



Phase IV Validation Completion Report

At

Former Wheatfields Day Centre,
Whitefield

Client: Onward

Reference: 31990-SUT-ZZ-00-RP-G-7401

Date: September 2024

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SUTCLIFFE INVESTIGATIONS

Phase IV Remediation & Validation Strategy Proposals

Document Control Sheet

Report Reference: 31990-SUT-ZZ-00-RP-G-7401

Issue: P01 Date: September 2024

Prepared by:

Checked/Approved by:

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Revision History:

Rev.	Date	Description	Prepared	Checked	Approved
P01	September 2024	Final Report	AW	DB	WGB
Signatures:			Arun Woods		

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1 Introduction

1.1 Terms of Reference

Sutcliffe Investigations have carried out remediation validation works on behalf of Onward in order to enable contaminated land conditions to be removed at land at the Former Wheatfield Day Centre, Victoria Avenue, Whitefield M45 6DP.

The present document outlines Sutcliffe Investigations validation works including:

-  Gas Membrane Validation
-  Topsoil Sampling
-  Depth Validation

1.2 Previous Works

This report should be read in conjunction with:

-  31990-SUT-ZZ-RP-G-701-0001 - Phase I Preliminary Risk Assessment Report (September 2021).
-  31990-SUT-ZZ-00-RP-G-702-0002 - Phase II Interpretative Ground Assessment (July 2022).
-  31990-SUT-ZZ-00-RP-G-7301 - Phase III Remediation & Validation Strategy Proposals (April 2023).

Based on the findings of the ground assessment, Elevated levels of Arsenic, Lead, Benzo(b)fluoranthene, Benzo(a)pyrene and Dibenzo(ah)anthracene were observed in samples screened at WS105, WS203, TP106 & TP107 which indicate the presence of site wide contamination that will require remediation to be safe for Human Health.

Statistical analysis carried out indicated site wide contamination and therefore the need for site wide remediation. Given site levels were to be raised this compromised a 600mm clean capping system to be emplaced in all soft landscaping (garden) areas as part of the development works, this will be formed of a minimum 150mm topsoil and 450mm subsoil. This will break any remaining potential contaminant linkages.

Levels beneath proposed areas of hardstanding will be as dictated by the adopted foundation solution.

Based on the quantitative and qualitative assessment of the risk associated with ground gas the site is classified as an Amber 2 under the NHBC Traffic Light system as outlined in CIRIA C665. As such gas protection measures will be required as part of the development of the site.

1.3 Objectives

Therefore, the aim of this document is to provide evidence that methodologies and protocols have been adhered to as detailed within the Phase III Remediation and Validation Proposals, dated April 2023, thus ensuring risks to identified receptors have been mitigated.

This principally relates to the imported topsoil material for garden areas and the gas membrane installation in all plots.

1.4 Development Proposal

The proposal layout is for the construction of residential properties with private gardens and associated infrastructure. A plan detailing the proposed development schematic is presented as Drawing Ref: *21059-PJA-00-ZZ-DR-A-1000-O*.

1.5 Site Location, Topography and Description

The site is located on land at the located at Victoria Avenue, Whitefield M45 6DP. Site details are summarised in the table below.

Table 1.1: Summary of Site Description

Detail	Remarks
Location	5.13km south of the centre of Bury
Grid Reference	381190, 405710
Area	0.908ha
Current Access	Site is accessed via Victoria Avenue to the south of the site
Topography	The site topography is noted to be relatively flat with a ridge of high ground in the northwestern corner.
Surrounding Land Uses	The surrounding area comprises of mostly residential properties with an industrial / commercial to the north.

2 Risk Assessment (Pre-Remedial Works)

2.1 Long Term Human Health

Following intrusive site investigation works completed by Sutcliffe Investigations (*reported in July 2022*) analytical results indicated that there were site wide elevated concentrations of contamination on site that would represent a risk to identified receptors (site end & adjacent users, construction workers & controlled waters).

A full assessment of risks to long term human health is presented in Sutcliffe's "*Phase II Interpretative Ground Assessment Report (July 2022)*".

2.2 Ground Gas Risk Assessment

Based on the results of the gas monitoring and due to elevated CO₂ readings, a Characteristic Situation 2 classification is recommended for the site, as such a gas membrane will be required as part of the ground floor design in all the new houses on site.

A full assessment of risks associated with ground gas is presented in Sutcliffe's "*Phase II Interpretative Ground Assessment Report (July 2022)*".

2.3 Controlled Waters

Exceedances of DWS and EQS screening criteria are not considered significant given the likely depth to groundwater, effects of natural attenuation, lack of nearby groundwater abstractions and the absence of any surface water courses that could be in continuity with ground water beneath the site.

A full assessment of risks to controlled waters is presented in Sutcliffe's "*Phase II Interpretative Ground Assessment Report (July 2022)*".

3 Remediation Works

3.1 Introduction

Based on the findings of the ground assessment, completed for the site (reported in July 2022), and with the exception of risks to receptors (construction workers & adjacent site users) associated with the site wide contamination, in addition to risks associated with ground gas, no other source-pathway-receptor linkages have been identified.

The site wide contamination was removed to achieve formation levels and a clean 600mm capping system was installed in all soft landscaping (garden) areas. In regard to ground gas risks, validated protection measures have been installed.

3.2 Remedial Works

Imported Material

Approximately 482m³ of clean topsoil and 1448m³ of clean subsoil was imported onto site for the garden areas. A recommended depth of 150mm was emplaced in all plots to create a suitable growth medium, along with 450mm subsoil to ensure a total capping system of 600mm was emplaced.

Depth validation was carried out and it was noted that a total depth of 600mm was emplaced on site, comprising 450mm subsoil overlain with 150mm topsoil material.

Sampling was undertaken to ensure the material was suitable and “*fit for purpose*” at a sampling rate of 1 sample per 50m³ of material. 13No. samples have been recovered so far from the material on site, and sampled against the following guidance values:

-  LQM Suitable 4 Use Levels (S4ULs).
-  ATRISK Soil Screening Values (SSVs) and CL:AIRE Generic Assessment Criteria (GACs) – Cyanide
-  Category 4 Screening Values – Lead

The chemical results for the topsoil were compared against the relevant GACs for residential (with plant uptake) at 6% soil organic matter (SOM). No elevated levels of contamination or Asbestos have been identified.

The analytical results certificates and screening spreadsheet are presented in *Appendix A*.

Gas Protection Measures

A gas membrane was required for the new development and required to meet a CS2 classification. This required medium-level gas protection measures, comprising a membrane and passive sub-floor dispersal layer to create a permeability contrast to limit the ingress of gas into buildings.

Validation of the membrane installation was carried out by Sutcliffe for plots 1-6, 9-14 and 17-30, to ensure the installation was carried out to the correct standard.

A Photographic logs of the gas membrane installations are presented in *Appendix B*.

Site Variations

No variations have been noted on site during the course of the remediation works.

4 Conclusions

Sutcliffe Investigations can confirm site works have been carried out on site as detailed in this report. A suitable gas membrane has been installed in plots and imported topsoil and subsoil for use in garden areas has been sampled and validated and Sutcliffe can confirm that the material is suitable for its proposed use on site.

Sutcliffe can confirm that the site does not pose a significant risk to identified receptors (site users, construction works, adjacent site users & controlled waters).

Appendix A – Analytical Certificates & Screening Tables (Imported)

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/07906
Issue Number: 1

Date: 20 August, 2024

Client: Sutcliffe
18-20 Harrington Street
Liverpool
L2 9QA

Project Manager: (Use) D Evans; D Bowen; A Tosh; W Baldwin/(Use) Sa
Project Name: Wheatfields Day Centre
Project Ref: 31990LG
Order No: 10494
Date Samples Received: 13/08/24
Date Instructions Received: 13/08/24
Date Analysis Completed: 20/08/24

Approved by:



Richard Wong
Client Manager

Envirolab Job Number: 24/07906

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07906/1	24/07906/2	24/07906/3	24/07906/4	24/07906/5	24/07906/6		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-Plot 2	TS-Plot 5	TS-Plot 8	TS-Plot 11	SS-Plot 23	TS-Plot 19				
Depth to Top	0.00	0.00	0.00	0.00	0.20	0.00				
Depth To Bottom	0.20	0.20	0.20	0.20	0.60	0.20				
Date Sampled	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	4AE	4AE	4AE	4AE	4AE				
% Moisture at <40C _A	18.1	19.4	18.6	18.7	8.1	18.5		% w/w	0.1	A-T-044
% Stones >10mm _A	4.4	4.1	4.2	2.2	15.5	11.8		% w/w	0.1	A-T-044
pH _D ^{MF}	8.23	8.20	8.02	8.29	7.50	8.15		pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{MF}	0.09	0.10	0.13	0.14	0.02	0.10		g/l	0.01	A-T-026s
Sulphate (acid soluble) _D ^{MF}	580	500	570	760	<200	460		mg/kg	200	A-T-028s
Cyanide (total) _A ^{MF}	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		mg/kg	0.2	A-T-050s
Sulphide _A	<5	<5	<5	<5	<5	<5		mg/kg	5	A-T-043-s
Sulphur (elemental) _D ^{MF}	6	<5	6	7	<5	6		mg/kg	5	A-T-029s
Organic Matter _D ^{MF}	12.8	8.3	11.7	7.3	2.1	5.2		% w/w	0.1	A-T-032s
Arsenic _D ^{MF}	4	4	3	4	<1	4		mg/kg	1	A-T-024s
Boron (water soluble) _D ^{MF}	1.7	1.9	1.8	1.7	<1.0	1.6		mg/kg	1	A-T-027s
Cadmium _D ^{MF}	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		mg/kg	0.5	A-T-024s
Copper _D ^{MF}	20	14	18	19	10	16		mg/kg	1	A-T-024s
Chromium _D ^{MF}	10	11	12	11	16	9		mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-040s
Chromium (trivalent)	10	11	12	11	16	9		mg/kg	1	Calc
Lead _D ^{MF}	21	22	26	26	11	22		mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17		mg/kg	0.17	A-T-024s
Nickel _D ^{MF}	9	8	8	9	15	6		mg/kg	1	A-T-024s
Selenium _D ^{MF}	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-024s
Zinc _D ^{MF}	46	43	59	56	46	77		mg/kg	5	A-T-024s

Envirolab Job Number: 24/07906

Client Project Name: Wheatfields Day Centre

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Client Sample No										
Client Sample ID	TS-Plot 2	TS-Plot 5	TS-Plot 8	TS-Plot 11	SS-Plot 23	TS-Plot 19				
Depth to Top	0.00	0.00	0.00	0.00	0.20	0.00				
Depth To Bottom	0.20	0.20	0.20	0.20	0.60	0.20				
Date Sampled	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	4AE	4AE	4AE	4AE	4AE				
Asbestos in Soil (inc. matrix)										
Asbestos in soil ^o	NAD	NAD	NAD	NAD	NAD	NAD				A-T-045
Asbestos Matrix (visual) ^o	-	-	-	-	-	-				A-T-045
Asbestos Matrix (microscope) ^o	-	-	-	-	-	-				A-T-045
Asbestos ACM - Suitable for Water Absorption Test? ^o	N/A	N/A	N/A	N/A	N/A	N/A				A-T-045

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Client Project Name: Wheatfields Day Centre

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Lab Sample ID	24/07906/1	24/07906/2	24/07906/3	24/07906/4	24/07906/5	24/07906/6		Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-Plot 2	TS-Plot 5	TS-Plot 8	TS-Plot 11	SS-Plot 23	TS-Plot 19				
Depth to Top	0.00	0.00	0.00	0.00	0.20	0.00				
Depth To Bottom	0.20	0.20	0.20	0.20	0.60	0.20				
Date Sampled	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	4AE	4AE	4AE	4AE	4AE				
PAH-16MS										
Acenaphthene _A ^{MS}	0.01	0.30	0.01	0.04	<0.01	0.03		mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{MS}	<0.01	<0.01	<0.01	0.02	<0.01	<0.01		mg/kg	0.01	A-T-019s
Anthracene _A ^{MS}	0.02	0.37	0.02	0.07	<0.02	0.04		mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{MS}	0.11	0.71	0.14	0.19	0.05	0.14		mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{MS}	0.09	0.50	0.12	0.18	0.05	0.11		mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{MS}	0.15	0.73	0.19	0.26	0.07	0.17		mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{MS}	0.07	0.24	0.08	0.13	<0.05	0.08		mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{MS}	<0.07	0.24	<0.07	<0.07	<0.07	<0.07		mg/kg	0.07	A-T-019s
Chrysene _A ^{MS}	0.14	0.75	0.18	0.24	0.07	0.18		mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{MS}	<0.04	0.05	<0.04	<0.04	<0.04	<0.04		mg/kg	0.04	A-T-019s
Fluoranthene _A ^{MS}	0.29	2.20	0.31	0.51	0.12	0.42		mg/kg	0.08	A-T-019s
Fluorene _A ^{MS}	<0.01	0.15	<0.01	0.06	<0.01	0.01		mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{MS}	0.07	0.25	0.07	0.12	<0.03	0.08		mg/kg	0.03	A-T-019s
Naphthalene _A ^{MS}	<0.03	<0.03	<0.03	0.06	<0.03	<0.03		mg/kg	0.03	A-T-019s
Phenanthrene _A ^{MS}	0.13	1.46	0.12	0.35	0.06	0.16		mg/kg	0.03	A-T-019s
Pyrene _A ^{MS}	0.28	1.75	0.31	0.51	0.12	0.40		mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{MS}	1.36	9.70	1.55	2.74	0.54	1.82		mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/07906

Client Project Name: Wheatfields Day Centre

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Client Sample No										
Client Sample ID	TS-Plot 2	TS-Plot 5	TS-Plot 8	TS-Plot 11	SS-Plot 23	TS-Plot 19				
Depth to Top	0.00	0.00	0.00	0.00	0.20	0.00				
Depth To Bottom	0.20	0.20	0.20	0.20	0.60	0.20				
Date Sampled	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24	13-Aug-24				
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES				
Sample Matrix Code	4AE	4AE	4AE	4AE	4AE	4AE				
TPH UKCWG with Clean Up										
Alii >C5-C6 _A	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
Alii >C6-C8 _A	<0.01	0.02	0.02	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
Alii >C8-C10 _A	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Alii >C10-C12 _A ^{M#}	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Alii >C12-C16 _A ^{M#}	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Alii >C16-C21 _A ^{M#}	6	6	5	7	4	5		mg/kg	1	A-T-055s
Alii >C21-C35 _A ^{M#}	33	71	29	43	17	41		mg/kg	1	A-T-055s
Alii >C35-C44 _A	4	36	4	6	2	3		mg/kg	1	A-T-055s
Total Aliphatics _A	42	113	38	57	22	50		mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1	<1	<1	<1		mg/kg	1	A-T-055s
Aro >C12-C16 _A	5	7	5	6	2	4		mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	13	21	11	23	8	14		mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	25	37	22	45	12	24		mg/kg	1	A-T-055s
Aro >C35-C44 _A	5	18	4	6	2	8		mg/kg	1	A-T-055s
Total Aromatics _A	47	83	41	79	24	50		mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C44) _A	89	196	79	136	46	100		mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		mg/kg	0.01	A-T-022s

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript "##"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "D" on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript "A"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

"Trace Asbestos Identified" will be reported if there is not enough present to verify the type.

Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). "TRACE" will be reported as a quantification result.

PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs
Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.					

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only. Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Sutcliffe, 18-20 Harrington Street, Liverpool, L2 9QA

Project No: 24/07906

Project: Wheatfields Day Centre

Date Received: 13/08/2024 (pm)

Clients Project No: 31990LG

Cool Box Temperatures (°C): 20.5

NO DEVIATIONS IDENTIFIED with respect to sampling dates or containers received.

Note: If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3 (for water samples $5 \pm 3^{\circ}\text{C}$), ISO 18400-105:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/07906/1	24/07906/2	24/07906/3	24/07906/4	24/07906/5	24/07906/6
Client Sample No						
Client Sample ID/Depth	TS-Plot 2 0.00-0.20m	TS-Plot 5 0.00-0.20m	TS-Plot 8 0.00-0.20m	TS-Plot 11 0.00-0.20m	SS-Plot 23 0.20-0.60m	TS-Plot 19 0.00-0.20m
Date Sampled	13/08/24	13/08/24	13/08/24	13/08/24	13/08/24	13/08/24
A-T-019s	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
A-T-022s	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
A-T-024s	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
A-T-026s	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-027s	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
A-T-028s	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
A-T-029s	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-031s	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-032s	20/08/2024	20/08/2024	20/08/2024	20/08/2024	20/08/2024	20/08/2024
A-T-040s	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-042sTCN	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
A-T-043-s	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
A-T-044	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024	16/08/2024
A-T-045	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
A-T-050s	16/08/2024	16/08/2024	15/08/2024	15/08/2024	15/08/2024	16/08/2024
A-T-055s	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
Calc	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024	19/08/2024
Calc-As Recd	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/07340
Issue Number: 1

Date: 02 August, 2024

Client: Sutcliffe
18-20 Harrington Street
Liverpool
L2 9QA

Project Manager: (Use) D Evans; D Bowen; A Tosh; W Baldwin/(Use) Sa
Project Name: Wheatfields Day Centre
Project Ref: 31990LG
Order No: 10477
Date Samples Received: 26/07/24
Date Instructions Received: 29/07/24
Date Analysis Completed: 02/08/24

Approved by:



Richard Wong
Client Manager

Envirolab Job Number: 24/07340

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07340/1	24/07340/2	24/07340/3	24/07340/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SS-P14	SS-P11	SS-P8	SS-P5						
Depth to Top	0.00	0.00	0.00	0.00						
Depth To Bottom	0.30	0.30	0.30	0.30						
Date Sampled	25-Jul-24	25-Jul-24	25-Jul-24	25-Jul-24						
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES						
Sample Matrix Code	4AE	4AE	5AE	4AE						
% Moisture at <40C _A	8.7	8.9	10.8	9.0				% w/w	0.1	A-T-044
% Stones >10mm _A	4.9	11.9	7.3	5.0				% w/w	0.1	A-T-044
pH _D ^{M#}	7.73	7.05	6.62	7.72				pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.03	0.02	0.02	0.03				g/l	0.01	A-T-026s
Sulphate (acid soluble) _D ^{M#}	<200	<200	<200	<200				mg/kg	200	A-T-028s
Cyanide (total) _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2				mg/kg	0.2	A-T-050s
Sulphide _A	<5	<5	<5	<5				mg/kg	5	A-T-043-s
Sulphur (elemental) _D ^{M#}	<5	<5	<5	<5				mg/kg	5	A-T-029s
Organic Matter _D ^{M#}	0.7	0.4	0.7	0.6				% w/w	0.1	A-T-032s
Arsenic _D ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-024s
Boron (water soluble) _D ^{M#}	<1.0	<1.0	<1.0	<1.0				mg/kg	1	A-T-027s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5	<0.5				mg/kg	0.5	A-T-024s
Copper _D ^{M#}	11	11	11	11				mg/kg	1	A-T-024s
Chromium _D ^{M#}	18	18	19	18				mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1	<1				mg/kg	1	A-T-040s
Chromium (trivalent)	18	18	19	18				mg/kg	1	Calc
Lead _D ^{M#}	12	11	12	13				mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17				mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	18	17	18	18				mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-024s
Zinc _D ^{M#}	51	46	50	50				mg/kg	5	A-T-024s

Envirolab Job Number: 24/07340

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07340/1	24/07340/2	24/07340/3	24/07340/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SS-P14	SS-P11	SS-P8	SS-P5						
Depth to Top	0.00	0.00	0.00	0.00						
Depth To Bottom	0.30	0.30	0.30	0.30						
Date Sampled	25-Jul-24	25-Jul-24	25-Jul-24	25-Jul-24						
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES						
Sample Matrix Code	4AE	4AE	5AE	4AE						
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D [#]	NAD	NAD	NAD	NAD						A-T-045
Asbestos Matrix (visual) _D	-	-	-	-						A-T-045
Asbestos Matrix (microscope) _D	-	-	-	-						A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	N/A	N/A	N/A						A-T-045

Envirolab Job Number: 24/07340

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07340/1	24/07340/2	24/07340/3	24/07340/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SS-P14	SS-P11	SS-P8	SS-P5						
Depth to Top	0.00	0.00	0.00	0.00						
Depth To Bottom	0.30	0.30	0.30	0.30						
Date Sampled	25-Jul-24	25-Jul-24	25-Jul-24	25-Jul-24						
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES						
Sample Matrix Code	4AE	4AE	5AE	4AE						
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	<0.02	<0.02	<0.02	<0.02				mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	0.04	<0.04	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	<0.04	<0.04	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	0.06	<0.05	<0.05	<0.05				mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	<0.05	<0.05	<0.05	<0.05				mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07				mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	0.07	<0.06	<0.06	<0.06				mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04				mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	0.12	<0.08	<0.08	<0.08				mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	<0.03	<0.03	<0.03	<0.03				mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03				mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.07	<0.03	<0.03	0.04				mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	0.11	<0.07	<0.07	<0.07				mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	0.47	<0.08	<0.08	<0.08				mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/07340

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/07340/1	24/07340/2	24/07340/3	24/07340/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	SS-P14	SS-P11	SS-P8	SS-P5						
Depth to Top	0.00	0.00	0.00	0.00						
Depth To Bottom	0.30	0.30	0.30	0.30						
Date Sampled	25-Jul-24	25-Jul-24	25-Jul-24	25-Jul-24						
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES						
Sample Matrix Code	4AE	4AE	5AE	4AE						
TPH UKCWG with Clean Up										
Ali >C5-C6 _A	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	4	3	4	4				mg/kg	1	A-T-055s
Ali >C35-C44 _A	<1	<1	1	1				mg/kg	1	A-T-055s
Total Aliphatics _A	4	3	5	5				mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C12-C16 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	2	<1	<1	2				mg/kg	1	A-T-055s
Aro >C35-C44 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Total Aromatics _A	2	<1	<1	2				mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C44) _A	6	3	5	7				mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript “#”	Accredited to ISO 17025
Superscript “M”	Accredited to MCertS
Superscript “U”	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript “A”	Analysis performed on as-received Sample
Subscript “D”	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript “D” on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript “A”	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

“Trace Asbestos Identified” will be reported if there is not enough present to verify the type.

Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to ‘HSG264, Asbestos: The survey guide’ and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). “TRACE” will be reported as a quantification result.

PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs

Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as ‘% stones >10mm’.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any “D” subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only. Results “with Clean up” indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from “TPH CWG with clean up” please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Sutcliffe, 18-20 Harrington Street, Liverpool, L2 9QA

Project No: 24/07340

Date Received: 29/07/2024 (am)

Project: Wheatfields Day Centre

Cool Box Temperatures (°C): 19.7

Clients Project No: 31990LG

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/07340/1	24/07340/2	24/07340/3	24/07340/4
Client Sample No				
Client Sample ID/Depth	SS-P14 0.00-0.30m	SS-P11 0.00-0.30m	SS-P8 0.00-0.30m	SS-P5 0.00-0.30m
Date Sampled	25/07/24	25/07/24	25/07/24	25/07/24
A-T-019s	31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-022s	31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-024s	02/08/2024	02/08/2024	02/08/2024	02/08/2024
A-T-026s	01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-027s	01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-028s	01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-029s	01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-031s	31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-032s	02/08/2024	02/08/2024	02/08/2024	02/08/2024
A-T-040s	01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-042sTCN	31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-043-s	31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-044	01/08/2024	01/08/2024	01/08/2024	01/08/2024
A-T-045	30/07/2024	30/07/2024	30/07/2024	30/07/2024
A-T-050s	31/07/2024	31/07/2024	31/07/2024	31/07/2024
A-T-055s	31/07/2024	31/07/2024	31/07/2024	31/07/2024
Calc	02/08/2024	02/08/2024	02/08/2024	02/08/2024
Calc-As Recd	31/07/2024	31/07/2024	31/07/2024	31/07/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/08804
Issue Number: 1

Date: 17 September, 2024

Client: Sutcliffe
18-20 Harrington Street
Liverpool
L2 9QA

Project Manager: (Use) D Evans; D Bowen; A Tosh; W Baldwin/(Use) Sa
Project Name: Wheatfields Day Centre
Project Ref: 31990LG
Order No: 10542
Date Samples Received: 11/09/24
Date Instructions Received: 12/09/24
Date Analysis Completed: 17/09/24

Approved by:



Danielle Brierley
Client Services Supervisor

Envirolab Job Number: 24/08804

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-PLOT 29-30	TS-PLOT 15	SS-PLOT 29-30	SS-PLOT 16						
Depth to Top	0.00	0.00	0.15	0.15						
Depth To Bottom	0.15	0.15	0.60	0.60						
Date Sampled	09-Sep-24	09-Sep-24	09-Sep-24	09-Sep-24						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4AE	4AE	5AE						
% Moisture at <40C _A	23.6	22.3	10.5	13.5				% w/w	0.1	A-T-044
% Stones >10mm _A	2.5	1.6	18.2	3.0				% w/w	0.1	A-T-044
pH _D ^{M#}	8.81	8.61	8.21	8.38				pH	0.01	A-T-031s
Sulphate (water sol 2:1) _D ^{M#}	0.04	0.05	<0.01	0.03				g/l	0.01	A-T-026s
Sulphate (acid soluble) _D ^{M#}	400	350	<200	<200				mg/kg	200	A-T-028s
Cyanide (total) _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-042sTCN
Phenols - Total by HPLC _A	<0.2	<0.2	<0.2	<0.2				mg/kg	0.2	A-T-050s
Sulphide _A	<5	<5	<5	<5				mg/kg	5	A-T-043-s
Sulphur (elemental) _D ^{M#}	6	7	<5	<5				mg/kg	5	A-T-029s
Organic Matter _D ^{M#}	11.5	8.6	0.2	0.9				% w/w	0.1	A-T-032s
Arsenic _D ^{M#}	4	3	<1	<1				mg/kg	1	A-T-024s
Boron (water soluble) _D ^{M#}	1.5	1.4	<1.0	<1.0				mg/kg	1	A-T-027s
Cadmium _D ^{M#}	<0.5	<0.5	<0.5	<0.5				mg/kg	0.5	A-T-024s
Copper _D ^{M#}	20	14	6	11				mg/kg	1	A-T-024s
Chromium _D ^{M#}	9	10	11	16				mg/kg	1	A-T-024s
Chromium (hexavalent) _D	<1	<1	<1	<1				mg/kg	1	A-T-040s
Chromium (trivalent)	9	10	11	16				mg/kg	1	Calc
Lead _D ^{M#}	23	22	7	11				mg/kg	1	A-T-024s
Mercury _D	<0.17	<0.17	<0.17	<0.17				mg/kg	0.17	A-T-024s
Nickel _D ^{M#}	8	9	11	17				mg/kg	1	A-T-024s
Selenium _D ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-024s
Zinc _D ^{M#}	49	51	36	54				mg/kg	5	A-T-024s

Envirolab Job Number: 24/08804

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-PLOT 29-30	TS-PLOT 15	SS-PLOT 29-30	SS-PLOT 16						
Depth to Top	0.00	0.00	0.15	0.15						
Depth To Bottom	0.15	0.15	0.60	0.60						
Date Sampled	09-Sep-24	09-Sep-24	09-Sep-24	09-Sep-24						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4AE	4AE	5AE						
Asbestos in Soil (inc. matrix)										
Asbestos in soil _D [#]	NAD	NAD	NAD	NAD						A-T-045
Asbestos Matrix (visual) _D	-	-	-	-						A-T-045
Asbestos Matrix (microscope) _D	-	-	-	-						A-T-045
Asbestos ACM - Suitable for Water Absorption Test? _D	N/A	N/A	N/A	N/A						A-T-045

Envirolab Job Number: 24/08804

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-PLOT 29-30	TS-PLOT 15	SS-PLOT 29-30	SS-PLOT 16						
Depth to Top	0.00	0.00	0.15	0.15						
Depth To Bottom	0.15	0.15	0.60	0.60						
Date Sampled	09-Sep-24	09-Sep-24	09-Sep-24	09-Sep-24						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4AE	4AE	5AE						
PAH-16MS										
Acenaphthene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Acenaphthylene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Anthracene _A ^{M#}	0.05	<0.02	<0.02	<0.02				mg/kg	0.02	A-T-019s
Benzo(a)anthracene _A ^{M#}	0.19	0.14	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(a)pyrene _A ^{M#}	0.11	0.09	<0.04	<0.04				mg/kg	0.04	A-T-019s
Benzo(b)fluoranthene _A ^{M#}	0.17	0.15	<0.05	<0.05				mg/kg	0.05	A-T-019s
Benzo(ghi)perylene _A ^{M#}	0.09	0.06	<0.05	<0.05				mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene _A ^{M#}	<0.07	<0.07	<0.07	<0.07				mg/kg	0.07	A-T-019s
Chrysene _A ^{M#}	0.23	0.19	<0.06	<0.06				mg/kg	0.06	A-T-019s
Dibenzo(ah)anthracene _A ^{M#}	<0.04	<0.04	<0.04	<0.04				mg/kg	0.04	A-T-019s
Fluoranthene _A ^{M#}	0.40	0.25	<0.08	<0.08				mg/kg	0.08	A-T-019s
Fluorene _A ^{M#}	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-019s
Indeno(123-cd)pyrene _A ^{M#}	0.06	0.05	<0.03	<0.03				mg/kg	0.03	A-T-019s
Naphthalene _A ^{M#}	<0.03	<0.03	<0.03	<0.03				mg/kg	0.03	A-T-019s
Phenanthrene _A ^{M#}	0.15	0.06	<0.03	<0.03				mg/kg	0.03	A-T-019s
Pyrene _A ^{M#}	0.34	0.23	<0.07	<0.07				mg/kg	0.07	A-T-019s
Total PAH-16MS _A ^{M#}	1.79	1.22	<0.08	<0.08				mg/kg	0.01	A-T-019s

Envirolab Job Number: 24/08804

Client Project Name: Wheatfields Day Centre

Client Project Ref: 31990LG

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4				Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	TS-PLOT 29-30	TS-PLOT 15	SS-PLOT 29-30	SS-PLOT 16						
Depth to Top	0.00	0.00	0.15	0.15						
Depth To Bottom	0.15	0.15	0.60	0.60						
Date Sampled	09-Sep-24	09-Sep-24	09-Sep-24	09-Sep-24						
Sample Type	SOIL	SOIL	SOIL	SOIL						
Sample Matrix Code	4AE	4AE	4AE	5AE						
TPH UKCWG with Clean Up										
Ali >C5-C6 _A	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C6-C8 _A	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Ali >C8-C10 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C10-C12 _A ^{M#}	<1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C12-C16 _A ^{M#}	1	<1	<1	<1				mg/kg	1	A-T-055s
Ali >C16-C21 _A ^{M#}	6	6	<1	<1				mg/kg	1	A-T-055s
Ali >C21-C35 _A ^{M#}	40	38	<1	<1				mg/kg	1	A-T-055s
Ali >C35-C44 _A	8	9	<1	<1				mg/kg	1	A-T-055s
Total Aliphatics _A	55	53	<1	<1				mg/kg	1	Calc-As Recd
Aro >C5-C7 _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C7-C8 _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
Aro >C8-C10 _A	1	1	<1	<1				mg/kg	1	A-T-055s
Aro >C10-C12 _A	<1	<1	<1	<1				mg/kg	1	A-T-055s
Aro >C12-C16 _A	5	4	<1	<1				mg/kg	1	A-T-055s
Aro >C16-C21 _A ^{M#}	20	13	<1	<1				mg/kg	1	A-T-055s
Aro >C21-C35 _A ^{M#}	43	20	<1	<1				mg/kg	1	A-T-055s
Aro >C35-C44 _A	6	6	<1	<1				mg/kg	1	A-T-055s
Total Aromatics _A	77	44	<1	<1				mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C44) _A	131	98	2	<1				mg/kg	1	Calc-As Recd
BTEX - Benzene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Toluene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - m & p Xylene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
BTEX - o Xylene _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s
MTBE _A [#]	<0.01	<0.01	<0.01	<0.01				mg/kg	0.01	A-T-022s

Report Notes

General

- This report shall not be reproduced, except in full, without written approval from Envirolab.
- The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
- The results reported herein relate only to the material supplied to the laboratory.
- The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
- Analytical results reflect the quality of the sample at the time of analysis only.
- Opinions and Interpretations expressed are outside our scope of accreditation.
- A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
- If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
- Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript “#”	Accredited to ISO 17025
Superscript “M”	Accredited to MCertS
Superscript “U”	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript “A”	Analysis performed on as-received Sample
Subscript “D”	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript “D” on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript “A”	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.

Stones etc. are not removed from the sample prior to analysis

“Trace Asbestos Identified” will be reported if there is not enough present to verify the type.

Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to ‘HSG264, Asbestos: The survey guide’ and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). “TRACE” will be reported as a quantification result.

PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs

Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.

Soil Chemical Analysis:

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as ‘% stones >10mm’.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any “A” subscripts

All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any “D” subscripts.

TPH by method A-T-007:

For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only. Results “with Clean up” indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:

EPH CWG results have humics mathematically subtracted through instrument calculation.

Where these humic substances have been identified in any IDs from “TPH CWG with clean up” please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:

Results greater than 12900µS/cm @ 25°C / 11550µS/cm @ 20°C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Sutcliffe, 18-20 Harrington Street, Liverpool, L2 9QA

Project No: 24/08804

Date Received: 12/09/2024 (am)

Project: Wheatfields Day Centre

Cool Box Temperatures (°C): 14.8

Clients Project No: 31990LG

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

Lab Sample ID	24/08804/1	24/08804/2	24/08804/3	24/08804/4
Client Sample No				
Client Sample ID/Depth	TS-PLOT 29-30 0.00-0.15m	TS-PLOT 15 0.00-0.15m	SS-PLOT 29-30 0.15-0.60m	SS-PLOT 16 0.15-0.60m
Date Sampled	09/09/24	09/09/24	09/09/24	09/09/24
A-T-019s	16/09/2024	16/09/2024	17/09/2024	17/09/2024
A-T-022s	13/09/2024	13/09/2024	13/09/2024	13/09/2024
A-T-024s	17/09/2024	17/09/2024	17/09/2024	17/09/2024
A-T-026s	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-027s	17/09/2024	17/09/2024	17/09/2024	17/09/2024
A-T-028s	17/09/2024	17/09/2024	17/09/2024	17/09/2024
A-T-029s	17/09/2024	17/09/2024	17/09/2024	17/09/2024
A-T-031s	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-032s	16/09/2024	16/09/2024	16/09/2024	17/09/2024
A-T-040s	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-042sTCN	13/09/2024	13/09/2024	13/09/2024	16/09/2024
A-T-043-s	12/09/2024	12/09/2024	12/09/2024	12/09/2024
A-T-044	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-045	13/09/2024	13/09/2024	13/09/2024	13/09/2024
A-T-050s	16/09/2024	16/09/2024	16/09/2024	16/09/2024
A-T-055s	13/09/2024	13/09/2024	13/09/2024	13/09/2024
Calc	17/09/2024	17/09/2024	17/09/2024	17/09/2024
Calc-As Recd	13/09/2024	13/09/2024	13/09/2024	13/09/2024

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

End of Report

Appendix B – Gas Membrane Validation

Gas Membrane Validation Log



Plate 1: Showing a sealed service entry on plot 1 using Visqueen detailing strip



Plate 2: Showing the general condition of the gas membrane on plot 1

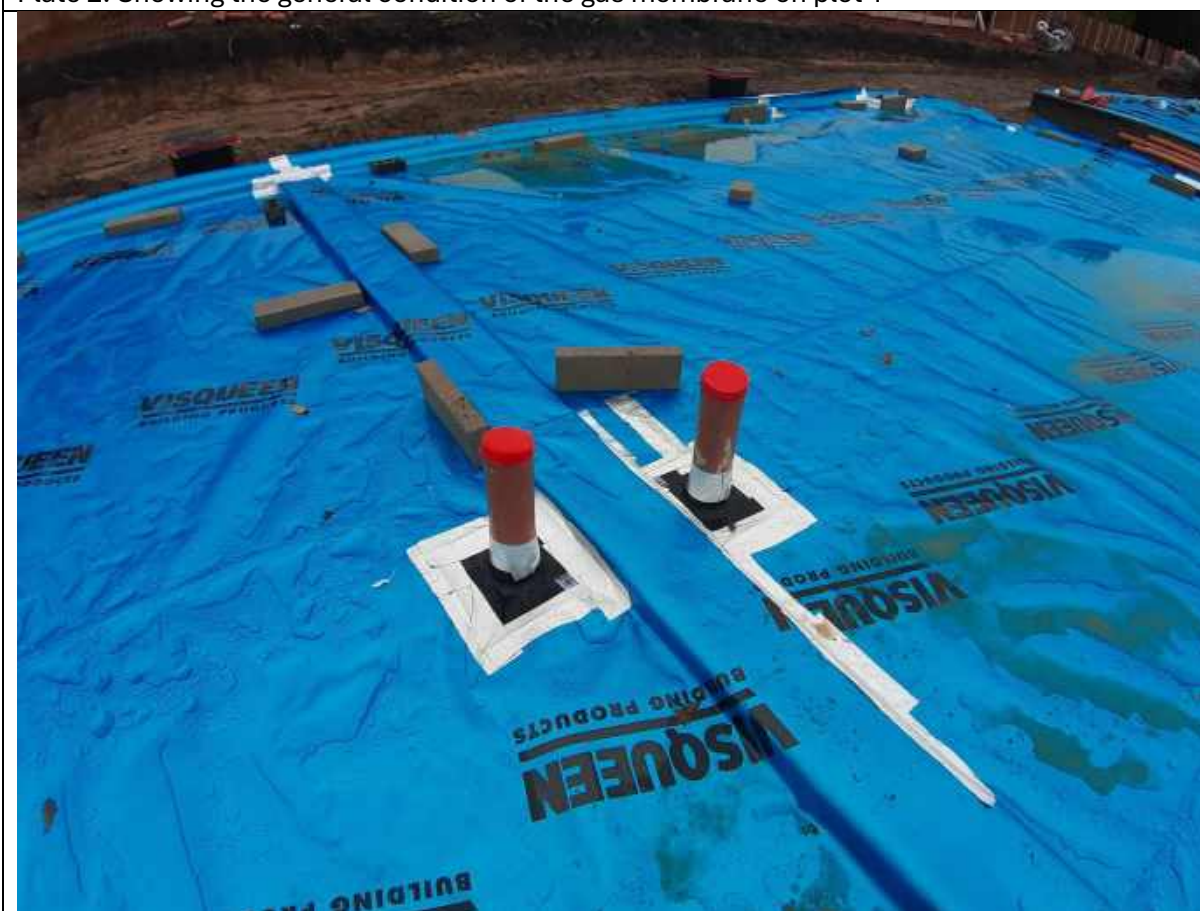


Plate 3: Showing preformed top hats sealed using Visqueen detailing tape on plots 1-2



Plate 4: Showing the general condition of the gas membrane on plots 1-2



Plate 5: Showing the general condition of the membrane on plots 1-2



Plate 6: Showing the general condition of the membrane on plot 1-2



Plot 7: Showing a sealed preformed tophat on a service entry using Visqueen detailing tape on plot 3



Plate 8: Showing the general condition of the membrane and sealed service entries in plots 3-4



Plate 9: Showing the general condition of the membrane and sealed service entry on plots 3-4



Plate 10: Showing the general condition of the membrane on plot 3-4



Plate 11: Showing the general condition of the membrane and sealed top hats on plots 3-4



Plate 12: Showing the general condition of the membrane on plots 3-4



Plate 13: Showing the general condition of the membrane on plots 3-4



Plate 14: Showing the general condition of the membrane on plots 3-4



Plate 15: Showing the general condition of the membrane on plots 5-6



Plate 16: Showing sealed preformed top hats on plots 5-6



Plate 17: Showing the condition of the membrane sealing on plots 5-6



Plate 18: Showing the general condition of the membrane on plots 5-6



Plate 19: Showing the general condition of the membrane on plots 5-6



Plate 20: Showing the general condition of the membrane in plots 5-6



Plate 21: Plots 5&6: Showing the general condition of the membrane and a sealed service entry on plots 5&6



Plate 22: Showing the general condition of the membrane on plots 5&6



Plate 23: Showing the general condition of the membrane on plots 5&6



Plate 24: Showing the general condition of the membrane and sealed service entries on Plots 5&6



Plate 25: Showing the general condition of the membrane and sealed service entries on Plots 5&6



Plate 26: Showing a preformed top hat sealed with visqueen detailing tape Plot 7



Plate 27: Showing the general condition of the membrane on plot 7

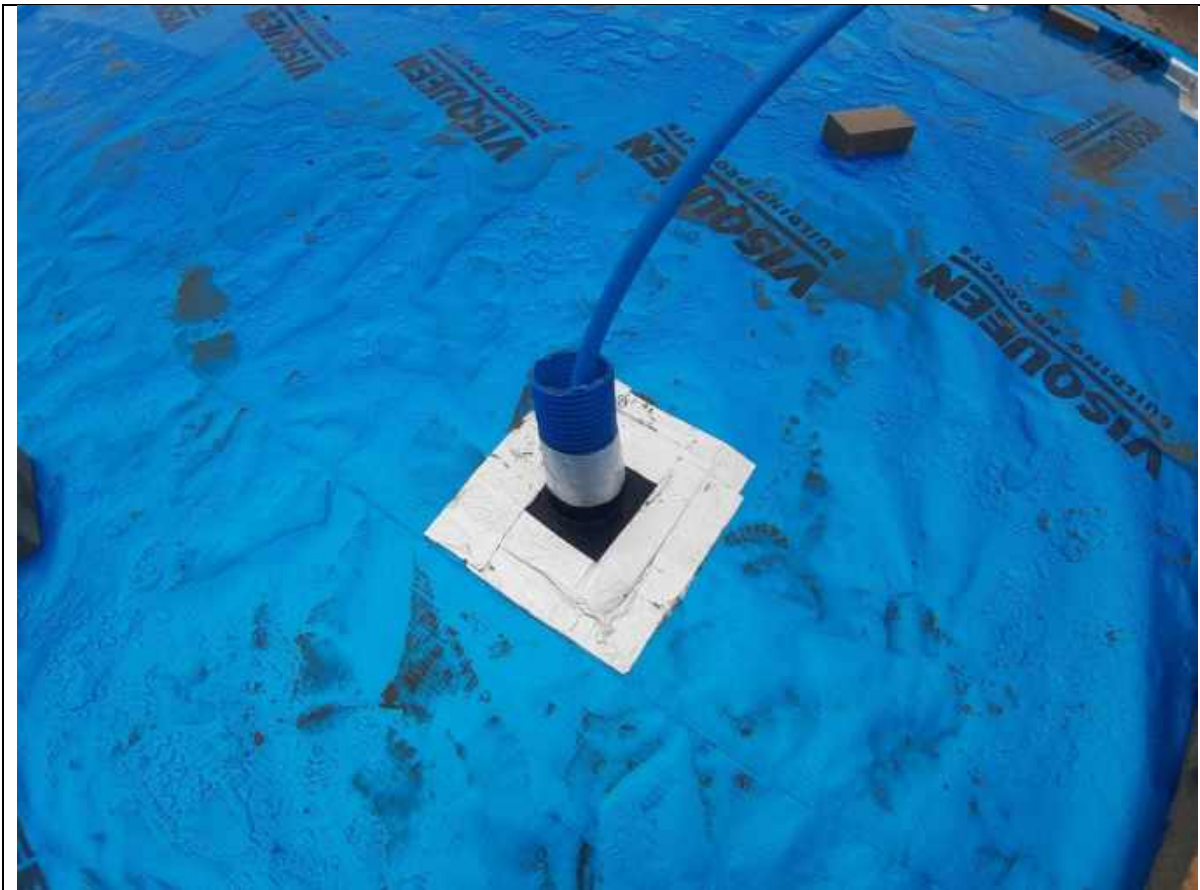


Plate 28: Showing a sealed service entry on Plot 8



Plate 29: Showing the general condition of the membrane on Plot 8



Plate 30: Showing the general condition of the membrane on Plots 9-10



Plate 31: Showing the general condition of the membrane on Plots 9-10

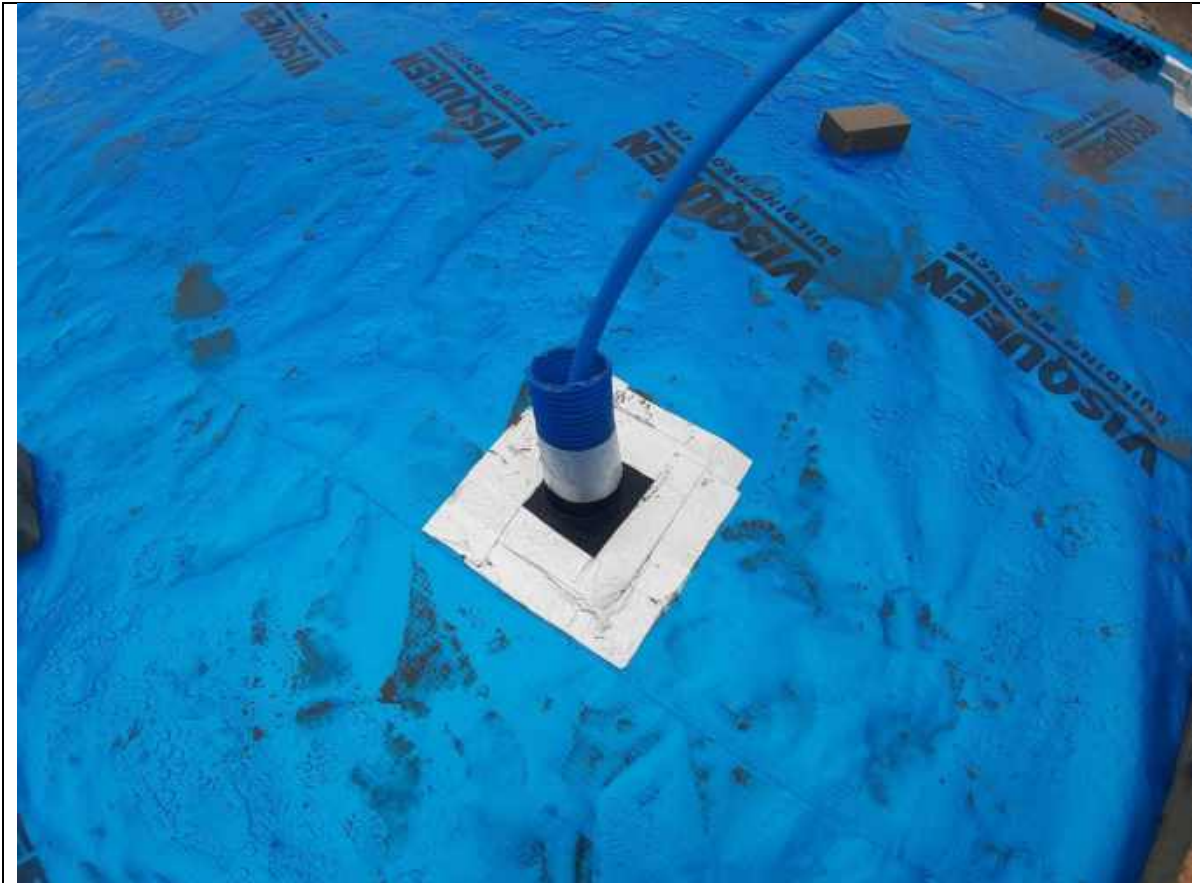


Plate 32: Showing a sealed service entry in Plots 9-10



Plate 33: Showing a preformed top hat on Plots 9-10



Plate 34: Showing the condition of the membrane on Plots 9-10



Plate 35: Showing the condition of the membrane Plots 9-10



Plate 36: Showing the general condition of the membrane on Plots 11-12



Plate 37: Showing the general condition of the membrane on Plots 11-12



Plate 38: Showing the general condition of the membrane on Plots 11-12



Plate 39: Showing the general condition of the membrane on Plots 11-12



Plate 40: Showing a preformed tophat sealed using Visqueen detailing tape on Plots 11-12



Plate 41: Showing the general condition of the membrane on Plots 11-12



Plate 42: Showing a preformed tophate using Visqueen detailing tape on Plots 11-12



Plate 43: Showing heat sealed seams on the membrane on Plot 13

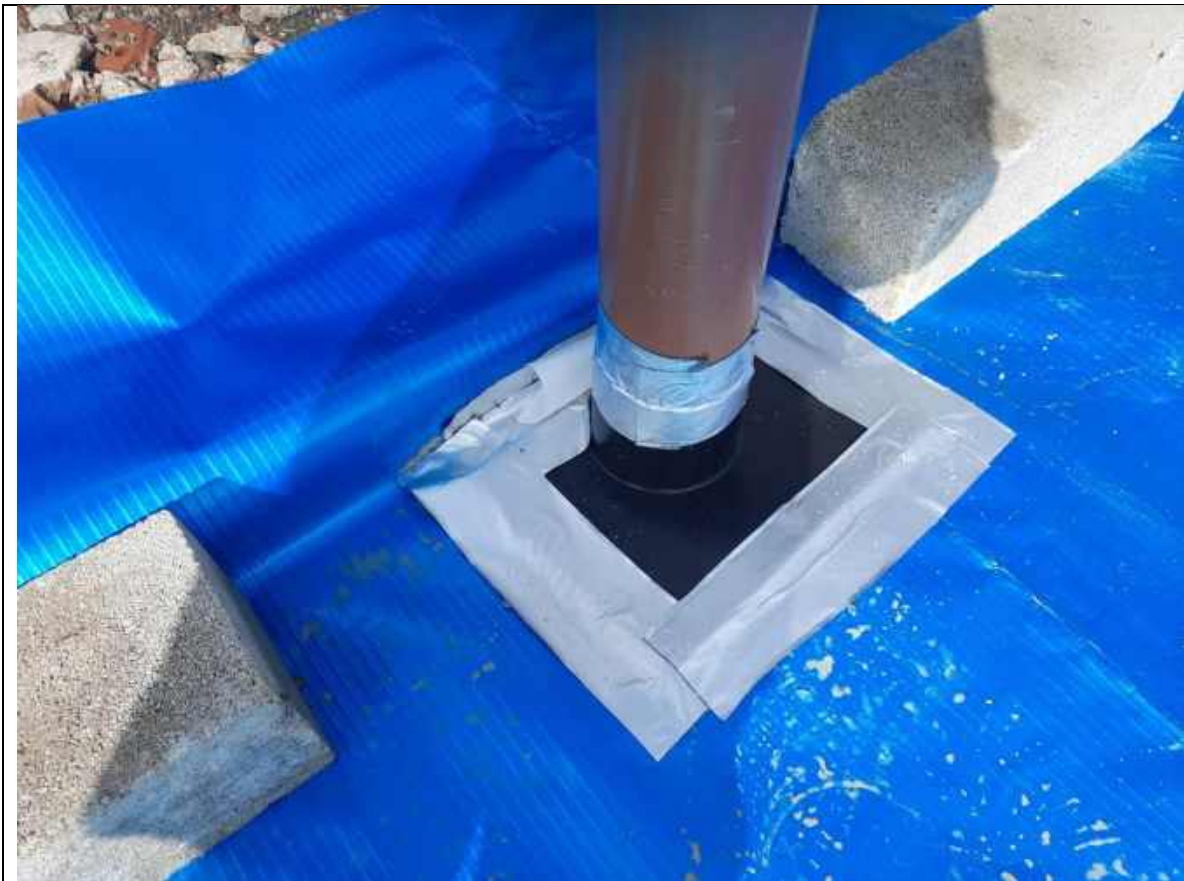


Plate 44: Showing a sealed service entry on Plot 14



Plate 45: Showing heat sealed seams on Plot 14



Plate 46: Showing the membrane covering the cavity wall on Plot 14



Plate 47: Showing the general condition of the membrane on Plot 15



Plate 48: Showing the membrane covering the cavity wall on Plot 15



Plate 49: Showing a sealed service entry on Plot 16



Plate 50: Showing a heat sealed membrane on Plot 16



Plate 51: Showing the general condition of the membrane on Plot 17



Plate 52: Showing a sealed service entry Plot 17



Plate 53: Showing sealed service entry on Plot 17



Plate 54: Showing sealed edges covering the cavity wall on Plot 17



Plate 55: Showing the general condition of the membrane on Plot 18



Plate 56: Showing the membrane covering the cavity wall on Plot 18

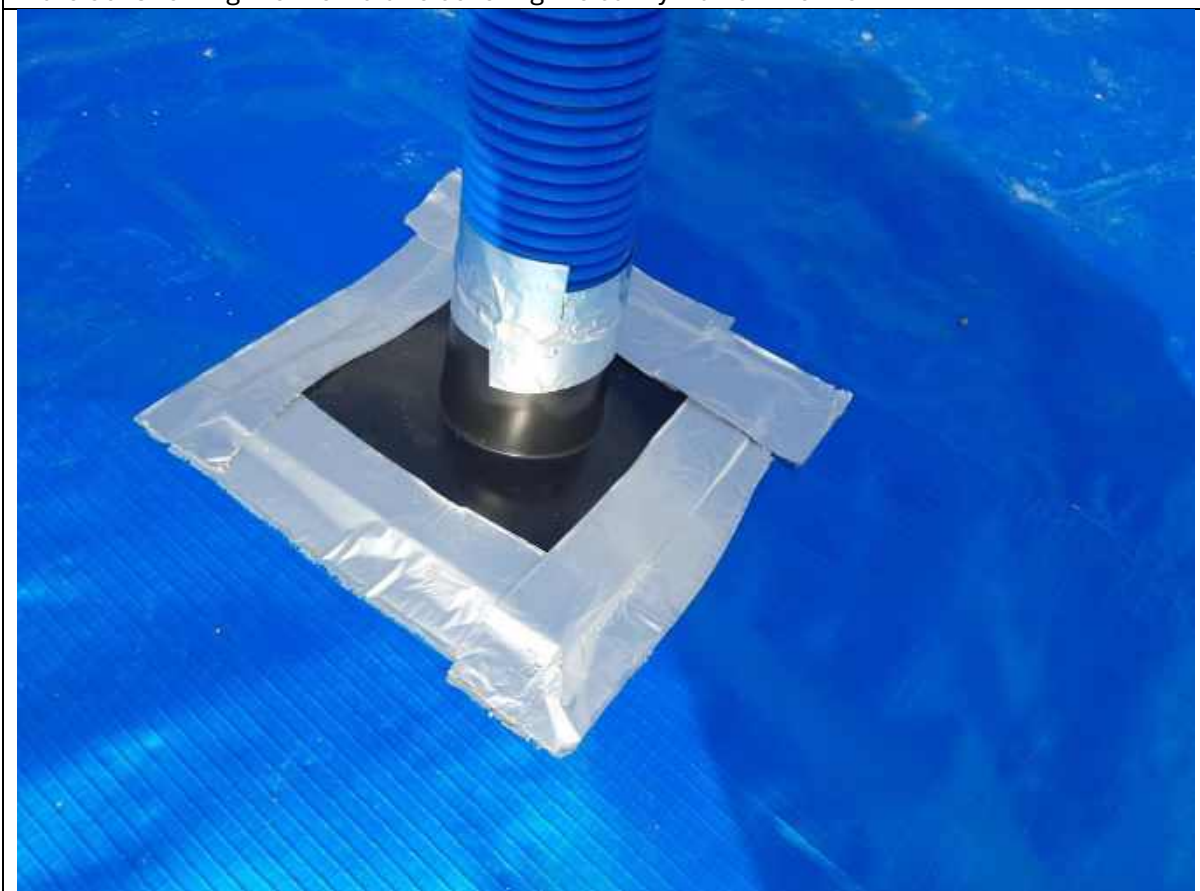


Plate 57: Showing a sealed service entry on Plot 18



Plate 58: Showing heat sealed seams on Plot 18



Plate 59: Shwoing the general condition of the membrane on Plot 19



Plate 60: Showing the condition of the edges on Plot 19



Plate 61: Showing the condition of the edges on Plot 19



Plate 62: Showing the condition of the edges on Plot 19



Plate 63: Showing the condition of the membrane on Plot 19



Plate 64: Showing the condition of the membrane on Plot 20



Plate 65: Showing a sealed service entry on Plot 20



Plate 66: Showing the condition of the membrane on Plot 20



Plate 67: Showing the general condition of the membrane on Plots 21-22



Plate 68: Showing the general condition of the membrane on Plots 21-22



Plate 69: Showing the general condition of the membrane on Plots 21-22



Plate 70: Showing the general condition of the membrane on Plots 21-22



Plate 71: Showing the general condition of the membranes on Plots 21-22



Plate 72: Showing a sealed preformed top hat on Plots 21-22



Plate 73: Showing the general condition of the membrane on Plots 23-24

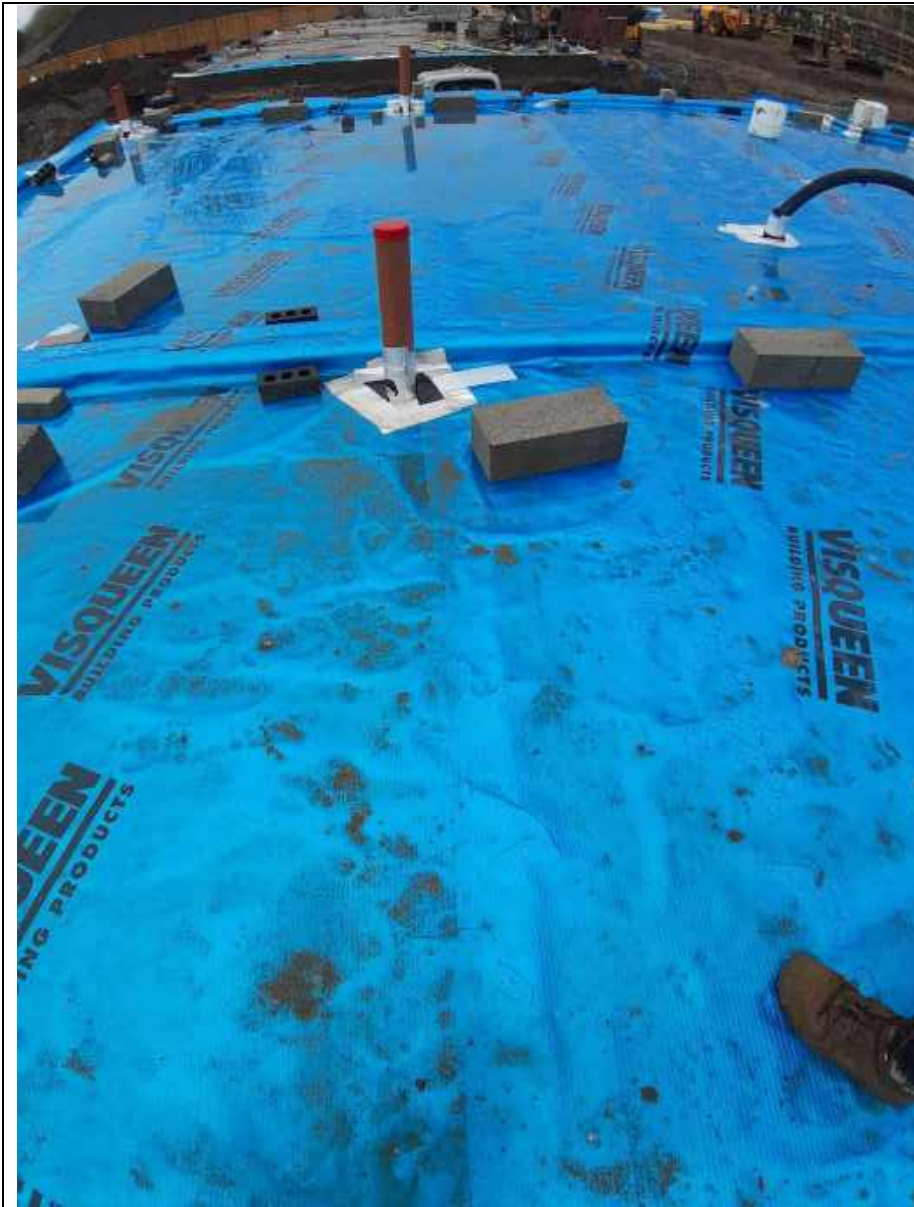


Plate 74: Showing the general condition of the membrane on Plots 23-24



Plate 75: Showing a sealed service entry on Plots 23-24



Plate 76: Showing the general condition of the membrane on Plots 23-24



Plate 77: Showing the general condition of the membrane in Plots 23-24



Plate 78: Showing the general condition of the membrane on Plots 25-26



Plate 79: Showing the general condition of the membrane on Plots 25-26



Plate 80: Showing the general condition of Plots 25-26



Plate 81: Showing the general condition of the membrane and sealed service entries and preformed top hats in Plots 25-26



Plate 82: Showing a preformed top hat sealed with Visqueen detailing strip on Plots 25-26



Plate 83: Showing the general condition of Plots 25-26

Appendix C – Depth Validation Photographic Log

Photographic Log – Plots 15-16 and 25-26 Garden Validations – 09/09/24



Photo 1 – Plot 15 validation hole to 0.6m.



Photo 2 – Plot 15 validation hole to 0.6m.

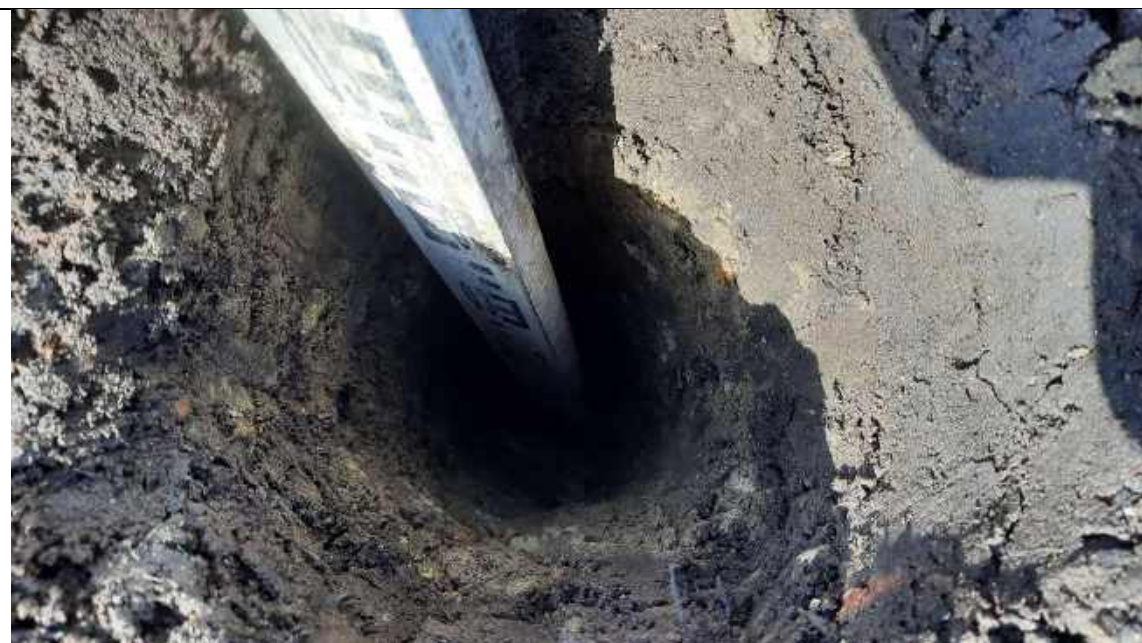


Photo 3 – Plot 15 validation hole to 0.6m.



Photo 4 – Plot 16 validation hole to 0.6m.



Photo 5 – Plot 16 validation hole to 0.6m.



Photo 6 – Plot 16 validation hole to 0.6m.



Photo 7 – Plots 25-26 apartments validation hole to 0.6m.



Photo 8 – Plots 25-26 apartments validation hole to 0.6m.



Photo 9 – Plots 25-26 apartments validation hole to 0.6m.



Photo 10 – Plots 27-28 apartments validation hole to 0.6m.



Photo 11 – Plots 27-28 apartments validation hole to 0.6m.



Photo 12 – Plots 27-28 apartments validation hole to 0.6m.



Photo 13 – Plots 29-30 apartments validation hole to 0.6m.



Photo 14 – Plots 29-30 apartments validation hole to 0.6m.



Photo 15 – Plots 29-30 apartments validation hole to 0.6m.

Photographic Log – Wheatfields Day Centre – Plots 2-14 and 19-23 Depth Validations – 13/8/24



Photo 1 – Plot 2 depth validation to 0.6m.



Photo 2 – Plot 2 depth validation to 0.6m.



Photo 3 – Plot 2 depth validation to 0.6m.



Photo 4 – Plot 3 depth validation to 0.6m.



Photo 5 – Plot 3 depth validation to 0.6m.



Photo 6 – Plot 3 depth validation to 0.6m.



Photo 7 – Plot 4 depth validation to 0.6m.



Photo 8 – Plot 4 depth validation to 0.6m.



Photo 9 – Plot 4 depth validation to 0.6m.



Photo 10 – Plot 5 depth validation to 0.6m.



Photo 11 – Plot 5 depth validation to 0.6m.



Photo 12 – Plot 5 depth validation to 0.6m.



Photo 13 – Plot 6 depth validation to 0.6m.



Photo 14 – Plot 6 depth validation to 0.6m.



Photo 15 – Plot 6 depth validation to 0.6m.



Photo 16 – Plot 7 depth validation to 0.6m.



Photo 17 – Plot 7 depth validation to 0.6m.



Photo 18 – Plot 8 depth validation to 0.6m.



Photo 19 – Plot 8 depth validation to 0.6m.



Photo 20 – Plot 8 depth validation to 0.6m.



Photo 21 - Plot 9 depth validation to 0.6m.



Photo 22 - Plot 9 depth validation to 0.6m.



Photo 23 - Plot 9 depth validation to 0.6m.



Photo 24 - Plot 10 depth validation to 0.6m.



Photo 25 - Plot 10 depth validation to 0.6m.



Photo 26 - Plot 10 depth validation to 0.6m.



Photo 27 - Plot 11 depth validation to 0.6m.



Photo 28 - Plot 11 depth validation to 0.6m.



Photo 29 - Plot 11 depth validation to 0.6m.



Photo 30 - Plot 12 depth validation to 0.6m.



Photo 31 - Plot 12 depth validation to 0.6m.



Photo 32 - Plot 13 depth validation to 0.6m.



Photo 33 - Plot 13 depth validation to 0.6m.



Photo 34 - Plot 14 depth validation to 0.6m.



Photo 34 - Plot 14 depth validation to 0.6m.



Photo 35 - Plot 14 depth validation to 0.6m.



Photo 36 - Plot 19 depth validation to 0.6m.



Photo 37 - Plot 19 depth validation to 0.6m.



Photo 38 - Plot 20 depth validation to 0.6m.



Photo 39 - Plot 20 depth validation to 0.6m.



Photo 40 - Plot 20 depth validation to 0.6m.



Photo 41 - Plot 21 depth validation to 0.6m.



Photo 42 - Plot 21 depth validation to 0.6m.



Photo 43 - Plot 21 depth validation to 0.6m.



Photo 44 - Plot 22 depth validation to 0.6m.



Photo 45 - Plot 22 depth validation to 0.6m.



Photo 46 - Plot 22 depth validation to 0.6m.



Photo 47 - Plot 23 depth validation to 0.6m.



Photo 48 - Plot 23 depth validation to 0.6m.



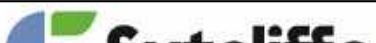
Photo 49 - Plot 23 depth validation to 0.6m.

Drawing Ref: – 31990-SUT-ZZ-00-DR-G-720-0001 & 31990-SUT-ZZ-00DR-G-720-0001



Legend

 **Sample Location**

 Structural & Civil Engineering Geotechnical & Environmental Investigations Building Surveying Pre Planning Services Liverpool Head Office: 0151 227 3155 Manchester Office: 0161 817 5188 North Wales Office: 01708 664 071 London Office: 020 8016 4320 www.sutcliffe.co.uk  Client ONWARD Project WHEATFIELDS DAY CENTRE WHITEFIELD Drawing Status FOR INFORMATION	Drawing Title TOPSOIL AND SUBSOIL VALIDATION SAMPLES ON PROPOSED PLAN				
	Rev	Description	Date 03/22	By MW	Chkd DB
	Date SEPT 2024	Drawn By M WIGGINS	Checked By D BOWEN		
	Scale at A3 NTS		Project Number 31990LG		
	Sheet Number 31990-SUT-ZZ-OO-DR-G-720-0001				Revision P01