Validation Report
New Smithfield Market, Manchester

Reference:12-757-R6-1
Date: September 2023

REMEDIATION AND ENABLING WORKS VALIDATION

New Smithfield Market
Whitworth Street East
Openshaw
Manchester
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Prepared for:
Russell WBHO

Report Ref: 12-757-R6-1
Date Issued: September 2023

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C0524 - SHV001 – Shear Test Locations
C0524 - TURN001 – Turnover Levels in the Fill Area
C0524 - ROAD001 – Road As Built Levels

1. INTRODUCTION

1.1. BACKGROUND

This report details the remediation and enabling works operations that were undertaken by PP O'Connor under the supervision of E3P to facilitate the preparation of the commercial development at the former Smithfield Market in Openshaw, Manchester; herein referred to as the site.

E3P were appointed by Russell WBHO as independent Geoenvironmental Consultant for the site remediation, preparation / enabling and validation works and the subsequent production of a suitably detailed report to ensure the satisfaction of the relevant planning conditions and geotechnical engineering requirements for Building Control, warranty providers and the future adoption of infrastructure by the Highways Authority and statutory service providers.

1.2. PROPOSED DEVELOPMENT

Russell WBHO intends to construct a commercial development comprising two industrial steel frame units with ancillary office space with associated access, parking, service yard and landscaping including the replacement of the access roadway to the existing adjacent unit. Drawing 12-757-002 (Appendix III) identifies the proposed development layout.

A snapshot of the proposed development layout is indicated in Figure 1.1.

FIGURE 1.1 SNAPSHOT OF PROPOSED DEVELOPMENT



1.3. SUMMARY OF PARTIES INVOLVED

Function/interest	Name of Party
Local Planning Authority	Manchester City Council
Developer	Russell WBHO
Geoenvironmental Consultant	E3P
Main Contractor	Russell WBHO
Remediation/Enabling Works Contractor	PP O'Connor
Human Health Regulator	Manchester City Council
Controlled Waters and Waste Regulator	Environment Agency
Highways Adoption Authority	Manchester City Council

1.4. PREVIOUS WORKS

The following previous phases of site investigation and assessment have been completed at the subject site:

- **E3P –** *Phase I Geoenvironmental Desk Study* Ref: 12-757, dated August 2018
- **E3P –** *Phase II Geoenvironmental Site Assessment*: 12-757r2, dated November 2018
- **E3P –** *Geoenvironmental Desk Study* Ref: 12-757r3 Dated July 2020
- **E3P –** *Phase II Geo-Environmental Site Assessment*. Ref: Report No. 12-757-r2 dated July 2020.
- **E3P –** *Supplementary Ground Investigation Report (Area 1)*. Ref: Report No. 12-757-L4 dated 15th December 2020
- **E3P –** *Supplementary Site Investigation Report*. Ref: Report No. 12-757-L5 dated 3rd March 2022

These documents were utilised to development the following Remediation and Enabling Works Strategy:

- **E3P –** *Remediation and Enabling Works Strategy* Ref: 12-757-R4-8, dated January 2023.

The above documents should be read in conjunction with this Validation Report.

2. SUMMARY OF REMEDIATION AND ENABLING WORKS OBJECTIVES

The proposed remediation activities were detailed within the E3P Remediation and Enabling Works Strategy (Ref: 12-757-R4-8, dated January 2023) and supplementary supporting documents provided by E3P.

This report has been prepared to document the completion of all necessary land remediation and enabling works and to record the presence of any variation in ground conditions or previously unidentified sources of potential contamination, environmental impact or potential nuisance to the wider environ.

The Remediation and Enabling Works elements are summarised below:

- RE-1 – Pre-commencement Supplementary Site Investigation
- RE-2 – Pre-commencement Regulatory Compliance
- RE-3 – Environment and Nuisance Control
- RE-4 – Minimise Risk to Infrastructure
- RE-5 – Identification, Isolation and Treatment of Invasive Plants
- RE-6 – Site Clearance Operations
- RE-7 – Management of Asbestos Impacted Soils
- RE-8 – Delineation, Excavation, Treatment and Disposal of Visual and Olfactory Hydrocarbon-Impacted Material
- RE-9 – Delineation, Excavation, Treatment and Disposal of any as of yet Unknown Visual and Olfactory Hydrocarbon-Impacted Material
- RE-10 – Excavation, Breaking and Processing of All Above- and Below-Ground Structures
- RE-11 – Removal of Deleterious Material
- RE-12 – Cut-And-Filling of Made Ground to Development Levels
- RE-13 – Replacement of Materials, Geotechnical Engineering Requirements
- RE-14 – Importation of Bulk Fill
- RE-15 – Independent Validation: Watching Brief
- RE-16 – Waste Soils Surplus to Requirements
- RE-17 – Validation of Materials for Potable Water Supply Infrastructure
- RE-18 – Remedial Verification Report

3. SECOND PHASE MITIGATION AND MANAGEMENT – BUILD PHASE

A second post demolition phase of works will be required to ensure the proposed development is constructed in a manner that incorporates the required mitigation measures to ensure the development is compliant with UK Building Regulations and the Local Authority Planning requirements.

These obligations are specified in more detail within a separate build phase report and are outlined within Section 6.

4. DETAILED REMEDIATION AND ENABLING WORKS ACTIVITIES

The focus of the remediation and enabling works are to address the geotechnical and contaminant issues previously identified within the site investigations that presented an unacceptable risk to human health following the redevelopment of the site.

For completeness, each of these activities has been discussed below within the context of the actual remediation works that were undertaken on site.

RE-1 – PRE-COMMENCEMENT SUPPLEMENTARY SITE INVESTIGATION

OVERVIEW OF WORKS
Following demolition of the commercial units, E3P attended site during the turnover within these areas and visually inspected the Made Ground and the underlying natural materials. No visual or olfactory evidence of previously unidentified contamination was encountered during this exercise. Made Ground comprised a light brown sandy gravel with brick, concrete, limestone and mudstone. The underlying natural cohesive strata was typically encountered at circa 1.00 m bgl which comprised a stiff slightly gravelly clay with gravel of mudstone. The presence of an electric substation was noted off-site to the south of the site. It was recommended that additional testing was to be carried out along the southern boundary of the site to confirm there is no risk from PCBs within the underlying soils. The southeast corner of the site was utilised as the compound area for PP O'Connor during the remediation works therefore access was not permitted for sampling in this area. **Further remediation works are required in this area to excavate and validate the previously identified hotspots and undertake sampling for PCBs. The details of the further works will be included within a supplementary validation report upon completion.**

RE-2 – PRE-COMMENCEMENT REGULATORY COMPLIANCE

DATE OF WORKS UNDERTAKEN
Prior to remediation works

OVERVIEW OF WORKS
Full planning permission has been granted for demolition of existing buildings and erection of two warehouse units with ancillary office space, with associated access, parking, service yard and landscaping, including works to roadway to the existing adjacent warehouse unit from within from New Smithfield Market. Planning application reference 133759/FO/2022, granted on 5th September 2022. Regulatory correspondence was obtained from Manchester City Council confirming acceptance of the Remediation and Enabling Works Strategy. E3P completed a Materials Management Plan (Ref: 12-757-R5, dated March 2023) to re-use site won materials.

RE-3 – ENVIRONMENT AND NUISANCE CONTROL

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 1, 2

OVERVIEW OF WORKS
During remediation, works were restricted to between 8.00am and 5.30pm. A road sweeper was present to keep the access and the surrounding streets clean and clear of debris during the importation of materials to site. Heras fencing was erected around the site boundary. A power washer and bowser were present to dampen down materials throughout the works and during the excavation and delineation of asbestos hotspots.

RE-4 – MINIMISE RISK TO INFRASTRUCTURE

DATE OF WORKS UNDERTAKEN
Throughout

OVERVIEW OF WORKS
Site works were completed under RAMS from PP O'Connor and in a manner that ensured no risk of disturbance to the adjacent infrastructure.

RE-5 – IDENTIFICATION, ISOLATION AND TREATMENT OF INVASIVE PLANTS

DATE OF WORKS UNDERTAKEN
N/A

OVERVIEW OF WORKS
No invasive plant species were identified on site by the contractor.

RE-6 – SITE CLEARANCE OPERATIONS

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 3 - 5

OVERVIEW OF WORKS
The asbestos within the buildings was removed by specialists with personal and reassurance air monitoring was completed by Scope iT Ltd. Asbestos records are included in Appendix VII. The former market buildings were demolished by PP O'Connor. The concrete and asphalt hardstanding was broken up and stockpiled for processing by Part B LAPC licensed mobile plant to produce 6F2. Throughout the enabling works scrap metal and general waste was separated from demolition materials and placed into allocated skips for subsequent disposal off-site.

RE-7 – MANAGEMENT OF ASBESTOS IMPACTED SOILS

DATE OF WORKS UNDERTAKEN
May – June 2023

PHOTOGRAPHS
Plate 6 – 8

CHEMICAL TESTING
I2 Analytical Report 23-36420 (MG AV 01 - 03) I2 Analytical Report 23-36435 (HS1 North, East, South, West, Base, Arisings) I2 Analytical Report 23-40639 (HS1 WAC) I2 Analytical Report 23-40640 (HS1 WAC – WAC Analysis) I2 Analytical Report 23-39407 (HS2 North, East, South, West, Base, Arisings) I2 Analytical Report 23-40634 (HS2 South) I2 Analytical Report 23-40628 (HS2 WAC – WAC Analysis) I2 Analytical Report 23-40626 (HS2 WAC)

OVERVIEW OF WORKS
The ground investigation identified detectable asbestos fibres in two locations (WS206, TP308). Asbestos in the form of loose amosite fibres was identified in the granular Made Ground in WS206 and was quantified as <0.001 %. Asbestos in the form of loose chrysotile and amosite fibres was identified in the granular Made Ground in TP308 at 0.70 m bgl and was quantified as 0.006 %. The remediation strategy detailed that the asbestos impacted material must be buried in line with the E3P Conceptual Site Model detailed within the E3P Remediation Strategy Report (Ref: 12-757-R4-8). During the remediation and enabling works, a hotspot removal was completed within the location of TP308 (HS1). Validation samples were taken from the sidewalls and base of the excavation and no asbestos was detected. The hotspot arisings were stockpiled in the north of the site for removal to Harwood Quarry landfill. Waste tickets are available upon request from PPOC. A hotspot removal was also completed within the location of WS206 (HS2). Validation samples were taken from the sidewalls and base of the excavation and amosite was identified in the southern sidewall at 0.023 %. Naphthalene was also noted to be elevated in excavated arisings (HS2 arisings). The hotspot arisings were stockpiled in the north of the site for removal to Harwood Quarry Landfill. Waste tickets are available upon request from PPOC. The hotspot excavation was extended to the south and an additional sample was collected from the southern sidewall on 20th June 2023. Trace fibres of chrysotile were identified at <0.001 %, therefore the soils were deemed suitable for retention beneath hardstanding in accordance with the asbestos CSM. Visible ACM was identified in the west of the site, therefore the material was removed by a suitably qualified specialist and removed off-site to a suitable waste facility. Subsequent validation samples collected across the northwest sector of the site (MG AV - 01 – MG AV - 03) did not identify any detectable asbestos within the soils in this location.

RE-8 – DELINEATION, EXCAVATION, TREATMENT AND DISPOSAL OF VISUAL AND OLFACTORY HYDROCARBON-IMPACTED MATERIAL

DATE OF WORKS UNDERTAKEN

June 2023 – July 2023

PHOTOGRAPHS

Plate 9 – 12

CHEMICAL TESTING

I2 Analytical Report 23-40645 (TP402, TP404 Contam)
I2 Analytical Report 23-41101 (HS3 North A, B, South A, B, East, West, Base, Arisings)
I2 Analytical Report 23-41108 (HS3 Arisings – WAC Analysis)
I2 Analytical Report 23-45841 (HS3-1, HS3-3)
I2 Analytical Report 23-45842 (HS4-1)
I2 Analytical Report 23-45844 (HS4-1 – WAC Analysis)
I2 Analytical Report 23-41106 (TT1 Base, East, South, Arisings)
I2 Analytical Report 23-41467 (TT2 North, West, South, Arisings)
I2 Analytical Report 23-42172 (HS4-SW)
I2 Analytical Report 23-43105 (HS4-SW – WAC Analysis)
I2 Analytical Report 23-42534 (Wall Water 1, Wall Water 2)

OVERVIEW OF WORKS

The Ground Investigation and controlled waters risk assessment identified localised TPH and SVOC impact in the very southeast of the site (WS201, TP201, TP202) and in the west of the site (TP306). This material was considered to present an unacceptable risk associated with migration towards controlled waters receptors and odour nuisance that cannot be mitigated through the construction of a clean cover system.

On 20th June 2023, supplementary trial pits were completed around TP306 (completed as TP401-TP404). Elevated concentrations of BTEX, TPH C5-35, PAHs, SVOCs and VOCs were recorded in sample TP404 at 0.50 m bgl. No exceedances were identified in sample TP402 at 0.50 m bgl.

On 22nd June 2023 the soils at TP306 (HS3) were excavated as a hotspot removal with samples of the sidewalls to the north, west, east and base of the excavation taken. Visual and olfactory evidence of contamination associated with the hotspot was identified in the southern wall and the excavation required further validation and excavation. The excavation was extended and a series of trial trenches were completed to identify the extent of the impact and to collect further validation samples (TT2-W and TT1-E).

The excavation was extended to the south and southwest of HS3 and was subsequently recorded as Hotspot 4 (HS4). A partial circular wall feature was identified at the southwestern edge of the HS4 hotspot excavation. The wall was a partial circular brick structure which extended vertically circa 2.50 m bgl and is not identified on historical mapping therefore the previous use has not been confirmed. The material within the circular structure was tested (HS4-1) which identified concentrations above the LOD of TPHs and PAHs. The material was also deemed to be geotechnically unsuitable and therefore the material was subsequently excavated as part of the hotspot delineation and removed from site. Chemical analysis of the southwestern elevation of the excavation did not identify any elevated concentrations in this location (HS4-SW), therefore no further excavation was required. The wall was located beneath an area of proposed yard and hardstanding therefore it was agreed that the wall could be removed to a depth of 1.20 m below FFL and left in-situ.

The entire excavation for HS3 and HS4 comprised 7 no. samples along the side walls which were taken in line with the requirement for 1 sample per 10 linear meters of excavation during a validation. All side walls indicated levels of contamination which were below the GACs for commercial end use and were deemed suitable to remain in-situ.

The hotspot arisings from HS3 and HS4 were stockpiled in the north of the site for removal to Harwood Quarry landfill. Waste transfer tickets are made available on request from PP O'Connor.

The hotspots located in the southeast of the site (WS201, TP201, TP202) have not been remediated to date due to access restrictions, therefore further works will be required to remediate this area in line with the E3P Remediation Strategy. Further remediation works will be detailed in a supplementary validation report upon completion.

RE-9 – DELINEATION, EXCAVATION, TREATMENT AND DISPOSAL OF PREVIOUSLY UNKNOWN VISUAL AND OLFACTORY HYDROCARBON-IMPACTED MATERIAL

DATE OF WORKS UNDERTAKEN
N/A

OVERVIEW OF WORKS
The extent of the previously identified hotspots as detailed within RE-8 was wider than anticipated however these were validated in their entirety and the full extent of contamination was removed with subsequent validation testing of the side walls and base. No further visual/olfactory impact has been identified during the remediation and enabling works completed to date.

RE-10 – EXCAVATION, BREAKING AND PROCESSING OF ALL ABOVE- AND BELOW-GROUND STRUCTURES

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 13 – 15

CHEMICAL TESTING
I2 Analytical Report 23-25001 (Crush 101, Crush 102) I2 Analytical Report 23-34682 (Crush 103) I2 Analytical Report 23-36442 (Crush 104 - Crush 106) I2 Analytical Report 23-43292 (Crush 107 - Crush 110) I2 Analytical Report 23-20763 (MG BF 101 - 103)

GEOTECHNICAL TESTING
PSL Report PSL23/1430 – (MGBF101) - Made Ground Backfill Murray Rix Report MRN 4616/7 (Sample 1, Sample 2) - 6F2 Grading Murray Rix Report MRN 4616/11 (6F2) - 6F2 Grading

OVERVIEW OF WORKS
All sub-structures were excavated using controlled mechanical techniques to a depth of 1.20 m below FFL under the strict control of the PP O'Connor site manager with E3P in part time supervision.

This process allowed for the removal of any oversize materials and the identification of any previously unidentified areas of contamination. Oversized materials and concrete were stockpiled prior to crushing/processing to nominal 6F2 grading with chemical validation in accordance with the validation sampling protocol.

Any steel re-enforcements present within the concrete hardstanding, or waste in the form of wood, scrap metal, plastic was removed prior to the crushing of demolition material stockpiles, and allocated to skips for subsequent disposal.

E3P maintained a part time watching brief during the turning and processing of the Made Ground to audit and validate the site enabling works in addition to inspecting all materials turned over and identifying any previously unidentified contamination hotspots, including Asbestos Containing Materials (ACM).

The chemical analysis results confirmed the Made Ground and 6F2 materials were chemically suitable to be re-used on site.

RE-11 – REMOVAL OF DELETERIOUS MATERIAL

DATE OF WORKS UNDERTAKEN
N/A

OVERVIEW OF WORKS
Within the extended hotspot HS4 within the brick wall structure, deleterious material was identified. All of this material was excavated and removed from site as part of the hotspot removal and validation. No further deleterious materials were identified.

RE-12 – CUT-AND-FILLING OF MADE GROUND TO DEVELOPMENT LEVELS

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 15 – 17

GEOTECHNICAL TESTING
PSL Report PSL23/1430 (MGBF101) PSL Report PSL23/4597 (Upfill Fines 1, Upfill Fines 2, Upfill Clay 1) Murray Rix Report MRN 4616/24 – CBR Test Results Murray Rix Report MRN 4616/27 – CBR Test Results

OVERVIEW OF WORKS
PP O'Connor has undertaken cut and filling of Made Ground to development levels at the site. Hand shear vane tests were completed at formation level. All HSV results indicated a strength with a Cu in excess of 90 kN/m2. Cohesive soils were used as upfill. Compaction testing has been completed where clay soils have been placed.

Non-Nuclear Density Gauge (NNDG) tests were completed throughout the upfill layers and all achieved >95% compaction. Where testing identified <95 % at test location NNDG1, the soils were re-compacted and re-tested. The NNDG test results are included in Appendix VI. The test locations are shown on PP O'Connor drawing C0524 - NDG001in Appendix III.

PP O'Connor has produced an As Built Survey of the site and this is presented in Appendix III.

RE-13 – REPLACEMENT OF MATERIALS, GEOTECHNICAL ENGINEERING REQUIREMENTS

DATE OF WORKS UNDERTAKEN
Throughout

PHOTOGRAPHS
Plate 18

GEOTECHNICAL TESTING
Murray Rix Report MRN 4616/24 – CBR Test Results Murray Rix Report MRN 4616/27 – CBR Test Results

OVERVIEW OF WORKS
The enabling works required a large-scale turnover to remove constraints to construction. Where applicable all voids were up filled with materials in accordance with the E3P Remediation and Enabling Works Strategy. CBR tests were undertaken at the remediation levels on pile mats and roads. All materials were backfilled in strict compliance with the E3P Remediation and Enabling Works Strategy. CBR testing was completed to demonstrate compliance. Geotechnical testing results are included in Appendix VI. The CBR test locations are shown on the PP O'Connor drawings included within Appendix III.

RE-14 – IMPORTATION OF BULK FILL

DATE OF WORKS UNDERTAKEN
N/A

OVERVIEW OF WORKS
There was no shortfall, therefore there was no requirement to import materials.

RE-15 – INDEPENDENT VALIDATION: WATCHING BRIEF

DATE OF WORKS UNDERTAKEN
Throughout

OVERVIEW OF WORKS
Throughout the remediation and enabling works completed by PP O'Connor, E3P maintained a part-time watching brief in which site visits were undertaken to monitor works and investigate any potential sources of unidentified contamination. No previously unidentified contamination was encountered.

RE-16 – WASTE SOILS SURPLUS TO REQUIREMENTS

DATE OF WORKS UNDERTAKEN
July – August 2023

OVERVIEW OF WORKS
The following materials were sent to Harwood Quarry Landfill: - 200 tonnes of asbestos impacted soils from HS1 and HS2 - 1000 tonnes of TPH impacted soils from HS3 and HS4 - 800 tonnes of surplus inert spoil Waste transfer notes are included in Appendix VIII.

RE-17 – VALIDATION OF MATERIALS FOR POTABLE WATER SUPPLY INFRASTRUCTURE

DATE OF WORKS UNDERTAKEN
TBC

OVERVIEW OF WORKS
The validation of materials for potable water supply will be completed upon completion of the remediation works in the southeast.

5. FURTHER WORKS

Due to the presence of site cabins and access restrictions in the southeast of the site remediation works could not be undertaken in this area, which is defined within figure 5.1. The outstanding requirements for this area are summarised below and will need to be completed ahead of the build phase works.

FIGURE 5.1 – AREA WITH OUTSTANDING REMEDIATION ITEMS (RED SHADING)



- RE-3 – Environment and Nuisance Control
- RE-4 – Minimise Risk to Infrastructure
- RE-5 – Identification, Isolation and Treatment of Invasive Plants
- RE-6 – Site Clearance Operations
- RE-8 – Delineation, Excavation, Treatment and Disposal of Visual and Olfactory Hydrocarbon-Impacted Material
- RE-9 – Delineation, Excavation, Treatment and Disposal of any as of yet Unknown Visual and Olfactory Hydrocarbon-Impacted Material
- RE-10 – Excavation, Breaking and Processing of All Above- and Below-Ground Structures
- RE-11 – Removal of Deleterious Material
- RE-12 – Cut-And-Filling of Made Ground to Development Levels
- RE-13 – Replacement of Materials, Geotechnical Engineering Requirements
- RE-15 – Independent Validation: Watching Brief

6. POST REMEDIATION BUILD PHASE REQUIREMENTS

This document details the construction works that are required to ensure full compliance with the remediation Strategy, Regulatory Authorities, Building Control & Warranty Providers;

The following should be implemented during the build phase of the development:

- Laboratory testing of the imported topsoil;
- Chemical validation of any subsoil imported for use within landscaping;
- Placement of the 300 mm cover system within landscaped areas.

The validation protocols are presented within the E3P Remediation and Enabling Works Strategy and will be detailed within a separate build phase report.

6.1. POTABLE WATER SUPPLY – CONTAMINANT ASSESSMENT CRITERIA

Table 6.1 provides a summary of the threshold concentrations that must not be exceeded within remediated ground at pipeline depth in order to PE pipe works to be acceptable for the proposed development.

TABLE 6.1 PIPELINE SELECTION PE THRESHOLD CONCENTRATIONS

Contaminant Group	PE-threshold
Total VOC	0.5
Total BTEX And MTBE	0.1
Total SVOCs (Excluding PAH and those substances marked with an *)	2
EC5-EC10 Aliphatic and Aromatic Hydrocarbons	2
EC10-EC16- Aliphatic and Aromatic Hydrocarbons	10
EC16-EC40 Aliphatic and Aromatic Hydrocarbons	500
Phenols (From SVOC Analysis)*	2
Cresols and Chlorinated Phenols (From SVOC Analysis)	2
Ethers*	0.5
Nitrobenzene*	0.5
Ketones*	0.5
Aldehydes*	0.5
Amines	Fail

Notes

A. All concentrations in mg/kg.

Upon completion of the remedial works a full UKWIR Risk Assessment should be undertaken.

7. CONCLUSION

The remediation elements identified within the approved Remediation and Enabling Works Strategy have been completed with validation testing confirming that the works have been completed to the required standard (with the exception of the southeast corner of the site where further works are required).

Prior to construction, further works to remediate the southeast of the site will be required as detailed above in Section 6.

As part of the on-going construction works the developer will be required to construct and validate the items listed below in strict accordance with the requirements of the regulatory authorities as documented in detail within this report.

- Placement of clean subsoil and topsoil in all soft landscaped areas must be a minimum of 300 mm or natural ground (whichever is the shallower).
- Independent validation of the cover system by a suitably qualified E3P engineer.
- Provision a suitable water supply infrastructure.

END OF REPORT

APPENDIX I
LIMITATIONS

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between E3P and the Client as indicated in Section 1.2.

2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information it has been assumed it is correct. No attempt has been made to verify the information.

3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination which are enforced by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.

4. During the site walkover, reasonable effort has been made to obtain an overview of the site conditions. However, during the site walkover, no attempt has been made to enter areas of the site that are unsafe or present a risk to health and safety, are locked, barricaded, overgrown, or the location of the area has not been made known or accessible.

5. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.

6. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.

7. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials, this is for indicative purposes only and do not constitute or replace full and proper surveys.

8. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.

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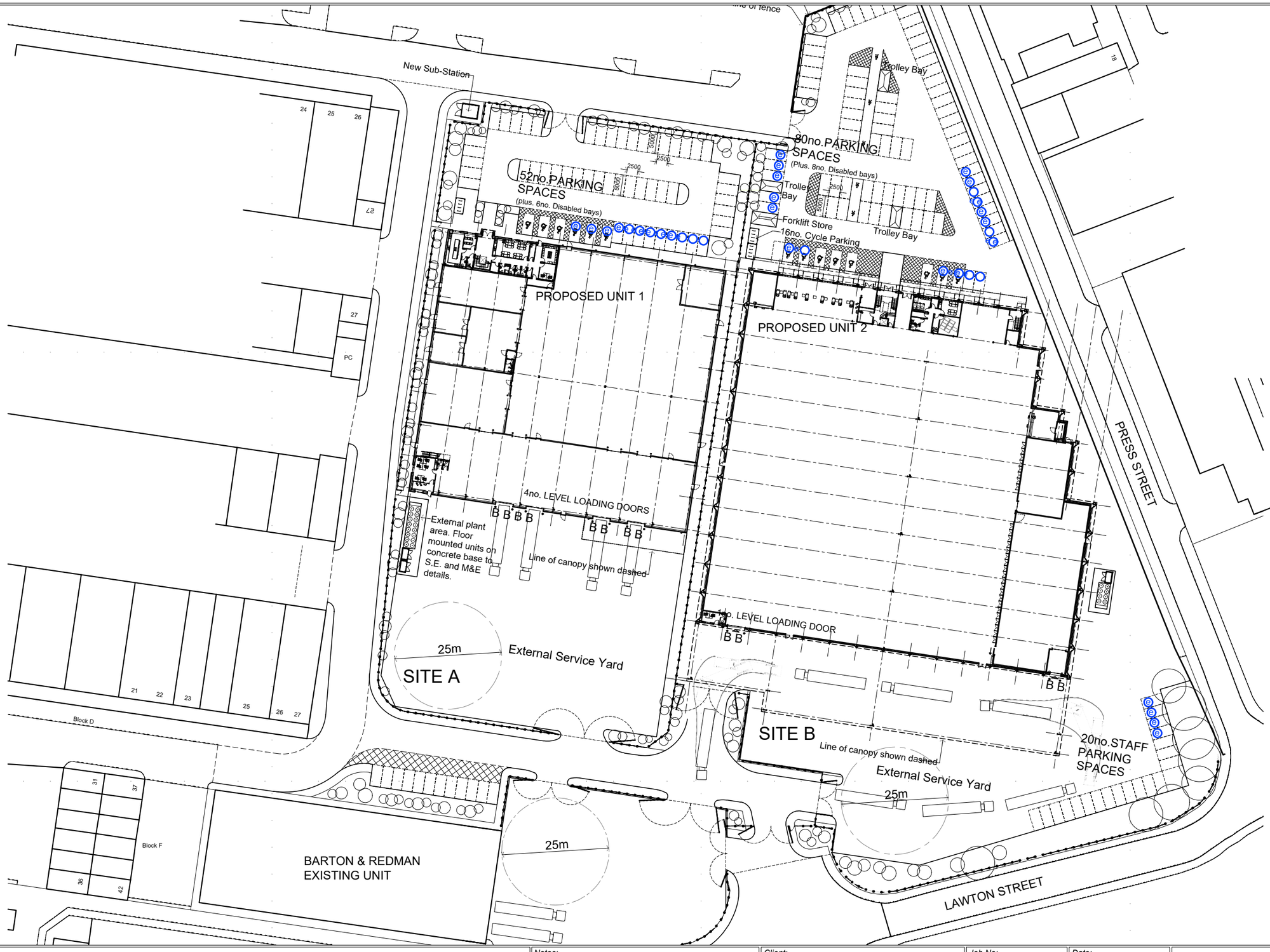
APPENDIX II
GLOSSARY

TERMS

ACM	Asbestos-containing material	**MMP**	Materials management plan
ADS	Acoustic design statement	**ND**	Not detected
AST	Above-ground storage tank	**NDP**	Nuclear density probe
BGS	British Geological Survey	**NMP**	Noise management plan
BSI	British Standards Institute	**NPSE**	Noise policy statement for England
BTEX	Benzene, toluene, ethylbenzene, xylenes	**NR**	Not recorded
CA	Coal Authority	**PAH**	Polycyclic aromatic hydrocarbon
CBR	California bearing ratio	**PCB**	Polychlorinated biphenyl
CIEH	Chartered Institute of Environmental Health	**PI**	Plasticity index
CIRIA	Construction Industry Research Association	**PID**	Photo ionisation detector
CLEA	Contaminated land exposure assessment	**POS**	Public open space
CML	Council of Mortgage Lenders	**PPE**	Personnel protective equipment
CoC	Contaminants of concern	**ProPG**	Professional practice guidance
CSM	Conceptual site model	**QA**	Quality assurance
DNAPL	Dense non-aqueous phase liquid (chlorinated solvents, PCB)	**SGV**	Soil guideline value
DWS	Drinking water standard	**SPH**	Separate-phase hydrocarbon
EA	Environment Agency	**SPT**	Standard penetration test
EQS	Environmental quality standard	**SVOC**	Semi-volatile organic compound
FFL	Finished floor level	**TPH**	Total and speciated petroleum hydrocarbon
GAC	General assessment criteria	**TPH CWG**	Total Petroleum Hydrocarbon (Criteria Working Group)
GL	Ground level	**UKWIR**	United Kingdom Water Infrastructure Risk
GSV	Gas screening value	**UST**	Underground storage tank
HCV	Health criteria value	**VCC**	Vibro-concrete column
ICSM	Initial conceptual site model	**VOC**	Volatile organic compound
LEL	Lower explosive limit	**VRSC**	Vibro-replacement stone columns
LMRL	Lower method reporting limit	**VSC**	Vibro-stone columns
LNAPL	Light non-aqueous phase liquid (petrol, diesel, kerosene)	**WHO**	World Health Organisation
MCV	Moisture condition value	**WRAP**	Waste and Resources Action Programme
MIBK	Methyl isobutyl ketone	**WTE**	Water table elevation

m	Metres	**ppm**	Parts per million
km	Kilometres	**mg/m^3**	Milligram per metre cubed
% v/v	Percent volume in air	**m bgl**	Metres below ground level
mb	Millibars (atmospheric pressure)	**m bcl**	Metre below cover level
l/hr	Litres per hour	**mAOD**	Metres above ordnance datum (sea level)
µg/l	Micrograms per litre (parts per billion)	**kN/m^2**	Kilonewtons per metre squared
ppb	Parts per billion	**µm**	Micrometre
mg/kg	Milligrams per kilogram (parts per million)	**SSRT**	Site Specific Remediation Target
PSD	Particle Size Distribution	**DD**	Dry Density
CL:AIRE	Contaminated Land: Applications in Real Environments	**Mc**	Moisture Content
ρ	Bulk Density	**GPR**	Ground Penetrating Radar
NDP	Nuclear Density Probe	**FFL**	Finished Floor Level
LEL	Lower Explosive Limit	**UKWIR**	UK Water Industry Research
CIRIA	Construction Industry Research and Information Association	**LOD**	Limit of Detection

APPENDIX III
DRAWINGS



P1	REVB	22.07.2022	LM	NS
P1	REVA	18.06.2020	LM	SE
Phase	Issue	Date	Drawn	Checked

Notes:

Client: Russells Construction

Job No: 12-757

Date: 22.07.2022

Drawing No: 002

Scale: NTS @ A3

Job Title: Barton & Redman, Manchester

Drawing Title: Proposed Development Plan

Environmental Engineering Partnership Ltd
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Urmston, Manchester, M41 7JQ
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Historical Features

- Storage Units
- Former Works Buildings
- Former Traveling Crane
- Substation
- Former Railway Tracks

Notes:

P1	REVB	23.06.2020	LM	SE
P1	REVA	19.06.2020	LM	SE
Phase	Issue	Date	Drawn	Checked

Client: Russells Construction

Job No: 12-757

Date: 23.06.2020

Drawing No: 003

Scale: NTS @ A3

Job Title: Barton & Redman, Manchester

Drawing Title: Historical Features Plan

e3p
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Location Symbols

- Approximate Window Sample Probehole Location
- Approximate Window Sample Probehole Location with Install
- Approximate Trial Pit Location
- Approximate Cable Percussive Borehole Location

Notes:

Client: Russells Construction

Job No: 12-757

Date: 21.06.2023

Drawing No: 005

Scale: NTS @ A3

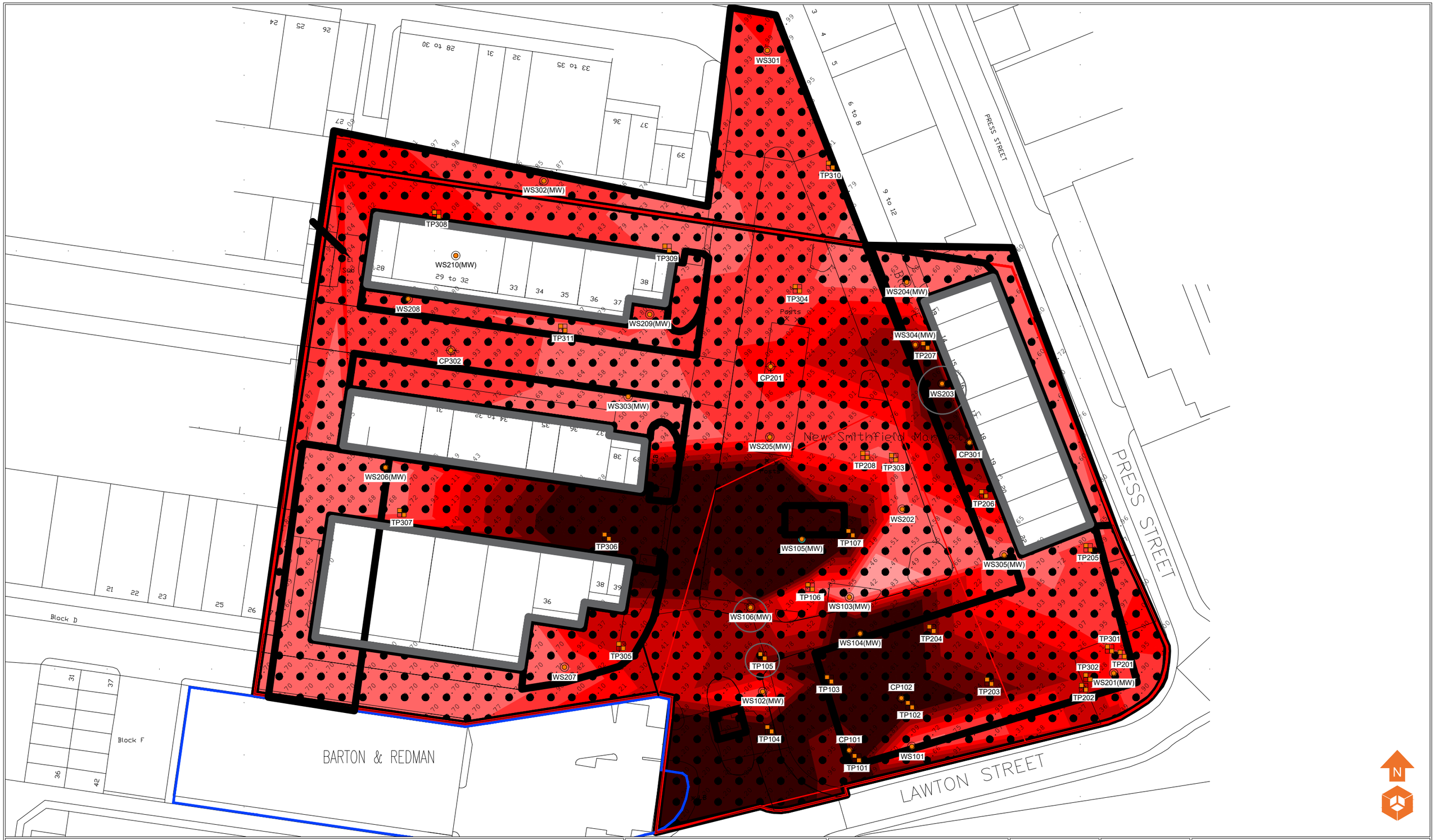
Phase	Issue	Date	Drawn	Checked
P1	REVG	21.06.2023	OW	HM
P1	REVF	15.02.2022	HM	VW
P1	REVE	28.01.2022	EB	VW
P1	REVD	11.10.2021	HM	SE
P1	REVC	17.11.2020	CB	SE
P1	REVB	18.05.2020	LM	SE
P1	REVA	29.05.2020	CB	SE

Job Title: Barton & Redman, Manchester

Drawing Title: Exploratory Hole Location Plan

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Location Symbols

- Approximate Window Sample Probehole Location
- Approximate Window Sample Probehole Location with Install
- Approximate Trial Pit Location
- Approximate Cable Percussive Borehole Location

Made Ground Depth (m)

- Depth of Made Ground 0.25 - 0.49m
- Depth of Made Ground 0.50 - 0.74m
- Depth of Made Ground 0.75 - 0.99m
- Depth of Made Ground 1.00 - 1.24m
- Depth of Made Ground 1.25 - 1.49m
- Depth of Made Ground 1.50 - 1.74m
- Depth of Made Ground 1.75 - 1.99m
- Depth of Made Ground >2.00m
- Hole Refused on Obstruction

Notes:

Phase	Issue	Date	Drawn	Checked
P1	REVF	08.03.2022	EB	VW
P1	REVE	02.12.2020	CB	SE
P1	REVD	23.07.2020	LM	SE
P1	REVC	16.07.2020	CB	SE
P1	REVB	26.06.2020	LM	SE
P1	REVA	18.06.2020	LM	SE

Client: Russells Construction

Job No: 12-757

Date: 08.03.2022

Drawing No: 006

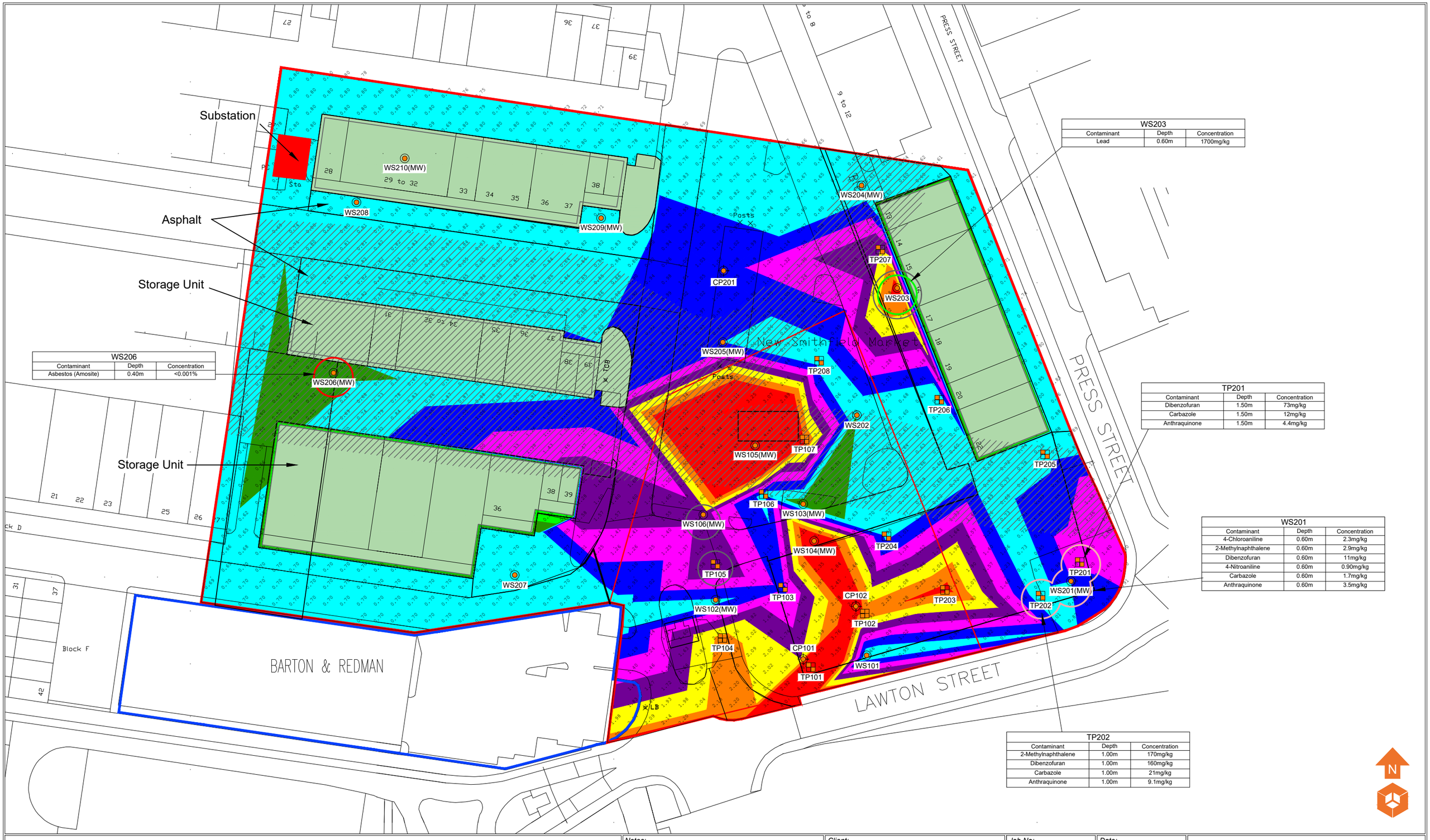
Scale: NTS @ A3

Job Title: Barton & Redman, Manchester

Drawing Title: Depth of Made Ground Plan

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WS206		
Contaminant	Depth	Concentration
Asbestos (Amosite)	0.40m	<0.001%

WS203		
Contaminant	Depth	Concentration
Lead	0.60m	1700mg/kg

TP201		
Contaminant	Depth	Concentration
Dibenzofuran	1.50m	73mg/kg
Carbazole	1.50m	12mg/kg
Anthraquinone	1.50m	4.4mg/kg

WS201		
Contaminant	Depth	Concentration
4-Chloroaniline	0.60m	2.3mg/kg
2-Methylnaphthalene	0.60m	2.9mg/kg
Dibenzofuran	0.60m	11mg/kg
4-Nitroaniline	0.60m	0.90mg/kg
Carbazole	0.60m	1.7mg/kg
Anthraquinone	0.60m	3.5mg/kg

TP202		
Contaminant	Depth	Concentration
2-Methylnaphthalene	1.00m	170mg/kg
Dibenzofuran	1.00m	160mg/kg
Carbazole	1.00m	21mg/kg
Anthraquinone	1.00m	9.1mg/kg

Development Constraints Features

- Substation
- Storage Units

Made Ground Depth (m)

- Depth of Made Ground 0.00 - 0.29m
- Depth of Made Ground 0.30 - 0.59m
- Depth of Made Ground 0.60 - 0.89m
- Depth of Made Ground 0.90 - 1.19m
- Depth of Made Ground 1.20 - 1.49m
- Depth of Made Ground 1.50 - 1.79m
- Depth of Made Ground 1.80 - 2.09m
- Depth of Made Ground 2.10 - 2.49m
- Depth of Made Ground >2.50m

- Depth of Made Ground may be deeper due to known Services
- Hole Refused on Obstruction

Contamination Exceedances

- Asbestos
- SVOC
- Lead

Notes:

Phase	Issue	Date	Drawn	Checked
P1	REVC	02.12.2020	CB	SE
P1	REVB	27.07.2020	LM	SE
P1	REVA	18.06.2020	LM	SE

Client: Russells Construction

Job No: 12-757

Date: 02.12.2020

Drawing No: 008

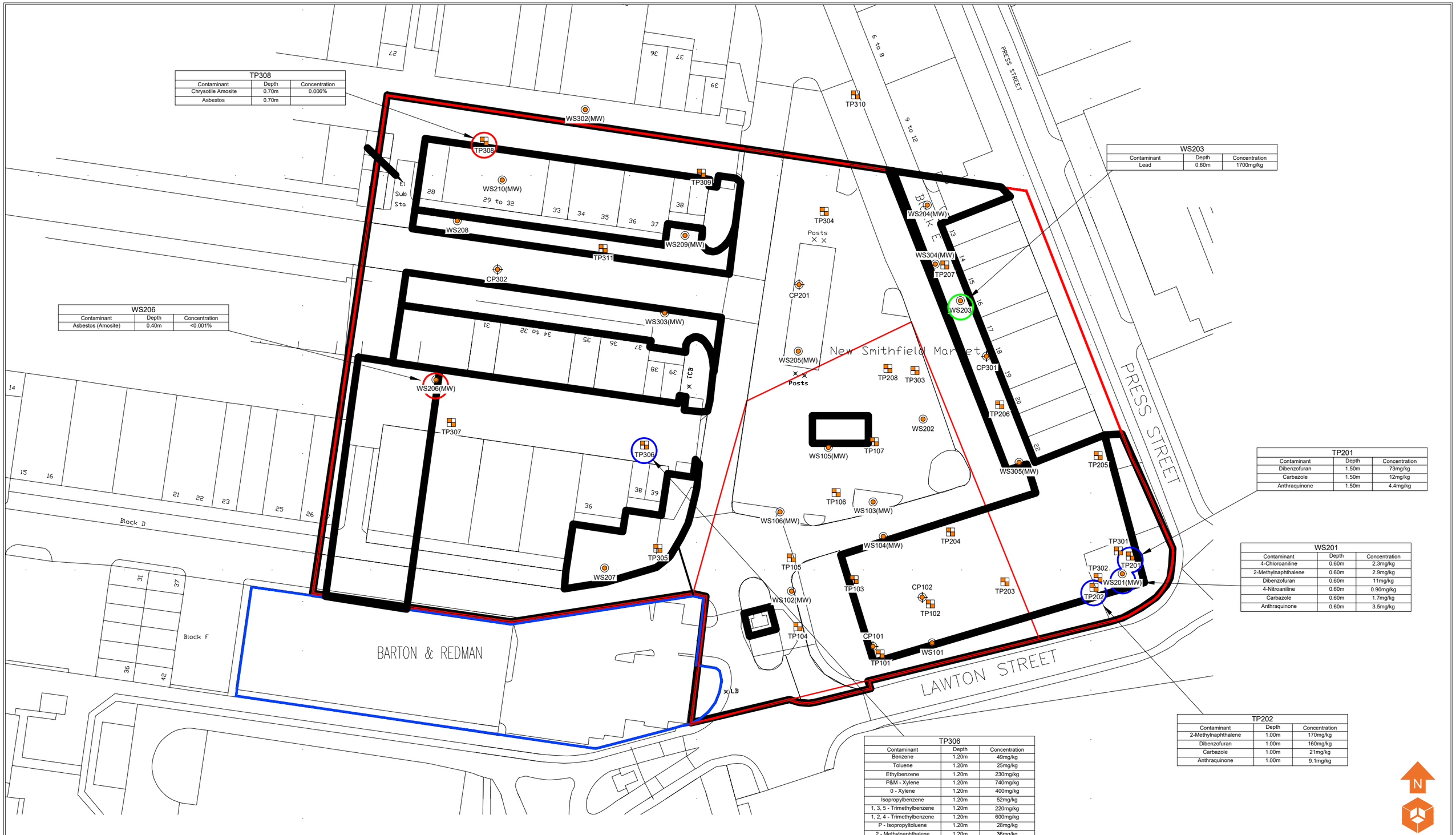
Scale: NTS @ A3

Job Title: Barton & Redman, Manchester

Drawing Title: Development Constraints Plan

e3p
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Location Symbols

- Approximate Window Sample Probehole Location
- Approximate Window Sample Probehole Location with Install
- Approximate Trial Pit Location
- Approximate Cable Percussive Borehole Location

Contamination Exceedances

- Asbestos
- SVOC
- Lead

Notes:

Phase	Issue	Date	Drawn	Checked
P1	REVC	07.03.2022	EB	VW
P1	REVB	02.12.2020	CB	SE
P1	REVA	09.07.2020	LM	SE

Client: Russells Construction

Job No: 12-757

Date: 07.03.2022

Drawing No: 018

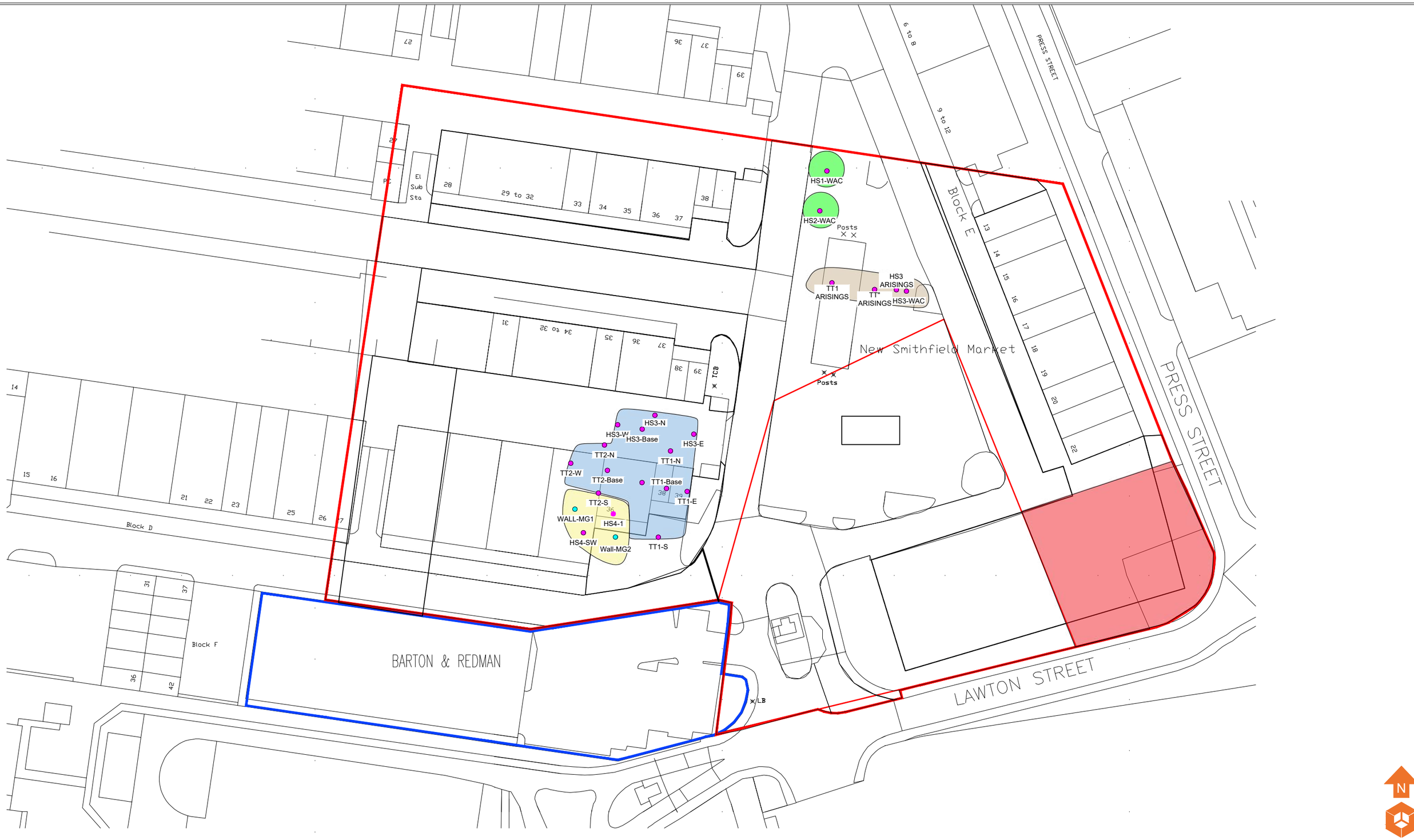
Scale: NTS @ A3

Job Title: Barton & Redman, Manchester

Drawing Title: Contamination Exceedances Plan

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Location Symbols

- Soul Chemical Analysis
- Water Chemical Analysis
- HS4 Extent
- HS3 Extent
- TT1 & TT2 & TT3 Arisings
- HS1 & HS2 Arisings
- Area left un-remediated due to access restrictions

Notes:

P1	REVB	21.09.2023	OW	ND
P1	REVA	12.07.2023	EB	ND
Phase	Issue	Date	Drawn	Checked

Client: Russells Construction

Job No: 12-757

Date: 21.09.2023

Drawing No: 022

Scale: NTS @ A3

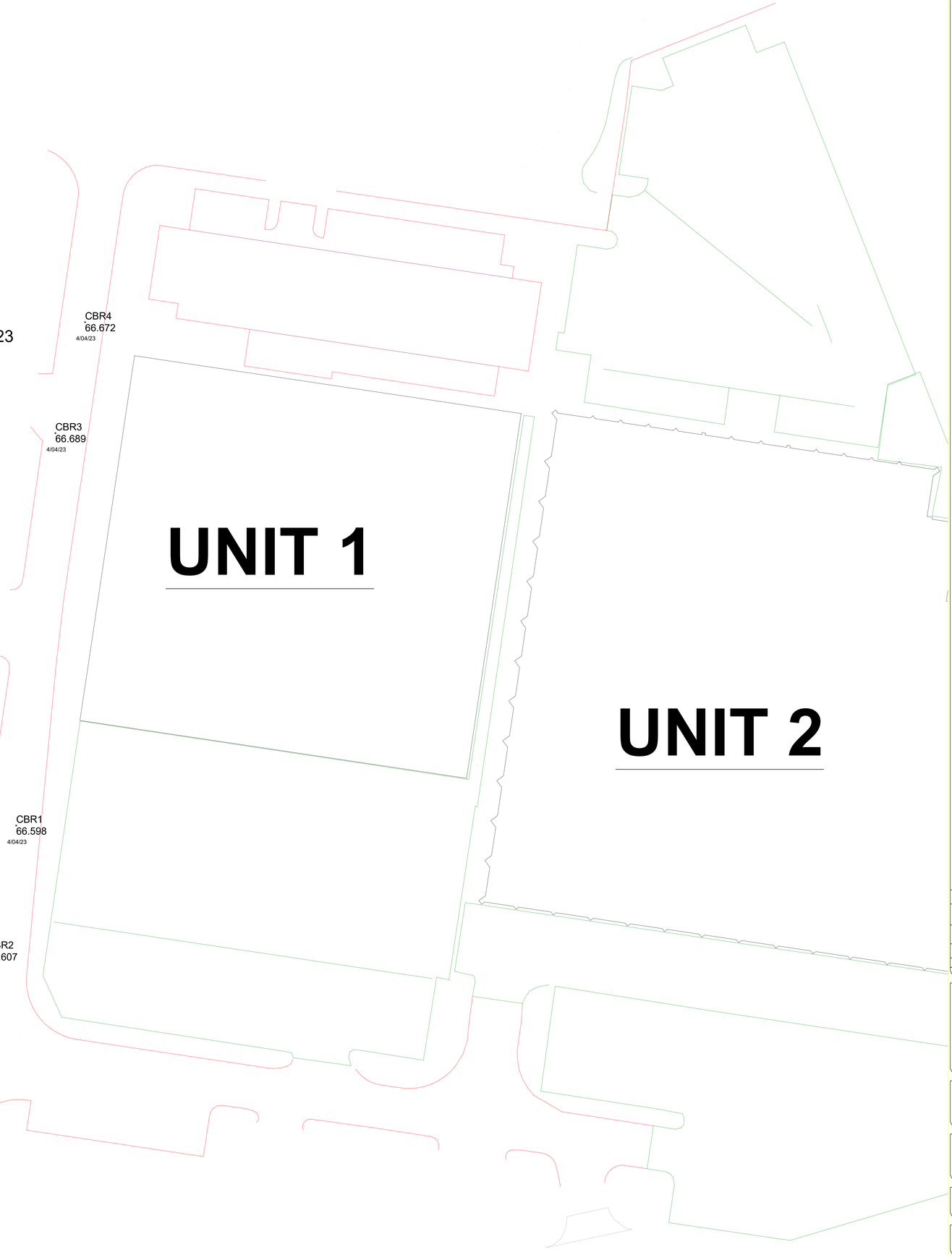
Job Title: Barton & Redman, Manchester

Drawing Title: Remediation Sampling Plan

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CBR testing 4/4/23



NOTES

1. Do not scale from this drawing.

REV	DATE	REVISION DETAILS	INITIALS

P. P. O'CONNOR
Committed To Excellence

PROJECT:
SMITHFIELD MARKET

TITLE:
CBR Test locations

SCALE @ A1:	DRAWN:	DATE:
NTS	JR	4th April 2023

JOB No:	DRAWING No:	REVISION:
C0524	CBR003	0

A B C D E

1 2 3 4 5



NOTES

1. Do not scale from this drawing.

REV	DATE	REVISION DETAILS	INITIALS

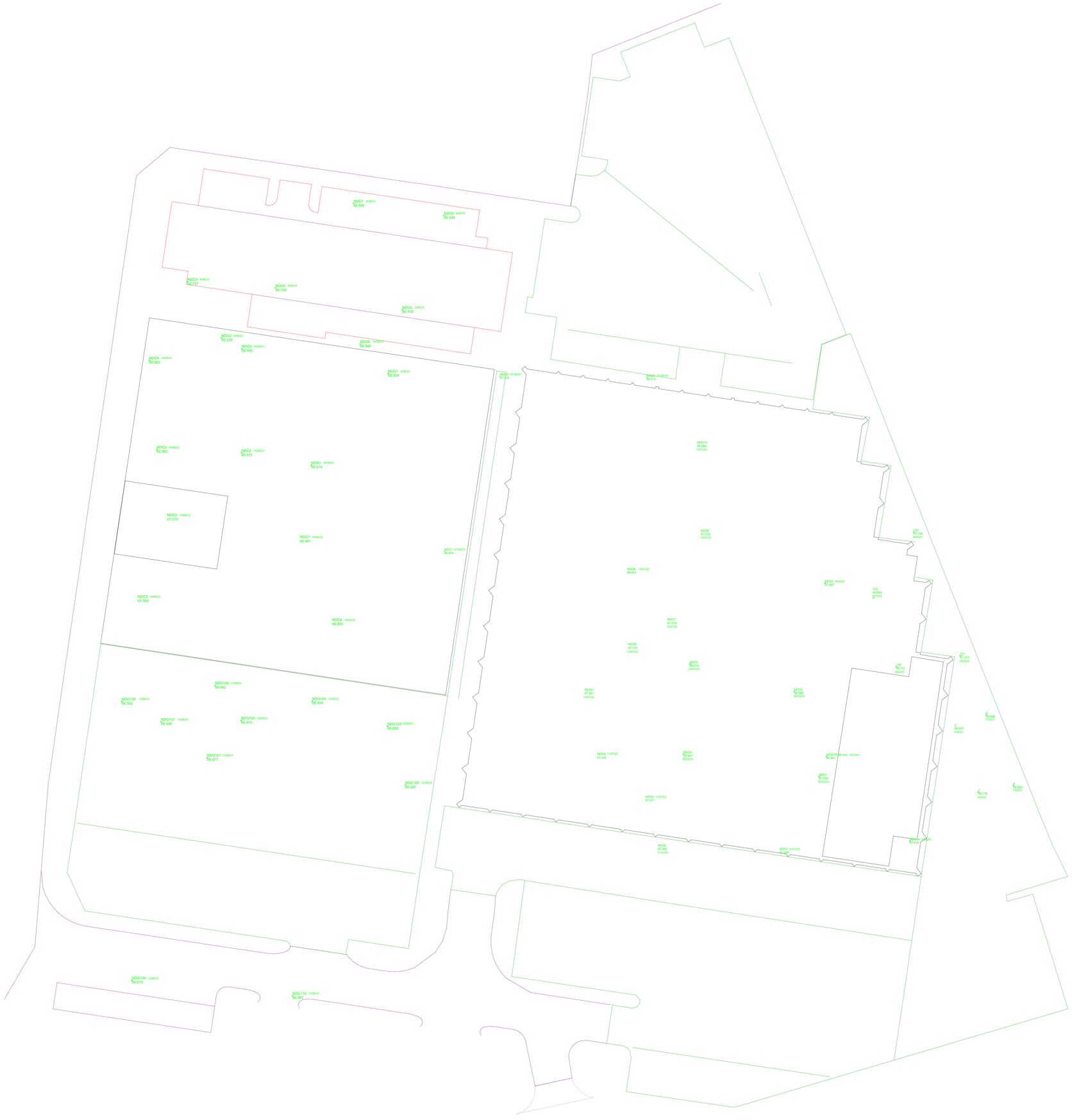
P. P. O'CONNOR
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PROJECT:
SMITHFIELD MARKET

TITLE:
CBR locations Plan

SCALE @ A1:	DRAWN:	DATE:
NTS	JR	8th Aug 2023

JOB No:	DRAWING No:	REVISION:
C0524	CBR001	0



NOTES

1. Do not scale from this drawing.

REV	DATE	REVISION DETAILS	INITIALS
B	13/07/23	NDG TEST LOCATIONS	JR
A	27/06/23	NDG TEST LOCATIONS	JR
0	19/06/23	NDG TEST LOCATIONS	JR

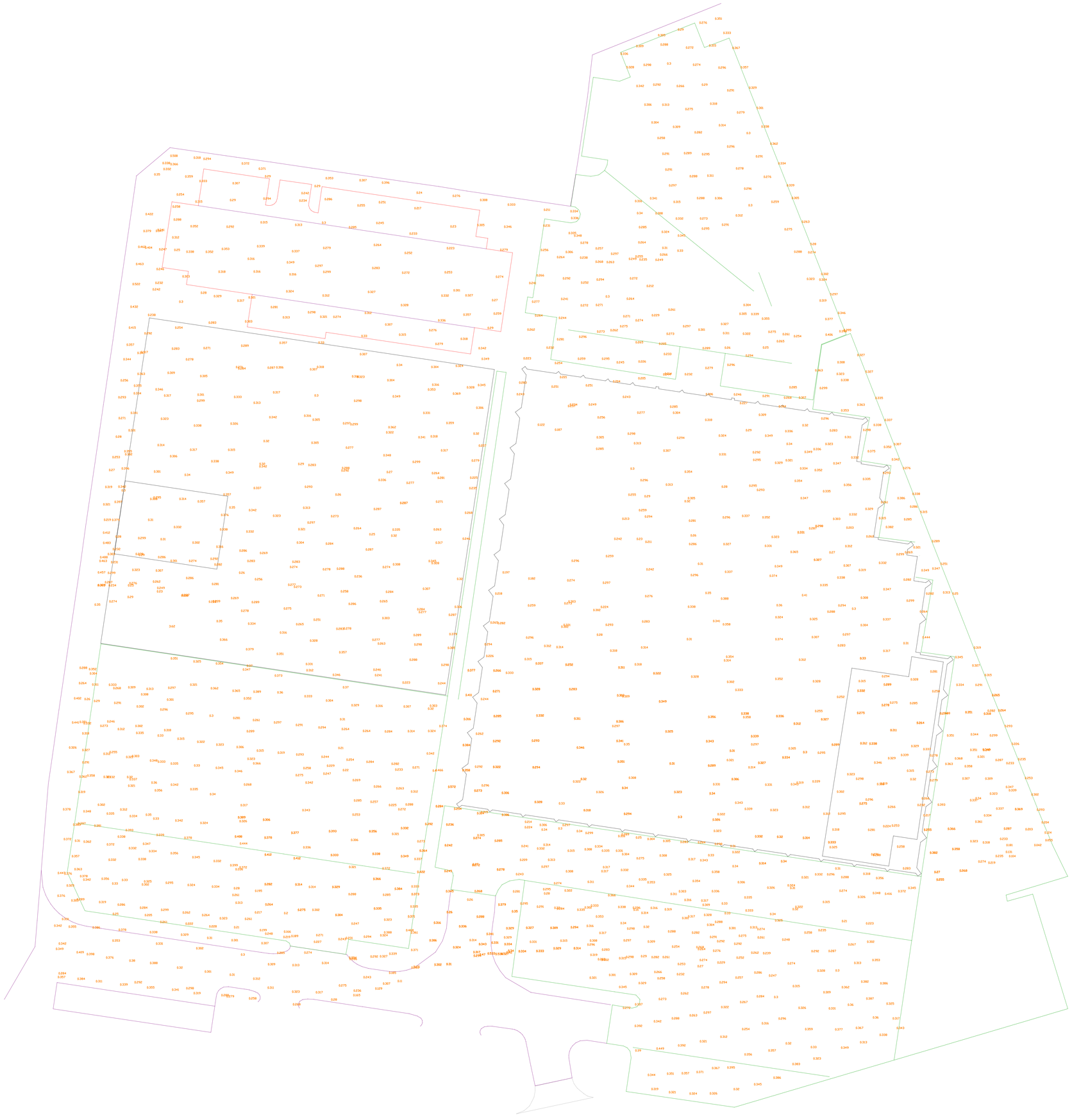
P. P. O'CONNOR
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PROJECT:
SMITHFIELD MARKET

TITLE:
Nuclear Density Test locations

SCALE @ A1:	DRAWN:	DATE:
NTS	JR	13th July2023

JOB No:	DRAWING No:	REVISION:
C0524	NDG001	B



NOTES

1. Do not scale from this drawing.

REV	DATE	REVISION DETAILS	INITIALS
A	8/08/23	Capping levels-thickness	JR
0	7/07/23	Capping levels-thickness	JR

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PROJECT:
SMITHFIELD MARKET

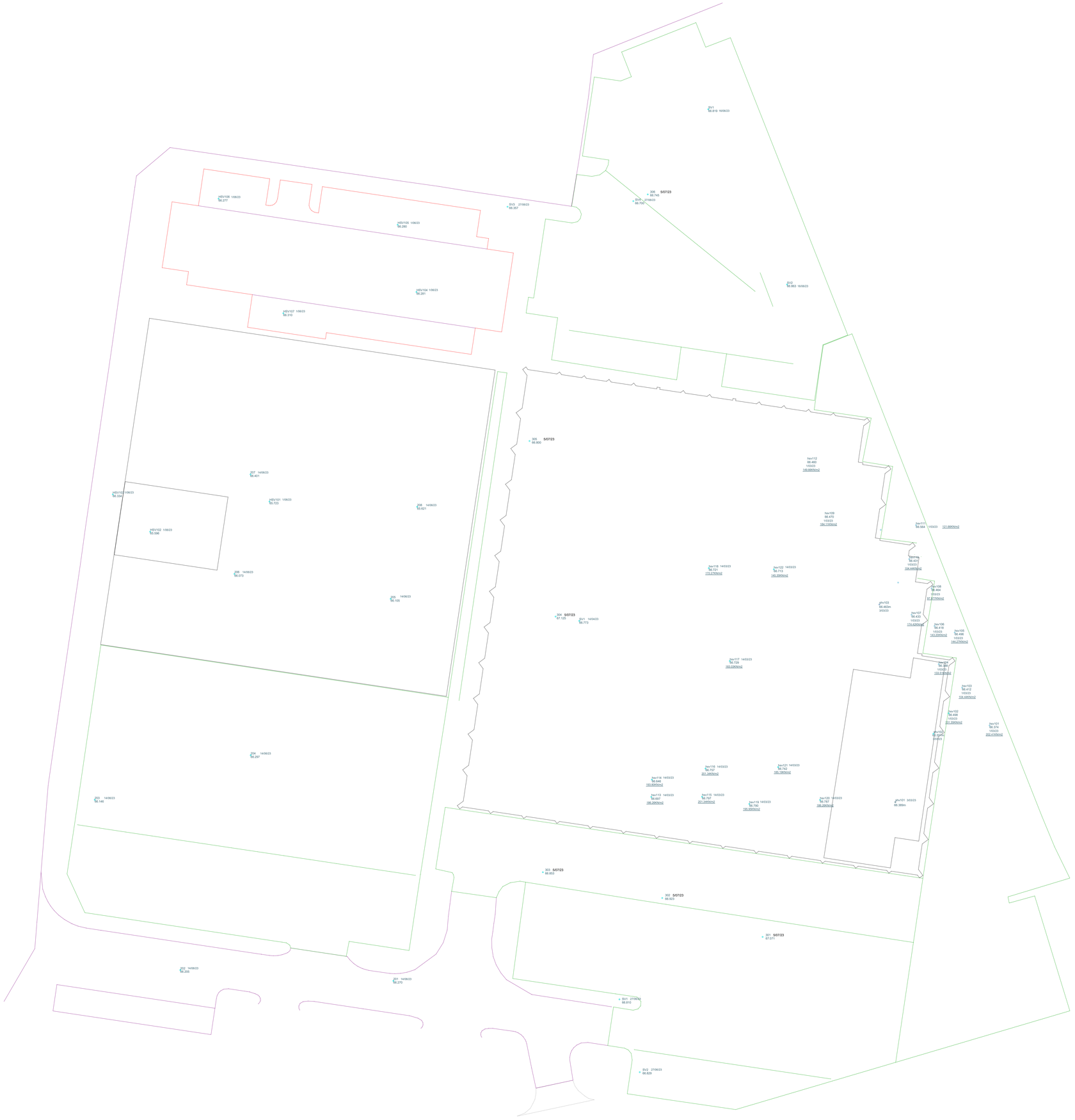
TITLE:
Capping Thickness Survey

SCALE @ A1:	DRAWN:	DATE:
NTS	JR	8th Aug 2023

JOB No:	DRAWING No:	REVISION:
C0524	CAPP001	A

NOTES

1. Do not scale from this drawing.



REV	DATE	REVISION DETAILS	INITIALS
B	5th July 2023	Total shear vane positions	JR
A	27th June 2023	Total shear vane positions	JR
0	19th June 2023	Total shear vane positions	JR

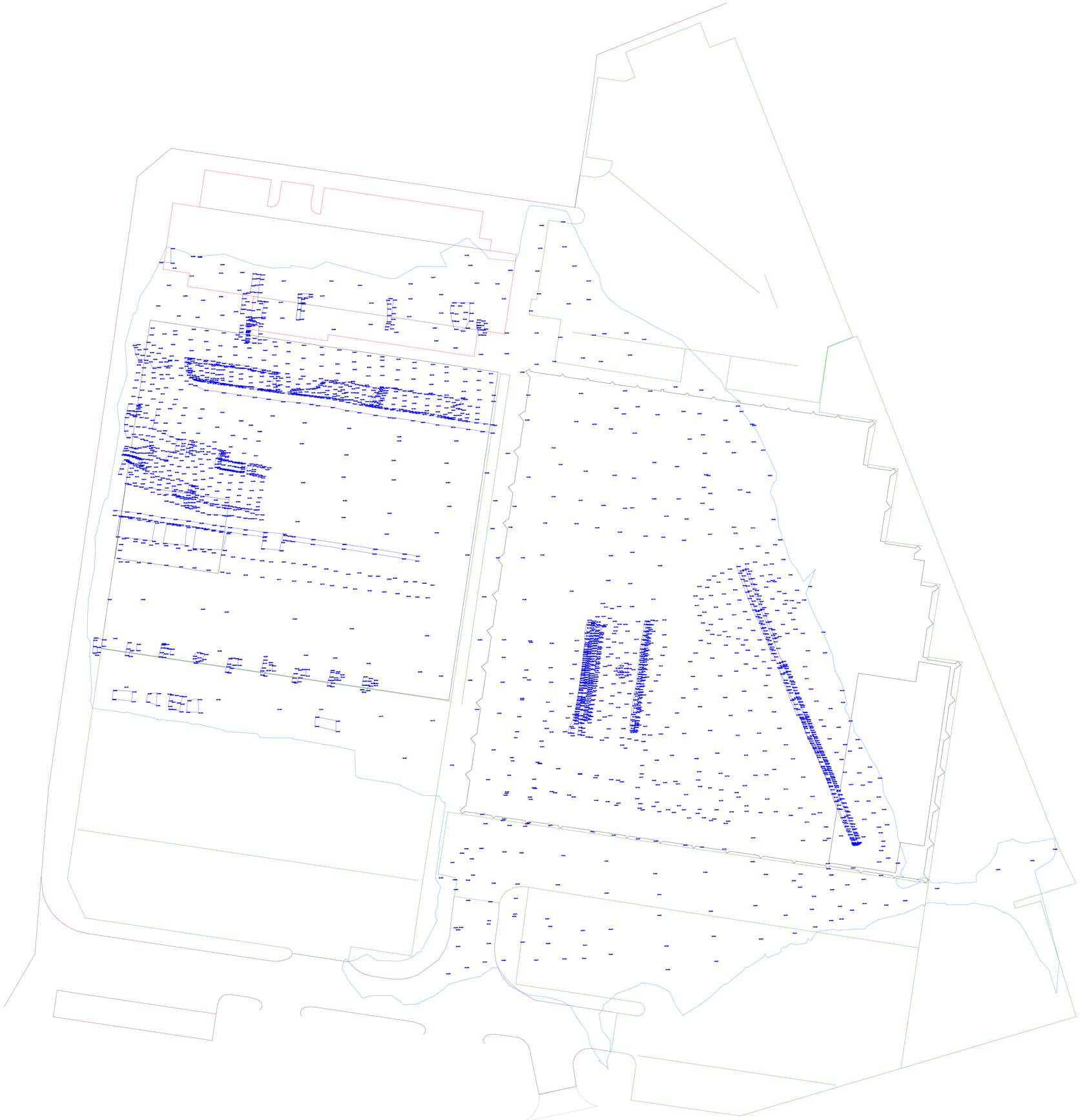
P. P. O'CONNOR
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PROJECT:
SMITHFIELD MARKET

TITLE:
Shear Test Locations

SCALE @ A1:	DRAWN:	DATE:
NTS	JR	5th July 2023

JOB No:	DRAWING No:	REVISION:
C0524	SHV001	B



NOTES

1. Do not scale from this drawing.

REV	DATE	REVISION DETAILS	INITIALS

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PROJECT:
SMITHFIELD MARKET

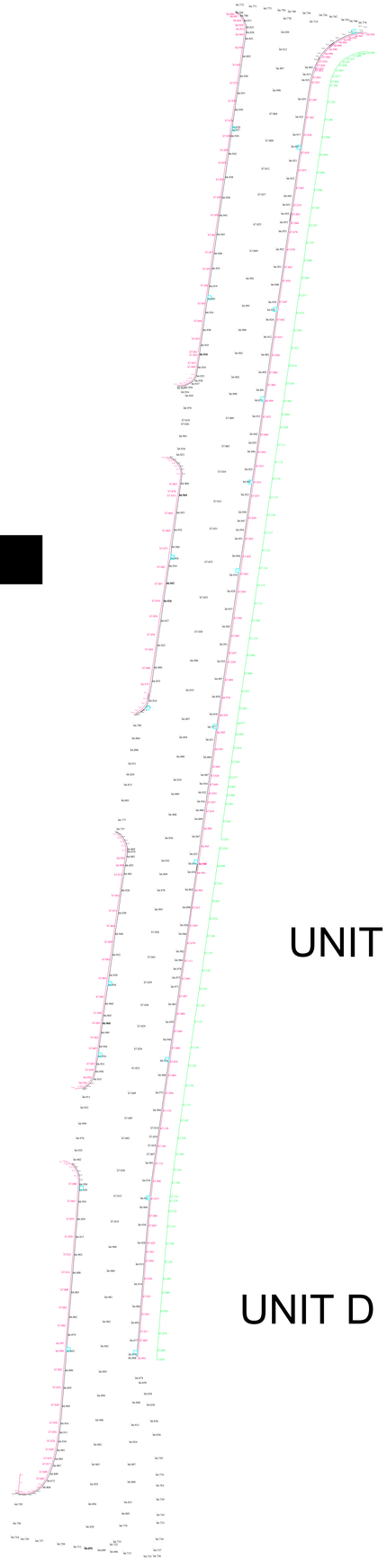
TITLE:
Turnover levels in the fill area

SCALE @ A1:	DRAWN:	DATE:
NTS	JR	8th August 23

JOB No:	DRAWING No:	REVISION:
C0524	TURN001	0

Scale = 30.00m

[redacted]



UNIT A

UNIT B

UNIT C

UNIT D

NOTES

1. Do not scale from this drawing.

REV	DATE	REVISION DETAILS	INITIALS

P. P. O'CONNOR
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PROJECT:
SMITHFIELD MARKET

TITLE:
Road as Built levels

SCALE @ A1:	DRAWN:	DATE:
As shown	JR	25thMAY2023

JOB No:	DRAWING No:	REVISION:
C0524	ROAD001	0

APPENDIX IV
CHEMICAL TESTING RESULTS

Harriet Mason
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e: hmason@e3p.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 23-25001

Project / Site name:	Smithfield Market	**Samples received on:**	24/03/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	24/03/2023
Your order number:	004434	**Analysis completed by:**	31/03/2023
Report Issue Number:	1	**Report issued on:**	31/03/2023
Samples Analysed:	2 non soil samples		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-25001
Project / Site name: Smithfield Market
Your Order No: 004434

Lab Sample Number				2629672	2629673
Sample Reference				Crush 101	Crush 102
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				23/03/2023	23/03/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	3.1	3.2
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA

General Inorganics

pH - Automated	pH Units	N/A	NONE	12.1	11.7
Total Cyanide	mg/kg	1	NONE	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	NONE	14000	5000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	NONE	1.3	0.5
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	NONE	2600	1000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	NONE	1290	502
Sulphide	mg/kg	1	NONE	21	10
Total Sulphur	mg/kg	50	NONE	5700	1600
Total Organic Carbon (TOC) - Automated	%	0.1	NONE	0.8	0.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	NONE	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	< 0.05	< 0.05
Fluorene	mg/kg	0.05	NONE	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	NONE	0.31	0.11
Anthracene	mg/kg	0.05	NONE	0.07	< 0.05
Fluoranthene	mg/kg	0.05	NONE	0.26	0.15
Pyrene	mg/kg	0.05	NONE	0.25	0.17
Benzo(a)anthracene	mg/kg	0.05	NONE	0.12	< 0.05
Chrysene	mg/kg	0.05	NONE	0.2	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	NONE	0.12	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	1.38	< 0.80

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
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Analytical i2 Environmental Science

Analytical Report Number: 23-25001
Project / Site name: Smithfield Market
Your Order No: 004434

Lab Sample Number				2629672	2629673
Sample Reference				Crush 101	Crush 102
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				23/03/2023	23/03/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Heavy Metals / Metalloids					
Arsenic (aqua regia extractable)	mg/kg	1	NONE	3.3	3
Cadmium (aqua regia extractable)	mg/kg	0.2	NONE	0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	NONE	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	NONE	19	11
Copper (aqua regia extractable)	mg/kg	1	NONE	5.4	7.5
Lead (aqua regia extractable)	mg/kg	1	NONE	6	6
Mercury (aqua regia extractable)	mg/kg	0.3	NONE	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	NONE	6	6
Selenium (aqua regia extractable)	mg/kg	1	NONE	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	NONE	43	14
Petroleum Hydrocarbons					
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	4	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	15	6.8
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	330	190
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	230	84
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	580	280

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-25001
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2629672	Crush 101	None Supplied	None Supplied	Light grey rubble with concrete and brick.#
2629673	Crush 102	None Supplied	None Supplied	Light grey rubble with concrete and brick.#

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-25001
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	NONE
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and NONE requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	NONE
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	NONE

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-25001
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-34682

Project / Site name:	Smithfield Market	**Samples received on:**	18/05/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	18/05/2023
Your order number:	004876	**Analysis completed by:**	26/05/2023
Report Issue Number:	1	**Report issued on:**	26/05/2023
Samples Analysed:	1 soil sample		

Signed:

Anna Goc
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-34682
Project / Site name: Smithfield Market
Your Order No: 004876

Lab Sample Number				2684570
Sample Reference				Crush 103
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				23/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	100
Moisture Content	%	0.01	NONE	2.7
Total mass of sample received	kg	0.001	NONE	0.4

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MLO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	12
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	4300
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.48
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	960
Sulphide	mg/kg	1	NONE	13
Total Sulphur	mg/kg	50	MCERTS	1800
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	< 0.05
Acenaphthene	mg/kg	0.05	NONE	< 0.05
Fluorene	mg/kg	0.05	NONE	< 0.05
Phenanthrene	mg/kg	0.05	NONE	< 0.05
Anthracene	mg/kg	0.05	NONE	< 0.05
Fluoranthene	mg/kg	0.05	NONE	0.08
Pyrene	mg/kg	0.05	NONE	0.07
Benzo(a)anthracene	mg/kg	0.05	NONE	< 0.05
Chrysene	mg/kg	0.05	NONE	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	NONE	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	NONE	< 0.05
Benzo(a)pyrene	mg/kg	0.05	NONE	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	< 0.80

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Analytical Report Number: 23-34682
Project / Site name: Smithfield Market
Your Order No: 004876

Lab Sample Number				2684570
Sample Reference				Crush 103
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				23/03/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	9.7
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	13
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	6.4
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	40
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	3.5
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	54
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	25
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	82

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-34682
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2684570	Crush 103	None Supplied	None Supplied	Brown sand with brick and stones.

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Analytical Report Number : 23-34682
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-34682
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-34682

Project / Site name: Smithfield Market

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
Crush 103	None Supplied	S	2684570	c	Hexavalent chromium in soil	L080-PL	c
Crush 103	None Supplied	S	2684570	c	Monohydric phenols in soil	L080-PL	c
Crush 103	None Supplied	S	2684570	c	Organic matter (Automated) in soil	L009-PL	c
Crush 103	None Supplied	S	2684570	c	Speciated EPA-16 PAHs in soil	L064-PL	c
Crush 103	None Supplied	S	2684570	c	Sulphide in soil	L010-PL	c
Crush 103	None Supplied	S	2684570	c	TPH in (Soil)	L076-PL	c
Crush 103	None Supplied	S	2684570	c	Total cyanide in soil	L080-PL	c
Crush 103	None Supplied	S	2684570	c	Total organic carbon (Automated) in soil	L009-PL	c
Crush 103	None Supplied	S	2684570	c	pH in soil (automated)	L099-PL	c

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number : 23-36442

Project / Site name:	Smithfield Market	**Samples received on:**	26/05/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	31/05/2023
Your order number:	005004	**Analysis completed by:**	08/06/2023
Report Issue Number:	1	**Report issued on:**	08/06/2023
Samples Analysed:	3 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-36442
Project / Site name: Smithfield Market
Your Order No: 005004

Lab Sample Number				2695305	2695306	2695307
Sample Reference				Crush 104	Crush 105	Crush 106
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				24/05/2023	24/05/2023	24/05/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	71	74	81
Moisture Content	%	0.01	NONE	0.09	2.9	0.12
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	SCA	SCA

General Inorganics

pH - Automated	pH Units	N/A	NONE	12.4	12.3	12.5
Total Cyanide	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	NONE	8400	2300	2700
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	NONE	0.74	0.01	0.018
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	NONE	1500	21	36
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	NONE	740	10.4	18
Sulphide	mg/kg	1	NONE	5.3	13	12
Total Sulphur	mg/kg	50	NONE	3700	1300	1300
Total Organic Carbon (TOC) - Automated	%	0.1	NONE	2.1	1.8	2.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.15
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.07
Fluorene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	NONE	0.28	0.54	0.99
Anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.1
Fluoranthene	mg/kg	0.05	NONE	< 0.05	0.42	0.59
Pyrene	mg/kg	0.05	NONE	< 0.05	0.45	0.62
Benzo(a)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.21
Chrysene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.53
Benzo(b)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.32
Benzo(k)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.31
Benzo(a)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.28
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.12
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	< 0.80	1.41	4.49

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Analytical Report Number: 23-36442
Project / Site name: Smithfield Market
Your Order No: 005004

Lab Sample Number				2695305	2695306	2695307
Sample Reference				Crush 104	Crush 105	Crush 106
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				24/05/2023	24/05/2023	24/05/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	NONE	4.4	2.7	2.8
Cadmium (aqua regia extractable)	mg/kg	0.2	NONE	0.3	0.3	0.3
Chromium (hexavalent)	mg/kg	1.8	NONE	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	NONE	18	11	9.9
Copper (aqua regia extractable)	mg/kg	1	NONE	31	23	34
Lead (aqua regia extractable)	mg/kg	1	NONE	9.2	9.7	7.8
Mercury (aqua regia extractable)	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	NONE	9.6	8.5	5.8
Selenium (aqua regia extractable)	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	NONE	43	40	33
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	< 2.0	< 2.0	2.8
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	7.3	23	20
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	72	100	110
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	1600	1800	1500
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	750	770	580
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	2400	2700	2200

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-36442
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2695305	Crush 104	None Supplied	None Supplied	Light grey rubble with concrete and brick.**
2695306	Crush 105	None Supplied	None Supplied	Light grey rubble with concrete and brick.**
2695307	Crush 106	None Supplied	None Supplied	Light grey rubble with concrete and brick.**

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Analytical Report Number : 23-36442
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	NONE
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	NONE
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	NONE
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

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Analytical Report Number : 23-36442
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

**UNACCREDITED SAMPLE MATRIX

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Analytical Report Number : 23-43292

Project / Site name:	Smithfield Market	**Samples received on:**	05/07/2023
Your job number:	12 757	**Samples instructed on/ Analysis started on:**	05/07/2023
Your order number:	005415	**Analysis completed by:**	12/07/2023
Report Issue Number:	1	**Report issued on:**	12/07/2023
Samples Analysed:	4 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-43292
Project / Site name: Smithfield Market
Your Order No: 005415

Lab Sample Number				2737729	2737730	2737731	2737732
Sample Reference				Crush 107	Crush 108	Crush 109	Crush 110
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				05/07/2023	05/07/2023	05/07/2023	05/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	59
Moisture Content	%	0.01	NONE	5.8	3.4	5.6	3.2
Total mass of sample received	kg	0.001	NONE	0.4	0.4	0.4	0.4
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SSZ	SSZ	SSZ	SSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	12.2	11.5	12.5	11.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	2300	2300	2800	3000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.024	0.35	0.027	0.25
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	48	690	54	500
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	23.9	347	26.9	251
Sulphide	mg/kg	1	MCERTS	11	10	12	5.6
Total Sulphur	mg/kg	50	MCERTS	1200	1400	1100	1300
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.1	1.8	2.7	2.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.19	< 0.05	0.16	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.24	0.24	0.18	0.33
Fluorene	mg/kg	0.05	MCERTS	0.16	0.14	0.14	0.25
Phenanthrene	mg/kg	0.05	MCERTS	1.9	1.5	1.8	2.4
Anthracene	mg/kg	0.05	MCERTS	0.45	0.37	0.39	0.57
Fluoranthene	mg/kg	0.05	MCERTS	1.8	1.7	1.6	2.9
Pyrene	mg/kg	0.05	MCERTS	1.6	1.7	1.5	2.7
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.74	0.86	0.57	1.6
Chrysene	mg/kg	0.05	MCERTS	0.93	0.89	0.9	1.5
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.76	0.83	0.71	1.5
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.23	0.48	0.23	0.59
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.54	0.64	0.47	1.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.33	0.34	0.32	0.56
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.38	0.43	0.34	0.79

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	10.3	10.1	9.3	16.8

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Analytical Report Number: 23-43292
Project / Site name: Smithfield Market
Your Order No: 005415

Lab Sample Number				2737729	2737730	2737731	2737732
Sample Reference				Crush 107	Crush 108	Crush 109	Crush 110
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				05/07/2023	05/07/2023	05/07/2023	05/07/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	4.1	7.3	4.1	8.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	1	0.3	0.6
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	12	9.5	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	31	41	36	62
Lead (aqua regia extractable)	mg/kg	1	MCERTS	32	85	33	66
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	9	14	8.1	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	49	98	51	73
Petroleum Hydrocarbons							
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	9.6	9.1	12	8.9
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	76	48	80	51
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	1500	930	1600	780
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	540	400	650	330
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	2200	1400	2400	1200

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-43292
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2737729	Crush 107	None Supplied	None Supplied	Brown loam and sand with gravel and tar.
2737730	Crush 108	None Supplied	None Supplied	Brown loam and sand with brick and tar.
2737731	Crush 109	None Supplied	None Supplied	Brown loam and sand with gravel and brick.
2737732	Crush 110	None Supplied	None Supplied	Brown loam and sand with gravel and tar.

Analytical Report Number : 23-43292
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-43292
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-40645

Project / Site name:	Smithfield Market	**Samples received on:**	21/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	21/06/2023
Your order number:	005279	**Analysis completed by:**	28/06/2023
Report Issue Number:	1	**Report issued on:**	28/06/2023
Samples Analysed:	2 soil samples		

Signed:

Elżbieta Suchy
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-40645
Project / Site name: Smithfield Market
Your Order No: 005279

Lab Sample Number				2722183	2722184
Sample Reference				TP402	TP404 Contam
Sample Number				None Supplied	None Supplied
Depth (m)				0.50	0.50
Date Sampled				20/06/2023	20/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	25
Total mass of sample received	kg	0.001	NONE	0.8	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MWI	MWI

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	11.3
Total Cyanide	mg/kg	1	MCERTS	5.6	150"
Total Sulphate as SO4	mg/kg	50	MCERTS	1200	1700
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.41	0.44
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	820	880
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	411	440
Sulphide	mg/kg	1	MCERTS	37	51
Total Sulphur	mg/kg	50	MCERTS	2000	2200
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	5.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	9.2

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	9.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	230	100
Lead (aqua regia extractable)	mg/kg	1	MCERTS	140	67
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	140

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	30000
Toluene	µg/kg	5	MCERTS	< 5.0	100000
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	14000
p & m-xylene	µg/kg	5	MCERTS	< 5.0	95000
o-xylene	µg/kg	5	MCERTS	< 5.0#	28000
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-40645
Project / Site name: Smithfield Market
Your Order No: 005279

Lab Sample Number				2722183	2722184
Sample Reference				TP402	TP404 Contam
Sample Number				None Supplied	None Supplied
Depth (m)				0.50	0.50
Date Sampled				20/06/2023	20/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	0.14
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	4.5
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	28
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	230
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	290
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	300
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10	850
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	42
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	150
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	200
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	630
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0	2900
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10	5100
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	20	5200
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	28	14000
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0##
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0##	< 5.0##
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	30000
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0##	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	100000
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	14000

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Analytical Report Number: 23-40645
Project / Site name: Smithfield Market
Your Order No: 005279

Lab Sample Number				2722183	2722184
Sample Reference				TP402	TP404 Contam
Sample Number				None Supplied	None Supplied
Depth (m)				0.50	0.50
Date Sampled				20/06/2023	20/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	95000
Styrene	µg/kg	5	NONE	< 5.0#	< 5.0#
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0#	28000
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0##	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0#	420#
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0#	< 5.0#
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0##	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	10000
tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0	26000#
sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0##
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0#	< 5.0#

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	38
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	3.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	8.1
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.22	470
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.2	400
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-40645
Project / Site name: Smithfield Market
Your Order No: 005279

Lab Sample Number				2722183	2722184
Sample Reference				TP402	TP404 Contam
Sample Number				None Supplied	None Supplied
Depth (m)				0.50	0.50
Date Sampled				20/06/2023	20/06/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	MCERTS	0.09	310
Acenaphthene	mg/kg	0.05	MCERTS	0.22	62
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	120
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.27	300
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	1.2	730
Anthracene	mg/kg	0.05	MCERTS	0.51	310
Carbazole	mg/kg	0.3	MCERTS	< 0.3	85
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	2.2	380
Pyrene	mg/kg	0.05	MCERTS	2.7	410
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.3	180
Chrysene	mg/kg	0.05	MCERTS	1.7	160
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.6	130
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.97	42
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.8	120
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.83	45
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	17
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.76	53

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-40645
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2722183	TP402	None Supplied	0.5	Brown clay and loam with gravel and glass.
2722184	TP404 Contam	None Supplied	0.5	Brown clay and sand with gravel and tar.

Analytical Report Number : 23-40645
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-40645
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.
" Result was reported from high dilution and should be interpreted with care

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Analytical Report Number : 23-40639

Project / Site name:	Smithfield Market	**Samples received on:**	21/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	21/06/2023
Your order number:	005277	**Analysis completed by:**	27/06/2023
Report Issue Number:	1	**Report issued on:**	27/06/2023
Samples Analysed:	1 soil sample		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-40639
Project / Site name: Smithfield Market
Your Order No: 005277

Lab Sample Number				2722146
Sample Reference				HS1 WAC
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				20/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	18
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Crocidolite
Asbestos in Soil	Type	N/A	ISO 17025	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.003
Asbestos Quantification Total	%	0.001	ISO 17025	0.003
Asbestos Analyst ID	N/A	N/A	N/A	DSA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.6
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	600
Sulphide	mg/kg	1	MCERTS	19
Total Sulphur	mg/kg	50	MCERTS	1800
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.67
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.81
Fluorene	mg/kg	0.05	MCERTS	0.88
Phenanthrene	mg/kg	0.05	MCERTS	3.5
Anthracene	mg/kg	0.05	MCERTS	0.92
Fluoranthene	mg/kg	0.05	MCERTS	4.9
Pyrene	mg/kg	0.05	MCERTS	4.5
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.3
Chrysene	mg/kg	0.05	MCERTS	1.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.92
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	27.2

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-40639
Project / Site name: Smithfield Market
Your Order No: 005277

Lab Sample Number				2722146
Sample Reference				HS1 WAC
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				20/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	30
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	970
Lead (aqua regia extractable)	mg/kg	1	MCERTS	650
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	46
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	420
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	11
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	140
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	680
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	130
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	950

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-40639
Project / Site name: Smithfield Market
Your Order No: 005277

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2722146	HS1 WAC		131	Loose Fibres	**Chrysotile & Crocidolite**	0.003	**0.003**

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

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-40639
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2722146	HS1 WAC	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-40639
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-40639
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-36435

Project / Site name:	Smithfield Market	**Samples received on:**	26/05/2023
Your job number:	12 757	**Samples instructed on/ Analysis started on:**	31/05/2023
Your order number:	005005	**Analysis completed by:**	06/06/2023
Report Issue Number:	1	**Report issued on:**	06/06/2023
Samples Analysed:	6 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number : 23-40640

Project / Site name:	Smithfield Market	**Samples received on:**	21/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	21/06/2023
Your order number:	05277	**Analysis completed by:**	27/06/2023
Report Issue Number:	1	**Report issued on:**	27/06/2023
Samples Analysed:	1 wac multi sample		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

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Waste Acceptance Criteria Analytical Results

Report No:	**23-40640**						
					Client: E3P		
Location	**Smithfield Market**						
Lab Reference (Sample Number)	2722147				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	20/06/2023						
Sample ID	HS1 WAC				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)							
Solid Waste Analysis							
TOC (%)**	1.7				3%	5%	6%
Loss on Ignition (%) **	5.5				--	--	10%
BTEX (µg/kg)**	< 10				6000	--	--
Sum of PCBs (mg/kg)**	< 0.30				1	--	--
Mineral Oil (mg/kg) $_{EH\_1D\_CU\_AL}$ #	570				500	--	--
Total PAH (WAC-17) (mg/kg)	27.2				100	--	--
pH (units)**	7.6				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	3.3				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 3 preparation utilising end over end leaching procedure)	2:1 mg/l	8:1 mg/l		Cumulative 10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.078	0.12		1.2	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	< 0.0010	< 0.0010		0.0059	0.5	10	70
Copper *	0.015	0.024		0.23	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	0.019	0.013		0.13	0.5	10	30
Nickel *	0.0053	0.0013		0.018	0.4	10	40
Lead *	< 0.0050	0.014		0.13	0.5	10	50
Antimony *	0.015	0.014		0.14	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.026	0.0167		0.18	4	50	200
Chloride *	16	< 4.0		30	800	15000	25000
Fluoride*	0.98	0.86		8.7	10	150	500
Sulphate *	540	85		1300	1000	20000	50000
TDS*	630	180		2200	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	12	5.6		62	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	82						
Moisture (%)	18						
Stage 1							
Volume Eluate L2 (litres)	0.31						
Filtered Eluate VE1 (litres)	0.18						

Results are expressed on a dry weight basis, after correction for moisture content where applicable. *= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepencies with current legislation ** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-40640
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2722147	HS1 WAC	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-40640
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Preparation WAC leachate		In-house method	L043-PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270.	L064-PL	D	MCERTS
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033-PL	W	ISO 17025
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031-PL	W	ISO 17025
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037-PL	W	NONE
PCB's by GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
BTEX (Sum of BTEX compounds) in soil	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil in Soil C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS

Analytical Report Number : 23-40640
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number: 23-36435
Project / Site name: Smithfield Market
Your Order No: 005005

Lab Sample Number				2695277	2695278	2695279	2695280	2695281
Sample Reference				HS1 BASE	HS1 ARSINGS	HS1 NORTH	HS1 SOUTH	HS1 EAST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				24/05/2023	24/05/2023	24/05/2023	24/05/2023	24/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	45	-	-	-
Moisture Content	%	0.01	NONE	-	4.6	-	-	-
Total mass of sample received	kg	0.001	NONE	-	0.4	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA	DSA	DSA	DSA	DSA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	9.2	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	360	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.12	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	240	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	122	-	-	-
Sulphide	mg/kg	1	NONE	-	< 1.0	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	170	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	0.2	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Acenaphthylene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Acenaphthene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Fluorene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Phenanthrene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Anthracene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Fluoranthene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Pyrene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Chrysene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-	< 0.05	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-	< 0.05	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-	< 0.80	-	-	-

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Analytical Report Number: 23-36435
Project / Site name: Smithfield Market
Your Order No: 005005

Lab Sample Number				2695277	2695278	2695279	2695280	2695281
Sample Reference				HS1 BASE	HS1 ARSINGS	HS1 NORTH	HS1 SOUTH	HS1 EAST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				24/05/2023	24/05/2023	24/05/2023	24/05/2023	24/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	2.4	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	9.5	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	11	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	7.9	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	12	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	27	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-	< 2.0	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-	< 4.0	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	< 10	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	< 10	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-36435
Project / Site name: Smithfield Market
Your Order No: 005005

Lab Sample Number				2695282
Sample Reference				HS1 WEST
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				24/05/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	-
Moisture Content	%	0.01	NONE	-
Total mass of sample received	kg	0.001	NONE	-

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-
Total Cyanide	mg/kg	1	MCERTS	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-
Sulphide	mg/kg	1	NONE	-
Total Sulphur	mg/kg	50	MCERTS	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-

Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	-
Acenaphthylene	mg/kg	0.05	NONE	-
Acenaphthene	mg/kg	0.05	NONE	-
Fluorene	mg/kg	0.05	NONE	-
Phenanthrene	mg/kg	0.05	NONE	-
Anthracene	mg/kg	0.05	NONE	-
Fluoranthene	mg/kg	0.05	NONE	-
Pyrene	mg/kg	0.05	NONE	-
Benzo(a)anthracene	mg/kg	0.05	NONE	-
Chrysene	mg/kg	0.05	NONE	-
Benzo(b)fluoranthene	mg/kg	0.05	NONE	-
Benzo(k)fluoranthene	mg/kg	0.05	NONE	-
Benzo(a)pyrene	mg/kg	0.05	NONE	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	-
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	-
Benzo(ghi)perylene	mg/kg	0.05	NONE	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	-

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Analytical Report Number: 23-36435
Project / Site name: Smithfield Market
Your Order No: 005005

Lab Sample Number				2695282
Sample Reference				HS1 WEST
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				24/05/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	NONE	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	NONE	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	NONE	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-36435
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2695278	HS1 ARSINGS	None Supplied	None Supplied	Brown clay and sand with stones.

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Analytical Report Number : 23-39407

Project / Site name:	Smithfield Market	**Samples received on:**	14/06/2023
Your job number:	12 757	**Samples instructed on/ Analysis started on:**	14/06/2023
Your order number:		**Analysis completed by:**	19/06/2023
Report Issue Number:	1	**Report issued on:**	20/06/2023
Samples Analysed:	6 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-39407
Project / Site name: Smithfield Market

Lab Sample Number				2714734	2714735	2714736	2714737	2714738
Sample Reference				HS2 BASE	HS2 ARSINGS	HS2 NORTH	HS2 SOUTH	HS2 EAST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				24/05/2023	24/05/2023	24/05/2023	24/05/2023	24/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	-	< 0.1	-	-	-
Moisture Content	%	0.01	NONE	-	12	-	-	-
Total mass of sample received	kg	0.001	NONE	-	0.3	-	-	-
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	Amosite	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	0.023	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	0.023	-
Asbestos Analyst ID	N/A	N/A	N/A	LFT	LFT	LFT	LFT	LFT
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	-	8	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	860	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.53	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	1100	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	533	-	-	-
Sulphide	mg/kg	1	MCERTS	-	9.8	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	1700	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	3.2	-	-	-
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	-	30	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	-	3.9	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	-	41	-	-	-
Fluorene	mg/kg	0.05	MCERTS	-	31	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	-	150	-	-	-
Anthracene	mg/kg	0.05	MCERTS	-	49	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	-	140	-	-	-
Pyrene	mg/kg	0.05	MCERTS	-	130	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-	81	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	77	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-	110	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-	120	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-	72	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-	33	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-	8.9	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	38	-	-	-
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-	1110	-	-	-

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Analytical Report Number: 23-39407
Project / Site name: Smithfield Market

Lab Sample Number				2714734	2714735	2714736	2714737	2714738
Sample Reference				HS2 BASE	HS2 ARSINGS	HS2 NORTH	HS2 SOUTH	HS2 EAST
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				24/05/2023	24/05/2023	24/05/2023	24/05/2023	24/05/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	55	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	33	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	340	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	470	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	0.8	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	39	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	300	-	-	-
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-	< 1.0	-	-	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-	< 0.1	-	-	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-	18	-	-	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-	190	-	-	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	720	-	-	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-	910	-	-	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-	110	-	-	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-	1900	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-39407
Project / Site name: Smithfield Market

Lab Sample Number				2714739
Sample Reference				HS2 WEST
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				24/05/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	-
Moisture Content	%	0.01	NONE	-
Total mass of sample received	kg	0.001	NONE	-

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-
Asbestos Quantification Total	%	0.001	ISO 17025	-
Asbestos Analyst ID	N/A	N/A	N/A	LFT

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-
Total Cyanide	mg/kg	1	MCERTS	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-
Sulphide	mg/kg	1	MCERTS	-
Total Sulphur	mg/kg	50	MCERTS	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-
Acenaphthylene	mg/kg	0.05	MCERTS	-
Acenaphthene	mg/kg	0.05	MCERTS	-
Fluorene	mg/kg	0.05	MCERTS	-
Phenanthrene	mg/kg	0.05	MCERTS	-
Anthracene	mg/kg	0.05	MCERTS	-
Fluoranthene	mg/kg	0.05	MCERTS	-
Pyrene	mg/kg	0.05	MCERTS	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	-
Chrysene	mg/kg	0.05	MCERTS	-
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	-
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	-

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-39407
Project / Site name: Smithfield Market

Lab Sample Number				2714739
Sample Reference				HS2 WEST
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				24/05/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	-
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	-
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	-
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	-
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	-
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	-
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-39407
Project / Site name: Smithfield Market
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2714737	HS2 SOUTH		148	Sheeting/Board Debris	**Amosite**	0.023	**0.023**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-39407
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2714735	HS2 ARSINGS	None Supplied	None Supplied	Brown loam and sand with gravel and brick.

Analytical Report Number : 23-39407
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-39407
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report

Analytical Report Number : 23-39407
Project / Site name: Smithfield Market

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
HS2 ARSINGS	None Supplied	S	2714735	c	Monohydric phenols in soil	L080-PL	c
HS2 ARSINGS	None Supplied	S	2714735	c	Speciated EPA-16 PAHs in soil	L064-PL	c
HS2 ARSINGS	None Supplied	S	2714735	c	Sulphide in soil	L010-PL	c
HS2 ARSINGS	None Supplied	S	2714735	c	TPH in (Soil)	L076-PL	c
HS2 ARSINGS	None Supplied	S	2714735	c	Total cyanide in soil	L080-PL	c

Analytical Report Number : 23-36435
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-36435
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-40634

Project / Site name:	Smithfield Market	**Samples received on:**	21/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	21/06/2023
Your order number:	005276	**Analysis completed by:**	26/06/2023
Report Issue Number:	1	**Report issued on:**	27/06/2023
Samples Analysed:	1 soil sample		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number: 23-40634
Project / Site name: Smithfield Market
Your Order No: 005276

Lab Sample Number				2722105
Sample Reference				HS2 South
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				20/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	< 0.001
Asbestos Analyst ID	N/A	N/A	N/A	DSA

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number : 23-40626

Project / Site name:	Smithfield Market	**Samples received on:**	21/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	21/06/2023
Your order number:	005278	**Analysis completed by:**	27/06/2023
Report Issue Number:	1	**Report issued on:**	27/06/2023
Samples Analysed:	1 soil sample		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
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Analytical Report Number: 23-40626
Project / Site name: Smithfield Market
Your Order No: 005278

Lab Sample Number				2722074
Sample Reference				HS2 WAC
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				20/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	22
Total mass of sample received	kg	0.001	NONE	0.8

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	700
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.12
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	240
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	119
Sulphide	mg/kg	1	MCERTS	1.8
Total Sulphur	mg/kg	50	MCERTS	470
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	1.6
Acenaphthylene	mg/kg	0.05	MCERTS	0.53
Acenaphthene	mg/kg	0.05	MCERTS	2.7
Fluorene	mg/kg	0.05	MCERTS	2.4
Phenanthrene	mg/kg	0.05	MCERTS	20
Anthracene	mg/kg	0.05	MCERTS	4.4
Fluoranthene	mg/kg	0.05	MCERTS	26
Pyrene	mg/kg	0.05	MCERTS	24
Benzo(a)anthracene	mg/kg	0.05	MCERTS	11
Chrysene	mg/kg	0.05	MCERTS	10
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	11
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	5.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	8.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.86
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.8

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	137

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-40626
Project / Site name: Smithfield Market
Your Order No: 005278

Lab Sample Number				2722074
Sample Reference				HS2 WAC
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				20/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Heavy Metals / Metalloids				
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	20
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	94
Lead (aqua regia extractable)	mg/kg	1	MCERTS	170
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	35
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130
Petroleum Hydrocarbons				
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	2.7
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	12
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	50
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	83
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	18
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	170

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-40626
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2722074	HS2 WAC	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-40626
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-40626
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-40628

Project / Site name:	Smithfield Market	**Samples received on:**	21/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	21/06/2023
Your order number:	005278	**Analysis completed by:**	27/06/2023
Report Issue Number:	1	**Report issued on:**	27/06/2023
Samples Analysed:	1 wac multi sample		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

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Waste Acceptance Criteria Analytical Results

Report No:	**23-40628**						
					Client: E3P		
Location	**Smithfield Market**						
Lab Reference (Sample Number)	2722084				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	20/06/2023				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	HS2 WAC						
Depth (m)							
Solid Waste Analysis							
TOC (%)**	1.2				3%	5%	6%
Loss on Ignition (%) **	4.4				--	--	10%
BTEX (µg/kg)**	< 10				6000	--	--
Sum of PCBs (mg/kg)**	< 0.30				1	--	--
Mineral Oil (mg/kg) $_{EH\_1D\_CU\_AL}$ #	57				500	--	--
Total PAH (WAC-17) (mg/kg)	139				100	--	--
pH (units)**	7.8				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	3.8				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 3 preparation utilising end over end leaching procedure)	2:1 mg/l	8:1 mg/l		Cumulative 10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.039	0.024		0.26	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	< 0.0010	< 0.0010		0.0054	0.5	10	70
Copper *	0.0097	0.0099		0.098	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	0.0031	0.0038		0.037	0.5	10	30
Nickel *	< 0.0010	< 0.0010		0.0052	0.4	10	40
Lead *	< 0.0050	< 0.0050		< 0.020	0.5	10	50
Antimony *	< 0.0050	< 0.0050		< 0.020	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.012	0.0071		0.076	4	50	200
Chloride *	13	< 4.0		27	800	15000	25000
Fluoride*	1.0	0.70		7.4	10	150	500
Sulphate *	62	9.4		150	1000	20000	50000
TDS*	160	65		750	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	7.3	7.5		75	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.80						
Dry Matter (%)	78						
Moisture (%)	22						
Stage 1							
Volume Eluate L2 (litres)	0.31						
Filtered Eluate VE1 (litres)	0.19						

Results are expressed on a dry weight basis, after correction for moisture content where applicable. *= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepencies with current legislation ** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-40628
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2722084	HS2 WAC	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-40628
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Preparation WAC leachate		In-house method	L043-PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270.	L064-PL	D	MCERTS
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033-PL	W	ISO 17025
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031-PL	W	ISO 17025
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037-PL	W	NONE
PCB's by GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
BTEX (Sum of BTEX compounds) in soil	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil in Soil C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS

Analytical Report Number : 23-40628
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number: 23-40634
Project / Site name: Smithfield Market
Your Order No: 005276

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006-PL based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
2722105	HS2 South		143	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

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

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-40634
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 23-41101

Project / Site name:	Smithfield Market	**Samples received on:**	23/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	23/06/2023
Your order number:	005298	**Analysis completed by:**	29/06/2023
Report Issue Number:	1	**Report issued on:**	29/06/2023
Samples Analysed:	8 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-41101
Project / Site name: Smithfield Market
Your Order No: 005298

Lab Sample Number				2724857	2724858	2724859	2724860	2724861
Sample Reference				HS3 BASE	HS3 ARISINGS	HS3 NORTH a	HS3 NORTH b	HS3 SOUTH a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	19	8.7	10	20
Total mass of sample received	kg	0.001	NONE	0.3	1.3	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	DSO	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	8.6	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	18	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	1700	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	0.5	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	990	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	496	-	-	-
Sulphide	mg/kg	1	MCERTS	-	20	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	2000	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	2.4	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	18	-	-	-

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	12	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	< 1.8	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	16	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	180	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	130	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	19	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	< 1.0	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	120	-	-	-

Monoaromatics & Oxygenates#

Benzene	µg/kg	5	NONE	280	190	< 5.0	< 5.0	95
Toluene	µg/kg	5	NONE	1400	610	< 5.0	< 5.0	280
Ethylbenzene	µg/kg	5	NONE	370	410	< 5.0	< 5.0	320
p & m-xylene	µg/kg	5	NONE	2500	1300	< 5.0	< 5.0	710
o-xylene	µg/kg	5	NONE	2200	1600	< 5.0	< 5.0	580
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	5.6	16	< 1.0	< 1.0	2.7
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	15	45	< 2.0	< 2.0	6.7
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	10	43	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	44	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	37	150	< 10	< 10	18

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Analytical Report Number: 23-41101
Project / Site name: Smithfield Market
Your Order No: 005298

Lab Sample Number				2724857	2724858	2724859	2724860	2724861
Sample Reference				HS3 BASE	HS3 ARISINGS	HS3 NORTH a	HS3 NORTH b	HS3 SOUTH a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.001	NONE	0.24	0.15	< 0.001	< 0.001	0.071
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.001	NONE	1.3	0.54	< 0.001	< 0.001	0.26
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.001	NONE	5.7	3.7	< 0.001	< 0.001	1.9
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	18	110	< 1.0	< 1.0	6.1
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	92	380	< 2.0	< 2.0	49
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	150	580	< 10	< 10	88
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	110	650	< 10	< 10	73
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	380	1700	< 10	< 10	220
VOCs#								
Chloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	50	48	< 5.0	< 5.0	47
1,1,1-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	280	190	< 5.0	< 5.0	95
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	1400	610	< 5.0	< 5.0	280
1,1,2-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	370	410	< 5.0	< 5.0	320
p & m-Xylene	µg/kg	5	NONE	2500	1300	< 5.0	< 5.0	710
Styrene	µg/kg	5	NONE	< 5.0	140	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	NONE	2200	1600	< 5.0	< 5.0	580
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0	40	< 5.0	< 5.0	54
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	47	< 5.0	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-41101
Project / Site name: Smithfield Market
Your Order No: 005298

Lab Sample Number				2724857	2724858	2724859	2724860	2724861
Sample Reference				HS3 BASE	HS3 ARISINGS	HS3 NORTH a	HS3 NORTH b	HS3 SOUTH a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
1,3,5-Trimethylbenzene	µg/kg	5	NONE	650	510	< 5.0	< 5.0	220
tert-Butylbenzene	µg/kg	5	NONE	12	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	1900	1400	< 5.0	< 5.0	640
sec-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	65	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	2.9	< 0.2	< 0.2	< 0.2	4.1
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	13	14	< 0.3	< 0.3	0.4
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	44	79	0.19	0.09	16
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	51	68	0.2	0.1	14
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.3
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	24	39	0.12	< 0.05	3.9
Acenaphthene	mg/kg	0.05	MCERTS	6.8	17	0.16	< 0.05	6.5
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	12	14	< 0.2	< 0.2	3.8
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	26	47	0.16	0.05	11
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2

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Analytical Report Number: 23-41101
Project / Site name: Smithfield Market
Your Order No: 005298

Lab Sample Number				2724857	2724858	2724859	2724860	2724861
Sample Reference				HS3 BASE	HS3 ARISINGS	HS3 NORTH a	HS3 NORTH b	HS3 SOUTH a
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	52	120	1.3	0.45	25
Anthracene	mg/kg	0.05	MCERTS	27	44	0.36	0.1	10
Carbazole	mg/kg	0.3	MCERTS	7.1	13	< 0.3	< 0.3	3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	31	71	2.3	0.94	11
Pyrene	mg/kg	0.05	MCERTS	35	78	2.2	0.98	13
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	17	31	1.2	0.5	5.8
Chrysene	mg/kg	0.05	MCERTS	15	28	1.1	0.51	4.2
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	12	23	1.5	0.66	4.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	4.7	10	0.41	0.2	1.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	11	22	1.1	0.48	3.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	3	7.7	0.52	0.22	1.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.5	3.6	0.17	< 0.05	0.5
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.5	9.7	0.57	0.25	1.3

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-41101
Project / Site name: Smithfield Market
Your Order No: 005298

Lab Sample Number				2724862	2724863	2724864
Sample Reference				HS3 SOUTH b	HS3 EAST	HS3 WEST
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	32	13	31
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-
Total Sulphate as SO4	mg/kg	50	MCERTS	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	-	-	-
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	-	-	-
Sulphide	mg/kg	1	MCERTS	-	-	-
Total Sulphur	mg/kg	50	MCERTS	-	-	-
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	-	-	-
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-
Chromium (hexavalent)	mg/kg	1.8	MCERTS	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-
Monoaromatics & Oxygenates#						
Benzene	µg/kg	5	NONE	< 5.0	17	24
Toluene	µg/kg	5	NONE	< 5.0	24	24
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	56
p & m-xylene	µg/kg	5	NONE	< 5.0	5.8	67
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0	59
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Petroleum Hydrocarbons						
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	7.6	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	26	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	22	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	17	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	72	< 10	< 10

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Analytical Report Number: 23-41101
Project / Site name: Smithfield Market
Your Order No: 005298

Lab Sample Number				2724862	2724863	2724864
Sample Reference				HS3 SOUTH b	HS3 EAST	HS3 WEST
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	0.014	0.021
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	0.023	0.025
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.001	NONE	< 0.001	0.018	0.22
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	35	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	170	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	250	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	250	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	710	< 10	< 10
VOCs#						
Chloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Bromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1-Dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Trichloromethane	µg/kg	5	NONE	< 5.0	7.9	8.6
1,1,1-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Trans-1,2-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	NONE	< 5.0	17	24
Tetrachloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Trichloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Dibromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	24	24
1,1,2-Trichloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	56
p & m-Xylene	µg/kg	5	NONE	< 5.0	5.8	67
Styrene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Tribromomethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
o-Xylene	µg/kg	5	NONE	< 5.0	< 5.0	59
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Isopropylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
n-Propylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0

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Analytical Report Number: 23-41101
Project / Site name: Smithfield Market
Your Order No: 005298

Lab Sample Number				2724862	2724863	2724864
Sample Reference				HS3 SOUTH b	HS3 EAST	HS3 WEST
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
1,3,5-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	11
tert-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	33
sec-Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
p-Isopropyltoluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	7.1	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	71	0.4	0.25
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	78	0.1	0.2
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	44	0.25	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	16	< 0.05	< 0.05
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	19	< 0.2	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	61	0.21	0.14
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2

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Analytical Report Number: 23-41101
Project / Site name: Smithfield Market
Your Order No: 005298

Lab Sample Number				2724862	2724863	2724864
Sample Reference				HS3 SOUTH b	HS3 EAST	HS3 WEST
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	150	0.49	0.41
Anthracene	mg/kg	0.05	MCERTS	54	0.16	0.14
Carbazole	mg/kg	0.3	MCERTS	4.6	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	73	0.31	0.57
Pyrene	mg/kg	0.05	MCERTS	85	0.33	0.58
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	33	0.16	0.18
Chrysene	mg/kg	0.05	MCERTS	29	0.19	0.19
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	24	0.19	0.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	8.1	< 0.05	0.09
Benzo(a)pyrene	mg/kg	0.05	MCERTS	24	< 0.05	0.15
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	7.8	< 0.05	0.1
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	3.3	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	9.7	< 0.05	0.12

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-41101
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2724857	HS3 BASE	None Supplied	None Supplied	Brown clay and sand with gravel.
2724858	HS3 ARISINGS	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
2724859	HS3 NORTH a	None Supplied	None Supplied	Brown loam and clay with gravel.
2724860	HS3 NORTH b	None Supplied	None Supplied	Brown loam and clay with gravel.
2724861	HS3 SOUTH a	None Supplied	None Supplied	Brown loam and clay with gravel.
2724862	HS3 SOUTH b	None Supplied	None Supplied	Brown clay and sand with gravel.
2724863	HS3 EAST	None Supplied	None Supplied	Brown clay and sand with gravel.
2724864	HS3 WEST	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.

Analytical Report Number : 23-41101
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS

Analytical Report Number : 23-41101
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

#Data reported unaccredited due to quality control parameter failure associated with this result; other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and therefore may be compromised.

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Analytical Report Number : 23-41108

Project / Site name:	Smithfield Market	**Samples received on:**	23/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	23/06/2023
Your order number:	005298	**Analysis completed by:**	29/06/2023
Report Issue Number:	1	**Report issued on:**	29/06/2023
Samples Analysed:	1 wac multi sample		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Waste Acceptance Criteria Analytical Results

Report No:	23-41108						
					Client: E3P		
Location	Smithfield Market						
Lab Reference (Sample Number)	2724909				Landfill Waste Acceptance Criteria Limits		
Sampling Date	22/06/2023						
Sample ID	HS3 ARISINGS				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)							
Solid Waste Analysis							
TOC (%)**	2.1				3%	5%	6%
Loss on Ignition (%) **	9.0				--	--	10%
BTEX (µg/kg)**	4100				6000	--	--
Sum of PCBs (mg/kg)**	< 0.30				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL #	150				500	--	--
Total PAH (WAC-17) (mg/kg)	628				100	--	--
pH (units)**	U/S#*				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	U/S#*				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 3 preparation utilising end over end leaching procedure)	2:1 mg/l	8:1 mg/l		Cumulative 10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.086	0.068		0.70	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	< 0.0010	0.0017		0.016	0.5	10	70
Copper *	0.045	0.019		0.22	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	0.022	0.0095		0.11	0.5	10	30
Nickel *	0.0025	0.0020		0.021	0.4	10	40
Lead *	< 0.0050	< 0.0050		< 0.020	0.5	10	50
Antimony *	< 0.0050	< 0.0050		< 0.020	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.016	0.0101		0.11	4	50	200
Chloride *	56	5.9		130	800	15000	25000
Fluoride*	0.37	0.46		4.4	10	150	500
Sulphate *	350	52		920	1000	20000	50000
TDS*	530	190		2300	4000	60000	100000
Phenol Index (Monohydric Phenols) *	1.0	< 0.13		2.4	1	-	-
DOC	67	29		340	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.3						
Dry Matter (%)	81						
Moisture (%)	19						
Stage 1							
Volume Eluate L2 (litres)	0.31						
Filtered Eluate VE1 (litres)	0.23						

Results are expressed on a dry weight basis, after correction for moisture content where applicable. *= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepencies with current legislation ** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number : 23-41108
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2724909	HS3 ARISINGS	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.

Analytical Report Number : 23-41108
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Preparation WAC leachate		In-house method	L043-PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270.	L064-PL	D	MCERTS
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033-PL	W	ISO 17025
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031-PL	W	ISO 17025
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037-PL	W	NONE
PCB's by GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
BTEX (Sum of BTEX compounds) in soil	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil in Soil C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS

Analytical Report Number : 23-41108
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

#*Analysis could not be completed due to sample matrix.

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Analytical Report Number : 23-45841

Project / Site name:	Smithfield Market	**Samples received on:**	18/07/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	19/07/2023
Your order number:	5528	**Analysis completed by:**	24/07/2023
Report Issue Number:	1	**Report issued on:**	24/07/2023
Samples Analysed:	2 leachate samples - 2 soil samples		

Signed:

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-45841
Project / Site name: Smithfield Market
Your Order No: 5528

Lab Sample Number				2752953	2752954
Sample Reference				HS3-1	HS3-3
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/07/2023	17/07/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	18
Total mass of sample received	kg	0.001	NONE	0.8	0.8
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSO	DSO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	8.3
Total Cyanide	mg/kg	1	MCERTS	11	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	1100	1100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.38	0.16
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	760	320
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	379	159
Sulphide	mg/kg	1	MCERTS	16	110
Total Sulphur	mg/kg	50	MCERTS	930	1800
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.3	0.7

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	7.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	320	180
Lead (aqua regia extractable)	mg/kg	1	MCERTS	230	190
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	33	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	58

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	27	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	21	< 5.0
p & m-xylene	µg/kg	5	MCERTS	110	15
o-xylene	µg/kg	5	MCERTS	75	11
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

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Analytical Report Number: 23-45841
Project / Site name: Smithfield Market
Your Order No: 5528

Lab Sample Number				2752953	2752954
Sample Reference				HS3-1	HS3-3
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/07/2023	17/07/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Petroleum Hydrocarbons					
TPH-CWG - Aliphatic ## >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic ## >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	11	10
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.10	< 0.10
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	0.21	< 0.10
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0	1.4
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	4.2	4.4
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	13	17
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	16	11
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	34	34
VOCs					
Chloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	27	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	21	< 5.0

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Analytical Report Number: 23-45841
Project / Site name: Smithfield Market
Your Order No: 5528

Lab Sample Number				2752953	2752954
Sample Reference				HS3-1	HS3-3
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/07/2023	17/07/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
p & m-xylene	µg/kg	5	MCERTS	110	15
Styrene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	75	11
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane ##	µg/kg	5	ISO 17025	< 5.0	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	31	7.8
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	70	12
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane ##	µg/kg	5	ISO 17025	< 5.0	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	0.6
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.96	2.9
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.6	1.4
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1	< 0.1

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Analytical Report Number: 23-45841
Project / Site name: Smithfield Market
Your Order No: 5528

Lab Sample Number				2752953	2752954
Sample Reference				HS3-1	HS3-3
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/07/2023	17/07/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Acenaphthylene	mg/kg	0.05	MCERTS	0.56	0.23
Acenaphthene	mg/kg	0.05	MCERTS	0.87	0.53
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	0.6	0.4
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2	< 0.2
Fluorene	mg/kg	0.05	MCERTS	1.4	0.78
Azobenzene	mg/kg	0.3	NONE	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	3.5	2.4
Anthracene	mg/kg	0.05	MCERTS	1.4	0.67
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	3.6	1.5
Pyrene	mg/kg	0.05	MCERTS	3.9	1.5
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.7	0.59
Chrysene	mg/kg	0.05	MCERTS	1.6	0.65
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.2	0.33
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.66	0.2
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.3	0.31
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.59	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.21	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.72	< 0.05

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-45841
Project / Site name: Smithfield Market

Your Order No: 5528

Lab Sample Number				2752955	2752956
Sample Reference				HS3-1	HS3-3
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/07/2023	17/07/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
General Inorganics					
pH (automated)	pH Units	N/A	ISO 17025	7.8	7.6
Total Cyanide	µg/l	10	ISO 17025	< 10	35
Total Phenols					
Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	15
Speciated PAHs					
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	0.15	0.24
Acenaphthene	µg/l	0.01	ISO 17025	0.2	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	0.19	0.25
Pyrene	µg/l	0.01	ISO 17025	0.16	0.16
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01
Total PAH					
Total EPA-16 PAHs	µg/l	0.2	NONE	0.7	0.7
Heavy Metals / Metalloids					
Arsenic (dissolved)	µg/l	1	ISO 17025	2.1	3.5
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	< 0.4	< 0.4
Copper (dissolved)	µg/l	0.7	ISO 17025	21	20
Lead (dissolved)	µg/l	1	ISO 17025	2.4	1.3
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	1.7	3.2
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	18	25
Monoaromatics & Oxygenates					
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10	< 10
Petroleum Hydrocarbons					
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	380	1500

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-45841
Project / Site name: Smithfield Market

Your Order No: 5528

Lab Sample Number				2752955	2752956
Sample Reference				HS3-1	HS3-3
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				17/07/2023	17/07/2023
Time Taken				None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	30	160
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	90	490
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	160	570
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	95	240
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	380	1500

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-45841
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2752953	HS3-1	None Supplied	None Supplied	Brown clay and sand with gravel.
2752954	HS3-3	None Supplied	None Supplied	Brown clay and sand with gravel and brick.

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Analytical Report Number : 23-42172-2

Replaces Analytical Report Number: 23-42172, issue no. 1
Client references/information amended.
Sample ID amended at client's request

Project / Site name:	Smithfield Market	**Samples received on:**	29/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	29/06/2023
Your order number:	005344	**Analysis completed by:**	04/07/2023
Report Issue Number:	2	**Report issued on:**	21/09/2023
Samples Analysed:	1 soil sample		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-42172
Project / Site name: Smithfield Market
Your Order No: 005344

Lab Sample Number				2731400
Sample Reference				HS4-SW
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				29/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	41
Moisture Content	%	0.01	NONE	21
Total mass of sample received	kg	0.001	NONE	1.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SFS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6
Total Cyanide	mg/kg	1	MCERTS	2.9
Total Sulphate as SO4	mg/kg	50	MCERTS	2200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.68
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1400
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	681
Sulphide	mg/kg	1	MCERTS	130
Total Sulphur	mg/kg	50	MCERTS	3200
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.2

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	390
Lead (aqua regia extractable)	mg/kg	1	MCERTS	580
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	85

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	< 10

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Analytical Report Number: 23-42172
Project / Site name: Smithfield Market
Your Order No: 005344

Lab Sample Number				2731400
Sample Reference				HS4-SW
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				29/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	0.012
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	< 10
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	< 10
VOCs				
Chloromethane	µg/kg	5	ISO 17025	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0
Chloroform	µg/kg	5	NONE	< 5.0
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0
Carbontetrachloride	µg/kg	5	NONE	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-xylene	µg/kg	5	MCERTS	< 5.0
Styrene	µg/kg	5	ISO 17025	< 5.0
Bromoform	µg/kg	5	NONE	< 5.0
o-xylene	µg/kg	5	MCERTS	< 5.0
Isopropylbenzene	µg/kg	5	ISO 17025	< 5.0
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0
Bromobenzene	µg/kg	5	NONE	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0

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Analytical Report Number: 23-42172
Project / Site name: Smithfield Market
Your Order No: 005344

Lab Sample Number				2731400
Sample Reference				HS4-SW
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				29/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	< 5.0
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	< 5.0
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	0.72
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	0.3
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1
Acenaphthylene	mg/kg	0.05	MCERTS	0.14
Acenaphthene	mg/kg	0.05	MCERTS	0.21
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	< 0.2
Fluorene	mg/kg	0.05	MCERTS	0.25

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Analytical Report Number: 23-42172
Project / Site name: Smithfield Market
Your Order No: 005344

Lab Sample Number				2731400
Sample Reference				HS4-SW
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				29/06/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Azobenzene	mg/kg	0.3	NONE	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	1.2
Anthracene	mg/kg	0.05	MCERTS	0.33
Carbazole	mg/kg	0.3	MCERTS	< 0.3
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	1.2
Pyrene	mg/kg	0.05	MCERTS	1.2
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.76
Chrysene	mg/kg	0.05	MCERTS	0.71
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.26
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.35
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.19
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.27

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-42172
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2731400	HS4-SW	None Supplied	None Supplied	Brown sand with gravel and stones.

Analytical Report Number : 23-42172
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS

Analytical Report Number : 23-42172
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-43105-2

Replaces Analytical Report Number: 23-43105, issue no. 1
Client references/information amended.
Sample ID amended at client's request

Project / Site name:	Smithfield Market	**Samples received on:**	29/06/2023
Your job number:	12 757	**Samples instructed on/ Analysis started on:**	05/07/2023
Your order number:	005344	**Analysis completed by:**	11/07/2023
Report Issue Number:	2	**Report issued on:**	21/09/2023
Samples Analysed:	1 wac multi sample		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

This certificate should not be reproduced, except in full, without the express permission of the laboratory.
The results included within the report relate only to the sample(s) submitted for testing.

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Waste Acceptance Criteria Analytical Results

Report No:	**23-43105**						
					Client:	**E3P**	
Location	**Smithfield Market**						
Lab Reference (Sample Number)	2736704				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	29/06/2023				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	HS4-SW						
Depth (m)							
Solid Waste Analysis							
TOC (%)**	1.3				3%	5%	6%
Loss on Ignition (%) **	9.7				--	--	10%
BTEX (µg/kg)**	16				6000	--	--
Sum of PCBs (mg/kg)**	< 0.30				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL	15				500	--	--
Total PAH (WAC-17) (mg/kg)	11.0				100	--	--
pH (units)**	7.0				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	0.00				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 3 preparation utilising end over end leaching procedure)	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/l		mg/kg			
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.085	0.083		0.84	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	< 0.0010	< 0.0010		0.0078	0.5	10	70
Copper *	0.0084	0.019		0.18	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	0.0039	< 0.0030		0.025	0.5	10	30
Nickel *	0.023	0.0033		0.053	0.4	10	40
Lead *	< 0.0050	0.012		0.11	0.5	10	50
Antimony *	< 0.0050	< 0.0050		< 0.020	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.025	0.0133		0.15	4	50	200
Chloride *	11	< 4.0		19	800	15000	25000
Fluoride*	0.40	0.22		2.4	10	150	500
Sulphate *	680	69		1300	1000	20000	50000
TDS*	660	130		1800	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	5.6	3.0		32	500	800	1000
Leach Test Information							
Stone Content (%)	41						
Sample Mass (kg)	1.3						
Dry Matter (%)	79						
Moisture (%)	21						
Stage 1							
Volume Eluate L2 (litres)	0.29						
Filtered Eluate VE1 (litres)	0.18						

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation

** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as

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The results included within the report are representative of the samples submitted for analysis.

amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Analytical Report Number : 23-43105
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2736704	HS4-SW	None Supplied	None Supplied	Brown sand with gravel and stones.

Analytical Report Number : 23-43105
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Preparation WAC leachate		In-house method	L043-PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270.	L064-PL	D	MCERTS
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033-PL	W	ISO 17025
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031-PL	W	ISO 17025
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037-PL	W	NONE
PCB's by GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
BTEX (Sum of BTEX compounds) in soil	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil in Soil C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS

Analytical Report Number : 23-43105
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Analytical Report Number : 23-45841
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS

Analytical Report Number : 23-45841
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
Total cyanide in leachate	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-45841
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-45842

Project / Site name:	Smithfield Market	**Samples received on:**	18/07/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	19/07/2023
Your order number:	SS29	**Analysis completed by:**	24/07/2023
Report Issue Number:	1	**Report issued on:**	24/07/2023
Samples Analysed:	1 leachate sample - 1 soil sample		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-45842
Project / Site name: Smithfield Market
Your Order No: SS29

Lab Sample Number				2752957
Sample Reference				HS4-1
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				17/07/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	17
Total mass of sample received	kg	0.001	NONE	1.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8
Total Cyanide	mg/kg	1	MCERTS	1.2
Total Sulphate as SO4	mg/kg	50	MCERTS	1800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.68
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1400
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	678
Sulphide	mg/kg	1	MCERTS	36
Total Sulphur	mg/kg	50	MCERTS	1700
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.9

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	170
Lead (aqua regia extractable)	mg/kg	1	MCERTS	120
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	240
Toluene	µg/kg	5	MCERTS	130
Ethylbenzene	µg/kg	5	MCERTS	180
p & m-xylene	µg/kg	5	MCERTS	590
o-xylene	µg/kg	5	MCERTS	290
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0

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Analytical Report Number: 23-45842
Project / Site name: Smithfield Market
Your Order No: SS29

Lab Sample Number				2752957
Sample Reference				HS4-1
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				17/07/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Petroleum Hydrocarbons				
TPH-CWG - Aliphatic >EC5 - EC6 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	< 0.10
TPH-CWG - Aliphatic >EC6 - EC8 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	0.35
TPH-CWG - Aliphatic >EC8 - EC10 $_{HS\_1D\_AL}$	mg/kg	0.1	NONE	1.8
TPH-CWG - Aliphatic >EC10 - EC12 $_{EH\_CU\_1D\_AL}$	mg/kg	1	MCERTS	3.4
TPH-CWG - Aliphatic >EC12 - EC16 $_{EH\_CU\_1D\_AL}$	mg/kg	2	MCERTS	30
TPH-CWG - Aliphatic >EC16 - EC21 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	44
TPH-CWG - Aliphatic >EC21 - EC35 $_{EH\_CU\_1D\_AL}$	mg/kg	8	MCERTS	62
TPH-CWG - Aliphatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AL}$	mg/kg	10	NONE	140
TPH-CWG - Aromatic >EC5 - EC7 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	0.26
TPH-CWG - Aromatic >EC7 - EC8 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	0.14
TPH-CWG - Aromatic >EC8 - EC10 $_{HS\_1D\_AR}$	mg/kg	0.1	NONE	1.2
TPH-CWG - Aromatic >EC10 - EC12 $_{EH\_CU\_1D\_AR}$	mg/kg	1	MCERTS	9.6
TPH-CWG - Aromatic >EC12 - EC16 $_{EH\_CU\_1D\_AR}$	mg/kg	2	MCERTS	92
TPH-CWG - Aromatic >EC16 - EC21 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	230
TPH-CWG - Aromatic >EC21 - EC35 $_{EH\_CU\_1D\_AR}$	mg/kg	10	MCERTS	190
TPH-CWG - Aromatic (EC5 - EC35) $_{EH\_CU+HS\_1D\_AR}$	mg/kg	10	NONE	520
VOCs				
Chloromethane	µg/kg	5	ISO 17025	< 5.0
Chloroethane	µg/kg	5	NONE	< 5.0
Bromomethane	µg/kg	5	ISO 17025	< 5.0
Vinyl Chloride	µg/kg	5	NONE	< 5.0
Trichlorofluoromethane	µg/kg	5	NONE	< 5.0
1,1-dichloroethene	µg/kg	5	NONE	< 5.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	< 5.0
Trans 1,2-dichloroethylene	µg/kg	5	NONE	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0
1,1-dichloroethane	µg/kg	5	ISO 17025	< 5.0
2,2-Dichloropropane	µg/kg	5	ISO 17025	< 5.0
Chloroform	µg/kg	5	NONE	8.3
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	< 5.0
1,2-dichloroethane	µg/kg	5	ISO 17025	< 5.0
1,1-Dichloropropene	µg/kg	5	ISO 17025	< 5.0
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	< 5.0
Benzene	µg/kg	5	MCERTS	240
Carbontetrachloride	µg/kg	5	NONE	< 5.0
1,2-dichloropropane	µg/kg	5	ISO 17025	< 5.0
Trichloroethene	µg/kg	5	ISO 17025	< 5.0
Dibromomethane	µg/kg	5	ISO 17025	< 5.0
Bromodichloromethane	µg/kg	5	ISO 17025	< 5.0
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	< 5.0
Toluene	µg/kg	5	MCERTS	130
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	< 5.0
1,3-Dichloropropane	µg/kg	5	ISO 17025	< 5.0
Dibromochloromethane	µg/kg	5	ISO 17025	< 5.0
Tetrachloroethene	µg/kg	5	NONE	< 5.0
1,2-Dibromoethane	µg/kg	5	ISO 17025	< 5.0
Chlorobenzene	µg/kg	5	ISO 17025	< 5.0
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	180

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Analytical Report Number: 23-45842
Project / Site name: Smithfield Market
Your Order No: SS29

Lab Sample Number				2752957
Sample Reference				HS4-1
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				17/07/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
p & m-xylene	µg/kg	5	MCERTS	590
Styrene	µg/kg	5	ISO 17025	26
Bromoform	µg/kg	5	NONE	< 5.0
o-xylene	µg/kg	5	MCERTS	290
Isopropylbenzene	µg/kg	5	ISO 17025	20
1,1,2,2-Tetrachloroethane	µg/kg	5	ISO 17025	< 5.0##
Bromobenzene	µg/kg	5	NONE	< 5.0
N-Propylbenzene	µg/kg	5	ISO 17025	< 5.0
2-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0
4-Chlorotoluene	µg/kg	5	ISO 17025	< 5.0
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	220
Tert-Butylbenzene	µg/kg	5	ISO 17025	< 5.0
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	250
Sec-Butylbenzene	µg/kg	5	ISO 17025	< 5.0
1,3-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0
P-Isopropyltoluene	µg/kg	5	ISO 17025	11
1,4-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0
1,2-dichlorobenzene	µg/kg	5	ISO 17025	< 5.0
Butylbenzene	µg/kg	5	NONE	< 5.0
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	< 5.0##
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0
Hexachlorobutadiene	µg/kg	5	NONE	< 5.0
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	< 5.0

SVOCs

Aniline	mg/kg	0.1	NONE	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3
Hexachloroethane	mg/kg	0.05	ISO 17025	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2
2-Nitrophenol	mg/kg	0.3	NONE	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	0.9
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	15
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	14
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	NONE	< 0.1

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Analytical Report Number: 23-45842
Project / Site name: Smithfield Market
Your Order No: SS29

Lab Sample Number				2752957
Sample Reference				HS4-1
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				17/07/2023
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Acenaphthylene	mg/kg	0.05	MCERTS	9.4
Acenaphthene	mg/kg	0.05	MCERTS	7.7
2,4-Dinitrotoluene	mg/kg	0.2	NONE	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	5.8
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2
4-Nitroaniline	mg/kg	0.2	NONE	0.6
Fluorene	mg/kg	0.05	MCERTS	16
Azobenzene	mg/kg	0.3	NONE	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3
Phenanthrene	mg/kg	0.05	MCERTS	34
Anthracene	mg/kg	0.05	MCERTS	16
Carbazole	mg/kg	0.3	MCERTS	2.5
Dibutyl phthalate	mg/kg	0.2	NONE	< 0.2
Anthraquinone	mg/kg	0.3	NONE	< 0.3
Fluoranthene	mg/kg	0.05	MCERTS	29
Pyrene	mg/kg	0.05	MCERTS	33
Butyl benzyl phthalate	mg/kg	0.3	NONE	< 0.3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	17
Chrysene	mg/kg	0.05	MCERTS	13
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	11
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	4.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	12
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	4.2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.5
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.5

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-45842
Project / Site name: Smithfield Market

Your Order No: SS29

Lab Sample Number				2752958
Sample Reference				HS4-1
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				17/07/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (automated)	pH Units	N/A	ISO 17025	8.3
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	5.2
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	0.3
Acenaphthylene	µg/l	0.01	ISO 17025	0.34
Acenaphthene	µg/l	0.01	ISO 17025	0.73
Fluorene	µg/l	0.01	ISO 17025	0.36
Phenanthrene	µg/l	0.01	ISO 17025	0.23
Anthracene	µg/l	0.01	ISO 17025	0.12
Fluoranthene	µg/l	0.01	ISO 17025	0.18
Pyrene	µg/l	0.01	ISO 17025	0.16
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.2	NONE	2.4
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	1	ISO 17025	5.6
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	0.8
Copper (dissolved)	µg/l	0.7	ISO 17025	9.2
Lead (dissolved)	µg/l	1	ISO 17025	2.4
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	1.3
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	9.3
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10

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Analytical Report Number: 23-45842
Project / Site name: Smithfield Market

Your Order No: SS29

Lab Sample Number				2752958
Sample Reference				HS4-1
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				17/07/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Petroleum Hydrocarbons				
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	280
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0##
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	55
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	90
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	90
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	40
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	280

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-45842
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2752957	HS4-1	None Supplied	None Supplied	Grey gravly sand with clinker.

Analytical Report Number : 23-45842
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS

Analytical Report Number : 23-45842
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-45842
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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Analytical Report Number : 23-45844

Project / Site name:	Smithfield Market	**Samples received on:**	18/07/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	19/07/2023
Your order number:	SS29	**Analysis completed by:**	26/07/2023
Report Issue Number:	1	**Report issued on:**	26/07/2023
Samples Analysed:	1 wac multi sample		

Izabela Wójcik

Signed:

Izabela Wójcik
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

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Waste Acceptance Criteria Analytical Results

Report No:	23-45844						
					Client: E3P		
Location	Smithfield Market						
Lab Reference (Sample Number)	2752961				Landfill Waste Acceptance Criteria Limits		
Sampling Date	17/07/2023						
Sample ID	HS4-1				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Depth (m)							
Solid Waste Analysis							
TOC (%)**	1.7				3%	5%	6%
Loss on Ignition (%) **	5.2				--	--	10%
BTEX (µg/kg)**	1600				6000	--	--
Sum of PCBs (mg/kg)**	< 0.30				1	--	--
Mineral Oil (mg/kg) EH_1D_CU_AL #	120				500	--	--
Total PAH (WAC-17) (mg/kg)	165				100	--	--
pH (units)**	7.6				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	5.0				--	To be evaluated	To be evaluated
Eluate Analysis (BS EN 12457 - 3 preparation utilising end over end leaching procedure)	2:1 mg/l	8:1 mg/l		Cumulative 10:1 mg/kg	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.061	0.14		1.3	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	< 0.0010	< 0.0010		< 0.0050	0.5	10	70
Copper *	0.015	< 0.0030		0.041	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	0.044	< 0.0030		0.083	0.5	10	30
Nickel *	0.0014	< 0.0010		< 0.0050	0.4	10	40
Lead *	< 0.0050	< 0.0050		< 0.020	0.5	10	50
Antimony *	< 0.0050	< 0.0050		< 0.020	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.0054	0.0022		0.027	4	50	200
Chloride *	12	< 4.0		37	800	15000	25000
Fluoride*	0.29	0.12		1.5	10	150	500
Sulphate *	53	110		1000	1000	20000	50000
TDS*	160	220		2200	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	15	4.5		60	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.3						
Dry Matter (%)	83						
Moisture (%)	17						
Stage 1							
Volume Eluate L2 (litres)	0.31						
Filtered Eluate VE1 (litres)	0.25						

Results are expressed on a dry weight basis, after correction for moisture content where applicable. *= UKAS accredited (liquid eluate analysis only)

Stated limits are for guidance only and i2 cannot be held responsible for any discrepencies with current legislation ** = MCERTS accredited

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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The results included within the report are representative of the samples submitted for analysis.

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Analytical Report Number : 23-41467

Project / Site name:	Smithfield Market	**Samples received on:**	26/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	26/06/2023
Your order number:		**Analysis completed by:**	30/06/2023
Report Issue Number:	1	**Report issued on:**	30/06/2023
Samples Analysed:	1 leachate sample - 4 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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An estimate of measurement uncertainty can be provided on request.

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Analytical Report Number: 23-41467
Project / Site name: Smithfield Market

Lab Sample Number				2727047	2727048	2727049	2727050
Sample Reference				TT2 NORTH	TT2 WEST	TT2 SOUTH	TT2 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	17	17	19
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	1.2
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	8	8.5	7.8
Total Cyanide	mg/kg	1	MCERTS	1.5	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	530	1100	300	1300
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.11	0.39	0.041	0.3
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	220	780	83	600
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	111	388	41.4	302
Sulphide	mg/kg	1	MCERTS	47	7	5.4	24
Total Sulphur	mg/kg	50	MCERTS	1600	660	310	2000
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	0.9	0.9	1.8

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.13	0.05	0.09	0.29
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.14	0.41
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	0.36
Phenanthrene	mg/kg	0.05	MCERTS	0.12	0.16	0.64	2.2
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.17	0.78
Fluoranthene	mg/kg	0.05	MCERTS	0.13	0.22	0.75	2.9
Pyrene	mg/kg	0.05	MCERTS	0.15	0.21	0.92	3
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.11	0.12	0.78	3.5
Chrysene	mg/kg	0.05	MCERTS	0.11	0.13	0.81	3.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.08	0.12	0.9	4.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05	< 0.05	0.39	2.3
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.11	0.1	1.1	5
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.53	2
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.92
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.73	2.7

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	0.99	1.11	8.03	33.8

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Analytical Report Number: 23-41467
Project / Site name: Smithfield Market

Lab Sample Number				2727047	2727048	2727049	2727050
Sample Reference				TT2 NORTH	TT2 WEST	TT2 SOUTH	TT2 ARISINGS
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	22/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.8	8.6	9	26
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	24	25	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	50	96	66	670
Lead (aqua regia extractable)	mg/kg	1	MCERTS	36	50	38	1000
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	9.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27	27	33	31
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	76	74	65	220
Petroleum Hydrocarbons							
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	7.6
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	34
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	< 10	< 10	47

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number: 23-41467
Project / Site name: Smithfield Market

Lab Sample Number				2727051
Sample Reference				TT2 ARISINGS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				22/06/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (automated)	pH Units	N/A	ISO 17025	7.8
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	1.4
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	0.5
Copper (dissolved)	µg/l	0.7	ISO 17025	6.8
Lead (dissolved)	µg/l	1	ISO 17025	1.4
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	4.7
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	13
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10
Petroleum Hydrocarbons				
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	< 10

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Analytical Report Number: 23-41467
Project / Site name: Smithfield Market

Lab Sample Number				2727051
Sample Reference				TT2 ARISINGS
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				22/06/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10
TPH-CWG - Aromatic (C5 - C35) $_{HS+EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-41467
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2727047	TT2 NORTH	None Supplied	None Supplied	Brown clay and sand with gravel.
2727048	TT2 WEST	None Supplied	None Supplied	Brown clay and sand with gravel.
2727049	TT2 SOUTH	None Supplied	None Supplied	Brown clay and sand with gravel.
2727050	TT2 ARISINGS	None Supplied	None Supplied	Brown sand with clinker and gravel

Analytical Report Number : 23-41467
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE

Analytical Report Number : 23-41467
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-41467
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Analytical Report Number : 23-45844
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2752961	HS4-1	None Supplied	None Supplied	Grey gravely sand with clinker.

Analytical Report Number : 23-45844
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Preparation WAC leachate		In-house method	L043-PL	W	NONE
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270.	L064-PL	D	MCERTS
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033-PL	W	ISO 17025
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031-PL	W	ISO 17025
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037-PL	W	NONE
PCB's by GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	NONE
BTEX (Sum of BTEX compounds) in soil	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil in Soil C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS

Analytical Report Number : 23-45844
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 23-41106

Project / Site name:	Smithfield Market	**Samples received on:**	23/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	23/06/2023
Your order number:	005299	**Analysis completed by:**	29/06/2023
Report Issue Number:	1	**Report issued on:**	29/06/2023
Samples Analysed:	4 soil samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-41106
Project / Site name: Smithfield Market
Your Order No: 005299

Lab Sample Number				2724899	2724900	2724901	2724902
Sample Reference				TT1 Base	TT1 East	TT1 South	TT1 Arisings
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	23/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	11	9.7	8.5
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.8	1.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	LFT	LFT	LFT	LFT

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.3	8.2	7.5	7.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	2.7
Total Sulphate as SO4	mg/kg	50	MCERTS	2300	270	380	2100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.7	0.065	0.09	0.62
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1400	130	180	1200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	700	64.9	90.1	616
Sulphide	mg/kg	1	MCERTS	8.7	< 1.0	< 1.0	26
Total Sulphur	mg/kg	50	MCERTS	1200	190	230	1900
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.9	0.8	0.7	1.3

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.37	0.08	0.07	0.49
Acenaphthylene	mg/kg	0.05	MCERTS	0.28	< 0.05	< 0.05	0.12
Acenaphthene	mg/kg	0.05	MCERTS	0.35	< 0.05	< 0.05	0.17
Fluorene	mg/kg	0.05	MCERTS	0.42	< 0.05	< 0.05	0.25
Phenanthrene	mg/kg	0.05	MCERTS	2.2	0.06	0.08	1.1
Anthracene	mg/kg	0.05	MCERTS	0.79	< 0.05	< 0.05	0.29
Fluoranthene	mg/kg	0.05	MCERTS	2.8	< 0.05	< 0.05	0.96
Pyrene	mg/kg	0.05	MCERTS	2.9	< 0.05	0.05	1.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.5	< 0.05	< 0.05	0.78
Chrysene	mg/kg	0.05	MCERTS	1.2	< 0.05	< 0.05	0.8
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.5	< 0.05	< 0.05	0.91
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.5	< 0.05	< 0.05	0.37
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.2	< 0.05	< 0.05	0.84
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.46	< 0.05	< 0.05	0.36
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.15	< 0.05	< 0.05	0.13
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.52	< 0.05	< 0.05	0.47

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	17	< 0.80	< 0.80	9.11

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Analytical Report Number: 23-41106
Project / Site name: Smithfield Market
Your Order No: 005299

Lab Sample Number				2724899	2724900	2724901	2724902
Sample Reference				TT1 Base	TT1 East	TT1 South	TT1 Arisings
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				22/06/2023	22/06/2023	23/06/2023	22/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.2	9.3	9.3	14
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	26	26	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	35	25	25	170
Lead (aqua regia extractable)	mg/kg	1	MCERTS	230	14	15	190
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	32	34	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	86	54	54	120
Petroleum Hydrocarbons							
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	5.6	< 1.0	< 1.0	11
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	15	< 1.0	< 1.0	35
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	NONE	< 10	< 10	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	21	< 10	< 10	50

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-41106
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2724899	TT1 Base	None Supplied	None Supplied	Brown clay and sand with gravel.
2724900	TT1 East	None Supplied	None Supplied	Brown clay and sand with gravel.
2724901	TT1 South	None Supplied	None Supplied	Brown clay and sand with gravel.
2724902	TT1 Arisings	None Supplied	None Supplied	Brown clay and sand with gravel.

Analytical Report Number : 23-41106
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-41106
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-20763

Project / Site name:	Smithfield Market	**Samples received on:**	02/03/2023
Your job number:	12 757	**Samples instructed on/ Analysis started on:**	03/03/2023
Your order number:	4269	**Analysis completed by:**	10/03/2023
Report Issue Number:	1	**Report issued on:**	10/03/2023
Samples Analysed:	1 leachate sample - 3 soil samples		

Signed:

Dominika Warjan
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-20763
Project / Site name: Smithfield Market
Your Order No: 4269

Lab Sample Number				2604023	2604024	2604025
Sample Reference				MG BF 101	MG BF 102	MG BF 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/03/2023	01/03/2023	01/03/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	15	15	14
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA	DSA	DSA
General Inorganics						
pH - Automated	pH Units	N/A	MCERTS	8.6	8.3	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	810	840	560
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.3	0.3	0.18
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	590	600	350
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	296	299	177
Sulphide	mg/kg	1	MCERTS	17	24	49
Total Sulphur	mg/kg	50	MCERTS	640	690	650
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.7	0.8	0.7
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	0.22	0.25	0.15
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.11	0.15	0.05
Fluorene	mg/kg	0.05	MCERTS	0.09	0.1	0.06
Phenanthrene	mg/kg	0.05	MCERTS	0.49	0.43	0.25
Anthracene	mg/kg	0.05	MCERTS	0.09	0.09	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.44	0.38	0.14
Pyrene	mg/kg	0.05	MCERTS	0.47	0.36	0.14
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.3	0.24	0.12
Chrysene	mg/kg	0.05	MCERTS	0.29	0.27	0.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.38	0.23	0.11
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.09	0.12	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.31	0.23	0.09
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.17	0.11	0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.23	0.15	0.08
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	3.73	3.11	1.34

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Analytical Report Number: 23-20763
Project / Site name: Smithfield Market
Your Order No: 4269

Lab Sample Number				2604023	2604024	2604025
Sample Reference				MG BF 101	MG BF 102	MG BF 103
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				01/03/2023	01/03/2023	01/03/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	8.7	7.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.3	0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	26	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	72	99	28
Lead (aqua regia extractable)	mg/kg	1	MCERTS	89	93	22
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	32	32	29
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	110	54
Petroleum Hydrocarbons						
TPH (C5 - C6) $_{HS\_1D\_TOTAL}$	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (C6 - C8) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C8 - C10) $_{HS\_1D\_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (C12 - C16) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0
TPH (C16 - C21) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	7.2	< 1.0	< 1.0
TPH (C21 - C35) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	1	MCERTS	14	< 1.0	< 1.0
TPH (C35 - C40) $_{EH\_CU\_1D\_TOTAL}$	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH Total C5 - C40 $_{EH\_CU+HS\_1D\_TOTAL}$	mg/kg	10	NONE	29	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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UKAS TESTING
4041

Analytical i2 Environmental Science

Analytical Report Number: 23-20763
Project / Site name: Smithfield Market

Your Order No: 4269

Lab Sample Number				2604026
Sample Reference				MG BF 101
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				01/03/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
General Inorganics				
pH (automated)	pH Units	N/A	ISO 17025	7.9
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0
Total Phenols				
Total Phenols (monohydric)	µg/l	1	ISO 17025	< 1.0
Speciated PAHs				
Naphthalene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01
Total PAH				
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2
Heavy Metals / Metalloids				
Arsenic (dissolved)	µg/l	1	ISO 17025	< 1.0
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	2.5
Copper (dissolved)	µg/l	0.7	ISO 17025	7.7
Lead (dissolved)	µg/l	1	ISO 17025	< 1.0
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	0.6
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	15
Monoaromatics & Oxygenates				
Benzene	µg/l	3	ISO 17025	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	10	NONE	< 10

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Analytical Report Number: 23-20763
Project / Site name: Smithfield Market

Your Order No: 4269

Lab Sample Number				2604026
Sample Reference				MG BF 101
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				01/03/2023
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	**Units**	**Limit of detection**	**Accreditation Status**	
Petroleum Hydrocarbons				
TPH1 (C10 - C40) EH_1D_TOTAL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C5 - C6 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C6 - C8 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C8 - C10 HS_1D_AL	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aliphatic >C10 - C12 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C12 - C16 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C16 - C21 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic >C21 - C35 EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aliphatic (C5 - C35) HS+EH_1D_AL_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C5 - C7 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C7 - C8 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C8 - C10 HS_1D_AR	µg/l	1	ISO 17025	< 1.0
TPH-CWG - Aromatic >C10 - C12 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C12 - C16 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C16 - C21 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic >C21 - C35 EH_1D_AR_MS	µg/l	10	NONE	< 10
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-20763
Project / Site name: Smithfield Market

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2604023	MG BF 101	None Supplied	None Supplied	Brown clay and sand with vegetation.
2604024	MG BF 102	None Supplied	None Supplied	Brown clay and sand.
2604025	MG BF 103	None Supplied	None Supplied	Brown clay and sand.

Analytical Report Number : 23-20763
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in leachate - LOW LEVEL 1 ug/l	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
pH at 20oC in leachate (automated)	Determination of pH in leachate by electrometric measurement.	In house method.	L099B	W	ISO 17025
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	In house method.	L038-PL	D	MCERTS

Analytical Report Number : 23-20763
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	NONE
TPHCWG (Leachates)	Determination of dichloromethane extractable hydrocarbons in leachate by GC-MS.	In-house method	L070-PL	W	ISO 17025
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in leachates (Monoaromatics)	Determination of BTEX and MTBE in leachates by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
TPH in (Soil)	Determination of TPH bands by HS-GC-MS/GC-FID	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Total cyanide in leachate - 1µg/l	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

Analytical Report Number : 23-20763
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Analytical Report Number : 23-36420

Project / Site name:	Smithfields Market	**Samples received on:**	26/05/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	31/05/2023
Your order number:	005006	**Analysis completed by:**	02/06/2023
Report Issue Number:	1	**Report issued on:**	02/06/2023
Samples Analysed:	3 soil samples		

Signed:

Joanna Wawrzeczko
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

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Analytical Report Number: 23-36420
Project / Site name: Smithfields Market
Your Order No: 005006

Lab Sample Number				2695230	2695231	2695232
Sample Reference				MG AV 01	MG AV 02	MG AV 03
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				24/05/2023	24/05/2023	24/05/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**			
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	MJN	MJN	MJN

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number : 23-36420
Project / Site name: Smithfields Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

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Analytical Report Number : 23-42534

Project / Site name:	Smithfield Market	**Samples received on:**	30/06/2023
Your job number:	12-757	**Samples instructed on/ Analysis started on:**	30/06/2023
Your order number:	005343	**Analysis completed by:**	07/07/2023
Report Issue Number:	1	**Report issued on:**	07/07/2023
Samples Analysed:	4 water samples		

Signed:

Dominika Warjan
Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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The results included within the report relate only to the sample(s) submitted for testing.

Analytical Report Number: 23-42534
Project / Site name: Smithfield Market

Your Order No: 005343

Lab Sample Number				2733383	2733384	2733385	2733386
Sample Reference				SW	SW 2	Wall Water 1	Wall Water 2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/06/2023	29/06/2023	29/06/2023	29/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
General Inorganics							
pH (L005B)	pH Units	N/A	ISO 17025	7.8	7.7	8.2	8.3
Total Cyanide (Low Level 1 µg/l)	µg/l	1	ISO 17025	< 1.0	< 1.0	5.2	4.5
Dissolved Organic Carbon (DOC)	mg/l	0.1	ISO 17025	9.87	8.78	8.16	7.44
Total Phenols							
Total Phenols (monohydric)	µg/l	1	ISO 17025	2.3	2.1	13	10
Heavy Metals / Metalloids							
Calcium (dissolved)	mg/l	0.012	ISO 17025	51	53	49	48
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	U/S
Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.83	3.07	2.24	2.15
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	< 0.02	< 0.02	< 0.02
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.5	0.4	10	2.8
Copper (dissolved)	µg/l	0.5	ISO 17025	1.3	1.4	4.6	5.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2
Manganese (dissolved)	µg/l	0.05	ISO 17025	230	260	58	56
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	2.6	2.5	1.4	1.2
Selenium (dissolved)	µg/l	0.6	ISO 17025	1	0.8	0.8	1
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.9	2.2	3.3	2.3
Monoaromatics & Oxygenates							
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Petroleum Hydrocarbons							
TPH1 (C10 - C40) $_{EH\_1D\_TOTAL\_MS}$	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C5 - C6 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C6 - C8 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C8 - C10 $_{HS\_1D\_AL}$	µg/l	1	ISO 17025	< 1.0##	< 1.0	< 1.0##	< 1.0##
TPH-CWG - Aliphatic >C10 - C12 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35 $_{EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35) $_{HS+EH\_1D\_AL\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C5 - C7 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C7 - C8 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C8 - C10 $_{HS\_1D\_AR}$	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >C10 - C12 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35 $_{EH\_1D\_AR\_MS}$	µg/l	10	NONE	< 10	< 10	< 10	< 10

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Analytical Report Number: 23-42534
Project / Site name: Smithfield Market

Your Order No: 005343

Lab Sample Number				2733383	2733384	2733385	2733386
Sample Reference				SW	SW 2	Wall Water 1	Wall Water 2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/06/2023	29/06/2023	29/06/2023	29/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
TPH-CWG - Aromatic (C5 - C35) HS+EH_1D_AR_MS	µg/l	10	NONE	< 10	< 10	< 10	< 10
VOCs							
Chloromethane	µg/l	3	ISO 17025	< 3.0##	< 3.0##	< 3.0	< 3.0
Chloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Vinyl Chloride	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
Trichlorofluoromethane	µg/l	3	NONE	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/l	3	ISO 17025	< 3.0##	< 3.0	< 3.0##	< 3.0##
Trans 1,2-dichloroethylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
2,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0##	< 3.0	< 3.0	< 3.0
Chloroform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1-Dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,2-dichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Carbontetrachloride	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0##	< 3.0##
1,2-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trichloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromomethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromodichloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Cis-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Trans-1,3-dichloropropene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2-Trichloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Dibromochloromethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Tetrachloroethene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromoethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Chlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,1,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p & m-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Styrene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromoform	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
o-Xylene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Isopropylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,1,2,2-Tetrachloroethane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Bromobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
n-Propylbenzene	µg/l	3	ISO 17025	< 3.0##	< 3.0	< 3.0	< 3.0
2-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
4-Chlorotoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3,5-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
tert-Butylbenzene	µg/l	3	ISO 17025	< 3.0##	< 3.0	< 3.0	< 3.0
1,2,4-Trimethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
sec-Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,3-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
p-Isopropyltoluene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

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Analytical Report Number: 23-42534
Project / Site name: Smithfield Market

Your Order No: 005343

Lab Sample Number				2733383	2733384	2733385	2733386
Sample Reference				SW	SW 2	Wall Water 1	Wall Water 2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/06/2023	29/06/2023	29/06/2023	29/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
1,4-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Butylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2-Dibromo-3-chloropropane	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
1,2,4-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0
Hexachlorobutadiene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0##	< 3.0##
1,2,3-Trichlorobenzene	µg/l	3	ISO 17025	< 3.0	< 3.0	< 3.0	< 3.0

SVOCs

Aniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroethyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bis(2-chloroisopropyl)ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Isophorone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Nitrophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dimethylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	1.4	0.97
Bis(2-chloroethoxy)methane	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chloro-3-methylphenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,6-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,4,5-Trichlorophenol	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2-Chloronaphthalene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dimethylphthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
2,6-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
2,4-Dinitrotoluene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzofuran	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Chlorophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Diethyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
4-Nitroaniline	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Azobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Bromophenyl phenyl ether	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Carbazole	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Dibutyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05

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Analytical Report Number: 23-42534
Project / Site name: Smithfield Market

Your Order No: 005343

Lab Sample Number				2733383	2733384	2733385	2733386
Sample Reference				SW	SW 2	Wall Water 1	Wall Water 2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				29/06/2023	29/06/2023	29/06/2023	29/06/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	**Units**	**Limit of detection**	**Accreditation Status**				
Anthraquinone	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Butyl benzyl phthalate	µg/l	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01
3&4-Methylphenol	µg/l	0.1	NONE	< 0.10	< 0.10	< 0.10	< 0.10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

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Analytical Report Number : 23-42534
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-OES (dissolved)	Determination of metals in water by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW.(Al, Cu,Fe,Zn).	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Monohydric phenols in water - LOW LEVEL 1 ug/l	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds in leachate by extraction in dichloromethane followed by GC-MS.	In-house method based on USEPA 8270	L102B-PL	W	ISO 17025
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	ISO 17025
Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Dissolved Organic Carbon in water	Determination of dissolved inorganic carbon in water by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Low level total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In house method.	L099-PL	W	ISO 17025

Analytical Report Number : 23-42534
Project / Site name: Smithfield Market

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
TPH1 (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS.	In-house method	L070-PL	W	ISO 17025

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL or B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

Sample Deviation Report

Analytical Report Number : 23-42534
Project / Site name: Smithfield Market

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis.Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
SW	None Supplied	W	2733383	c	pH at 20oC in water (automated)	L099-PL	c
SW 2	None Supplied	W	2733384	c	pH at 20oC in water (automated)	L099-PL	c
Wall Water 1	None Supplied	W	2733385	c	pH at 20oC in water (automated)	L099-PL	c
Wall Water 2	None Supplied	W	2733386	c	pH at 20oC in water (automated)	L099-PL	c

HazWasteOnline™

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

CEN9P-T5OKH-8EBP7

This Waste Classification Report contains user defined substances. See Appendix A for details.

Job name

12-757 - Smithfield Market (HS3-1 & HS3-3)

Description/Comments

This Waste Classification is based on the analytical results provided by E3P on the Chemtest Analytical Ltd 'Analytical Report' Number 23-45841. Soil Samples Only. During the assessment we have considered the 'worst or most reasonable case' metals compounds as laboratory reports only provide total concentrations of a metal e.g. Cu but not which compound(s) (species) of the metal present within the respective soil samples e.g. CuSO4. If the assessment is non-hazardous based on these worst-case species no further 'species' consideration is required. With TPH, WM3 (EA) require assessment of the potential presence of an unknown 'oil' by assessing the TPH range C6 – C40. in the case of 23-45841, TPH C5-35 has been analysed, meaning the full TPH range required by WM3 has not been assessed. Where the concentration of TPH is >0.1% (1000mg/kg) the 'soil' will be classed as HP 7 Carcinogenic and HP 11 Mutagenic, unless the concentration of the marker benzo(a)pyrene is <0.01% of the TPH concentration and confirmation is received that the TPH result has not arisen from petrol or diesel sources. Note that samples consider moisture content correction factors. In the case of any samples exceeding the 1000mg/kg TPH value and also the marker benzo(a)pyrene at <0.01% of the TPH concentration, the moisture correction factor could make it 'non-hazardous'. It is the responsibility of the geo-environmental consultant to target the laboratory analysis suite and testing to appropriately reflect the nature of the site, its activities and its impact on surrounding soils. WM3 states that the assessment of asbestos containing waste considers both the presence of asbestos as a) fibres that are free and dispersed, and b) identifiable pieces of asbestos containing material. If the waste contains fibres that are free and dispersed then the waste will be hazardous if the waste as a whole contains 0.1% or more asbestos. Where the waste contains identifiable pieces of asbestos containing material (i.e. any size that can be identified as potentially being asbestos by a competent person by the naked eye) it is deemed hazardous.

Project

Waste classification

Site

Smithfield Market

Classified by

Name:
Alicia Vermeulen
Date:
26 Jul 2023 15:15 GMT
Telephone:
01617060402

Company:
RJT Consulting Partnerships Ltd
E3P Building, Taylor Road
Trafford Park
Manchester
M41 7JQ

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: CERTIFIED

Course	Date
Hazardous Waste Classification	09 Dec 2021

Next 3 year Refresher due by Dec 2024

Purpose of classification

2 - Material Characterisation

Address of the waste

Smithfield Market, Whitworth street **Post Code** M11 2WJ

SIC for the process giving rise to the waste

43110 Demolition

Description of industry/producer giving rise to the waste

Demolition of old warehouse buildings and construction of new warehouse buildings for market re-development.

Description of the specific process, sub-process and/or activity that created the waste

Demolishing of old warehouse buildings and the construction of new warehouse buildings for the market.

Description of the waste

Brown clay and sand with gravel & brick

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	HS3-1		Non Hazardous		4
2	HS3-3		Non Hazardous		7

Related documents

#	Name	Description
1	E3P I2 Characterisation Suite 4 - Additions of BTEX and SVOC/VOC	waste stream template used to create this Job

Report

Created by: Alicia Vermeulen

Created date: 26 Jul 2023 15:15 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	10
Appendix B: Rationale for selection of metal species	11
Appendix C: Version	12

Classification of sample: HS3-1

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
HS3-1
Moisture content:
13%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.9 pH		7.9 pH	7.9 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				11 mg/kg	1.884	18.34 mg/kg	0.00183 %	✓	
3	phenol	604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
4	naphthalene	601-052-00-2	202-049-5	91-20-3		0.96 mg/kg		0.85 mg/kg	0.000085 %	✓	
5	acenaphthylene		205-917-1	208-96-8		0.56 mg/kg		0.496 mg/kg	0.0000496 %	✓	
6	acenaphthene		201-469-6	83-32-9		0.87 mg/kg		0.77 mg/kg	0.000077 %	✓	
7	fluorene		201-695-5	86-73-7		1.4 mg/kg		1.239 mg/kg	0.000124 %	✓	
8	phenanthrene		201-581-5	85-01-8		3.5 mg/kg		3.097 mg/kg	0.00031 %	✓	
9	anthracene		204-371-1	120-12-7		1.4 mg/kg		1.239 mg/kg	0.000124 %	✓	
10	fluoranthene		205-912-4	206-44-0		3.6 mg/kg		3.186 mg/kg	0.000319 %	✓	
11	pyrene		204-927-3	129-00-0		3.9 mg/kg		3.451 mg/kg	0.000345 %	✓	
12	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.7 mg/kg		1.504 mg/kg	0.00015 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9		1.6 mg/kg		1.416 mg/kg	0.000142 %	✓	
14	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		1.2 mg/kg		1.062 mg/kg	0.000106 %	✓	
15	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.66 mg/kg		0.584 mg/kg	0.0000584 %	✓	
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		1.3 mg/kg		1.15 mg/kg	0.000115 %	✓	

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
17	indeno[123-cd]pyrene		205-893-2	193-39-5		0.59 mg/kg		0.522 mg/kg	0.0000522 %	✓	
18	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.21 mg/kg		0.186 mg/kg	0.0000186 %	✓	
19	benzo[ghi]perylene		205-883-8	191-24-2		0.72 mg/kg		0.637 mg/kg	0.0000637 %	✓	
20	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14 mg/kg	1.32	16.358 mg/kg	0.00164 %	✓	
21	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<**LOD**
22	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<**LOD**
23	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		26 mg/kg	1.462	33.629 mg/kg	0.00336 %	✓	
24	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		320 mg/kg	1.126	318.836 mg/kg	0.0319 %	✓	
25	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	230 mg/kg	1.56	317.485 mg/kg	0.0204 %	✓	
26	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.7 mg/kg	1.353	0.838 mg/kg	0.0000838 %	✓	
27	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		33 mg/kg	2.976	86.917 mg/kg	0.00869 %	✓	
28	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
29	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		120 mg/kg	2.774	294.6 mg/kg	0.0295 %	✓	
30	TPH (C6 to C40) petroleum group			TPH		45 mg/kg		39.823 mg/kg	0.00398 %	✓	
31	benzene	601-020-00-8	200-753-7	71-43-2		<5 µg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
32	toluene	601-021-00-3	203-625-9	108-88-3		27 µg/kg		0.0239 mg/kg	0.00000239 %	✓	
33	ethylbenzene	601-023-00-4	202-849-4	100-41-4		21 µg/kg		0.0186 mg/kg	0.00000186 %	✓	
34	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		185 µg/kg		0.164 mg/kg	0.0000164 %	✓	
35	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8		31 µg/kg		0.0274 mg/kg	0.00000274 %	✓	
36	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6		70 µg/kg		0.0619 mg/kg	0.00000619 %	✓	
37	2-Methylnapthalene		202-078-3	91-57-6		0.6 mg/kg		0.531 mg/kg	0.0000531 %	✓	
38	dibenzofuran		205-071-3	132-64-9		0.6 mg/kg		0.531 mg/kg	0.0000531 %	✓	
								Total:	0.104 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Determinand defined by classifier (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Toluene, ethylbenzene, o-xylene, p-xylene, m-xylene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene are only hazardous in terms of HP3(i) as there is no published threshold. The values suggest it is unlikely that there would be any potential flammability. TPH HP3(i) is based on liquid samples. All samples analysed as part of this WM3 were completed on solid soil samples, therefore the hazardous threshold should be increased to 1000 making this non-hazardous.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

toluene: (conc.: 2.39e-06%)
ethylbenzene: (conc.: 1.86e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

TPH (C6 to C40) petroleum group: (conc.: 0.00398%)
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]: (conc.: 0.00001%)
mesitylene; 1,3,5-trimethylbenzene: (conc.: 2.74e-06%)
1,2,4-trimethylbenzene: (conc.: 6.19e-06%)

Classification of sample: HS3-3

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
HS3-3
Moisture content:
18%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 18% Dry Weight Moisture Correction applied (MC)

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	pH			PH		8.3 pH		8.3 pH	8.3 pH		
2	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<**LOD**
3	phenol	604-001-00-2	203-632-7	108-95-2		0.6 mg/kg		0.508 mg/kg	0.0000508 %	✓	
4	naphthalene	601-052-00-2	202-049-5	91-20-3		2.9 mg/kg		2.458 mg/kg	0.000246 %	✓	
5	acenaphthylene		205-917-1	208-96-8		0.23 mg/kg		0.195 mg/kg	0.0000195 %	✓	
6	acenaphthene		201-469-6	83-32-9		0.53 mg/kg		0.449 mg/kg	0.0000449 %	✓	
7	fluorene		201-695-5	86-73-7		0.78 mg/kg		0.661 mg/kg	0.0000661 %	✓	
8	phenanthrene		201-581-5	85-01-8		2.4 mg/kg		2.034 mg/kg	0.000203 %	✓	
9	anthracene		204-371-1	120-12-7		0.67 mg/kg		0.568 mg/kg	0.0000568 %	✓	
10	fluoranthene		205-912-4	206-44-0		1.5 mg/kg		1.271 mg/kg	0.000127 %	✓	
11	pyrene		204-927-3	129-00-0		1.5 mg/kg		1.271 mg/kg	0.000127 %	✓	
12	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.59 mg/kg		0.5 mg/kg	0.00005 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9		0.65 mg/kg		0.551 mg/kg	0.0000551 %	✓	
14	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.33 mg/kg		0.28 mg/kg	0.000028 %	✓	
15	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.2 mg/kg		0.169 mg/kg	0.0000169 %	✓	
16	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.31 mg/kg		0.263 mg/kg	0.0000263 %	✓	

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
17	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
18	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
19	benzo[ghi]perylene		205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.2 mg/kg	1.32	8.056 mg/kg	0.000806 %	✓	
21	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
22	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
23	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		14 mg/kg	1.462	17.34 mg/kg	0.00173 %	✓	
24	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		180 mg/kg	1.126	171.746 mg/kg	0.0172 %	✓	
25	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	190 mg/kg	1.56	251.157 mg/kg	0.0161 %	✓	
26	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
27	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		14 mg/kg	2.976	35.312 mg/kg	0.00353 %	✓	
28	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
29	zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		58 mg/kg	2.774	136.356 mg/kg	0.0136 %	✓	
30	TPH (C6 to C40) petroleum group			TPH		44 mg/kg		37.288 mg/kg	0.00373 %	✓	
31	benzene	601-020-00-8	200-753-7	71-43-2		<5 µg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
32	toluene	601-021-00-3	203-625-9	108-88-3		<5 µg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
33	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<5 µg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
34	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		26 µg/kg		0.022 mg/kg	0.0000022 %	✓	
35	mesitylene; 1,3,5-trimethylbenzene	601-025-00-5	203-604-4	108-67-8		7.8 µg/kg		0.0066 mg/kg	0.000000661 %	✓	
36	1,2,4-trimethylbenzene	601-043-00-3	202-436-9	95-63-6		12 µg/kg		0.0102 mg/kg	0.00000102 %	✓	
37	2-Methylnapthalene		202-078-3	91-57-6		1.4 mg/kg		1.186 mg/kg	0.000119 %	✓	
38	dibenzofuran		205-071-3	132-64-9		0.4 mg/kg		0.339 mg/kg	0.0000339 %	✓	
								Total:	0.0587 %		

Key	
	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Determinand defined by classifier (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Toluene, ethylbenzene, o-xylene, p-xylene, m-xylene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene are only hazardous in terms of HP3(i) as there is no published threshold. The values suggest it is unlikely that there would be any potential flammability. TPH HP3(i) is based on liquid samples. All samples analysed as part of this WM3 were completed on solid soil samples, therefore the hazardous threshold should be increased to 1000 making this non-hazardous.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

TPH (C6 to C40) petroleum group: (conc.: 0.00373%)
o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]: (conc.: 2.2e-06%)
mesitylene; 1,3,5-trimethylbenzene: (conc.: 6.61e-07%)
1,2,4-trimethylbenzene: (conc.: 1.02e-06%)

Appendix A: Classifier defined and non GB MCL determinands

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

GB MCL index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

2-Methylnapthalene (EC Number: 202-078-3, CAS Number: 91-57-6)

Description/Comments: Origins: Organic and Petroleum Products
Data source: https://www.echa.europa.eu/web/guest/brief-profile/-/briefprofile/100.001.890
Data source date: 21 Oct 2020
Hazard Statements: Acute Tox. 4; H302 , Aquatic Chronic 2; H411 , Aquatic Chronic 1; H410 , Aquatic Acute 1; H400 , Eye Irrit. 2; H319 , Skin Irrit. 2; H315 , STOT SE 3; H335 , STOT SE 3; H336

dibenzofuran (EC Number: 205-071-3, CAS Number: 132-64-9)

Description/Comments: VOC; Data from C&L Inventory Database
Data source: https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 02 Mar 2017
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 4; H312 , Acute Tox. 4; H332 , Aquatic Chronic 2; H411

Appendix B: Rationale for selection of metal species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst Case

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected.

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil.

zinc {zinc chromate}

Worst case CLP species based on hazard statements/molecular weight

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2023.203.5693.10482 (22 Jul 2023)
HazWasteOnline Database: 2023.203.5693.10482 (22 Jul 2023)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021

APPENDIX V
PHOTOGRAPHS

PLATE 1 HERAS FENCING – SITE ACCESS



PLATE 2 DAMPENING DOWN DURING CRUSHING



PLATE 3 DEMOLITION AND ASBESTOS REMOVAL WORKS



PLATE 4 DEMOLITION WORKS



PLATE 5 DEMOLITION AND CLEARANCE WORKS



PLATE 6 HS1 HOTSPOT EXCAVATION



PLATE 7 HS2 HOTSPOT EXCAVATION



PLATE 8 HS2 HOTSPOT EXTENSION



PLATE 9 TT2 TRIAL TRENCH EXCAVATION



PLATE 10 INITIAL HS3 HOTSPOT EXCAVATION



PLATE 11 TP404 EXCAVATION



PLATE 12 CIRCULAR WALL LOCATION



PLATE 13 CRUSHING



PLATE 14 OVERSIZE MATERIAL



PLATE 15 TURNOVER/CUT/FILL WORKS



PLATE 16 HAND SHEAR VANE TESTING COMPLETED AT FORMATION LEVEL



PLATE 17 MADE GROUND BACKFILL STOCKPILE



PLATE 18 PILING MAT

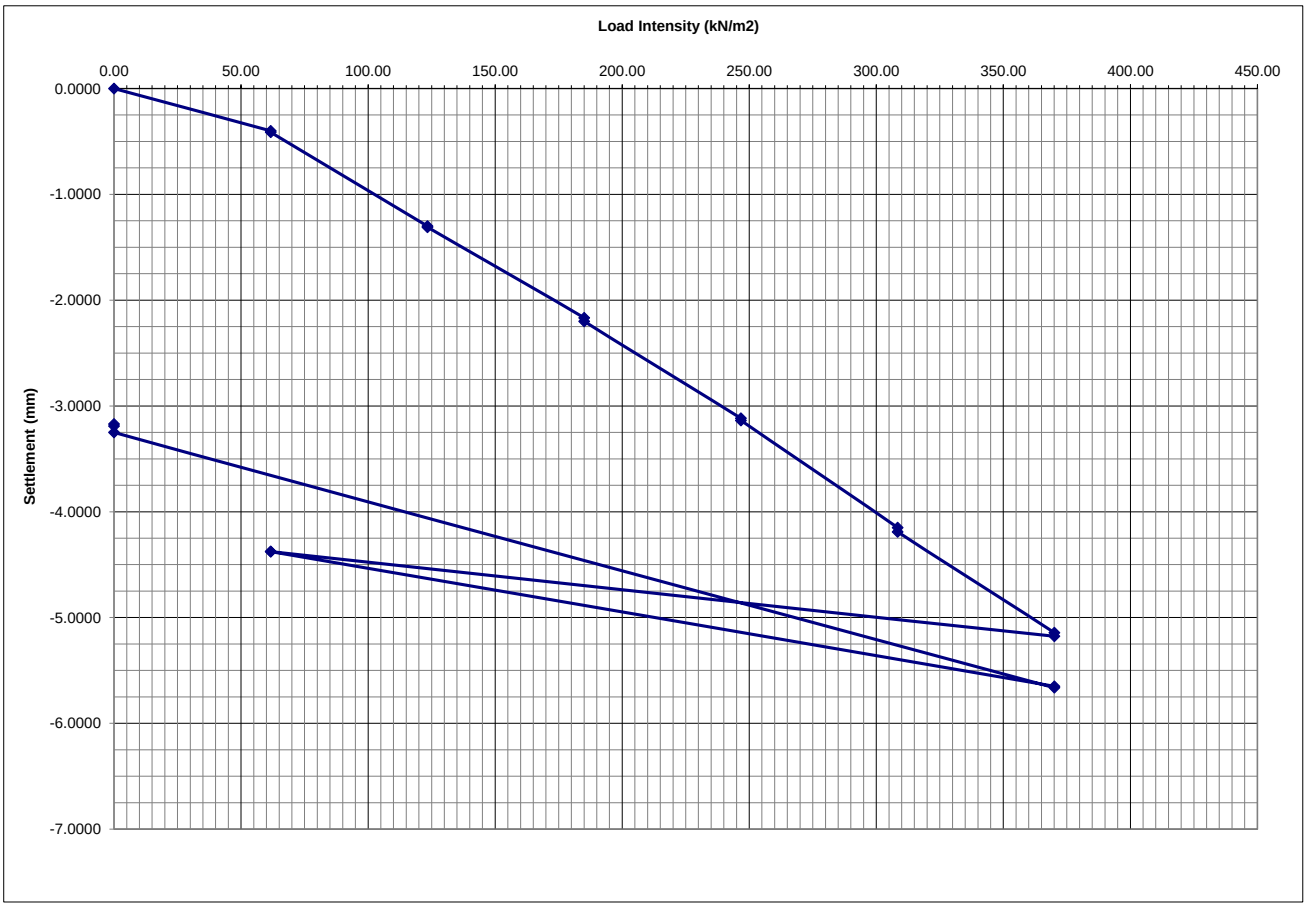


APPENDIX VI
GEOTECHNICAL TESTING RESULTS

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	09/03/2023
Site Ref:	12757	**Type of Kentledge:**	15 Tonne Excavator
Test No.:	CBR101	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-5.66	**Weather:**	Dry
Strata Description:	Capping		



Equivalent CBR Value of 12%

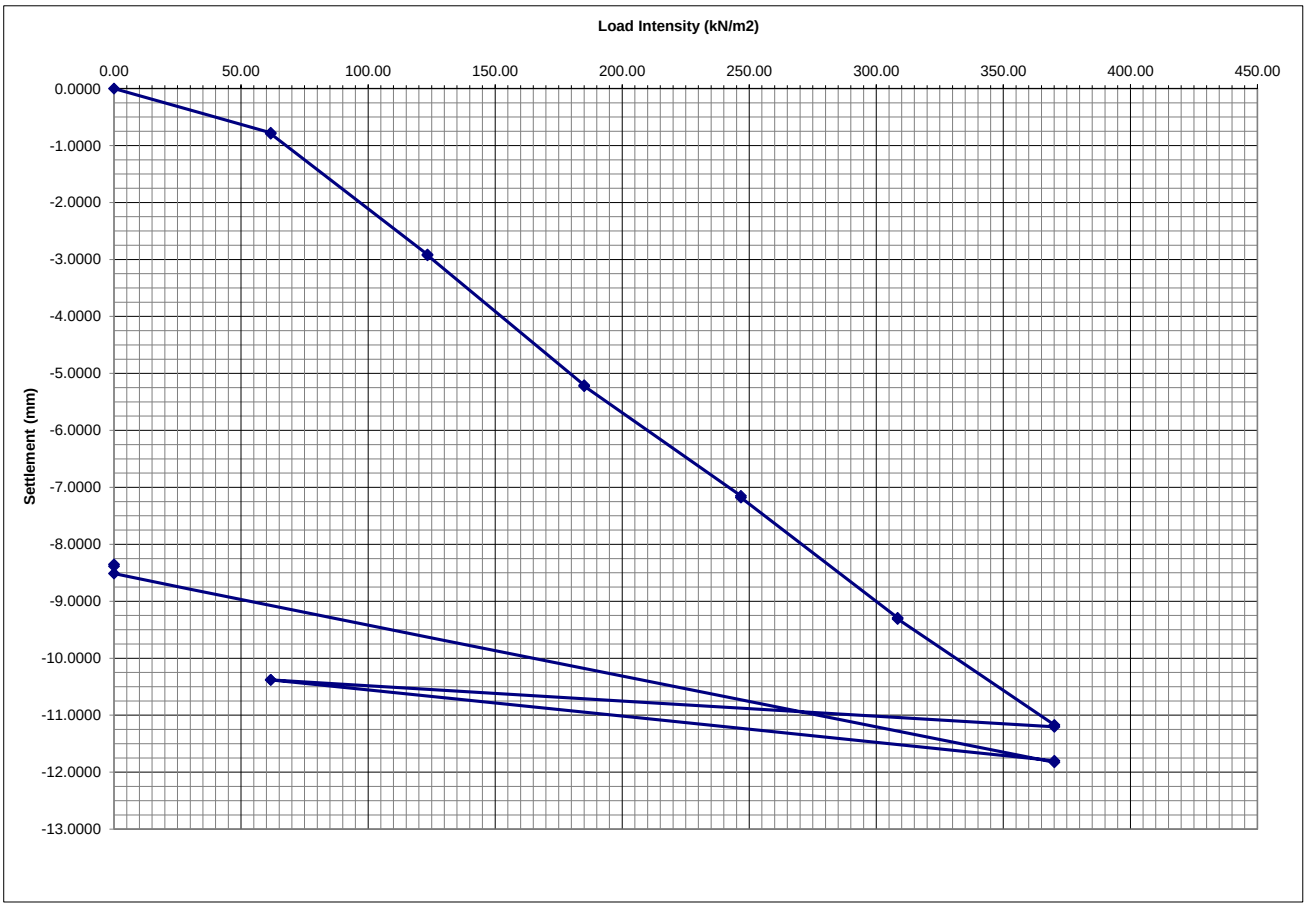
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R.Webster	N.Dawson	09/03/2023	N.Dawson	09/03/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	09/03/2023
Site Ref:	12757	**Type of Kentledge:**	29 tonne excavator
Test No.:	CBR102	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-11.83	**Weather:**	Dry
Strata Description:	Crush		



Equivalent CBR Value of 5%

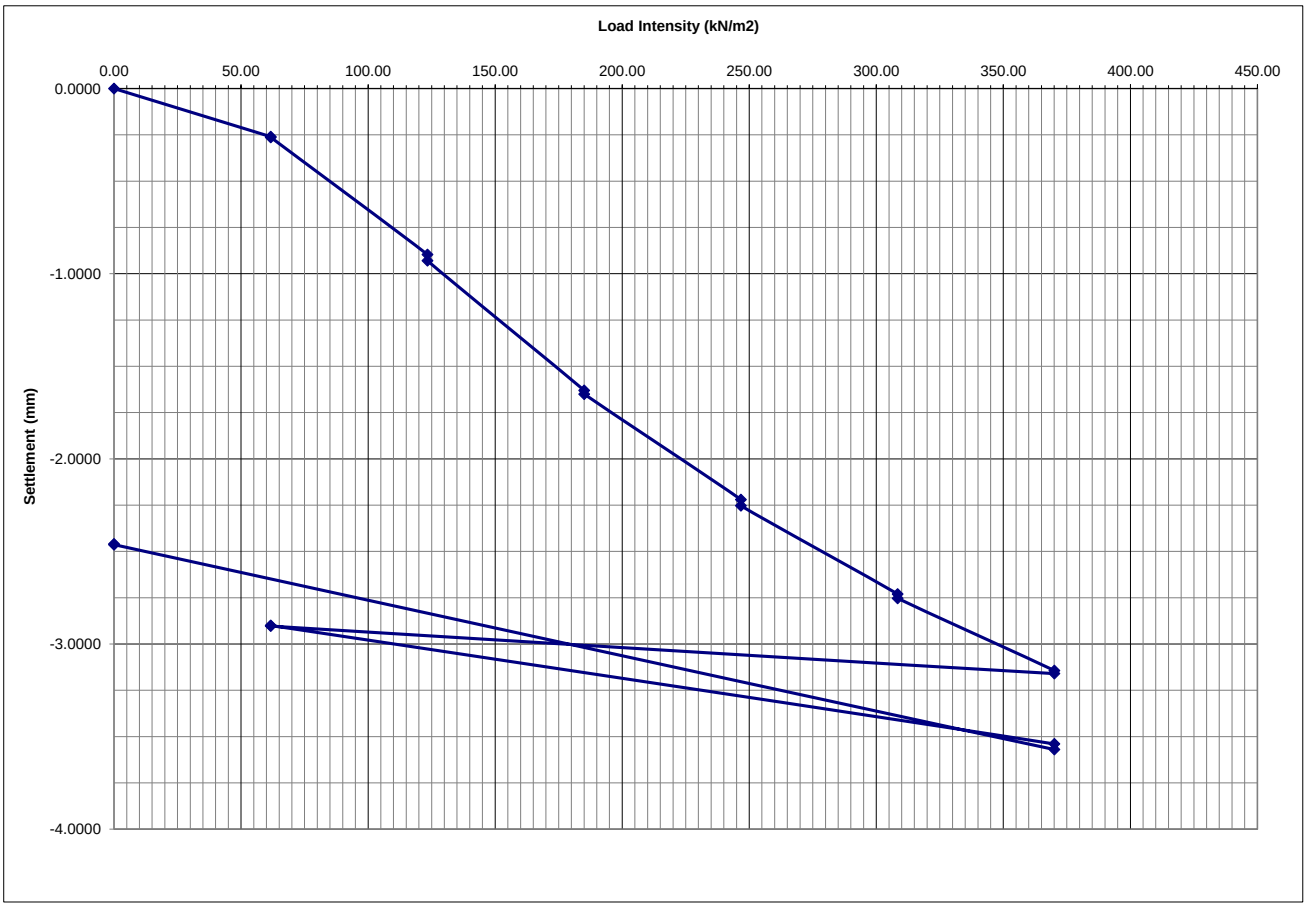
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R.Webster	N.Dawson	09/03/2023	N.Dawson	09/03/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	09/03/2023
Site Ref:	12757	**Type of Kentledge:**	29 tonne excavator
Test No.:	CBR103	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-3.57	**Weather:**	Dry
Strata Description:	MOT		



Equivalent CBR Value of 18%

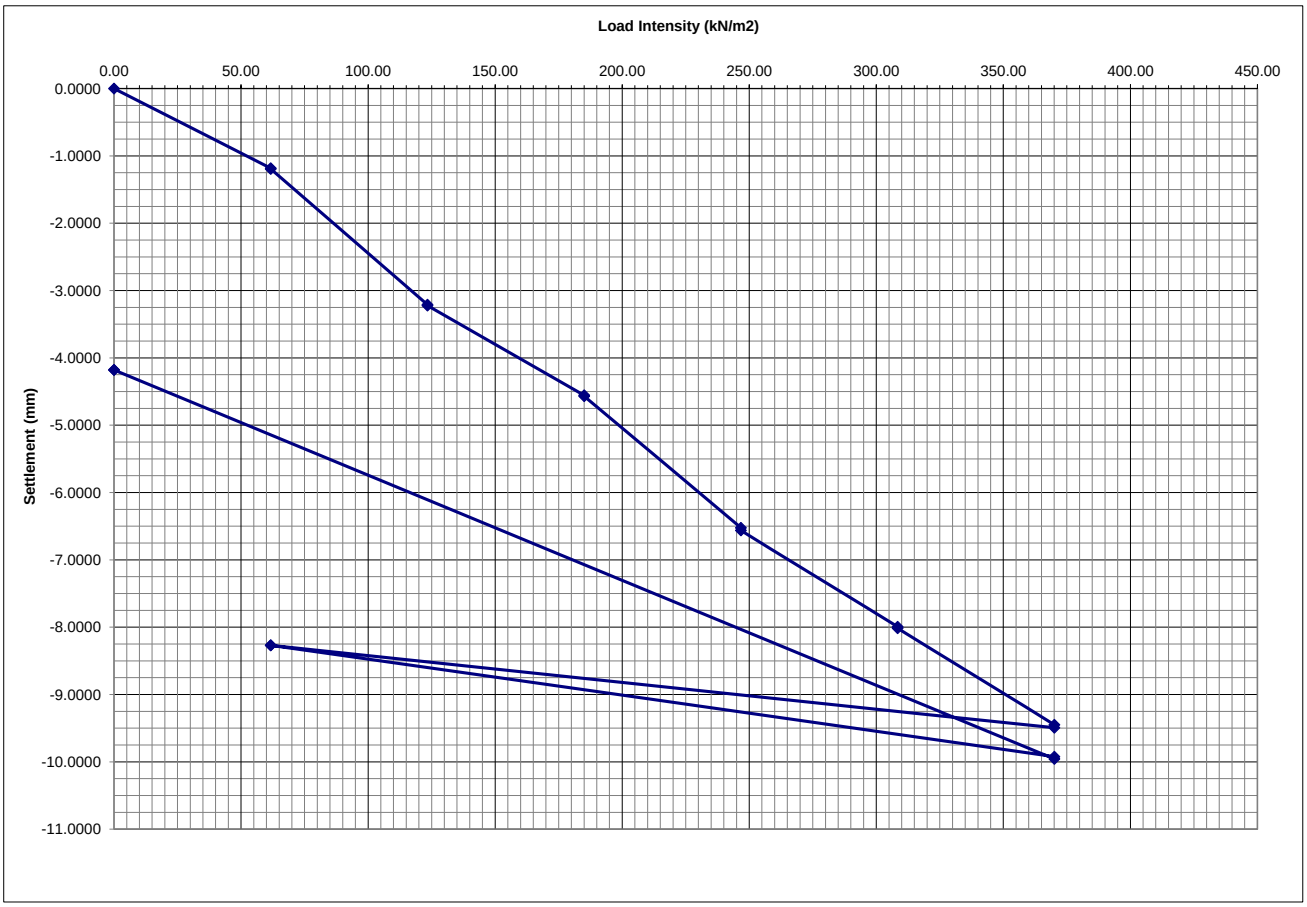
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R.Webster	N.Dawson	09/03/2023	N.Dawson	09/03/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	14/03/2023
Site Ref:	12757	**Type of Kentledge:**	15 Tonne Excavator
Test No.:	CBR101	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-9.96	**Weather:**	Dry
Strata Description:	Crush		



Equivalent CBR Value of 4%

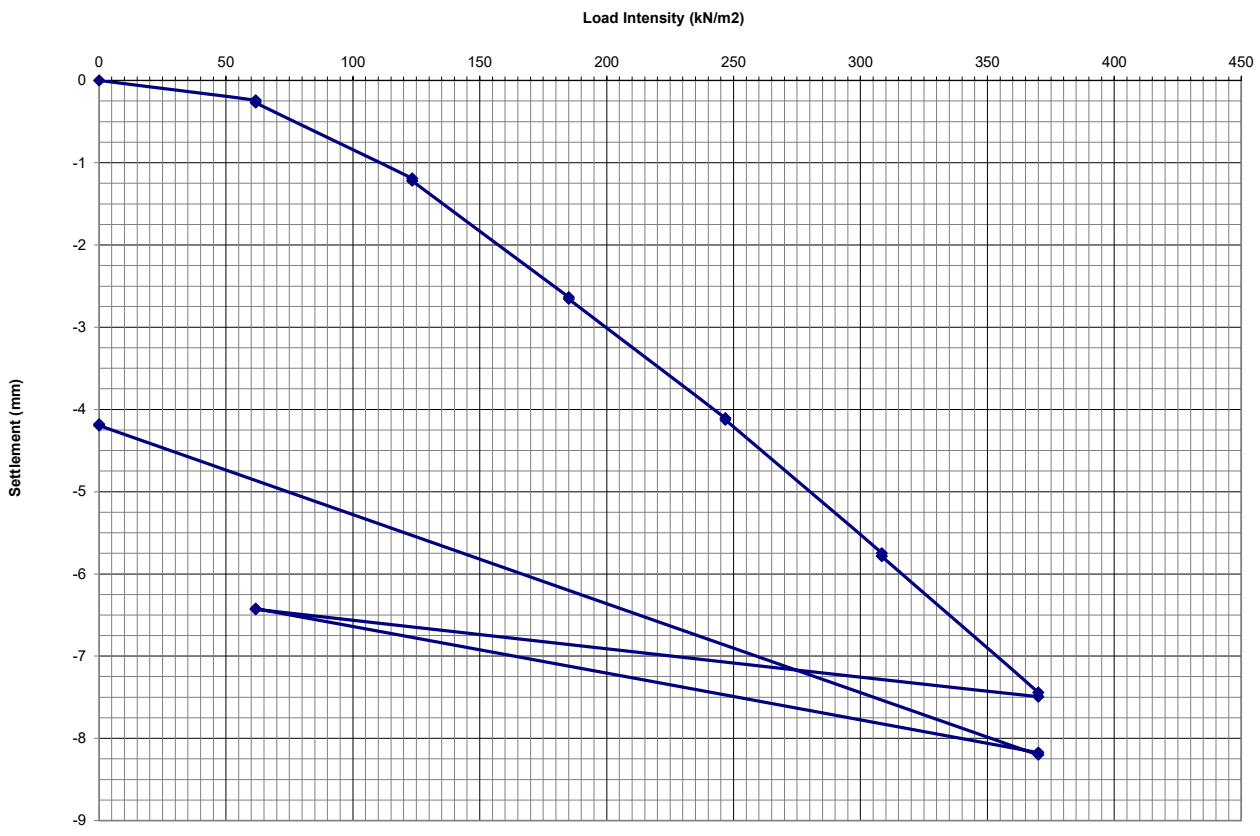
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R.Webster	N.Dawson	14/03/2023	N.Dawson	14/03/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	28/03/2023
Site Ref:	12-757	**Type of Kentledge:**	15 Tonne Excavator
Test No.:	Market Road 1	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-8.20	**Weather:**	Dry
Strata Description:	6F2		



Equivalent CBR Value of 13%

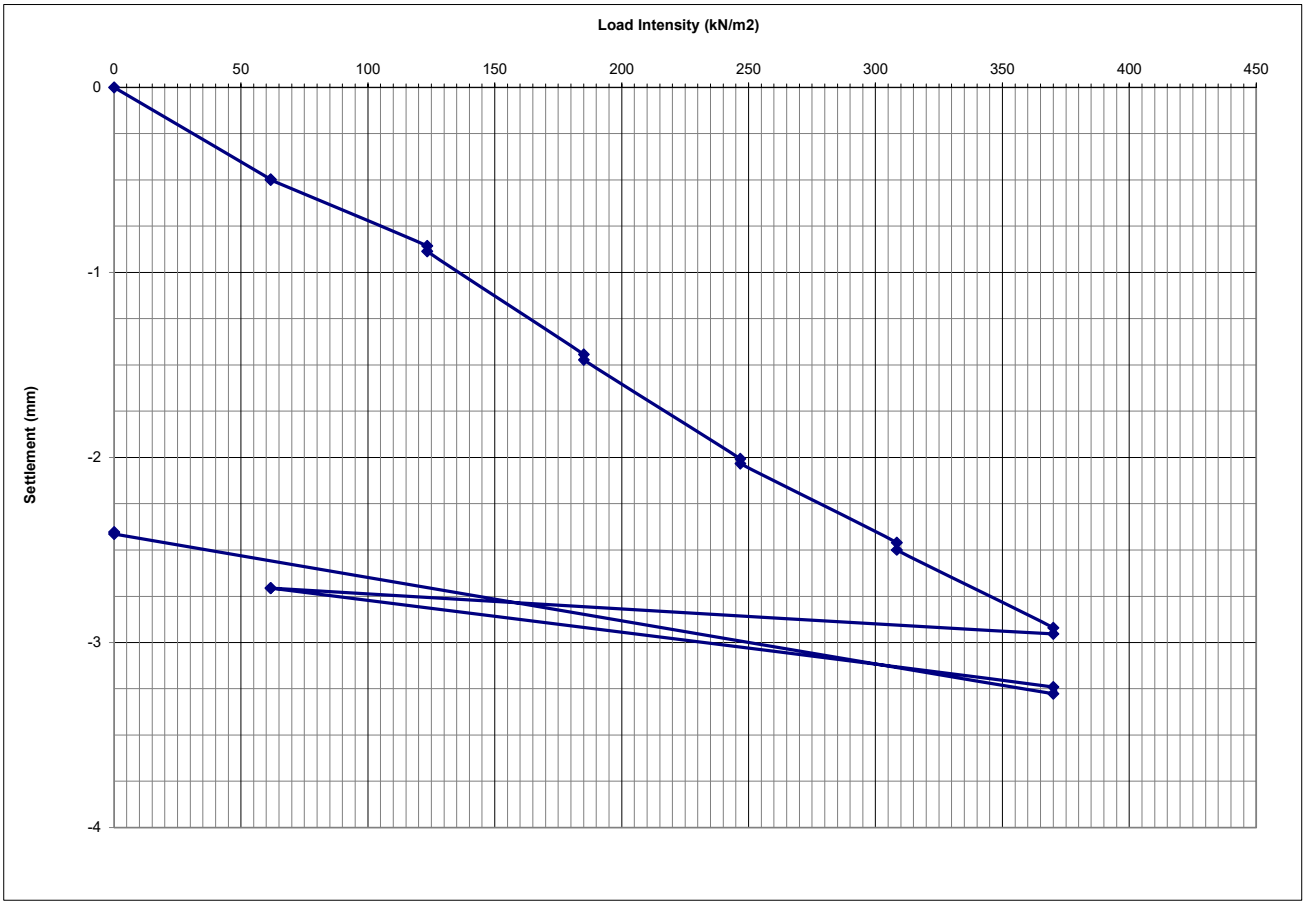
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	N Dawson	29/03/2023	S. Ellis	29/03/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	28/03/2023
Site Ref:	12-757	**Type of Kentledge:**	15 Tonne Excavator
Test No.:	Market Road 2	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-3.28	**Weather:**	Dry
Strata Description:	6F2		



Equivalent CBR Value of 21%

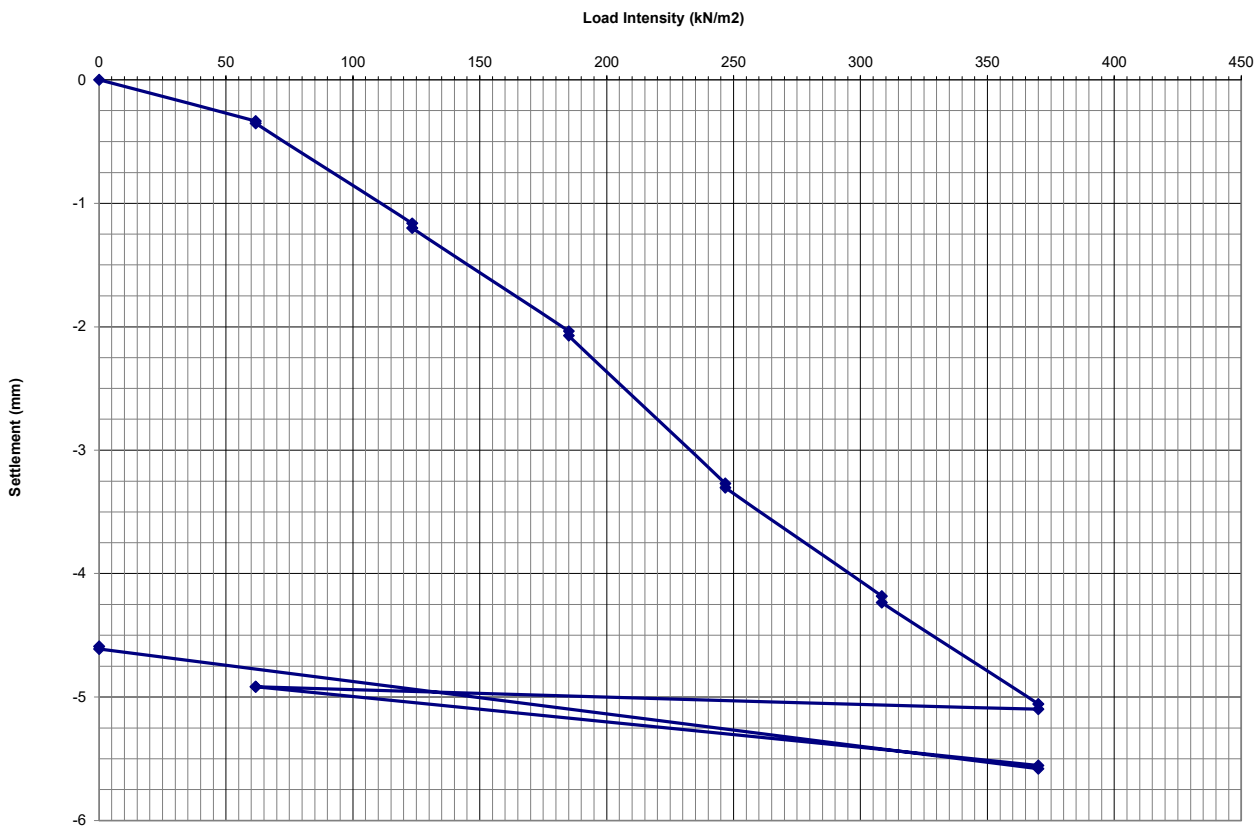
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	N Dawson	29/03/2023	S. Ellis	29/03/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	28/03/2023
Site Ref:	12-757	**Type of Kentledge:**	15 Tonne Excavator
Test No.:	Market Road 3	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-5.58	**Weather:**	Dry
Strata Description:	6F2		



Equivalent CBR Value of 13%

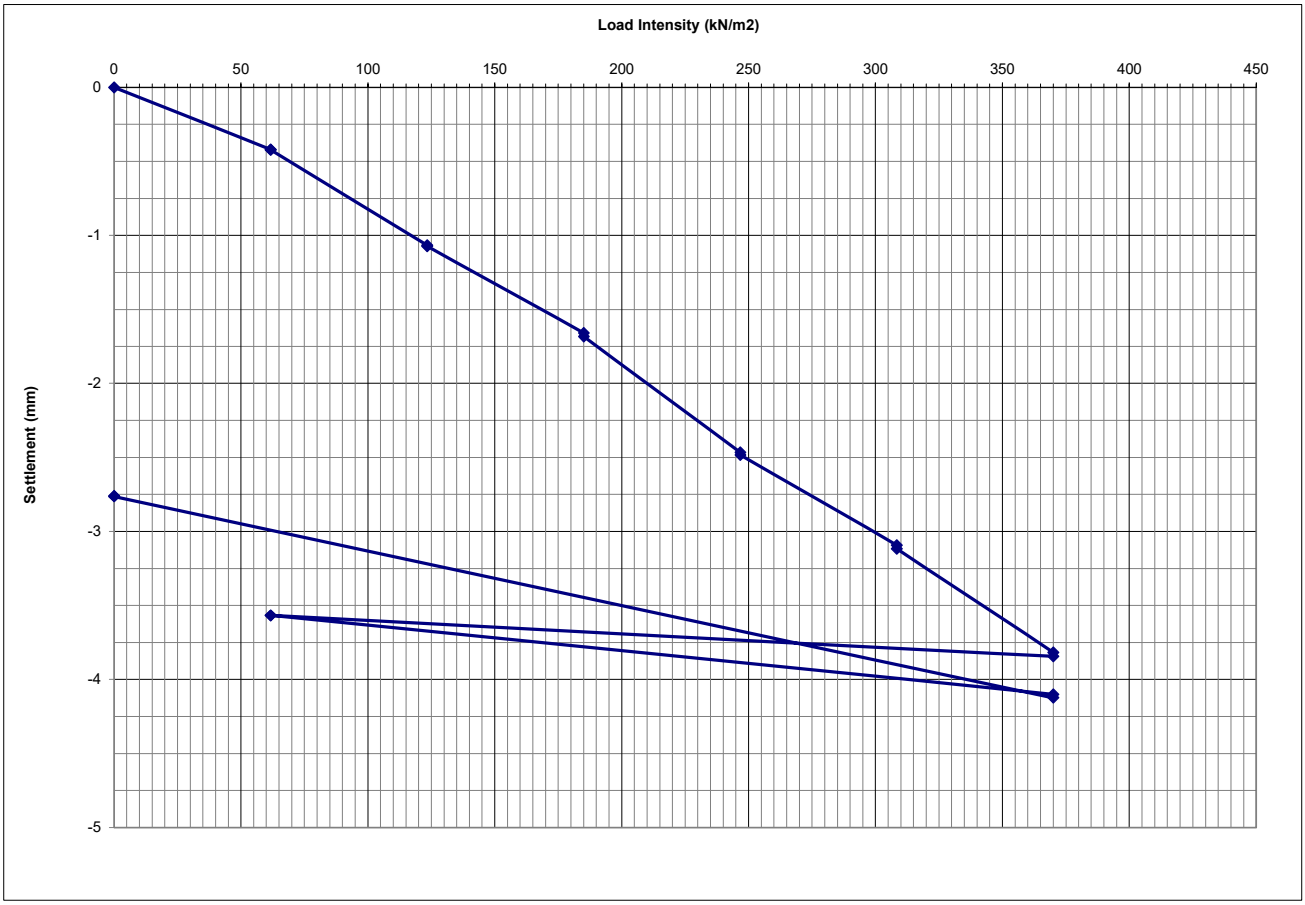
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	N Dawson	29/03/2023	S. Ellis	29/03/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	28/03/2023
Site Ref:	12-757	**Type of Kentledge:**	15 Tonne Excavator
Test No.:	Market Road 4	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-4.12	**Weather:**	Dry
Strata Description:	6F2		



Equivalent CBR Value of 16%

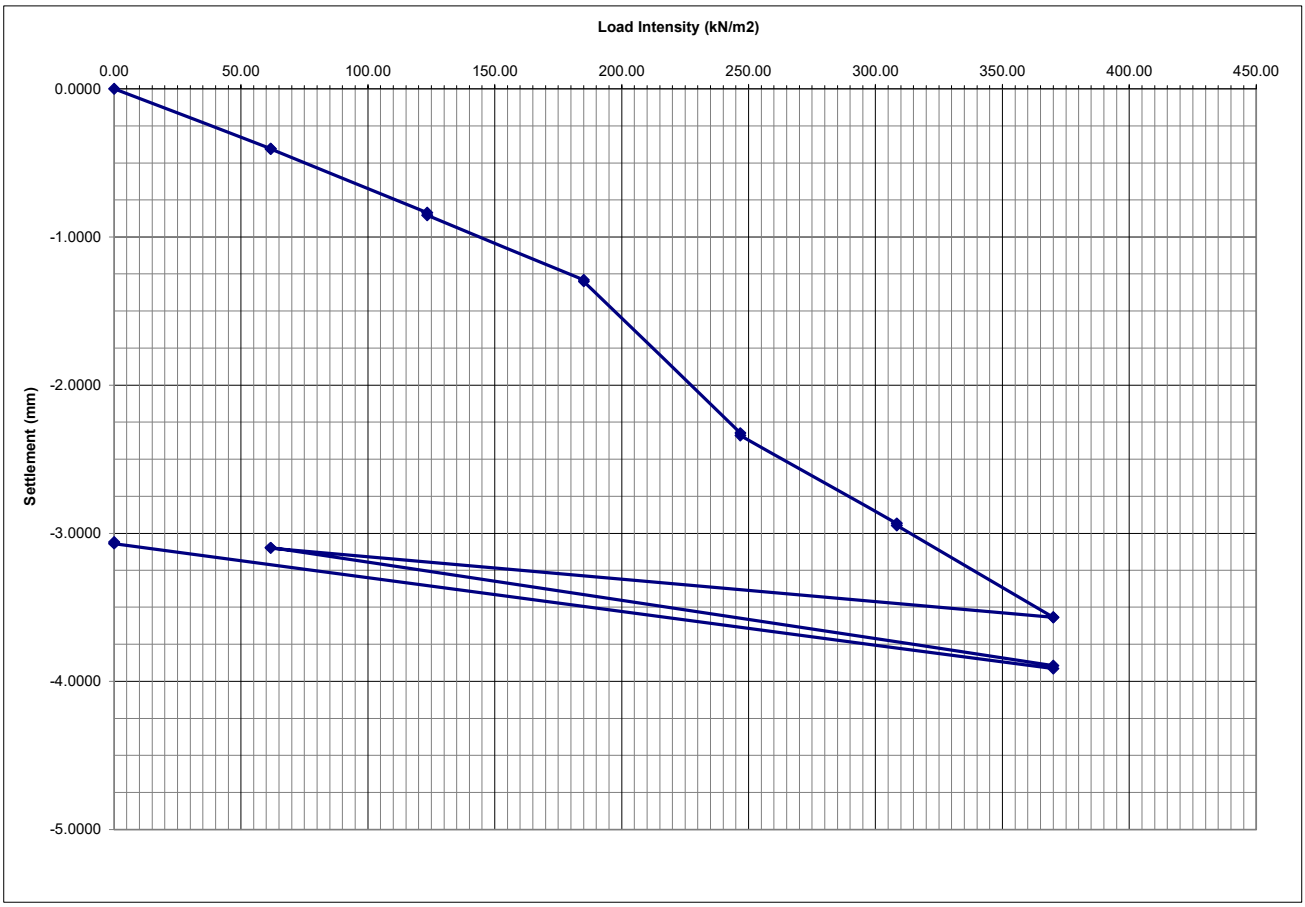
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
R. Webster	N Dawson	29/03/2023	S. Ellis	29/03/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	04/04/2023
Site Ref:	12-757	**Type of Kentledge:**	13 Tonne Excavator
Test No.:	CBR101	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-3.91	**Weather:**	Dry
Strata Description:	6F2		



Equivalent CBR Value of 24%

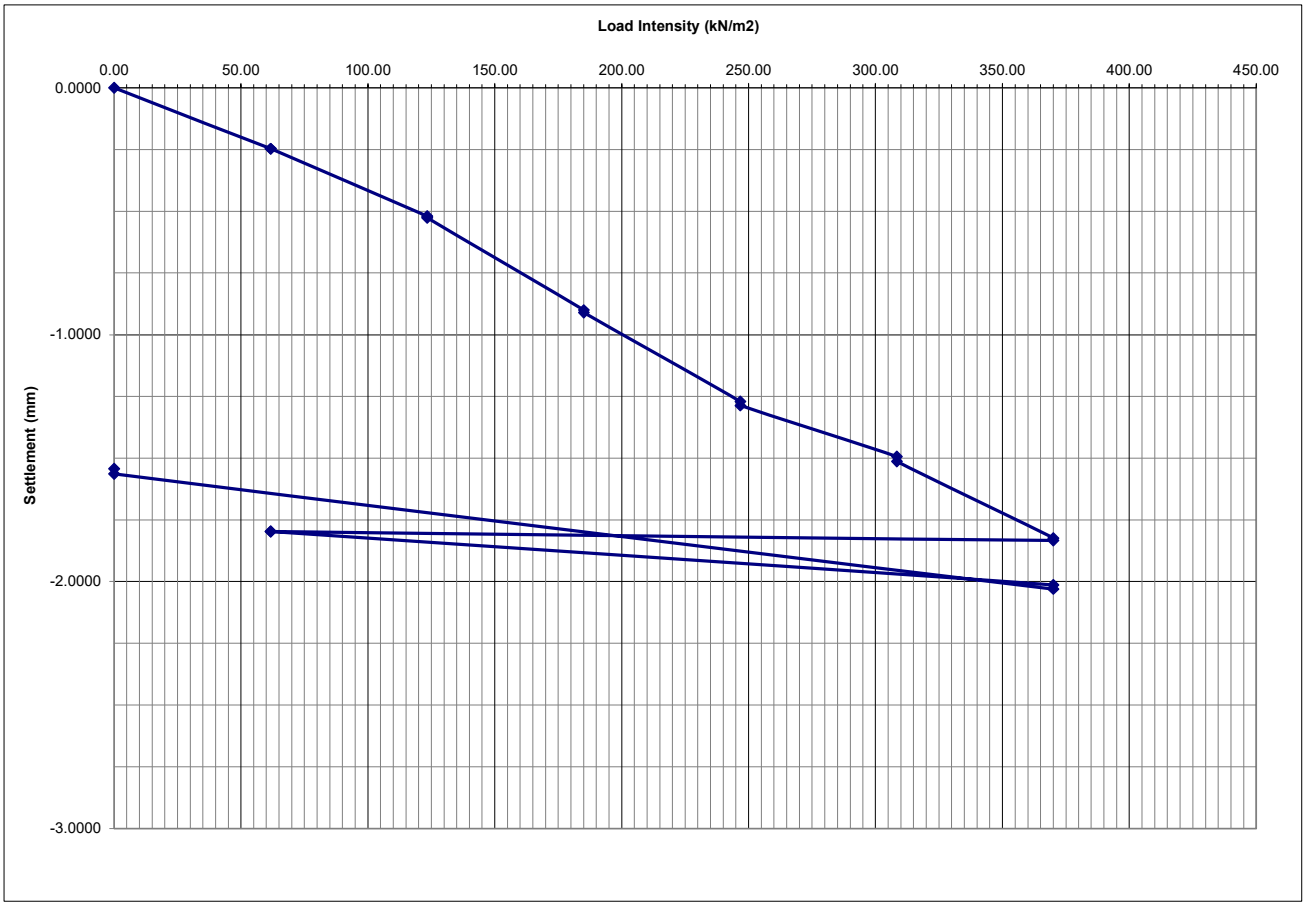
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	N Dawson	05/04/2023	S. Ellis	05/04/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	04/04/2023
Site Ref:	12-757	**Type of Kentledge:**	13 Tonne Excavator
Test No.:	CBR102	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-2.03	**Weather:**	Dry
Strata Description:	6F2		



Equivalent CBR Value of 42%

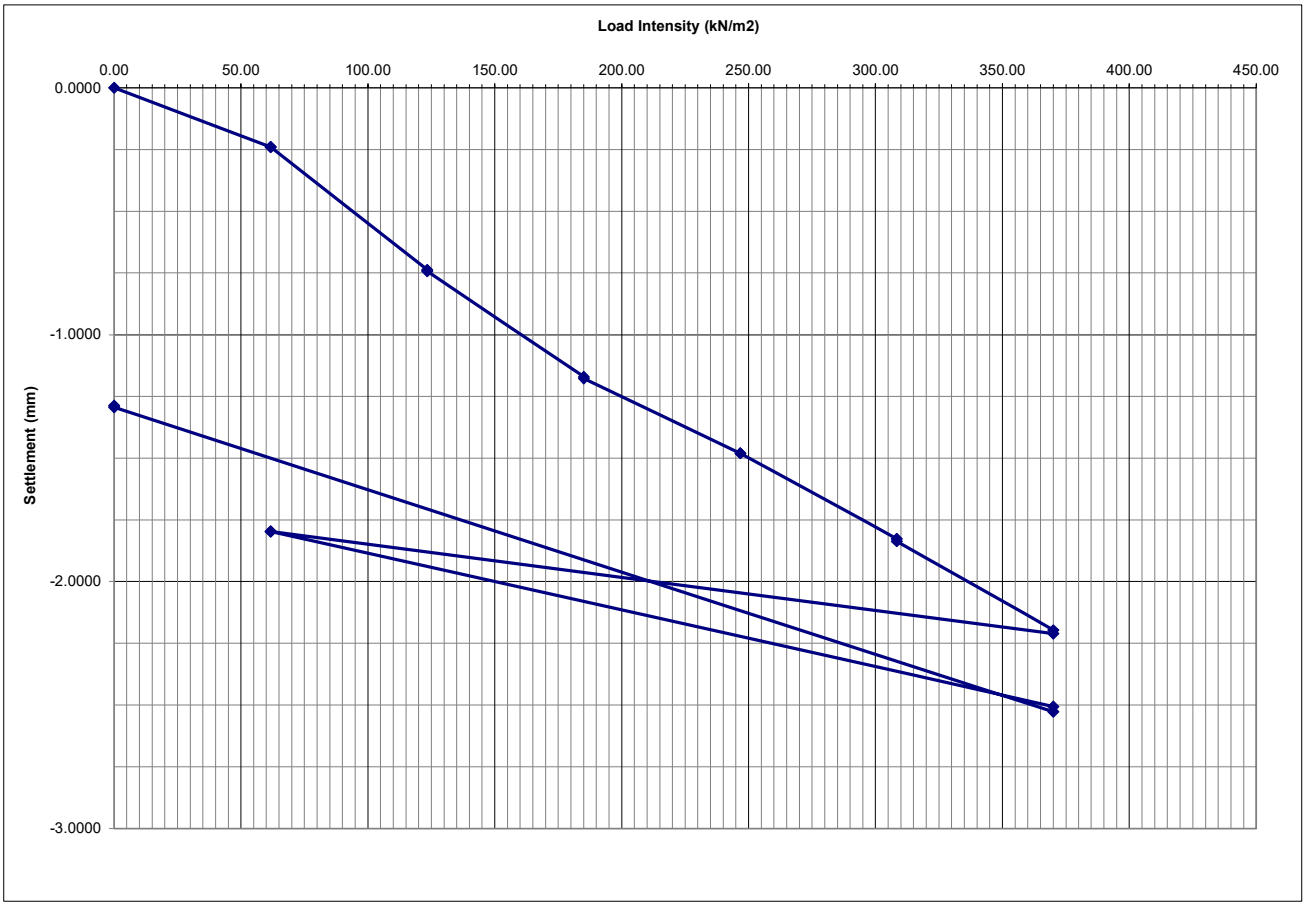
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	N Dawson	05/04/2023	S. Ellis	05/04/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	04/04/2023
Site Ref:	12-757	**Type of Kentledge:**	13 Tonne Excavator
Test No.:	CBR103	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-2.53	**Weather:**	Dry
Strata Description:	6F2		



Equivalent CBR Value of 29%

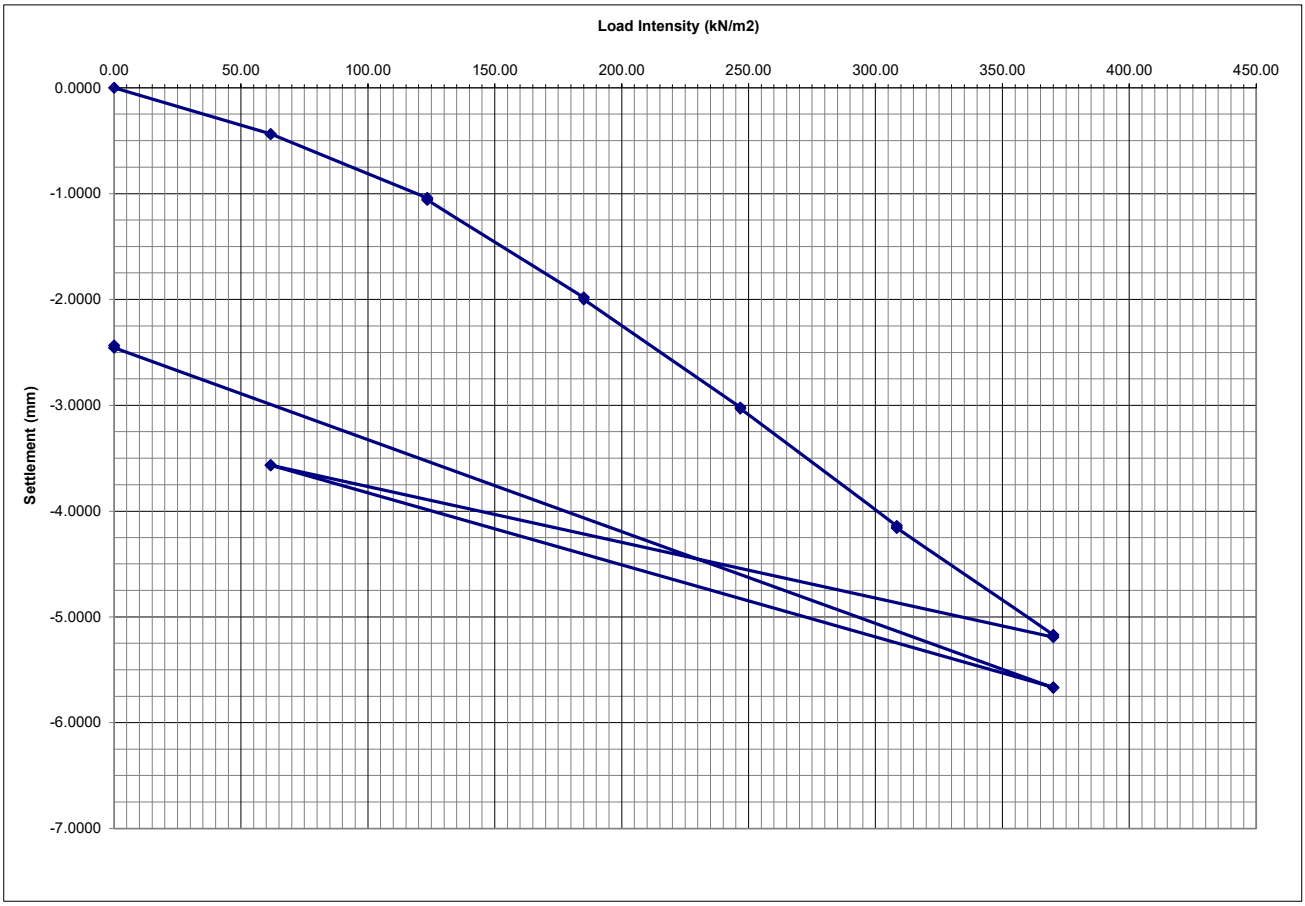
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	N Dawson	05/04/2023	S. Ellis	05/04/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	04/04/2023
Site Ref:	12-757	**Type of Kentledge:**	13 Tonne Excavator
Test No.:	CBR104	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-5.67	**Weather:**	Dry
Strata Description:	6F2		



Equivalent CBR Value of 16%

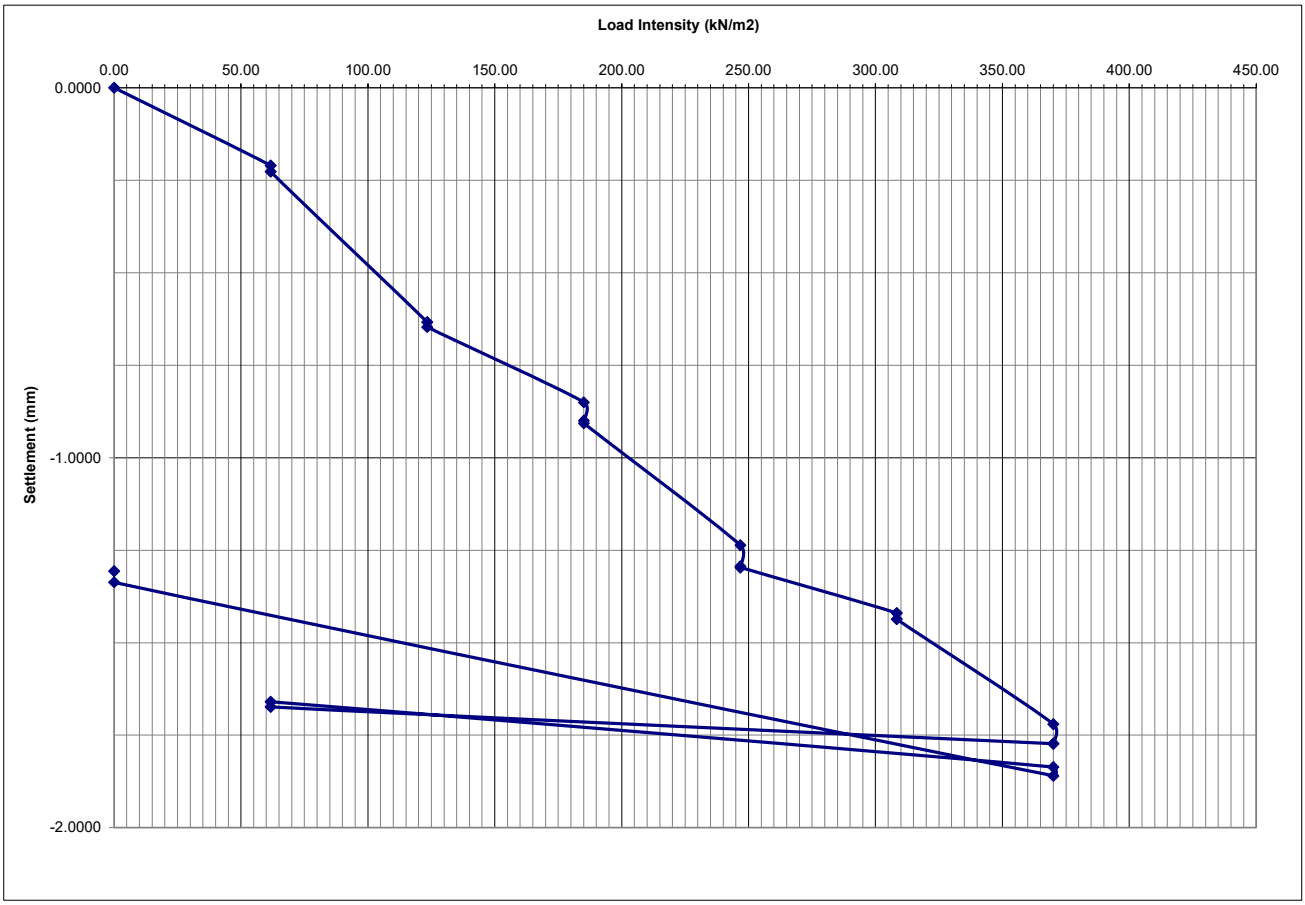
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
J. James	S. Ellis	04/04/2023	S. Ellis	04/04/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	20/04/2023
Site Ref:	12-757	**Type of Kentledge:**	15 Tonne Excavator
Test No.:	CBR102	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-1.86	**Weather:**	Sun
Strata Description:	MOT		



Equivalent CBR Value of 42%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
P. Lavelle	N Dawson	20/04/2023	R Horseman	20/04/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	20/04/2023
Site Ref:	12-757	**Type of Kentledge:**	15 Tonne Excavator
Test No.:	CBR103	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-1.89	**Weather:**	Sun
Strata Description:	MOT		



Equivalent CBR Value of 41%

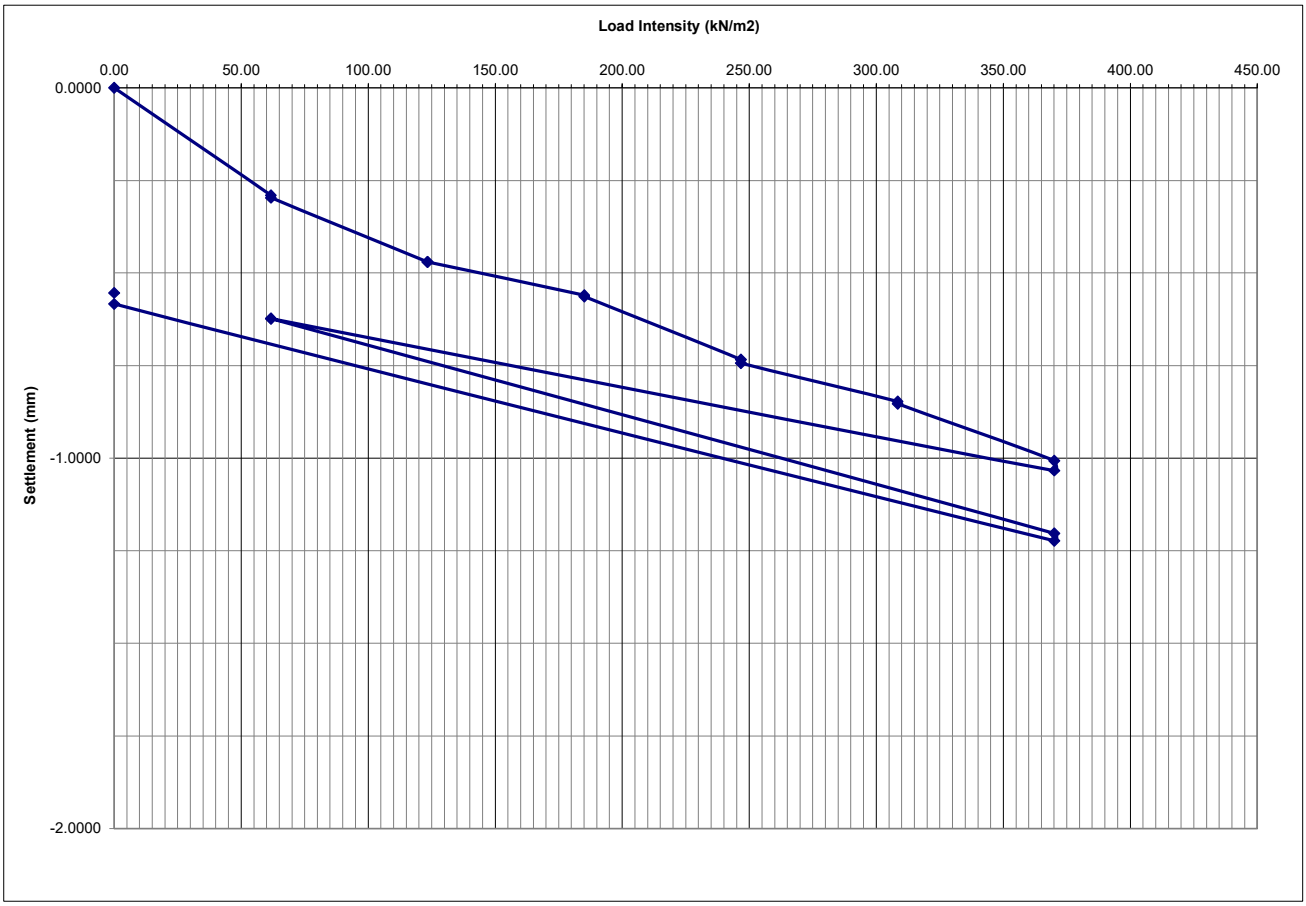
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
P. Lavelle	N Dawson	20/04/2023	R Horseman	20/04/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	20/04/2023
Site Ref:	12-757	**Type of Kentledge:**	15 Tonne Excavator
Test No.:	CBR104	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-1.22	**Weather:**	Sun
Strata Description:	MOT		



Equivalent CBR Value in excess of 85%

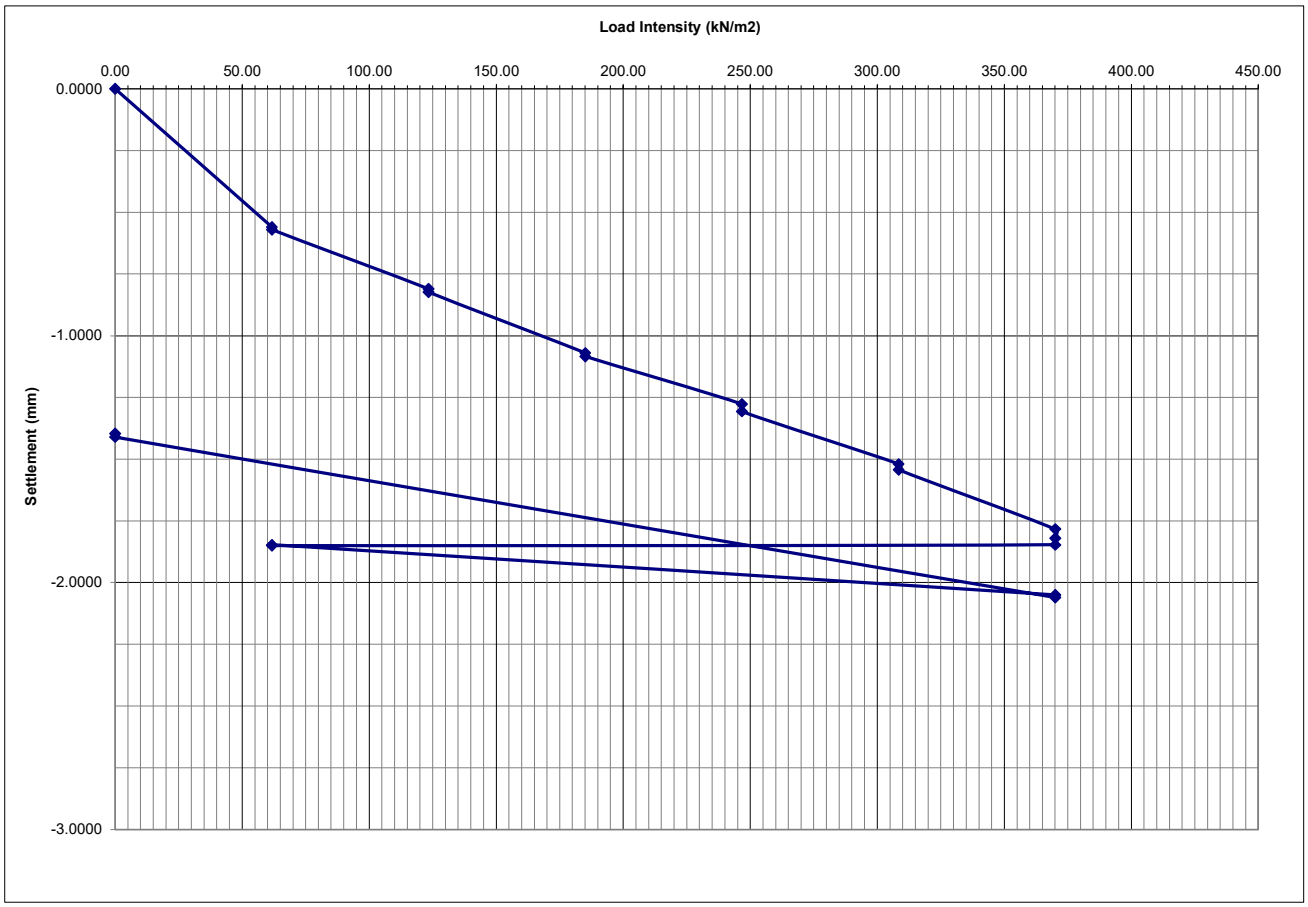
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
P. Lavelle	N Dawson	20/04/2023	R Horseman	20/04/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	09/05/2023
Site Ref:	12757	**Type of Kentledge:**	20 Tonne Excavator
Test No.:	CBR201	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-2.06	**Weather:**	Dry
Strata Description:	MOT		



Equivalent CBR Value of 40%

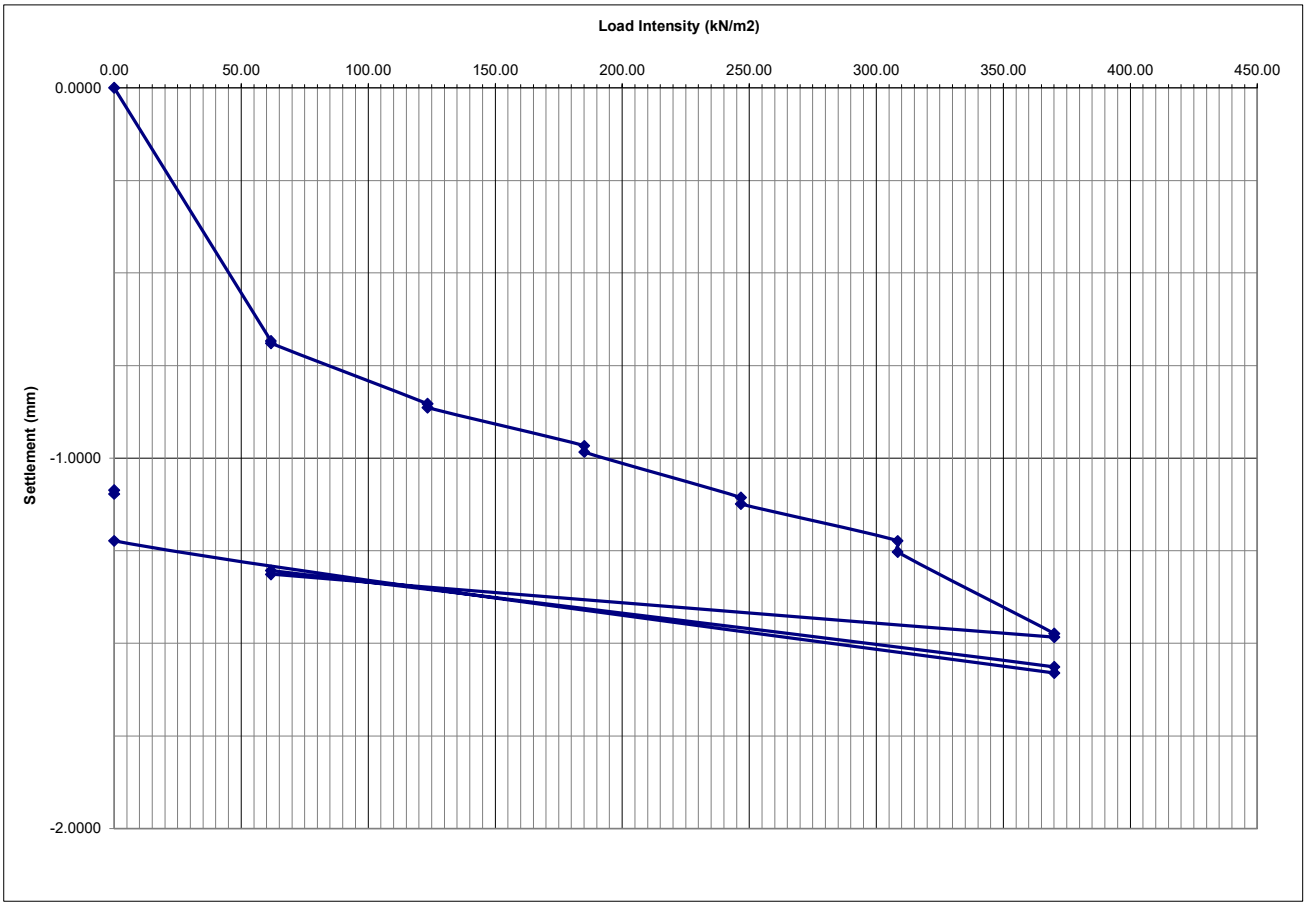
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
P.Lavelle	N.Dawson	09/05/2023	R Horseman	09/05/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	09/05/2023
Site Ref:	12757	**Type of Kentledge:**	20 Tonne Excavator
Test No.:	CBR202	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-1.58	**Weather:**	Dry
Strata Description:	MOT		



Equivalent CBR Value of 62%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
P.Lavelle	N.Dawson	09/05/2023	R Horseman	09/05/2023

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Smithfield Market**	**Test Date:**	09/05/2023
Site Ref:	12757	**Type of Kentledge:**	20 Tonne Excavator
Test No.:	CBR203	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	370.09	**Northing:**	N/A
Maximum Deformation (mm):	-2.14	**Weather:**	Dry
Strata Description:	MOT		



Equivalent CBR Value of 40%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
P.Lavelle	N.Dawson	09/05/2023	R Horseman	09/05/2023

LABORATORY REPORT

Contract Number: PSL23/1430

Report Date: 31 March 2023

Client's Reference: 12-757

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Harriet Mason

Contract Title: Smithfield Market

Date Received: 8/3/2023
Date Commenced: 8/3/2023
Date Completed: 31/3/2023

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins (Director)	R Berriman (Quality Manager)	S Royle (Laboratory Manager)
L Knight (Assistant Laboratory Manager)	S Eyre (Senior Technician)	T Watkins (Senior Technician)

5 – 7 Hexthorpe Road,
Hexthorpe,
Doncaster,
DN4 0AR
Tel: 01302 768098
Email: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
	MGBF101	B			Brown slightly gravelly very sandy CLAY.

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Smithfield Market

Contract No:

PSL23/1430

Client Ref:

12-757

SUMMARY OF SOIL CLASSIFICATION TESTS

(BS1377 : PART 2 : 1990)

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Moisture Content % Clause 3.2	Linear Shrinkage % Clause 6.5	Particle Density Mg/m^3 Clause 8.2	Liquid Limit % Clause 4.3/4	Plastic Limit % Clause 5.3	Plasticity Index % Clause 5.4	Passing .425mm %	Remarks
	MGBF101	B			19							

SYMBOLS : NP : Non Plastic *** : Liquid Limit and Plastic Limit Wet Sieved.**

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Smithfield Market

Contract No:

PSL23/1430

Client Ref:

12-757

PARTICLE SIZE DISTRIBUTION TEST

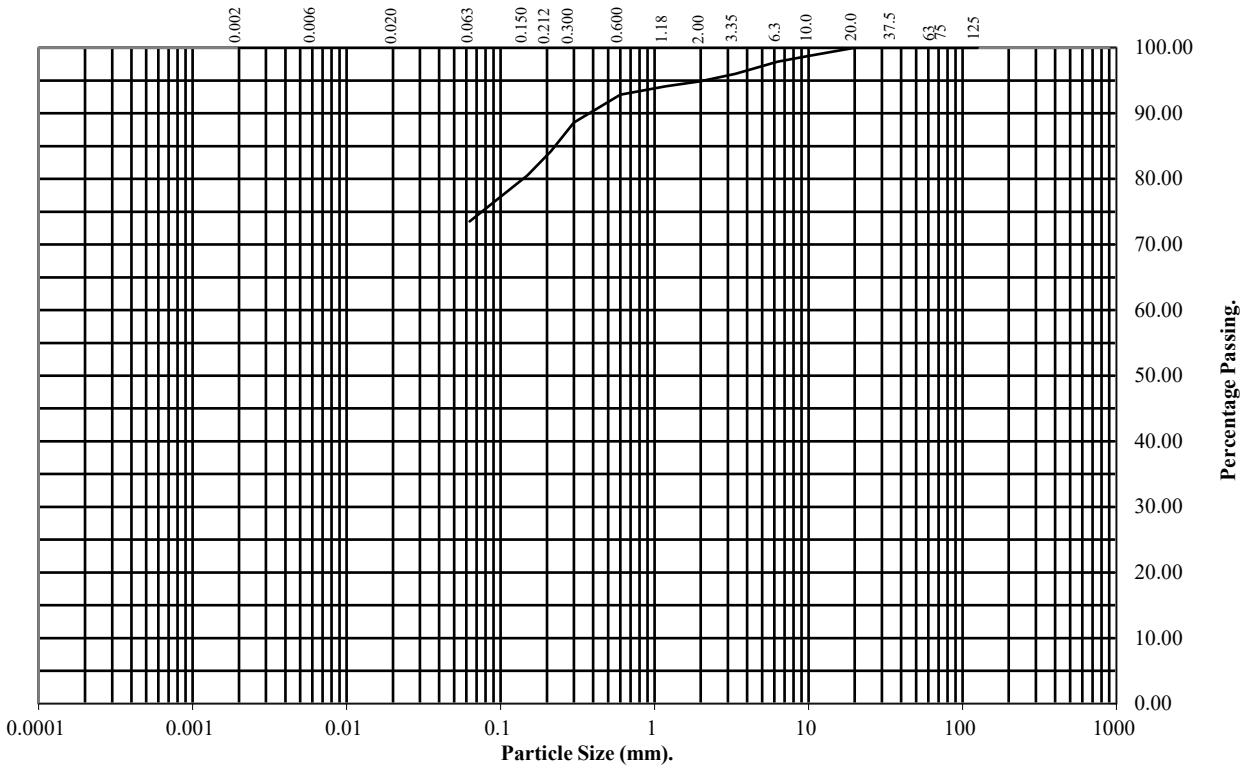
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Top Depth (m):**

Sample Number: **MGBF101** **Base Depth(m):**

Sample Type: **B**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	100
10	99
6.3	98
3.35	96
2	95
1.18	94
0.6	93
0.3	89
0.212	84
0.15	81
0.063	74

Soil Fraction	Total Percentage
Cobbles	0
Gravel	5
Sand	21
Silt/Clay	74

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Smithfield Market

Contract No: PSL23/1430

Client Ref: 12-757

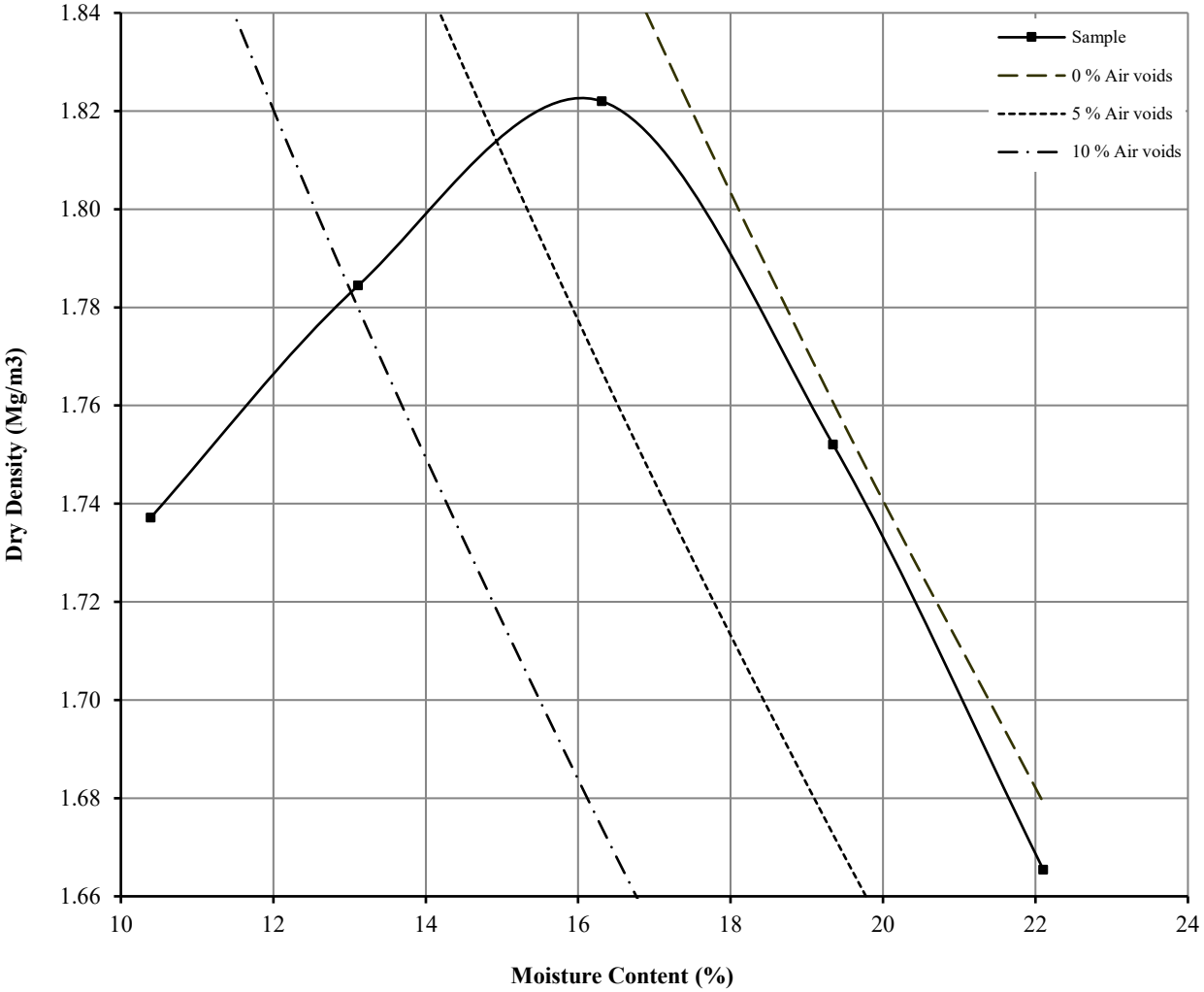
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.3 : 1990

Hole Number: **Top Depth (m) :**

Sample Number: **MGBF101** **Base Depth (m) :**

Sample Type: **B**



Initial Moisture Content:		19	Method of Compaction:	2.5kg	Separate Samples
Particle Density (Mg/m3):	2.67	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.82	Material Retained on 20.0 mm Test Sieve (%):		0
Optimum Moisture Content (%):		16			
Remarks See summary of soil descriptions					

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Smithfield Market

Contract
PSL23/1430
Client Ref
12-757

LABORATORY REPORT

Contract Number: PSL23/4597

Report Date: 24 July 2023

Client's Reference: 12-757

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Harriet Mason

Contract Title: Smithfield Market

Date Received: 14/6/2023
Date Commenced: 14/6/2023
Date Completed: 24/7/2023

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins (Director)	R Berriman (Quality Manager)	S Royle (Laboratory Manager)
L Knight (Assistant Laboratory Manager)	S Eyre (Senior Technician)	T Watkins (Senior Technician)

5 – 7 Hexthorpe Road,
Hexthorpe,
Doncaster,
DN4 0AR
Tel: 01302 768098
Email: rberriman@prosoils.co.uk
awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
Upfill Fines 1		B			MADE GROUND brown very sandy silty gravel with some cobbles.
Upfill Fines 2		B			MADE GROUND brown very sandy very silty gravel with cobbles.
Upfill Clay 1		B			MADE GROUND brown gravelly very sandy clay.

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Smithfield Market

Contract No:
PSL23/4597
Client Ref:
12-757

SUMMARY OF SOIL CLASSIFICATION TESTS

(BS1377 : PART 2 : 1990)

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Moisture Content % Clause 3.2	Particle Density Mg/m^3 Clause 8.2	Liquid Limit % Clause 4.3/4	Plastic Limit % Clause 5.3	Plasticity Index % Clause 5.4	Passing .425mm %	Remarks
Upfill Fines 1		B			10			NP			
Upfill Fines 2		B			13			NP			
Upfill Clay 1		B			16		31	15	16	81	Low Plasticity CL

SYMBOLS : **NP : Non Plastic** *** : Liquid Limit and Plastic Limit Wet Sieved.**

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Smithfield Market

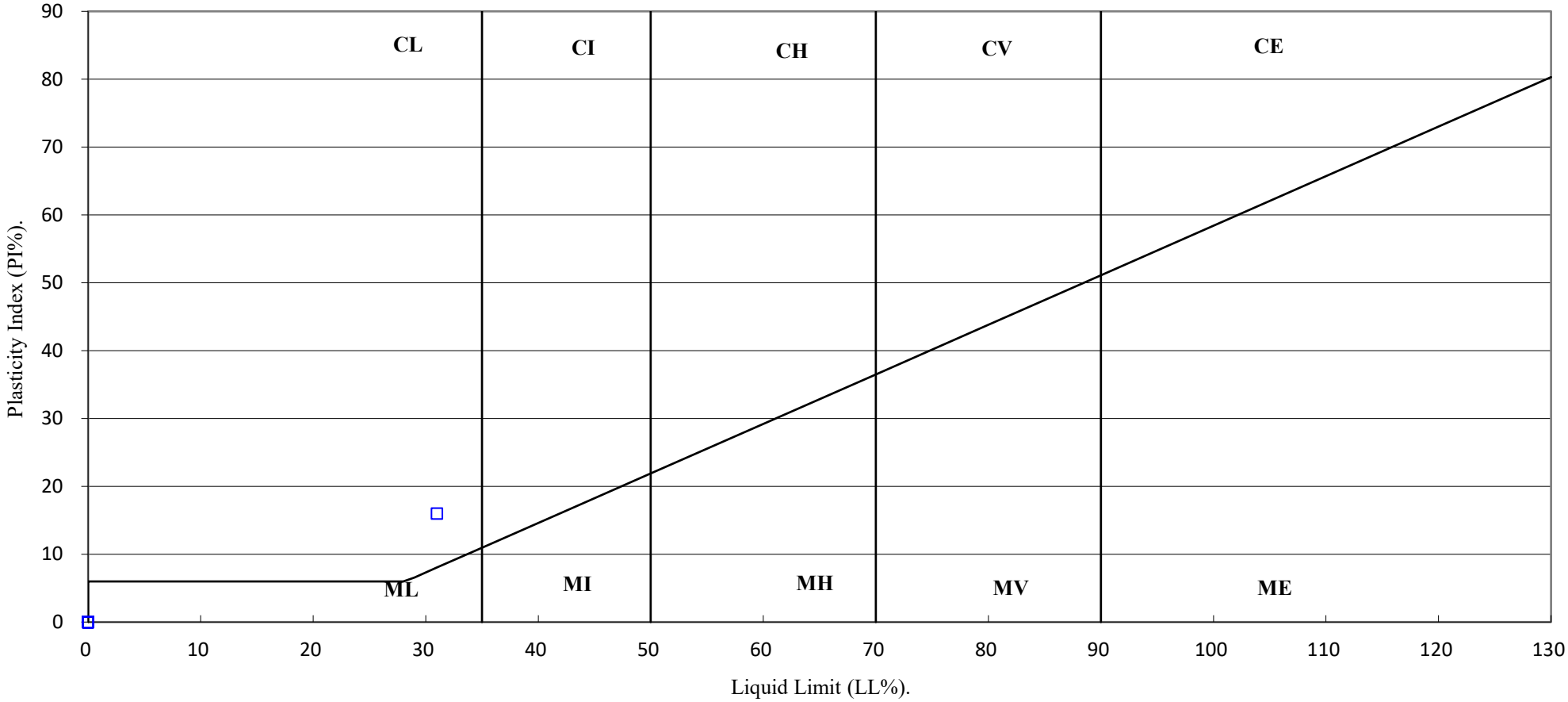
Contract No:

PSL23/4597

Client Ref:

12-757

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.



UKAS TESTING 4043 / PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY	**Smithfield Market**	**Contract No:** PSL23/4597 **Client Ref:** 12-757

PARTICLE SIZE DISTRIBUTION TEST

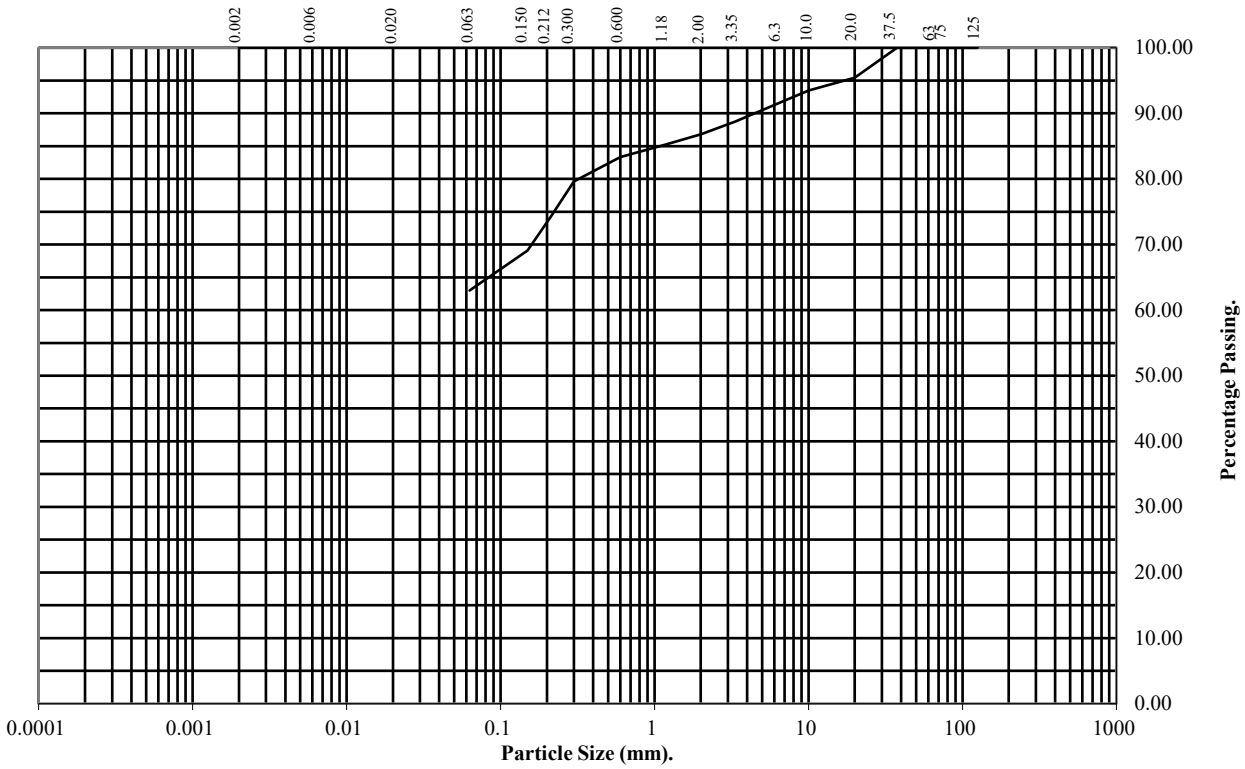
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: Upfill Clay 1 **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	100
37.5	100
20	95
10	93
6.3	91
3.35	89
2	87
1.18	85
0.6	83
0.3	80
0.212	74
0.15	69
0.063	63

Soil Fraction	Total Percentage
Cobbles	0
Gravel	13
Sand	24
Silt/Clay	63

Remarks:
See Summary of Soil Descriptions

PARTICLE SIZE DISTRIBUTION TEST

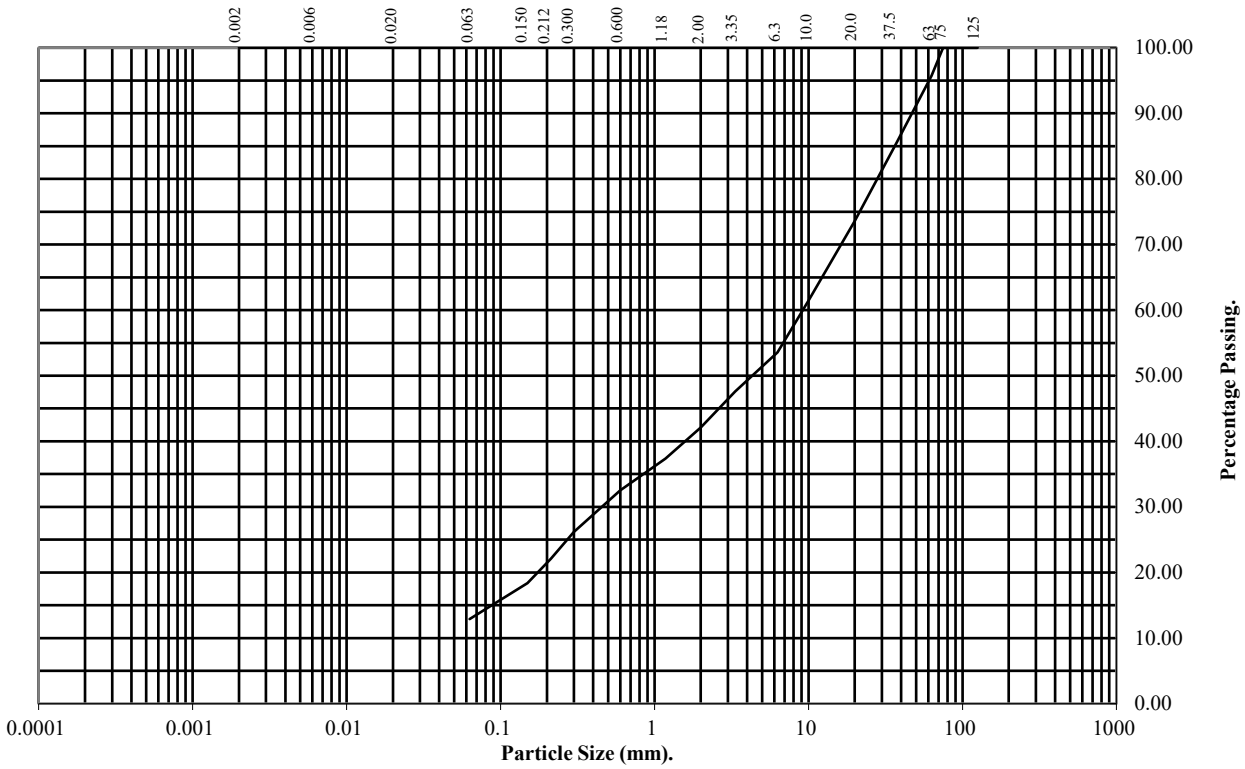
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Upfill Fines 1** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **B**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	96
37.5	86
20	74
10	61
6.3	54
3.35	48
2	42
1.18	37
0.6	33
0.3	26
0.212	22
0.15	18
0.063	13

Soil Fraction	Total Percentage
Cobbles	4
Gravel	54
Sand	29
Silt/Clay	13

Remarks:
See Summary of Soil Descriptions

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Smithfield Market

Contract No: PSL23/4597

Client Ref: 12-757

PARTICLE SIZE DISTRIBUTION TEST

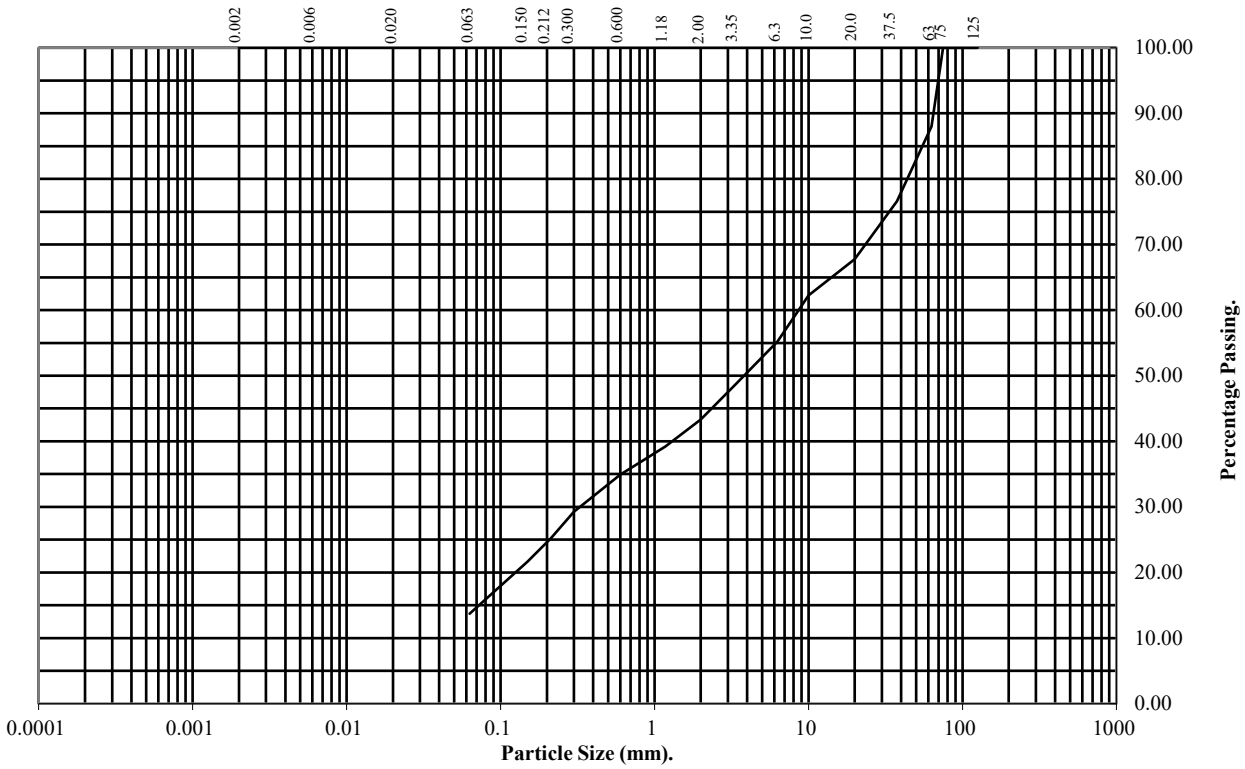
BS1377 : Part 2 : 1990

Wet Sieve, Clause 9.2

Hole Number: **Upfill Fines 2** **Top Depth (m):**

Sample Number: **Base Depth(m):**

Sample Type: **B**



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
63	88
37.5	77
20	68
10	62
6.3	55
3.35	49
2	43
1.18	39
0.6	35
0.3	29
0.212	25
0.15	22
0.063	14

Soil Fraction	Total Percentage
Cobbles	12
Gravel	45
Sand	29
Silt/Clay	14

Remarks:
See Summary of Soil Descriptions

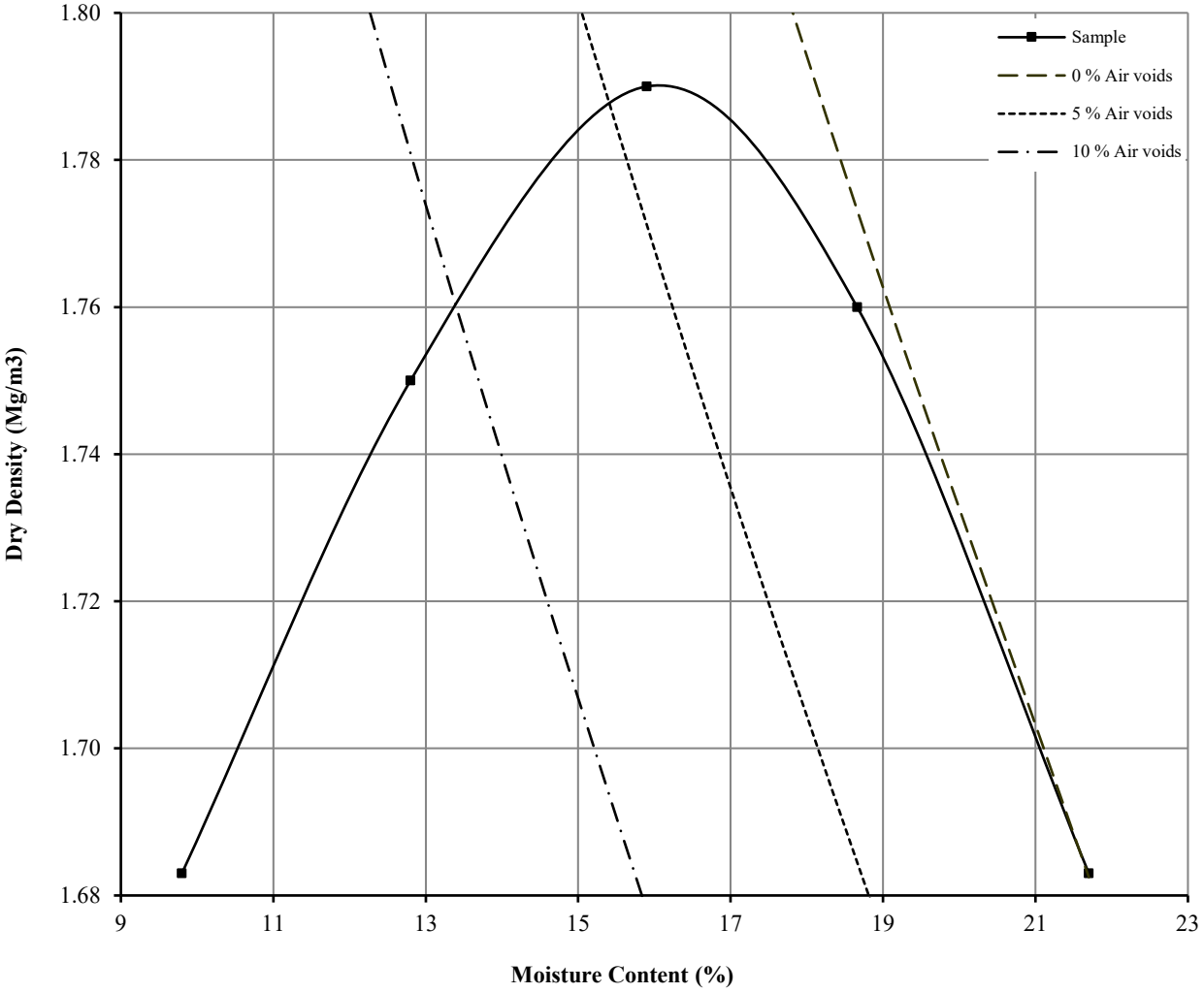
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

BS 1377 : Part 4 : Clause 3.3 : 1990

Hole Number: Upfill Clay 1 **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type: B



Initial Moisture Content:		16	Method of Compaction:	2.5kg	Separate Samples
Particle Density (Mg/m3):	2.65	Assumed	Material Retained on 37.5 mm Test Sieve (%):		0
Maximum Dry Density (Mg/m3):		1.79	Material Retained on 20.0 mm Test Sieve (%):		5
Optimum Moisture Content (%):		16			
Remarks See summary of soil descriptions					

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Smithfield Market

Contract
PSL23/4597
Client Ref
12-757

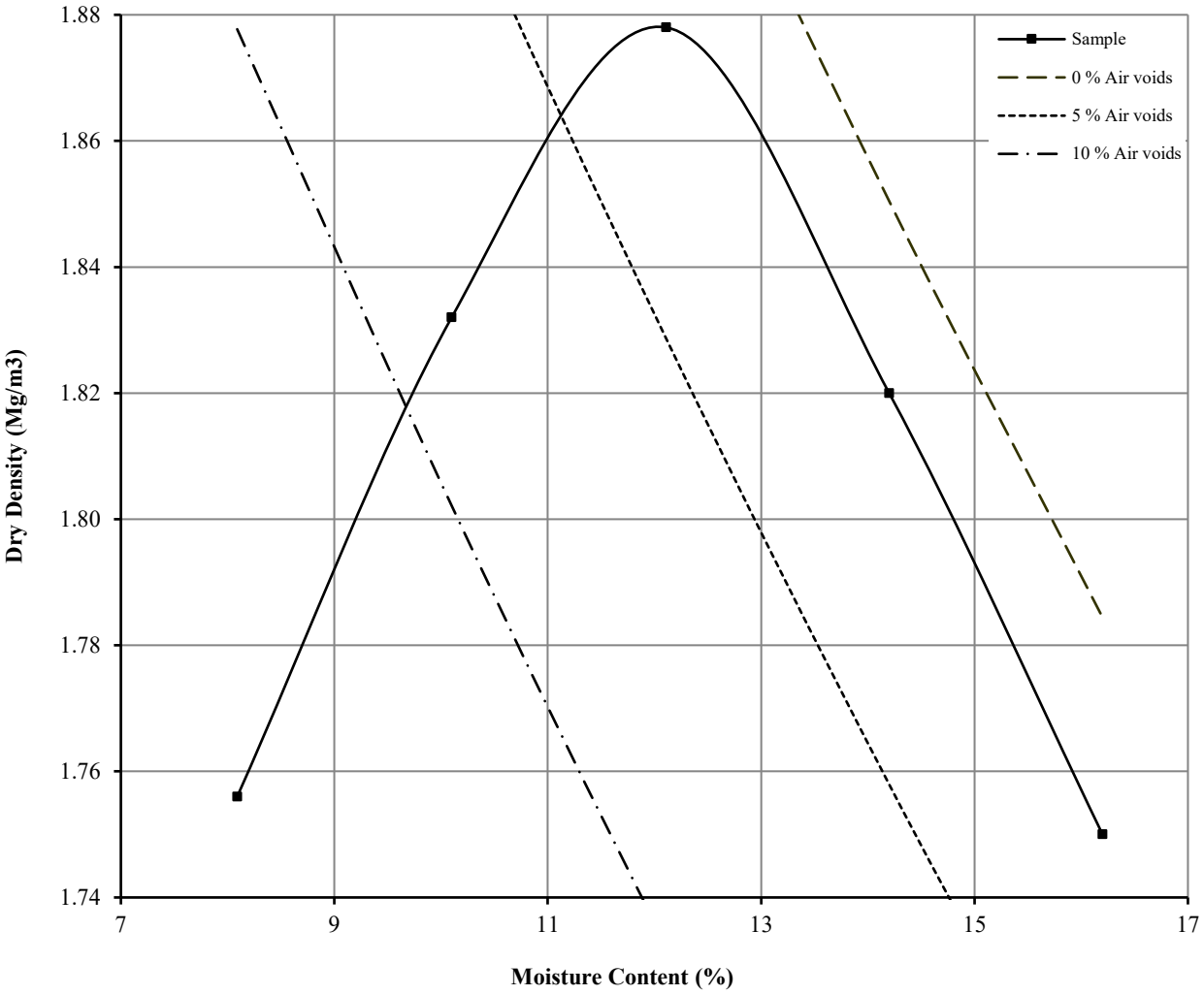
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.4 : 1990

Hole Number: Upfill Fines 1 **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type: B



Initial Moisture Content:		10	Method of Compaction:	2.5kg	Separate Samples
Particle Density (Mg/m3):	2.51	Assumed	Material Retained on 37.5 mm Test Sieve (%):		14
Maximum Dry Density (Mg/m3):		1.88	Material Retained on 20.0 mm Test Sieve (%):		12
Optimum Moisture Content (%):		12			
Remarks See summary of soil descriptions					

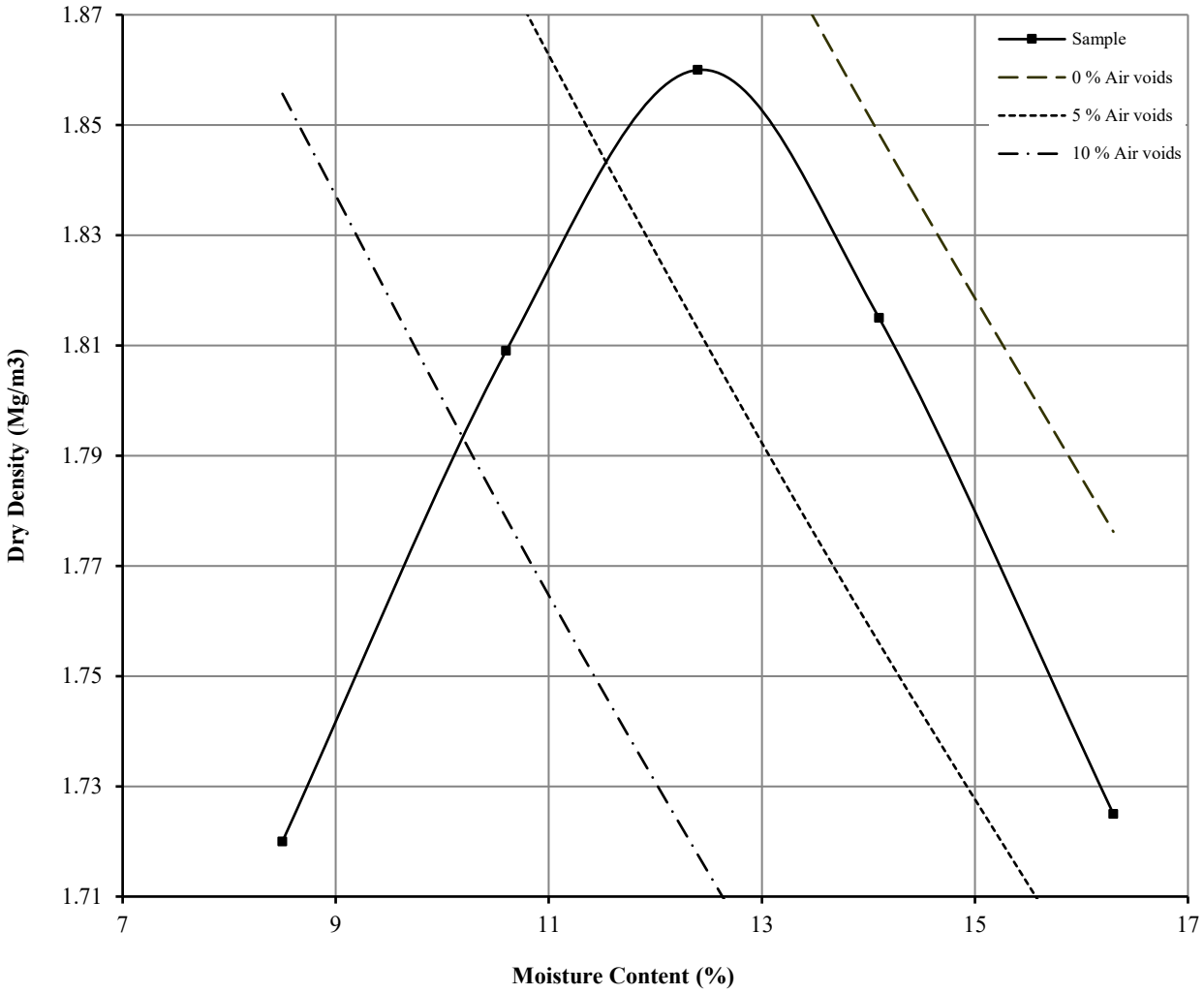
DRY DENSITY / MOISTURE CONTENT RELATIONSHIP

Non compliance with BS 1377 : Part 4 : Clause 3.4 : 1990

Hole Number: Upfill Fines 2 **Top Depth (m) :**

Sample Number: **Base Depth (m) :**

Sample Type: B



Initial Moisture Content:		12	Method of Compaction:	2.5kg	Separate Samples
Particle Density (Mg/m3):	2.5	Assumed	Material Retained on 37.5 mm Test Sieve (%):		23
Maximum Dry Density (Mg/m3):		1.86	Material Retained on 20.0 mm Test Sieve (%):		9
Optimum Moisture Content (%):		12			
Remarks See summary of soil descriptions					

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Smithfield Market

Contract
PSL23/4597
Client Ref
12-757

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client P.P. O'Connor Ltd

Address 61 Mosley Road
Trafford Park
Manchester
M17 1GJ

Contract New Smithfield Market

Job Number MRN 4616/11
Date of Issue 27 April 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

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

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

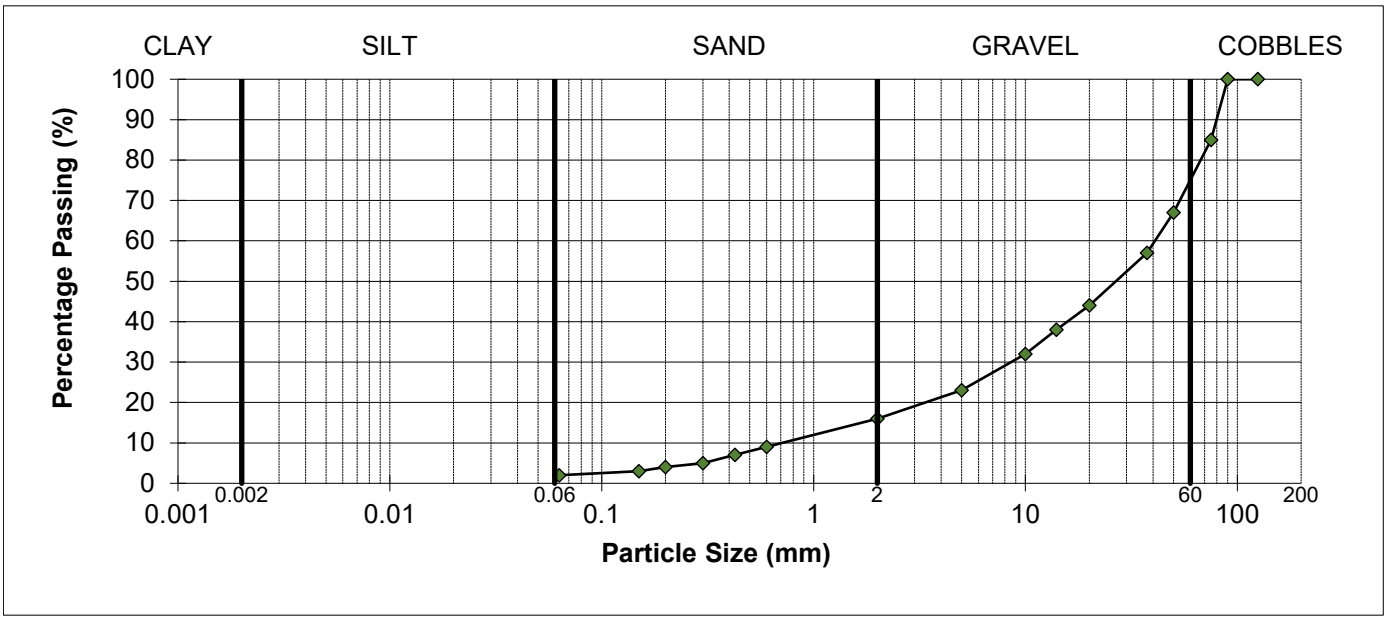
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/11

SAMPLE LABEL	6F2	DATE SAMPLED	20-Apr-23
LAB SAMPLE No	123948	DATE RECEIVED	20-Apr-23
DATE TESTED	21-Apr-23	SAMPLED BY	Client

MATERIAL	Recycled Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	23	10-45
90	100	80-100	2	16	
75	85	65-100	0.6	9	0-25
50	67		0.425	7	
37.5	57	45-100	0.3	5	
20	44		0.2	4	
14	38		0.15	3	
10	32	15-60	0.063	2	0-12



REMARKS
As received water content = 7.4%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 27-Apr-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market

SAMPLE DETAILS

Job Number	:	MRN 4265/1
Laboratory sample number	:	123948
Material	:	Recycled Crush
Advised source	:	As client & site above
Site mark	:	6F2
Certificate of sampling received	:	No
Date and time of sampling	:	20 April 2023
Date received at Laboratory	:	20 April 2023
Date of start of test	:	21 April 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	84
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	0.2
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	0.0
Ra	Bituminous materials	16
Rg	Glass	0.1
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.1
FL	Floating Particles (cm^3/kg)	0.2

Comments

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 27-Apr-23

MURRAY RIX

CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client P.P. O'Connor Ltd

Address 61 Mosley Road
Trafford Park
Manchester
M17 1GJ

Contract New Smithfield Market

Job Number MRN 4616/25
Date of Issue 26 July 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

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

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

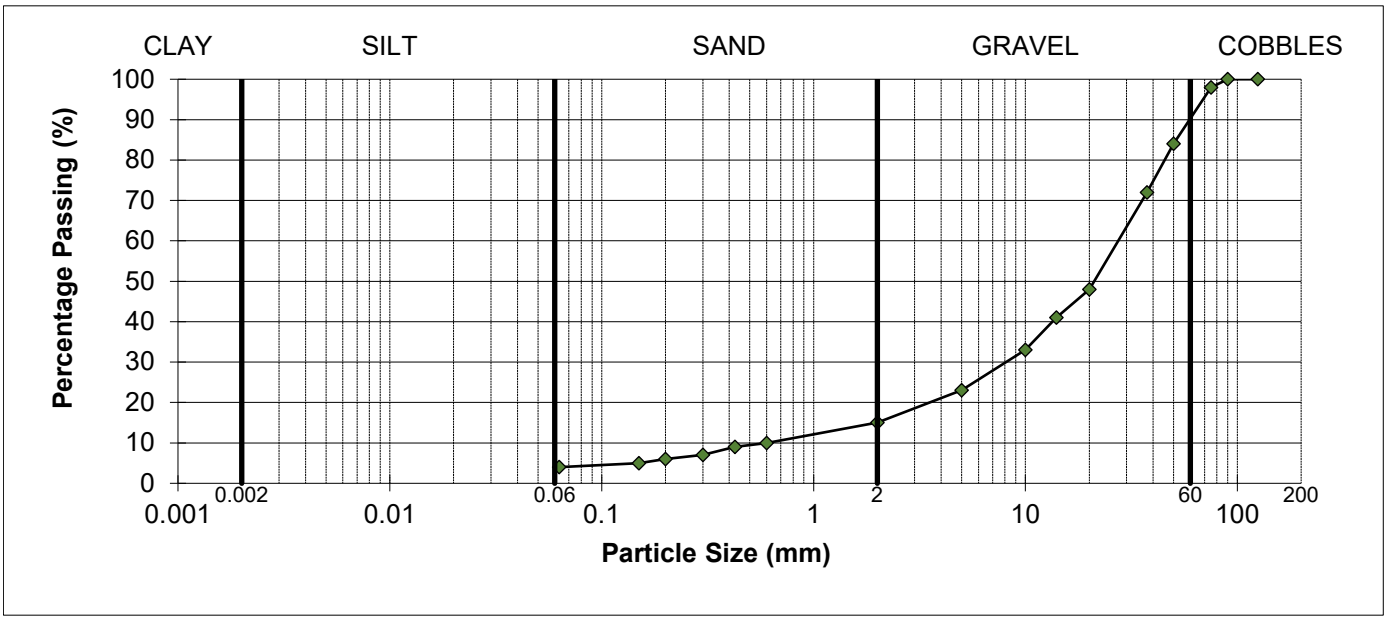
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/25

SAMPLE LABEL	6F2 - 1	DATE SAMPLED	04-Jul-23
LAB SAMPLE No	127957	DATE RECEIVED	04-Jul-23
DATE TESTED	10-Jul-23	SAMPLED BY	Murray Rix

MATERIAL	Recycled Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	23	10-45
90	100	80-100	2	15	
75	98	65-100	0.6	10	0-25
50	84		0.425	9	
37.5	72	45-100	0.3	7	
20	48		0.2	6	
14	41		0.15	5	
10	33	15-60	0.063	4	0-12



REMARKS
As received water content = 5.1%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 26-Jul-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

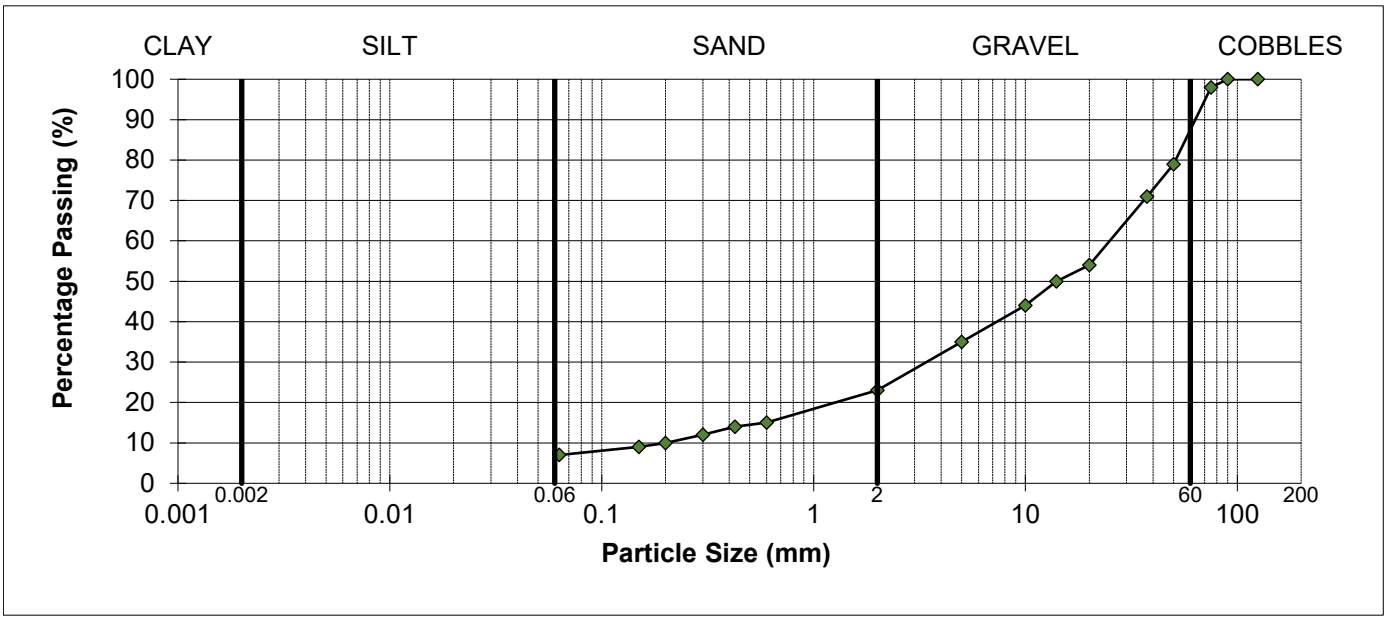
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/25

SAMPLE LABEL	6F2 - 2	DATE SAMPLED	04-Jul-23
LAB SAMPLE No	127958	DATE RECEIVED	04-Jul-23
DATE TESTED	10-Jul-23	SAMPLED BY	Murray Rix

MATERIAL	Recycled Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	35	10-45
90	100	80-100	2	23	
75	98	65-100	0.6	15	0-25
50	79		0.425	14	
37.5	71	45-100	0.3	12	
20	54		0.2	10	
14	50		0.15	9	
10	44	15-60	0.063	7	0-12



REMARKS
As received water content = 5.5%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 26-Jul-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

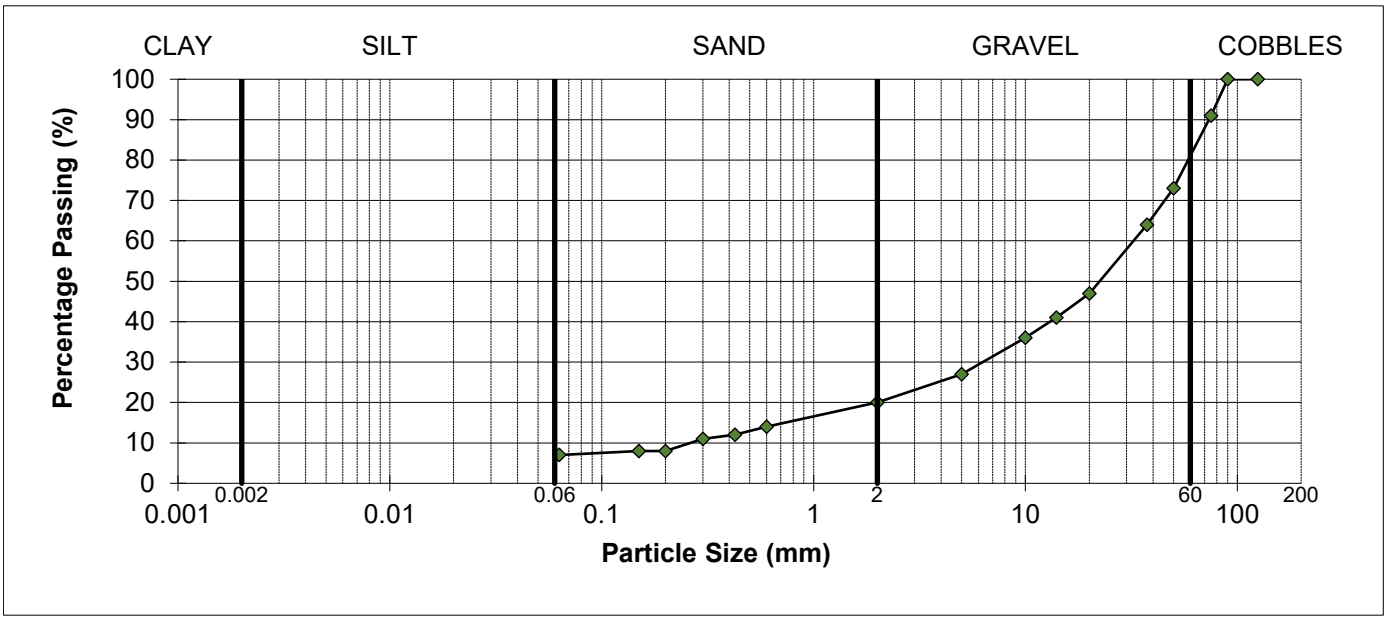
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/25

SAMPLE LABEL	6F2 - 3	DATE SAMPLED	04-Jul-23
LAB SAMPLE No	127959	DATE RECEIVED	04-Jul-23
DATE TESTED	10-Jul-23	SAMPLED BY	Murray Rix

MATERIAL	Recycled Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	27	10-45
90	100	80-100	2	20	
75	91	65-100	0.6	14	0-25
50	73		0.425	12	
37.5	64	45-100	0.3	11	
20	47		0.2	8	
14	41		0.15	8	
10	36	15-60	0.063	7	0-12



REMARKS
As received water content = 5.3%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 26-Jul-23

M U R R A Y R I X

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UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

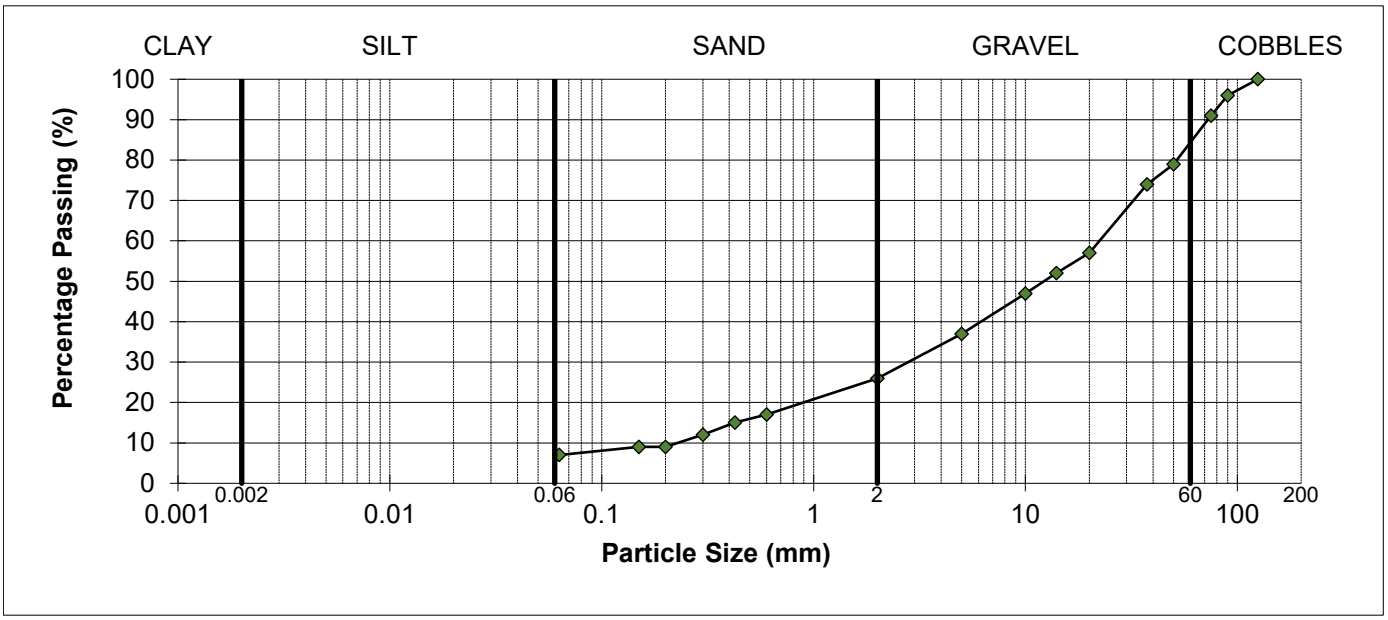
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/25

SAMPLE LABEL	6F2 - 4	DATE SAMPLED	04-Jul-23
LAB SAMPLE No	127960	DATE RECEIVED	04-Jul-23
DATE TESTED	10-Jul-23	SAMPLED BY	Murray Rix

MATERIAL	Recycled Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	37	10-45
90	96	80-100	2	26	
75	91	65-100	0.6	17	0-25
50	79		0.425	15	
37.5	74	45-100	0.3	12	
20	57		0.2	9	
14	52		0.15	9	
10	47	15-60	0.063	7	0-12



REMARKS
As received water content = 5.4%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 26-Jul-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market

SAMPLE DETAILS

Job Number	:	MRN 4616/25
Laboratory sample number	:	127957
Material	:	Recycled Crush
Advised source	:	Site won
Site mark	:	6F2-01
Certificate of sampling received	:	Yes
Date and time of sampling	:	04 July 2023
Date received at Laboratory	:	04 July 2023
Date of start of test	:	18 July 2023
Sampling Location	:	Site Stockpile
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Murray Rix
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	80
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	0.0
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	3.2
Ra	Bituminous materials	16
Rg	Glass	0.1
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.5
FL	Floating Particles (cm^3/kg)	0.2

Comments

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 26-Jul-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market

SAMPLE DETAILS

Job Number	:	MRN 4616/26
Laboratory sample number	:	127958
Material	:	Recycled Crush
Advised source	:	Site won
Site mark	:	6F2-02
Certificate of sampling received	:	Yes
Date and time of sampling	:	04 July 2023
Date received at Laboratory	:	04 July 2023
Date of start of test	:	18 July 2023
Sampling Location	:	Site Stockpile
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Murray Rix
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	73
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	0.0
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	7.8
Ra	Bituminous materials	19
Rg	Glass	0.0
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.2
FL	Floating Particles (cm^3/kg)	0.1

Comments

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 26-Jul-23

M U R R A Y R I X

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UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market

SAMPLE DETAILS

Job Number	:	MRN 4616/26
Laboratory sample number	:	127959
Material	:	Recycled Crush
Advised source	:	Site won
Site mark	:	6F2-03
Certificate of sampling received	:	Yes
Date and time of sampling	:	04 July 2023
Date received at Laboratory	:	04 July 2023
Date of start of test	:	18 July 2023
Sampling Location	:	Site Stockpile
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Murray Rix
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	79
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	0.0
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	3.4
Ra	Bituminous materials	18
Rg	Glass	0.0
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.1
FL	Floating Particles (cm^3/kg)	0.1

Comments

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 26-Jul-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market

SAMPLE DETAILS

Job Number	:	MRN 4616/26
Laboratory sample number	:	127960
Material	:	Recycled Crush
Advised source	:	Site won
Site mark	:	6F2-04
Certificate of sampling received	:	Yes
Date and time of sampling	:	04 July 2023
Date received at Laboratory	:	04 July 2023
Date of start of test	:	18 July 2023
Sampling Location	:	Site Stockpile
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Murray Rix
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	76
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	1.2
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	6.2
Ra	Bituminous materials	16
Rg	Glass	0.0
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.2
FL	Floating Particles (cm^3/kg)	0.0

Comments

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 26-Jul-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client P.P. O'Connor Ltd

Address 61 Mosley Road
Trafford Park
Manchester
M17 1GJ

Contract New Smithfield Market

Job Number MRN 4616/22
Date of Issue 06 July 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.

2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.

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

4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.

5 The results included within the report are representative of the samples submitted for analysis.

6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

UKAS TESTING 1580

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

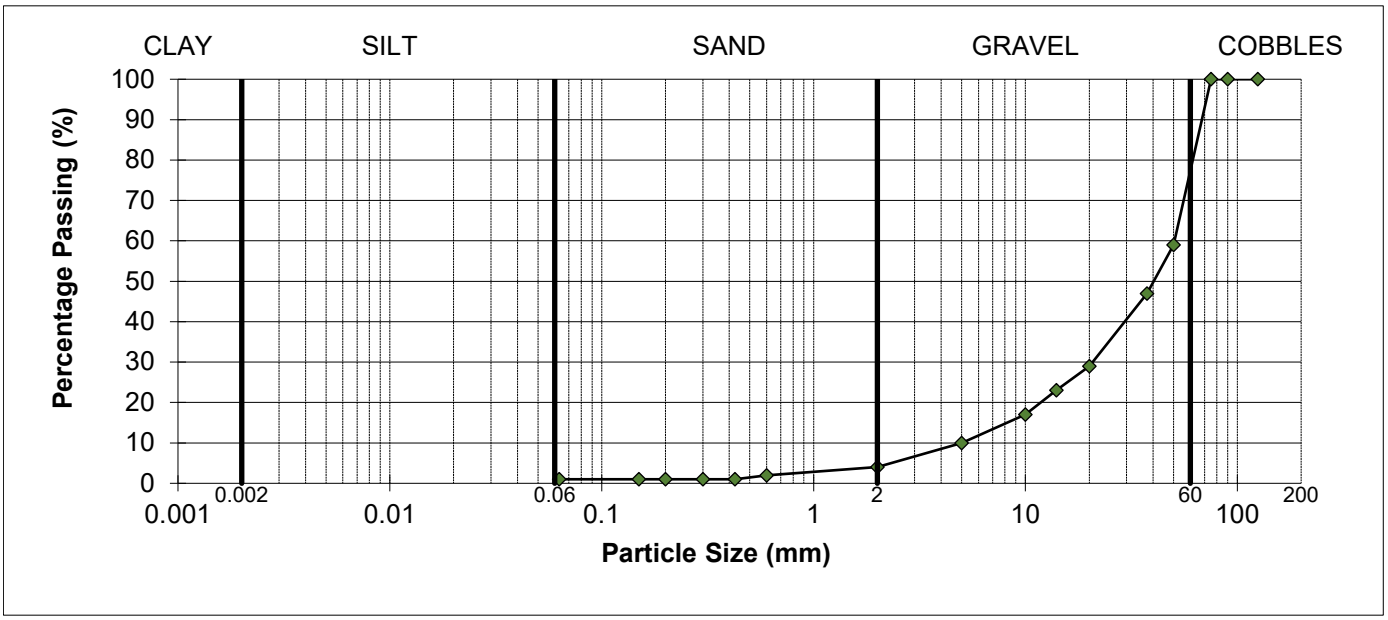
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/22

SAMPLE LABEL	6F2 - 1	DATE SAMPLED	Not advised
LAB SAMPLE No	125827	DATE RECEIVED	25-May-23
DATE TESTED	06-Jun-23	SAMPLED BY	Client

MATERIAL	Recycled Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	10	10-45
90	100	80-100	2	4	
75	100	65-100	0.6	2	0-25
50	59		0.425	1	
37.5	47	45-100	0.3	1	
20	29		0.2	1	
14	23		0.15	1	
10	17	15-60	0.063	1	0-12



REMARKS
As received water content = 3.3%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 06-Jul-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
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TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

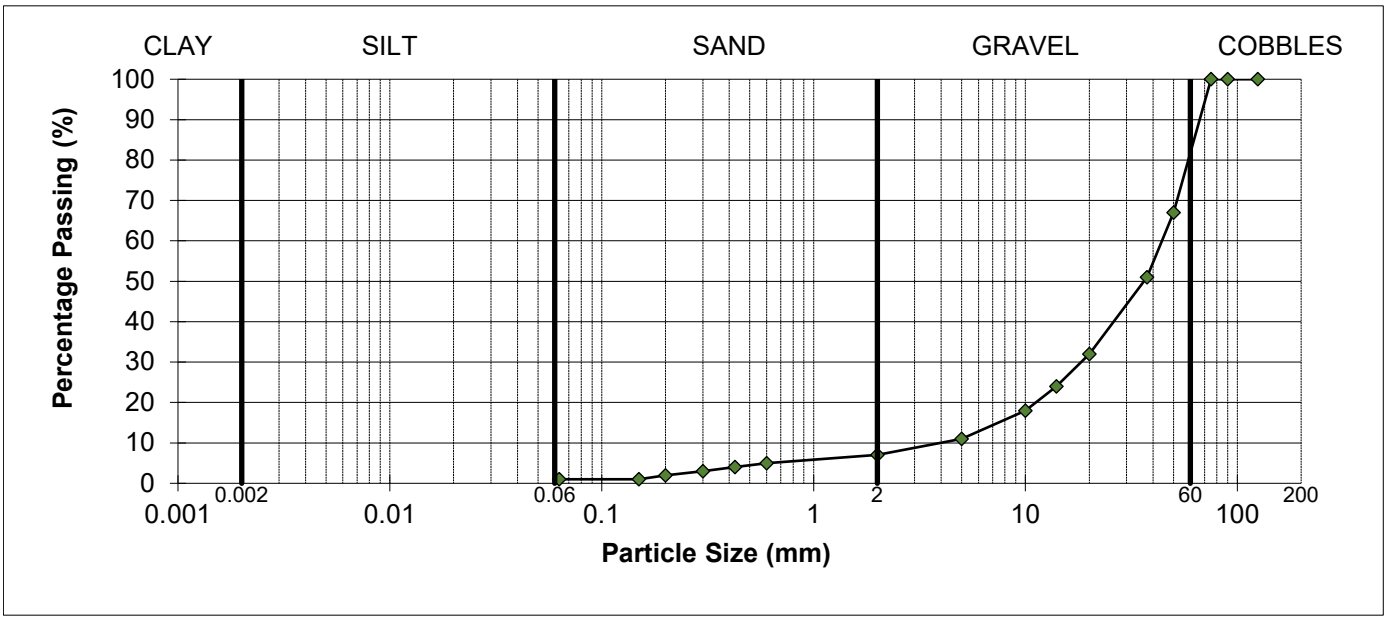
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/22

SAMPLE LABEL	6F2 - 2	DATE SAMPLED	Not advised
LAB SAMPLE No	125828	DATE RECEIVED	25-May-23
DATE TESTED	06-Jun-23	SAMPLED BY	Client

MATERIAL	Recycled Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	11	10-45
90	100	80-100	2	7	
75	100	65-100	0.6	5	0-25
50	67		0.425	4	
37.5	51	45-100	0.3	3	
20	32		0.2	2	
14	24		0.15	1	
10	18	15-60	0.063	1	0-12



REMARKS
As received water content = 3.1%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 06-Jul-23

M U R R A Y R I X
ANDREW HOUSE, HADFIELD STREET,
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TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

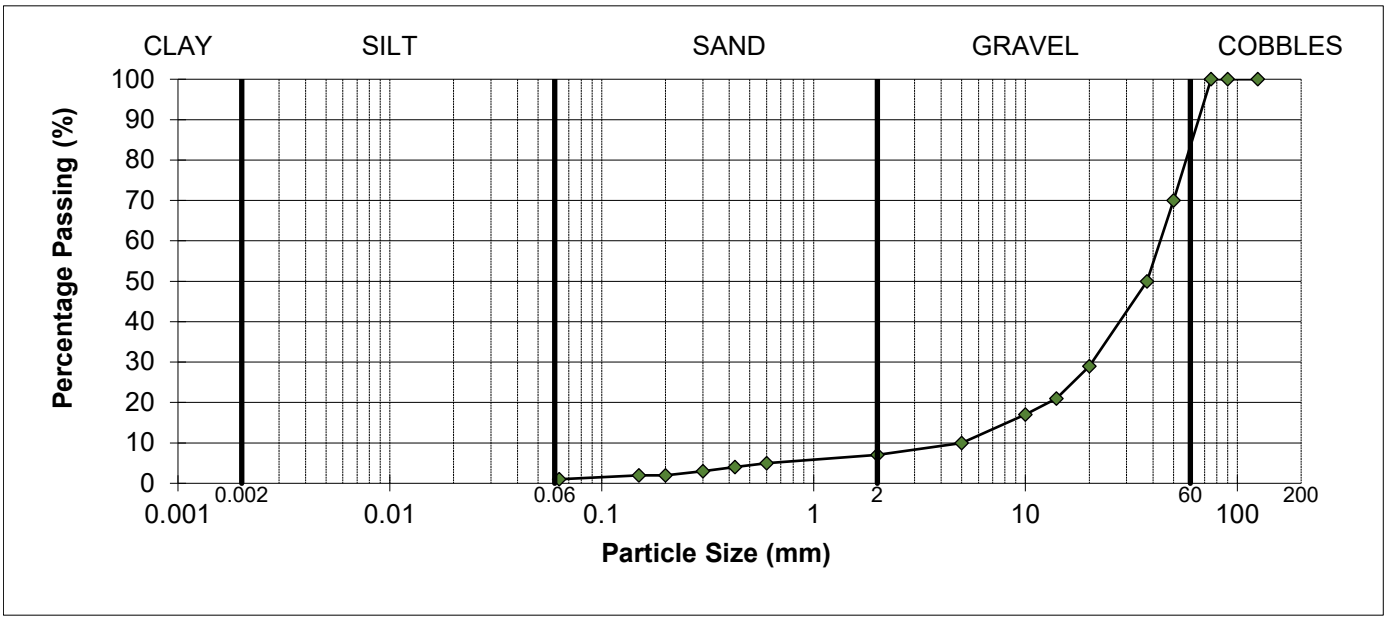
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/22

SAMPLE LABEL	6F2 - 3	DATE SAMPLED	Not advised
LAB SAMPLE No	125829	DATE RECEIVED	25-May-23
DATE TESTED	06-Jun-23	SAMPLED BY	Client

MATERIAL	Recycled Crush
ADVISED SOURCE	Site won

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	10	10-45
90	100	80-100	2	7	
75	100	65-100	0.6	5	0-25
50	70		0.425	4	
37.5	50	45-100	0.3	3	
20	29		0.2	2	
14	21		0.15	2	
10	17	15-60	0.063	1	0-12



REMARKS
As received water content = 3.4%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 06-Jul-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market

SAMPLE DETAILS

Job Number	:	MRN 4616/22
Laboratory sample number	:	125827
Material	:	Recycled Crush
Advised source	:	Site won
Site mark	:	6F2-01
Certificate of sampling received	:	No
Date and time of sampling	:	Not advised
Date received at Laboratory	:	25 May 2023
Date of start of test	:	06 June 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	81
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	0.9
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	0.0
Ra	Bituminous materials	17
Rg	Glass	0.4
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.2
FL	Floating Particles (cm^3/kg)	0.1

Comments

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 06-Jul-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market

SAMPLE DETAILS

Job Number	:	MRN 4616/22
Laboratory sample number	:	125828
Material	:	Recycled Crush
Advised source	:	Site won
Site mark	:	6F2-02
Certificate of sampling received	:	No
Date and time of sampling	:	Not advised
Date received at Laboratory	:	25 May 2023
Date of start of test	:	06 June 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	85
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	2.1
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	0.0
Ra	Bituminous materials	13
Rg	Glass	0.1
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.1
FL	Floating Particles (cm^3/kg)	0.0

Comments

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 06-Jul-23

M U R R A Y R I X

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

DETERMINATION OF CONSTITUENTS OF COARSE RECYCLED AGGREGATE

BS EN 933-11:2009

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market

SAMPLE DETAILS

Job Number	:	MRN 4616/22
Laboratory sample number	:	125829
Material	:	Recycled Crush
Advised source	:	Site won
Site mark	:	6F2-03
Certificate of sampling received	:	No
Date and time of sampling	:	Not advised
Date received at Laboratory	:	25 May 2023
Date of start of test	:	06 June 2023
Sampling Location	:	Not advised
Method of sampling	:	BS EN 932-1 : 1997
Sampled by	:	Client
Mass of dry sample tested	:	50 kg
Drying Temperature	:	40 ± 5°C

RESULT

Constituent	Description	Proportion (%)
Rc	Concrete, Concrete products, Mortar, Concrete masonry units	82
Ru	Unbound aggregate, Natural stone, Hydraulically bound aggregate	1.3
Rb	Clay masonry units (i.e. bricks & tiles), Calcium silicate masonry units, Aerated non-floating concrete	0.0
Ra	Bituminous materials	16
Rg	Glass	0.0
X	Other: Cohesive (i.e. clay & soil), Metals (ferrous & non-ferrous), Non-floating wood, plastic & rubber, Gypsum plaster	0.3
FL	Floating Particles (cm^3/kg)	0.0

Comments

NAME O.P. Davies BA (Hons) (Laboratory Manager) SIGNED DATE 06-Jul-23

MURRAY RIX

CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client P.P. O'Connor Ltd

Address 61 Mosley Road
Trafford Park
Manchester
M17 1GJ

Contract New Smithfield Market

Job Number MRN 4616/7
Date of Issue 03 March 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

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TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

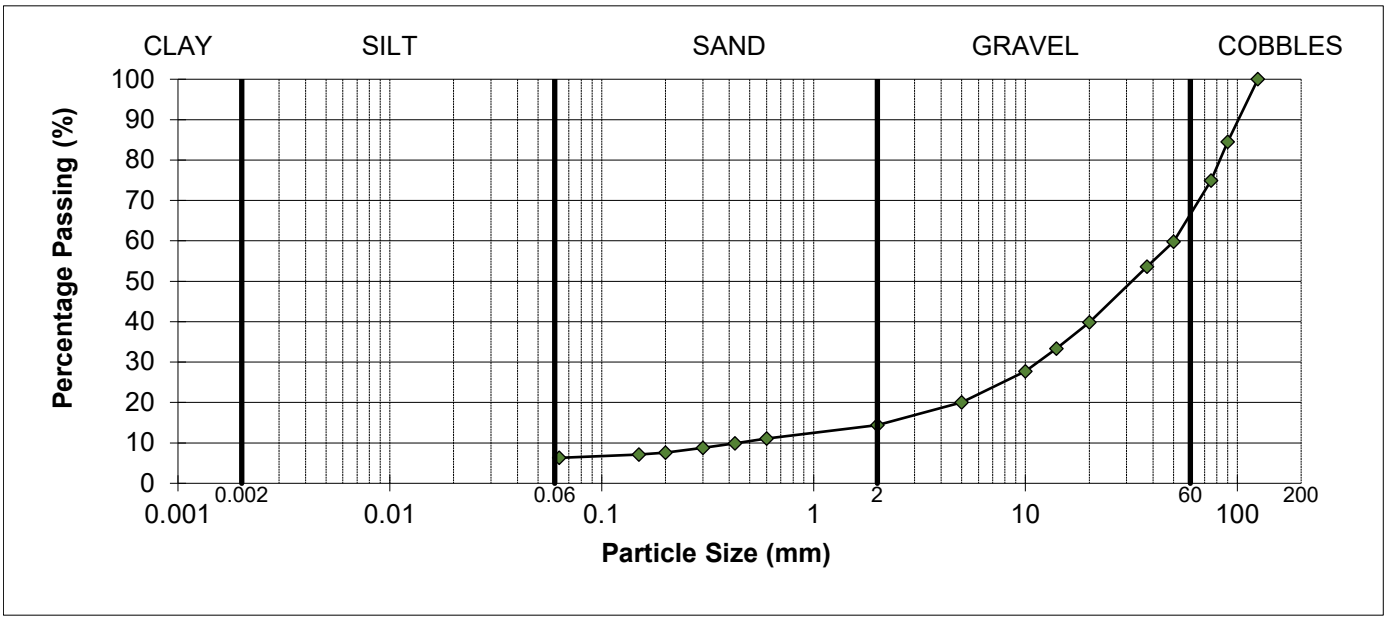
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/7

SAMPLE LABEL	Sample 1	DATE SAMPLED	24-Feb-23
LAB SAMPLE No	121979	DATE RECEIVED	24-Feb-23
DATE TESTED	27-Feb-23	SAMPLED BY	Murray Rix

MATERIAL	6F2
ADVISED SOURCE	As client & site above

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	20	10-45
90	85	80-100	2	14	
75	75	65-100	0.6	11	0-25
50	60		0.425	10	
37.5	54	45-100	0.3	9	
20	40		0.2	8	
14	33		0.15	7	
10	28	15-60	0.063	6	0-12



REMARKS
As received water content = 5.9%
Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 03-Mar-23

M U R R A Y R I X

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DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

TEST CERTIFICATE

PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

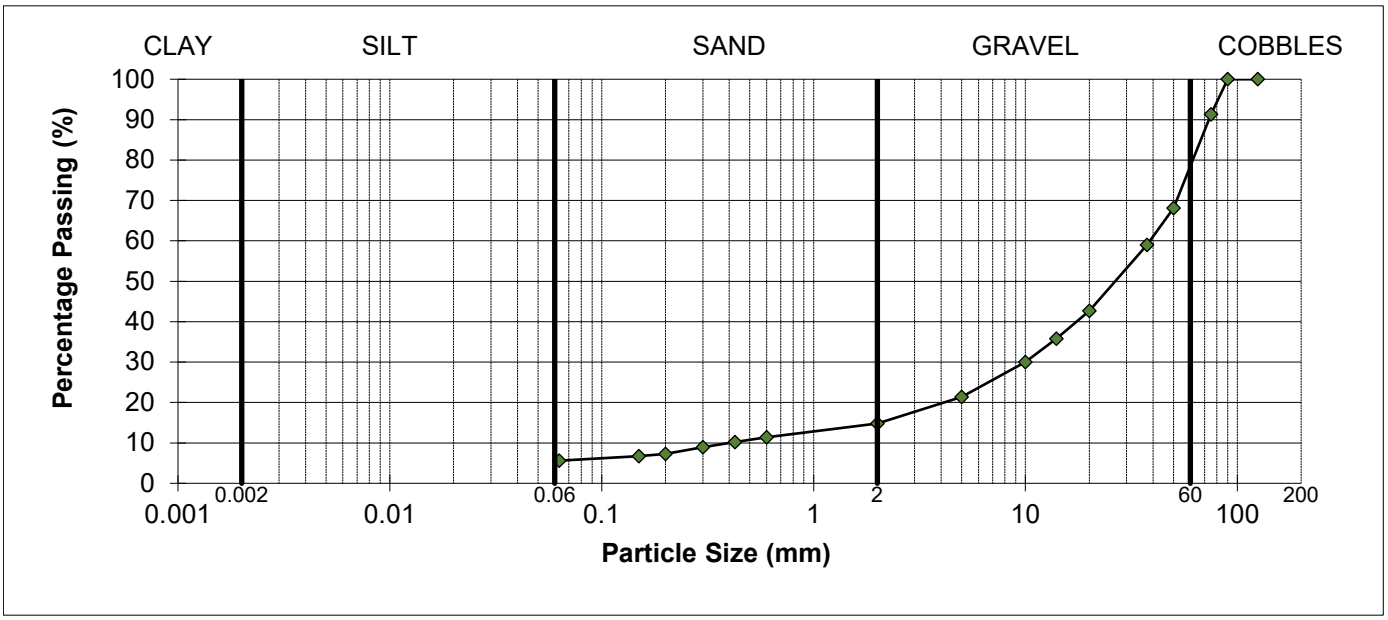
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	P.P. O'Connor Ltd
SITE	New Smithfield Market
JOB NUMBER	MRN 4616/7

SAMPLE LABEL	Sample 2	DATE SAMPLED	24-Feb-23
LAB SAMPLE No	121980	DATE RECEIVED	24-Feb-23
DATE TESTED	27-Feb-23	SAMPLED BY	Murray Rix

MATERIAL	6F2
ADVISED SOURCE	As client & site above

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100	100	5	21	10-45
90	100	80-100	2	15	
75	91	65-100	0.6	11	0-25
50	68		0.425	10	
37.5	59	45-100	0.3	9	
20	43		0.2	7	
14	36		0.15	7	
10	30	15-60	0.063	6	0-12



REMARKS

As received water content = 5.8%

Sample complies with the advised grading specification for a 6F2 material (SHW 2016)

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 03-Mar-23

MURRAY RIX
CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client P.P. O'Connor Ltd

Address 61 Mosley Road
Trafford Park
Manchester
M17 1GJ

Contract New Smithfield Market

Job Number MRN 4616/27
Date of Issue 31 July 2023

Approved Signatories

S J Hutchings, O P Davies

Notes

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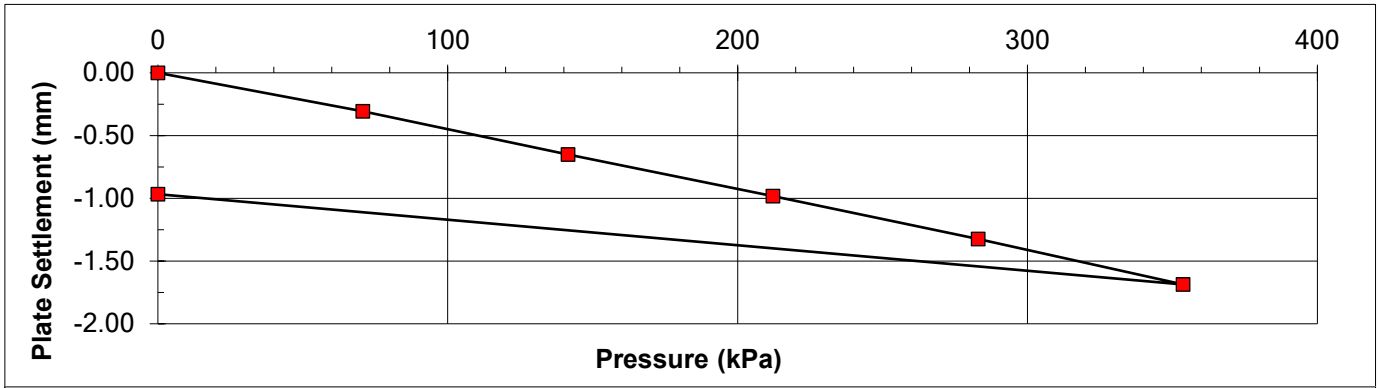
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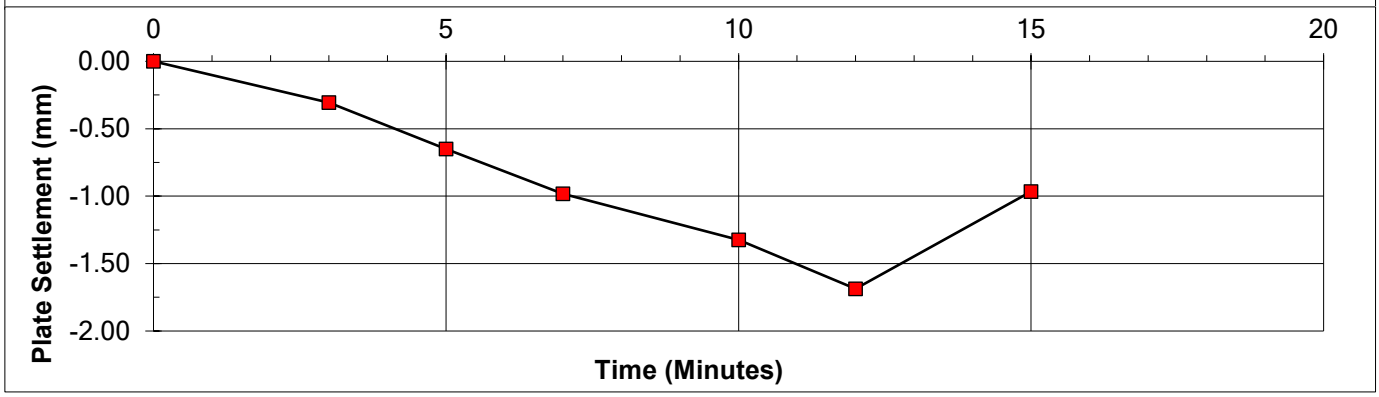
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd		
SITE	New Smithfield Market		
JOB NUMBER	MRN 4089/27		
TEST LOCATION	Test 01	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	28-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4417	4457	4368	4414	0.00	0.00	0.0
4383	4426	4341	4383	-0.31	5.00	70.7
4355	4389	4303	4349	-0.65	10.00	141.5
4320	4358	4269	4316	-0.98	15.00	212.2
4282	4326	4237	4282	-1.32	20.00	282.9
4246	4284	4206	4245	-1.69	25.00	353.7
4328	4347	4277	4317	-0.97	0.00	0.0





Pressure at 1.25 mm deflexion =	268	kPa
Modulus of subgrade reaction (k) =	214	MPa/m
Equivalent 762 mm plate reaction =	95	MPa/m
Equivalent CBR =	25.6	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 31-Jul-23

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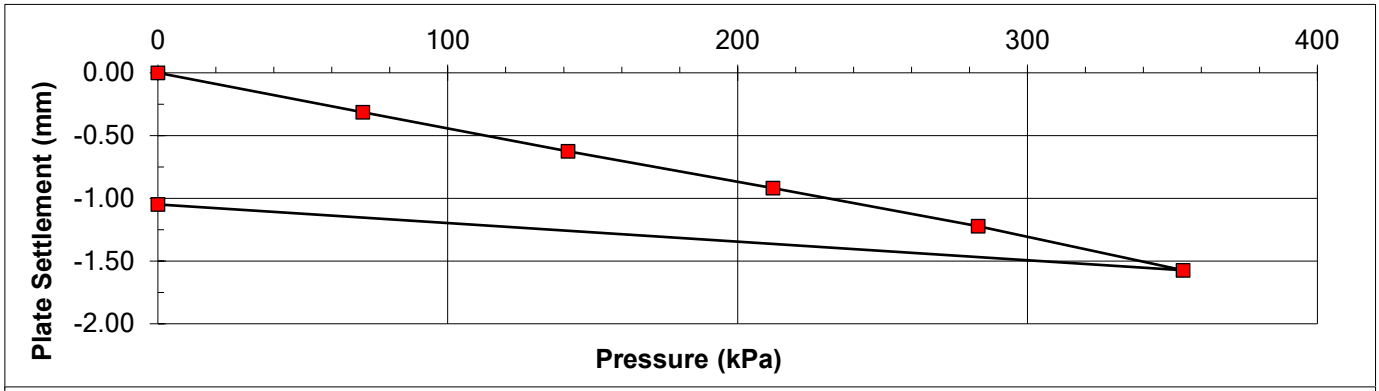
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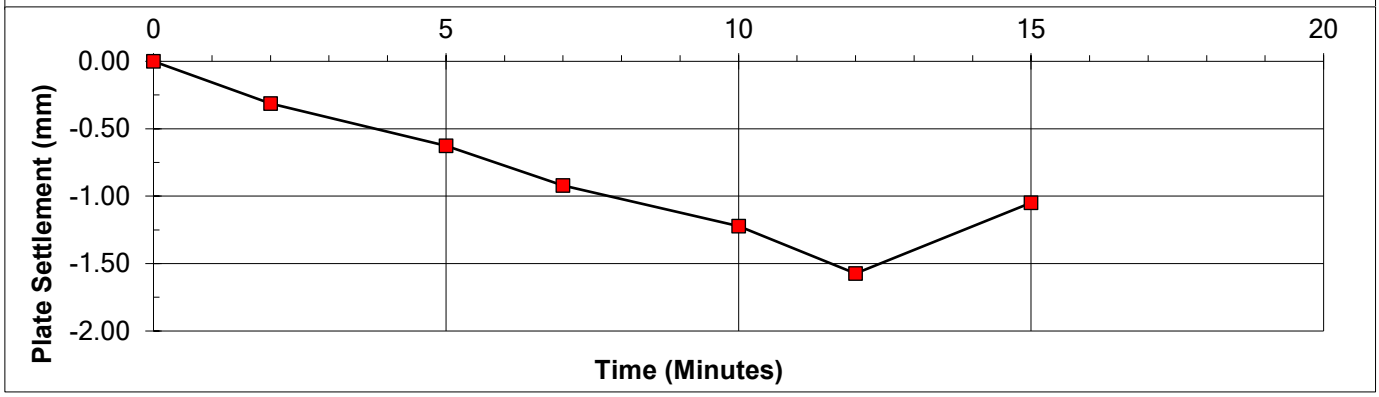
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd		
SITE	New Smithfield Market		
JOB NUMBER	MRN 4089/27		
TEST LOCATION	Test 02	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	28-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4368	4443	4567	4459	0.00	0.00	0.0
4340	4415	4529	4428	-0.31	5.00	70.7
4306	4383	4501	4397	-0.63	10.00	141.5
4277	4351	4474	4367	-0.92	15.00	212.2
4248	4322	4441	4337	-1.22	20.00	282.9
4214	4289	4403	4302	-1.57	25.00	353.7
4258	4348	4457	4354	-1.05	0.00	0.0





Pressure at 1.25 mm deflexion =	288	kPa
Modulus of subgrade reaction (k) =	231	MPa/m
Equivalent 762 mm plate reaction =	102	MPa/m
Equivalent CBR =	29.1	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

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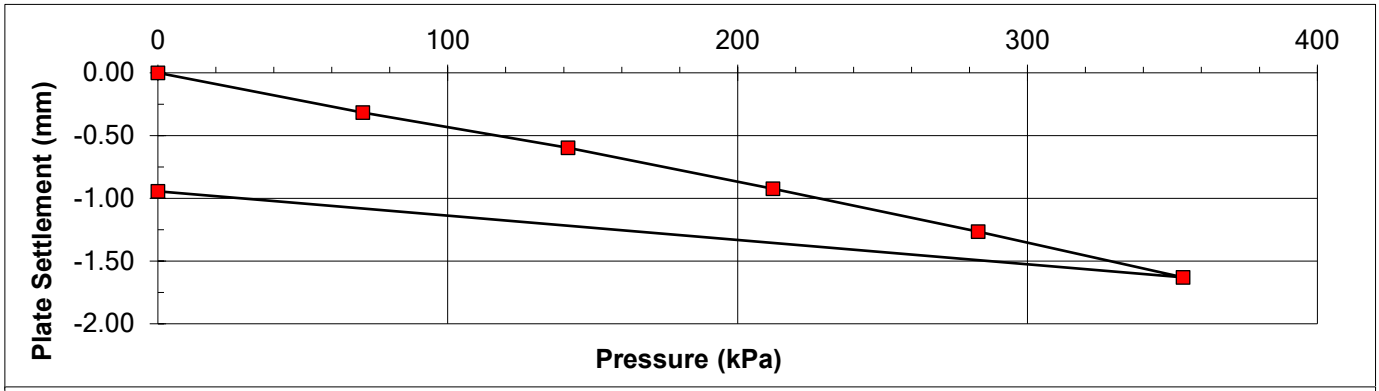
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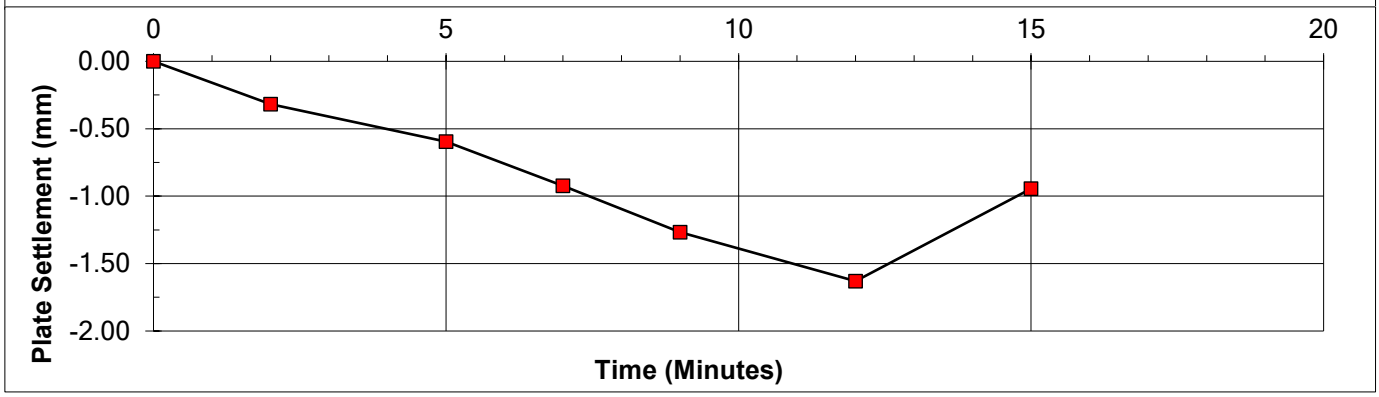
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd		
SITE	New Smithfield Market		
JOB NUMBER	MRN 4089/27		
TEST LOCATION	Test 03	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	28-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4479	4511	4453	4481	0.00	0.00	0.0
4445	4477	4426	4449	-0.32	5.00	70.7
4415	4446	4403	4421	-0.60	10.00	141.5
4383	4415	4368	4389	-0.92	15.00	212.2
4353	4384	4326	4354	-1.27	20.00	282.9
4317	4346	4291	4318	-1.63	25.00	353.7
4387	4417	4356	4387	-0.94	0.00	0.0





Pressure at 1.25 mm deflexion =	280	kPa
Modulus of subgrade reaction (k) =	224	MPa/m
Equivalent 762 mm plate reaction =	99	MPa/m
Equivalent CBR =	27.6	%

REMARKS

SIGNED

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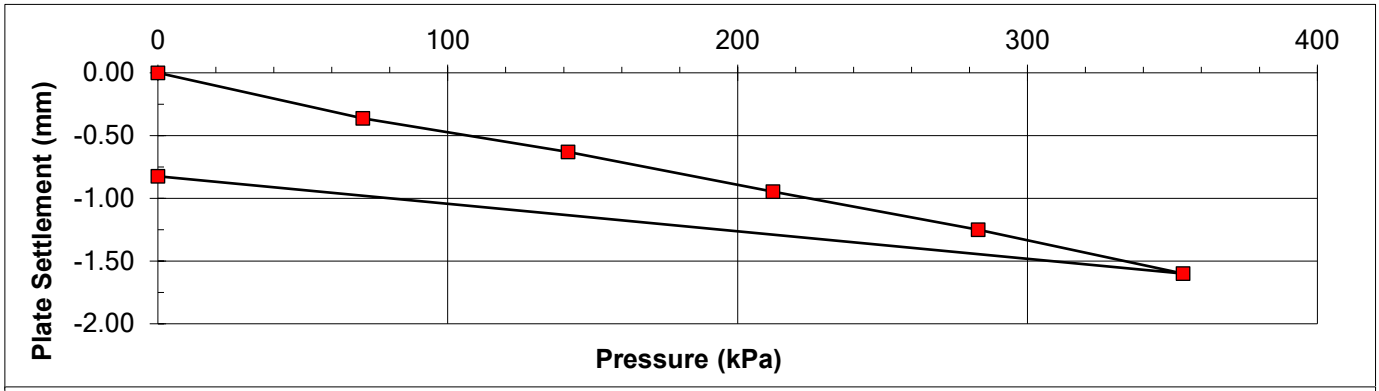
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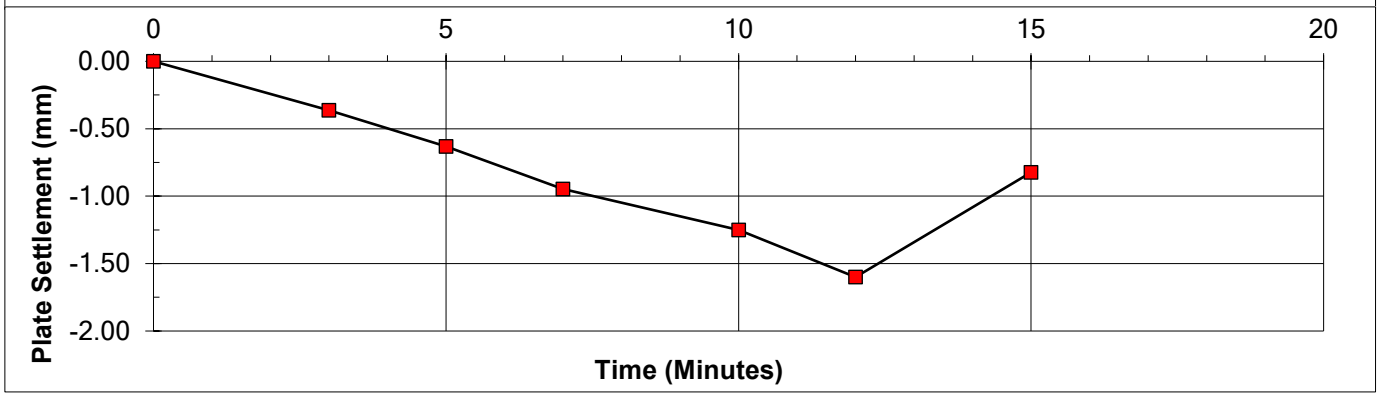
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd		
SITE	New Smithfield Market		
JOB NUMBER	MRN 4089/27		
TEST LOCATION	Test 04	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	28-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4379	4415	4473	4422	0.00	0.00	0.0
4345	4376	4437	4386	-0.36	5.00	70.7
4315	4352	4411	4359	-0.63	10.00	141.5
4288	4320	4375	4328	-0.95	15.00	212.2
4261	4287	4344	4297	-1.25	20.00	282.9
4220	4251	4316	4262	-1.60	25.00	353.7
4315	4328	4377	4340	-0.82	0.00	0.0





Pressure at 1.25 mm deflexion =	283	kPa
Modulus of subgrade reaction (k) =	226	MPa/m
Equivalent 762 mm plate reaction =	100	MPa/m
Equivalent CBR =	28.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 31-Jul-23

MURRAY RIX

CONSULTANCY, SITE INVESTIGATION
CONSTRUCTION MATERIALS TESTING

TEST REPORT

Client P.P. O'Connor Ltd

Address 61 Mosley Road
Trafford Park
Manchester
M17 1GJ

Contract New Smithfield Market

Job Number MRN 4616/24
Date of Issue 13 July 2023

Approved Signatories

S J Hutchings, O P Davies

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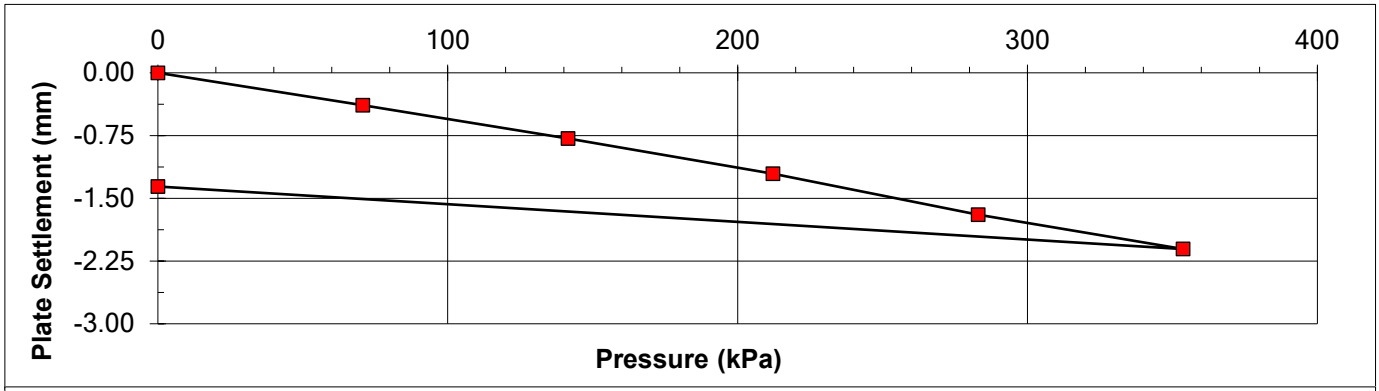
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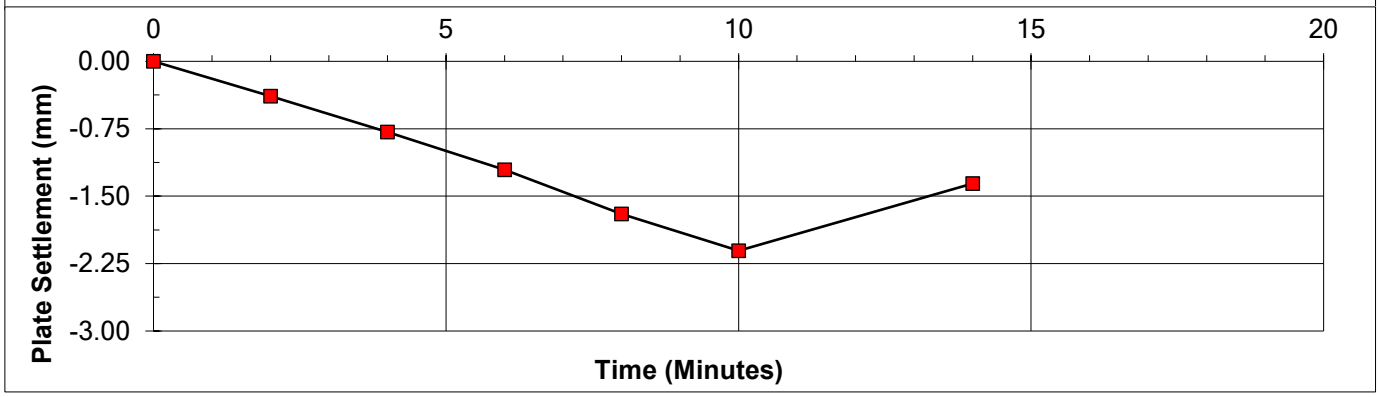
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd				
SITE	New Smithfield Market				
JOB NUMBER	MRN 4089/24				
TEST LOCATION	B2	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	12-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4866	4710	4741	4772	0.00	0.00	0.0
4836	4671	4694	4734	-0.39	5.00	70.7
4791	4637	4653	4694	-0.79	10.00	141.5
4742	4589	4624	4652	-1.21	15.00	212.2
4687	4542	4579	4603	-1.70	20.00	282.9
4650	4496	4539	4562	-2.11	25.00	353.7
4713	4585	4611	4636	-1.36	0.00	0.0





Pressure at 1.25 mm deflexion =	218	kPa
Modulus of subgrade reaction (k) =	175	MPa/m
Equivalent 762 mm plate reaction =	77	MPa/m
Equivalent CBR =	18.0	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 13-Jul-23

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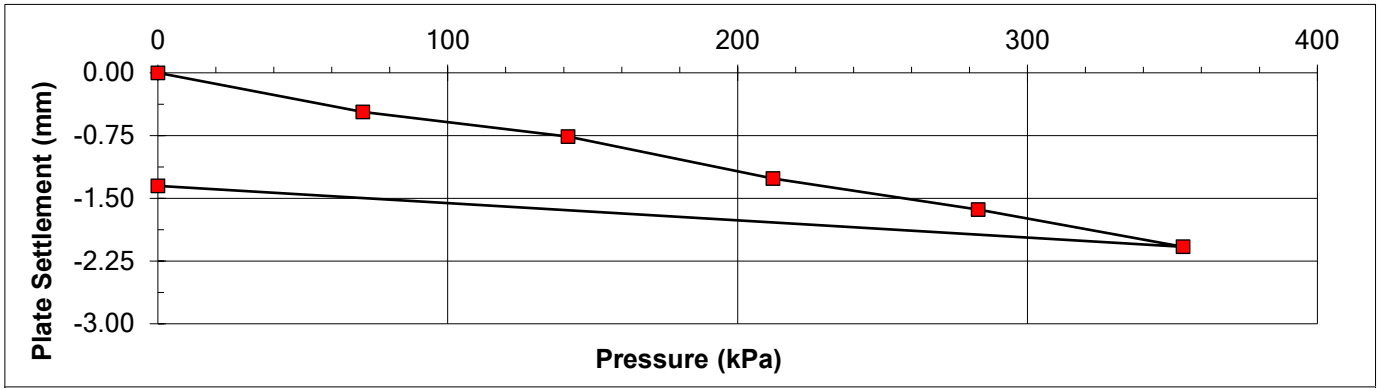
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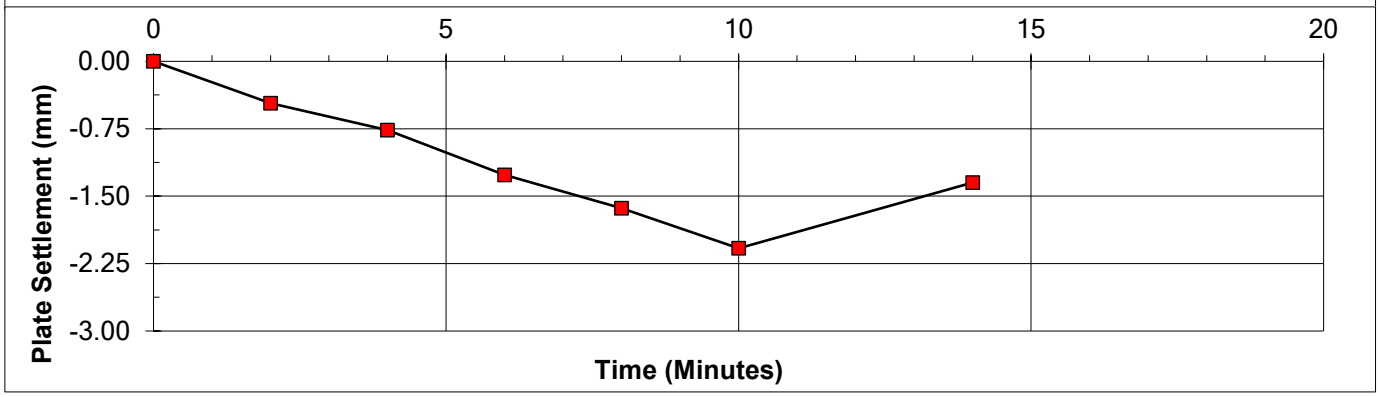
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd		
SITE	New Smithfield Market		
JOB NUMBER	MRN 4089/24		
TEST LOCATION	B3	LOADING DEVICE	20 Tonne Enerpac Jack
TEST DATE	12-Jul-23	PLATE SIZE (mm)	300 diameter
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4692	4643	4780	4705	0.00	0.00	0.0
4651	4593	4731	4658	-0.47	5.00	70.7
4621	4566	4699	4629	-0.76	10.00	141.5
4559	4517	4660	4579	-1.26	15.00	212.2
4521	4478	4626	4542	-1.63	20.00	282.9
4472	4440	4579	4497	-2.08	25.00	353.7
4551	4503	4656	4570	-1.35	0.00	0.0





Pressure at 1.25 mm deflexion =	210	kPa
Modulus of subgrade reaction (k) =	168	MPa/m
Equivalent 762 mm plate reaction =	74	MPa/m
Equivalent CBR =	16.9	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 13-Jul-23

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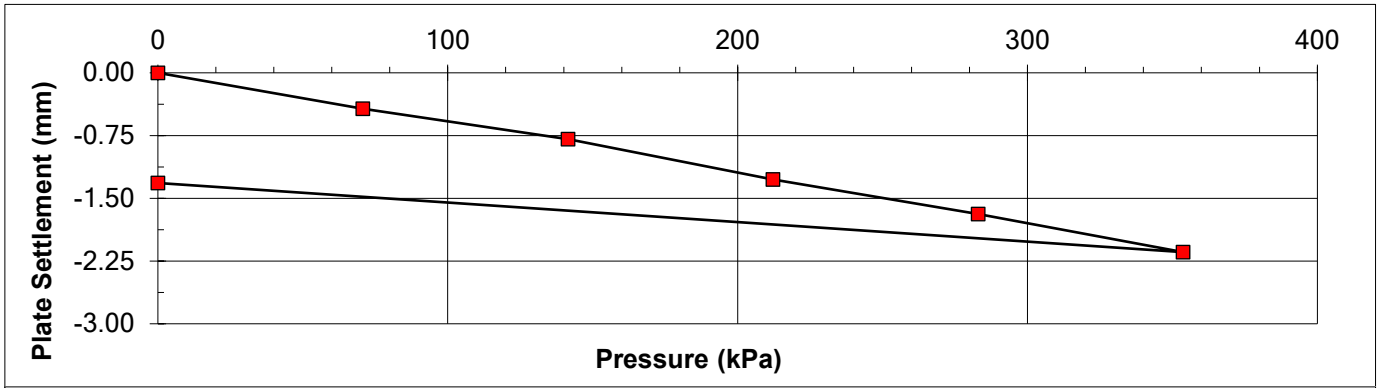
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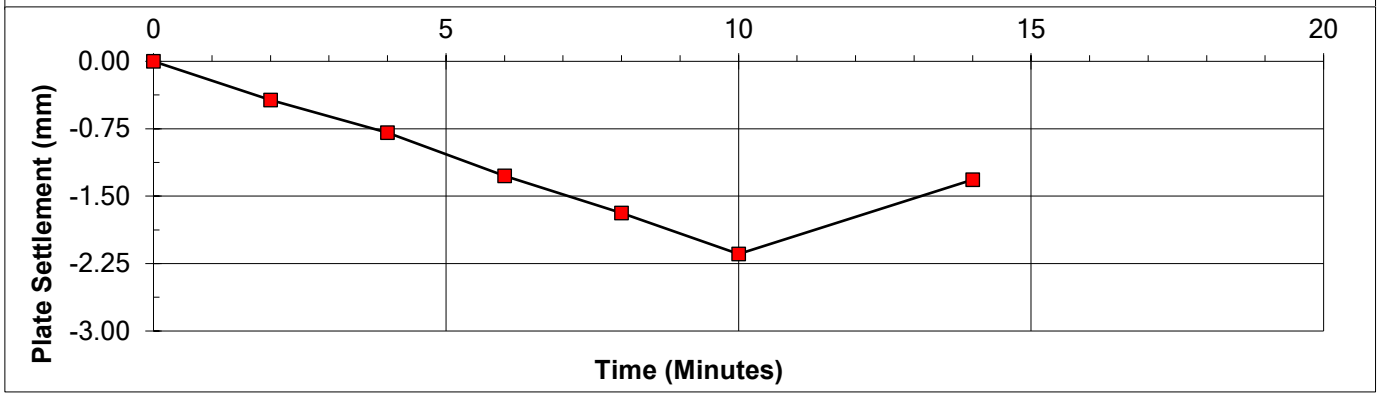
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd				
SITE	New Smithfield Market				
JOB NUMBER	MRN 4089/24				
TEST LOCATION	B4	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	12-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4539	4758	4752	4683	0.00	0.00	0.0
4490	4721	4709	4640	-0.43	5.00	70.7
4451	4688	4672	4604	-0.79	10.00	141.5
4406	4632	4629	4556	-1.27	15.00	212.2
4364	4593	4586	4514	-1.69	20.00	282.9
4316	4550	4540	4469	-2.14	25.00	353.7
4413	4618	4623	4551	-1.32	0.00	0.0





Pressure at 1.25 mm deflexion =	209	kPa
Modulus of subgrade reaction (k) =	167	MPa/m
Equivalent 762 mm plate reaction =	74	MPa/m
Equivalent CBR =	16.6	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 13-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

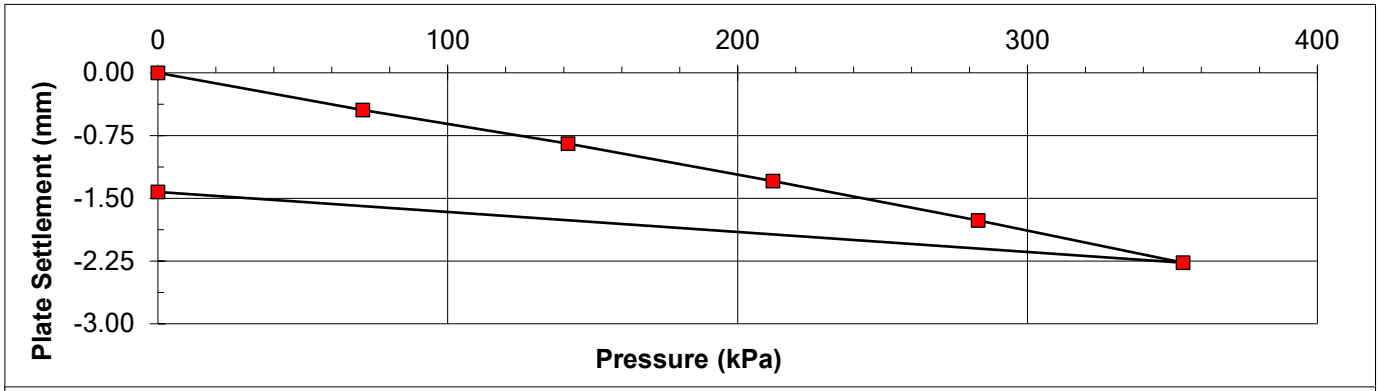
TEST CERTIFICATE

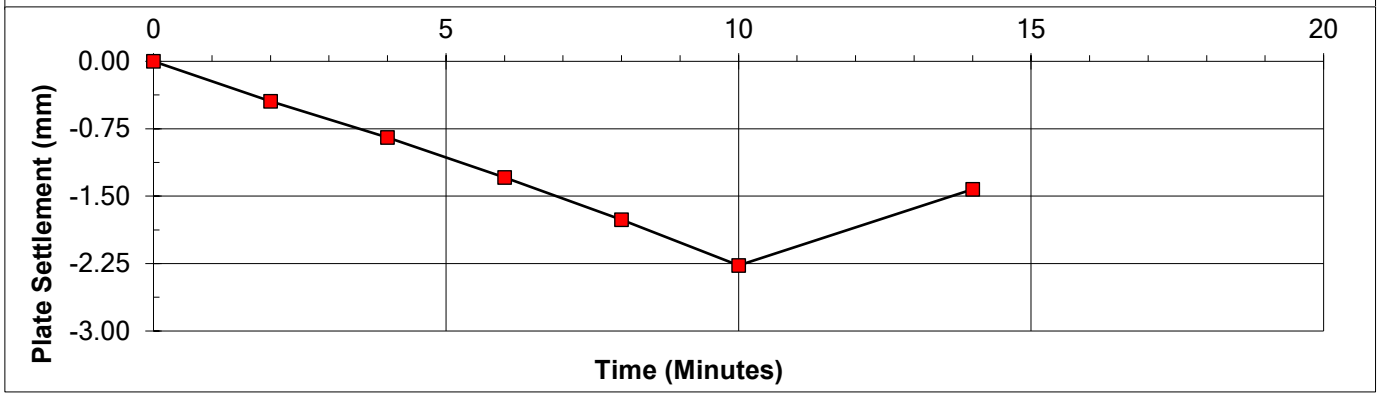
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd				
SITE	New Smithfield Market				
JOB NUMBER	MRN 4089/24				
TEST LOCATION	C1		LOADING DEVICE	20 Tonne Enerpac Jack	
TEST DATE	12-Jul-23		PLATE SIZE (mm)	300 diameter	
TEST DEPTH	Surface		REACTION LOAD USED	Site Plant	
MATERIAL UNDER TEST	Crush		MOISTURE CONTENT	Not Required	

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4742	4760	4511	4671	0.00	0.00	0.0
4692	4719	4469	4627	-0.44	5.00	70.7
4639	4683	4437	4586	-0.85	10.00	141.5
4597	4644	4384	4542	-1.29	15.00	212.2
4549	4596	4339	4495	-1.76	20.00	282.9
4501	4560	4271	4444	-2.27	25.00	353.7
4580	4628	4378	4529	-1.42	0.00	0.0





Pressure at 1.25 mm deflexion =	205	kPa
Modulus of subgrade reaction (k) =	164	MPa/m
Equivalent 762 mm plate reaction =	73	MPa/m
Equivalent CBR =	16.2	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 13-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

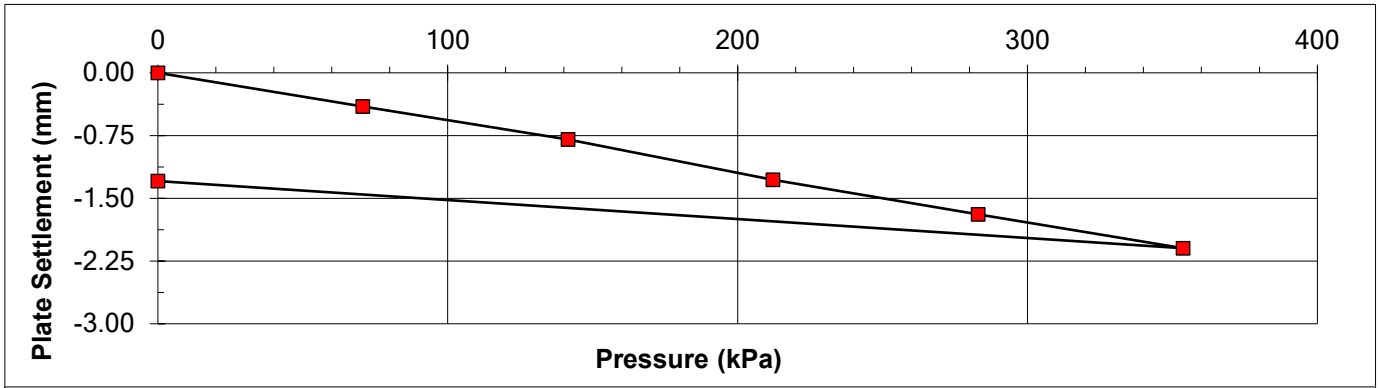
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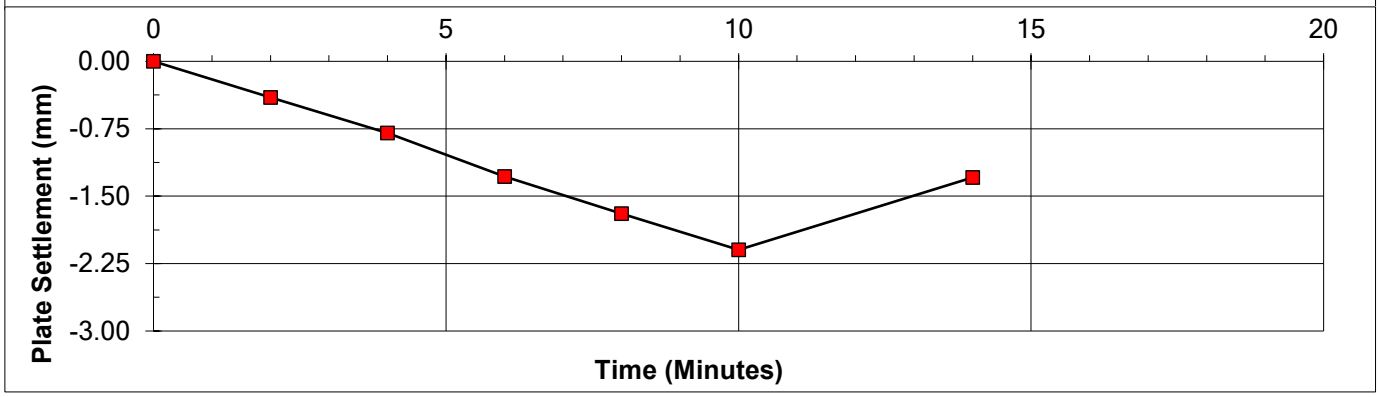
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd				
SITE	New Smithfield Market				
JOB NUMBER	MRN 4089/24				
TEST LOCATION	C2	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	12-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4611	4643	4835	4696	0.00	0.00	0.0
4571	4607	4790	4656	-0.40	5.00	70.7
4534	4564	4752	4617	-0.80	10.00	141.5
4479	4517	4709	4568	-1.28	15.00	212.2
4439	4478	4664	4527	-1.69	20.00	282.9
4393	4441	4626	4487	-2.10	25.00	353.7
4482	4514	4705	4567	-1.29	0.00	0.0





Pressure at 1.25 mm deflexion =	208	kPa
Modulus of subgrade reaction (k) =	166	MPa/m
Equivalent 762 mm plate reaction =	73	MPa/m
Equivalent CBR =	16.5	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 13-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

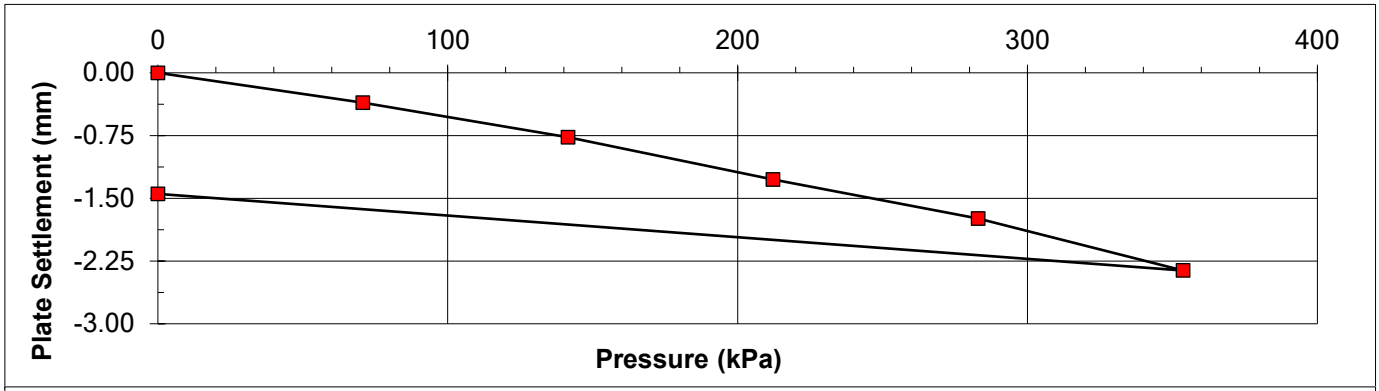
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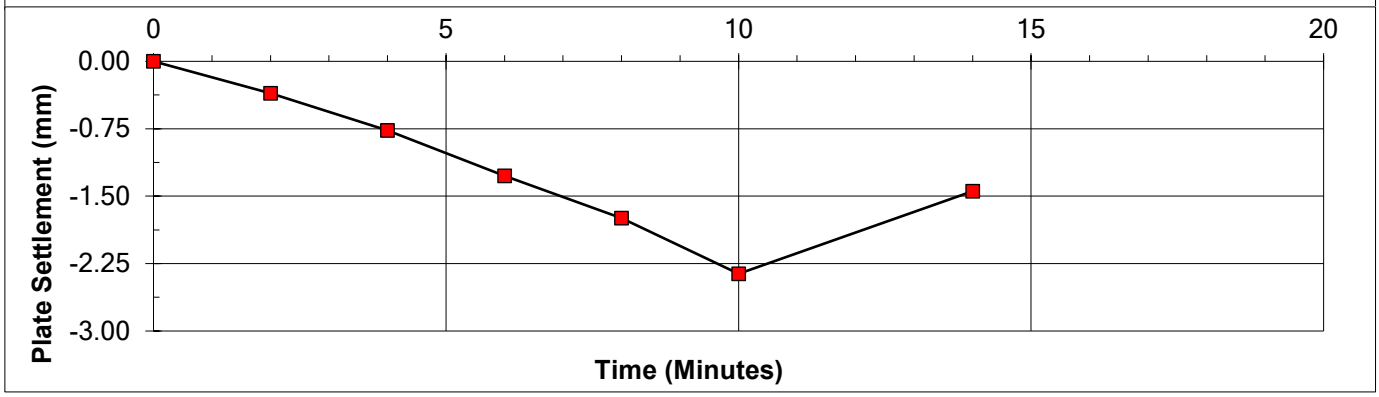
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd				
SITE	New Smithfield Market				
JOB NUMBER	MRN 4089/24				
TEST LOCATION	C5	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	12-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4546	4813	4591	4650	0.00	0.00	0.0
4512	4773	4558	4614	-0.36	5.00	70.7
4474	4729	4516	4573	-0.77	10.00	141.5
4416	4688	4464	4523	-1.27	15.00	212.2
4374	4644	4409	4476	-1.74	20.00	282.9
4309	4578	4354	4414	-2.36	25.00	353.7
4401	4671	4444	4505	-1.45	0.00	0.0





Pressure at 1.25 mm deflexion =	209	kPa
Modulus of subgrade reaction (k) =	167	MPa/m
Equivalent 762 mm plate reaction =	74	MPa/m
Equivalent CBR =	16.7	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 13-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

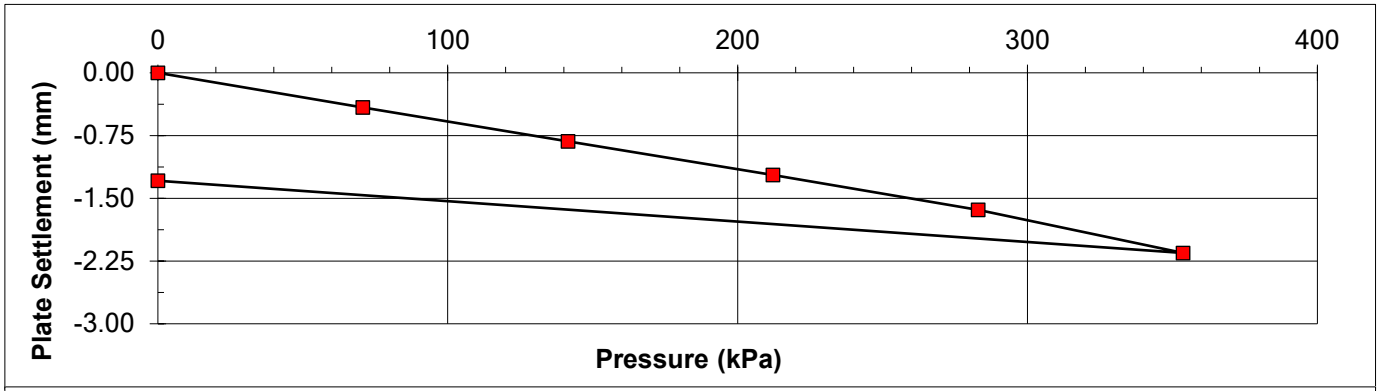
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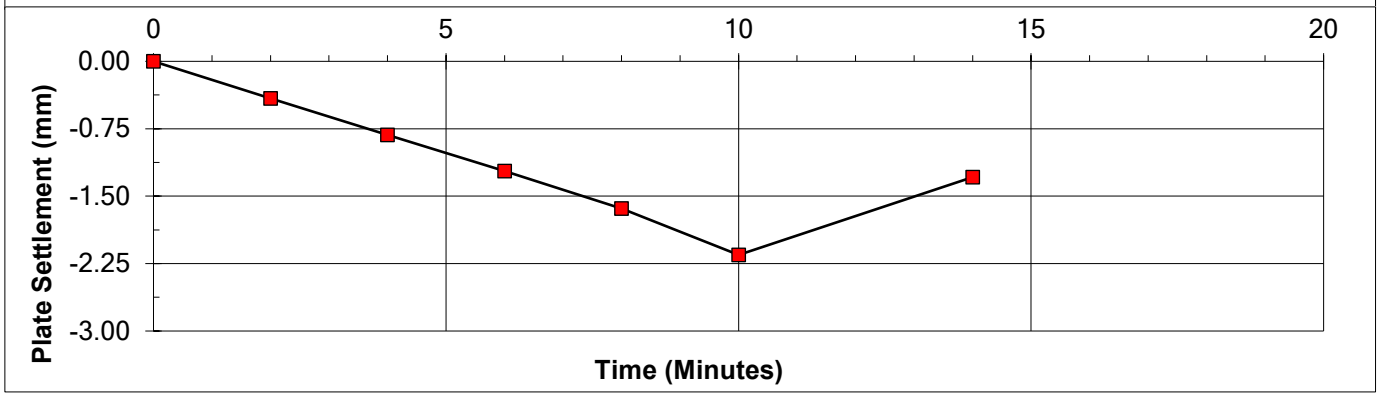
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd				
SITE	New Smithfield Market				
JOB NUMBER	MRN 4089/24				
TEST LOCATION	D2	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	12-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4432	4654	4618	4568	0.00	0.00	0.0
4391	4619	4570	4527	-0.41	5.00	70.7
4346	4576	4536	4486	-0.82	10.00	141.5
4309	4535	4494	4446	-1.22	15.00	212.2
4264	4489	4460	4404	-1.64	20.00	282.9
4210	4442	4406	4353	-2.15	25.00	353.7
4299	4523	4495	4439	-1.29	0.00	0.0





Pressure at 1.25 mm deflexion =	217	kPa
Modulus of subgrade reaction (k) =	174	MPa/m
Equivalent 762 mm plate reaction =	77	MPa/m
Equivalent CBR =	17.8	%

REMARKS

SIGNED

NAME O.P. Davies BA (Hons) (Laboratory Manager) DATE 13-Jul-23

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

UKAS TESTING 1580

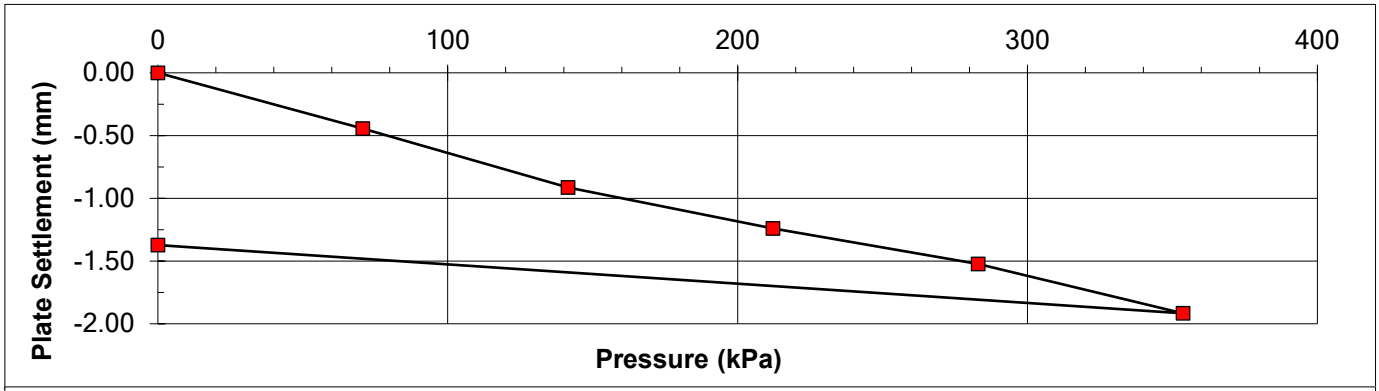
TEST CERTIFICATE

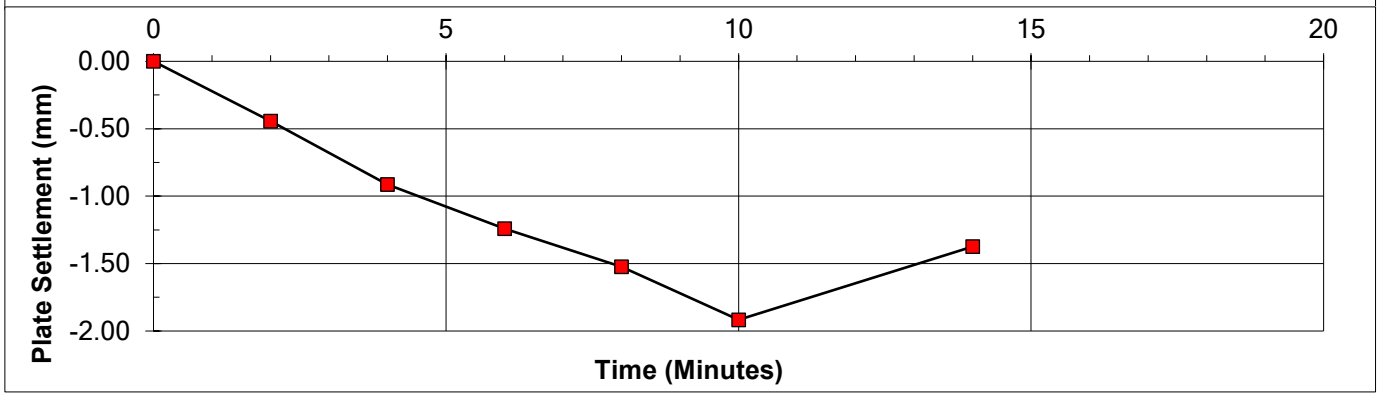
PLATE INCREMENTAL LOAD TEST

BS 1377 : PART 9 : CL 4.1 and IAN 73/06 Rev 1 (2009)

CLIENT	P.P. O'Connor Ltd				
SITE	New Smithfield Market				
JOB NUMBER	MRN 4089/24				
TEST LOCATION	D5	LOADING DEVICE	20 Tonne Enerpac Jack		
TEST DATE	12-Jul-23	PLATE SIZE (mm)	300 diameter		
TEST DEPTH	Surface	REACTION LOAD USED	Site Plant		
MATERIAL UNDER TEST	Crush	MOISTURE CONTENT	Not Required		

Dial Gauge 1 (mmx100)	Dial Gauge 2 (mmx100)	Dial Gauge 3 (mmx100)	Mean Gauge (mmx100)	Mean Deflection (mm)	Load (kN)	Pressure (kPa)
4641	4789	4706	4712	0.00	0.00	0.0
4593	4742	4668	4668	-0.44	5.00	70.7
4554	4699	4609	4621	-0.91	10.00	141.5
4522	4664	4578	4588	-1.24	15.00	212.2
4496	4630	4553	4560	-1.52	20.00	282.9
4461	4589	4511	4520	-1.92	25.00	353.7
4513	4647	4564	4575	-1.37	0.00	0.0





Pressure at 1.25 mm deflexion =	215	kPa
Modulus of subgrade reaction (k) =	172	MPa/m
Equivalent 762 mm plate reaction =	76	MPa/m
Equivalent CBR =	17.5	%

REMARKS

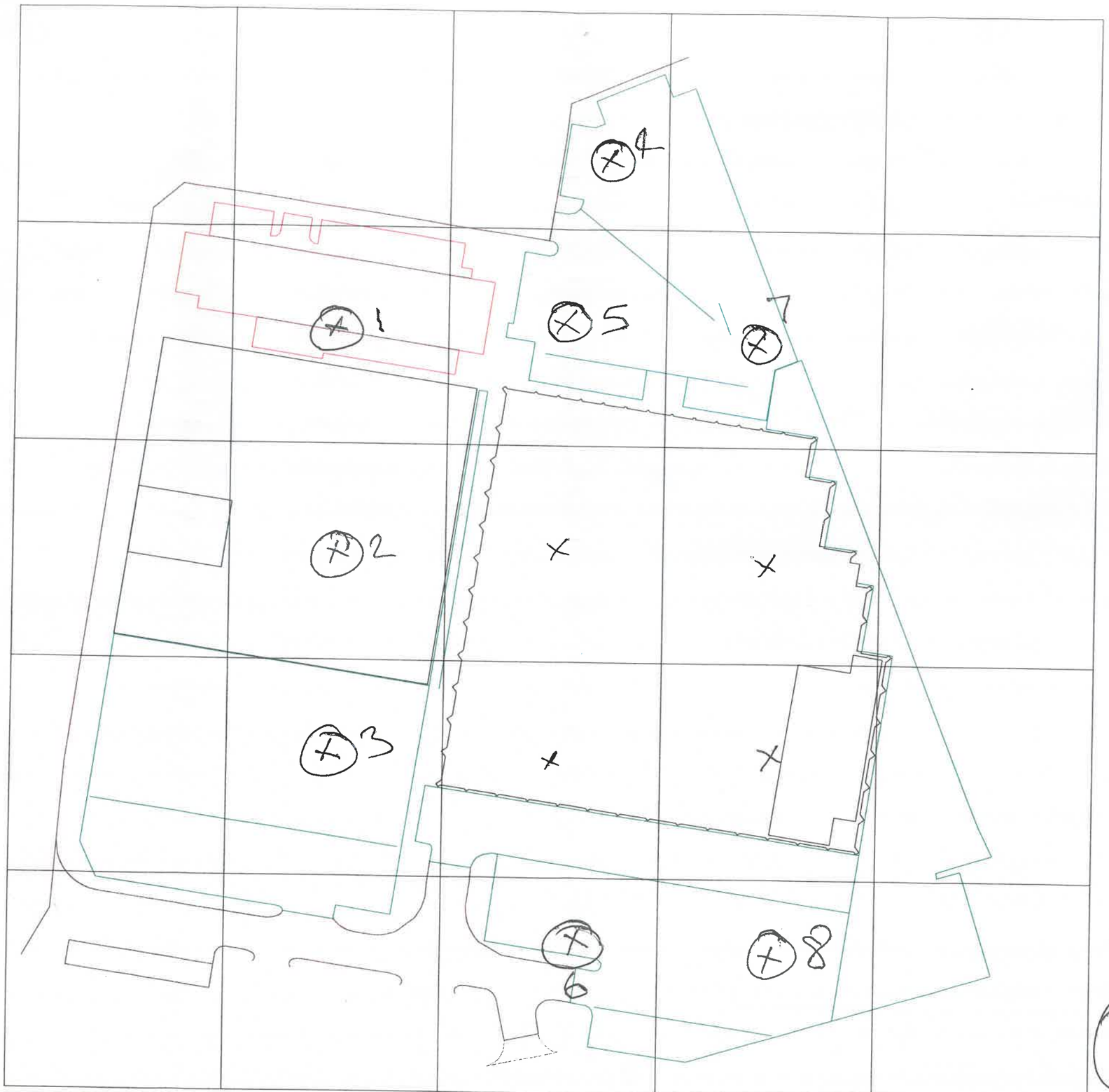
SIGNED

NAME O.P. Davies BA (Hons)
(Laboratory Manager)

DATE 13-Jul-23

A B C D E

1 2 3 4 5



CBR's.

NOTES

1. Do not scale from this drawing.

REV	DATE	REVISION DETAILS	INITIALS

P. P. O'CONNOR
Committed To Excellence

PROJECT:
SMITHFIELD MARKET

TITLE:
CBR locations grid

SCALE @ A1:	DRAWN:	DATE:
NTS	JR	5th July 2023

JOB No:	DRAWING No:	REVISION:
C0524	CBRloc001	0

13-Jul-23

APPENDIX VII
ASBESTOS RECORDS

UKAS TESTING
9086

VISUAL INSPECTION

Scope iT

Scope iT Ltd, Unit 14 The Quad, Atherleigh Business Park, Gibfield Park Avenue, Atherton, Manchester, M46 0SY

Tel: 01942 879067 *Email: info@scope-it-group.com*

Project Details				
Certificate Ref:	FG06–COR	Project Ref:	J118431
Area to be Assessed:	Zone 2, blocks C and D	Scope of Works, Including Dates:	Visual inspection
Client Address:	61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ	Site Address:	Smithfield Market, Whitworth Street, Manchester, M11 2WJ
Client Contact:	Richard Speake	Site Contact:	James Johnson
Removal Contractor Name/Address/Contact:	PP O'Connor LTD, 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ	Site Supervisor Name/Contact:	James Johnson /
ASB5 Present & Valid?	Yes	Contractors Plan of Work Reference:	A21658

Visual Inspection	Requirement	Yes/No	Comments
	Airlock/baglock/enclosure are free of waste bags	N/A	No enclosure
	All ACMs have been completely removed from the underlying surfaces	No	The concrete floor slab has been removed. Any AIB contaminated concrete has been disposed into an asbestos waste skip. The area has been surface picked of any obvious visible AIB debris.
	Interior surfaces inside the enclosure are free from debris and fine settled dust	N/A	Any visible AIB has been removed.
	Visual Inspection:	PASSED	The airlock, baglock and enclosure has PASSED as being free of visible asbestos waste, debris and surface dust.
	Comments, including details of any ACM,s to be left in-situ & length of time of the visual inspection.	The concrete floor slab has been removed and all AIB debris loose or stuck to the concrete has been disposed of. It's assumed that AIB debris remains present below the surface and highly likely to be disturbed once work begins on the area so would be advisable to have a licensed asbestos removal contractor in attendance to identify and remove any possible contamination identified during the remediation works.	

Anlyst Name:	Jon Goulding	Signed:		Date/Time:	02 Jun 2023/10:53

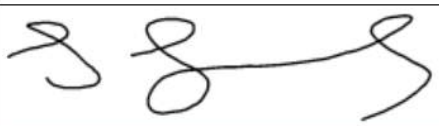
Drawing of Enclosure
(include transit & waste routes, dimensions of the enclosure, position of DCU and locations of any known ACM,s to be left in-situ)



Issue by the Assessor

Copies of this certificate (certificate number and issue number) were issued with attachments (list attachements) to:

Copy to be sent to the client

Name of Issuer:	Jon Goulding	Signed:		Date/Time:	02 Jun 2023/10:53

Notes: A copy of this certificate must always be issued to the asbestos removal contractor.
A seperate clearance certificate of inspection for the hygiene facility is required by the asbestos removal contractor.

Carried out in accordance with HSG248 and Scope iT Ltd procedures. Opinions and interpretations are outside the scope of UKAS accreditation.

INSPECTION CERTIFICATE FOR THE HYGIENE FACILITY

UKAS TESTING
9086

Client Details

- **PP O'Connor LTD**
- **Richard Speake**
- **61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118431

Certificate Number: FG07

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Site Contact/Supervisor: James Johnson

DCU Manufacturer: Empire

DCU Serial No.: DCU001



Scope iT

Unit 14 The Quad
Atherleigh Business Park
Gibfield Park Avenue
Atherton
Manchester
M46 0SY

INSPECTION CERTIFICATE FOR THE HYGIENE FACILITY

Email: info@scope-it-group.com
Web: www.scope-it-group.com

PERSONAL

9086

Client Details

- **Client: PP O'Connor LTD**
- **Project Manager: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Contractor: PP O'Connor LTD**
- **Contracts Manager: Sarah Mather**
- **Contractor Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118431

Certificate Number: FG05

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Site

Scope of Works: Personal Air Monitoring

Site Contact:

Site Supervisor:

ASB5 Present and Valid: Yes

Contractors Plan of Work Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY
01942 879 067
info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING
9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG05
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Person	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Calc Conc f/ml	Report Conc f/ml
FG001010	1	Personal	J Plimmer	PP01	SH65	13:47	14:47	60	4.0	4.0	240	4.5	100	0.0091	<0.04

*** Test type abbreviations: P = Personal**

Comments:
Personal airtest carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory
Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.

Issue of Certificate by the Assessor				**Contractor's Representative Acknowledgement**			
Date:	02 Jun 2023	**Time:**	15:20	**Date:**	02 Jun 2023	**Time:**	16:37
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

According to HSG248 the lowest level of reliable quantification above background is about 0.01 f/ml for a sample volume of 480 litres.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

FIBRE COUNT REPORT

9086

Client Details

- **Client: PP O'Connor LTD**
- **Client Contact: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118034

Analyst Name: Jon Goulding



Certificate Number: FG01

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Zone 2, Blocks C and D

Scope of Works: Reassurance Air Monitoring - Zone 2

Site Contact: James Johnson

Site Supervisor: Mike Bagnall

ASB5 Present and Valid: Yes

FIBRE COUNT REPORT

9086

Contractors Plan of Work
Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

01942 879 067

info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG01
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000917	1	Reassurance	Adjacent work area	HF15	SH65	09:37	10:37	60	8.0	8.0	480	1.0	200	0.01	0.0005	<0.010
FG000918	2	Reassurance	Adjacent work area	HF20	SH70	09:37	10:37	60	8.0	8.0	480	1.5	200	0.01	0.0008	<0.010
FG000919	3	Reassurance	Adjacent work area	HF21	SH71	09:38	10:38	60	8.0	8.0	480	2.5	200	0.01	0.0013	<0.010
FG000921	4	Reassurance	Adjacent work area	HF28	SH72	10:47	11:47	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000922	5	Reassurance	Adjacent work area	HF29	SH73	10:47	11:47	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000923	6	Reassurance	Adjacent work area	HF39	SH76	10:48	11:48	60	8.0	8.0	480	1.5	200	0.01	0.0008	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	22 May 2023	**Time:**	15:41	**Date:**	22 May 2023	**Time:**	15:43
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG01
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000924	7	Reassurance	Adjacent work area	HF28	SH71	13:29	14:29	60	8.0	8.0	480	1.0	200	0.01	0.0005	<0.010
FG000925	8	Reassurance	Adjacent work area	HF29	SH72	13:29	14:29	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000926	9	Reassurance	Adjacent work area	HF39	SH73	13:30	14:30	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000927	10	Reassurance	Adjacent work area	HF20	SH65	13:55	14:55	60	8.0	8.0	480	5.5	200	0.01	0.0028	<0.010
FG000928	11	Reassurance	Adjacent skip	HF15	SH70	13:56	14:56	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

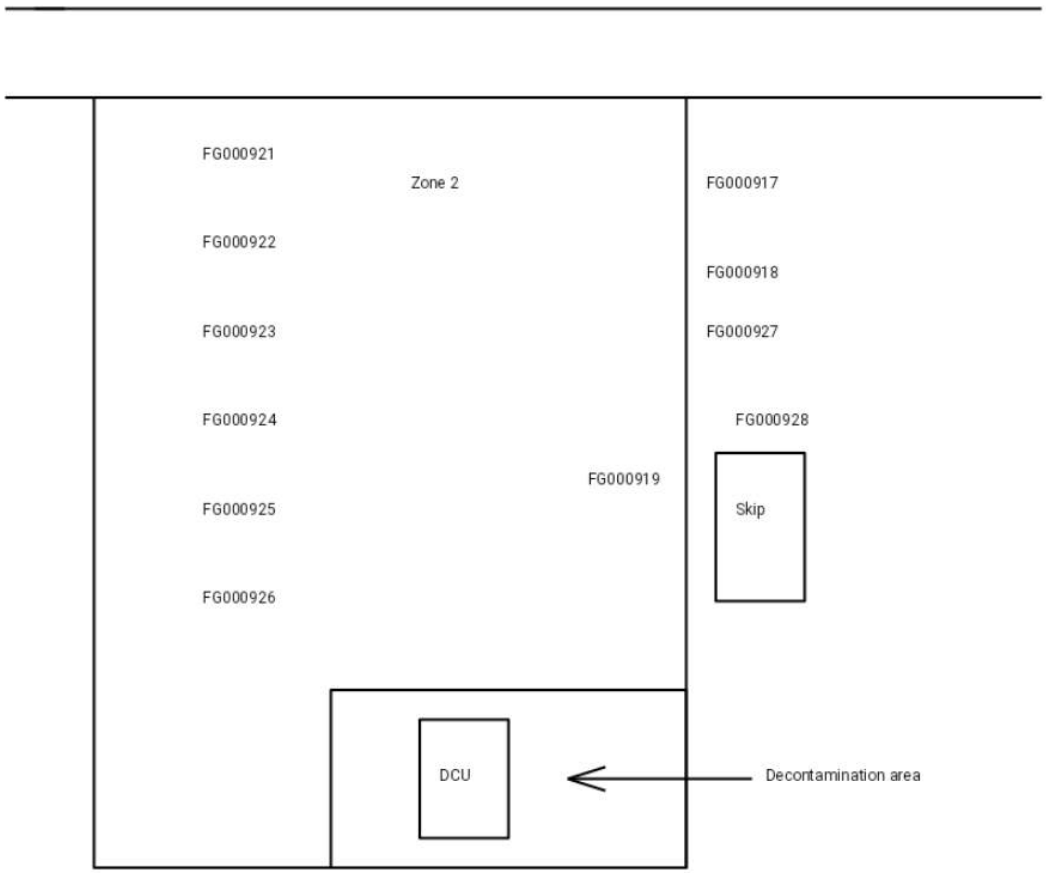
Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	22 May 2023	**Time:**	15:41	**Date:**	22 May 2023	**Time:**	15:43
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
N/A	N/A	N/A
		
Number 04	**Number 05**	**Number 06**
N/A	N/A	N/A
		

PERSONAL

9086

Client Details

- **Client: PP O'Connor LTD**
- **Project Manager: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Contractor: PP O'Connor LTD**
- **Contracts Manager: Sarah Mather**
- **Contractor Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118034

Certificate Number: FG02

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Site

Scope of Works: Personal Air Monitoring

Site Contact:

Site Supervisor:

ASB5 Present and Valid: Yes

Contractors Plan of Work Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY
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Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING
9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG02
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT10	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Person	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Calc Conc f/ml	Report Conc f/ml
FG000920	1	Personal	Mark Nelson	PP01	SH30	10:32	11:32	60	2.0	2.0	120	3	100	0.0121	0.01

*** Test type abbreviations: P = Personal**

Comments:
Personal airtest carried out within machine cab during site works proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*

Issue of Certificate by the Assessor				**Contractor's Representative Acknowledgement**			
Date:	22 May 2023	**Time:**	12:04	**Date:**	22 May 2023	**Time:**	15:45
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

According to HSG248 the lowest level of reliable quantification above background is about 0.01 f/ml for a sample volume of 480 litres.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

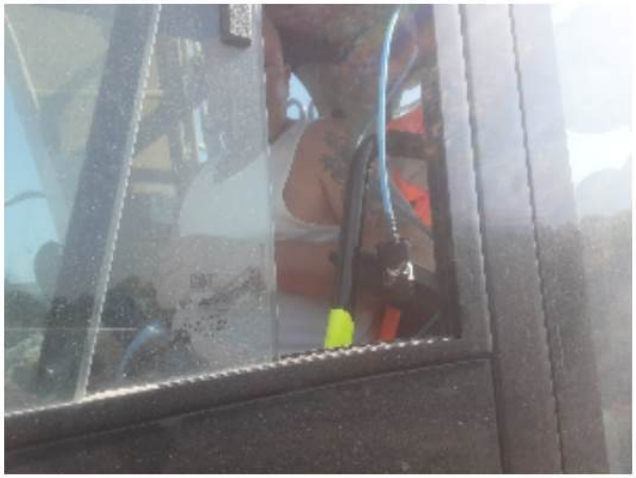
Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
	No photographic evidence available.	No photographic evidence available.
Number 04	**Number 05**	**Number 06**
No photographic evidence available.	No photographic evidence available.	No photographic evidence available.

FIBRE COUNT REPORT

9086

Client Details

- **Client: PP O'Connor LTD**
- **Client Contact: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118034

Analyst Name: Jon Goulding



Certificate Number: FG03

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Zone 2, blocks C and D

Scope of Works: Reassurance Air Monitoring

Site Contact: James Johnson

Site Supervisor: Mike Bagnall

ASB5 Present and Valid: Yes

FIBRE COUNT REPORT

9086

Contractors Plan of Work
Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

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Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG03
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000929	1	Reassurance	Adjacent work area	HF15	SH65	09:02	10:02	60	8.0	8.0	480	2.5	200	0.01	0.0013	<0.010
FG000930	2	Reassurance	Adjacent work area	HF20	SH70	09:03	10:03	60	8.0	8.0	480	1.0	200	0.01	0.0005	<0.010
FG000931	3	Reassurance	Adjacent work area	HF21	SH71	09:03	10:03	60	8.0	8.0	480	1.5	200	0.01	0.0008	<0.010
FG000932	4	Reassurance	Adjacent work area	HF28	SH72	09:09	10:09	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000933	5	Reassurance	Adjacent work area	HF29	SH73	09:09	10:09	60	8.0	8.0	480	3.5	200	0.01	0.0018	<0.010
FG000934	6	Reassurance	Adjacent work area	HF39	SH76	09:10	10:10	60	8.0	8.0	480	2.5	200	0.01	0.0013	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	23 May 2023	**Time:**	15:37	**Date:**	23 May 2023	**Time:**	15:50
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG03
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000936	7	Reassurance	Adjacent work area	HF15	SH76	13:33	14:33	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000937	8	Reassurance	Adjacent work area	HF20	SH70	13:33	14:33	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000938	9	Reassurance	Adjacent work area	HF21	SH71	13:34	14:34	60	8.0	8.0	480	1.0	200	0.01	0.0005	<0.010
FG000939	10	Reassurance	Adjacent work area	HF28	SH72	13:39	14:39	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000940	11	Reassurance	Adjacent work area	HF39	SH73	13:39	14:39	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

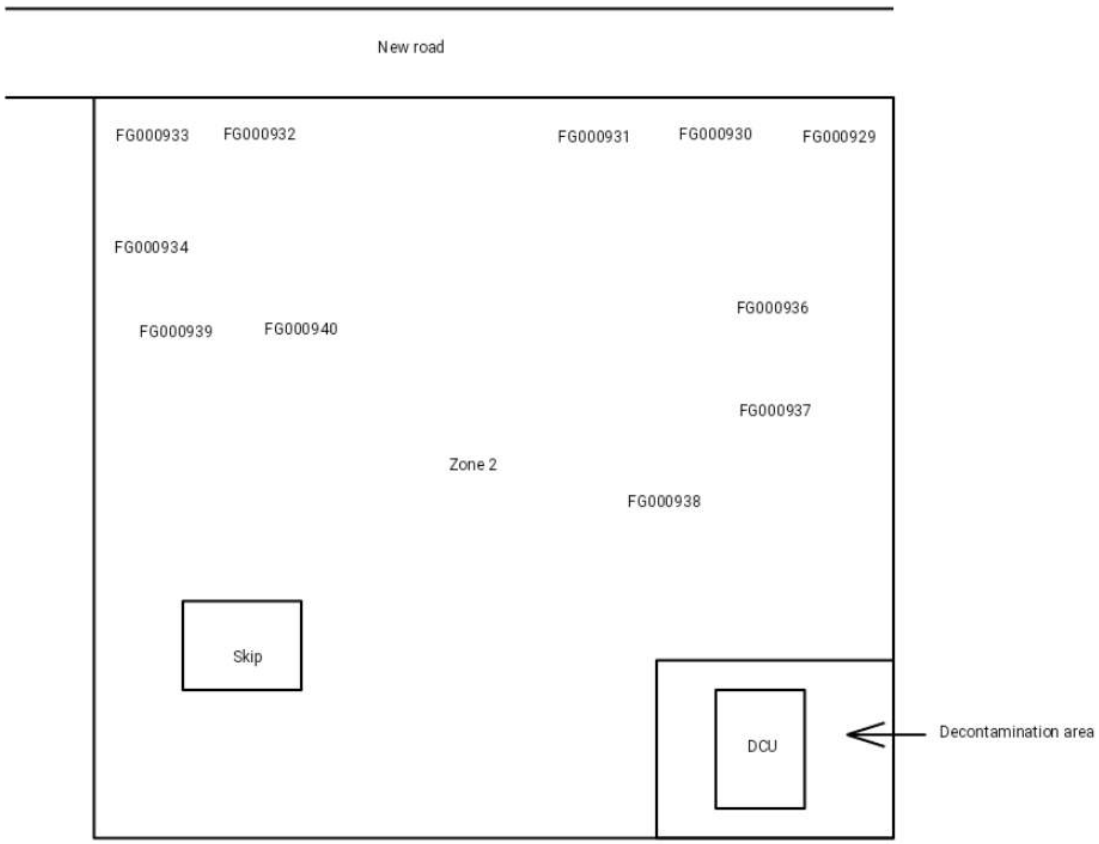
Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	23 May 2023	**Time:**	15:37	**Date:**	23 May 2023	**Time:**	15:50
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
N/A	N/A	N/A
		
Number 04	**Number 05**	**Number 06**
N/A	N/A	N/A
		

PERSONAL

9086

Client Details

- **Client: PP O'Connor LTD**
- **Project Manager: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Contractor: PP O'Connor LTD**
- **Contracts Manager: Sarah Mather**
- **Contractor Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118034

Certificate Number: FG04

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Site

Scope of Works: Personal Air Monitoring

Site Contact:

Site Supervisor:

ASB5 Present and Valid: Yes

Contractors Plan of Work Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY
01942 879 067
info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG04
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Person	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Calc Conc f/ml	Report Conc f/ml
FG000935	1	Personal	Mark Nelson	PP01	SH65	11:17	13:51	154	3.0	3.0	462	4.0	100	0.0042	0.004

*** Test type abbreviations: P = Personal**

Comments:
Personal airtest carried out within cab of digger during site work proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*

Issue of Certificate by the Assessor				**Contractor's Representative Acknowledgement**			
Date:	23 May 2023	**Time:**	13:25	**Date:**	23 May 2023	**Time:**	15:51
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

According to HSG248 the lowest level of reliable quantification above background is about 0.01 f/ml for a sample volume of 480 litres.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
	No photographic evidence available.	No photographic evidence available.
Number 04	**Number 05**	**Number 06**
No photographic evidence available.	No photographic evidence available.	No photographic evidence available.

FIBRE COUNT REPORT

9086

Client Details

- **Client: PP O'Connor LTD**
- **Client Contact: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118034

Analyst Name: Jon Goulding



Certificate Number: FG05

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Zone 2, blocks C and D

Scope of Works: Reassurance Air Monitoring

Site Contact: James Johnson

Site Supervisor: Mike Bagnall

ASB5 Present and Valid: Yes

FIBRE COUNT REPORT

9086

Contractors Plan of Work
Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

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Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG05
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000941	1	Reassurance	Adjacent work area	HF20	SH70	08:37	09:37	60	8.0	8.0	480	1.0	200	0.01	0.0005	<0.010
FG000942	2	Reassurance	Adjacent work area	HF21	SH71	08:38	09:38	60	8.0	8.0	480	3.5	200	0.01	0.0018	<0.010
FG000943	3	Reassurance	Adjacent work area	HF28	SH72	08:38	09:38	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000944	4	Reassurance	Adjacent work area	HF15	SH65	09:40	10:40	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000945	5	Reassurance	Adjacent work area	HF29	SH73	09:40	10:40	60	8.0	8.0	480	1.0	200	0.01	0.0005	<0.010
FG000946	6	Reassurance	Adjacent work area	HF39	SH76	09:41	10:41	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	24 May 2023	**Time:**	15:47	**Date:**	24 May 2023	**Time:**	15:48
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG05
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000948	7	Reassurance	Adjacent work area	HF20	SH70	13:12	14:12	60	8.0	8.0	480	1.0	200	0.01	0.0005	<0.010
FG000949	8	Reassurance	Adjacent work area	HF21	SH71	13:12	14:12	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000950	9	Reassurance	Adjacent work area	HF29	SH72	13:13	14:13	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000951	10	Reassurance	Adjacent work area	HF28	SH72	14:16	15:16	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000952	11	Reassurance	Adjacent work area	HF39	SH76	14:16	15:16	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

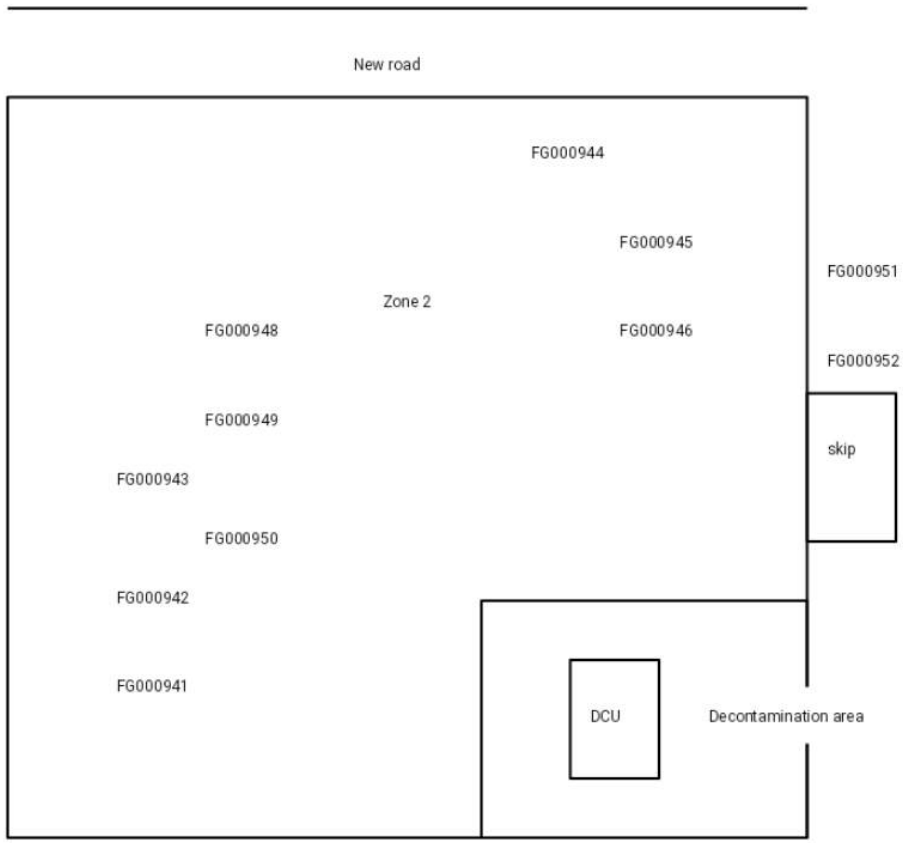
Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	24 May 2023	**Time:**	15:47	**Date:**	24 May 2023	**Time:**	15:48
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
N/A	N/A	N/A
		
Number 04	Number 05	Number 06
No photographic evidence.	No photographic evidence.	No photographic evidence.

PERSONAL

9086

Client Details

- **Client: PP O'Connor LTD**
- **Project Manager: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Contractor: PP O'Connor LTD**
- **Contracts Manager: Sarah Mather**
- **Contractor Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118034

Certificate Number: FG06

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Site

Scope of Works: Personal Air Monitoring

Site Contact:

Site Supervisor:

ASB5 Present and Valid: Yes

Contractors Plan of Work Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY
01942 879 067
info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING
9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG06
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Person	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Calc Conc f/ml	Report Conc f/ml
FG000947	1	Personal	Mark Nelson	PP01	SH15	10:34	12:51	137	3.0	3.0	411	5.5	100	0.0065	0.01

*** Test type abbreviations: P = Personal**

Comments:
Personal airtest carried out within machine cab during site works proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*

Issue of Certificate by the Assessor				**Contractor's Representative Acknowledgement**			
Date:	24 May 2023	**Time:**	13:31	**Date:**	24 May 2023	**Time:**	15:49
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

According to HSG248 the lowest level of reliable quantification above background is about 0.01 f/ml for a sample volume of 480 litres.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
	No photographic evidence available.	No photographic evidence available.
Number 04	**Number 05**	**Number 06**
No photographic evidence available.	No photographic evidence available.	No photographic evidence available.

FIBRE COUNT REPORT

9086

Client Details

- **Client: PP O'Connor LTD**
- **Client Contact: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118034

Analyst Name: Jon Goulding



Certificate Number: FG07

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Zone 2, blocks C and D

Scope of Works: Reassurance Air Monitoring

Site Contact: James Johnson

Site Supervisor: Mike Bagnall

ASB5 Present and Valid: Yes

FIBRE COUNT REPORT

9086

Contractors Plan of Work
Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

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Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG07
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000953	1	Reassurance	Adjacent work area	HF15	SH65	08:36	09:36	60	8.0	8.0	480	3.5	200	0.01	0.0018	<0.010
FG000954	2	Reassurance	Adjacent work area	HF20	SH70	08:36	09:36	60	8.0	8.0	480	5.0	200	0.01	0.0025	<0.010
FG000955	3	Reassurance	Adjacent work area	HF39	SH76	08:37	09:37	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000956	4	Reassurance	Adjacent work area	HF21	SH71	09:34	10:34	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000957	5	Reassurance	Adjacent work area	HF28	SH72	09:34	10:34	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010
FG000958	6	Reassurance	Adjacent work area	HF29	SH73	09:35	10:35	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	25 May 2023	**Time:**	15:21	**Date:**	25 May 2023	**Time:**	15:41
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG07
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000960	7	Reassurance	Adjacent work area	HF21	SH71	13:11	14:11	60	8.0	8.0	480	4.5	200	0.01	0.0023	<0.010
FG000961	8	Reassurance	Adjacent work area	HF28	SH72	13:11	14:11	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000962	9	Reassurance	Adjacent work area	HF15	SH76	13:13	14:13	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010
FG000963	10	Reassurance	Adjacent work area	HF20	SH70	13:14	14:14	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000964	11	Reassurance	Adjacent work area	HF39	SH73	13:14	14:14	60	8.0	8.0	480	6.0	200	0.01	0.0030	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

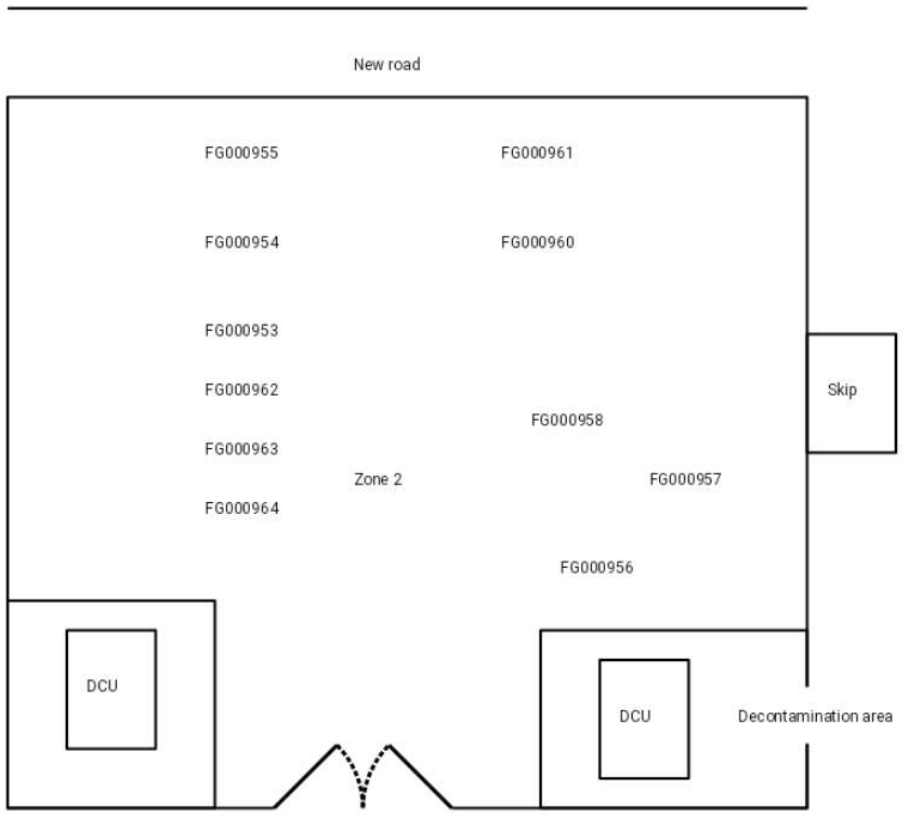
Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	25 May 2023	**Time:**	15:21	**Date:**	25 May 2023	**Time:**	15:41
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
N/A	N/A	N/A
		
Number 04	**Number 05**	**Number 06**
N/A	N/A	N/A
		

PERSONAL

9086

Client Details

- **Client: PP O'Connor LTD**
- **Project Manager: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Contractor: PP O'Connor LTD**
- **Contracts Manager: Sarah Mather**
- **Contractor Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118034

Certificate Number: FG08

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Zone 2

Scope of Works: Personal Air Monitoring

Site Contact:

Site Supervisor:

ASB5 Present and Valid: Yes

Contractors Plan of Work Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY
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info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG08
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT10	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Person	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Calc Conc f/ml	Report Conc f/ml
FG000959	1	Personal	J Plimmer	PP01	SH15	10:29	11:48	79	3.0	3.0	237	22.5	100	0.0459	0.05
FG000965	2	Personal	Within cab	PP01	SH65	13:14	14:28	74	3.0	3.0	222	2.0	100	0.0044	0.004

*** Test type abbreviations: P = Personal**

Comments:

Personal airtest carried out on J Plimmer during litter picking and separating AIB contaminated concrete from site was quite high but below the mask protection factor, operative advised to use more suppression during works. Personal airtest carried out within cab of plant machinery during excavation work proved satisfactory.

Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.

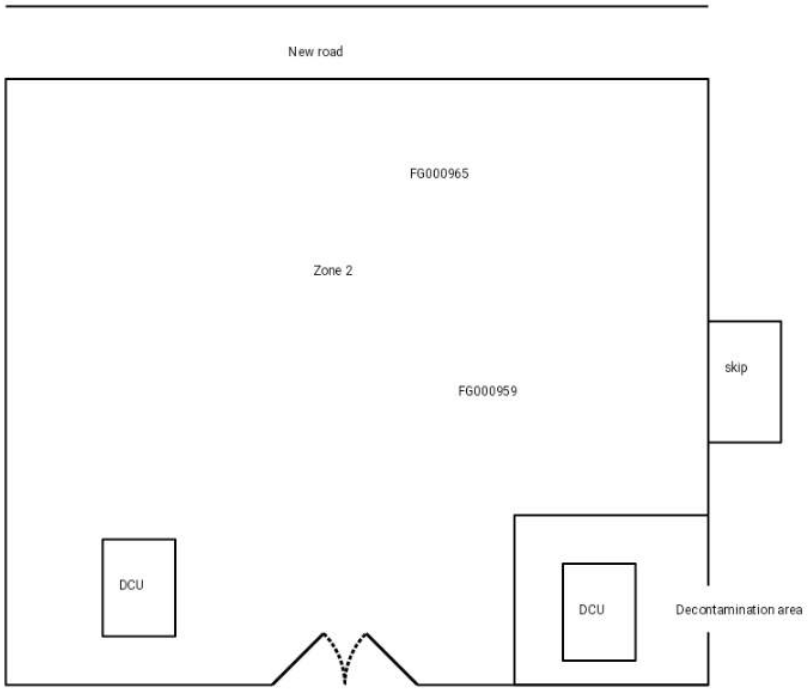
Issue of Certificate by the Assessor				**Contractor's Representative Acknowledgement**			
Date:	25 May 2023	**Time:**	15:31	**Date:**	25 May 2023	**Time:**	15:34
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

According to HSG248 the lowest level of reliable quantification above background is about 0.01 f/ml for a sample volume of 480 litres.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
		No photographic evidence available.
Number 04	**Number 05**	**Number 06**
No photographic evidence available.	No photographic evidence available.	No photographic evidence available.

FIBRE COUNT REPORT

9086

Client Details

- **Client: PP O'Connor LTD**
- **Client Contact: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118034

Analyst Name: Jon Goulding



Certificate Number: FG09

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Zone 2

Scope of Works: Reassurance Air Monitoring

Site Contact: James Johnson

Site Supervisor: Mike Bagnall

ASB5 Present and Valid: Yes

FIBRE COUNT REPORT

9086

Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

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ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG09
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000966	1		Adjacent work area	HF15	SH65	09:00	10:00	60	8.0	8.0	480	1.5	200	0.01	0.0008	<0.010
FG000967	2	Reassurance	Adjacent work area	HF20	SH70	09:01	10:01	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000968	3	Reassurance	Adjacent work area	HF21	SH71	09:02	10:02	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010
FG000969	4	Reassurance	Adjacent work area	HF28	SH72	10:32	11:32	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000970	5	Reassurance	Adjacent skip	HF29	SH73	10:33	11:33	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010
FG000971	6	Reassurance	Adjacent work area	HF39	SH76	10:34	11:34	60	8.0	8.0	480	2.5	200	0.01	0.0013	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	26 May 2023	**Time:**	16:20	**Date:**	26 May 2023	**Time:**	13:59
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118034/FG09
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000972	7	Reassurance	Adjacent work area	HF28	SH72	13:05	14:05	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000973	8	Reassurance	Adjacent work area	HF29	SH73	13:05	14:05	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010
FG000974	9	Reassurance	Adjacent work area	HF39	SH76	13:06	14:06	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000975	10	Reassurance	Adjacent skip	HF15	SH65	13:06	14:06	60	8.0	8.0	480	1.5	200	0.01	0.0008	<0.010
FG000976	11	Reassurance	Adjacent work area	HF20	SH70	13:07	14:07	60	8.0	8.0	480	2.5	200	0.01	0.0013	<0.010
FG000977	12	Reassurance	Adjacent work area	HF21	SH71	13:07	14:07	60	8.0	8.0	480	4.5	200	0.01	0.0023	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

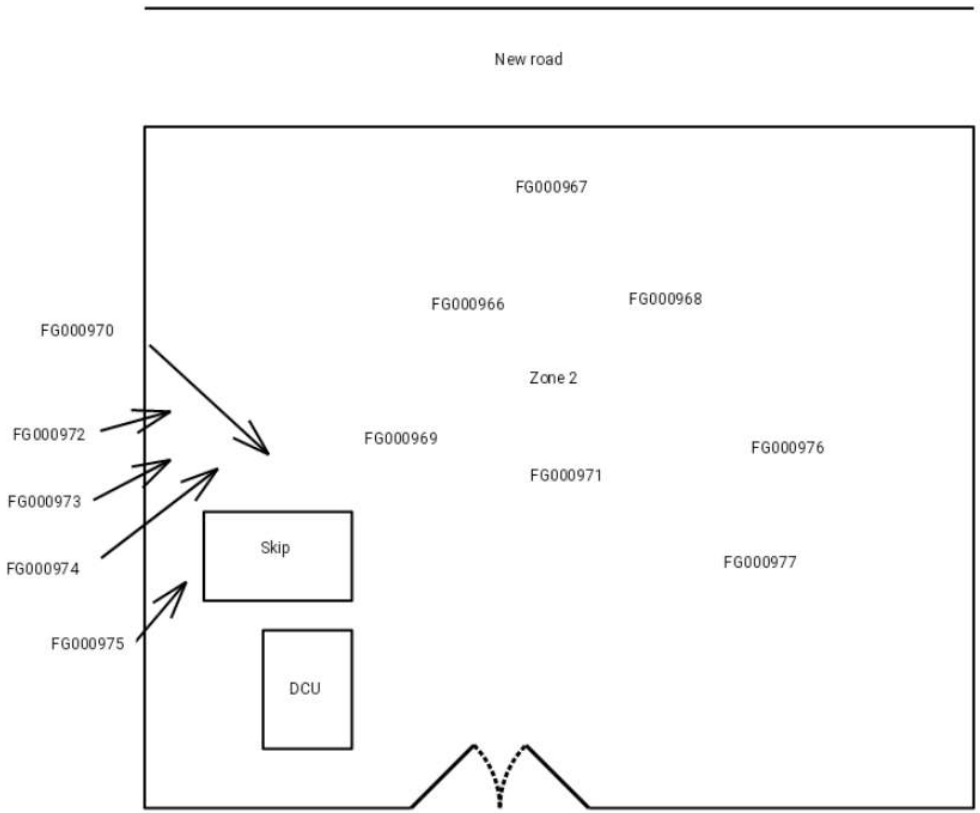
Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	26 May 2023	**Time:**	16:20	**Date:**	26 May 2023	**Time:**	13:59
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
N/A	N/A	N/A
		
Number 04	**Number 05**	**Number 06**
N/A	N/A	N/A
		

FIBRE COUNT REPORT

9086

Client Details

- **Client: PP O'Connor LTD**
- **Client Contact: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118431

Analyst Name: Jon Goulding



Certificate Number: FG01

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Zone 2

Scope of Works: Reassurance Air Monitoring

Site Contact: James Johnson

Site Supervisor: Mike Bagnall

ASB5 Present and Valid: Yes

FIBRE COUNT REPORT

9086

Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

01942 879 067

info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

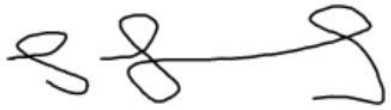
UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG01
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000978	1	Reassurance	Adjacent work area	HF15	SH65	08:44	09:44	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010
FG000979	2	Reassurance	Adjacent work area	HF28	SH72	08:44	09:44	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000980	3	Reassurance	Adjacent work area	HF29	SH73	08:45	09:45	60	8.0	8.0	480	3.5	200	0.01	0.0018	<0.010
FG000981	4	Reassurance	Adjacent work area	HF39	SH76	08:45	09:45	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000982	5	Reassurance	Adjacent work area	HF15	SH65	10:53	11:53	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000983	6	Reassurance	Adjacent work area	HF28	SH72	10:53	11:53	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	30 May 2023	**Time:**	13:53	**Date:**	30 May 2023	**Time:**	15:48
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Scope iT

ASBESTOS FIBRE COUNT REPORT

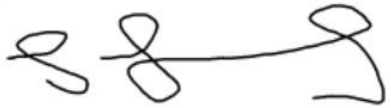
UKAS TESTING
9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG01
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000984	7	Reassurance	Adjacent skip	HF29	SH73	10:55	11:55	60	8.0	8.0	480	3.5	200	0.01	0.0018	<0.010
FG000985	8	Reassurance	Adjacent work area	HF39	SH76	10:56	11:56	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

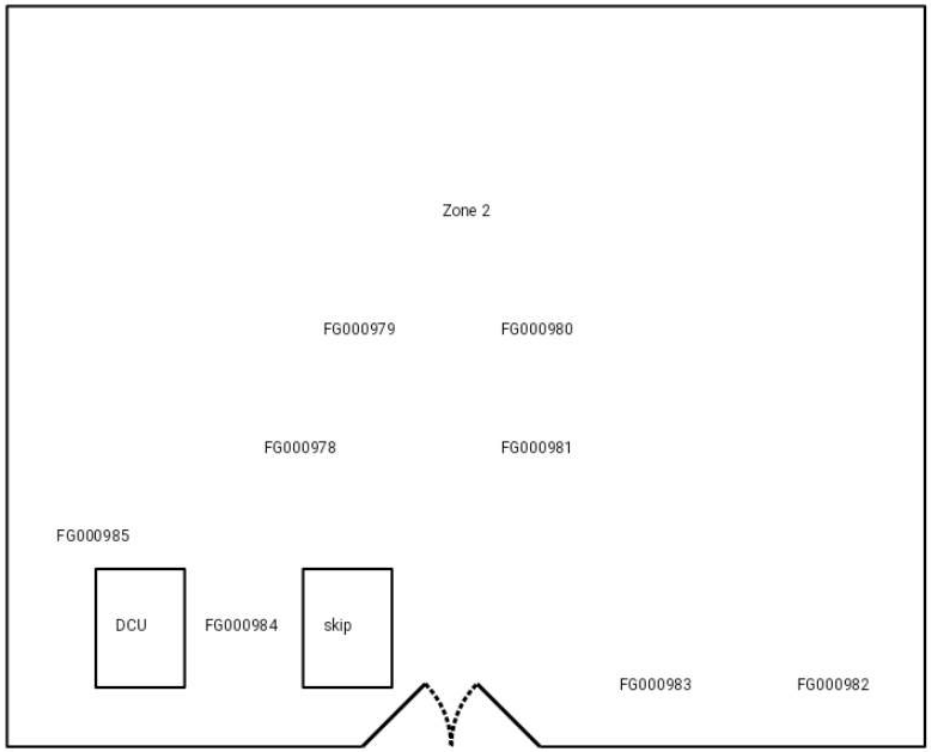
Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	30 May 2023	**Time:**	13:53	**Date:**	30 May 2023	**Time:**	15:48
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
N/A	N/A	N/A
		
Number 04	**Number 05**	**Number 06**
N/A	N/A	N/A
		

FIBRE COUNT REPORT

9086

Client Details

- **Client: PP O'Connor LTD**
- **Client Contact: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118431

Analyst Name: Jon Goulding



Certificate Number: FG02

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Zone 3

Scope of Works: Reassurance Air Monitoring

Site Contact: James Johnson

Site Supervisor: Mike Bagnall

ASB5 Present and Valid: Yes

FIBRE COUNT REPORT

9086

Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

01942 879 067

info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG02
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000986	1	Reassurance	Adjacent work area	HF15	SH65	13:24	14:24	60	8.0	8.0	480	1.5	200	0.01	0.0008	<0.010
FG000987	2	Reassurance	Adjacent work area	HF28	SH72	13:25	14:25	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000988	3	Reassurance	Adjacent work area	HF29	SH73	13:25	14:25	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000989	4	Reassurance	Adjacent work area	HF39	SH76	13:26	14:26	60	8.0	8.0	480	3.5	200	0.01	0.0018	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

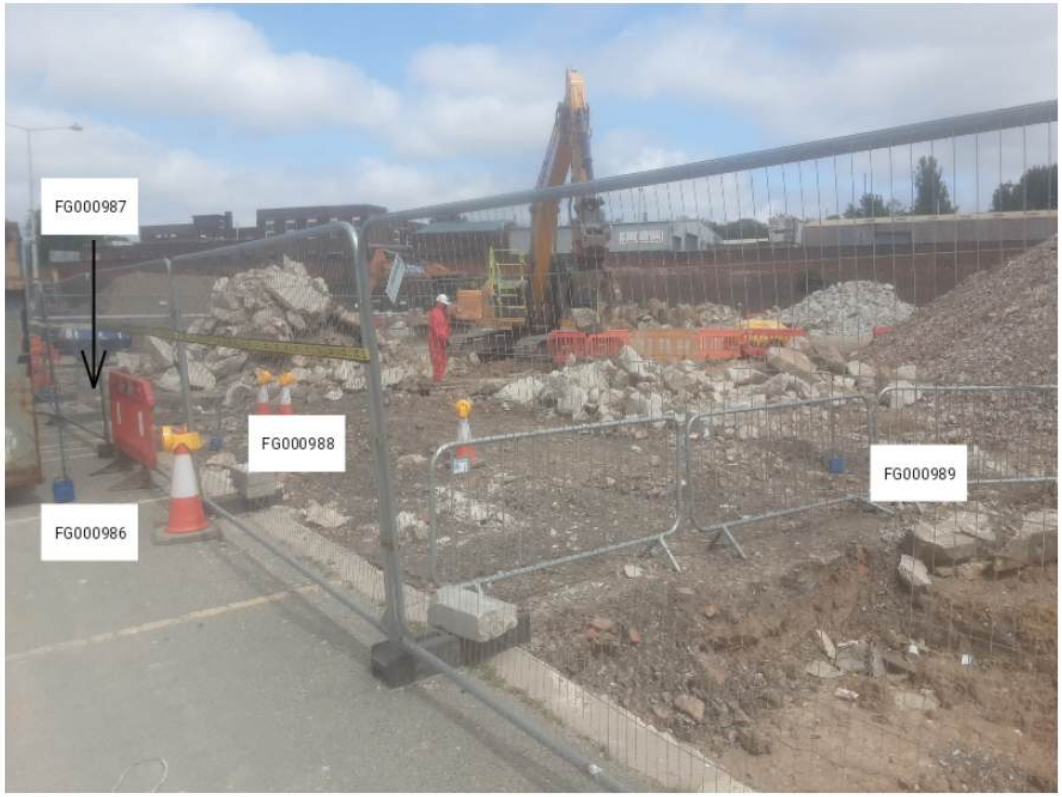
Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	30 May 2023	**Time:**	15:44	**Date:**	30 May 2023	**Time:**	15:43
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
N/A	N/A	N/A
		
Number 04	**Number 05**	**Number 06**
N/A		
	No photographic evidence.	No photographic evidence.

FIBRE COUNT REPORT

9086

Client Details

- **Client: PP O'Connor LTD**
- **Client Contact: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118431

Analyst Name: Jon Goulding



Certificate Number: FG03

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Zone 3

Scope of Works: Reassurance Air Monitoring

Site Contact: James Johnson

Site Supervisor: Mike Bagnall

ASB5 Present and Valid: Yes

FIBRE COUNT REPORT

9086

Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

01942 879 067

info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

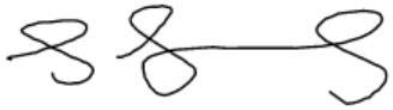
UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG03
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000990	1	Reassurance	Adjacent work area	HF20	SH72	09:22	10:22	60	8.0	8.0	480	1.0	200	0.01	0.0005	<0.010
FG000991	2	Reassurance	Adjacent work area	HF21	SH73	09:22	10:22	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000992	3	Reassurance	Adjacent work area	HF51	SH65	09:23	10:23	60	8.0	8.0	480	2.5	200	0.01	0.0013	<0.010
FG000993	4	Reassurance	Adjacent work area	HF20	SH70	10:29	11:29	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000994	5	Reassurance	Adjacent work area	HF21	SH71	10:30	11:30	60	8.0	8.0	480	4.5	200	0.01	0.0023	<0.010
FG000995	6	Reassurance	Adjacent work area	HF51	SH76	10:30	11:30	60	8.0	8.0	480	5.0	200	0.01	0.0025	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	31 May 2023	**Time:**	15:52	**Date:**	31 May 2023	**Time:**	15:53
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Scope iT

ASBESTOS FIBRE COUNT REPORT

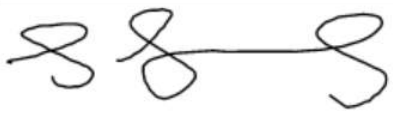
UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG03
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG000996	7	Reassurance	Adjacent work area	HF20	SH70	13:14	14:14	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000997	8	Reassurance	Adjacent work area	HF21	SH71	13:14	14:14	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010
FG000998	9	Reassurance	Adjacent work area	HF51	SH65	13:15	14:15	60	8.0	8.0	480	2.0	200	0.01	0.0010	<0.010
FG000999	10	Reassurance	Adjacent work area	HF20	SH72	14:17	15:17	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010
FG001000	11	Reassurance	Adjacent work area	HF21	SH73	14:17	15:17	60	8.0	8.0	480	4.5	200	0.01	0.0023	<0.010
FG001001	12	Reassurance	Adjacent work area	HF51	SH65	14:18	15:18	60	8.0	8.0	480	3.0	200	0.01	0.0015	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	31 May 2023	**Time:**	15:52	**Date:**	31 May 2023	**Time:**	15:53
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
N/A	N/A	N/A
		
Number 04	**Number 05**	**Number 06**
N/A	N/A	N/A
		

FIBRE COUNT REPORT

9086

Client Details

- **Client: PP O'Connor LTD**
- **Client Contact: Richard Speake**
- **Client Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118431

Analyst Name: Jon Goulding



Certificate Number: FG04

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Area to be Assessed: Site

Scope of Works: Reassurance Air Monitoring

Site Contact: James Johnson

Site Supervisor: Mike Bagnall

ASB5 Present and Valid: Yes

FIBRE COUNT REPORT

9086

Reference: A21658

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

01942 879 067

info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG04
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG001002	1	Reassurance	Adjacent work area	HF15	SH65	09:24	10:55	91	8.0	8.0	728	4.0	132	0.01	0.0020	<0.010
FG001003	2	Reassurance	Adjacent work area	HF28	SH72	09:24	10:55	91	8.0	8.0	728	2.0	132	0.01	0.0010	<0.010
FG001004	3	Reassurance	Adjacent work area	HF29	SH73	09:25	10:56	91	8.0	8.0	728	3.0	132	0.01	0.0015	<0.010
FG001005	4	Reassurance	Adjacent work area	HF39	SH76	09:25	10:56	91	8.0	8.0	728	2.0	132	0.01	0.0010	<0.010
FG001006	5	Reassurance	Adjacent work area	HF15	SH15	10:58	11:58	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010
FG001007	6	Reassurance	Adjacent work area	HF28	SH70	10:58	11:58	60	8.0	8.0	480	4.5	200	0.01	0.0023	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	02 Jun 2023	**Time:**	12:58	**Date:**	01 Jun 2023	**Time:**	16:08
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING
9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG04
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
FG001008	7	Reassurance	Adjacent work area	HF29	SH71	10:59	11:59	60	8.0	8.0	480	3.5	200	0.01	0.0018	<0.010
FG001009	8	Reassurance	Adjacent work area	HF39	SH30	10:59	11:59	60	8.0	8.0	480	4.0	200	0.01	0.0020	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
Reassurance airtests carried out during separating AIB contaminated concrete into waste skips under locally controlled conditions proved satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	02 Jun 2023	**Time:**	12:58	**Date:**	01 Jun 2023	**Time:**	16:08
Name:	Jon Goulding	**Signed:**		**Name:**	James Johnson	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: N/A m

Length: N/A m

Height: N/A m

Area or volume of enclosure: N/A or N/A

Estimated number of pumps required: N/A

Photography

Number 01	Number 02	Number 03
N/A	N/A	N/A
		
Number 04	**Number 05**	**Number 06**
N/A		
	No photographic evidence.	No photographic evidence.

Photography

Number 01	Number 02	Number 03
	No photographic evidence available.	No photographic evidence available.
Number 04	**Number 05**	**Number 06**
No photographic evidence available.	No photographic evidence available.	No photographic evidence available.

THOROUGH VISUAL INSPECTION

I, the site supervisor, have carried out a full inspection of the DCU and found the unit to be clean and dry		Requirement	Yes/No	Comments
Name:	James Johnson	Hygiene facilities are free from waste, debris, dust, contaminated clothing, waste bags etc:	Yes	All waste has been removed
Signed:				
Date & Time:	02 Jun 2023/12:00	Interior surfaces are free from debris and settled dust:	Yes	Interior surfaces are free from dust
The hygiene facility is FREE of visible asbestos waste, debris and surface dust		Visual Inspection Time:	6	
		Visual Inspection:	Passed	
Analyst Name:	Jon Goulding	Comments: (see site log for additional comments)	Satisfactory	
Signed:				
Date & Time:	02 Jun 2023/12:02			

	Yes/No	Comments/Values			Drawing of DCU
All areas are dry	Yes	All areas are dry			
Air movers off and sealed	Yes	Air mover has been sealed			
Disturbance used (state type)	Brush	Satisfactory	Fibre Count Report Ref:	FG07–FCR	
Total time of disturbance: (1.5 minutes per sample)		1.5 Minutes			
Number of air samples collected: If shower and dirty end have a combined volume of <10m^3, a single air test between both compartments can be used. Otherwise, 2 no. separate tests are required.			1		
The hygiene facility is PASSED for reuse			Clearance Monitoring:	Passed	
Analyst Name:	Jon Goulding		Comments: (see site log for additional comments)	Clearance airtest satisfactory	
Signed:					
Time & Date:	02 Jun 2023/12:02				
(If failed, state the reasons in the comments box above and get the representative to sign the acknowledgement box at the end)					

ASBESTOS FIBRE COUNT REPORT

9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG07
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Calc Conc f/ml	Report Conc f/ml
FG001015	1	Clearance	Shower/dirty end	HF28	SH71	12:04	13:04	60	8.0	8.0	480	2.0	200	0.0010	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance, P = Personal**

Comments:	Counting location:
Clearance airtest satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Inspection Certificate of Reoccupation by the Assessor			
Date:	02 Jun 2023	**Time:**	13:40
Analyst:	Jon Goulding	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification.

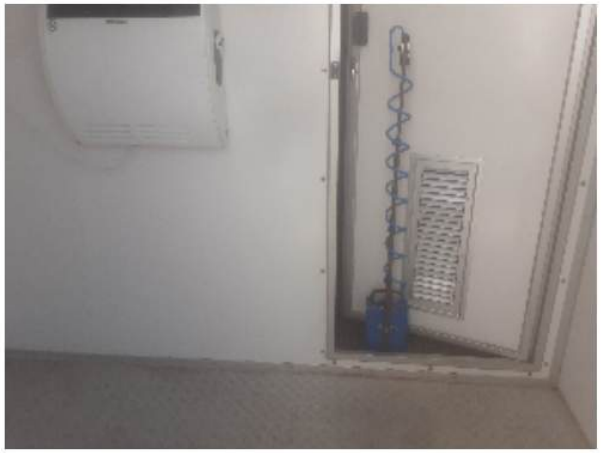
Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values >0.015 are reported to 2 decimal places.

Contractor's Representative Ackowledgement

I have been advised by Scope IT Ltd that an inspection certificate for the hygiene facility CAN be issued.

Name	James Johnson	**Hygiene unit remaining on site?**	No
Signed:			
Date & Time:	02 Jun 2023 14:00		

AIR SAMPLING PHOTOGRAPHY

Number 01	Number 02	Number 03
		

INSPECTION CERTIFICATE FOR THE HYGIENE FACILITY

UKAS TESTING 9086

Client Details

- **PP O'Connor LTD**
- **Richard Speake**
- **61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**

Contractor Details

- **Removal Company: PP O'Connor LTD**
- **Address: 61 Mosley Road, Trafford Park, Stretford Manchester, M17 1GJ**
- **Contracts Manager: Sarah Mather**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118431

Certificate Number: FG08

Site Address: Smithfield Market, Whitworth Street, Manchester, M11 2WJ

Site Contact/Supervisor: James Johnson

DCU Manufacturer: Empire

DCU Serial No.: DCU 002



Scope iT

Unit 14 The Quad
Atherleigh Business Park
Gibfield Park Avenue
Atherton
Manchester
M46 0SY

INSPECTION CERTIFICATE FOR THE HYGIENE FACILITY

Email: info@scope-it-group.com
Web: www.scope-it-group.com

THOROUGH VISUAL INSPECTION

I, the site supervisor, have carried out a full inspection of the DCU and found the unit to be clean and dry		Requirement	Yes/No	Comments
Name:	James Johnson	Hygiene facilities are free from waste, debris, dust, contaminated clothing, waste bags etc:	Yes	All waste has been removed
Signed:				
Date & Time:	02 Jun 2023/12:00	Interior surfaces are free from debris and settled dust:	Yes	Interior surfaces are free from dust
The hygiene facility is FREE of visible asbestos waste, debris and surface dust		Visual Inspection Time:	5	
		Visual Inspection:	Passed	
Analyst Name:	Jon Goulding	Comments: (see site log for additional comments)	Satisfactory	
Signed:				
Date & Time:	02 Jun 2023/12:11			

	Yes/No	Comments/Values			Drawing of DCU
All areas are dry	Yes	All areas are dry			
Air movers off and sealed	Yes	Air mover has been sealed			
Disturbance used (state type)	Brush	Satisfactory	Fibre Count Report Ref:	FG08–FCR	
Total time of disturbance: (1.5 minutes per sample)		1.5 Minutes			
Number of air samples collected: If shower and dirty end have a combined volume of <10m^3, a single air test between both compartments can be used. Otherwise, 2 no. separate tests are required.			1		
The hygiene facility is PASSED for reuse			Clearance Monitoring:	Passed	
Analyst Name:	Jon Goulding		Comments: (see site log for additional comments)	Clearance airtest satisfactory	
Signed:					
Time & Date:	02 Jun 2023/12:11				
(If failed, state the reasons in the comments box above and get the representative to sign the acknowledgement box at the end)					

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M5	**Tally Counter Ref No's:**	TC07/TC08	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118431/FG08
NPL Test Slide Ref:	TS10	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM10	**Graticule Diameter:**	100
Timer/Barometer Ref:	/ BM04	**Flowmeter No:**	RT13	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Calc Conc f/ml	Report Conc f/ml
FG001016	1	Reassurance	Shower/dirty end	HF39	SH30	12:12	13:12	60	8.0	8.0	480	3.0	200	0.0015	<0.010

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance, P = Personal**

Comments:	Counting location:
Clearance airtest satisfactory *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

Issue of Inspection Certificate of Reoccupation by the Assessor			
Date:	02 Jun 2023	**Time:**	13:29
Analyst:	Jon Goulding	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification.

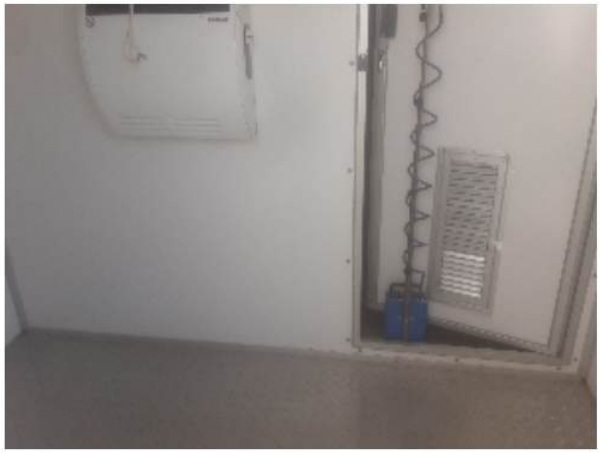
Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values >0.015 are reported to 2 decimal places.

Contractor's Representative Ackowledgement

I have been advised by Scope IT Ltd that an inspection certificate for the hygiene facility CAN be issued.

Name	James Johnson	**Hygiene unit remaining on site?**	No
Signed:			
Date & Time:	02 Jun 2023 14:02		

AIR SAMPLING PHOTOGRAPHY

Number 01	Number 02	Number 03
		

FIBRE COUNT REPORT

9086

Client Details

- **Client: Bradley Group**
- **Client Contact: Rhiannon Dawe**
- **Client Address: Bradley House, Kent Street, Preston, PR1 1PE**

Contractor Details

- **Removal Company: Bradley Group**
- **Address: Bradley House, Kent Street, Preston, PR1 1PE**
- **Contracts Manager: Michael Degnan**

Summary Overview

Asbestos Fibre Count Report

PASSED

Job Number: J118855

Analyst Name: Daniel Albert



Certificate Number: EL01

Site Address: 125 - 149B Grove Street, Edge Hill, Liverpool, Merseyside, L7 7AF

Area to be Assessed: external areas of demolition to 125-149b Grove Street

Scope of Works: Reassurances air monitoring

Site Contact: Alan Rae

Site Supervisor: Sarah Mather

FIBRE COUNT REPORT

9086

Contractors Plan of Work
Reference: Grove Street Site B - Demolition

Head Office
Unit 14,The Quad, Gibfield Park Avenue,
Atherton, Manchester, M46 0SY

01942 879 067

info@scope-it-group.com

Scope iT

ASBESTOS FIBRE COUNT REPORT

UKAS TESTING 9086

Microscope Ref:	M10	**Tally Counter Ref No's:**	TC09/TC10	**Filter Clearing Method is:**	Acetone & Triacetin	**Certificate Reference:**	J118855/EL01
NPL Test Slide Ref:	TS06	**Number of Blocks visible:**	Yes	**Stage Micrometer Ref:**	SM09	**Graticule Diameter:**	100
Timer/Barometer Ref:	TD05 / BM05	**Flowmeter No:**	RT09	**Temperature & Pressure:**	N/A °C	**Barometric Pressure:**	N/A mbar

Filter Ref No.	Sample No.	Test Type*	Location	Pump No.	Filter Head No.	Time on	Time off	Total Sample Time	Indicated flow rate start l/min	Indicated flow rate end l/min	Volume	Fibres	Fields	Limit of quantif-ication	Calc Conc f/ml	Report Conc f/ml
EL000020	1	Reassurance air test	Main site compound entrance	HF10	SH25	08:26	09:15	49	10.0	10.0	490	2.5	200	0.01	0.0012	<0.010
EL000021	2	Reassurance air test	Walkway adjacent to LHS compound entrance	HF24	SH39	08:26	09:16	50	10.0	10.0	500	1.5	200	0.01	0.0007	<0.010
EL000022	3	Reassurance air test	Welfare compound	HF49	SH60	08:28	09:16	48	10.0	10.0	480	2.0	200	0.01	0.0010	<0.010
EL000023	4	Reassurance air test	Adjacent plant / machinery within compound	HF48	SH63	08:27	09:17	50	10.0	10.0	500	2.5	200	0.01	0.0012	<0.010
EL000024	5	FB	Field Blank	N/A	SH78	N/A	N/A	0	N/A	N/A	0			0	N/A	

*** Test type abbreviations: L = Leak, R = Reassurance, B = Background, C = Clearance**

Comments:	Counting location:
All results satisfactory. <0.01 f/cm3 *Opinions and interpretations given in the comments section are outside the scope of UKAS accreditation.*	Mobile Lab

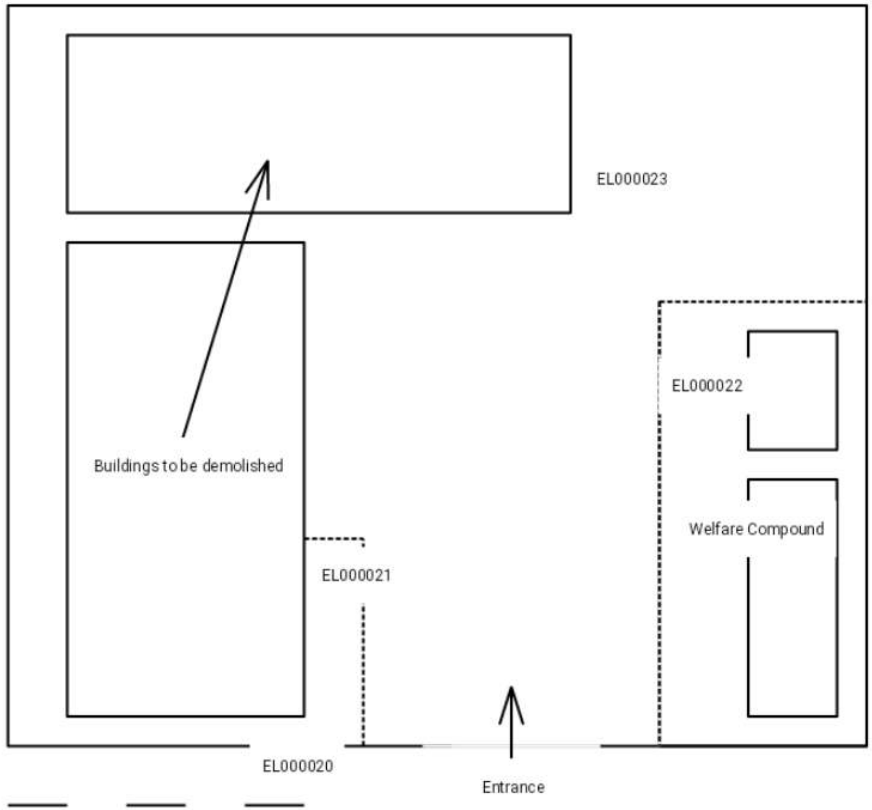
Issue of Certificate by the Assessor				Contractor's Representative Acknowledgement			
Date:	06 Jun 2023	**Time:**	09:33	**Date:**	06 Jun 2023	**Time:**	09:33
Name:	Daniel Albert	**Signed:**		**Name:**	Alan Rae	**Signed:**	

These membrane filters have been cleared and counted in accordance with the HSE's HSG248 as appropriate for using phase contrast optical microscopy.

With the exceptions of personal monitoring and short duration leak tests, sample volumes must be a minimum of 480 litres. Air tests of less than 480 litres need to be reported with their calculated limit of quantification. Ref:- Scopeit operating procedures - Reassurance and Background Air Sampling 7.4.

Calculated values <0.010 f/ml are reported as <0.01 f/ml, values >0.010 and <0.015 are reported to 3 decimal places, values > are reported to 2 decimal places.

Drawing of Work Areas



Width: 0 m

Length: 0 m

Height: 0 m

Area or volume of enclosure: 0м² or 0m³

Estimated number of pumps required: -1

Photography

Number 01	Number 02	Number 03
Welfare units	Demo site	Reassurance air test
		
Number 04	**Number 05**	**Number 06**
Reassurance air test	Reassurance air test	Reassurance air test
		

Health and Safety Executive

Control of Asbestos Regulations 2012

Notification of asbestos work

To improve the management of licensed asbestos work through auditing by the asbestos industry, HSE may share limited data provided on the ASB5 form with trade associations and relevant bodies. The data shared will be limited to: name of licensee, licence expiry date, site location, dates of work, nature of work

Notification Number: 136F0E3861 Submitted Date: 17/04/2023

About you and your licence

Notification type	This is a NEW notification
Licence number	202105955
Expiry date	11/06/2024
Licence holder name	Intelligent Environmental Services LTD
Address	Unit A7, The Dresser Centre Whitworth Street Openshaw MANCHESTER Greater Manchester M11 2NE
Phone Number	07855278675
Email	adam.pearson@i-es.uk

Job details

Name of company contracted to	PP O'Connor Limited
Phone number of company contracted to	07949420926
Contact name at company contracted to	Mr Brett Jarman
Site address	New Smithfield Market Whitworth Street East MANCHESTER M11 2WJ
Multiple site addresses	No, there are not multiple site addresses

In which local authority is the site address (Country, Geographical Area, Local Authority)
England, Greater Manchester, Manchester

Exact work location or description of where on premises work is to be carried out
Slab of former buildings

Person preparing plan of work	Mr Adam Pearson
Mobile number	07855278675
Site supervisor	Mr Shaun Newbon
Mobile number	07920 256551

Timing and duration of work

Actual start date of set up on site	02/05/2023

Expected finish date of work	12/05/2023
Waiver required?	No, this notification does not require a waiver
Duration of work (no days)	x8 Days
Job start and finish times	08:00 to 16:00
Night working	No, night working is not involved
Weekend working	No, weekend working is not involved
Significant cessation / pause	No, there will not be a significant cessation or pause during the work

About the work

ACM Type	Asbestos insulating board
Work to be undertaken	Removal
General condition of asbestos material	Poor
Main type of asbestos	Chrysotile Amosite

Details of the type of work to be undertaken, general condition and main type of asbestos

- Controlled removal of concrete slab with presumed or identified asbestos insulating board packers and/or shuttering.
- All loose hardcore, brick work and structural materials shall be disposed of as general waste by PP O'Connor following inspection by iES operatives.
- iES operatives to undertake a watching brief including the application of fiber/dust suppression during the removal process including litter pick of any potential asbestos insulating board debris.
- All mechanical removal works to be undertaken by PP O'Connor site operatives. All mechanical removal works to be undertaken in line with PP O'Connor LTD civil engineering RAMS.
- A UKAS accredited analyst shall be present at all times on site undertaking re-assurance air monitoring, personal monitoring and background air monitoring.

The general condition of the ACM's is poor with the main type of asbestos being Chrysotile and Amosite

Size of job (area or volume)	N/Q due to location of ACM's
Minimum number of person employed per shift	2
Maximum number of person employed per shift	3

Control measures and risks

Control measures used to reduce exposure	Decontamination RPE
How the work will be supervised and monitored	Using enclosure entry
Non-asbestos risks	Yes, there are non asbestos risks that make the asbestos work more difficult

Details of non-asbestos risks
Access to Works Area
External Working
Working on a civil engineering site.

Special premises	No, the asbestos removal is not taking place on special premises
Enforcing authority	The enforcing authority is - HSE

Notifier contact details and declaration

Declaration	I declare that an ACoP compliant plan of work has been prepared
Notifier name	Mr Adam Pearson
Position	Operations Manager

HSE

Health and Safety Executive

Control of Asbestos Regulations 2012

Notification of asbestos work

To improve the management of licensed asbestos work through auditing by the asbestos industry, HSE may share limited data provided on the ASB5 form with trade associations and relevant bodies. The data shared will be limited to: name of licensee, licence expiry date, site location, dates of work, nature of work

Notification Number: 109103B3B8 Submitted Date: 22/11/2022

About you and your licence

Notification type	This is a NEW notification
Licence number	102005482
Expiry date	11/07/2023
Licence holder name	Bradley Demolition Limited
Address	Kent Street PRESTON Lancashire PR1 1PE
Phone Number	01772280256
Email	nick@bradleydemo.co.uk

Job details

Name of company contracted to	PP O,Connor
Phone number of company contracted to	07872455671
Contact name at company contracted to	Mr Neil Powell
Site address	New Smithfield Market Block A,B,C,D MANCHESTER Greater Manchester M11 2WJ
Multiple site addresses	No, there are not multiple site addresses

In which local authority is the site address (Country, Geographical Area, Local Authority)
England, Greater Manchester, Manchester

Exact work location or description of where on premises work is to be carried out
Blocks A,B,C,D & E Ground and 1st floor areas plus 4 x Canopys.

Person preparing plan of work	Mr Nick Simm
Mobile number	07359126390
Site supervisor	Mr Dave Ferguson
Mobile number	07799646666

Timing and duration of work

Actual start date of set up on site	06/12/2022
Expected finish date of work	10/03/2023

Waiver required?	No, this notification does not require a waiver
Duration of work (no days)	13 weeks
Job start and finish times	07:30 -16:30
Night working	No, night working is not involved
Weekend working	No, weekend working is not involved
Significant cessation / pause	Yes, there will be a significant cessation or pause during the work

Cessation / pause details
22/12/2022 -03/01/2023 (Christmas)

About the work

ACM Type	Asbestos insulating board
Work to be undertaken	Removal Environmental Decontamination
General condition of asbestos material	Good
Main type of asbestos	Chrysotile Amosite

Details of the type of work to be undertaken, general condition and main type of asbestos
Removal of AIB ceilings , beams , walls and window panels to block A,B,C,D under negative pressure and fully controlled conditions.

Size of job (area or volume)	8 skips
Minimum number of person employed per shift	3
Maximum number of person employed per shift	16

Control measures and risks

Control measures used to reduce exposure	Shadow vacuuming Decontamination Enclosure of work under negative pressure Intact removal of whole AIB panels /tiles etc RPE
How the work will be supervised and monitored	Using viewing panels Via CCTV Using enclosure entry
Non-asbestos risks	No, there are no non asbestos risks that make the asbestos work more difficult
Special premises	No, the asbestos removal is not taking place on special premises
Enforcing authority	The enforcing authority is - HSE

Notifier contact details and declaration

Declaration	I declare that an ACoP compliant plan of work has been

	prepared
Notifier name	Mr Nick Simm
Position	Contract Manager

HSE

Health and Safety Executive

Control of Asbestos Regulations 2012

Notification of asbestos work

To improve the management of licensed asbestos work through auditing by the asbestos industry, HSE may share limited data provided on the ASB5 form with trade associations and relevant bodies. The data shared will be limited to: name of licensee, licence expiry date, site location, dates of work, nature of work

Notification Number: 9382EF94E0 Submitted Date: 28/04/2023

About you and your licence

Notification type	This is a NEW notification
Licence number	202105955
Expiry date	11/06/2024
Licence holder name	Intelligent Environmental Services LTD
Address	Unit A7, The Dresser Centre Whitworth Street Openshaw MANCHESTER Greater Manchester M11 2NE
Phone Number	07855278675
Email	adam.pearson@i-es.uk

Job details

Name of company contracted to	PP O'Connor Limited
Phone number of company contracted to	07949420926
Contact name at company contracted to	Mr Brett Jarman
Site address	New Smithfield Market Whitworth Street East MANCHESTER M11 2WJ
Multiple site addresses	No, there are not multiple site addresses

In which local authority is the site address (Country, Geographical Area, Local Authority)
England, Greater Manchester, Manchester

Exact work location or description of where on premises work is to be carried out
Slab C & D

Person preparing plan of work	Mr Adam Pearson
Mobile number	07855 278675
Site supervisor	Mr Shaun Newbon
Mobile number	07920 256551

Timing and duration of work

Actual start date of set up on site	15/05/2023

Expected finish date of work	09/06/2023
Waiver required?	No, this notification does not require a waiver
Duration of work (no days)	x19 Day Shifts
Job start and finish times	08:00 to 16:00
Night working	No, night working is not involved
Weekend working	No, weekend working is not involved
Significant cessation / pause	No, there will not be a significant cessation or pause during the work

About the work

ACM Type	Asbestos insulating board
Work to be undertaken	Removal
General condition of asbestos material	Poor
Main type of asbestos	Chrysotile Amosite

Details of the type of work to be undertaken, general condition and main type of asbestos

- Controlled removal of concrete slab and surface water drainage covers with presumed or identified asbestos insulating board packers and/or shuttering.
- All loose hardcore, brick work and structural materials shall be disposed of as general waste by PP O'Connor following inspection by iES operatives.
- iES operatives to undertake a watching brief including the application of fiber/dust suppression during the removal process including litter pick of any potential asbestos insulating board debris.
- All mechanical removal works to be undertaken by PP O'Connor site operatives. All mechanical removal works to be undertaken in line with PP O'Connor LTD civil engineering RAMS.
- A UKAS accredited analyst shall be present at all times on site undertaking re-assurance air monitoring, personal monitoring and background air monitoring.

Size of job (area or volume)	Slab C & D
Minimum number of person employed per shift	4
Maximum number of person employed per shift	4

Control measures and risks

Control measures used to reduce exposure	Shadow vacuuming Decontamination Intact removal of whole AIB panels /tiles etc RPE
How the work will be supervised and monitored	Using enclosure entry
Non-asbestos risks	Yes, there are non asbestos risks that make the asbestos work more difficult
Details of non-asbestos risks	

Access to Works Area
Working on a Demo/Civils Site

Special premises	No, the asbestos removal is not taking place on special premises
Enforcing authority	The enforcing authority is - HSE

Notifier contact details and declaration

Declaration	I declare that an ACoP compliant plan of work has been prepared
Notifier name	Mr Adam Pearson
Position	Operations Manager

HSE

Health and Safety Executive

Control of Asbestos Regulations 2012

Notification of asbestos work

To improve the management of licensed asbestos work through auditing by the asbestos industry, HSE may share limited data provided on the ASB5 form with trade associations and relevant bodies. The data shared will be limited to: name of licensee, licence expiry date, site location, dates of work, nature of work

Notification Number: B2105B9125 Submitted Date: 07/04/2023

About you and your licence

Notification type	This is a NEW notification
Licence number	202105955
Expiry date	11/06/2024
Licence holder name	Intelligent Environmental Services LTD
Address	Unit A7, The Dresser Centre Whitworth Street Openshaw MANCHESTER Greater Manchester M11 2NE
Phone Number	07855278675
Email	adam.pearson@i-es.uk

Job details

Name of company contracted to	PP O'Connor Limited
Phone number of company contracted to	07711176296
Contact name at company contracted to	Mr Brett Jarman
Site address	New Smithfield Market Whitworth Street East MANCHESTER M11 2WJ
Multiple site addresses	No, there are not multiple site addresses

In which local authority is the site address (Country, Geographical Area, Local Authority)
England, Greater Manchester, Manchester

Exact work location or description of where on premises work is to be carried out
External Road Systems

Person preparing plan of work	Mr Adam Pearson
Mobile number	07855 278675
Site supervisor	Mr James Johnston
Mobile number	07946 443430

Timing and duration of work

Actual start date of set up on site	21/04/2023

Expected finish date of work	05/05/2023
Waiver required?	No, this notification does not require a waiver
Duration of work (no days)	10 days
Job start and finish times	08:00 to 16:00
Night working	No, night working is not involved
Weekend working	No, weekend working is not involved
Significant cessation / pause	Yes, there will be a significant cessation or pause during the work

Cessation / pause details

Works on the 21st of April to begin at 08:30am.

About the work

ACM Type	Asbestos insulation
Work to be undertaken	Removal
General condition of asbestos material	Poor
Main type of asbestos	Chrysotile Amosite

Details of the type of work to be undertaken, general condition and main type of asbestos

- Controlled removal of surface water drainage covers with presumed or identified asbestos insulating board packers and/or shuttering.
- All loose hardcore, brick work and structural materials shall be disposed of as general waste by PP O'Connor following inspection by iES operatives.
- iES operatives to undertake a watching brief including the application of fibre/dust suppression during the removal process
- All mechanical removal works to be undertaken by PP O'Connor site operatives in the form of concrete cutting and removal of man surface water covers using mechanical machinery. All removal works to be undertakenin line with PP O'Connor LTD civil engineering RAMS.
- A UKAS accredited analyst shall be present at all times on site undertaking re-assurance air monitoring, personal monitoring and background air monitoring.

The general condition of the ACM's is presumed to be poor with the main type of asbestos being Chryostile and Amosite

Size of job (area or volume)	x5 Surface Water Draines
Minimum number of person employed per shift	2
Maximum number of person employed per shift	3

Control measures and risks

Control measures used to reduce exposure	Decontamination Intact removal of whole AIB panels /tiles etc RPE
How the work will be supervised and monitored	Using enclosure entry

Non-asbestos risks	Yes, there are non asbestos risks that make the asbestos work more difficult
Details of non-asbestos risks	
Access to Works Area	
External Working	
Working on a civil engineering site	
Special premises	No, the asbestos removal is not taking place on special premises
Enforcing authority	The enforcing authority is - HSE

Notifier contact details and declaration

Declaration	I declare that an ACoP compliant plan of work has been prepared
Notifier name	Mr Adam Pearson
Position	Operations Manager

HSE

Health and Safety Executive

Control of Asbestos Regulations 2012

Notification of asbestos work

To improve the management of licensed asbestos work through auditing by the asbestos industry, HSE may share limited data provided on the ASB5 form with trade associations and relevant bodies. The data shared will be limited to: name of licensee, licence expiry date, site location, dates of work, nature of work

Notification Number: 136F0E3861 Submitted Date: 09/05/2023

About you and your licence

Notification type	This is an UPDATE to a previously submitted notification
Licence number	202105955
Expiry date	11/06/2024
Licence holder name	Intelligent Environmental Services LTD
Address	Unit A7, The Dresser Centre Whitworth Street Openshaw MANCHESTER Greater Manchester M11 2NE
Phone Number	07855278675
Email	adam.pearson@i-es.uk

Job details

Name of company contracted to	PP O'Connor Limited
Phone number of company contracted to	07949420926
Contact name at company contracted to	Mr Brett Jarman
Site address	New Smithfield Market Whitworth Street East MANCHESTER M11 2WJ
Multiple site addresses	No, there are not multiple site addresses

In which local authority is the site address (Country, Geographical Area, Local Authority)
England, Greater Manchester, Manchester

Exact work location or description of where on premises work is to be carried out
Slab of former buildings

Person preparing plan of work	Mr Adam Pearson
Mobile number	07855278675
Site supervisor	Mr James Johnston
Mobile number	07946 443430

Timing and duration of work

Actual start date of set up on site	02/05/2023

Expected finish date of work	12/05/2023
Waiver required?	No, this notification does not require a waiver
Duration of work (no days)	x8 Days
Job start and finish times	08:00 to 16:00
Night working	No, night working is not involved
Weekend working	No, weekend working is not involved
Significant cessation / pause	No, there will not be a significant cessation or pause during the work

About the work

ACM Type	Asbestos insulating board
Work to be undertaken	Removal
General condition of asbestos material	Poor
Main type of asbestos	Chrysotile Amosite

Details of the type of work to be undertaken, general condition and main type of asbestos

- Controlled removal of concrete slab with presumed or identified asbestos insulating board packers and/or shuttering.
- All loose hardcore, brick work and structural materials shall be disposed of as general waste by PP O'Connor following inspection by iES operatives.
- iES operatives to undertake a watching brief including the application of fiber/dust suppression during the removal process including litter pick of any potential asbestos insulating board debris.
- All mechanical removal works to be undertaken by PP O'Connor site operatives. All mechanical removal works to be undertaken in line with PP O'Connor LTD civil engineering RAMS.
- A UKAS accredited analyst shall be present at all times on site undertaking re-assurance air monitoring, personal monitoring and background air monitoring.

The general condition of the ACM's is poor with the main type of asbestos being Chrysotile and Amosite

Size of job (area or volume)	N/Q due to location of ACM's
Minimum number of person employed per shift	2
Maximum number of person employed per shift	4

Control measures and risks

Control measures used to reduce exposure	Decontamination RPE
How the work will be supervised and monitored	Using enclosure entry
Non-asbestos risks	Yes, there are non asbestos risks that make the asbestos work more difficult

Details of non-asbestos risks
Access to Works Area
External Working
Working on a civil engineering site.

Special premises	No, the asbestos removal is not taking place on special premises
Enforcing authority	The enforcing authority is - HSE

Notifier contact details and declaration

Declaration	I declare that an ACoP compliant plan of work has been prepared
Notifier name	Mr Adam Pearson
Position	Operations Manager

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 25/04/2023

Job Number: 56312

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
NEWSK 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 10:33 **Time Off Site** 10:33



Waste Producer Signature

Print Name john
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver

Registration Number:

Registration Number:

Vehicle Registration: MV23 WWG

Driver Name: Lee Holden

Carrier Signature Lee Holden

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 05/05/2023

Job Number: 57214

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 10:25 **Time Off Site** 10:47

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 57214

PO: CO524

Ticket Ref: P37893

Gross: 28.160 T

Tare: 17.600 T

Gross timestamp: 05/05/2023 12:23:38

Tare timestamp: 05/05/2023 12:23:42

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 10.560 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 05/05/2023

Job Number: 57728

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
NEWSK 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 13:19 **Time Off Site** 13:19

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver

Registration Number:

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Carrier Signature Paul Rogers

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 09/05/2023

Job Number: 57753

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 11:20 **Time Off Site** 11:38

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 57753

PO: CO524

Ticket Ref: P38077

Gross: 30.920 T

Tare: 17.800 T

Gross timestamp: 09/05/2023 13:23:11

Tare timestamp: 09/05/2023 13:23:15

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 13.120 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 10/05/2023

Job Number: 57754

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 11:37 **Time Off Site** 13:06

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 57754

PO: CO524

Ticket Ref: P38243

Gross: 32.320 T

Tare: 17.680 T

Gross timestamp: 10/05/2023 13:07:18

Tare timestamp: 10/05/2023 13:07:22

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 14.640 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 11/05/2023

Job Number: 57755

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 40 (Enclosed)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 14:16 **Time Off Site** 16:56

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 57755

PO: CO524

Ticket Ref: P38406

Gross: 28.880 T

Tare: 17.560 T

Gross timestamp: 11/05/2023 16:57:28

Tare timestamp: 11/05/2023 16:57:33

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 11.320 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 12/05/2023

Job Number: 57756

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 12:02 **Time Off Site** 13:25

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 57756

PO: CO524

Ticket Ref: P38597

Gross: 29.840 T

Tare: 17.740 T

Gross timestamp: 12/05/2023 13:24:02

Tare timestamp: 12/05/2023 13:24:07

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 12.100 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 15/05/2023

Job Number: 58267

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 14:40 **Time Off Site** 14:42

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 58267

PO: CO524

Ticket Ref: P38855

Gross: 23.260 T

Tare: 17.740 T

Gross timestamp: 15/05/2023 15:56:30

Tare timestamp: 15/05/2023 15:56:35

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 5.520 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 17/05/2023

Job Number: 58270

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 14:55 **Time Off Site** 15:20

Waste Producer Signature

Print Name
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 58270

PO: CO524

Ticket Ref: P39221

Gross: 24.540 T

Tare: 17.740 T

Gross timestamp: 17/05/2023 16:25:53

Tare timestamp: 17/05/2023 16:25:57

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 6.800 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 16/05/2023

Job Number: 58877

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
FIN 40 (Enclosed)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 15:43 **Time Off Site** 15:44

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 58877

PO: CO524

Ticket Ref: P39027

Gross: 24.920 T

Tare: 17.740 T

Gross timestamp: 16/05/2023 15:44:47

Tare timestamp: 16/05/2023 15:44:52

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 7.180 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 24/05/2023

Job Number: 59550

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Mixed Metals - 17 04 07

SIC Code: 41201

Load Details:

Order Details
NEWSK 42 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 08:16 **Time Off Site** 08:23

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver

Registration Number:

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Carrier Signature Paul Rogers

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 25/05/2023

Job Number: 59834

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Mixed Metals - 17 04 07

SIC Code: 41201

Load Details:

Order Details
E/R 42 (Ro Ro)

Driver Notes
PLEASE MAKE SURE YOU TAKE PHOTOS OF THE SCRAP TICKET AND SCRAP ONCE TIPPED

PO: CO524
Contact: 07711176296

Time On Site 08:56 **Time Off Site** 09:13

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
EUROPEAN METAL RECYCLING LTD
2 W Egerton St, Salford, M5 4DY

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 59834

PO: CO524

Ticket Ref: 9160551

Gross: 26.740 T

Tare: 18.200 T

Gross timestamp: 25/05/2023 10:22:09

Tare timestamp: 25/05/2023 10:22:17

Vehicle Registration: MV18 FSU

Grade Weight

Mixed Metals: 8.540 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 25/05/2023

Job Number: 59835

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 11:17 **Time Off Site** 11:18

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 59835

PO: CO524

Ticket Ref: P40209

Gross: 26.060 T

Tare: 17.680 T

Gross timestamp: 25/05/2023 12:22:18

Tare timestamp: 25/05/2023 12:22:22

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 8.380 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 26/05/2023

Job Number: 59894

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Mixed Metals - 17 04 07

SIC Code: 41201

Load Details:

Order Details
E/R 42 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 12:04 **Time Off Site** 12:05

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
EUROPEAN METAL RECYCLING LTD
Oldham Road, Manchester, M40 2BP

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 59894

PO: CO524

Ticket Ref: 7205869

Gross: 26.680 T

Tare: 17.180 T

Gross timestamp: 26/05/2023 12:09:52

Tare timestamp: 26/05/2023 12:10:00

Vehicle Registration: MV18 FSU

Grade Weight

Mixed Metals: 9.500 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 26/05/2023

Job Number: 59914

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 08:47 **Time Off Site** 09:30

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 59914

PO: CO524

Ticket Ref: P40372

Gross: 27.660 T

Tare: 17.780 T

Gross timestamp: 26/05/2023 10:34:01

Tare timestamp: 26/05/2023 10:34:08

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 9.880 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 26/05/2023

Job Number: 60019

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 17:06 **Time Off Site** 17:26

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 60019

PO: CO524

Ticket Ref: 60019

Gross: 26.880 T

Tare: 17.640 T

Gross timestamp: 01/06/2023 07:08:03

Tare timestamp: 01/06/2023 07:08:07

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 9.240 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 30/05/2023

Job Number: 60020

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 42 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 10:53 **Time Off Site** 11:10

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: Y9 PPO.

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 60020

PO: CO524

Ticket Ref: P40587

Gross: 23.840 T

Tare: 16.900 T

Gross timestamp: 30/05/2023 12:40:42

Tare timestamp: 30/05/2023 12:40:46

Vehicle Registration: Y9 PPO.

Grade Weight

Construction Materials Containing Asbestos: 6.940 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 05/06/2023

Job Number: 60500

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 11:45 **Time Off Site** 11:46

Waste Producer Signature

Print Name
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
VALENCIA
(Pillsworth), Pillsworth Road, Bury, BL98QZ

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 60500

PO: CO524

Ticket Ref: P41335

Gross: 23.020 T

Tare: 20.660 T

Gross timestamp: 05/06/2023 12:46:07

Tare timestamp: 05/06/2023 12:46:13

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 2.360 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 06/06/2023

Job Number: 61154

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Mixed Metals - 17 04 07

SIC Code: 41201

Load Details:

Order Details
E/R 42 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 07:59 **Time Off Site** 08:00

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
EUROPEAN METAL RECYCLING LTD
2 W Egerton St, Salford, M5 4DY

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 61154

PO: CO524

Ticket Ref: 9161313-61154

Gross: 33.120 T

Tare: 16.060 T

Gross timestamp: 06/06/2023 08:43:39

Tare timestamp: 06/06/2023 08:43:44

Vehicle Registration: MV18 FSU

Grade Weight

Mixed Metals: 17.060 T

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: 0161 945 4668
Website: www.ppoconnor.co.uk

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 12/06/2023

Job Number: 61935

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 00:00 **Time Off Site** 00:00

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver

Registration Number:

Registration Number:

Vehicle Registration: MV23 WWG

Driver Name: Lee Holden

Carrier Signature Lee Holden

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 12/06/2023

Job Number: 61954

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC

SIC Code: 41201

Load Details:

Order Details
E/R 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 00:00 **Time Off Site** 00:00

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver

Registration Number:

Registration Number:

Vehicle Registration: MV23 WWG

Driver Name: Lee Holden

Carrier Signature Lee Holden

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

P.P O'Connor Enviro Limited
Sharston Recycling Yard, Longley Lane, Sharston,
Manchester, M22 4SS

Phone: **0161 945 4668**
Website: **www.ppoconnor.co.uk**

P. P. O'CONNOR
Committed To Excellence

Duty of Care - Controlled Waste Transfer Note

Waste Carrier Licence:

Waste Management Licence:
EPR/AB3205FD/T001 - The Old Railway Station, Longley Lane, Sharston, Manchester, M22 4RQ

Annual Waste Transfer Note - valid for 12 months from:
Date: 02/08/2023

Job Number: 66968

Waste Producer
P.P. O'CONNOR GROUP LTD
(Co524) (CO524), New Smithfield Market Street, Whitworth Street, Openshaw, M11 2WJ

Grade & EWC
Construction Materials Containing Asbestos - 17 06 05

SIC Code: 41201

Load Details:

Order Details
FIN 30 (Ro Ro)

Driver Notes

PO: CO524
Contact: 07711176296

Time On Site 06:42 **Time Off Site** 07:40

Waste Producer Signature

Print Name _____
Signing represents total acceptance of all the Terms and Conditions

I (the customer) do hereby declare that the service contracted for as defined above has been carried out to my complete satisfaction. I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011. Signing represents acceptance of the Terms and Conditions.

Waste Carrier
P.P. O'CONNOR ENVIRO LTD
61 Mosley Road, Trafford Park, Manchester, M17 1GJ

Waste Receiver
WHITEMOSS LANDFILL LTD
Whitemoss Road South, Skelmersdale, Lancashire, WN89TH

Registration Number:

Vehicle Registration: MV18 FSU

Driver Name: Paul Rogers

Registration Number:

Carrier Signature Paul Rogers

Receiver Signature

Description of Waste: Where waste is discovered to be inconsistent with the description given by the customer or their agent, the owner reserves the right to recover the appropriate charges and associated tax, together with any other costs incurred.

Weighbridge Details

Our Ref: 66968

PO: CO524

Ticket Ref: WML W22832

Gross: 23.500 T

Tare: 16.700 T

Gross timestamp: 02/08/2023 08:10:40

Tare timestamp: 02/08/2023 08:10:46

Vehicle Registration: MV18 FSU

Grade Weight

Construction Materials Containing Asbestos: 6.800 T

APPENDIX VIII
WASTE TRANSFER NOTES

P.P. O'CONNOR
Committed To Excellence

DUTY OF CARE CONTROLLED WASTE TRANSFER NOTE

P.P. O'Connor | [illegible] Trading Estate, [illegible]
[illegible] Tel: 0161 [illegible] Fax: 0161 [illegible]

Ticket № 006207

Section A – Waste Description

A1 - How is the waste contained: ☐ Skip ☑ Tipper ☐ Other (specify).....

A2 - Quantity of waste: 800 Tonnes

A3 - EWC Codes:

Construction and Demolition Waste (tick box if present):			
170101	Concrete	170201	Wood
170102	Brick	170202	Glass
170103	Tiles and Ceramics	170203	Plastic
170107 ✓	Non-hazardous mixtures of Concrete, Brick, Tiles and Ceramics	170302	Bituminous Mixtures (coal tar free)
170504 ✓	Non-hazardous Soil and Stone	170407	Mixed Metals
170508	Non-hazardous Track Ballast	170411	Cables
	Others		

Section B- Waste Producer:

B1 – Name and Address of Company; PP O'Connor Ltd, 61 Mosley Road, Trafford Park, Manchester, M17 1WJ.

B2 – SIC Code 2007; (Tick One Only):

41.20/1	Construction of Commercial Buildings	43.11 ✓	Demolition
41.20/2	Construction of Domestic Buildings	43.12	Demolition – Site Preparation
42.11	Construction of Roads and Motorways		Others
42.12	Construction of Railways		
42.13	Construction of Bridges and Tunnels		
42.91	Construction of Water Projects		
42.99	Construction of other Civil Engineering Projects N.E.C		

B3 – Name and Address of Site to collect from: New Smithfield Market, Whitworth Street East, Openshaw, Manchester, M11 2WJ.

B4 – Date of transfer from: 7-8-23 – 26-8-23.

B5 – I can confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011;

Name (print) A. J. Barry **Sign** AJB **Date** 7-8-23

Section C – Carrier of Waste:

C1 – Waste Carrier: P.P. O'Connor Group Ltd, The Exchange, 5 Bank Street, Bury BL9 0DN

C2 – Registration Number: CBDU101751

Name (print) A. J. Barry. **Sign** AJB **Date** 7-8-23

Section D – Waste Disposer/Recycler:

D1 – I can confirm I have brought the waste to a permitted or exempt facility on behalf of the person named in section B

Name (print) A. J. Barry. **Sign** AJB **Date** 7-8-23

D2 – Name of Facility: ☑ Permit EPR/BB3001kN 659 Eccles New Road, Salford M501DA ☐ Other;

☐ Permit EPR/AB3205FD Sharston Recycling Centre, Longley Lane, Sharston M224SS

Address of Site: .....

D3 – I acknowledge Receipt of the above waste on behalf of permit number: .....

Name (print) A. J. Barry **Sign** AJB **Date** 7-8-23

Holder Copy – White : Carrier Copy - Yellow : Disposer Copy – Pink

P.P. O'CONNOR
Committed To Excellence

DUTY OF CARE CONTROLLED WASTE TRANSFER NOTE

P.P. O'Connor | ~~Woodlands Park Thames Trading Estate | Iland – Manchester | M44 6NN | Tel: 0161 776 6333 | Fax: 0161 7760303~~

Ticket № 006228

Section A – Waste Description

A1 - How is the waste contained: ☐ Skip ☑ Tipper ☐ Other (specify).....

A2 - Quantity of waste: 200 Tonnes

A3 - EWC Codes: ASBESTOS IMPACTED - NON-HAZARDOUS

Construction and Demolition Waste (tick box if present):			
170101	Concrete	170201	Wood
170102	Brick	170202	Glass
170103	Tiles and Ceramics	170203	Plastic
170107	Non-hazardous mixtures of Concrete, Brick, Tiles and Ceramics	170302	Bituminous Mixtures (coal tar free)
170504 ✓	Non-hazardous Soil and Stone	170407	Mixed Metals
170508	Non-hazardous Track Ballast	170411	Cables
	Others		

Section B- Waste Producer:

B1 – Name and Address of Company: PP O'CONNOR, 61 MOSLEY ROAD, TRAFFORD PARK, MANCHESTER, M17 1EJ.

B2 – SIC Code 2007; (Tick One Only):

41.20/1	Construction of Commercial Buildings	43.11	Demolition
41.20/2	Construction of Domestic Buildings	43.12 ✓	Demolition – Site Preparation
42.11	Construction of Roads and Motorways		Others
42.12	Construction of Railways		
42.13	Construction of Bridges and Tunnels		
42.91	Construction of Water Projects		
42.99	Construction of other Civil Engineering Projects N.E.C		

B3 – Name and Address of Site to collect from: NEW SMITHFIELD MARKET, WHITWORTH STREET EAST, OPENSHAW, MANCHESTER, M11 2WJ.

B4 – Date of transfer from: .....

B5 – I can confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011;

Name (print) A. J. BARRY **Sign** A J B **Date** 19-7-23.

Section C – Carrier of Waste:

C1 – Waste Carrier: P.P. O'Connor Group Ltd, The Exchange, 5 Bank Street, Bury BL9 0DN

C2 – Registration Number: CBDU101751

Name (print) A. J. BARRY **Sign** A J B **Date** 19-7-23

Section D – Waste Disposer/Recycler:

D1 – I can confirm I have brought the waste to a permitted or exempt facility on behalf of the person named in section B

Name (print) A. J. BARRY **Sign** A J B **Date** 19-7-23.

D2 – Name of Facility: ☐ Permit EPR/BB3001kN 659 Eccles New Road, Salford M501DA ☑ Other;

☐ Permit EPR/AB3205FD Sharston Recycling Centre, Longley Lane, Sharston M224SS

Address of Site: BOOTH VENTURES LTD, HAGWOOD QUARRY LANDFILL, BROCKHOLE LANE, HAWOOD, BOLTON, GREATER MANCHESTER, BL2 4LS.

D3 – I acknowledge Receipt of the above waste on behalf of permit number: EPR/BV8741L/V006

Name (print) L PLACE **Sign** L Place **Date** 19/7/23.

Holder Copy – White : Carrier Copy - Yellow : Disposer Copy – Pink

P.P. O'CONNOR
Committed To Excellence

DUTY OF CARE CONTROLLED WASTE TRANSFER NOTE

E – FORM = 12
Issue 2.0 : 26/06/2018
Page 1 of 1
Review Annually

Ticket № 006237

P.P. O'Connor | Woodrow Way | Thames Trading Estate | Irlam
Manchester | M446NN | Tel: 0161 776 0333 | Fax: 0161 7760303

Section A – Waste Description

A1 - How is the waste contained: ☐ Skip ☑ Tipper ☐ Other (specify).....

A2 - Quantity of waste: ....1000....Tonnes

A3 - EWC Codes:

Construction and Demolition Waste (tick box if present):			
170101	Concrete	170201	Wood
170102	Brick	170202	Glass
170103	Tiles and Ceramics	170203	Plastic
170107	Non-hazardous mixtures of Concrete, Brick, Tiles and Ceramics	170302	Bituminous Mixtures (coal tar free)
170504 ✓	Non-hazardous Soil and Stone	170407	Mixed Metals
170508	Non-hazardous Track Ballast	170411	Cables
	Others		

Section B- Waste Producer:

B1 – Name and Address of Company: PP O'Connor, 61 Flosky Road, Trafford Park, Manchester, M17 1EJ.

B2 – SIC Code 2007; (Tick One Only):

41.20/1	Construction of Commercial Buildings	43.11	Demolition
41.20/2	Construction of Domestic Buildings	43.12 ✓	Demolition – Site Preparation
42.11	Construction of Roads and Motorways		Others
42.12	Construction of Railways		
42.13	Construction of Bridges and Tunnels		
42.91	Construction of Water Projects		
42.99	Construction of other Civil Engineering Projects N.E.C		

B3 – Name and Address of Site to collect from: New Smithfield Market, Whitworth Street East, Openshaw, Manchester, M11 1EJ

B4 – Date of transfer from: 11-8-23 – 17-8-23.

B5 – I can confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England and Wales) Regulations 2011;

Name (print) A.V. BARRY **Sign** [signature] **Date** 10-8-23

Section C – Carrier of Waste:

C1 – Waste Carrier: P.P. O'Connor Group Ltd, The Exchange, 5 Bank Street, Bury BL9 0DN

C2 – Registration Number: CBDU101751

Name (print) A.V. BARRY **Sign** [signature] **Date** 10-8-23

Section D – Waste Disposer/Recycler:

D1 – I can confirm I have brought the waste to a permitted or exempt facility on behalf of the person named in section B

Name (print) A.V. BARRY **Sign** [signature] **Date** 10-8-23

D2 – Name of Facility: ☐ Permit EPR/BB3001kN 659 Eccles New Road, Salford M501DA ☑ Other;

☐ Permit EPR/AB3205FD Sharston Recycling Centre, Longley Lane, Sharston M224SS

Address of Site: Booth Ventures Ltd, Harwood Quarry Landfill, Brookfield Lane, Harwood, Bolton, Greater Manchester, BL2 4LT.

D3 – I acknowledge Receipt of the above waste on behalf of permit number: EPR/BV8141L/V006.

Name (print) [illegible] **Sign** [signature] **Date** 10/8/23

Holder Copy – White : Carrier Copy - Yellow : Disposer Copy – Pink