



Selsdon Building Contractors Limited

Blackwell Farm, East Grinstead
Plots 7 - 10

Clean Cover Verification Report





This report has been prepared for **Selsdon Building Contractors Limited** in accordance with the terms and conditions of appointment for **Blackwell Farm, East Grinstead Plots 7 - 10**. Tweedie Evans Consulting Limited (TEC) cannot accept any responsibility for any use of or reliance on the contents by a third party.

Blackwell Farm, East Grinstead Plots 7 - 10

Clean Cover Verification Report

ISSUE RECORD					
Report Reference: 2503003.002.01					
Version	Date	Amendments Record	Prepared by	Checked by	Authorised by
	July 2026				
			Claire Hooley	Sophie Thomas	Ruth Easterbrook
Report Liability Date: July 2026					

TEC is ISO 9001:2015 and ISO 14001:2015 certified by British Assessment Bureau Ltd, a UKAS Accredited Certification Body (number 8289) and ISO 45001:2018 certified by QMS International Ltd for the scope of 'Specialist consultancy services across the UK in contaminated land assessment, ground engineering, waste management and construction phase monitoring'.

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1 INTRODUCTION

1.1 Terms of Reference

1.1.1 TEC has been appointed by Selsdon Building Contractors Limited to prepare a verification report detailing the clean cover remediation works undertaken at the development known as Blackwell Farm, East Grinstead. All works were undertaken in accordance with our proposal letter dated 05 March 2025 and referenced CH.2503003.001_002.

1.1.2 This report is associated with the verification of the cover system associated with Plots 7 – 10 only of the development scheme.

1.2 Background

1.2.1 The site is situated off Blackwell Farm Road to the east of East Grinstead town centre (Figure 1). The site covers an approximate area of 0.56 hectares, with the centre of the site situated at approximate National Grid Reference 539710, 138810. The nearest postcode is RH19 3JW.

1.2.2 It is understood that planning permission has been granted by Mid Sussex District Council (reference DM/20/1333) for the proposed development comprising the construction of 10No. low rise residential dwellings with associated private gardens and hard infrastructure (Figure 2).

1.2.3 A number of phases of investigation has been undertaken at the site by Land Science (2018) and TEC (2021), as detailed within the following documents:

- *Phase I and Phase II Geotechnical and Geo-Environmental Investigation – Blackwell Farm Road, East Grinstead, RH19 3JW. Prepared by Land Science for The Guinness Partnership Limited. Report reference LS 3734 dated September 2018.*
- *Blackwell Farm, East Grinstead – Ground Investigation Report. Prepared for W Stirland Ltd by TEC. Report reference 2006010.001.01 dated January 2021; and*
- *Blackwell Farm, East Grinstead – Supplementary Assessment. Prepared for W Stirland Ltd by TEC. Report reference 2006010.002.01 dated August 2021*
- *Blackwell Farm, East Grinstead – Remediation Strategy and Verification Plan. Prepared for Selsdon Building Contractors Limited by TEC. Report reference 2503003.001.01 dated March 2025*

1.2.4 It is further understood that these reports remain valid and have satisfactorily characterised the contaminative status of the site. TEC note that full reference should be made to all previous reporting for full site information. However, a summary of salient information, in relation to this Clean Cover Verification Report, is provided in the following section.

1.2.5 Following the completion of the clean cover placement, in accordance with the TEC Remediation Strategy, this report has been prepared to document the remedial works undertaken to aid in satisfying Condition 20 of planning permission DM/20/1333. This report has been undertaken in accordance with current guidance such as LCRM – Land Contamination: risk management (Environment Agency, 2025) and NHBC Standards.



2 PREVIOUS REPORT SUMMARY

2.1 Introduction

2.1.1 A summary of the salient information from previous reports prepared by both Land Science (2018) and TEC (2021), are understood to have been approved by Mid Sussex District Council, is detailed within Table 1 below. Reference to previous reporting should be made for full, detailed site information.

Table 1: Previous Reports Summary

Land Science – 2018	
Site History	Land Science reported the site comprised a series of small fields associated with Blackwell Farm between 1898 and 1931. Two small ponds were noted on site in the southwest and southeast corners of the site. A stream was reportedly present on site, flowing from the northwest corner down to the pond in the southeast corner. By 1962, the pond and stream were reportedly no longer depicted on mapping. No further significant features relating to the site were reported by Land Science. Further internet research undertaken by Land Science in relation to the proposed development reportedly highlighted a number of comments by local residents regarding the possibility that the southern section of the site has been a former pond that had been infilled. No further details were provided. An underground sewage pipe was reported within the southern section of the site.
Surrounding Land Use	The surrounding area was reported to generally comprise open farmland and building associated with Blackwell Farm, which was located immediately northeast of the site. By 1962, much of Blackwell Farm was reported to have been redeveloped with a large housing development. Further potentially contaminative land uses identified in proximity to the site included an allotment garden ~150m to the northwest of the site from 1910 to present and a cemetery immediately west of the site from 1931 to present.
Geology and Hydrogeology	The underlying geology was recorded to comprise the Lower Tunbridge Wells Sand, described as grey silt and yellowish fine silty sand with cemented beds of siltstone and sandstone at intervals, classified by the Environment Agency as a Secondary A Aquifer. This in turn was reported to be underlain by Wadhurst Clay, which is described as dark grey shales, clays and silty clays with subordinate beds of silt, sandstone and shelly limestone. No superficial deposits were recorded on site, although it was noted by Land Science that the intrusive works recorded the presence of material considered to be Alluvium. No groundwater abstraction licences were reported in proximity of the site and the site was not recorded to be located within a Source Protection Zone.
Hydrology	A stream was reported approximately 50m to the east of the site by Land Science. No surface water abstractions were reported within 1000m of the site. A single discharge consent to controlled waters was recorded in proximity to the site. This related to the discharge of public sewage and storm sewage overflow to an unnamed tributary of Medway via pond, approximately 55m to the east of the site.
Ground Gas Generation	Information presented by Land Science indicated the southern section of the site may have comprised a former pond that had been infilled, which may provide a potential source of ground gas generation subject to thickness and composition. No areas of historic or current landfill were identified within 250m of the site. A single record of potentially infilled land was recorded on mapping from 1950, which related to an area of unknown filled ground (pond, marsh, river, stream, dock etc), approximately 15m to the east of the site. The site was reported to be located within a lower Radon affected area as less than 1% of homes exceed the threshold for radon gas. Therefore, no radon protective measures were reported as necessary within the proposed development.



Encountered Ground Conditions	Intrusive works undertaken by Land Science recorded the presence of made ground across the site to depths of between 0.65mbgl and 2.1mbgl, which was generally recorded to comprise light brown clayey gravelly sand underlain by brown gravelly sand with varying amounts of brick, metal, sandstone, glass and clinker. This in turn was reported to be underlain by Alluvium (possible made ground) to the base of the excavations (maximum 4.0mbgl). The encountered material was recorded to comprise orange brown and grey sandy clay with sandstone fragments and pockets of organic matter to depths of up to 2.5mbgl, underlain by dark brown, blue grey and black sandy gravelly clay with sandstone fragments and abundant organic material to recorded depths of between 3.0mbgl and >4.0mbgl. This was reportedly underlain by light orange, brown and grey sandy gravelly clay with occasional sandstone fragments. A strong organic / peaty odour was reported in a number of locations.
Groundwater	Groundwater was encountered within a single location at a depth of 2.3mbgl, rising to a static level of 2.2mbgl after a period of 20 minutes.
Contamination	No visual or olfactory evidence of potential significant contamination was reported by Land Science during the intrusive works. Laboratory analysis of representative made ground materials reportedly recorded the exceedance of the relevant screening values for a number of PAH's and heavy metals. Leachate analysis of samples reported the exceedance of a number of heavy metals when compared to the Environmental Quality Standards (EQS) in a single location. In addition, the presence of Chrysotile (hard/cement type material) was recorded within a single location. Ground gas monitoring within a single location recorded carbon dioxide concentrations of up to 7.0%. No measurable methane was reported.
TEC – 2021	
TEC Encountered Ground Conditions	Intrusive works undertaken by TEC recorded the presence of made ground to depths of between 3.0mbgl and 5.5mbgl. The upper made ground materials were generally observed to comprise brown to dark brown sandy, very silty clay to depths of 0.1mbgl underlain by brown to dark brown or orange brown sandy gravelly clay or clayey gravelly sand to depths of between 1.7mbgl and 3.2mbgl. The gravel component within this material was observed to include flint, clinker, sandstone, red brick, concrete and metal. The upper materials were observed to be underlain by potential made ground materials comprising generally brown and blue grey silty clayey sand / silty sandy clay. Localised pockets of peat and decaying root matter as well as a strong organic odour was reported within this material. The Lower Tunbridge Wells Sand was recorded across the site from depths of 3.0mbgl and was generally recorded to comprise medium dense / dense becoming very dense clayey fine to medium sand with occasional to abundant gravel of flint interbedded with stiff dark grey / green grey slightly sandy clayey silt and sandy silty clay to the base of the excavations (maximum 11.5mbgl).
Groundwater	During the intrusive works, groundwater was encountered within 2No locations at depths of 3.0mbgl. Subsequent monitoring at the site recorded standing groundwater levels within 3No. installed boreholes at depths of between 1.65mbgl and 2.8mbgl, with 2No of these locations recording groundwater as absent during one monitoring round.
Contamination Characterisation	<i>Human Health</i> Visual and olfactory of potential hydrocarbon contamination was recorded within the south/south-east of the site (BH01, WS12 and WS13) during the intrusive investigation at depths of between 1.2mbgl and 3.5mbgl. However, screening of soils with a photo-ionisation detector (PID) within these locations recorded relatively low indicative VOC concentrations of between 0.4ppm and 54.8ppm. Laboratory analysis of representative samples of the underlying made ground and potential made ground recorded elevated PAH (benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(a)pyrene and dibenz(a,h)anthracene) and heavy metals (lead), when considering a residential with homegrown produce site end use. An asbestos screen completed on samples of the made ground/ at the laboratory recorded no suspected asbestos containing material or detectable asbestos fibres. It is noted that concentrations of petroleum hydrocarbons were all recorded to be below the relevant screening values for human health, including samples collected from the



	southern area of the site where field observations indicated the presence of potential residual hydrocarbons. <i>Controlled Waters</i> Initial leachate analysis undertaken recorded no contaminants of potential concern. However, due to the presence of elevated total TPH concentrations within the southern area of the site, the potential risk to controlled waters could not be fully discounted. As a result, subsequent groundwater monitoring was undertaken from perched water collected from the site during the later investigation in August 2021. It should be noted that no groundwater was encountered within the deeper monitoring wells installed to depths of 10.8mbgl and 11.5mbgl during the supplementary assessment works. The geochemical analysis recorded elevated ammonium, anthracene and fluoranthene within the sampled perched water. However, it was concluded that while elevated SVOC concentrations associated with the above PAHs were recorded in the sampled perched water, concentrations of VOC's and TPH were reported as below laboratory limit of detection within both locations, suggesting no vertical migration of the residual hydrocarbon contamination recorded on site during the previous investigation. In addition, heavy metal concentrations were recorded to be below the GAC deemed protective of the identified controlled water receptors. Concentrations of ammoniacal nitrogen were recorded to exceed the generic assessment criteria (GAC) of 500µg/l (based on the conservative UK Drinking Water Standard for Ammonium as NH4+) in all sampled perched water. The results were considered likely to be associated with anaerobic degradation of organic matter as recorded within the shallow ground materials on site – localised pockets of peat, organic clay and decayed roots were noted to depths of around 3 – 5.5m, considered to be associated with the former stream and ponds historically recorded on site (now infilled). No further potential sources of ammonium were identified in relation to the site. No groundwater was recorded within the deeper boreholes undertaken on site to depths between 10.8m and 11.5mbgl, within the Lower Tunbridge Wells Sand deposits. The nearest BGS borehole record (approximately 300m east of the site) indicated groundwater was struck at a depth of 20m within the sands/ sandstone during drilling of a borehole in June 2020 for East Grinstead Town Football Club. The boreholes for Hackenden Pumping Station record resting groundwater levels of around 10m – 15mbgl. Given the underlying thickness of unsaturated zone below the made ground (of at least 5.3-7.0m), and the distance to the identified controlled waters receptors (groundwater abstractions (850m-960m) and nearest surface water (small stream approximately 50m east),) it was considered that the risk to these receptors was low owing to the resulting attenuation and dilution of the concentrations of PAHs and ammoniacal nitrogen recorded in the perched water on site. In addition, the recorded ammoniacal nitrogen concentrations were considered likely to be associated with background levels for the area resulting from degradation of organic matter from the previous stream and ponds on site.
TEC 2025 – Updated Ground Gas Assessment	
Ground Gas	An updated ground gas assessment was undertaken by TEC in March 2025 in accordance with BS8485:2019, CL:AIRE RB17, and NHBC Foundation NF94. The subsequent assessment indicated the site could be classifies as ‘low risk’ and further site specific information was considered as part of a lines of evidence based assessment. It was noted that while gas monitoring undertaken at the site has recorded elevated methane (maximum 0.7%v/v) and carbon dioxide (maximum 16.2%v/v) concentrations, given the absence of any significant flow (maximum recorded 0.5l/hr) and the further lines of evidence risk assessment associated with the site, the risk from ground gas was considered to be low and it was considered that there is no requirement for ground gas protection measures as part of the proposed development. The site is also not within an area where radon protection is required.

2.2 Remediation Strategy Summary

2.2.1 TEC have prepared a Remediation Strategy for the site, as detailed within the following report:

- *Blackwell Farm, East Grinstead – Remediation Strategy and Verification Plan by TEC. Prepared for Selsdon Building Contractors Limited, dated March 2025 and referenced 2503003.001.01.*

2.2.2 Reference should be made to the report for full details, although relevant information is summarised as follows.

2.2.3 The Remediation Strategy identified the relevant contaminant linkages (RCLs), based upon the site characterisation and conceptual model undertaken by TEC as well as utilising the information contained within the previous reporting undertaken by Land Science.

2.2.4 The RCLs identified within the TEC Remediation Strategy and Verification Plan are summarised as follows:

- RCL1 Risk to site end users via exposure to Contaminants of Potential Concern (CoPC) within the made ground through dermal contact, ingestion and inhalation pathways in areas of proposed soft landscaping, where made ground remains;
- RCL2 Cumulative risk to brownfield construction workers and future site maintenance via exposure to Contaminants of Potential Concern (CoPC) within the made ground materials through dermal contact, ingestion and inhalation pathways; and
- RCL3 Potential risk of statutory nuisance via disturbance of in situ ground materials during development works resulting in the generation of dust, including fine particulate matter.

2.2.5 This report relates to RCL1 only.

Scope of Remedial Works (RCL1)

2.2.6 RCL1 relates to the chronic risk to site end users via exposure to identified contaminants of potential concern within the made ground materials, through the dermal contact, ingestion and inhalation pathways.

Hard Standing and Building Footprint

2.2.7 The proposed development plan indicated that the majority of the of the site area is to be covered by the footprint of the proposed development buildings, or areas of hardstanding. Where present, such hard cover features would remove the identified potential contaminant pathways in relation to site end users.

Soft Landscaped Areas

2.2.8 Given the contaminant concentrations recorded and the presence of asbestos containing material (ACM), a simple cover system, in accordance with Building Research Establishment (BRE) guidance (BRE 465), was not considered appropriate. Therefore, an engineered cover system, designed to provide complete separation of the receptor from the hazard, was recommended within proposed areas of soft landscaping where made ground remains.

2.2.9 The engineered cover system was to comprise a visual marker/break layer overlain by a suitable cover thickness, comprising topsoil and subsoil in accordance with the requirements of BS3882:2015 'Specification for topsoil' and BS8601:2013 'Specification for Subsoil and Requirements for Use'. Consequently, consolidated minimum thicknesses of 450mm will be required within the general soft landscaped (grassed) areas, 600mm in areas of shrub and 900mm in areas of tree planting. The consolidated depth of topsoil spread would not normally exceed 300mm with the remainder of the rooting depth being made up of suitable subsoil. It should be noted that the thickness of the cover system was to be agreed by the regulators as policies and guidance on this issue varies between Local Authorities.

2.2.10 Prior to placement of soils and after grading and compacting, an appropriate high visibility geotextile break layer (Terram Hi-Vis or equivalent) was to be laid and secured, in accordance with the manufacturer's instructions, to inhibit mixing with underlying material and minimise mixing and penetration of foreign objects such as glass, metal etc. into the clean cover. Prior to geotextile placement, the graded area was to be inspected to ensure no material is protruding from the surface which may cause significant damage to the geotextile.

3 VERIFICATION

3.1 Introduction

3.1.1 This verification report relates to the cover system remedial works undertaken in soft landscaped areas to address RCL1 within the soft landscaped areas and is based upon information provided to TEC by Selsdon Building Contractors Limited.

Hardstanding

3.1.2 The areas of hardstanding / building footprint are presented within the proposed development layout detailed within Figure 2. These areas of concrete and block paving hardstanding are considered sufficient to remove identified RCL1.

Soft Landscaped Cover System – Imported Materials

Plots 7 – 10 (July 2026)

3.1.3 Within the soft landscaped areas associated with Plots 7 – 10, an engineered remedial clean cover system, in compliance with the TEC Remediation Strategy is required.

3.1.4 Subsoil generated from site within areas absent of contamination has been utilised within the cover system, with extensive testing completed on the material to confirm its suitability for use. Associated geochemical certificates of analysis for the subsoil generated from site has been provided by Selsdon Building Contractors Limited and is presented in Appendix C. Review of the results record no exceedances of the relevant GACs when considering a residential with homegrown produce site end use and subsequent are below the relevant Importation Criteria laid out in Table 6.1 of the TEC Remediation Strategy and Verification Plan.

3.1.5 Imported topsoil was used within these soft landscaped areas. Information provided by Selsdon Building Contractors Limited indicates the imported topsoil to have been provided by Freeland Horticulture Limited, with 8No. loads of topsoil (~120m³) delivered to site between 13 July 2026 and 14 July 2026 (Appendix A).

3.1.6 Associated geochemical certificates of analysis for the imported topsoil have been provided by Selsdon Building Contractors Limited (Appendix B).

3.1.7 The imported topsoil from Bat & Ball, Sevenoaks Topsoil was tested on 27 April 2026 by Freeland Horticulture Ltd (certificate no. SLC-1468-SA). The laboratory report indicates that all determinands tested are below the relevant Importation Criteria laid out in Table 6.1 of the TEC Remediation Strategy and Verification Plan and the BS3882:2015 Topsoil testing reporting that the material sampled is compliant with multipurpose topsoil specifications.

Soft Landscaped Cover System – Placement

Plots 7 – 10 (July 2026)

3.1.8 Information provided by Selsdon Building Contractors Limited indicates hand dug puts were advanced within the areas of soft landscaping within Plots 7 – 10 to verify an appropriate thickness of material had been placed within these areas.

3.1.9 It is understood that the geotextile used within the clean cover system is a Lotrack® Alarm 15. The specification for this geomembrane is presented within Appendix E.

3.1.10 Photographs of each verification pit location are presented within Appendix D. The Verification recorded the presence of the geotextile at the base with a combined depth of topsoil and subsoil of approximately 600mm.

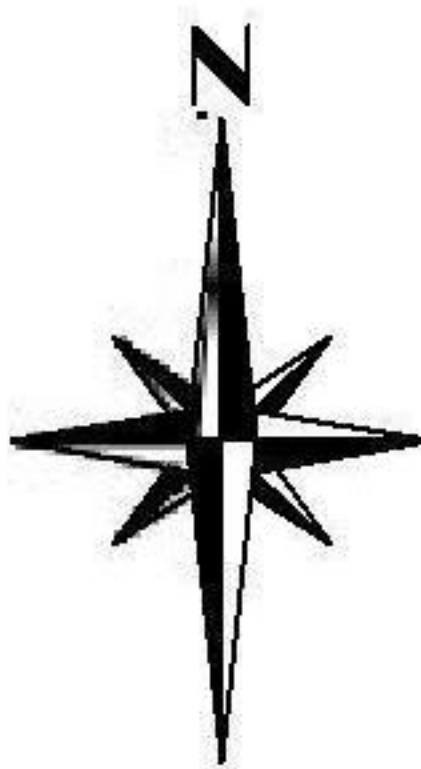


4 VERIFICATION STATEMENT

- 4.1.1 This Verification Report details the remedial cover system works undertaken within the soft landscaping areas associated with the proposed development at Blackwell Farm, East Grinstead, to support compliance with the remediation objectives and criteria for RCL1 as detailed within the TEC Remediation Strategy and Verification Plan (report ref.: 2503003.002.01), in order to aid in the discharging of phase 1 (Plots 7 -10) of Condition 20 of the approved planning permission (Mid Sussex District Council planning ref: DM/20/1333).
- 4.1.2 On the basis of the proposed development works undertaken and the information provided by the Client, it is considered that the remediation measures implemented within the soft landscaping areas of Plots 7 - 10 would appropriately mitigate against the contaminant linkage previously identified by TEC (i.e. RCL1 of the TEC Remediation Strategy).
- 4.1.3 This Verification Report relates to RCL1 within the soft landscaped areas of Plots 7 - 10.

TEC

Figures and Drawings



Approximate Site Location:



Ordnance Survey © Crown Copyright [2026] All rights reserved.
Licence number AC0000847862



TTC
and building your
any business
with us
EAST

email: info@tec.co.uk
Web: www.tec.co.uk

Site Name:
Blackwell Farm, East Grinstead

Drawing Name:
Site Location Plan

Client Name:
Selsdon Building Contractors Limited

Project No:
2503003 002

Figure No:
1

Date:
July 2026

Scale:
NTS



Extract of m h architects Site Plan drawing No. 18-202BFRMHA00ZZDRA002A



tec
Building and
Infrastructure
Solutions
1855 7

tel: 01459 677760
Email: info@tec-solutions.co.uk
Web: www.tec-solutions.co.uk

Site Name:
Blackwell Farm, Last Gristead

Drawing Name:
Proposed Development Plan

Client Name:
Selcon Building Contractors Limited

Appendix A

Imported Topsoil Conveyance Notes

Freeland

HORTICULTURE LIMITED

Rosedale Nursery
College Road
Hextable
Kent
BR8 7LT

Tel: 01322 619161
Fax: 01322 619135

E-mail: enquiries@freelandhorticulture.co.uk

Customer / Delivery Address

ORDER NOTE

Delivery to:

Dwyer Engineering

West Sussex

RH19 3HX

Customer Order No.

Delivery Ticket No.

289 334

Vehicle Registration No.

Driver

Special Instructions

Delivery Date & Time Required

14/7/28

Qty. Unit Description

15M Top Soil

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

Received the above in good order and condition.

Signed ...

Print name

Customer ordering Vehicle off the Public Road do
so entirely at their Own risk and will be liable for
any damage incurred.

Any complaint to be made within 48 hours of delivery.

Subject to our Standard Conditions of Sale and Contract

Site Copy - White

Haulier Copy - Blue

Customer Copy - Pink



Rosedale Nurser,
College Road
Hextable
Kent
BR8 7L

Tel: 01322 61916
Fax: 01322 61913

E-mail: enquiries@freelandhorticulture.co.uk

Customer / Delivery Address

ORDER NOTE

Delivery to:

DWyer Engineering

West Sussex

RH19 3HX

Customer Order No.

Delivery Ticket No.

289 333

Vehicle Registration No.

Driver:

Special Instructions.

Delivery Date & Time Required.

14/7/26

Qty.	Unit	Description
15	M	TOP Soil

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

Received the above in good order and condition.

Signed

Print name

Customer ordering Vehicle off the Public Road do
so entirely at their Own risk and will be liable for
any damage incurred.

Any complaint to be made within 48 hours of delivery.

Subject to our Standard Conditions of Sale and Contract

Site Copy - White

Haulier Copy - Blue

Customer Copy - Green

11000



Rosedale Nurse
College Rd
Hextah
Ke
BR8 7L

Tel: 01322 61911
Fax: 01322 61913

E-mail: enquiries@freelandhorticulture.co.uk

Customer / Delivery Address

ORDER NOTE

Delivery to: *Dwyer Engineering*

West Sussex RH19 3HX

Customer Order No.

Delivery Ticket No.

289 332

Vehicle Registration No.

Driver.

Special Instructions.

Delivery Date & Time Required.

14 / 7 / 25

Qty. Unit Description

15 m Top Soil

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

Received the above in good order and condition

Signed

Print name

Customer ordering Vehicle off the Public Road do
so entirely at their Own risk and will be liable for
any damage incurred.

Any complaint to be made within 48 hours of delivery.

Subject to our Standard Conditions of Sale and Contract

Site Copy - White

Haulier Copy - Blue

Customer Copy - Pink

Freeland

HORTICULTURE LIMITED

Rosedale Nurser
College Road
Hextable
Kent
BR8 7L

Tel: 01322 61916
Fax: 01322 61913

E-mail: enquiries@freelandhorticulture.co.uk

ORDER NOTE

Customer / Delivery Address

Delivery to.

Dwyer Engineering

West Sussex RH19 3HX

Customer Order No.

Delivery Ticket No.

289 331

Vehicle Registration No.

Driver.

Special Instructions.

Delivery Date & Time Required.

14/7/26

Qty.	Unit	Description
		15 m Top Soil

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

Received the above in good order and condition.

Signed

Print name

Customer ordering Vehicle off the Public Road do
so entirely at their Own risk and will be liable for
any damage incurred.

Any complaint to be made within 48 hours of delivery.

Subject to our Standard Conditions of Sale and Contract

Site Copy - White

Haulier Copy - Blue

Customer Copy - Pink

Freeland

HORTICULTURE LIMITED

Rosedale Nurse
College Rd
Hextham
Ke
BR8 7L

Tel: 01322 61916
Fax: 01322 61913

E-mail: enquiries@freelandhorticulture.co.uk

Customer / Delivery Address

ORDER NOTE

Customer Order No.

Delivery Ticket No.

Vehicle Registration No.

Driver.

Delivery to.

West Sussex RH19 3HX

Special Instructions.

Delivery Date & Time Required.

Qty. Unit Description

15 M TOP SOIL

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

Received the above in good order and condition.

Signed

Print name

Customer ordering Vehicle off the Public Road do
so entirely at their Own risk and will be liable for
any damage incurred.

Any complaint to be made within 48 hours of delivery.

Subject to our Standard Conditions of Sale and Contract.

Site Copy - White

Haulier Copy - Blue

Customer Copy - Pink

Freeland

HORTICULTURE LIMITED

Rosedale Nurser
College Road
Hextable
Kent
BR8 7L

Tel: 01322 61916
Fax: 01322 61913

E-mail: enquiries@freelandhorticulture.co.uk

Customer / Delivery Address

ORDER NOTE

Delivery to:

Dwyer Engineering

West Sussex

RH19 3HX

Customer Order No.

Delivery Ticket No.

289 329

Vehicle Registration No.

Driver:

Special Instructions.

Delivery Date & Time Required.

13/7/26

Qty. Unit Description

15 m Top soil

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

Received the above in good order and condition.

Signed

Print name

Customer ordering Vehicle off the Public Road do
so entirely at their Own risk and will be liable for
any damage incurred.

Any complaint to be made within 48 hours of delivery.

Subject to our Standard Conditions of Sale and Contract

Site Copy - White

Handler Copy - Blue

Customer Copy - Pink

Freeland

HORTICULTURE LIMITED

Rosedale Nurse
College Rd
Hextat
Ke
BR8 7L

Tel: 01322 61914
Fax: 01322 61913

E-mail: enquiries@freelandhorticulture.co.uk

Customer / Delivery Address

ORDER NOTE

Delivery to:

Dwyer Engineering

Customer Order No.

Delivery Ticket No.

289 328

Vehicle Registration No.

Driver:

West Sussex RH19 3HX

Special Instructions.

Delivery Date & Time Required.

13/7/26

Qty. Unit Description

15 M Top Soil

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

Received the above in good order and condition.

Signed

Print name

Customer ordering Vehicle off the Public Road do
so entirely at their Own risk and will be liable for
any damage incurred.

Any complaint to be made within 48 hours of delivery.

Subject to our Standard Conditions of Sale and Contract

Site Copy - White

Haulier Copy - Blue

Customer Copy - Pink

Freeland

HORTICULTURE LIMITED

Rosedale Nursery
College Road
Hextable
Kent
BR8 7LJ

Tel: 01322 61916
Fax: 01322 61913

E-mail: enquiries@freelandhorticulture.co.uk

ORDER NOTE

Customer / Delivery Address

Delivery to: *DWyer Engineering*

West Sussex RH19 3HX

Customer Order No.

Delivery Ticket No.

289 327

Vehicle Registration No.

Driver.

Special Instructions.

Delivery Date & Time Required.

13 / 7 / 26

Qty.	Unit	Description
		<i>15 m Top Soil</i>

Discrepancies/
damages to
be notified
within 7 days
of delivery.

Hauliers Signature:

Haulage Company:

Received the above in good order and condition

Signed

Print name

Customer ordering Vehicle off the Public Road do
so entirely at their Own risk and will be liable for
any damage incurred.

Any complaint to be made within 48 hours of delivery

Subject to our Standard Conditions of Sale and Contract

Site Copy - White

Handier Copy - Blue

Customer Copy - Pink

Appendix B

Imported Soils Geochemical Certificate of Analysis (Topsoil)



Freeland Horticulture Ltd
Rosedale Nursery
College Road
Hextable
Kent BR8 7LT

Attention: Philippa Lambourne

Our Ref: SLC-1468-SA

27 April 2026

Dear Philippa

Topsail Analysis Report: Bat & Ball, Sevenoaks Topsoil – April 2026

We have completed the analysis of the topsoil sample recently taken from the above site and it has been forwarded to an approved laboratory for analysis and have the pleasure of reporting our findings. The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes and its compliance with the current British Standard for topsoil (BS3882).

SOIL SAMPLING & EXAMINATION

At the time of our sampling visit the topsoil was stored in a stockpile. A series of 10 hand augered trial holes were constructed across the stockpile for the purpose of soil examination and sample collection. As the soil examination confirmed a consistent topsoil composition, the ten samples were combined together to form one composite sample for analysis purposes. The soil was described as dark brown, slightly moist and friable with a well-developed, fine to medium granular structure. The soil contained a low fraction of small stones and no deleterious materials (eg. building waste materials, glass, roots or rhizomes of pernicious weeds) or unusual odours (eg. hydrocarbons) were recorded.

LABORATORY ANALYSIS

The topsoil sample was submitted to a UKAS and MCERTS accredited laboratory for routine physical and chemical parameters to confirm the composition and fertility of the soil. The following parameters were determined:

- ⊕ pH & electrical conductivity values;
- ⊕ major plant nutrients (N, P, K, Mg) & organic matter content;
- ⊕ particle size distribution and stone content;
- ⊕ heavy metals & potentially toxic elements (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn, B);
- ⊕ sulphate, sulphur, sulphide;
- ⊕ total cyanide and total (mono) phenols;
- ⊕ speciated PAHs (US EPA16)
- ⊕ banded aromatic and aliphatic petroleum hydrocarbons (C₅-C₃₅).
- ⊕ Asbestos

The results are presented on the attached Certificate of Analysis and an interpretation of the results is given below.

COMMENTS***pH & Electrical Conductivity (salinity) Values***

The sample was alkaline in nature (pH 8.3) with a pH value that would be considered suitable for general landscaping purposes.

The electrical conductivity (salinity) value using the soil:water extract was 530µS/cm indicating that soluble salts are not present at levels that would be harmful to plants.

The electrical conductivity values by CaSO₄ extract (BS3882 requirement) fell below the maximum specified value (3300µS/cm) given in BS3882:2015.

Organic Matter & Nutrient Status

The sample was rich in organic matter and all major plant nutrients. No further additions of compost or fertiliser are required, or indeed recommended, for at least the first growing season.

The C:N ratio of the sample was acceptable for general landscape purposes

Particle Size Distribution & Stone Content

The sample contained 76% sand and fell into the sandy loam texture class. This particle size distribution is considered suitable for a broad range of landscape applications, including tree and shrub planting, turfing and seeding.

The sample was Virtually free from stones of 50 mm and upwards in diameter and only contained a slight fraction of smaller stones (0.7%). As such, stones will not restrict the use of the soil for landscaping purposes.

Potential Contaminants

We are not aware of any specified contaminant levels set for the proposed end-use of this topsoil. This includes human health, environmental protection and metals considered toxic to plants. In the absence of any site-specific assessment criteria, the concentrations that affect human health have been compared with the 'residential with homegrown produce' land use in the Suitable For Use Levels presented in 'The LQM/CIEH S4UIs' for Human Health Risk Assessment (2015) and DEFRA SP1010: 'Development of Category 4 Screening Levels' for Assessment of Land Affected by Contamination – Policy Companion Document (2014).

Of the potential contaminants determined, none was found at levels that would exceed their respective guideline values.

CONCLUSION

The purpose of the analysis was to determine the suitability of the topsoil for general landscaping purposes. From the soil examination and laboratory analysis, the soil is described as an alkaline, non-saline, sandy loam. The organic matter and nutrient levels are acceptable, and no significant contamination was found with respect to the parameters determined. This soil would adhere to the current BS3882 specification for 'multipurpose grade'.

To conclude, based on our findings, the topsoil would be considered well-suited to general landscaping purposes provided the physical condition of the soil is maintained.

We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if you have any queries or comments.

George Longmuir MSc Soil Sci. M.I Soil Sci.

Client	Freeland Horticulture Ltd
Job Name	Topsoil Analysis
Site	Bat & Ball, Sevenoaks
Month/Year	April 2026
Our Ref	1468-SA
Date	27 April 2026

Composite sample

pH Value & Salinity

pH value (1:2.5 soil/water ext)	units
Electrical Conductivity (1:2.5 soil/water ext)	µS/cm
Electrical Conductivity (1:2.5 soil/CaSO ₄ ext)	µS/cm

8.3
530
2475

Organic Matter & Nutrient Status

Organic Matter (LOI)	%
Organic Carbon (Derived)	%
Total Nitrogen	%
Carbon:Nitrogen Ratio	:1
Available Phosphorus	mg/l
Available Potassium	mg/l
Available Magnesium	mg/l

4.5
2.6
0.237
11.0
51.4
668
146

Particle Size Analysis & Stones

Clay (<0.002mm)	%
Silt (0.063-0.002mm)	%
Sand (2.0-0.063mm)	%
Texture Class	UK Class

11
13
76
SandyLoam

Stones 2-20mm	% by DW
Stones 20-50mm	% by DW
Stones >50mm	% by DW

0.7
0.0
0.0

Potential Contaminants

Total Arsenic (As)	mg/kg
Total Cadmium (Cd)	mg/kg
Total Chromium (Cr)	mg/kg
Hexavalent Chromium (CR ^{VI})	mg/kg
Total Copper (Cu)	mg/kg
Total Lead (Pb)	mg/kg
Total Mercury (Hg)	mg/kg
Total Nickel (Ni)	mg/kg
Total Selenium (Se)	mg/kg
Total Zinc (Zn)	mg/kg
Total Beryllium (Be)	mg/kg
Total Barium (Ba)	mg/kg
Total Vanadium (V)	mg/kg
Hot Water Soluble Boron (B)	mg/kg
Total Cyanide (CN)	mg/kg
Elemental Sulphur (S)	mg/kg
Easily Liberated Sulphide (S ²⁻)	mg/kg
Water Soluble Sulphate (SO ₄ ²⁻)	mg/l
Total Phenols Index	mg/kg
Asbestos Screen	-

12.7
0.11
86.5
<0.2
9.3
12.8
<0.2
49.6
0.19
49.5
<1
25.3
60.3
1.3
<1
<5
<1
84
<1
N.D.

Client	Freeland Horticulture Ltd
Job Name	Topsoil Analysis
Site	Bat & Ball, Sevenoaks
Month/Year	April 2026
Our Ref	1468-SA
Date	27 April 2026

Polyaromatic Hydrocarbons

Naphthalene	mg/kg	<0.05
Acenaphthylene	mg/kg	<0.05
Acenaphthene	mg/kg	<0.05
Fluorene	mg/kg	<0.05
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.05
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo[a]anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo[b]fluoranthene	mg/kg	<0.1
Benzo[k]fluoranthene	mg/kg	<0.1
Benzo[a]pyrene	mg/kg	<0.1
Indeno[1,2,3-cd]pyrene	mg/kg	<0.1
Dibenzo[a,h]anthracene	mg/kg	<0.1
Benzo[g,h,i]perylene	mg/kg	<0.1
Total PAHs sum US EPA 16	mg/kg	<1

Banded Petroleum Hydrocarbons

Aliphatic TPH >C ₅ -C ₆	mg/kg	<0.05
Aliphatic TPH >C ₆ -C ₈	mg/kg	<0.05
Aliphatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aliphatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aliphatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aliphatic TPH >C ₁₆ -C ₂₁	mg/kg	<10
Aliphatic TPH >C ₂₁ -C ₃₅	mg/kg	23.0
Aliphatic TPH >C ₃₅ -C ₄₄	mg/kg	<12

Aromatic TPH >C ₅ -C ₇	mg/kg	<0.05
Aromatic TPH >C ₇ -C ₈	mg/kg	<0.05
Aromatic TPH >C ₈ -C ₁₀	mg/kg	<0.05
Aromatic TPH >C ₁₀ -C ₁₂	mg/kg	<10
Aromatic TPH >C ₁₂ -C ₁₆	mg/kg	<10
Aromatic TPH >C ₁₆ -C ₂₁	mg/kg	22.0
Aromatic TPH >C ₂₁ -C ₃₅	mg/kg	99.0
Aromatic TPH >C ₃₅ -C ₄₄	mg/kg	16.0

Total Petroleum Hydrocarbons (C ₅ -C ₄₄)	mg/kg	172.0
---	-------	-------

BTEX

Benzene	mg/kg	<0.02
Toluene	mg/kg	<0.2
Ethyl Benzene	mg/kg	<0.04
m- & p- Xylene	mg/kg	<0.2
o-Xylene	mg/kg	<0.1

Compliant with BS3882:2015 Multipurpose Range

Date Reported 23.04.2026

Parameter	Range
Texture	
Clay Content %	5 – 35
Silt Content %	0 – 65
Sand Content %	30 - 85
Organic Matter Content %	
Clay 5 – 20%	3.0 – 20
Clay 20 – 35%	5.0 - 20
Maximum Coarse Fragment	
>2mm	0 – 30
>20mm	0 – 10
>50mm	0
Soil pH Value	5.5 – 8.5

Appendix C

Geochemical Certificate of Analysis (Subsoil)



Construction Testing Solutions
Northdown House
Ashford Road
Harrietsham
ME17 1QW

7 - 11 Harding Street
Leicester
LE1 4DH

Analytical Test Report: L25/10558/CTS - 25-85013

Your Project Reference:	5009642 Blackwell Farm Road		
Your Order Number:	HARRIETSHAM	Samples Received / Instructed:	07/10/2025 / 07/10/2025
Report Issue Number:	1	Sample Tested:	07/10 to 21/10/2025
Samples Analysed:	6 sample(s)	Report issued:	21/10/2025

Signed

David Ratcliffe
Director of Analytical Services
CTS

Notes:

General

Please refer to Methodologies page for details pertaining to the analytical methods undertaken.

Samples will be retained for 14 days after issue of this report with the exception of the asbestos test portion which is held for 6 months unless otherwise requested.

Moisture Content was determined in accordance with CTS method statement MS - CL - Sample Prep, oven dried at <30°C.

Moisture Content is reported as a percentage of the dry mass of soil, this calculation is in accordance with BS1377, Part 2, 1990, Clause 3.2

Stone Content was determined in accordance with CTS method statement MS - CL - Sample Prep and refers to the percentage of stones retained on a 10mm BS test sieve.

Where specification limits are included these are for guidance only. Where a measured value has been highlighted this is not implying acceptance or failure and certainty of measurement values have not been taken into account.

Uncertainty of measurement values are available on request.

Samples were supplied by customer, results apply to the samples as received.

Asbestos

Please note: Where further analysis is required samples identified as containing asbestos are screened and tested on an as received basis. No correction is made for moisture content and other than the asbestos test(s) these results are not covered by our accreditation

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

Deviating Samples

On receipt samples are compared against our sample holding and handling protocols, where any deviations have been noted these are reported on our deviating sample page (if present)

Accreditation Key

This report shall not be reproduce except in full

UKAS = UKAS Accreditation, MCERTS = MCERTS Accreditation, u = Unaccredited, subUKAS - Subcontracted to a laboratory UKAS accredited for this test, subMCERTS - Subcontracted to a laboratory MCERTS accredited for this test

MCERTS Accreditation only covers the SAND, CLAY and LOAM matrices

UKAS accreditation on waters only covers the Ground water and Surface water matrices

Date of Issue: 27.08.25

Issued by: J. Gane

Issue No: 4

Rev No: 27



7 - 11 Harding Street
Leicester
LE1 4DH

L25/10558/CTS - 25-85013
Project Reference - 5009642 Blackwell Farm
Road
Analytical Test Results - Solid

Lab Reference			610600	610601	610602	610603	610604	610605
Client Sample ID			589159	589160	589161	589162	589163	589164
Client Sample Location			1.Rear 9/10	2.Between plots 9/10 * 7/8	3.Rear 7/8	4.Left of Heap	5.Middle of Heap	6.Right of Heap
Client Sample Type			-	-	-	-	-	-
Client Material Description			Subsoil	Subsoil	Subsoil	Subsoil	Subsoil	Subsoil
Depth - Top (m)			-	-	-	-	-	-
Depth - Bottom (m)			-	-	-	-	-	-
Date of Sampling			29/09/2025	29/09/2025	29/09/2025	29/09/2025	29/09/2025	29/09/2025
Source / Supplier			Site Won	Site Won	Site Won	Site Won	Site Won	Site Won
Sample Matrix			Clay	Clay	Clay	Clay	Clay	Clay
Determinant			Units	Accreditation				
Arsenic	(mg/kg)	MCERTS	< 10	< 10	< 10	< 10	< 10	< 10
Barium	(mg/kg)	MCERTS	26	18	21	23	25	43
Beryllium	(mg/kg)	MCERTS	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Boron (w/s)	(mg/kg)	u	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Cadmium	(mg/kg)	MCERTS	0.5	0.4	0.5	0.6	0.9	1.8
Chromium (Total)	(mg/kg)	UKAS	6.2	4.5	5.5	6.3	6.3	6.9
Copper	(mg/kg)	MCERTS	11	9.5	7.8	9.0	9.3	13
Lead	(mg/kg)	MCERTS	28	20	15	17	22	37
Mercury	(mg/kg)	UKAS	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Nickel	(mg/kg)	MCERTS	6.6	5.5	6.4	7.2	7.1	9.0
Selenium	(mg/kg)	u	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
Vanadium	(mg/kg)	UKAS	12	8.3	11	12	11	12
Zinc	(mg/kg)	MCERTS	36	31	38	42	57	110
Total Phenols	(mg/kg)	u	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyanide (Total)	(mg/kg)	u	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chromium (Hexavalent)	(mg/kg)	u	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Acenaphthene	(mg/kg)	MCERTS	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Acenaphthylene	(mg/kg)	UKAS	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Anthracene	(mg/kg)	UKAS	0.03	0.03	< 0.02	< 0.02	< 0.02	< 0.02
Benzo (a) anthracene	(mg/kg)	MCERTS	0.08	0.07	0.04	0.04	0.06	0.04
Benzo (a) pyrene	(mg/kg)	MCERTS	0.09	0.08	0.05	0.05	0.06	0.04
Benzo (b) fluoranthene	(mg/kg)	MCERTS	0.09	0.08	0.05	0.05	0.06	0.04
Benzo (g, h, i) perylene	(mg/kg)	MCERTS	0.06	0.05	0.04	0.03	0.04	0.03
Benzo (k) fluoranthene	(mg/kg)	MCERTS	0.04	0.04	0.02	< 0.02	0.03	< 0.02
Chrysene	(mg/kg)	MCERTS	0.07	0.07	0.03	0.03	0.05	0.04
Dibenzo (a,h) anthracene	(mg/kg)	MCERTS	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Fluoranthene	(mg/kg)	MCERTS	0.19	0.16	0.07	0.07	0.11	0.07
Fluorene	(mg/kg)	MCERTS	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Indeno (1, 2, 3,-cd) pyrene	(mg/kg)	MCERTS	0.05	0.04	0.03	0.02	0.03	0.02
Naphthalene	(mg/kg)	MCERTS	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Phenanthrene	(mg/kg)	MCERTS	0.08	0.07	< 0.02	0.02	0.05	0.02
Pyrene	(mg/kg)	MCERTS	0.17	0.14	0.07	0.07	0.10	0.06
Total PAH (Sum of USEPA 16)	(mg/kg)	UKAS	1.1	0.93	0.57	0.56	0.73	0.53
Asbestos	-	UKAS	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected



L25/10558/CTS - 25-85013
Project Reference - 5009642 Blackwell Farm Road
Analytical Test Results - VPH / EPH

7 - 11 Harding Street
Leicester
LE1 4DH

Lab Reference	610600	610601	610602	610603	610604	610605
Client Sample ID	589159	589160	589161	589162	589163	589164
Client Sample Location	1.Rear 9/10	2.Between plots 9/10 * 7/8	3.Rear 7/8	4.Left of Heap	5.Middle of Heap	6.Right of Heap
Client Sample Type	-	-	-	-	-	-
Client Material Description	Subsoil	Subsoil	Subsoil	Subsoil	Subsoil	Subsoil
Depth - Top (m)	-	-	-	-	-	-
Depth - Bottom (m)	-	-	-	-	-	-
Date of Sampling	29/09/2025	29/09/2025	29/09/2025	29/09/2025	29/09/2025	29/09/2025
Source / Supplier	Site Won	Site Won	Site Won	Site Won	Site Won	Site Won
Sample Matrix	Clay	Clay	Clay	Clay	Clay	Clay
Determinant	Units	Accreditation				
Aliphatic >C ₅ to C ₆ [HS_MS_1D_AL]	(mg/kg)	MCERTS	< 0.06	< 0.06	< 0.06	< 0.06
Aliphatic >C ₆ to C ₈ [HS_MS_1D_AL]	(mg/kg)	MCERTS	< 0.06	< 0.06	< 0.06	< 0.06
Aliphatic >C ₈ to C ₁₀ [HS_MS_1D_AL]	(mg/kg)	MCERTS	< 0.06	< 0.06	< 0.06	< 0.06
Aliphatic >C ₁₀ to C ₁₂ [EH_2D_AL]	(mg/kg)	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic >C ₁₂ to C ₁₆ [EH_2D_AL]	(mg/kg)	MCERTS	2.2	1.2	< 1.0	< 1.0
Aliphatic >C ₁₆ to C ₂₁ [EH_2D_AL]	(mg/kg)	MCERTS	3.3	2.2	1.7	1.9
Aliphatic >C ₂₁ to C ₃₅ [EH_2D_AL]	(mg/kg)	MCERTS	14	9.7	9.3	7.1
Aliphatic >C ₃₅ to C ₄₄ [EH_2D_AL]	(mg/kg)	u	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic >C ₅ to C ₇ [HS_MS_1D_AR]	(mg/kg)	MCERTS	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C ₇ to C ₈ [HS_MS_1D_AR]	(mg/kg)	MCERTS	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >C ₈ to C ₁₀ [HS_MS_1D_AR]	(mg/kg)	MCERTS	0.54	< 0.06	< 0.06	< 0.06
Aromatic >C ₁₀ to C ₁₂ [EH_2D_AR]	(mg/kg)	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic >C ₁₂ to C ₁₆ [EH_2D_AR]	(mg/kg)	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic >C ₁₆ to C ₂₁ [EH_2D_AR]	(mg/kg)	MCERTS	3.7	2.9	2.6	3.1
Aromatic >C ₂₁ to C ₃₅ [EH_2D_AR]	(mg/kg)	MCERTS	10	6.6	5.6	5.2
Aromatic >C ₃₅ to C ₄₄ [EH_2D_AR]	(mg/kg)	u	< 5.0	< 5.0	< 5.0	< 5.0
Total >C ₅ to C ₃₅ [EH_2D+HS_1D_Total]	(mg/kg)	MCERTS	33	23	19	17
Total >C ₅ to C ₄₀ [EH_2D+HS_1D_Total]	(mg/kg)	MCERTS	39	25	21	19
Total TPH >C ₈ to C ₄₀ [EH_2D_TOTAL]	(mg/kg)	MCERTS	43	29	26	24



4161



7 - 11 Harding Street
Leicester
LE1 4DH

L25/10558/CTS - 25-85013

Project Reference - 5009642 Blackwell Farm Road

Sample Descriptions

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Description	Moisture Content (%)	Stone Content (%)
610600	589159	1.Rear 9/10	-	-	Light brown slightly gravelly clayey silt	14	< 0.1
610601	589160	2.Between plots 9/10 * 7/8	-	-	Light brown slightly gravelly clayey silt	11	< 0.1
610602	589161	3.Rear 7/8	-	-	Light brown slightly gravelly clayey silt	16	< 0.1
610603	589162	4.Left of Heap	-	-	Light brown slightly gravelly clayey silt	14	< 0.1
610604	589163	5.Middle of Heap	-	-	Light brown slightly gravelly clayey silt	13	3.1
610605	589164	6.Right of Heap	-	-	Light brown slightly gravelly clayey silt	17	< 0.1



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7 - 11 Harding Street
Leicester
LE1 4DH

L25/10558/CTS - 25-85013

Project Reference - 5009642 Blackwell Farm Road

Sample Comments

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Comments
610600	589159	1.Rear 9/10	-	-	VPH/BTEX - Sample taken from container with headspace.
610601	589160	2.Between plots 9/10 * 7/8	-	-	VPH/BTEX - Sample taken from container with headspace.
610602	589161	3.Rear 7/8	-	-	VPH/BTEX - Sample taken from container with headspace.
610603	589162	4.Left of Heap	-	-	VPH/BTEX - Sample taken from container with headspace.
610604	589163	5.Middle of Heap	-	-	VPH/BTEX - Sample taken from container with headspace.
610605	589164	6.Right of Heap	-	-	VPH/BTEX - Sample taken from container with headspace.



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7 - 11 Harding Street
Leicester
LE1 4DH

L25/10558/CTS - 25-85013

Project Reference - 5009642 Blackwell Farm Road

Analysis Methodologies - Please refer to sample comments page (if present) for any changes to methods

Test Code	Test Name / Reference	Sample condition for analysis	Sample Preparation	Test Details
ICPMETS	MS - CL - ICP Metals	Air dried	Passing 10mm test sieve	Determination of metals in soils via ICP
PAHASRDS	MS - CL - PAH (As Received)	As received	Passing 10mm test sieve	Determination of Polyaromatic hydrocarbons in soil via GC-MS
GCXGCS	MS - CL - TPH & EPH by GCXGC	As received	Passing 10mm test sieve	Determination of TPH and EPH in soils via GCxGC-FID
CWGS	Calculation from VPH-S and EPH-S	As received	Passing 10mm test sieve	Determination of TPH CWG (Volatile Petroleum Hydrocarbons and Extractable Petroleum Hydrocarbons) in soils via Headspace-GC-MS and GC-GC-FID respectively
VPHS	MS - CL - VPH	As received	Passing 10mm test sieve	Determination of VPH in soils via Headspace-GC-MS
WSBORONS	MS - CL - WS Boron	Air dried	Passing 10mm test sieve	Determination of Water soluble Boron in soils via ICP
ASB	MS - AS - Asbestos	-	-	Fibre identification is in accordance with in house documented methods which are based on the procedure documented in the HSE Document HSG 248 "Asbestos: The analysts guide for sampling, analysis and clearance procedures"
SAMPLEPREP	MS - CL - Sample Preparation	-	-	Preparation of samples (including determination of moisture content) to allow for subsequent analysis
SUBSKAS	Subcontract - Phenol & Cyanide & Cr (VI)	-	-	Subcontract testing



7 - 11 Harding Street
Leicester
LE1 4DH

L25/10558/CTS - 25-85013

Project Reference - 5009642 Blackwell Farm Road

Sample Deviations

Deviations are listed below against each sample and associated test method, where deviation(s) are noted it means data may not be representative of the sample at the time of sampling and it is possible that results provided may be compromised.

Observations on receipt

- A - No date of sampling provided
- W - No time of sampling provided for water sample
- C - Received in inappropriate container
- H - Contains headspace
- T - Temperature on receipt exceeds storage temperature
- R - Sample(s) received with less than 96 hours for testing to commence/complete, any result formally classed as deviating will be marked with an X against the applicable test (i.e. RX)

Observations whilst in laboratory

X - Exceeds sampling to extraction or anlalysis timescales

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Test	Deviations
610600	589159	1.Rear 9/10	-	-	MS - CL - PAH (As Received)	RX
610600	589159	1.Rear 9/10	-	-	MS - CL - TPH & EPH by GCXGC	RX
610600	589159	1.Rear 9/10	-	-	MS - CL - VPH	RX
610601	589160	2.Between plots 9/10 * 7/8	-	-	MS - CL - PAH (As Received)	RX
610601	589160	2.Between plots 9/10 * 7/8	-	-	MS - CL - TPH & EPH by GCXGC	RX
610601	589160	2.Between plots 9/10 * 7/8	-	-	MS - CL - VPH	RX
610602	589161	3.Rear 7/8	-	-	MS - CL - PAH (As Received)	RX
610602	589161	3.Rear 7/8	-	-	MS - CL - TPH & EPH by GCXGC	RX
610602	589161	3.Rear 7/8	-	-	MS - CL - VPH	RX
610603	589162	4.Left of Heap	-	-	MS - CL - PAH (As Received)	RX
610603	589162	4.Left of Heap	-	-	MS - CL - TPH & EPH by GCXGC	RX
610603	589162	4.Left of Heap	-	-	MS - CL - VPH	RX
610604	589163	5.Middle of Heap	-	-	MS - CL - PAH (As Received)	RX
610604	589163	5.Middle of Heap	-	-	MS - CL - TPH & EPH by GCXGC	RX
610604	589163	5.Middle of Heap	-	-	MS - CL - VPH	RX
610605	589164	6.Right of Heap	-	-	MS - CL - PAH (As Received)	RX
610605	589164	6.Right of Heap	-	-	MS - CL - TPH & EPH by GCXGC	RX
610605	589164	6.Right of Heap	-	-	MS - CL - VPH	RX



7 - 11 Harding Street
Leicester
LE1 4DH

L25/10558/CTS - 25-85013

Project Reference - 5009642 Blackwell Farm Road

HWOL TPH Acronym Index

Acronym	Description
HS	Headspace Analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics and Aromatics
AL	Aliphatics Only
AR	Aromatics Only
2D	GC-GC - Double Coil Gas Chromatography
#1	EH_Total but with humics mathmatically subtracted
#2	EH_Total but with fatty acids mathmatically subtracted
_	Operator - underscore to separate acronyms (except for +)
+	Operator to indicate cumlative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

Appendix D

Client Issued Verification Pit Photographs



Photograph 1: Placement of geotextile within Plots 8, 9 and 10.



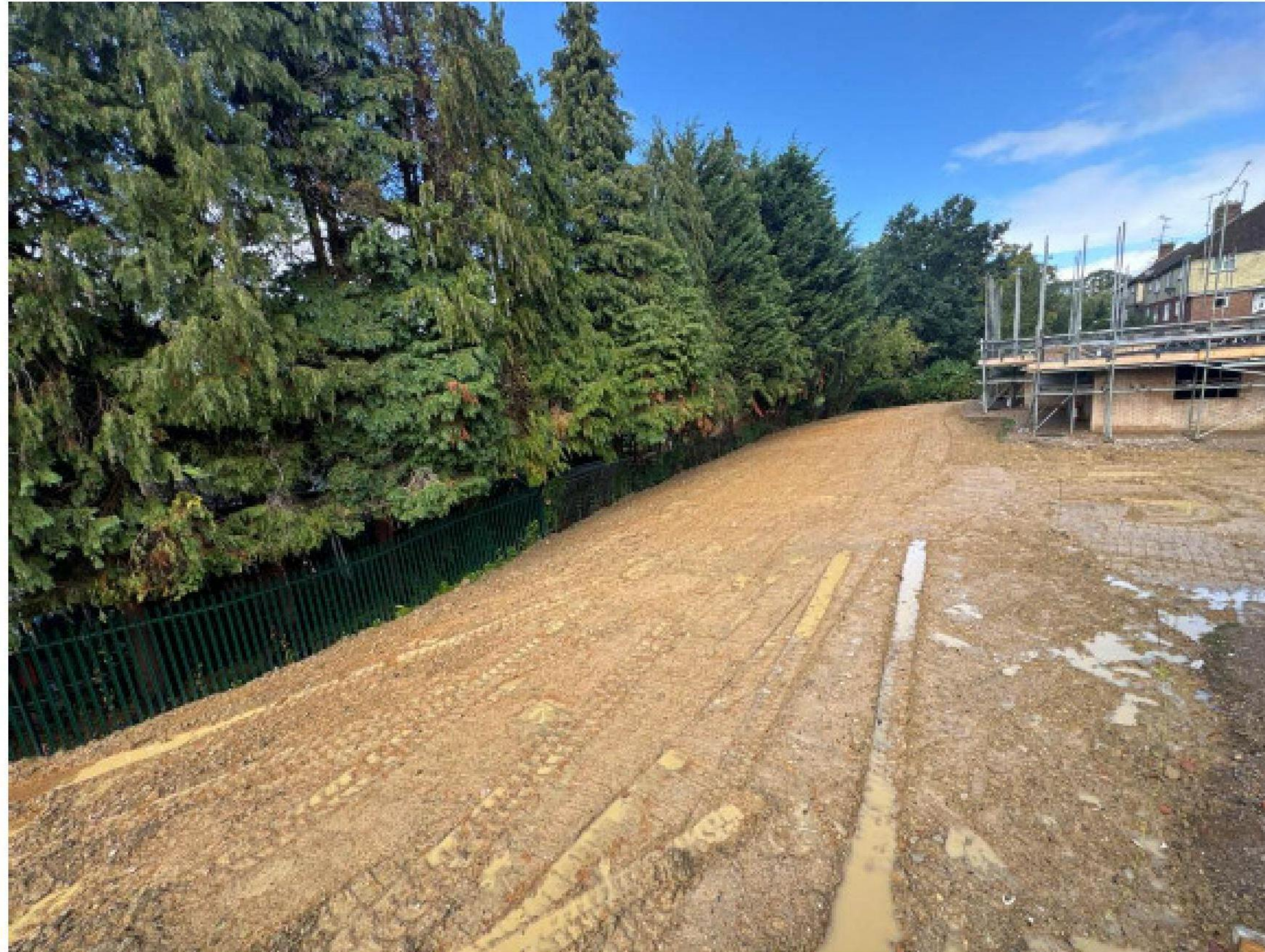
Photograph 2: Placement of clean materials over geotextile within Plots 9 and 10.



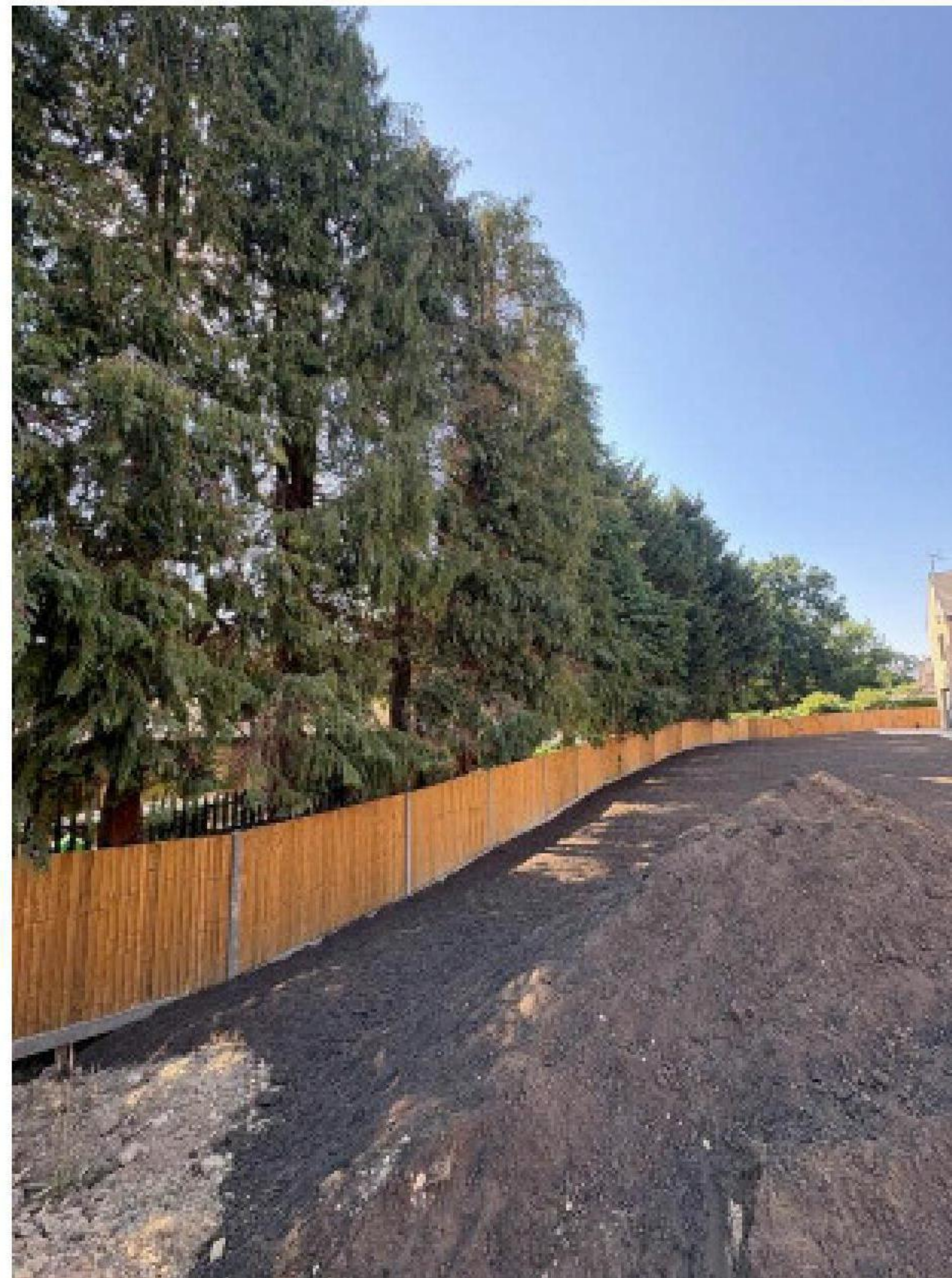
Photograph 3: Placement of clean materials over geotextile within Plots 7 and 8.



Photograph 4: Placed materials within Plots 7 and 8 over geotextile.



Photograph 5: View of placed materials within Plots 7 – 10.



Photograph 6: View of topsoil placement within Plots 7 – 10.



Photograph 7: View of finished soft landscaping and hardstanding associated with rear gardens of Plots 7-10 prior to seeding.



Photograph 8: Verification pit associated with Plot 7.



Photograph 9: Verification pit associated with Plot 8.



Photograph 10: Verification pit associated with Plot 9.



Photograph 11: Verification pit associated with Plot 10.

Appendix E

Geotextile Specification



High Visibility Technical Datasheet

Highly visible, Lotrak® Alarm15 has specifically been developed as a contaminated ground warning or marker geomembrane.

Designed to complement the existing Lotrak® range, Don & Low have drawn on their expertise and knowledge of this market sector and provided a combination of factors that has resulted in the development of this multi-functional geosynthetic material.

With the increasing demand for good building land, reclamation of industrial zones are becoming more commonplace, potential hazards are now often buried and contained underground as an alternative to removal. Good environmental construction practice utilises Lotrak® Alarm15 to notify future contractors and excavators of these hidden hazards.

Product Features

- ▶ With good tensile strength, CBR properties and a strong visual appearance Lotrak® Alarm15 provides a high-performance underground warning system.
- ▶ Based on well-established Lotrak® Base, Lotrak® Alarm15 performs excellently as a separating geotextile in a wide range of civil engineering applications

Benefits

- ▶ Proven superior performance
- ▶ UV resistant and highly durable
- ▶ Highly visible



TEST	STANDARD		Alarm15
Tensile Strength (kN/m)	EN ISO 10319	MD	10
		CD	9
Elongation at max. load (%)	EN ISO 10319	MD	22
		CD	15
CBR Puncture Resistance (N)	EN ISO 12236		1500
Cone Drop Penetration (mm)	EN ISO 13433		18
Pore size 90% finer than (microns)	EN ISO 12956		220
Water Permeability $V_{I_{H50}}$	EN ISO 11058		0.010
Water Flow Rate (l/m ² /sec)	EN ISO 11058		10
Effect of UV Light	The polypropylene (PP) used contains a UV inhibitor		
Roll Size (m)			4.5 x 100

All products are manufactured under BS EN ISO 9001.

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