	20.6	0	0	0	1
Apr	**1012**	**0**		**9.91**	**0**	**0**	**0**	**0.5**	**20.7**	**0**	**0**	**0**	**1**
01-Apr	1011	0		9.88	0	0	0	0.2	20.7	0	0	0	1
08-Apr	1010	0		9.89	0	0	0	0.2	20.7	0	0	0	1
20-Apr	1012	0		9.91	0	0	0	0.5	20.3	0	0	0	1
May	**1006**	**0**		**9.87**	**0**	**0**	**0**	**0.9**	**21**	**0**	**0**	**0**	**1**
05-May	999	0		9.87	0	0	0	0.9	20.7	0	0	0	1
18-May	998	0		9.86	0	0	0	0.6	20.5	0	0	0	1
28-May	1006	0		9.86	0	0	0	0.8	21	0	0	0	1
Grand Total	**1012**	**0**	**14.67**	**14.98**	**0**	**0**	**0**	**2.5**	**21.4**	**0**	**0**	**0**	**1**

Wost Case Check

Max Flow	Max CH4	Max CO2	CH4 Qhg (%vol)	CO2 Qhg (%vol)
0.1	0.1	2.5	0.0001	0.0025

Worst Case

Characteristic Situation 1 (GSV<0.07)

Notes

Worst Case Check calculated by multiplying the maximum recorded flow in any standpipewith the maximum gas concentration in any other standpipe but discounting any peak instantaneous flows and negative flows judged to be unrepresentative of a possible worst case.

