



Contaminated Land Phase Three Report; Validation of Remedial Works undertaken in Relation to potential contamination for Proposed Residential Development at, Land adjacent 6 Bentley Lane, Bury, BL9 6RZ.

Prepared for

James Campbell Associates Ltd
Campbell House
173 Rochdale Road
Firgrove
Rochdale
OL16 3BN

August 2025



Summary

This report provides a verification of the remediation works undertaken for a new residential development on land adjacent 6 Bentley Lane, Bury, BL9 6RZ.

Following a phase I desk study report undertaken by enviro solutions, ref: CL101, conducted to satisfy condition 4 of the approved planning permission the need for a Phase II Intrusive Investigation was identified.

The intrusive investigations undertaken, by Martin Environmental Solutions Ltd in August 2021 identified elevated levels of Lead on site. As such further remedial works are required as detailed in the report. The report also recommended the installation of a ground gas protection measures in the form of a suitable membrane.



Introduction

This report details the works undertaken to address previously identified risks of contamination likely to result in a significant possibility of significant harm on land off Bentley Lane, Bury, BL9 6RZ. The site in question having been granted planning permission for three dwellings.

The report follows previous work undertaken on-site including a Phase one desk Study report by enviro solution, ref CL101 and a phase II investigation by Martin Environmental Solutions, ref 2171-1.

The desk study and subsequent investigation identified elevated levels of lead on site that posed a potential risk of harm and as such additional remediation measures were proposed in the form of a clean cover system within garden amenity areas.

The Site:

Site Address: Land adjacent 6 Bentley Lane, Bury, BL9 6RZ.

Grid reference: 380962; 414167

An aerial photograph of the site is included in Figure 1.



The Investigation

The Phase I Desk Study report identified a moderate risk of contamination existing on site from “contaminated soil”, “contaminated groundwater” (affecting building services) and “Ground Gas/Vapours”.

An intrusive investigation was planned consisting of three trial pits across the proposed garden areas. Due to access issues and a wasps nest only two sample locations were possible on the day. Figure 2 details these locations at either end of the site.

The intrusive investigation was undertaken on the 2nd August 2021. Samples were taken from each location and sent to i2 Analytical UK Ltd, and UKAS & Mcerts accredited Laboratory for analysis.

Samples were taken at an approx. depth of 300mm and 600mm below ground level (bgl). Trail hole 1 was extended to a depth of approx. 1300mm to undertake a surface water percolation test at the time, no ground water was identified.

Samples were tested for:

- Heavy metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn)
- Polycyclic Aromatic Hydrocarbons (PAHs)
- Petroleum Hydrocarbons
- Asbestos.

The surface of the site consists of a mixture of flower beds and concrete/stone pathways, below which a thick root system was encountered. The soil was a brown loamy soil with some grit. A few larger pebbles were found in the soil.

The results from the samples were compared to the soil assessment criteria for Residential with home grown produce (6% organic matter) obtained from *The LQM/CIEH S4ULs Human Health Risk Assessment*:

Slightly elevated levels of lead were identified in all samples.

Ground Gas

Due to the size of the area, constraints in accessing the site with suitable equipment and the time constraints ground gas monitoring was not undertaken. However, the soil sampling identified a high organic matter content within the soil with a potential to generate ground gas,



while the site to the south that was at the time under construction had identified some local hotspots of ground gas.

A recommendation was therefore made to include ground gas protection measures within the development.

The report recommended:

1. Ground gas protection measures to be incorporated within the design of the building.
2. A clean cover system should be installed within the garden amenity areas.

Remedial Works

Ground Gas Protection Measures.

The site includes a basement, and as such ground gas protection measures include a Juta Titanbond sheets with minimum 100mm overlap to the base of the buildings, the sides of the basement treated with Juta GP1 Sam sheets, fixed on a bitumen primer, overlapped joints and an additional drainage board on the outside.

The above have been installed in accordance with BS8485:2015+2019 and verification certificates are presented in Appendix A; verification works were undertaken by Geoshield Limited in May and June 2024.

Clean Cover system

A significant amount of material has been removed from the site and clean stone imported to backfill the area and around the newly formed basements. Garden areas to the rear of the site have then been built up and are predominantly hard standing. A small area of soft landscape has then been created to the very rear of the site with clean imported material.

Appendix B contains photographs of the site during the works showing the amount of material removed and the backfilling of the site. Appendix C provides an invoice for waste material removed from site and Appendix D invoices for the imported stone. Appendix E presents the test certificates for the imported cover system.



Revised Conceptual Model

The table represents a revised basic conceptual model following remediation of the site. It highlights the potential sources of pollutants identified from the gathered information, and potential pathways in which any contaminants could reach the identified receptors.

Pathway	Description	Identified sources	Receptor at risk	Remediation	Probability	Consequence	Risk
1	Run off and seepage into groundwater from any spillages	-	Watercourse/ Environment		Unlikely	Mild	Very low
2	Migration of gases into the building.	Organic material on site, neighbouring site	Future users	Gas membrane installed	Unlikely	Medium	Low
3	Inhalation of gases/ vapours outside	-	Construction workers/future users		Unlikely	Mild	Very Low
4	Inhalation of fine particles	Elevated lead levels	Construction workers/future users	Clean Cover system installed	Unlikely	Medium	Low
5	Direct ingestion of contaminated soil	Elevated lead levels	Construction workers	Clean Cover system installed	Unlikely	Medium	Low
6	In-direct ingestion of contaminated soil	Elevated lead levels	Future users	Clean Cover system installed	Unlikely	Medium	Low
7	Absorption via direct dermal contact with contaminated soil	-	Construction workers/future users	Clean Cover system installed	Unlikely	Mild	Very low



		CONSEQUENCE			
		Severe	Medium	Mild	Minor
PROBABILITY	High Likelihood	Very High Risk	High Risk	Moderate Risk	Moderate / 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



Conclusion

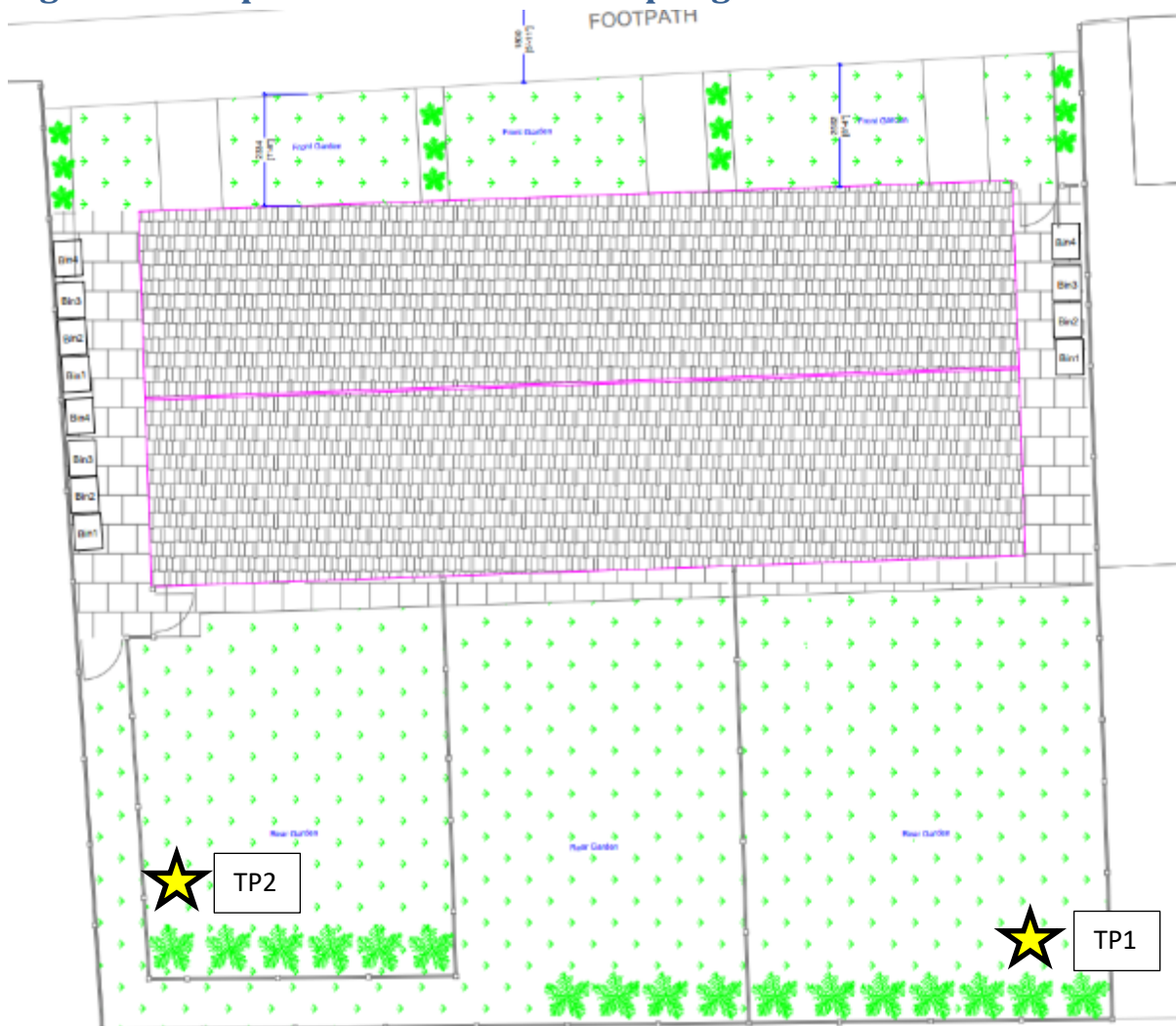
The information provided confirms that the identified remediation measures have been undertaken and the potential risk from the identified contaminants removed.

The site therefore no longer presents any Significant Possibility of Significant Harm to the identified receptors and is safe and suitable for its intended use.

Figure 1 – Aerial Photograph



Figure 2 – Proposed Site Plan and Sampling Locations





Appendix A – Verification of Ground Gas Protection Measures



GPVS Declaration Reference: 0624-J0030
Gas Protection Verification Declaration

Gas Protection Verification Declaration

Site

Site Name	Bentley Lane, Bury
Site Address	Land adjacent 6 Bentley Lane, Bury, BL9 6RZ
GPVS Declaration Reference	0624-J0030

Brief Description of Site

Proposed residential development consisting of 3No units.

Site Type	Residential
Plot Number(s)	1, 2, 3

Document

Verification Report Title	Land adjacent 6 Bentley Lane, Bury, BL9 6RZ
Verification Report Identifier	N/A
Named Client	M&D Membranes

Accredited Person Details

SGPV Name	Paul Colbeck
SGPV Registration No.	SGPV0005
Telephone	N/A
Email	pcolbeck@geoshield.co.uk
Organisation	Geoshield Limited
Address	



Declaration

I, Paul Colbeck, confirm that I am the person described in the Accredited Person details section and hold a current valid registration as a SGPV, Accreditation No. SGPV0005 under the Gas Protection Verification Accreditation Scheme.

I have reviewed the verification report described in the Document Details section and I am satisfied that:

1. The work has been carried out to an acceptable standard.
2. The work has been verified by suitably experienced and qualified personnel.
3. The level of verification is proportionate to the level of risk Identified in the site investigation report/Gas risk assessment.
4. The interpretations and conclusions are reasonable.
5. The verification strategy is in line with industry guidance.
6. I am competent to sign this Declaration and that
 - a. I am fully aware and comply with the Scheme's Code of Conduct
 - b. The work of this review and Declaration are within the limits of my knowledge, competence and professional capacity.

Note: The document that has been reviewed was prepared by the organisation named for the benefit of the named Client who has reliance upon it. Any professional liability arising from any proven negligent act or omission by the Company carrying out the work and publishing the document rests with that Company and not with the SGPV Accredited Person or the GPVS.

Signed:

Date: 20/06/2024

Name: PAUL COLBECK
[Block capitals]



0624-J0030



GeoShield Verification Report 001



PROJECT REFERENCE: GEO104633

PROJECT: Land Adjacent to 6 Bentley Lane

PROJECT ADDRESS: Land Adjacent to 6 Bentley Lane

Bury

BL9 6RZ

SPECIFICATION: Verified in accordance CIRIA 735.

Design in accordance with BS8485 2015 + 2019 for Methane and Carbon Dioxide.

Substrate prepared in accordance with manufacturers instructions.

Juta Titanbond

Juta GP SAM



GeoShield Verification Report



NAME OF SURVEYOR:

Liam England

VERIFICATION COMPANY:

GeoShield Limited

Icon Business Centre

4100 Park Approach

Thorpe Park

Leeds

CONTACT NUMBER:

075551259023

EMAIL ADDRESS:

LEngland@geoshield.co.uk

ORDER NUMBER:

To be confirmed

PER VISIT: YES:



NO:



PROJECT:

YES:



NO:





GEOSHIELD Verification Report



CLIENT DETAILS

CLIENT CONTACT:	Tom Williams
CONTACTS ROLE:	Director
MOBILE PHONE:	07437 103264
EMAIL ADDRESS:	

CLIENT CONTACT:	
CONTACTS ROLE:	
MOBILE PHONE:	
EMAIL ADDRESS	
NOTES:	
NOTES:	
NOTES:	



GEOSHIELD Verification Report



APPLICATION TEAM LEADERS

APPLICATOR NAME: Tom Williams

COMPANY: M&D Membranes

APPLICATOR TEL: 07437 103264

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES: Having worked with M&D Membranes on numerous successful projects these

NOTES: applicators will be deemed to be at an appropriate skill level for the job of

NOTES: installing the ground gas protection measures.

NOTES: At least one member of each team group will have a NVQ Level 2



GeoShield Verification Report



AREA SURVEYED:

Foundation Thickening - Titanbond

SITE CONDITIONS:

WEATHER:

Overcast

TEMPERATURE:

15c

RELATIVE HUMIDITY:

N/A

MEMBRANE TEMPERATURE:

N/A

TIME:

09:30-10:30

DATE:

20.05.2024

REPORT NUMBER:

001

ACCOMPANIED BY:

Tom Williams - M&D Membranes



GeoShield Verification Report



OVERVIEW



This is an overview image where today's verification was undertaken and the Titanbond Membrane was installed on the land Adjacent to 6 Bentley Lane



GeoShield Verification Report



VERIFICATION ITEM ONE

LOCATION/GRID LINE: Land Adjacent to 6 Bentley Lane

Internal/External Corner Detailing



NOTES:

The various internal and external corners had all been initially formed using additional patches of Titanbond membrane. These corners were reinforced and heat welded using a hot air tool and a silicone roller to gain the correct pressure needed for the Titanbond to create a strong bond.



NOTES:

The bond was confirmed via the Mechanical Point Stress Test as seen in the image above. The metal point was ran along the welded edges of all reinforced corners to ensure the correct bond was adhered. During this process 2 faults were found and remediated using GR SAM.



GeoShield Verification Report



VERIFICATION ITEM TWO

LOCATION/GRID LINE: Land Adjacent to 6 Bentley Lane

100mm Welded lap joints



NOTES:

Upon arrival installers had completed the installation of Juta Titanbond to the foundation thickenings. Adjacent sheets of Titanbond had been overlapped a minimum 100mm and welded using a combination of Twin welding and hand welding with a hot air tool and silicone roller.



NOTES:

The Twin weld and hand weld lap joints were confirmed via the Mechanical Point Stress Test as seen in the image above. The metal point was ran along all Twin/hand welded lap joints to ensure the correct bond was adhered. During this process 4 faults were found and remediated using GR SAM.



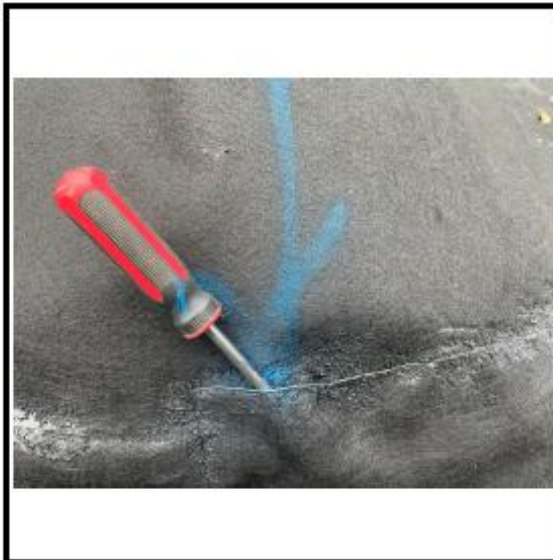
GeoShield Verification Report



VERIFICATION ITEM THREE

LOCATION/GRID LINE: Land Adjacent to 6 Bentley Lane

Faults Found and Remediated



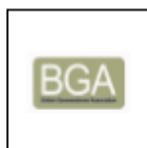
NOTES:

During the verification process 6 faults were found on lap joints and internal/external corners, which were brought to the attention of the installers on site and were remediated using GR SAM. This was done by removing any fleece lining and applying patches of GR SAM to any faults found.



NOTES:

Patches of GR SAM were cut to a minimum of 100mm and then applied by removing the paper backing, which then required heat to ensure the correct bond was adhered between the Titanbond and GR SAM. This was done by using a hot air tool and silicone roller to apply maximum pressure.



GEOSHIELD Verification Report



REMEDIATION LOG

Date	Nr	Remediation Description	Y/N
20/05/2024	001	There were six faults found within lap joints and Internal/external	✓
		corners of the Titanbond membrane. All these faults were	✓
		remediated during the verification visit.	✓



GEOSHIELD Verification Report



GAS MEMBRANE TESTING

VISUAL:	☐ YES	☒	☐ NO	☐	SMOKE TEST:	☐ YES	☐	☐ NO	☒
COMPRESSED AIR:	☐ YES	☐	☐ NO	☒	DILECTIC	☐ YES	☐	☐ NO	☒
DESTRUCTIVE:	☐ YES	☐	☐ NO	☒	OTHER:	☐ YES	☒	☐ NO	☐
Testing checklist attached:					☐ YES	☐	☐ NO	☒	

Gridline/Plot Sign off

Gridline/Plot Sign off	Foundation Thickening Land Adjacent to 6 Bentley Lane	☒
Gridline/Plot Sign off		☐
Gridline/Plot Sign off		☐
Gridline/Plot Sign off		☐
Gridline/Plot Sign off		☐
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Gridline/Plot Sign off		☐



GeoShield Verification Report



VERIFICATION SUMMARY

This was the first site visit where the foundation thickening had been fully lined out using JUTA Titanbond.

The verification process is summarised below:-

- >. Mechanical Point Stress Test carried out to all JUTA Titanbond lap joints where Four mis-welded lap joints were identified.
- >. Mechanical Point Stress Test to sampled internal/external corners where two issues were identified.
- >. Visual inspection of the completed foundation thickening where six faults were identified and remediated during the verification. There were no further punctures and/or areas of damage identified.

This was passed and verified in accordance with CIRIA 735 and installed to BS8485:2015+2019.

GEOSHIELD SIGNATURE:

DATE: 20-May-2024



GeoShield Verification Report 002



PROJECT REFERENCE: GEO104633

PROJECT: Land Adjacent to 6 Bentley Lane

PROJECT ADDRESS: Land Adjacent to 6 Bentley Lane

Bury

BL9 6RZ

SPECIFICATION: Verified in accordance CIRIA 735.

Design in accordance with BS8485 2015 + 2019 for Methane and Carbon Dioxide.

Substrate prepared in accordance with manufacturers instructions

Juta Titanbond

Juta GP SAM

JUTA GP1 SAM



GeoShield Verification Report



NAME OF SURVEYOR:

Niall Hogan

VERIFICATION COMPANY:

GeoShield Limited

Icon Business Centre

4100 Park Approach

Thorpe Park

Leeds

CONTACT NUMBER:

07423 116951

EMAIL ADDRESS:

nhogan@geoshield.co.uk

ORDER NUMBER:

To be confirmed

PER VISIT: YES:



NO:



PROJECT:

YES:



NO:





GEOSHIELD Verification Report



CLIENT DETAILS

CLIENT CONTACT: Tom Williams

CONTACTS ROLE: Director

MOBILE PHONE: 07437 103264

EMAIL ADDRESS:

CLIENT CONTACT:

CONTACTS ROLE:

MOBILE PHONE:

EMAIL ADDRESS

NOTES:

NOTES:

NOTES:



GEOSHIELD Verification Report



APPLICATION TEAM LEADERS

APPLICATOR NAME: Tom Williams

COMPANY: M&D Membranes

APPLICATOR TEL: 07437 103264

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES: Having worked with M&D Membranes on numerous successful projects these

NOTES: applicators will be deemed to be at an appropriate skill level for the job of

NOTES: installing the ground gas protection measures.

NOTES: At least one member of each team group will have a NVQ Level 2



GeoShield Verification Report



AREA SURVEYED:

Basement Walls Tanking

SITE CONDITIONS:

WEATHER:

Overcast

TEMPERATURE:

15c

RELATIVE HUMIDITY:

N/A

MEMBRANE TEMPERATURE:

N/A

TIME:

08:30-09:30

DATE:

07.06.2024

REPORT NUMBER:

002

ACCOMPANIED BY:

Tom Williams - M&D Membranes



GeoShield Verification Report



OVERVIEW



This is an overview image where today's verification took place on the basement walls



GeoShield Verification Report



VERIFICATION ITEM ONE

LOCATION/GRID LINE: Basement Walls

Installation of JUTA GP1 SAM



NOTES:

The basement walls of the property had been tanked using sheets JUTA GP1 SAM installed by M&D Membranes. Firstly the walls are primed with a bitumen primer and left to cure, this aids the adhesion process when installing sheets of SAM, once cured the sheet of GP1 SAM are heated to activate



NOTES:

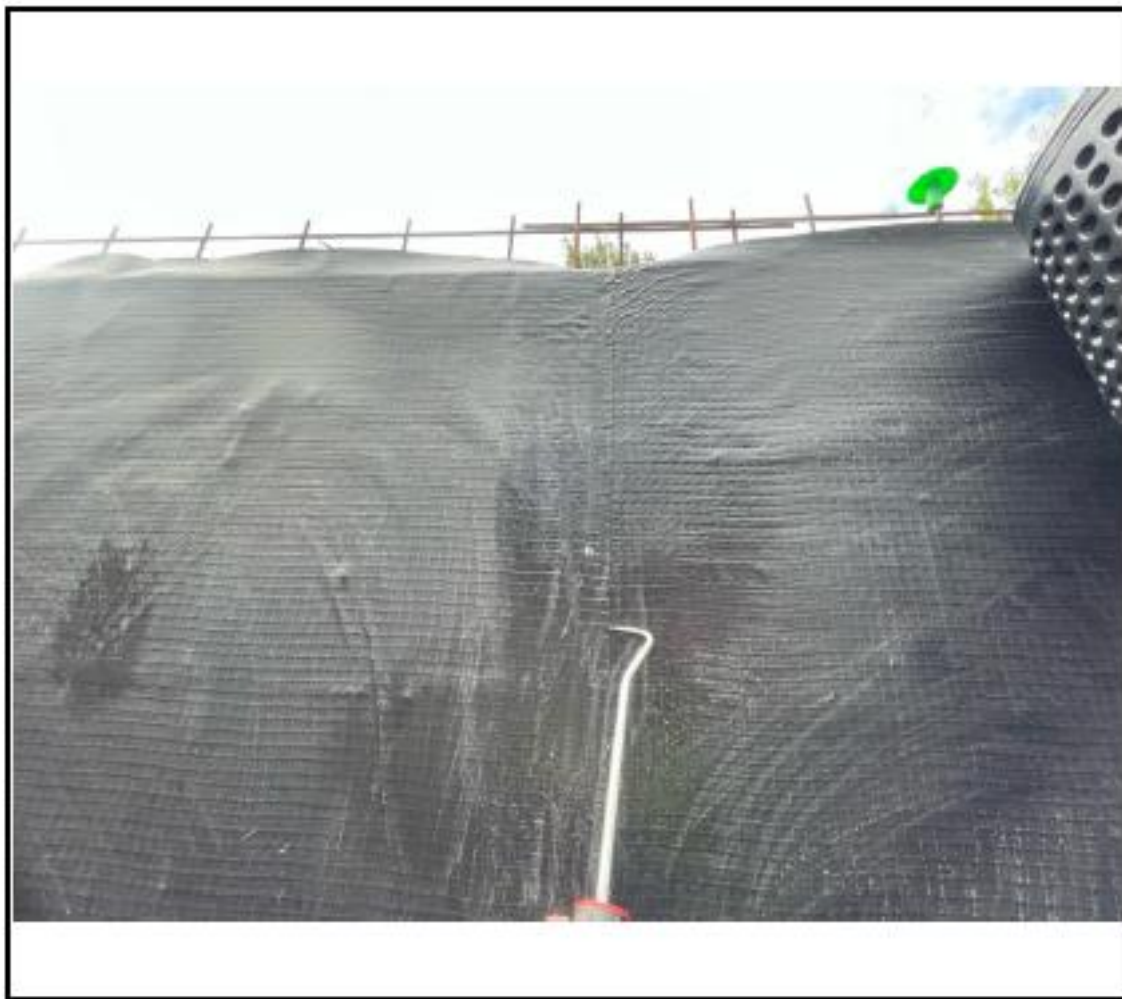
the bitumen backing and rolled into position with applied pressure to ensure a robust seal is achieved. Adjacent sheets of SAM are overlapped a minimum of 100mm and overlaps are subjected to mechanical point stress testing to ensure no faults are found.



GeoShield Verification Report



VERIFICATION ITEM ONE



The overview photograph above shows a mechanical point stress test being conducted on a welded overlap of JUTA GP1 SAM, where a metal probe is run along the edges of the welds to identify any miswelds. There were 2 miswelds found during testing and these were brought to the attention of installers and remediated with extra patches of GP1 SAM



GeoShield Verification Report



VERIFICATION ITEM TWO

LOCATION/GRID LINE: Basement Walls

PD1700 Protection Drainage Boards



NOTES:

After the testing procedures were completed and any faults remediated, PD1700 Protection drainage were installed across the entire face of the basement walls. These protection boards will stop the damage of the GP1 SAM when backfilling but also work as another form of drainage.



NOTES:

The drainage board are rolled out to cover the whole face of all the basement walls in preparation for backfilling and are tacked into position to hold them in place.



GEOSHIELD Verification Report



REMEDIATION LOG

Date	Nr	Remediation Description	Y/N
20/05/2024	001	There were six faults found within lap joints and Internal/external	✓
		comers of the Titanbond membrane, all these faults were	✓
		remediated during the verification visit	✓
07/06/2024	002	2 miswelded lap joints, remediated during visit	✓



GEOSHIELD Verification Report



GAS MEMBRANE TESTING

VISUAL:	☐ YES ☒	☐ NO ☐	SMOKE TEST:	☐ YES ☐	☐ NO ☒
COMPRESSED AIR:	☐ YES ☐	☐ NO ☒	DILECTIC	☐ YES ☐	☐ NO ☒
DESTRUCTIVE:	☐ YES ☐	☐ NO ☒	OTHER:	☐ YES ☒	☐ NO ☐
Testing checklist attached:			☐ YES ☐	☐ NO ☒	

Gridline/Plot Sign off

Gridline/Plot Sign off	Foundation Thickening Land Adjacent to 6 Bentley Lane	☒
Gridline/Plot Sign off	Basement Walls Tanking	☒
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Gridline/Plot Sign off		☐



GeoShield Verification Report



VERIFICATION SUMMARY

Second visit to site for the inspection and verification of the installation of Juta GP1 to the Basement Walls Tanking, verification process is as follows;

...: Mechanical Point Stress Test to all twin hand welded overlaps achieving minimum 100mm overlaps 2 faults found, remediated using Juta GP1 SAM

..: Mechanical Point Stress test to all external corners, 0 faults found

..: Visual inspection to the condition of the membrane revealed no damage or defects

..: Mechanical Point Stress test to Juta Titanbond section on floor, 0 faults found

This was passed and verified in accordance with CIRIA 735 and installed to BS8485:2015+2019.

GEOSHIELD SIGNATURE:

DATE: 07-Jun-2024

Appendix B – Photographs of the excavation and build













Appendix C – Invoice for waste removal

NW Groundwork & Civil Engineering Ltd
5 Parkgate
Hameldon Road
Hapton
BB11 5QW

**NW Groundwork &
Civil Engineering Ltd**

Page 1

VAT Reg No: 279 2304 87

Invoice

A Warburton Building Services
10 Camoustie Drive
Ramsbottom
Bury
BL0 9QL

1999

17/05/2024

VAT Reg No:

AAB001

Quantity	Details	Unit Price	Net Amount	VAT Rate	VAT
1.00	Groundworks at Walmersley	11,000.00	11,000.00	0.00	0.00
1.00	Blockwall	1,200.00	1,200.00	0.00	0.00
	Plant & Transport @ 80%				
	Labour @ 20% - CIS £488.00				
67.00	Loads off site - 67 x £230	230.00	15,410.00	0.00	0.00
60.00	3 loads of MOT - £23 per ton x 60 ton	23.00	1,380.00	0.00	0.00
	This Transaction is Subject to Reverse Charge				
	Reverse Charge Total				
	To Be Paid to HMRC: £5798.00				

Payment Terms - 14 days from date of invoice
Bank details: Santander
Account No: 17438203
Sort Code: 09-01-29

Total Net Amount	28,990.00
Carriage Net	0.00
Total VAT Amount	0.00
Invoice Total	28,990.00



Appendix D – Invoices for imported material

SR & RJ BROWN LTD

Lower Gollinrod Farm
Walmersley
Bury
Lancashire
BL9 5NB

Tel: 01706 825460
Stephen: 07733 125561

Email: info@brownsfarmbury.co.uk

VAT Reg No: 785 5073 00
Co Reg No: 5085749

INVOICE

Page 1

Andrew Warburton

10 Carnoustia Drive
Off Dundee Lane
Ramsbottom
Bury, Lancs
BL0 9QL

Invoice No	31281
Invoice Date	01/05/2024
Order No	
Account Ref	AWARBI

Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	1/05/2024 - 4T of 20mm Clean Collected (Bentley Lane)	120.00	0.00	120.00	20.00	24.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD
UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	120.00
Carriage Net	£	0.00
Total Tax Amount	£	24.00
Invoice Total	£	144.00



SR & RJ BROWN LTD

Lower Gollinrod Farm
Walmersley
Bury
Lancashire
BL9 5NB

Tel: 01706 825460
Stephen: 07733 125561

Email: info@brownsfarmbury.co.uk

VAT Reg No: 785 5073 00
Co Reg No: 5085749

INVOICE

Page 1

Andrew Warburton
10 Carnoustia Drive
Off Dundee Lane
Ramsbottom
Bury, Lancs
BL0 9QL

Invoice No	31403
Invoice Date	28/05/2024
Order No	
Account Ref	AWARBI

Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	23/05/2024 - 2T of 20mm Clean Collected (Bentley Lane)	60.00	0.00	60.00	20.00	12.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD
UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	60.00
Carriage Net	£	0.00
Total Tax Amount	£	12.00
Invoice Total	£	72.00



SR & RJ BROWN LTD

Lower Gollinrod Farm
Walmersley
Bury
Lancashire
BL9 5NB

Tel: 01706 825460
Stephen: 07733 125561

Email: info@brownsfarmbury.co.uk

VAT Reg No: 785 5073 00
Co Reg No: 5085749

INVOICE

Page 1

Andrew Warburton
10 Carnoustia Drive
Off Dundee Lane
Ramsbottom
Bury, Lancs
BL0 9QL

Invoice No	31482
Invoice Date	11/06/2024
Order No	
Account Ref	AWARBI

Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	10/06/2024 - 16T of 20mm Clean Delivered to 6 Bentley Lane, lane BL9 6RZ @ £35.00 p/t	560.00	0.00	560.00	20.00	112.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD
UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	560.00
Carriage Net	£	0.00
Total Tax Amount	£	112.00
Invoice Total	£	672.00



SR & RJ BROWN LTD

Lower Gollinrod Farm
Walmersley
Bury
Lancashire
BL9 5NB

Tel: 01706 825460
Stephen: 07733 125561

Email: info@brownsfarmbury.co.uk

Andrew Warburton
10 Carnoustia Drive
Off Dundee Lane
Ramsbottom
Bury, Lancs
BL0 9QL

VAT Reg No: 785 5073 00
Co Reg No: 5085749

INVOICE

Page 1

Invoice No	31530
Invoice Date	18/06/2024
Order No	
Account Ref	AWARBI

Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	17/06/2024 - 16T of 20mm Clean Delivered to Bentley Lane, Bury BL9 6RZ @ £35.00 p/t	560.00	0.00	560.00	20.00	112.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD
UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	560.00
Carriage Net	£	0.00
Total Tax Amount	£	112.00
Invoice Total	£	672.00



SR & RJ BROWN LTD

Lower Gollinrod Farm
Walmersley
Bury
Lancashire
BL9 5NB

Tel: 01706 825460
Stephen: 07733 125561

Email: info@brownsfarmbury.co.uk

VAT Reg No: 785 5073 00
Co Reg No: 5085749

INVOICE

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Andrew Warburton
10 Carnoustia Drive
Off Dundee Lane
Ramsbottom
Bury, Lancs
BL0 9QL

Invoice No	31544
Invoice Date	19/06/2024
Order No	
Account Ref	AWARBI

Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	18/06/2024 - 2 x 16T Loads of 20mm Clean Delivered to Bentley Lane, Bury @ £35.00 p/t	1,120.00	0.00	1,120.00	20.00	224.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD
UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	1,120.00
Carriage Net	£	0.00
Total Tax Amount	£	224.00
Invoice Total	£	1,344.00



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Bury, lincs
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Co Reg No: 5085749

INVOICE

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Invoice No	31581
Invoice Date	27/06/2024
Order No	
Account Ref	AWARBI

Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	21/06/2024 - 42T of 20mm Clean Delivered to Bentley Lane, Bury BL9 6RZ @ £25.00 p/t	1,050.00	0.00	1,050.00	20.00	210.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	1,050.00
Carriage Net	£	0.00
Total Tax Amount	£	210.00
Invoice Total	£	1,260.00



SR & RJ BROWN LTD

Lower Gollinrod Farm

Walmersley

Bury

Lancashire

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INVOICE

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Andrew Warburton

10 Carnoustia Drive

Off Dundee Lane

Ramsbottom

Bury, Lancs

BL0 9QL

Invoice No	31679
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Invoice Date	12/07/2024
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Order No	
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Account Ref	AWARBI
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Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	3/07/2024 - 10T of 20mm Clean Delivered to Bentley Rd, Nangreaves	300.00	0.00	300.00	20.00	60.00
1.00	3/07/2024 - 10T of 10mm Clean Stone Delivered to Bentley Rd, Nangreaves	300.00	0.00	300.00	20.00	60.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	600.00
Carriage Net	£	0.00
Total Tax Amount	£	120.00
Invoice Total	£	720.00



SR & RJ BROWN LTD

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INVOICE

Page 1

Andrew Warburton
10 Carnoustia Drive
Off Dundee Lane
Ramsbottom
Bury, Lancs
BL0 9QL

Invoice No	31664
Invoice Date	11/07/2024
Order No	
Account Ref	AWARBI

Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	9/07/2024 - 20T of 20mm Clean Delivered to Bentley Lane @ £25.00 p/t	500.00	0.00	500.00	20.00	100.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD
UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	500.00
Carriage Net	£	0.00
Total Tax Amount	£	100.00
Invoice Total	£	600.00



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INVOICE

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Invoice No	31720
Invoice Date	19/07/2024
Order No	
Account Ref	AWARBI

Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	18/07/2024 - 16T of 20mm Clean Delivered to Bentley Lane	480.00	0.00	480.00	20.00	96.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD
UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	480.00
Carriage Net	£	0.00
Total Tax Amount	£	96.00
Invoice Total	£	576.00



SR & RJ BROWN LTD

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Co Reg No: 5085749

INVOICE

Page 1

Andrew Warburton
10 Carnoustia Drive
Off Dundee Lane
Ramsbottom
Bury, Lancs
BL0 9QL

Invoice No	31754
Invoice Date	25/07/2024
Order No	
Account Ref	AWARBI

Quantity	Description	Unit Price	Disc Amt	Net Amt	VAT %	VAT
1.00	24/07/2024 - 16T of 20mm Clean Stone Delivered to Bentley Lane	480.00	0.00	480.00	20.00	96.00

Any discrepancy must be notified in writing within 7 days.

ALL GOODS REMAIN THE PROPERTY OF SR & RJ BROWN LTD
UNTIL PAYMENT HAS BEEN RECEIVED IN FULL.

Payment Terms: 30 days from date of invoice
Cheques to be made Payable to: SR & RJ Brown Ltd
BACS Payments to: SR & RJ Brown Limited
Sort Code: 20-45-45 Account Number: 10395234

Total Discount	£	0.00
Total Net Amount	£	480.00
Carriage Net	£	0.00
Total Tax Amount	£	96.00
Invoice Total	£	576.00



Appendix E – Imported Soil Test Certification



TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

Alan Draper
R. Draper Ltd
Barrow Nook Lane
Bickerstaffe
Nr. Ormskirk
Lancashire
L39 0ET

25th February 2025
Our Ref: TOHA/25/1730/1/SS
Your Ref: as below

Dear Sirs

Topsoil Analysis Report – Grade 1 Topsoil

We have completed the analysis of the topsoil sample recently submitted, referenced *Grade 1 Topsoil*, and have pleasure reporting our findings.

The purpose of the analysis was to determine the suitability of the topsoil sample for general landscape purposes (trees, shrubs, amenity grass). In addition, this sample has been assessed to determine its compliance with the requirements of the British Standard for Topsoil (*BS3882:2015 Specification for Topsoil – Multipurpose Topsoil*).

This report presents the results of analysis for the sample submitted to our office, and it should be considered 'indicative' of the topsoil source. The report and results should therefore not be used by third parties as a means of verification or validation testing or waste designation purposes, especially after the topsoil has left the R Draper Ltd site.

SAMPLE EXAMINATION

The sample was described as a black (Munsell Colour 10YR 2/1), dry, friable, non-calcareous LOAMY SAND with a weakly developed, fine to medium granular structure*. The sample was slightly stony and contained a moderate proportion of organic fines and occasional woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

*This appraisal of soil structure was made from examination of disturbed sample. Structure is a key soil characteristic that may only be accurately assessed by examination in an in-situ state.

Tim O'Hare Associates LLP
Howbery Park Wallingford Oxfordshire OX10 8BA
T:01491 822653 E:info@toha.co.uk
www.toha.co.uk

Registered In England No. OC324049 Registered Office: The Innovation Centre, Howbery Park, Wallingford, Oxfordshire OX10 8BA

ANALYTICAL SCHEDULE

The sample was submitted to a UKAS and MCERTS accredited laboratory for a range of physical and chemical tests to confirm the composition and fertility of the soil, and the concentration of selected potential contaminants. The following parameters were determined:

- particle size analysis (sand, silt, clay);
- stone content (2-20mm, 20-50mm, >50mm);
- pH and electrical conductivity values;
- exchangeable sodium percentage;
- major plant nutrients (N, P, K, Mg);
- organic matter content;
- C:N ratio;
- heavy metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn, B);
- total cyanide and total (mono) phenols;
- speciated PAHs (US EPA16 suite);
- aromatic and aliphatic TPH (C5-C35 banding);
- benzene, toluene, ethylbenzene, xylene (BTEX);
- asbestos screen.

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

RESULTS OF ANALYSIS

Particle Size Analysis and Stone Content

The sample fell into the *loamy sand* texture class, which is usually considered suitable for general landscape applications provided the soil's physical condition is satisfactory.

The sample was low and, as such, stones should not restrict the use of the soil for general landscape purposes.

pH and Electrical Conductivity Values

The sample was neutral in reaction (pH 7.0), with a pH value that would be considered ideal for general landscape purposes.

The electrical conductivity (salinity) value (water extract) was moderate, which indicates that soluble salts should not be present at levels that would be harmful to plants.

The electrical conductivity value by CaSO₄ extract (BS3882 requirement) fell below the maximum specified value (3300 µS/cm) given in BS3882:2015 – Table 1.

Organic Matter and Fertility Status

The sample was adequate to well supplied with organic matter and all major plant nutrients.

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

Potential Contaminants

With reference to BS3882:2015 - Table 1: Notes 3 and 4, there is a recommendation to confirm levels of potential contaminants in relation to the topsoil's proposed end use. This includes human health, environmental protection and metals considered toxic to plants. In the absence of site-specific assessment criteria, the concentrations that affect human health have been compared with the *residential with home grown produce* land use in the Suitable For Use Levels (S4ULs) presented in *The LQM/CIEH S4ULs for Human Health Risk Assessment* (2015) and the DEFRA SP1010: *Development of Category 4 Screening Levels (C4SLs) for Assessment of Land Affected by Contamination – Policy Companion Document* (2014).

Of the potential contaminants determined, none exceeded their respective guideline values.



Phytotoxic Contaminants

Of the phytotoxic (toxic to plants) contaminants determined (copper, nickel, zinc), none was found at levels that exceeded the maximum permissible levels specified in BS3882:2015 – Table 1.

CONCLUSION

The purpose of the analysis was to determine the suitability of the topsoil sample for general landscape purposes (trees, shrubs, amenity grass). In addition, this sample has been assessed to determine its compliance with the requirements of the British Standard for Topsoil (BS3882:2015 Specification for Topsoil – Multipurpose Topsoil).

From the soil examination and laboratory analysis, the sample was described as a neutral, non-saline, slightly calcareous *loamy sand* with a weakly developed structure and a low stone content. The sample was adequate to well supplied with organic matter and all major plant nutrients. Of the potential contaminants determined, none exceeded their guideline values.

To conclude, based on our findings, the topsoil represented by this sample would be considered suitable for general landscape purposes (trees, shrubs and amenity grass), provided the physical condition of the topsoil is satisfactory.

The topsoil was fully compliant with the requirements of the British Standard for Topsoil (BS3882:2015 – Specification for Topsoil – Table 1, Multipurpose Topsoil).

RECOMMENDATIONS

Soil Handling Recommendations

It is important to maintain the physical condition of the soil and avoid structural damage during all phases of soil handling (e.g. stockpiling, resspreading, cultivating, planting, seeding or turfing). As a consequence, soil handling operations should be carried out when soil is sufficiently dry to be non-plastic (friable) in consistency.

It is important to ensure that the soil is not unnecessarily compacted by trampling or trafficking by site machinery, and soil handling should be stopped during and after heavy rainfall and not continued until the soil is friable in consistency. If the soil is structurally damaged and compacted at any stage during the course of soiling or landscaping works, it should be cultivated appropriately to relieve the compaction and to restore the soil's structure prior to any planting, turfing or seeding.

Further details on soil handling are provided in Annex A of BS3882:2015.



We hope this report meets with your approval and provides the necessary information. Please do not hesitate to contact the undersigned if we can be of further assistance.

Yours faithfully

Ebony Gheorghe
BSc MSc
Soil Scientist

Tim White
BSc MSc MSc SoilSci CSci
Senior Associate

For & on behalf of Tim O'Hare Associates LLP



TIM O'HARE ASSOCIATES
SOIL & LANDSCAPE CONSULTANCY

Client:	R Draper Ltd
Project:	Grade 1 Topsoil
Job:	Topsoil Analysis - B33882-2016
Date:	26/02/2025
Job Ref No:	TOHA/26/1738/1/88

Sample Reference	
Clay (<0.002mm)	% UKAS
Silt (0.002-0.063mm)	% UKAS
Sand (0.063-2.0mm)	% UKAS
Texture Class (UK Classification)	- UKAS
Stones (<20mm)	% DW GLP
Stones (20-50mm)	% DW GLP
Stones (>50mm)	% DW GLP

pH Value (1:2.5 water extract)	units	UKAS
Electrical Conductivity (1:2.5 water extract)	uS/cm	UKAS
Electrical Conductivity (1:2 CaSO ₄ extract)	uS/cm	UKAS
Exchangeable Sodium Percentage	%	UKAS
Organic Matter (LOI)	%	UKAS
Total Nitrogen (Dumas)	%	UKAS
C : N Ratio	ratio	UKAS
Extractable Phosphorus	mg/l	UKAS
Extractable Potassium	mg/l	UKAS
Extractable Magnesium	mg/l	UKAS

Total Arsenic (As)	mg/kg	MCERTS
Total Cadmium (Cd)	mg/kg	MCERTS
Total Chromium (Cr)	mg/kg	MCERTS
Hexavalent Chromium (Cr VI)	mg/kg	MCERTS
Total Copper (Cu)	mg/kg	MCERTS
Total Lead (Pb)	mg/kg	MCERTS
Total Mercury (Hg)	mg/kg	MCERTS
Total Nickel (Ni)	mg/kg	MCERTS
Total Selenium (Se)	mg/kg	MCERTS
Total Zinc (Zn)	mg/kg	MCERTS
Water Soluble Boron (B)	mg/kg	MCERTS
Total Cyanide (CN)	mg/kg	MCERTS
Total (mono) Phenols	mg/kg	MCERTS

Naphthalene	mg/kg	MCERTS
Acenaphthylene	mg/kg	MCERTS
Acenaphthene	mg/kg	MCERTS
Fluorene	mg/kg	MCERTS
Phenanthrene	mg/kg	MCERTS
Anthracene	mg/kg	MCERTS
Fluoranthene	mg/kg	MCERTS
Pyrene	mg/kg	MCERTS
Benzo(a)anthracene	mg/kg	MCERTS
Chrysene	mg/kg	MCERTS
Benzo(b)fluoranthene	mg/kg	MCERTS
Benzo(k)fluoranthene	mg/kg	MCERTS
Benzo(a)pyrene	mg/kg	MCERTS
Indeno(1,2,3-cd)pyrene	mg/kg	MCERTS
Dibenz(a,h)anthracene	mg/kg	MCERTS
Benzo(g,h,i)perylene	mg/kg	MCERTS
Total PAHs (sum USEPA16)	mg/kg	MCERTS

Aliphatic TPH >C5 - C6	mg/kg	MCERTS
Aliphatic TPH >C6 - C8	mg/kg	MCERTS
Aliphatic TPH >C8 - C10	mg/kg	MCERTS
Aliphatic TPH >C10 - C12	mg/kg	MCERTS
Aliphatic TPH >C12 - C16	mg/kg	MCERTS
Aliphatic TPH >C16 - C21	mg/kg	MCERTS
Aliphatic TPH >C21 - C35	mg/kg	MCERTS
Aliphatic TPH (C5 - C35)	mg/kg	MCERTS
Aromatic TPH >C5 - C7	mg/kg	MCERTS
Aromatic TPH >C7 - C8	mg/kg	MCERTS
Aromatic TPH >C8 - C10	mg/kg	MCERTS
Aromatic TPH >C10 - C12	mg/kg	MCERTS
Aromatic TPH >C12 - C16	mg/kg	MCERTS
Aromatic TPH >C16 - C21	mg/kg	MCERTS
Aromatic TPH >C21 - C35	mg/kg	MCERTS
Aromatic TPH (C5 - C35)	mg/kg	MCERTS

Benzene	mg/kg	MCERTS
Toluene	mg/kg	MCERTS
Ethylbenzene	mg/kg	MCERTS
p & m-xylene	mg/kg	MCERTS
Xylene	mg/kg	MCERTS
MTBE (Methyl Tertiary Butyl Ether)	mg/kg	MCERTS

Asbestos Screen	NND	ISO 17025
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LS = LOAMY SAND

Visual Examination

The sample was described as a black (Munsell Colour 10YR 2/1), dry, friable, non-calcareous LOAMY SAND with a weakly developed, fine to medium granular structure. The sample was slightly stony and contained a moderate proportion of organic fines and occasional woody fragments. No unusual odours, deleterious materials, roots or rhizomes of pernicious weeds were observed.

Results of analysis should be read in conjunction with the report they were issued with.

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Ebony Gheorghe
BSc MSc
Soil Scientist