Validation Report

Site: Laystall Street, Manchester
Reference: 16-613-R3-2
Date: January 2026

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REV REF:	DESCRIPTION	AUTHOR	CHECKED	AUTHORISED	DATE
R3-1	First issue	NS	RJW	AE	27/03/24
R3-2	Revision – Inclusion of Topsoil testing for landscaping (planters)	RJW	RJW	AE	20/1/2026

This report has been prepared for the sole benefit, use, and information of the client. The liability of Environmental Engineering Partnership Limited T/A E3P with respect to the information contained in the report will not extend to any third party. This report has been prepared by the qualified persons as listed below.

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DRAWING LIST

16-613-001 - Site Location Plan
16-613-002 - Proposed Development Plan
16-613-005 - Exploratory Hole Location Plan
16-613-006 - CBR Location Plan
16-613-019 - Remediation Issues Plan

1. INTRODUCTION

1.1. BACKGROUND

This report details the remediation and enabling works operations that were undertaken by Bradley Demolition Ltd under the supervision of E3P to facilitate the preparation of the high-rise residential development located off Laystall Street, Manchester; herein referred to as the site.

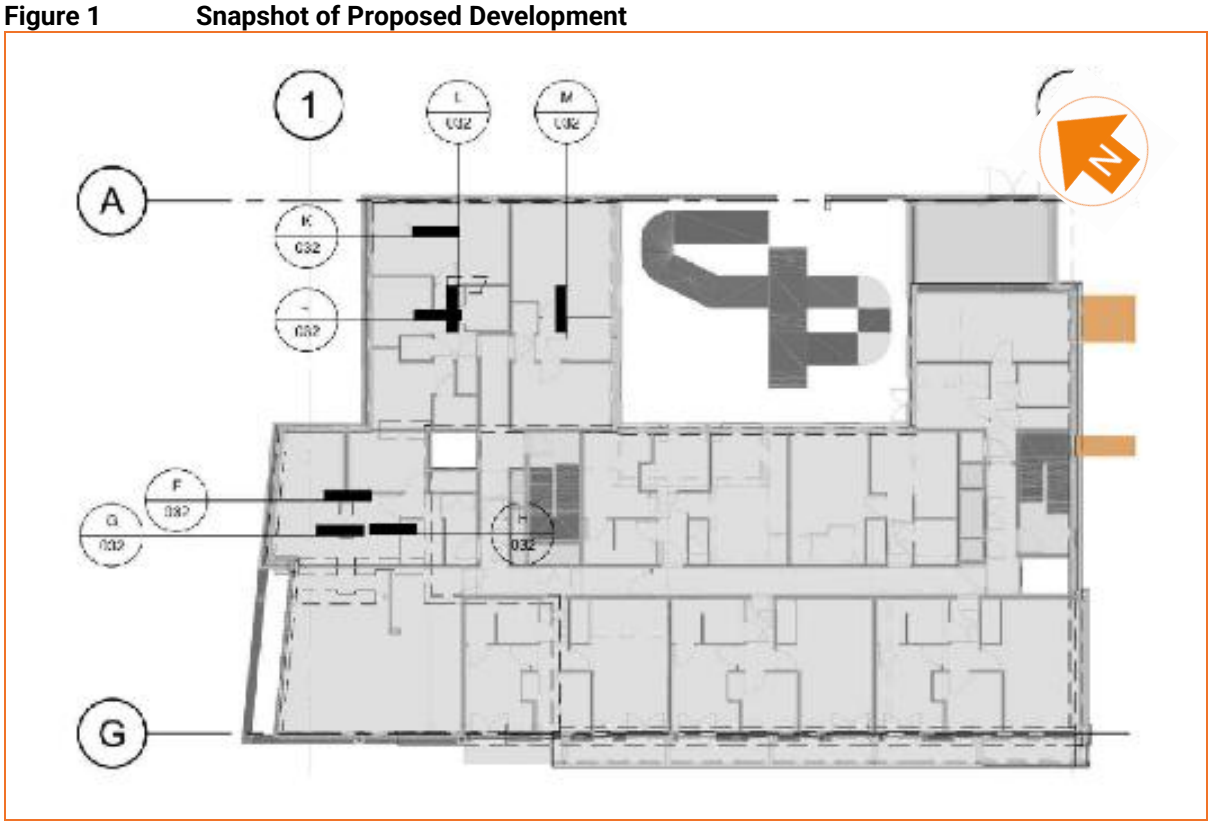
E3P was appointed by Eric Wright Construction as an independent Geoenvironmental Consultant for the site remediation, preparation/enabling and validation works and the subsequent production of a suitably detailed report to ensure the satisfaction of the relevant planning conditions and geotechnical engineering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

1.2. PROPOSED DEVELOPMENT

The redevelopment will include the erection of a nine storey residential building comprising 89 residential units. The development will include the conversion of a three storey extension to 32–34 Laystall Street for use as offices. Preparation and construction will include associated external works following demolition of existing structures along with other associated works including access, servicing, landscaping and secure cycle parking.

A general arrangement of the lower floor has been provided and utilised to demonstrate the proposed development. This is presented in Figure 1 and as Drawing ref 16-613-002 (Appendix III).

Figure 1 Snapshot of Proposed Development



1.3. SUMMARY OF PARTIES INVOLVED

Table 1 Summary of Parties Involved

FUNCTION/INTEREST	NAME OF PARTY
Local Planning Authority	Manchester City Council
Developer	Eric Wright Construction
Geoenvironmental Consultant	E3P
Main Contractor	Eric Wright Construction
Remediation/Enabling Works Contractor	Bradley Demolition Ltd
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:

- **Earth Environmental & Geotechnical** – Phase I Desk Study (Ref: A3664/20, dated August 2020) prepared for McCauls.
- **E3P** – Phase II Geoenvironmental Site Assessment – Laystall Street, Manchester (Ref: 15-140-R1-1, dated March 2022) prepared for Great Places Housing Group.
- **E3P** – Ground Gas Addendum Report – Laystall Street, Manchester (Ref: 15-140-R2-1, dated May 2022) prepared for Great Places Housing Group.
- **Clancy Consulting Ltd** – Phase 2 Site Investigation Report – Laystall Street, Manchester (Ref: 10/1448.1/001 Rev. 01, dated October 2022) prepared for Great Places Housing Group.

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

- **E3P** – Supplementary Phase II Geoenvironmental Site Assessment and Remediation and Enabling Works Strategy (Ref: 16-613-R1-1, dated March 2023) prepared for Eric Wright Construction.

The following supplementary report was also produced:

- **E3P** – Remediation Strategy Addendum Report - Vapour Risk Assessment (Ref: 16-613-R2-1, dated February 2024) prepared for Eric Wright Construction.

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 (16-613-R1-1; dated March 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 environment.

The Remediation and Enabling Works elements are summarised below:

- RE-1 – Pre-commencement Regulatory Compliance
- RE-2 – Risk to Infrastructure
- RE-3 – Environment and Nuisance Control
- RE-4 – Identification, Isolation and Treatment of Invasive Plants
- RE-5 – Site Clearance Operations
- RE-6 – Excavation, Breaking and Processing of All Above- and Below-Ground Structures and Made Ground
- RE-7 – Delineation, Excavation and Treatment of Identified Asbestos Impact
- RE-8 – Remedial Works in Respect to Naphthalene Impact
- RE-9 – Removal of Deleterious Material
- RE-10 – Construction of Temporary Working Platform
- RE-11 – Replacement of Materials, Geotechnical Engineering Requirements
- RE-12 – Preparation of Peripheral Landscaped Areas for Cover System
- RE-13 – Provision of Subsoil
- RE-14 – Provision of Topsoil
- 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 Section 5.

4. DETAILED REMEDIATION AND ENABLING WORKS ACTIVITIES

The focus of the remediation and enabling works is to address the 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 REGULATORY COMPLIANCE

Date of Works Undertaken	Prior to commencement.
Overview of Works	Manchester City Council granted planning permission for the proposed residential development under planning ref: 128911/FO/2020. This report has been completed concerning the discharge of condition 21. Regulatory correspondence was obtained confirming acceptance of the Remediation and Enabling Works Strategy. It is understood that all obligations relating to notice of deployment of plant and associated documentation were also in place as pre-commencement obligations for the contractor.

RE-2 – MINIMISE RISK TO INFRASTRUCTURE

Date of Works Undertaken	Throughout.
Overview of Works	Site works were completed under RAMS from Bradley Demolition Ltd in a manner that ensured no risk of disturbance to the adjacent infrastructure. All utility infrastructure was disconnected prior to works in areas of known services.

RE-3 – ENVIRONMENT AND NUISANCE CONTROL

Date of Works Undertaken	Throughout.
Overview of Works	During remediation, works were restricted to between 8.00 am and 5.30 pm in line with the planning decision restrictions. Fencing was utilised around the perimeter to secure the site. A power washer and bowser were present to dampen down materials throughout the work. The works were completed during a generally wetter period which reduced dust generation.

RE-4 – IDENTIFICATION, ISOLATION AND TREATMENT OF INVASIVE PLANTS

Date of Works Undertaken	N/A
Overview of Works	Invasive plant species were not identified ahead of the works and were confirmed to be absent prior to remediation and enabling works starting.

RE-5 – SITE CLEARANCE OPERATIONS

Date of Works Undertaken	Throughout
Photographs	Plate 1
Overview of Works	The former industrial building was demolished in a controlled manner prior to the commencement of the remediation works. The materials were processed into a usable material in construction and used to infill former basements and construction piling mats for the proposed development. Throughout the demolition and enabling works, scrap metal and general waste were separated from reusable demolition materials and placed into allocated skips for subsequent disposal off-site. Concrete, brick and inert materials were processed on-site and reused as aggregates.

RE-6 – EXCAVATION, BREAKING AND PROCESSING OF ALL ABOVE- AND BELOW-GROUND STRUCTURES

Date of Works Undertaken	Throughout
Photographs	Plate 2
Chemical Testing	I2 Analytical Report Ref: 23-16847: TP101-TP112
Geotechnical Testing	PSL Report PSL24/0811: Bulk 101
Overview of Works	Prior to E3P's attendance, all previous buildings and above ground structures had been demolished. All sub-structures including the former basements were excavated using controlled mechanical techniques under the strict control of the EWC and Bradley's Site Manager with E3P in part-time supervision. The site was subject to a turnover to the full depth of Made Ground stratum to ensure the full removal and excavation of all below-ground obstructions and relict foundations. This process allowed for the removal of any oversize materials. 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-inforcement 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. Grading analysis listed above confirmed a 6F2 classification. A WM3 assessment completed for soil samples from E3P trial pits confirmed that all soils would be classified as non-hazardous.

RE-7 – MANAGEMENT OF ASBESTOS IMPACT

Date of Works Undertaken	Throughout.
Overview of Works	During the E3P ground investigation, asbestos in the form of chrysotile and amosite was identified within localised areas of Made Ground deposits within TP102, TP104 and WS105. Clancy Consulting also identified chrysotile and amosite fibres in TP4. Asbestos quantification confirmed that the fibres were present at a concentration of <0.001 % for all locations. In-line with the asbestos conceptual site model, the risk associated with the asbestos fibres will be mitigated through the installation of a suitable cover system in all proposed landscaping and public open space to remove any potential for direct exposure to impacted soils. Ultimately the structure will occupy the vast majority of the site and so it is considered sufficiently encapsulated that the exposure pathway is severed. For the avoidance of doubt, no visual signs of ACM were encountered during the works and all soils were sufficiently dampened during excavation to restrict free fibres and dust.

RE-8 – REMEDIAL WORKS IN RESPECT TO NAPHTHALENE IMPACT

Date of Works Undertaken	January 2024
Overview of Works	The previous ground investigation works identified elevated naphthalene concentrations throughout the Made Ground across the site. Vapour monitoring was recommended to assess the volatilisation risk posed to the site end users. Following the completion of the demolition and site strip, six ground gas monitoring wells were installed in the proximity of the highest detected naphthalene samples, particularly those in the area of the historic basement and deep areas of Made Ground with the intent to utilise these as vapour sampling positions and to determine the concentrations of vapours emitting from the soils. E3P subsequently returned to the site utilising Summa Cannister sampling methodology to obtain samples. No exceedances against the SSSVs were detected for naphthalene or any (vapour phase/light end) TPH compounds analysed at the three target locations. In the absence of any vapour risk, it was determined that the soils are suitable for their intended use, and there was no requirement for further assessment or mitigation measures in consideration of the proposed development. The full Vapour Risk Assessment is detailed within the E3P report ref: 16-613-R2-Rev A, dated February 2024. E3P understood this to have been accepted as a satisfactory assessment following submission.

RE-9 – REMOVAL OF DELETERIOUS MATERIAL

Date of Works Undertaken	Throughout
Overview of Works	All potentially deleterious materials were removed from the site by the contractor to a licensed waste facility. A WM3 assessment accompanied all soils to be disposed off-site in line with waste hierarchy. Waste tickets are available from the contractor on request.

RE-10 – CONSTRUCTION OF TEMPORARY WORKING PLATFORM

Date of Works Undertaken	Throughout.
Geotechnical Testing	E3P CBR Certificates – CBR101-104 February 2024 E3P CBR Certificates – CBR101-107 February 2024
Overview of Works	A temporary working platform has been constructed using site generated 6F2 in accordance with the geotechnical engineer's temporary works design. The mat was placed in a 300 mm layer based on a temporary works design completed by others and in consideration of the piling rig that attended the site. CBR testing was completed by E3P to ensure compaction had been achieved to the required specification. Geotechnical testing results are included in Appendix VI. The CBR test locations are shown on the E3P drawing ref: 16-613-006 within Appendix III.

RE-11 – REPLACEMENT OF MATERIALS, GEOTECHNICAL ENGINEERING REQUIREMENTS

Date of Works Undertaken	Throughout.
Geotechnical Testing	E3P CBR Certificates – CBR101-104 February 2024 E3P CBR Certificates – CBR101-107 February 2024
Overview of Works	The enabling works required a large-scale turnover to remove constraints to construction. Where applicable all voids were upfilled with materials in accordance with the E3P Geotechnical Engineering Specification. CBR tests were undertaken at the remediation levels on pile mats. All materials were backfilled in strict compliance with the E3P Geotechnical Engineering Specification. CBR testing was completed to demonstrate compliance. Geotechnical testing results are included in Appendix VI. The CBR test locations are shown on the E3P drawing ref: 16-613-006 within Appendix III.

RE-12 – PREPARATION OF PERIPHERAL LANDSCAPED AREAS FOR COVER SYSTEM

Date of Works Undertaken	Throughout.
Overview of Works	All landscaped areas were prepared to 300 mm below the finished level to allow the placement of the clean cover system during the build phase. Levels of the landscaped areas to regrade level were brought to the intended elevation with site-won Made Ground. The installation of cover systems is a build phase item and will be completed under separate cover where necessary. In the event that hardstanding occupies the entire site, this will not be required.

RE-13 – PROVISION OF SUBSOIL

Date of Works Undertaken	N/A
Overview of Works	Subsoil was not generated during enabling earthworks; therefore, this will require importing during the build phase of the development. Any subsoil imported to the site will require testing in line with the approved remediation strategy. **January 2026 Update** It has been confirmed to E3P that the only soft landscaping to exist within the development is within raised planters. These will be entirely filled with Topsoil, as such there is not a requirement for subsoil at the site.

RE-14 – PROVISION OF TOPSOIL

Date of Works Undertaken	January 2026
Chemical Analysis	3 Samples – TS101-TS103 – I2 report Ref: 26-001295
Overview of Works	Topsoil will require importing during the build phase of the development. Any topsoil imported to the site will require testing in line with the approved remediation strategy. R3-2 Update January 2026 – It has been confirmed to E3P that the only soft landscaping within the development is within raised planters. Towards the end of the build phase on the 12th January 2026, E3P was invited to site to obtain 3 samples to cover an import of 6x 1T bags of topsoil to facilitate the requirements of the planters in full. As such the three samples meet the minimum sampling frequency based on this quantity. When comparing the results of the chemical analysis to Teir 2 LQM S4UL's for residential gardens (most conservative) no compounds exceed the criteria levels. As such these soils have been confirmed as suitable for us in raise planters at the site. Given the scenario for raised planters without the installation of landscaping at ground level, a depth validation has not been completed as the planters are in excess of 300mm deep and raised from ground level. The previous report suggested a requirement for validation of this but in light of the detail this is not considered to be necessary.

RE-15 – INDEPENDENT VALIDATION: WATCHING BRIEF

Date of Works Undertaken	Throughout
Overview of Works	The contractor did not identify any visual or olfactory impacted material during the remediation and enabling works that had not already been assessed in the preceding ground investigations and supplementary assessment works. E3P completed occasional visits at key points during the works to gather the evidence presented herein and did not encounter any previously unidentified gross contamination.

RE-16 – WASTE SOILS SURPLUS TO REQUIREMENTS

Date of Works Undertaken	N/A
Overview of Works	Mixed general waste was removed to a licensed waste facility. Any materials considered excess were reduced by removing oversize and inert materials from the bulk mass before removing them from the site. The finer fractions of the excess were then removed to a suitable waste receiver site. It is understood that the majority of soils were re-used at the site given the retained level to tie in with existing constraints. Waste Transfer Notes are available on request to Bradley Construction Ltd.

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

Date of Works Undertaken	N/A
Overview of Works	The completed pipeline risk assessment (dated 19/10/23) confirms the requirement for a barrier pipe to be installed for the proposed development.

5. 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 any imported topsoil/subsoil;
- Where required, placement and chemical validation of the 300 mm clean cover system within all areas of soft landscaping; and,
- Installation of basic radon protection measures.

The validation protocols are presented within the E3P Remediation and Enabling Works Strategy and are presented below.

5.1. PLACEMENT OF COVER SYSTEM

The remediation and enabling works strategy for the site, concerning the health of the future site users, includes the provision of a chemically suitable clean material to be installed in any soft landscaped areas.

The construction of the clean cover/placement of clean material shall consist of:

- 300 mm cover system in all landscaped areas which overlie Made Ground deposits across the site.

The depth of cover system within the tree pits may require deepening to 600 mm as per the requirements of MCC guidance.

In accordance with the current requirements of the regulatory authorities, validation samples will be collected from all materials that are to be imported to site.

Subsoil and topsoil shall be free of any deleterious materials, such as building materials, timber, plastics etc. Testing requirements for topsoil and subsoil are presented in Table 2.

Table 2 Specification for Soil Testing

MATERIAL USE	TESTING FREQUENCY	SUITE OF ANALYSIS
Subsoil Greenfield Source	1 Sample per 200 m^3 (minimum 3 from source)	A/B/C/D
Subsoil Brownfield Source	1 Sample per 50 m^3 (minimum 6 from source)	A/B/C/D
Topsoil Greenfield Source	1 Sample per 200 m^3 (minimum 3 from source)	A/B/C/D
Topsoil Brownfield Source	1 Sample per 50 m^3 (minimum 6 from source)	A/B/C/D
General Engineering Fill (Class 1 and 2 Soil)	1 Sample per 1000 m^3	A/B/C/D

Notes
Suites of Analysis:
A. Speciated PAH.
B. Speciated TPH (C5-C35).
C. Asbestos (ID).
D. CLEA Inorganic Heavy Metals.

5.2. POTABLE WATER SUPPLY

The pipeline risk assessment completed By E3P (dated 19/10/23) confirms the requirement for ***barrier*** pipe due to elevated concentrations of TPH C10-C16.

6. 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.

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.

- Installation of basic radon protection measures.
- Placement of the 300 mm clean cover system within any areas of soft landscaping.
- Independent validation of the cover system by a suitably qualified E3P engineer.
- Provision a suitable water supply infrastructure.

END OF REPORT

APPENDIX I
LIMITATIONS

GENERAL

1. This report and any associated works (together comprising the "Services") were compiled and carried out by E3P for the client (as present in Section 1) under the E3P “Terms of Business” or with those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed and outlined in the body of the report.

2. Unless explicitly agreed otherwise, in writing, this report has been prepared under E3P Standard Terms and Business as included within our proposal to the Client.

3. Project-specific appointment documents may be agreed upon at our discretion and a charge may be levied for both the time to review and finalise appointment documents and also for associated changes to the appointment terms. E3P reserves the right to amend the fee should any changes to the appointment terms create an increased risk to E3P.

4. The report needs to be considered in light of the proposal and associated limitations of scope. The report needs to be read in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the report.

PHASE 1 GEOENVIRONMENTAL AND PRELIMINARY RISK ASSESSMENTS

5. Coverage: This section covers reports with the following titles or combination of titles: Phase 1; Desktop Study; Geoenvironmental Assessment; Development Appraisal; Preliminary Environmental Risk Assessment; Constraints Report; Due Diligence Report; Geotechnical Development Review; Environmental Statement; Environmental Chapter; Baseline Environmental Assessment; Project Scope Summary Report (PSSR), Program Environmental Impact Report (PEIR), Geotechnical Development Risk Register; Agricultural Land Assessment; Mineral Safeguarding Assessment; Desk Top Coal Mining Risk Assessment; Hydrogeological Appraisal; Construction Environmental Management Plan; and Site Water Management Plan.

6. The works undertaken to prepare this report comprised a study of available and easily documented information from a variety of sources (including the Client), together with (where appropriate) a brief walkover inspection of the Site and correspondence with relevant authorities and other interested parties. Due to the short timescales associated with these projects responses may not have been received from all parties. E3P cannot be held responsible for any disclosures that are provided post-production of our report and will not automatically update our report.

7. The opinions given in this report have been dictated by the finite data on which they are based and are relevant only for the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, E3P reserves the right to review such information and, if warranted, to modify the opinions accordingly.

8. It should be noted that any risks identified in this report are perceived risks based on the information reviewed. Actual risks can only be assessed following intrusive investigations of the site.

9. 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 does not constitute or replace full and proper surveys completed by suitably qualified and experienced specialists in these fields.

10. E3P does not warrant work/data undertaken/provided by others.

INTRUSIVE INVESTIGATION REPORTS

11. Coverage: The following report titles (or combination) may cover this category of work: Geoenvironmental Site Investigation; Geotechnical Assessment; GIR (Ground Investigation Reports); Preliminary Environmental And Geotechnical Risk Assessment; Preliminary Summary; Coal Mining Risk Assessment, Ground Gas Addendum; and, Geotechnical Risk Register.

12. The investigation has been undertaken to provide information concerning either:

    I. The type and degree of contamination present at the site in order to allow a generic quantitative risk assessment to be undertaken; or

    II. Information on the soil properties present at the site to allow for geotechnical development constraints to be considered.

13. The scope of the investigation was selected on the basis of the specific development and land use scenario proposed by the Client and may be inappropriate to another form of development or scheme. If the development layout was not known at the time of the investigation the report findings may need revisiting once the development layout is confirmed.

14. Unless otherwise specified in the scope of works, any site drawing(s) provided in this report is (are) not meant to be an accurate base plan but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for setting out and should be considered indicative only.

15. For contamination purposes, the objectives of the investigation are limited to establishing the risks associated with potential contamination sources with the potential to cause harm to human health, building materials, the environment (including adjacent land), or controlled waters.

16. For geotechnical investigations, the purpose is to broadly consider potential development constraints associated with the physical property of the soils underlying the site within the context of the proposed future or continued use of the site, as stated within the report.

17. The amount of exploratory work, soil property testing and chemical testing undertaken has necessarily been restricted by various factors which may include accessibility, the presence of services; existing buildings; current site usage or short timescales. The exploratory holes completed assess only a small percentage of the area in relation to the overall size of the Site, and as such can only provide a general indication of conditions.

18. The number of sampling points and the methods of sampling and testing do not preclude the possible existence of contamination where concentrations may be significantly higher than those actually encountered or ground conditions that vary from those identified. In addition, there may be exceptional ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been taken into account in this report.

19. The inspection, testing and monitoring records relate specifically to the investigation points and the timeframe that the works were undertaken. They will also be limited by the techniques employed. As part of this assessment, E3P has used reasonable skill and care to extrapolate conditions between these points based on assumptions to develop our interpretation and conclusions.

20. The assumption made in forming our conclusions is that the ground and groundwater conditions (both chemically and physically) are the same as have been encountered during the works undertaken at the specific points of investigation and at the time of the investigation.

21. Conditions can change between investigation points both spatially and over time and these interpretations should therefore be considered indicative. The assessment of extreme weather events and their impact on ground conditions is not within the scope of E3P's work.

22. The risk assessment and opinions provided are based on currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values. Specific assumptions associated with the risk assessment process have been outlined within the body or associated appendix of the report.

23. Additional investigations may be required in order to satisfy relevant planning conditions or to resolve any engineering and environmental issues.

24. Where soil contamination concentrations recorded as part of this investigation are used for commentary on the potential waste classification of soils for disposal purposes, these should be classed as indicative only. Due consideration should be given to the variability of contaminant concentrations taken from targeted samples versus bulk excavated soils and the potential variability of contaminant concentrations between sampling locations. Where major waste disposal operations are considered, targeted waste classification investigations should be designed and the waste classification and any subsequent disposal option agreed upon with licenced subcontractors and/or the relevant regulators.

25. The results of the asbestos testing are factually reported and interpretation is given as to how this relates to the previous use of the site, the types of ground encountered and site conceptualisation. This does not however constitute a formal asbestos assessment. These results should be treated cautiously and should not be relied upon to provide detailed and representative information on the delineation, type and extent of bulk ACMs and/or trace loose asbestos fibres within the soil matrix at the site.

26. If costs have been included in relation to additional site works, and/or site remediation works these must be considered as indicative only and must be confirmed by a qualified quantity surveyor.

EUROCODE 7: GEOTECHNICAL DESIGN

27. On 1st April 2010, BS EN 1997-1:2004 (Eurocode 7: Geotechnical Design – Part 1) became the mandatory baseline standard for geotechnical ground investigations.

28. In terms of geotechnical design for foundations, slopes, retaining walls and earthworks, EC7 sets guidance on design procedures including specific guidance on the numbers and spacings of boreholes for geotechnical design, there are limits to methods of ground investigation and the quality of data obtained and there are also prescriptive methods of assessing soil strengths and methods of design. Unless otherwise explicitly stated, the work has not been undertaken in accordance with EC7. A standard geotechnical interpretative report will not meet the requirements of the Geotechnical Design Report (GDR) under Eurocode 7. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. The report is likely to represent a Ground Investigation Report (GIR) under the Eurocode 7 guidance.

DETAILED QUANTITATIVE RISK ASSESSMENTS AND REMEDIATION AND ENABLING WORK STRATEGY REPORTS

29. These reports build upon previous report versions and associated notes. The scope of the investigation, further testing and monitoring and associated risk assessments were selected based on the specific development and land use scenario proposed by the Client and may not be appropriate to another form of development or scheme layout. The risk assessment and opinions provided are based on currently available approaches in the generation of Site Specific Assessment Criteria relating to contamination concentrations and are not considered to represent a risk in a specific land use scenario to a specific receptor. No liability can be accepted for the retrospective effects of any future changes or amendments to these values, associated models or associated guidance.

30. The outputs of the Detailed Quantitative Risk Assessments are based upon the manipulation of standard risk assessment models. These are our interpretation of the risk assessment criteria.

31. Before adoption on-site, assessment criteria will need to be discussed and agreed upon with the Regulatory Authorities prior to adoption on site. The regulatory discussion and engagement process may result in an alternative interpretation being determined and agreed. The process and timescales associated with the Regulatory Authority engagement are not within the control of E3P. All costs and programmes presented as a result of this process should be validated by a quantity surveyor and should be presumed to be indicative.

32. E3P does not accept liability for any subcontract work that has not been completed in strict accordance with an approved E3P Remediation and Enabling Works Strategy.

GEOTECHNICAL DESIGN REPORT (GDR)

33. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. All the relevant information needs to be provided to allow for a GDR to be produced.

MONITORING (INCLUDING REMEDIATION MONITORING REPORTS AND BUILD PHASE MITIGATION)

34. These reports are factual and comprise monitoring, normally groundwater and ground gas and data provided by contractors as part of earthworks or remedial works.

35. The data is presented and will be compared with assessment criteria.

APPENDIX II
GLOSSARY

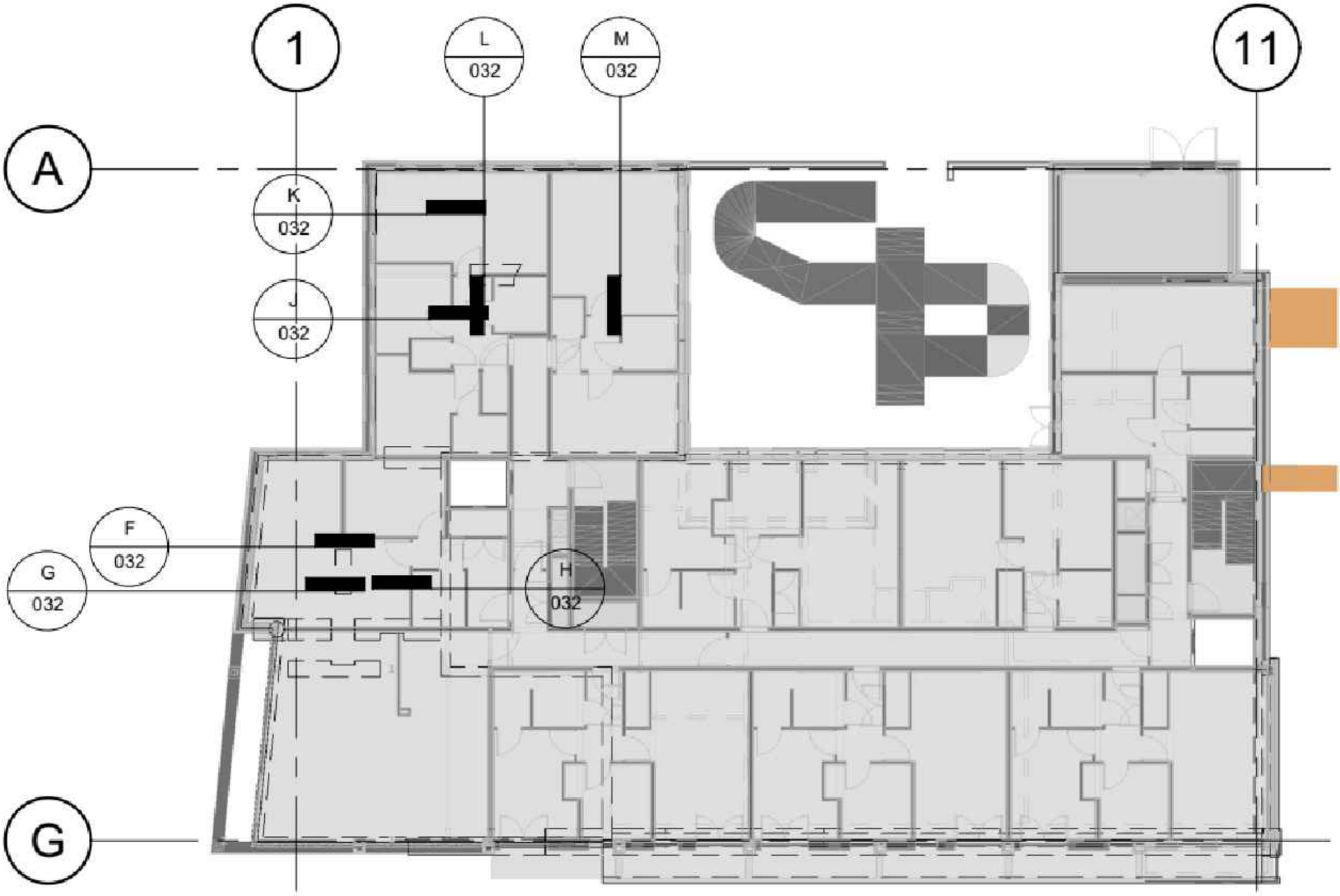
TERMS

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

DRAWING 16-613-001 – SITE LOCATION PLAN



P1	REVA	02.03.2023	EB	RJW
Phase	Issue	Date	Drawn	Checked

Notes:

Client: EWC

Job No: 16-613

Date: 02.03.2023

Drawing No: 002

Scale: NTS@ A3

Job Title: Laystall Street, Manchester

Drawing Title: Proposed Development Plan

e3p
Environmental Engineering Partnership Ltd
Taylor Road, Trafford Park
Urmston, Manchester, M41 7JQ
Tel: 0161 707 9612
E-mail: info@e3p.co.uk
Website: www.e3p.co.uk

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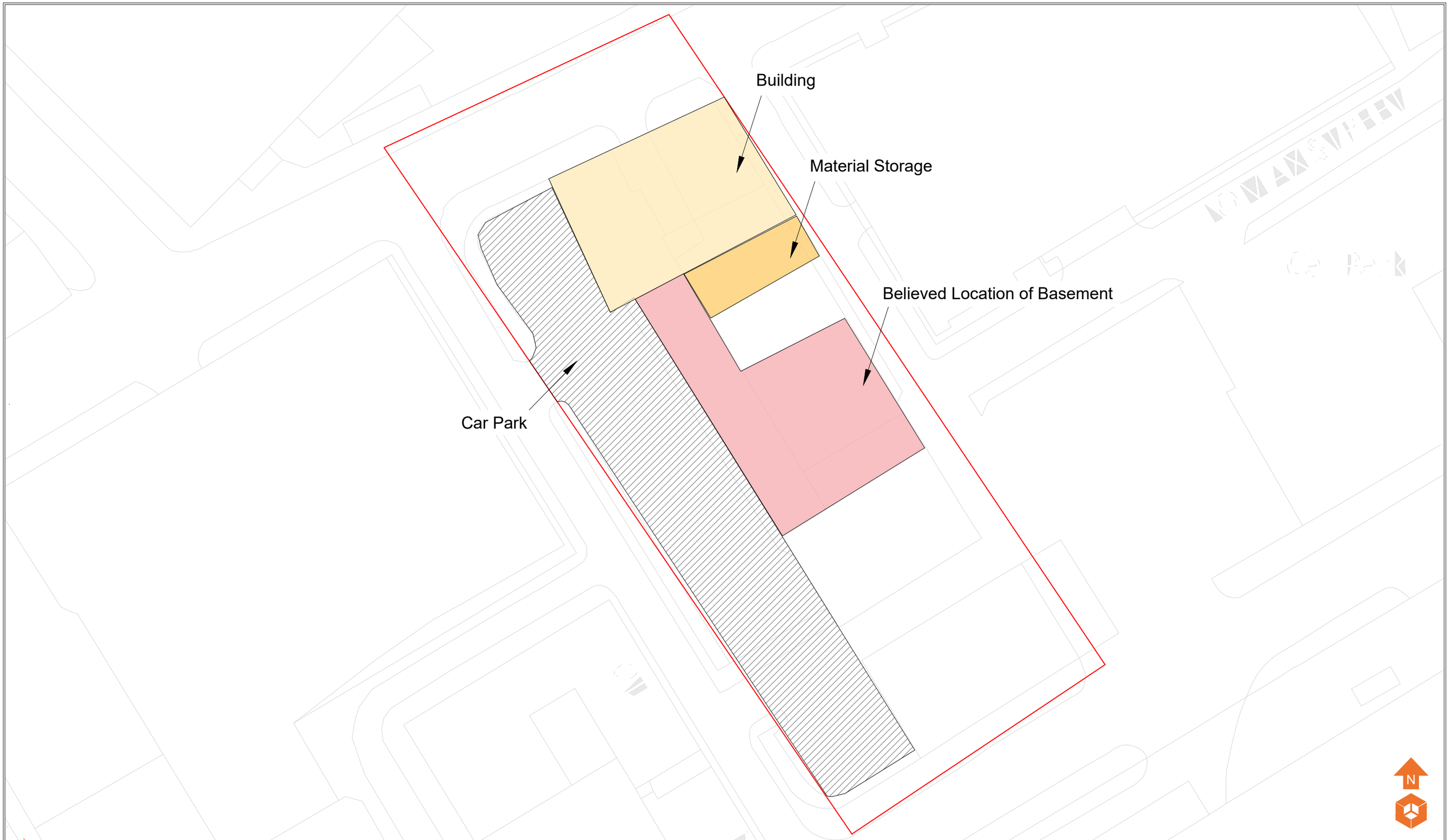

Site Features

- Car Park
- Buildings
- Material Boundaries
- Believed Location of Basement

Notes:

P1	REVA	13.02.2023	OW	MJ
Phase	Issue	Date	Drawn	Checked

Client: EWC

Job No: 16-613

Date: 13.02.2023

Drawing No: 004

Scale: 1:1000 @ A3

Job Title: Laystall Street, Manchester

Drawing Title: Site Features Plan

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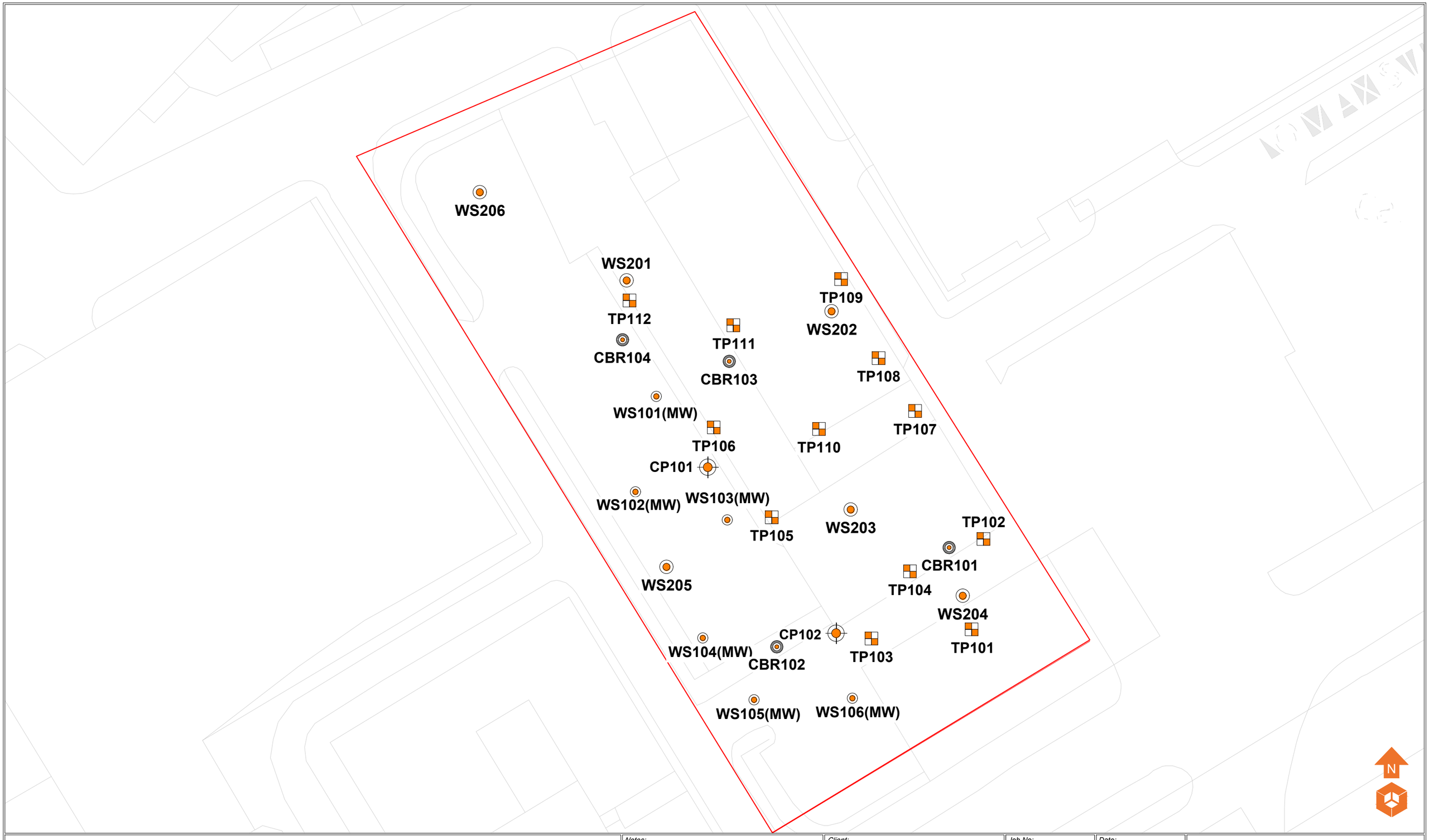

Location Symbols

Approximate Trial Pit Location	-WS101 - WS106 and CP101-102 (E3P M arch 2022 Phase II Geoenviromental Site Assessment.)
Approximate Window Sample Probehole Location	-TP101 - TP112 (E3P February 2023 Supplementary Site Assessment)
Approximate Cable Percussive Borehole Location	
Approximate California Bearing Ratio Test Location (E3P February 2024)	

Notes:

Phase	Issue	Date	Drawn	Checked
P1	REVC	05.02.2024	EB	RJW
P1	REVB	19.01.2023	OW	RJW
P1	REVA	23.02.2023	OW	MJ

Client: EWC

Job No: 16-613

Date: 05.02.2024

Drawing No: 005

Scale: NTS@ A3

Job Title: Laystall Street, Manchester

Drawing Title: Exploratory Hole Location Plan

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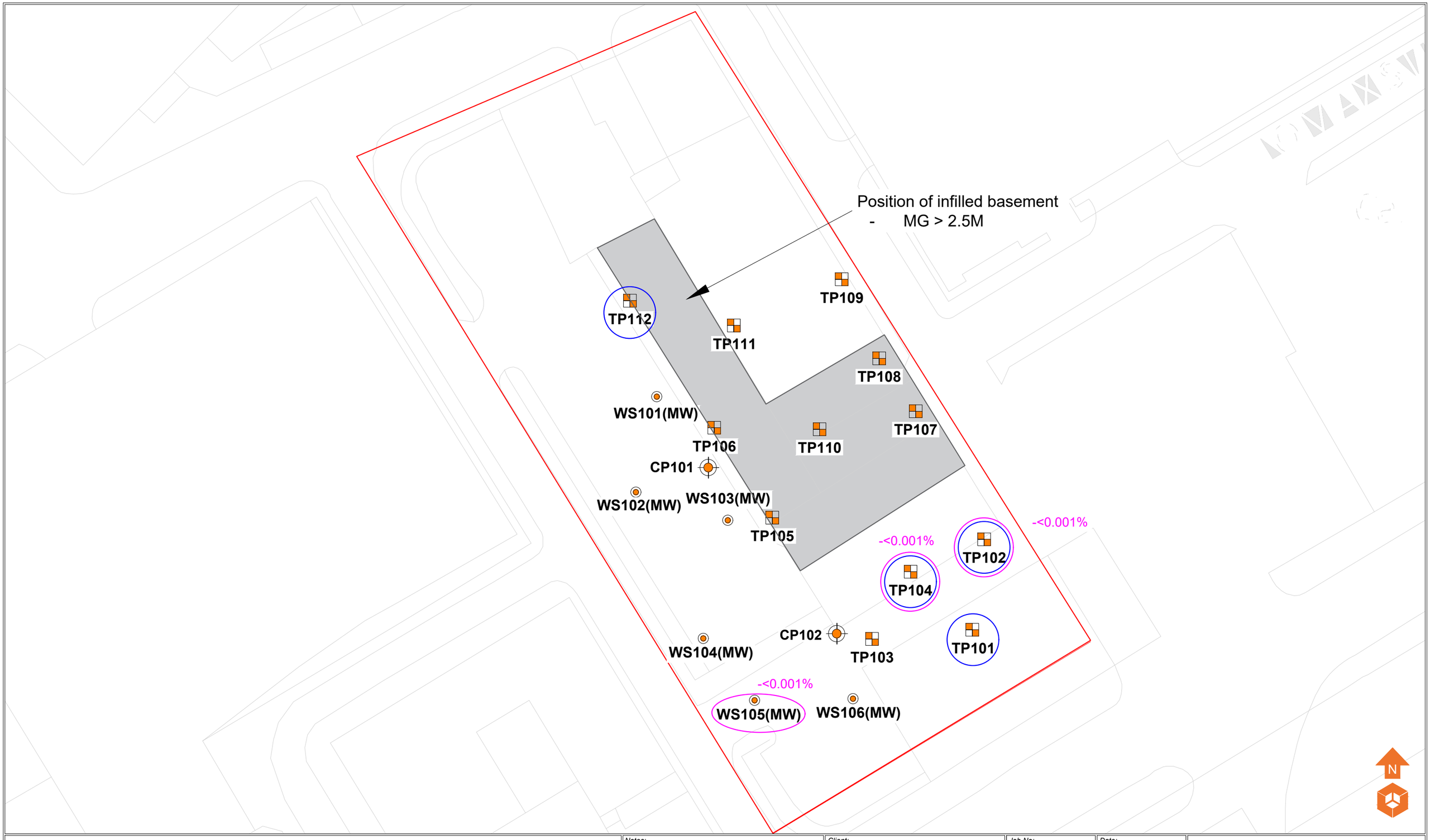

Location Symbols

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

-WS101 - WS106 and CP101-102 (E3P M arch 2022 Phase II Geoenviromental Site Assessment.)

-TP101 - TP112 (E3P February 2023 Supplementary Site Assessment)

Contaminants of Concern

- Naphthalene
- Asbestos - Chrysotile and Amosite

Notes:

Client: EWC

Job No: 16-613

Date: 27.02.2023

Drawing No: 019

Scale: 1:1000 @ A3

Phase	Issue	Date	Drawn	Checked
P1	REVA	27.02.2023	OW	MJ

Job Title: Laystall Street, Manchester

Drawing Title: Remediation Issues Plan

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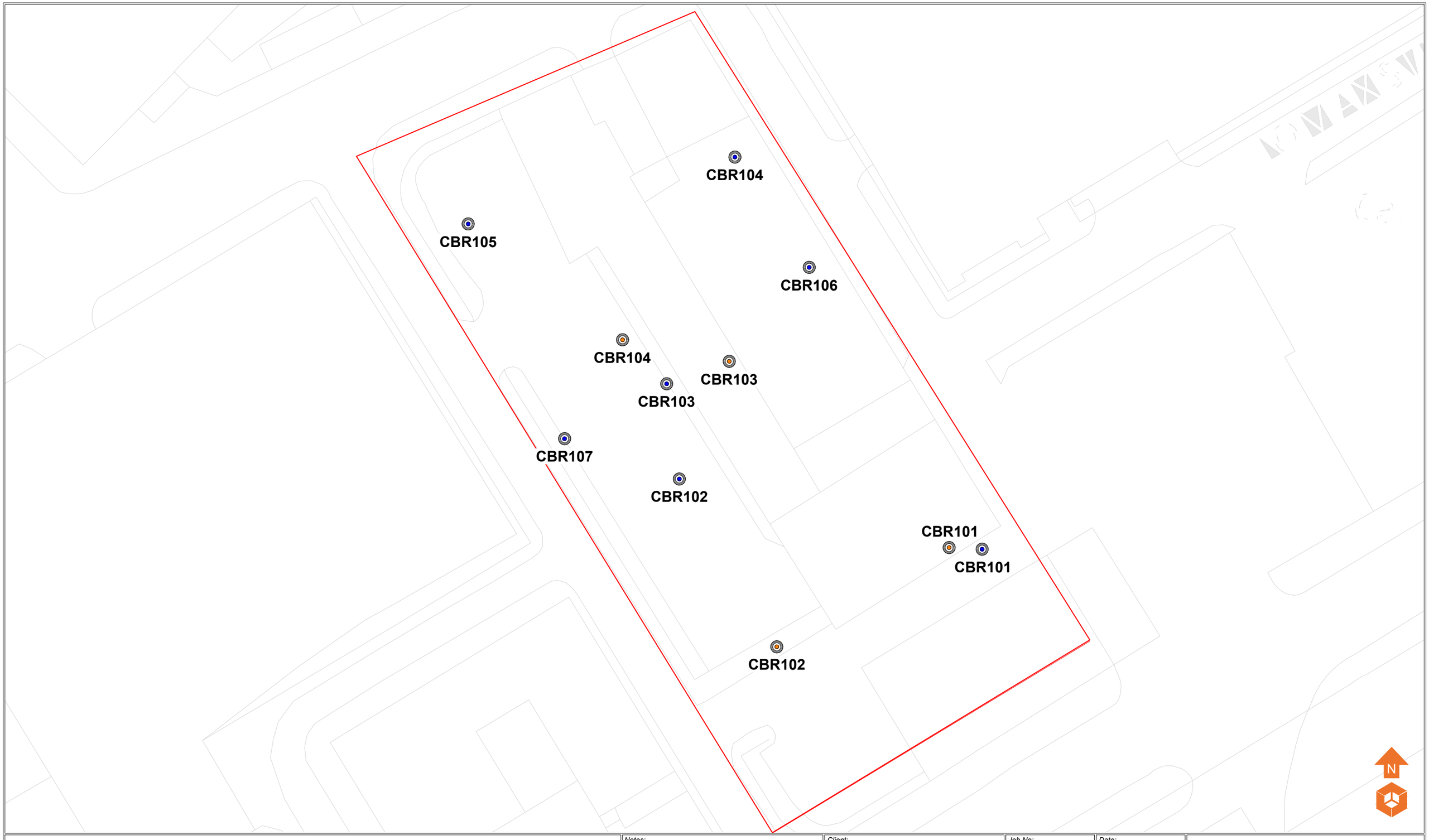

Location Symbols

- Approximate California Bearing Ratio Test Location (E3P February 2024)
- Approximate California Bearing Ratio Test Location (E3P March 2024)

Notes:

Client: EWC

Job No: 16-613

Date: 27.03.2024

Drawing No: 027

Scale: NTS@ A3

Phase	Issue	Date	Drawn	Checked
P1	REVA	27.03.2024	EB	RJW

Job Title: Laystall Street, Manchester

Drawing Title: CBR Location Plan

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E-mail: info@e3p.co.uk
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APPENDIX IV
CHEMICAL TESTING RESULTS

Matt Jackson
e3p
Taylor Road
Urmston
Manchester
M41 7JQ

[redacted]

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 : 23-16847

Project / Site name:	Laystall Street	**Samples received on:**	09/02/2023
Your job number:	16-613	**Samples instructed on/ Analysis started on:**	09/02/2023
Your order number:		**Analysis completed by:**	17/02/2023
Report Issue Number:	1	**Report issued on:**	17/02/2023
Samples Analysed:	10 soil samples		

[redacted]

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.

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

Analytical Report Number: 23-16847
Project / Site name: Laystall Street

Lab Sample Number				2580655	2580656	2580657	2580658	2580659
Sample Reference				TP101	TP102	TP102	TP104	TP105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	1.00	2.00	0.50	1.00
Date Sampled				08/02/2023	08/02/2023	08/02/2023	08/02/2023	08/02/2023
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	16	14	15	13	14
Total mass of sample received	kg	0.001	NONE	0.8	0.4	0.4	0.8	0.4

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

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	9.4	9.2	8.5	10.2	8.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	5200	5000	310	4400	6300
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.1	1	0.054	0.73	1.2
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	2100	2000	110	1500	2500
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1060	1020	53.6	733	1230
Sulphide	mg/kg	1	MCERTS	23	23	< 1.0	21	12
Total Sulphur	mg/kg	50	MCERTS	2000	2300	140	1900	2700
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.6	1.4	0.7	1.5	1.9

Total Phenols

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

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	6.1	7.4	0.16	5.3	13
Acenaphthylene	mg/kg	0.05	MCERTS	0.53	0.24	< 0.05	0.3	0.3
Acenaphthene	mg/kg	0.05	MCERTS	3.3	4.2	< 0.05	2.9	6.8
Fluorene	mg/kg	0.05	MCERTS	2.6	3	< 0.05	2.2	4.3
Phenanthrene	mg/kg	0.05	MCERTS	16	18	0.28	14	25
Anthracene	mg/kg	0.05	MCERTS	3.5	3.4	< 0.05	2.9	4.6
Fluoranthene	mg/kg	0.05	MCERTS	13	14	0.21	12	18
Pyrene	mg/kg	0.05	MCERTS	14	14	0.26	12	18
Benzo(a)anthracene	mg/kg	0.05	MCERTS	6.8	6.1	0.11	5.8	7.8
Chrysene	mg/kg	0.05	MCERTS	6	7.3	0.09	5.2	9.7
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	5.8	6.8	0.09	5.8	7.9
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	3	2.2	< 0.05	1.7	3.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.4	5.7	0.06	4.6	7.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.7	2.7	< 0.05	2.3	3.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.57	0.66	< 0.05	0.56	0.86
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.5	3.5	< 0.05	2.9	4.5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	93.3	99	1.26	79.8	134

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

Analytical Report Number: 23-16847
Project / Site name: Laystall Street

Lab Sample Number				2580655	2580656	2580657	2580658	2580659
Sample Reference				TP101	TP102	TP102	TP104	TP105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	1.00	2.00	0.50	1.00
Date Sampled				08/02/2023	08/02/2023	08/02/2023	08/02/2023	08/02/2023
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	15	16	8.3	14	16
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	0.9	< 0.2	0.9	0.8
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	22	31	18	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	48	60	26	44	52
Lead (aqua regia extractable)	mg/kg	1	MCERTS	200	190	13	180	180
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	0.3	< 0.3	0.3	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	22	36	17	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	200	210	60	160	200
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS_1D_TOTAL}$	mg/kg	1	NONE	< 1.0	< 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	< 0.1
TPH (C8 - C10) $_{HS_1D_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH_CU_1D_TOTAL}$	mg/kg	2	MCERTS	3.9	2.7	< 2.0	2.8	7.8
TPH (C12 - C16) $_{EH_CU_1D_TOTAL}$	mg/kg	4	MCERTS	17	9.9	< 4.0	15	30
TPH (C16 - C21) $_{EH_CU_1D_TOTAL}$	mg/kg	1	MCERTS	54	31	< 1.0	54	76
TPH (C21 - C35) $_{EH_CU_1D_TOTAL}$	mg/kg	1	MCERTS	150	65	< 1.0	170	150
TPH (C35 - C40) $_{EH_CU_1D_TOTAL}$	mg/kg	10	MCERTS	56	12	< 10	75	32
TPH Total C5 - C40 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	280	120	< 10	320	290

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: 23-16847
Project / Site name: Laystall Street

Lab Sample Number				2580660	2580661	2580662	2580663	2580664
Sample Reference				TP108	TP109	TP111	TP112	TP112
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.65	0.85	0.30	1.00	3.00
Date Sampled				08/02/2023	08/02/2023	08/02/2023	08/02/2023	08/02/2023
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	89	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	18	10	12	16
Total mass of sample received	kg	0.001	NONE	0.8	0.4	0.4	0.6	0.4
Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	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	SFS	SFS	SFS	SFS	SFS
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	9.4	8	9.6	9.4	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Sulphate as SO4	mg/kg	50	MCERTS	3400	380	2700	4900	2000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.69	0.13	0.75	1.2	0.59
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1400	260	1500	2300	1200
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	686	128	753	1150	592
Sulphide	mg/kg	1	MCERTS	11	< 1.0	2.7	22	5.1
Total Sulphur	mg/kg	50	MCERTS	1300	180	1100	2100	860
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	0.9	0.6	0.4	1.5	1.2
Total Phenols								
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	9.4	< 0.05	1.7	8.1	4.6
Acenaphthylene	mg/kg	0.05	MCERTS	0.2	< 0.05	< 0.05	0.47	0.14
Acenaphthene	mg/kg	0.05	MCERTS	4.4	< 0.05	0.92	4.6	2.1
Fluorene	mg/kg	0.05	MCERTS	3.3	< 0.05	0.55	3.8	1.4
Phenanthrene	mg/kg	0.05	MCERTS	19	0.25	3.6	22	9.4
Anthracene	mg/kg	0.05	MCERTS	3.7	< 0.05	0.64	4.6	1.7
Fluoranthene	mg/kg	0.05	MCERTS	14	0.21	3	17	7.2
Pyrene	mg/kg	0.05	MCERTS	14	0.24	3.3	18	7.8
Benzo(a)anthracene	mg/kg	0.05	MCERTS	7	0.11	1.2	8.8	3.4
Chrysene	mg/kg	0.05	MCERTS	6.1	0.08	1.6	8.3	3.4
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	6.6	0.08	1.6	7.7	3.7
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	2.3	< 0.05	0.39	4	0.85
Benzo(a)pyrene	mg/kg	0.05	MCERTS	5.1	0.07	1.2	7.2	2.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.5	< 0.05	0.57	3.5	1.4
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.76	< 0.05	0.16	1	0.4
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	3.4	< 0.05	0.83	4.4	1.8
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	103	1.04	21.3	124	52

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

Analytical Report Number: 23-16847
Project / Site name: Laystall Street

Lab Sample Number				2580660	2580661	2580662	2580663	2580664
Sample Reference				TP108	TP109	TP111	TP112	TP112
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.65	0.85	0.30	1.00	3.00
Date Sampled				08/02/2023	08/02/2023	08/02/2023	08/02/2023	08/02/2023
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	8.4	8	7.6	14	12
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	< 0.2	< 0.2	1	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	29	15	18	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	23	17	38	36
Lead (aqua regia extractable)	mg/kg	1	MCERTS	87	19	41	200	72
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	30	12	18	31
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	45	46	220	97
Petroleum Hydrocarbons								
TPH (C5 - C6) $_{HS_1D_TOTAL}$	mg/kg	1	NONE	< 1.0	< 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	< 0.1
TPH (C8 - C10) $_{HS_1D_TOTAL}$	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH (C10 - C12) $_{EH_CU_1D_TOTAL}$	mg/kg	2	MCERTS	3	< 2.0	< 2.0	3.5	< 2.0
TPH (C12 - C16) $_{EH_CU_1D_TOTAL}$	mg/kg	4	MCERTS	13	< 4.0	5.7	18	7.6
TPH (C16 - C21) $_{EH_CU_1D_TOTAL}$	mg/kg	1	MCERTS	38	3.6	19	71	19
TPH (C21 - C35) $_{EH_CU_1D_TOTAL}$	mg/kg	1	MCERTS	81	1.8	43	160	35
TPH (C35 - C40) $_{EH_CU_1D_TOTAL}$	mg/kg	10	MCERTS	25	< 10	< 10	42	< 10
TPH Total C5 - C40 $_{EH_CU+HS_1D_TOTAL}$	mg/kg	10	NONE	160	< 10	67	290	61

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: 23-16847
Project / Site name: Laystall Street
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
2580656	TP102	1.00	156	Loose Fibres	**Amosite**	< 0.001	**< 0.001**
2580658	TP104	0.50	160	Loose Fibres	**Chrysotile**	< 0.001	**< 0.001**

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 : 23-16847
Project / Site name: Laystall Street

* 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 *
2580655	TP101	None Supplied	0.3	Brown loam and clay with gravel and brick.
2580656	TP102	None Supplied	1	Brown clay and sand with gravel and brick.
2580657	TP102	None Supplied	2	Brown clay.
2580658	TP104	None Supplied	0.5	Brown loam and sand with gravel and brick.
2580659	TP105	None Supplied	1	Brown loam and sand with gravel and brick.
2580660	TP108	None Supplied	2.65	Brown loam and sand with brick and stones.
2580661	TP109	None Supplied	0.85	Brown clay.
2580662	TP111	None Supplied	0.3	Non Soil**
2580663	TP112	None Supplied	1	Brown clay and sand with gravel and brick.
2580664	TP112	None Supplied	3	Brown clay with gravel.

**Unaccredited sample matrix.

Analytical Report Number : 23-16847
Project / Site name: Laystall Street

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 : 23-16847
Project / Site name: Laystall Street

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

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.

1CFNZ-NCG6R-XA19G

Job name

16-613

Description/Comments

This Waste Classification is based on the analytical results provided by E3P on the i2 Analytical Ltd 'Analytical Report' Number 23-16847. 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. 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

Laystall Street

Classified by

Name:
Daniel Enon
Company:
RJT Consulting Partnerships Ltd
Date:
24 Feb 2023 10:43 GMT
Telephone:
0161 706 0402

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	18 Sep 2019
Most recent 3 year Refresher	02 Aug 2022

Next 3 year Refresher due by Aug 2025

Purpose of classification

2 - Material Characterisation

Address of the waste

Laystall Strett, Manchester **Post Code** M1 2JZ

SIC for the process giving rise to the waste

41100 Development of building projects

Description of industry/producer giving rise to the waste

Redevelopment of a former industrial site (former textile factory) into a residential development.

Description of the specific process, sub-process and/or activity that created the waste

Waste created in the process of groundworks as part of the redevelopment.

Description of the waste

All made ground across the site has been removed and this material tested consists of the superficial geology found across the site. Superficial geology is comprised of Devensian Till.

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	TP101	0.30	Non Hazardous		4
2	TP102 (1)	1.00	Non Hazardous		6
3	TP102 (2)	2.00	Non Hazardous		9
4	TP104	0.50	Non Hazardous		11
5	TP105	1.00	Non Hazardous		14
6	TP108	2.65	Non Hazardous		16
7	TP109	0.85	Non Hazardous		18
8	TP111	0.30	Non Hazardous		20
9	TP112(1)	1.00	Non Hazardous		22
10	TP112(2)	3.00	Non Hazardous		24

Related documents

#	Name	Description
1	E3P I2 Characterisation Suite 4	waste stream template used to create this Job

Report

Created by: Daniel Enon

Created date: 24 Feb 2023 10:43 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	26
Appendix B: Rationale for selection of metal species	27
Appendix C: Version	28

Classification of sample: TP101

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP101
Sample Depth:
0.30 m
Moisture content:
16%
(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: 16% 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		9.4 pH		9.4 pH	9.4 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		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
4	naphthalene	601-052-00-2	202-049-5	91-20-3		6.1 mg/kg		5.259 mg/kg	0.000526 %	✓	
5	acenaphthylene		205-917-1	208-96-8		0.53 mg/kg		0.457 mg/kg	0.0000457 %	✓	
6	acenaphthene		201-469-6	83-32-9		3.3 mg/kg		2.845 mg/kg	0.000284 %	✓	
7	fluorene		201-695-5	86-73-7		2.6 mg/kg		2.241 mg/kg	0.000224 %	✓	
8	phenanthrene		201-581-5	85-01-8		16 mg/kg		13.793 mg/kg	0.00138 %	✓	
9	anthracene		204-371-1	120-12-7		3.5 mg/kg		3.017 mg/kg	0.000302 %	✓	
10	fluoranthene		205-912-4	206-44-0		13 mg/kg		11.207 mg/kg	0.00112 %	✓	
11	pyrene		204-927-3	129-00-0		14 mg/kg		12.069 mg/kg	0.00121 %	✓	
12	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		6.8 mg/kg		5.862 mg/kg	0.000586 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9		6 mg/kg		5.172 mg/kg	0.000517 %	✓	
14	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		5.8 mg/kg		5 mg/kg	0.0005 %	✓	
15	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		3 mg/kg		2.586 mg/kg	0.000259 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				5.4	mg/kg		4.655	mg/kg	0.000466 %	✓	
		601-032-00-3	200-028-5	50-32-8									
17		indeno[123-cd]pyrene				2.7	mg/kg		2.328	mg/kg	0.000233 %	✓	
			205-893-2	193-39-5									
18		dibenz[a,h]anthracene				0.57	mg/kg		0.491	mg/kg	0.0000491 %	✓	
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				3.5	mg/kg		3.017	mg/kg	0.000302 %	✓	
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				15	mg/kg	1.32	17.073	mg/kg	0.00171 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				0.7	mg/kg	1.142	0.689	mg/kg	0.0000689 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				21	mg/kg	1.462	26.459	mg/kg	0.00265 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				48	mg/kg	1.126	46.588	mg/kg	0.00466 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead chromate }			1	200	mg/kg	1.56	268.934	mg/kg	0.0172 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
26		mercury { mercury dichloride }				0.5	mg/kg	1.353	0.583	mg/kg	0.0000583 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
27		nickel { nickel chromate }				21	mg/kg	2.976	53.881	mg/kg	0.00539 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**
		034-002-00-8											
29		zinc { zinc chromate }				200	mg/kg	2.774	478.301	mg/kg	0.0478 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
30		TPH (C6 to C40) petroleum group				280	mg/kg		241.379	mg/kg	0.0241 %	✓	
				TPH									
										Total:	0.113 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
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 HP3(i) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous statement does not apply to these sampels.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0241%)

Classification of sample: TP102 (1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP102 (1)
Sample Depth:
1.00 m
Moisture content:
14%
(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: 14% 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		asbestos	650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
2		pH			PH		9.2 pH		9.2 pH	9.2 pH		
3		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**
4		phenol	604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
5		naphthalene	601-052-00-2	202-049-5	91-20-3		7.4 mg/kg		6.491 mg/kg	0.000649 %	✓	
6		acenaphthylene		205-917-1	208-96-8		0.24 mg/kg		0.211 mg/kg	0.0000211 %	✓	
7		acenaphthene		201-469-6	83-32-9		4.2 mg/kg		3.684 mg/kg	0.000368 %	✓	
8		fluorene		201-695-5	86-73-7		3 mg/kg		2.632 mg/kg	0.000263 %	✓	
9		phenanthrene		201-581-5	85-01-8		18 mg/kg		15.789 mg/kg	0.00158 %	✓	
10		anthracene		204-371-1	120-12-7		3.4 mg/kg		2.982 mg/kg	0.000298 %	✓	
11		fluoranthene		205-912-4	206-44-0		14 mg/kg		12.281 mg/kg	0.00123 %	✓	
12		pyrene		204-927-3	129-00-0		14 mg/kg		12.281 mg/kg	0.00123 %	✓	
13		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		6.1 mg/kg		5.351 mg/kg	0.000535 %	✓	

#		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
14		chrysene	601-048-00-0	205-923-4	218-01-9		7.3	mg/kg		6.404	mg/kg	0.00064 %	✓	
15		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		6.8	mg/kg		5.965	mg/kg	0.000596 %	✓	
16		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		2.2	mg/kg		1.93	mg/kg	0.000193 %	✓	
17		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		5.7	mg/kg		5	mg/kg	0.0005 %	✓	
18		indeno[123-cd]pyrene		205-893-2	193-39-5		2.7	mg/kg		2.368	mg/kg	0.000237 %	✓	
19		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.66	mg/kg		0.579	mg/kg	0.0000579 %	✓	
20		benzo[ghi]perylene		205-883-8	191-24-2		3.5	mg/kg		3.07	mg/kg	0.000307 %	✓	
21		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16	mg/kg	1.32	18.531	mg/kg	0.00185 %	✓	
22		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	0.902	mg/kg	0.0000902 %	✓	
23		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**
24		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		22	mg/kg	1.462	28.205	mg/kg	0.00282 %	✓	
25		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		60	mg/kg	1.126	59.257	mg/kg	0.00593 %	✓	
26		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	190	mg/kg	1.56	259.969	mg/kg	0.0167 %	✓	
27		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.3	mg/kg	1.353	0.356	mg/kg	0.0000356 %	✓	
28		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		22	mg/kg	2.976	57.437	mg/kg	0.00574 %	✓	
29		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**
30		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		210	mg/kg	2.774	511.027	mg/kg	0.0511 %	✓	
31		TPH (C6 to C40) petroleum group			TPH		120	mg/kg		105.263	mg/kg	0.0105 %	✓	
											Total:	0.105 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
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 HP3(i) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous statement does not apply to these sampels.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0105%)

Classification of sample: TP102 (2)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP102 (2)
Sample Depth:
2.00 m
Moisture content:
15%
(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: 15% 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		8.5 pH		8.5 pH	8.5 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		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
4	naphthalene	601-052-00-2	202-049-5	91-20-3		0.16 mg/kg		0.139 mg/kg	0.0000139 %	✓	
5	acenaphthylene		205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
6	acenaphthene		201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
7	fluorene		201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
8	phenanthrene		201-581-5	85-01-8		0.28 mg/kg		0.243 mg/kg	0.0000243 %	✓	
9	anthracene		204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
10	fluoranthene		205-912-4	206-44-0		0.21 mg/kg		0.183 mg/kg	0.0000183 %	✓	
11	pyrene		204-927-3	129-00-0		0.26 mg/kg		0.226 mg/kg	0.0000226 %	✓	
12	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.11 mg/kg		0.0957 mg/kg	0.00000957 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9		0.09 mg/kg		0.0783 mg/kg	0.00000783 %	✓	
14	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.09 mg/kg		0.0783 mg/kg	0.00000783 %	✓	
15	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				0.06	mg/kg		0.0522	mg/kg	0.00000522 %	✓	
		601-032-00-3	200-028-5	50-32-8									
17		indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-893-2	193-39-5									
18		dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				8.3	mg/kg	1.32	9.529	mg/kg	0.000953 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<**LOD**
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				31	mg/kg	1.462	39.398	mg/kg	0.00394 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				26	mg/kg	1.126	25.455	mg/kg	0.00255 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead chromate }			1	13	mg/kg	1.56	17.633	mg/kg	0.00113 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
26		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<**LOD**
		080-010-00-X	231-299-8	7487-94-7									
27		nickel { nickel chromate }				36	mg/kg	2.976	93.17	mg/kg	0.00932 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**
		034-002-00-8											
29		zinc { zinc chromate }				60	mg/kg	2.774	144.738	mg/kg	0.0145 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
30		TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<**LOD**
				TPH									
										Total:	0.0343 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP104

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP104
Sample Depth:
0.50 m
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		asbestos	650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<10 mg/kg		<10 mg/kg	<0.001 %		<**LOD**
2		pH			PH		10.2 pH		10.2 pH	10.2 pH		
3		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**
4		phenol	604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
5		naphthalene	601-052-00-2	202-049-5	91-20-3		5.3 mg/kg		4.69 mg/kg	0.000469 %	✓	
6		acenaphthylene		205-917-1	208-96-8		0.3 mg/kg		0.265 mg/kg	0.0000265 %	✓	
7		acenaphthene		201-469-6	83-32-9		2.9 mg/kg		2.566 mg/kg	0.000257 %	✓	
8		fluorene		201-695-5	86-73-7		2.2 mg/kg		1.947 mg/kg	0.000195 %	✓	
9		phenanthrene		201-581-5	85-01-8		14 mg/kg		12.389 mg/kg	0.00124 %	✓	
10		anthracene		204-371-1	120-12-7		2.9 mg/kg		2.566 mg/kg	0.000257 %	✓	
11		fluoranthene		205-912-4	206-44-0		12 mg/kg		10.619 mg/kg	0.00106 %	✓	
12		pyrene		204-927-3	129-00-0		12 mg/kg		10.619 mg/kg	0.00106 %	✓	
13		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		5.8 mg/kg		5.133 mg/kg	0.000513 %	✓	

#		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
14		chrysene	601-048-00-0	205-923-4	218-01-9		5.2	mg/kg		4.602	mg/kg	0.00046 %	✓	
15		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		5.8	mg/kg		5.133	mg/kg	0.000513 %	✓	
16		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.7	mg/kg		1.504	mg/kg	0.00015 %	✓	
17		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		4.6	mg/kg		4.071	mg/kg	0.000407 %	✓	
18		indeno[123-cd]pyrene		205-893-2	193-39-5		2.3	mg/kg		2.035	mg/kg	0.000204 %	✓	
19		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.56	mg/kg		0.496	mg/kg	0.0000496 %	✓	
20		benzo[ghi]perylene		205-883-8	191-24-2		2.9	mg/kg		2.566	mg/kg	0.000257 %	✓	
21		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14	mg/kg	1.32	16.358	mg/kg	0.00164 %	✓	
22		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	0.91	mg/kg	0.000091 %	✓	
23		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
24		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		18	mg/kg	1.462	23.281	mg/kg	0.00233 %	✓	
25		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		44	mg/kg	1.126	43.84	mg/kg	0.00438 %	✓	
26		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	180	mg/kg	1.56	248.466	mg/kg	0.0159 %	✓	
27		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.3	mg/kg	1.353	0.359	mg/kg	0.0000359 %	✓	
28		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		17	mg/kg	2.976	44.776	mg/kg	0.00448 %	✓	
29		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
30		zinc { zinc chromate }	024-007-00-3	236-878-9	13530-65-9		160	mg/kg	2.774	392.8	mg/kg	0.0393 %	✓	
31		TPH (C6 to C40) petroleum group			TPH		320	mg/kg		283.186	mg/kg	0.0283 %	✓	
											Total:	0.105 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
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 HP3(i) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous statement does not apply to these sampels.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0283%)

Classification of sample: TP105

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP105
Sample Depth:
1.00 m
Moisture content:
14%
(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: 14% 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		8.7 pH		8.7 pH	8.7 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		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
4	naphthalene	601-052-00-2	202-049-5	91-20-3		13 mg/kg		11.404 mg/kg	0.00114 %	✓	
5	acenaphthylene		205-917-1	208-96-8		0.3 mg/kg		0.263 mg/kg	0.0000263 %	✓	
6	acenaphthene		201-469-6	83-32-9		6.8 mg/kg		5.965 mg/kg	0.000596 %	✓	
7	fluorene		201-695-5	86-73-7		4.3 mg/kg		3.772 mg/kg	0.000377 %	✓	
8	phenanthrene		201-581-5	85-01-8		25 mg/kg		21.93 mg/kg	0.00219 %	✓	
9	anthracene		204-371-1	120-12-7		4.6 mg/kg		4.035 mg/kg	0.000404 %	✓	
10	fluoranthene		205-912-4	206-44-0		18 mg/kg		15.789 mg/kg	0.00158 %	✓	
11	pyrene		204-927-3	129-00-0		18 mg/kg		15.789 mg/kg	0.00158 %	✓	
12	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		7.8 mg/kg		6.842 mg/kg	0.000684 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9		9.7 mg/kg		8.509 mg/kg	0.000851 %	✓	
14	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		7.9 mg/kg		6.93 mg/kg	0.000693 %	✓	
15	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		3.7 mg/kg		3.246 mg/kg	0.000325 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				7.1	mg/kg		6.228	mg/kg	0.000623 %	✓	
		601-032-00-3	200-028-5	50-32-8									
17		indeno[123-cd]pyrene				3.4	mg/kg		2.982	mg/kg	0.000298 %	✓	
			205-893-2	193-39-5									
18		dibenz[a,h]anthracene				0.86	mg/kg		0.754	mg/kg	0.0000754 %	✓	
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				4.5	mg/kg		3.947	mg/kg	0.000395 %	✓	
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				16	mg/kg	1.32	18.531	mg/kg	0.00185 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				0.8	mg/kg	1.142	0.802	mg/kg	0.0000802 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				18	mg/kg	1.462	23.077	mg/kg	0.00231 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				52	mg/kg	1.126	51.356	mg/kg	0.00514 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead chromate }			1	180	mg/kg	1.56	246.287	mg/kg	0.0158 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
26		mercury { mercury dichloride }				0.4	mg/kg	1.353	0.475	mg/kg	0.0000475 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
27		nickel { nickel chromate }				20	mg/kg	2.976	52.215	mg/kg	0.00522 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
		034-002-00-8											
29		zinc { zinc chromate }				200	mg/kg	2.774	486.692	mg/kg	0.0487 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
30		TPH (C6 to C40) petroleum group				290	mg/kg		254.386	mg/kg	0.0254 %	✓	
				TPH									
										Total:	0.117 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
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 HP3(i) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous statement does not apply to these sampels.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0254%)

Classification of sample: TP108

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP108
Sample Depth:
2.65 m
Moisture content:
12%
(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: 12% 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		9.4 pH		9.4 pH	9.4 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		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
4	naphthalene	601-052-00-2	202-049-5	91-20-3		9.4 mg/kg		8.393 mg/kg	0.000839 %	✓	
5	acenaphthylene		205-917-1	208-96-8		0.2 mg/kg		0.179 mg/kg	0.0000179 %	✓	
6	acenaphthene		201-469-6	83-32-9		4.4 mg/kg		3.929 mg/kg	0.000393 %	✓	
7	fluorene		201-695-5	86-73-7		3.3 mg/kg		2.946 mg/kg	0.000295 %	✓	
8	phenanthrene		201-581-5	85-01-8		19 mg/kg		16.964 mg/kg	0.0017 %	✓	
9	anthracene		204-371-1	120-12-7		3.7 mg/kg		3.304 mg/kg	0.00033 %	✓	
10	fluoranthene		205-912-4	206-44-0		14 mg/kg		12.5 mg/kg	0.00125 %	✓	
11	pyrene		204-927-3	129-00-0		14 mg/kg		12.5 mg/kg	0.00125 %	✓	
12	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		7 mg/kg		6.25 mg/kg	0.000625 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9		6.1 mg/kg		5.446 mg/kg	0.000545 %	✓	
14	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		6.6 mg/kg		5.893 mg/kg	0.000589 %	✓	
15	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		2.3 mg/kg		2.054 mg/kg	0.000205 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				5.1	mg/kg		4.554	mg/kg	0.000455 %	✓	
		601-032-00-3	200-028-5	50-32-8									
17		indeno[123-cd]pyrene				2.5	mg/kg		2.232	mg/kg	0.000223 %	✓	
			205-893-2	193-39-5									
18		dibenz[a,h]anthracene				0.76	mg/kg		0.679	mg/kg	0.0000679 %	✓	
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				3.4	mg/kg		3.036	mg/kg	0.000304 %	✓	
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				8.4	mg/kg	1.32	9.902	mg/kg	0.00099 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				0.4	mg/kg	1.142	0.408	mg/kg	0.0000408 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				14	mg/kg	1.462	18.269	mg/kg	0.00183 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				24	mg/kg	1.126	24.126	mg/kg	0.00241 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead chromate }			1	87	mg/kg	1.56	121.164	mg/kg	0.00777 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
26		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<**LOD**
		080-010-00-X	231-299-8	7487-94-7									
27		nickel { nickel chromate }				13	mg/kg	2.976	34.546	mg/kg	0.00345 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**
		034-002-00-8											
29		zinc { zinc chromate }				100	mg/kg	2.774	247.692	mg/kg	0.0248 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
30		TPH (C6 to C40) petroleum group				160	mg/kg		142.857	mg/kg	0.0143 %	✓	
				TPH									
										Total:	0.0654 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
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 HP3(i) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous statement does not apply to these sampels.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0143%)

Classification of sample: TP109

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP109
Sample Depth:
0.85 m
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	pH		8	pH	8pH		
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		<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
4		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
5		acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
6		acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
7		fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
8		phenanthrene		201-581-5	85-01-8		0.25	mg/kg		0.212	mg/kg	0.0000212 %	✓	
9		anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
10		fluoranthene		205-912-4	206-44-0		0.21	mg/kg		0.178	mg/kg	0.0000178 %	✓	
11		pyrene		204-927-3	129-00-0		0.24	mg/kg		0.203	mg/kg	0.0000203 %	✓	
12		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.11	mg/kg		0.0932	mg/kg	0.00000932 %	✓	
13		chrysene	601-048-00-0	205-923-4	218-01-9		0.08	mg/kg		0.0678	mg/kg	0.00000678 %	✓	
14		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.08	mg/kg		0.0678	mg/kg	0.00000678 %	✓	
15		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**

#		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
16		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.07	mg/kg		0.0593	mg/kg	0.00000593 %	✓	
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		8	mg/kg	1.32	8.951	mg/kg	0.000895 %	✓	
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		29	mg/kg	1.462	35.92	mg/kg	0.00359 %	✓	
24		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		23	mg/kg	1.126	21.945	mg/kg	0.00219 %	✓	
25		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19	mg/kg	1.56	25.116	mg/kg	0.00161 %	✓	
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		30	mg/kg	2.976	75.668	mg/kg	0.00757 %	✓	
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		45	mg/kg	2.774	105.794	mg/kg	0.0106 %	✓	
30		TPH (C6 to C40) petroleum group			TPH		<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
											Total:	0.0275 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP111

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP111
Sample Depth:
0.30 m
Moisture content:
10%
(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: 10% 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		9.6 pH		9.6 pH	9.6 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		<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
4		naphthalene	601-052-00-2	202-049-5	91-20-3		1.7 mg/kg		1.545 mg/kg	0.000155 %	✓	
5		acenaphthylene		205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<**LOD**
6		acenaphthene		201-469-6	83-32-9		0.92 mg/kg		0.836 mg/kg	0.0000836 %	✓	
7		fluorene		201-695-5	86-73-7		0.55 mg/kg		0.5 mg/kg	0.00005 %	✓	
8		phenanthrene		201-581-5	85-01-8		3.6 mg/kg		3.273 mg/kg	0.000327 %	✓	
9		anthracene		204-371-1	120-12-7		0.64 mg/kg		0.582 mg/kg	0.0000582 %	✓	
10		fluoranthene		205-912-4	206-44-0		3 mg/kg		2.727 mg/kg	0.000273 %	✓	
11		pyrene		204-927-3	129-00-0		3.3 mg/kg		3 mg/kg	0.0003 %	✓	
12		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.2 mg/kg		1.091 mg/kg	0.000109 %	✓	
13		chrysene	601-048-00-0	205-923-4	218-01-9		1.6 mg/kg		1.455 mg/kg	0.000145 %	✓	
14		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		1.6 mg/kg		1.455 mg/kg	0.000145 %	✓	
15		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.39 mg/kg		0.355 mg/kg	0.0000355 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				1.2	mg/kg		1.091	mg/kg	0.000109 %	✓	
		601-032-00-3	200-028-5	50-32-8									
17		indeno[123-cd]pyrene				0.57	mg/kg		0.518	mg/kg	0.0000518 %	✓	
			205-893-2	193-39-5									
18		dibenz[a,h]anthracene				0.16	mg/kg		0.145	mg/kg	0.0000145 %	✓	
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				0.83	mg/kg		0.755	mg/kg	0.0000755 %	✓	
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				7.6	mg/kg	1.32	9.122	mg/kg	0.000912 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				15	mg/kg	1.462	19.93	mg/kg	0.00199 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				17	mg/kg	1.126	17.4	mg/kg	0.00174 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead chromate }			1	41	mg/kg	1.56	58.139	mg/kg	0.00373 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
26		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
27		nickel { nickel chromate }				12	mg/kg	2.976	32.468	mg/kg	0.00325 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
		034-002-00-8											
29		zinc { zinc chromate }				46	mg/kg	2.774	116.01	mg/kg	0.0116 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
30		TPH (C6 to C40) petroleum group				67	mg/kg		60.909	mg/kg	0.00609 %	✓	
				TPH									
										Total:	0.0321 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
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 HP3(i) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous statement does not apply to these sampels.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00609%)

Classification of sample: TP112(1)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP112(1)
Sample Depth:
1.00 m
Moisture content:
12%
(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: 12% 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		9.4	pH		9.4	pH	9.4 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		<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
4		naphthalene	601-052-00-2	202-049-5	91-20-3		8.1	mg/kg		7.232	mg/kg	0.000723 %	✓	
5		acenaphthylene		205-917-1	208-96-8		0.47	mg/kg		0.42	mg/kg	0.000042 %	✓	
6		acenaphthene		201-469-6	83-32-9		4.6	mg/kg		4.107	mg/kg	0.000411 %	✓	
7		fluorene		201-695-5	86-73-7		3.8	mg/kg		3.393	mg/kg	0.000339 %	✓	
8		phenanthrene		201-581-5	85-01-8		22	mg/kg		19.643	mg/kg	0.00196 %	✓	
9		anthracene		204-371-1	120-12-7		4.6	mg/kg		4.107	mg/kg	0.000411 %	✓	
10		fluoranthene		205-912-4	206-44-0		17	mg/kg		15.179	mg/kg	0.00152 %	✓	
11		pyrene		204-927-3	129-00-0		18	mg/kg		16.071	mg/kg	0.00161 %	✓	
12		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		8.8	mg/kg		7.857	mg/kg	0.000786 %	✓	
13		chrysene	601-048-00-0	205-923-4	218-01-9		8.3	mg/kg		7.411	mg/kg	0.000741 %	✓	
14		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		7.7	mg/kg		6.875	mg/kg	0.000688 %	✓	
15		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		4	mg/kg		3.571	mg/kg	0.000357 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				7.2	mg/kg		6.429	mg/kg	0.000643 %	✓	
		601-032-00-3	200-028-5	50-32-8									
17		indeno[123-cd]pyrene				3.5	mg/kg		3.125	mg/kg	0.000313 %	✓	
			205-893-2	193-39-5									
18		dibenz[a,h]anthracene				1	mg/kg		0.893	mg/kg	0.0000893 %	✓	
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				4.4	mg/kg		3.929	mg/kg	0.000393 %	✓	
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				14	mg/kg	1.32	16.504	mg/kg	0.00165 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				1	mg/kg	1.142	1.02	mg/kg	0.000102 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				18	mg/kg	1.462	23.489	mg/kg	0.00235 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				38	mg/kg	1.126	38.2	mg/kg	0.00382 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead chromate }			1	200	mg/kg	1.56	278.538	mg/kg	0.0179 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
26		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<**LOD**
		080-010-00-X	231-299-8	7487-94-7									
27		nickel { nickel chromate }				18	mg/kg	2.976	47.833	mg/kg	0.00478 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**
		034-002-00-8											
29		zinc { zinc chromate }				220	mg/kg	2.774	544.922	mg/kg	0.0545 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
30		TPH (C6 to C40) petroleum group				290	mg/kg		258.929	mg/kg	0.0259 %	✓	
				TPH									
										Total:	0.123 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
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 HP3(i) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous statement does not apply to these sampels.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0259%)

Classification of sample: TP112(2)

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:
TP112(2)
Sample Depth:
3.00 m
Moisture content:
16%
(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: 16% 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	pH		8	pH	8pH		
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		<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
4		naphthalene	601-052-00-2	202-049-5	91-20-3		4.6	mg/kg		3.966	mg/kg	0.000397 %	✓	
5		acenaphthylene		205-917-1	208-96-8		0.14	mg/kg		0.121	mg/kg	0.0000121 %	✓	
6		acenaphthene		201-469-6	83-32-9		2.1	mg/kg		1.81	mg/kg	0.000181 %	✓	
7		fluorene		201-695-5	86-73-7		1.4	mg/kg		1.207	mg/kg	0.000121 %	✓	
8		phenanthrene		201-581-5	85-01-8		9.4	mg/kg		8.103	mg/kg	0.00081 %	✓	
9		anthracene		204-371-1	120-12-7		1.7	mg/kg		1.466	mg/kg	0.000147 %	✓	
10		fluoranthene		205-912-4	206-44-0		7.2	mg/kg		6.207	mg/kg	0.000621 %	✓	
11		pyrene		204-927-3	129-00-0		7.8	mg/kg		6.724	mg/kg	0.000672 %	✓	
12		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		3.4	mg/kg		2.931	mg/kg	0.000293 %	✓	
13		chrysene	601-048-00-0	205-923-4	218-01-9		3.4	mg/kg		2.931	mg/kg	0.000293 %	✓	
14		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		3.7	mg/kg		3.19	mg/kg	0.000319 %	✓	
15		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.85	mg/kg		0.733	mg/kg	0.0000733 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
16		benzo[a]pyrene; benzo[def]chrysene				2.7	mg/kg		2.328	mg/kg	0.000233 %	✓	
		601-032-00-3	200-028-5	50-32-8									
17		indeno[123-cd]pyrene				1.4	mg/kg		1.207	mg/kg	0.000121 %	✓	
			205-893-2	193-39-5									
18		dibenz[a,h]anthracene				0.4	mg/kg		0.345	mg/kg	0.0000345 %	✓	
		601-041-00-2	200-181-8	53-70-3									
19		benzo[ghi]perylene				1.8	mg/kg		1.552	mg/kg	0.000155 %	✓	
			205-883-8	191-24-2									
20		arsenic { arsenic trioxide }				12	mg/kg	1.32	13.659	mg/kg	0.00137 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
21		cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
		048-002-00-0	215-146-2	1306-19-0									
22		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
23		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				27	mg/kg	1.462	34.019	mg/kg	0.0034 %	✓	
			215-160-9	1308-38-9									
24		copper { dicopper oxide; copper (I) oxide }				36	mg/kg	1.126	34.941	mg/kg	0.00349 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
25		lead { lead chromate }			1	72	mg/kg	1.56	96.816	mg/kg	0.00621 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
26		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
27		nickel { nickel chromate }				31	mg/kg	2.976	79.538	mg/kg	0.00795 %	✓	
		028-035-00-7	238-766-5	14721-18-7									
28		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
		034-002-00-8											
29		zinc { zinc chromate }				97	mg/kg	2.774	231.976	mg/kg	0.0232 %	✓	
		024-007-00-3	236-878-9	13530-65-9									
30		TPH (C6 to C40) petroleum group				61	mg/kg		52.586	mg/kg	0.00526 %	✓	
				TPH									
										Total:	0.0562 %		

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)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
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 HP3(i) - Flammable relates to liquids. However this assessment was undertaken on a solid soil sample and therefore this hazardous statement does not apply to these sampels.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00526%)

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

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: 2023.51.5529.10230 (20 Feb 2023)
HazWasteOnline Database: 2023.51.5529.10230 (20 Feb 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

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Analytical Report Number : 24-77241/9769

Project / Site name:	Laystall St, Manchester	**Samples received on:**	08/01/2024
Your job number:	16-613	**Samples instructed on/ Analysis started on:**	08/01/2024
Your order number:	007181	**Analysis completed by:**	15/01/2024
Report Issue Number:	1	**Report issued on:**	15/01/2024
Samples Analysed:	3 gas samples		

[redacted]

Jeanette Abbot
Technical Reviewer
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.

4041

Report Number	24-77241 / 9769		
Order number			
Sample Number	2923257	Sample date	03/01/2024
Sample ID	WS201 (700017)	Sample Start Time	
Depth		Sample Stop Time	
Canister Number	1694	Initial Pressure (PSI)	-13.46
Sample Volume	720	Final Pressure (PSI)	-2.95
		Dilution	3.23

CAS #	Compound Name	Accreditation	LoD	Result	Units #	LoD	Result	Units
71-55-6	1,1,1-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
79-00-5	1,1,2-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
75-35-4	1,1-Dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
75-34-3	1,1-Dichloroethane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
120-82-1	1,2,4-Trichlorobenzene	ISO 17025	3.8	< 3.8	µg/m3	0.5	< 0.5	ppbv
95-63-6	1,2,4-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
106-93-4	1,2-Dibromoethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
95-50-1	1,2-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
107-06-2	1,2-Dichloroethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
78-87-5	1,2-Dichloropropane	ISO 17025	2.4	< 2.4	µg/m3	0.5	< 0.5	ppbv
106-99-0	1,3-Butadiene	ISO 17025	1.1	< 1.1	µg/m3	0.5	< 0.5	ppbv
541-73-1	1,3-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
106-46-7	1,4-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
123-91-1	1,4-Dioxane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
622-96-8	4-Ethyltoluene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
67-64-1	Acetone	ISO 17025	9.7	53	µg/m3	4	22	ppbv
107-02-8	Acrolein	ISO 17025	1.2	8.3	µg/m3	0.5	3.5	ppbv
75-27-4	Bromodichloromethane	ISO 17025	3.4	< 3.4	µg/m3	0.5	< 0.5	ppbv
100-44-7	Benzyl chloride	ISO 17025	2.6	< 2.6	µg/m3	0.5	< 0.5	ppbv
71-43-2	Benzene	ISO 17025	1	< 1.0	µg/m3	0.3	< 0.3	ppbv
74-83-9	Bromomethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
156-59-2	Cis-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
10061-01-5	Cis-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
108-90-7	Chlorobenzene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
56-23-5	Carbon tetrachloride	ISO 17025	3.2	< 3.2	µg/m3	0.5	< 0.5	ppbv
75-15-0	Carbon disulphide	ISO 17025	9.5	13	µg/m3	3	4.1	ppbv
75-00-3	Chloroethane	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
67-66-3	Chloroform	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
74-87-3	Chloromethane	ISO 17025	10.4	< 10	µg/m3	5	< 5.0	ppbv
110-82-7	Cyclohexane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
124-48-1	Dibromochloromethane	ISO 17025	4.3	< 4.3	µg/m3	0.5	< 0.5	ppbv
75-71-8	Dichlorodifluoromethane	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
75-09-2	Dichlomethane	ISO 17025	24.8	36	µg/m3	7	10	ppbv
76-14-2	Dichlorotetrafluoroethane	ISO 17025	3.6	< 3.6	µg/m3	0.5	< 0.5	ppbv
141-78-6	Ethyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
100-41-4	Ethylbenzene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
64-17-5	Ethanol	ISO 17025	5.8	31	µg/m3	3	16	ppbv
87-68-3	Hexachlorobutadiene	ISO 17025	5.4	< 5.4	µg/m3	0.5	< 0.5	ppbv
142-82-5	Heptane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
110-54-3	Hexane	ISO 17025	10.8	25	µg/m3	3	7	ppbv
67-63-0	Isopropyl alcohol	ISO 17025	5	12	µg/m3	2	4.8	ppbv
591-78-6	2-Hexanone (MBK)	ISO 17025	2.1	2.4	µg/m3	0.5	0.6	ppbv
78-93-3	MEK	ISO 17025	1.5	12	µg/m3	0.5	4	ppbv
80-62-6	Methyl methacrylate	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
108-10-1	MIBK	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
1634-04-4	MTBE	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
95-47-6	O-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
	M/p-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
115-07-1	Propene	ISO 17025	0.9	< 0.9	µg/m3	0.5	< 0.5	ppbv
100-42-5	Styrene	ISO 17025	2.2	< 2.2	µg/m3	0.5	< 0.5	ppbv
156-60-5	Trans-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
1061-02-6	Trans-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
75-25-2	Bromoform	ISO 17025	5.3	< 5.3	µg/m3	0.5	< 0.5	ppbv
79-01-6	Trichloroethene	ISO 17025	2.7	4.4	µg/m3	0.5	0.8	ppbv
75-69-4	Trichlorofluoromethane	ISO 17025	2.9	< 2.9	µg/m3	0.5	< 0.5	ppbv
76-13-1	Trichlorotrifluoroethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
127-18-4	Tetrachloroethene	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
109-99-9	THF	ISO 17025	1.5	< 1.5	µg/m3	0.5	< 0.5	ppbv
108-67-8	1,3,5-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
108-88-3	Toluene	ISO 17025	1.2	5.7	µg/m3	0.3	1.5	ppbv
108-05-4	Vinyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
75-01-4	Vinyl chloride	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
91-20-3	Naphthalene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv

- results in ug/m3 outside the scope of accreditation

4041

Report Number	24-77241 / 9769		
Order number			
Sample Number	2923257	Sample date	03/01/2024
Sample ID	WS201 (700017)	Sample Start Time	
Depth		Sample Stop Time	
Canister Number	1694	Initial Pressure (PSI)	-13.46
Sample Volume	720	Final Pressure (PSI)	-2.95
		Dilution	3.23

CAS #	Compound Name	Accreditation	LoD	Result	Units	LoD	Result	Units
79-00-5	TPH Aliphatic C5-C6	NONE	30	84	µg/m3			
75-35-4	TPH Aliphatic C6-C8	NONE	30	87	µg/m3			
75-34-3	TPH Aliphatic C8-C10	NONE	30	65	µg/m3			
120-82-1	TPH Aromatic C6-C7	NONE	30	< 30	µg/m3			
95-63-6	TPH Aromatic C7-C8	NONE	30	< 30	µg/m3			
106-93-4	TPH Aromatic C8-C10	NONE	30	< 30	µg/m3			
	TPH >C10-C12	ISO 17025	30	< 30	ug/m3			
	PRO C5-C12	ISO 17025	30	270	ug/m3	5	44	ppbv
	TPH >C5-C6	ISO 17025	30	84	ug/m3			
	TPH >C6-C8	ISO 17025	30	93	ug/m3			
	TPH >C8-C10	ISO 17025	30	68	ug/m3			

			VOC TICS		
CAS #	**Compound Name**	**Accreditation**	**Compound Name**	**% Match**	**Amount (ppbv)**
	VOC TIC Match 1	None	hexamethyl-Cyclotrisiloxane,	90	52
	VOC TIC Match 2	None	octamethyl-Cyclotetrasiloxane,	94	37
	VOC TIC Match 3	None	trimethyl-Silanol	88	14
	VOC TIC Match 4	None	N.D.	-	-
	VOC TIC Match 5	None	N.D.	-	-
	VOC TIC Match 6	None	N.D.	-	-
	VOC TIC Match 7	None	N.D.	-	-
	VOC TIC Match 8	None	N.D.	-	-
	VOC TIC Match 9	None	N.D.	-	-
	VOC TIC Match 10	None	N.D.	-	-

4041

Report Number	24-77241 / 9769		
Order number			
Sample Number	2923258	Sample date	03/01/2024
Sample ID	WS203 (700018)	Sample Start Time	
Depth		Sample Stop Time	
Canister Number	1703	Initial Pressure (PSI)	-14.15
Sample Volume	750	Final Pressure (PSI)	-3.19
		Dilution	3.37

CAS #	Compound Name	Accreditation	LoD	Result	Units #	LoD	Result	Units
71-55-6	1,1,1-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
79-00-5	1,1,2-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
75-35-4	1,1-Dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
75-34-3	1,1-Dichloroethane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
120-82-1	1,2,4-Trichlorobenzene	ISO 17025	3.8	< 3.8	µg/m3	0.5	< 0.5	ppbv
95-63-6	1,2,4-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
106-93-4	1,2-Dibromoethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
95-50-1	1,2-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
107-06-2	1,2-Dichloroethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
78-87-5	1,2-Dichloropropane	ISO 17025	2.4	< 2.4	µg/m3	0.5	< 0.5	ppbv
106-99-0	1,3-Butadiene	ISO 17025	1.1	< 1.1	µg/m3	0.5	< 0.5	ppbv
541-73-1	1,3-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
106-46-7	1,4-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
123-91-1	1,4-Dioxane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
622-96-8	4-Ethyltoluene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
67-64-1	Acetone	ISO 17025	9.7	42	µg/m3	4	17	ppbv
107-02-8	Acrolein	ISO 17025	1.2	4.5	µg/m3	0.5	1.9	ppbv
75-27-4	Bromodichloromethane	ISO 17025	3.4	< 3.4	µg/m3	0.5	< 0.5	ppbv
100-44-7	Benzyl chloride	ISO 17025	2.6	< 2.6	µg/m3	0.5	< 0.5	ppbv
71-43-2	Benzene	ISO 17025	1	< 1.0	µg/m3	0.3	< 0.3	ppbv
74-83-9	Bromomethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
156-59-2	Cis-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
10061-01-5	Cis-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
108-90-7	Chlorobenzene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
56-23-5	Carbon tetrachloride	ISO 17025	3.2	< 3.2	µg/m3	0.5	< 0.5	ppbv
75-15-0	Carbon disulphide	ISO 17025	9.5	< 9.5	µg/m3	3	< 3.0	ppbv
75-00-3	Chloroethane	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
67-66-3	Chloroform	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
74-87-3	Chloromethane	ISO 17025	10.4	< 10	µg/m3	5	< 5.0	ppbv
110-82-7	Cyclohexane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
124-48-1	Dibromochloromethane	ISO 17025	4.3	< 4.3	µg/m3	0.5	< 0.5	ppbv
75-71-8	Dichlorodifluoromethane	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
75-09-2	Dichlomethane	ISO 17025	24.8	< 25	µg/m3	7	< 7.0	ppbv
76-14-2	Dichlorotetrafluoroethane	ISO 17025	3.6	< 3.6	µg/m3	0.5	< 0.5	ppbv
141-78-6	Ethyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
100-41-4	Ethylbenzene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
64-17-5	Ethanol	ISO 17025	5.8	32	µg/m3	3	17	ppbv
87-68-3	Hexachlorobutadiene	ISO 17025	5.4	< 5.4	µg/m3	0.5	< 0.5	ppbv
142-82-5	Heptane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
110-54-3	Hexane	ISO 17025	10.8	12	µg/m3	3	3.3	ppbv
67-63-0	Isopropyl alcohol	ISO 17025	5	11	µg/m3	2	4.3	ppbv
591-78-6	2-Hexanone (MBK)	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
78-93-3	MEK	ISO 17025	1.5	8.9	µg/m3	0.5	3	ppbv
80-62-6	Methyl methacrylate	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
108-10-1	MIBK	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
1634-04-4	MTBE	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
95-47-6	O-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
	M/p-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
115-07-1	Propene	ISO 17025	0.9	< 0.9	µg/m3	0.5	< 0.5	ppbv
100-42-5	Styrene	ISO 17025	2.2	< 2.2	µg/m3	0.5	< 0.5	ppbv
156-60-5	Trans-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
1061-02-6	Trans-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
75-25-2	Bromoform	ISO 17025	5.3	< 5.3	µg/m3	0.5	< 0.5	ppbv
79-01-6	Trichloroethene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv
75-69-4	Trichlorofluoromethane	ISO 17025	2.9	< 2.9	µg/m3	0.5	< 0.5	ppbv
76-13-1	Trichlorotrifluoroethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
127-18-4	Tetrachloroethene	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
109-99-9	THF	ISO 17025	1.5	< 1.5	µg/m3	0.5	< 0.5	ppbv
108-67-8	1,3,5-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
108-88-3	Toluene	ISO 17025	1.2	5.4	µg/m3	0.3	1.4	ppbv
108-05-4	Vinyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
75-01-4	Vinyl chloride	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
91-20-3	Naphthalene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv

- results in ug/m3 outside the scope of accreditation

4041

Report Number	24-77241 / 9769		
Order number			
Sample Number	2923258	Sample date	03/01/2024
Sample ID	WS203 (700018)	Sample Start Time	
Depth		Sample Stop Time	
Canister Number	1703	Initial Pressure (PSI)	-14.15
Sample Volume	750	Final Pressure (PSI)	-3.37
		Dilution	3.37

CAS #	Compound Name	Accreditation	LoD	Result	Units	LoD	Result	Units
79-00-5	TPH Aliphatic C5-C6	NONE	30	74	µg/m3			
75-35-4	TPH Aliphatic C6-C8	NONE	30	69	µg/m3			
75-34-3	TPH Aliphatic C8-C10	NONE	30	56	µg/m3			
120-82-1	TPH Aromatic C6-C7	NONE	30	< 30	µg/m3			
95-63-6	TPH Aromatic C7-C8	NONE	30	< 30	µg/m3			
106-93-4	TPH Aromatic C8-C10	NONE	30	< 30	µg/m3			
	TPH >C10-C12	ISO 17025	30	< 30	ug/m3			
	PRO C5-C12	ISO 17025	30	230	ug/m3	5	37	ppbv
	TPH >C5-C6	ISO 17025	30	74	ug/m3			
	TPH >C6-C8	ISO 17025	30	75	ug/m3			
	TPH >C8-C10	ISO 17025	30	58	ug/m3			

			VOC TICS		
CAS #	**Compound Name**	**Accreditation**	**Compound Name**	**% Match**	**Amount (ppbv)**
	VOC TIC Match 1	None	hexamethyl-Cyclotrisiloxane	90	45
	VOC TIC Match 2	None	octamethyl-Cyclotetrasiloxane	92	45
	VOC TIC Match 3	None	N.D.	-	-
	VOC TIC Match 4	None	N.D.	-	-
	VOC TIC Match 5	None	N.D.	-	-
	VOC TIC Match 6	None	N.D.	-	-
	VOC TIC Match 7	None	N.D.	-	-
	VOC TIC Match 8	None	N.D.	-	-
	VOC TIC Match 9	None	N.D.	-	-
	VOC TIC Match 10	None	N.D.	-	-

4041

Report Number	24-77241 / 9769		
Order number			
Sample Number	2923259	Sample date	03/01/2024
Sample ID	WS204 (700019)	Sample Start Time	
Depth		Sample Stop Time	
Canister Number	1685	Initial Pressure (PSI)	-13.46
Sample Volume	810	Final Pressure (PSI)	-1.57
		Dilution	3.14

CAS #	Compound Name	Accreditation	LoD	Result	Units #	LoD	Result	Units
71-55-6	1,1,1-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
79-00-5	1,1,2-Trichloroethane	ISO 17025	2.8	< 2.8	µg/m3	0.5	< 0.5	ppbv
75-35-4	1,1-Dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
75-34-3	1,1-Dichloroethane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
120-82-1	1,2,4-Trichlorobenzene	ISO 17025	3.8	< 3.8	µg/m3	0.5	< 0.5	ppbv
95-63-6	1,2,4-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
106-93-4	1,2-Dibromoethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
95-50-1	1,2-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
107-06-2	1,2-Dichloroethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
78-87-5	1,2-Dichloropropane	ISO 17025	2.4	< 2.4	µg/m3	0.5	< 0.5	ppbv
106-99-0	1,3-Butadiene	ISO 17025	1.1	< 1.1	µg/m3	0.5	< 0.5	ppbv
541-73-1	1,3-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
106-46-7	1,4-Dichlorobenzene	ISO 17025	3.1	< 3.1	µg/m3	0.5	< 0.5	ppbv
123-91-1	1,4-Dioxane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
622-96-8	4-Ethyltoluene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
67-64-1	Acetone	ISO 17025	9.7	47	µg/m3	4	19	ppbv
107-02-8	Acrolein	ISO 17025	1.2	6	µg/m3	0.5	2.6	ppbv
75-27-4	Bromodichloromethane	ISO 17025	3.4	< 3.4	µg/m3	0.5	< 0.5	ppbv
100-44-7	Benzyl chloride	ISO 17025	2.6	< 2.6	µg/m3	0.5	< 0.5	ppbv
71-43-2	Benzene	ISO 17025	1	< 1.0	µg/m3	0.3	< 0.3	ppbv
74-83-9	Bromomethane	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
156-59-2	Cis-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
10061-01-5	Cis-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
108-90-7	Chlorobenzene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
56-23-5	Carbon tetrachloride	ISO 17025	3.2	< 3.2	µg/m3	0.5	< 0.5	ppbv
75-15-0	Carbon disulphide	ISO 17025	9.5	23	µg/m3	3	7.2	ppbv
75-00-3	Chloroethane	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
67-66-3	Chloroform	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
74-87-3	Chloromethane	ISO 17025	10.4	< 10	µg/m3	5	< 5.0	ppbv
110-82-7	Cyclohexane	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
124-48-1	Dibromochloromethane	ISO 17025	4.3	< 4.3	µg/m3	0.5	< 0.5	ppbv
75-71-8	Dichlorodifluoromethane	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
75-09-2	Dichlomethane	ISO 17025	24.8	59	µg/m3	7	17	ppbv
76-14-2	Dichlorotetrafluoroethane	ISO 17025	3.6	< 3.6	µg/m3	0.5	< 0.5	ppbv
141-78-6	Ethyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
100-41-4	Ethylbenzene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
64-17-5	Ethanol	ISO 17025	5.8	22	µg/m3	3	12	ppbv
87-68-3	Hexachlorobutadiene	ISO 17025	5.4	< 5.4	µg/m3	0.5	< 0.5	ppbv
142-82-5	Heptane	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
110-54-3	Hexane	ISO 17025	10.8	35	µg/m3	3	9.8	ppbv
67-63-0	Isopropyl alcohol	ISO 17025	5	9.7	µg/m3	2	3.9	ppbv
591-78-6	2-Hexanone (MBK)	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
78-93-3	MEK	ISO 17025	1.5	9.1	µg/m3	0.5	3	ppbv
80-62-6	Methyl methacrylate	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
108-10-1	MIBK	ISO 17025	2.1	< 2.1	µg/m3	0.5	< 0.5	ppbv
1634-04-4	MTBE	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
95-47-6	O-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
	M/p-xylene	ISO 17025	1.3	< 1.3	µg/m3	0.3	< 0.3	ppbv
115-07-1	Propene	ISO 17025	0.9	< 0.9	µg/m3	0.5	< 0.5	ppbv
100-42-5	Styrene	ISO 17025	2.2	< 2.2	µg/m3	0.5	< 0.5	ppbv
156-60-5	Trans-1,2-dichloroethene	ISO 17025	2	< 2.0	µg/m3	0.5	< 0.5	ppbv
1061-02-6	Trans-1,3-dichloropropene	ISO 17025	2.3	< 2.3	µg/m3	0.5	< 0.5	ppbv
75-25-2	Bromoform	ISO 17025	5.3	< 5.3	µg/m3	0.5	< 0.5	ppbv
79-01-6	Trichloroethene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv
75-69-4	Trichlorofluoromethane	ISO 17025	2.9	< 2.9	µg/m3	0.5	< 0.5	ppbv
76-13-1	Trichlorotrifluoroethane	ISO 17025	3.9	< 3.9	µg/m3	0.5	< 0.5	ppbv
127-18-4	Tetrachloroethene	ISO 17025	3.5	< 3.5	µg/m3	0.5	< 0.5	ppbv
109-99-9	THF	ISO 17025	1.5	< 1.5	µg/m3	0.5	< 0.5	ppbv
108-67-8	1,3,5-Trimethylbenzene	ISO 17025	2.5	< 2.5	µg/m3	0.5	< 0.5	ppbv
108-88-3	Toluene	ISO 17025	1.2	5.7	µg/m3	0.3	1.5	ppbv
108-05-4	Vinyl acetate	ISO 17025	1.8	< 1.8	µg/m3	0.5	< 0.5	ppbv
75-01-4	Vinyl chloride	ISO 17025	1.3	< 1.3	µg/m3	0.5	< 0.5	ppbv
91-20-3	Naphthalene	ISO 17025	2.7	< 2.7	µg/m3	0.5	< 0.5	ppbv

- results in ug/m3 outside the scope of accreditation

4041

Report Number	24-77241 / 9769		
Order number			
Sample Number	2923259	Sample date	03/01/2024
Sample ID	WS204 (700019)	Sample Start Time	
Depth		Sample Stop Time	
Canister Number	1685	Initial Pressure (PSI)	-13.46
Sample Volume	810	Final Pressure (PSI)	-1.57
		Dilution	3.14

CAS #	Compound Name	Accreditation	LoD	Result	Units	LoD	Result	Units
79-00-5	TPH Aliphatic C5-C6	NONE	30	68	µg/m3			
75-35-4	TPH Aliphatic C6-C8	NONE	30	86	µg/m3			
75-34-3	TPH Aliphatic C8-C10	NONE	30	82	µg/m3			
120-82-1	TPH Aromatic C6-C7	NONE	30	< 30	µg/m3			
95-63-6	TPH Aromatic C7-C8	NONE	30	< 30	µg/m3			
106-93-4	TPH Aromatic C8-C10	NONE	30	< 30	µg/m3			
	TPH >C10-C12	ISO 17025	30	< 30	ug/m3			
	PRO C5-C12	ISO 17025	30	280	ug/m3	5	45	ppbv
	TPH >C5-C6	ISO 17025	30	68	ug/m3			
	TPH >C6-C8	ISO 17025	30	93	ug/m3			
	TPH >C8-C10	ISO 17025	30	84	ug/m3			

			VOC TICS		
CAS #	**Compound Name**	**Accreditation**	**Compound Name**	**% Match**	**Amount (ppbv)**
	VOC TIC Match 1	None	hexamethyl-Cyclotrisiloxane	9	12
	VOC TIC Match 2	None	Butane	82	16
	VOC TIC Match 3	None	N.D.	-	-
	VOC TIC Match 4	None	N.D.	-	-
	VOC TIC Match 5	None	N.D.	-	-
	VOC TIC Match 6	None	N.D.	-	-
	VOC TIC Match 7	None	N.D.	-	-
	VOC TIC Match 8	None	N.D.	-	-
	VOC TIC Match 9	None	N.D.	-	-
	VOC TIC Match 10	None	N.D.	-	-

Analytical Report Number : 24-77241/ 9769
Project / Site name: Laystall St, Manchester

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
PRO in air samples	Determination of Petroleum Range Organics in air by GC-MS	TO-15 Summa gas canister methodology	L107B-PL		ISO 17025
Tentatively identified compounds (VOC) in air	Determination of volatile organic compounds total ion count in air by GC-MS.	In-house method based on T0-15	L106B-PL		NONE
VOC in air samples	Determination of Volatile Organics Compunds in air by GC-MS	TO-15 Summa gas canister methodology	L106B-PL		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.

e3p
Taylor Road
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Manchester

t: [redacted]

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t: 01923 225404
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e: info-i2analytical@normecgroup.com

Analytical Report Number : 26-001295

Project / Site name:	Laystall Street	**Samples received on:**	13/01/2026
Your job number:	16-613	**Samples instructed on/ Analysis started on:**	13/01/2026
Your order number:	13094	**Analysis completed by:**	19/01/2026
Report Issue Number:	1	**Report issued on:**	19/01/2026
Samples Analysed:	3 soil samples		

[redacted]

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
air	- once the analysis is complete

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

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

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 are representative of the samples submitted for analysis.

Analytical Report Number: 26-001295
Project / Site name: Laystall Street
Your Order No: 13094

Lab Sample Number				799060	799061	799062
Sample Reference				TS101	TS102	TS103
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				12/01/2026	12/01/2026	12/01/2026
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	11	11
Total mass of sample received	kg	0.1	NONE	0.8	0.8	0.7
Asbestos						
Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KWB	KWB	KWB
Analysis completed	N/A	N/A	N/A	16/01/2026	16/01/2026	16/01/2026
General Inorganics						
pH (L099)	pH Units	N/A	MCERTS	8.5	8.5	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO_4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	140	120	130
Water Soluble SO_4 16hr extraction (2:1)	mg/l	1.25	MCERTS	70.6	62.3	66.9
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	2.1	2.9	2.2
Total Phenols						
Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Speciated PAHs						
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.07	0.07	0.08
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.08	0.08	0.09
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.06	0.06
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 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	< 0.05	< 0.05	< 0.05
Total PAH						
Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80

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

Analytical Report Number: 26-001295
Project / Site name: Laystall Street
Your Order No: 13094

Lab Sample Number				799060	799061	799062
Sample Reference				TS101	TS102	TS103
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				None Supplied	None Supplied	None Supplied
Date Sampled				12/01/2026	12/01/2026	12/01/2026
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			
Heavy Metals / Metalloids						
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2	1.9	2.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	< 0.2	0.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	U/S *U/S g	U/S *U/S g	U/S *U/S g
Chromium (hexavalent) by IC	mg/kg	1.8	NONE	< 1.80	< 1.80	< 1.80
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	6.7	6.2	6.7
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	14	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	13	13	15
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	7.4	6.9	7.5
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	56	53	57
Petroleum Hydrocarbons						
TPH (>EC5 - EC10) HS_1D_TOTAL	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0
TPH (>EC5 - EC6) HS_1D_TOTAL	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1
TPH (>EC6 - EC8) HS_1D_TOTAL	mg/kg	0.01	MCERTS	< 0.01	< 0.01	< 0.01
TPH (>EC8 - EC10) HS_1D_TOTAL	mg/kg	0.02	MCERTS	< 0.02	< 0.02	< 0.02
TPH (>EC10 - EC12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPH (>EC12 - EC16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0
TPH (>EC16 - EC21) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH (>EC21 - EC35) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH (>EC35 - EC40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10
TPH Total >EC5 - EC40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	< 10	< 10	< 10
TPH (EC10 - EC40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10

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

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Analytical Report Number : 26-001295
Project / Site name: Laystall Street

* 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 *
799060	TS101	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
799061	TS102	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation
799062	TS103	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation

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Analytical Report Number : 26-001295
Project / Site name: Laystall Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI 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, 2021	A001B	D	ISO 17025
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content (Wet Weight)	Moisture content (% wet weight), determined gravimetrically (up to 30°C)	In-house-procedure based on BS EN 12880:2000	L019B	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.	L019B	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	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Hexavalent chromium in soil by Ion Chromatography	Determination of hexavalent chromium in alkaline soil extract by use of ion chromatography with spectrophotometric detection	In-house method	L130B	W	NONE
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Total petroleum hydrocarbons by GC-FID in soil	Determination of total petroleum hydrocarbons in soil by GC-FID	In-house method	L076B	D	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil (Summed Bands)	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS (Summed Bands).	Calculation	L076B/L088-PL	D/W	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
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	L080-PL	W	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	L080-PL	W	MCERTS
Total petroleum hydrocarbons by HS-GC-MS in soil	Determination of total petroleum hydrocarbons in soil by HS-GC/MS	In-house method	L088-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

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Analytical Report Number : 26-001295
Project / Site name: Laystall Street

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Soil Descriptions	Textural classification	In-house method	L019B	W	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.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

*U/S g- Unsuitable for analysis due to high colour intensity.

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

APPENDIX V
PHOTOGRAPHS

PLATE 1 SITE CLEARANCE

PLATE 2 FORMER BASEMENT

APPENDIX VI
GEOTECHNICAL TESTING RESULTS

LABORATORY REPORT

Contract Number: PSL24/0811

Report Date: 20 February 2024

Client's Reference:

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Roy Walker

Contract Title: Laystall Street, Manchester

Date Received: 31/1/2024
Date Commenced: 31/1/2024
Date Completed: 20/2/2024

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 (Managing Director)
R Berriman (Associate Director)
S Royle (Laboratory Manager)
[redacted]
L Knight (Assistant Laboratory Manager)
S Eyre (Senior Technician)
A Fry (Section Manager)

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awatkins@prosoils.co.uk

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
Bulk 101		Bulk			Brown very sandy silty GRAVEL.

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Laystall Street - Manchester

Contract No:

PSL24/0811

Client Ref:

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
Bulk 101		Bulk			15							

SYMBOLS : **NP : Non Plastic** *** : Liquid Limit and Plastic Limit Wet Sieved.**

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Laystall Street - Manchester

Contract No:

PSL24/0811

Client Ref:

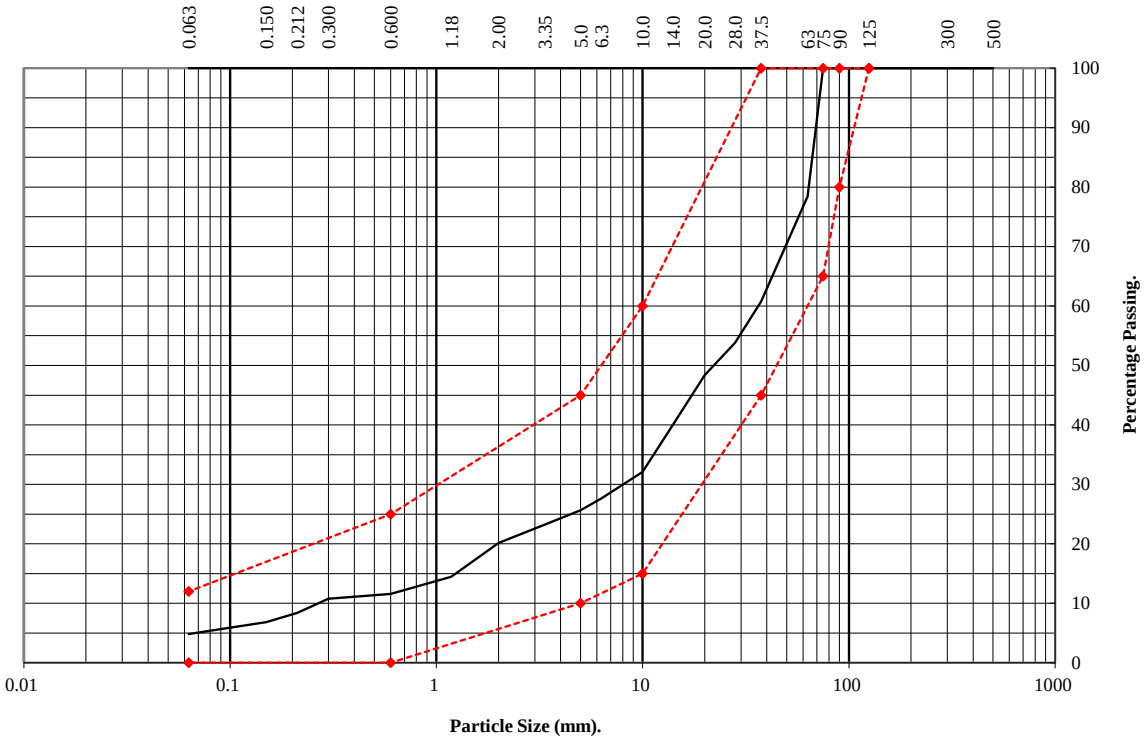
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Reference **Bulk 101** **Classification Type:** **6F2**



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements Lower	Upper
500	100		
300	100		
125	100	100	100
90	100	80	100
75	100	65	100
63	78		
37.5	61	45	100
28	54		
20	48		
14	40		
10	32	15	60
6.3	28		
5	26	10	45
3.35	23		
2	20		
1.18	14		
0.6	12	0	25
0.3	11		
0.212	8		
0.15	7		
0.063	5	0	12

Remarks:

SHW Series 600 Table 6/2 :
Class 6F2

UKAS TESTING 4043

PSL PROFESSIONAL SOILS LABORATORY A PHENNA GROUP COMPANY

Laystall Street - Manchester

Contract No.:

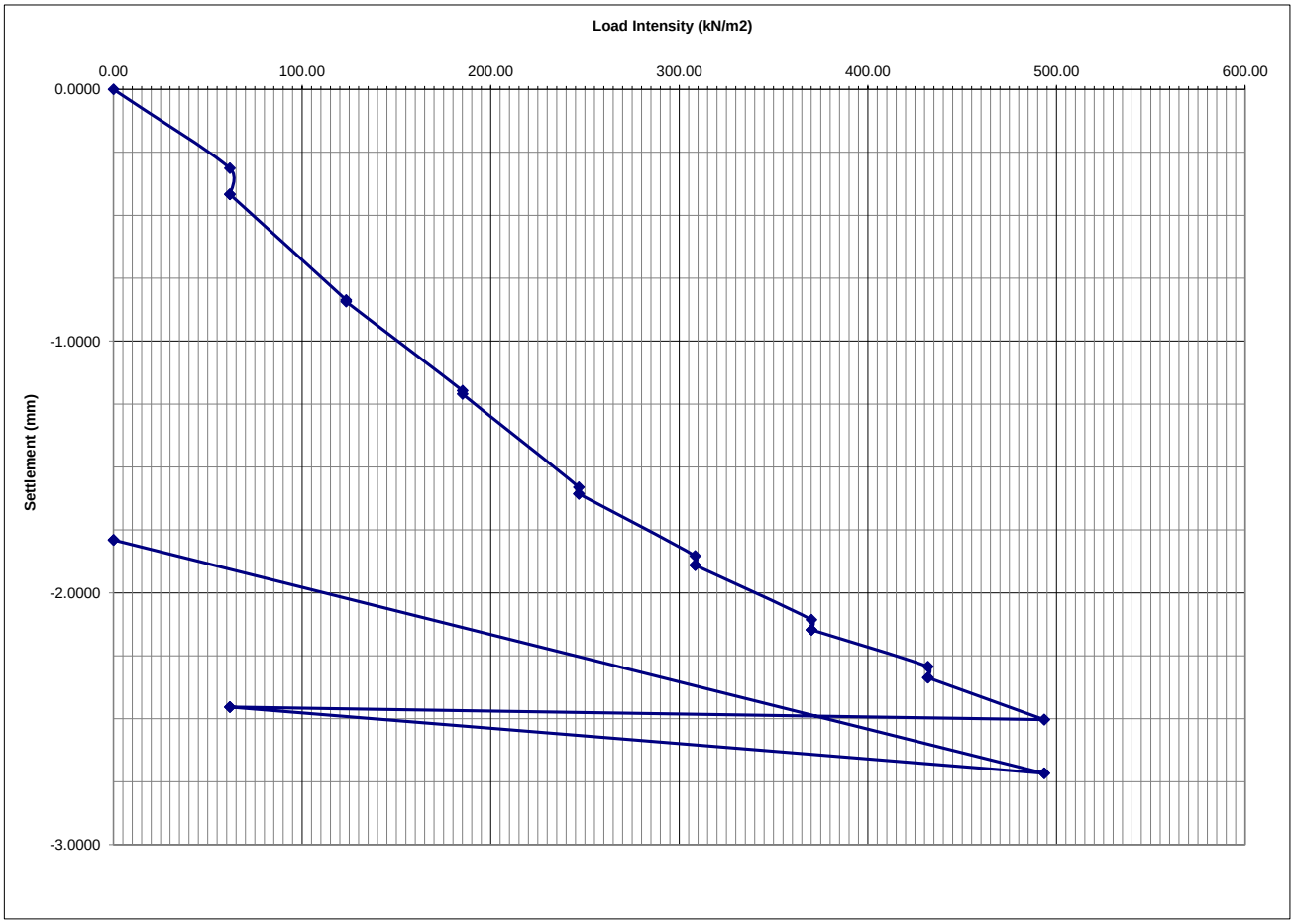
PSL24/0811

Client Ref:

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	26/02/2024
Site Ref:	16-613	**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):	493.45	**Northing:**	N/A
Maximum Deformation (mm):	-2.72	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 27%

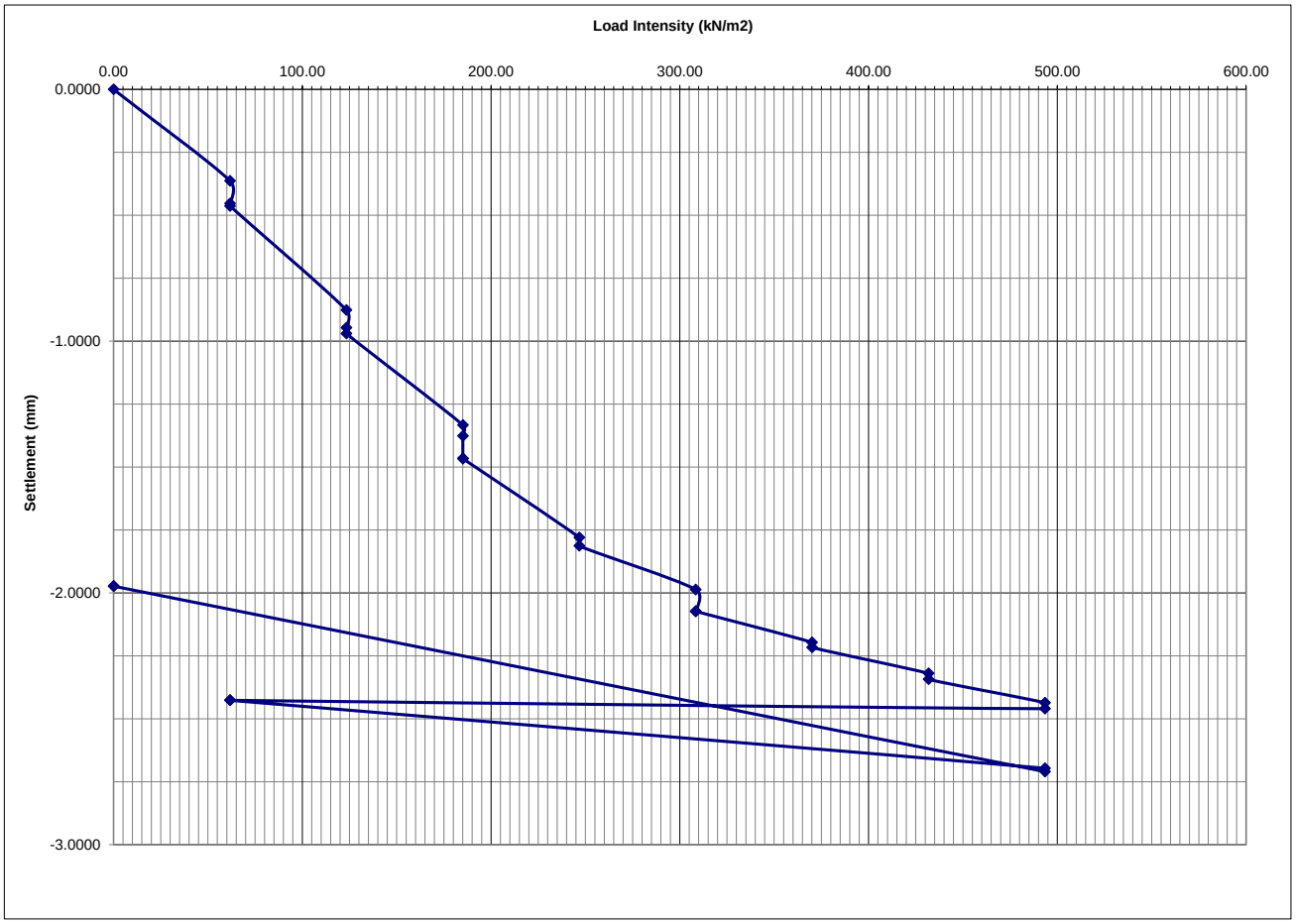
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	R. Walker	26/02/2024	R. Walker	26/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	26/02/2024
Site Ref:	16-613	**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):	493.45	**Northing:**	N/A
Maximum Deformation (mm):	-2.71	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 22%

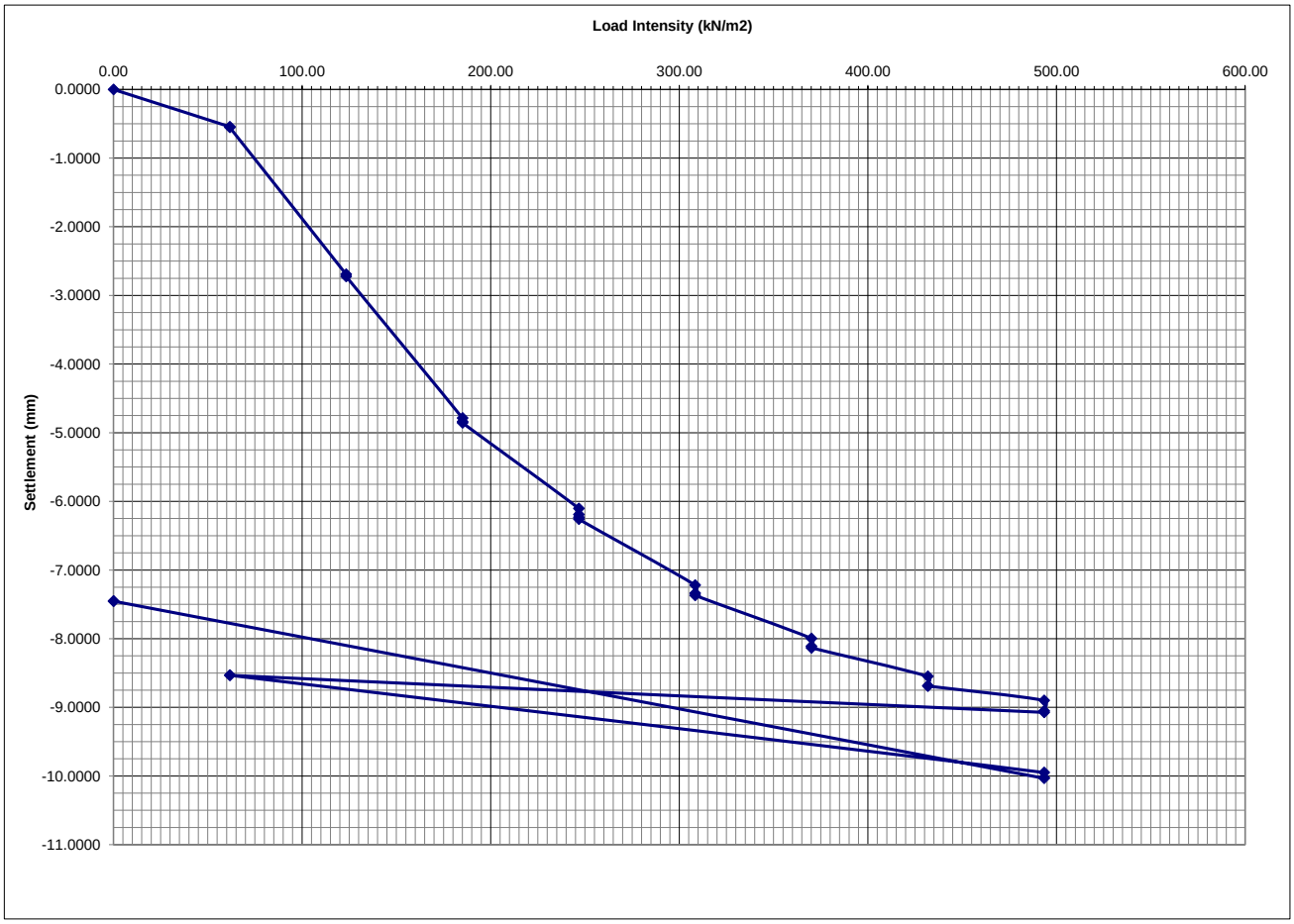
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	R. Walker	26/02/2024	R. Walker	26/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	26/02/2024
Site Ref:	16-613	**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):	493.45	**Northing:**	N/A
Maximum Deformation (mm):	-10.03	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 6%

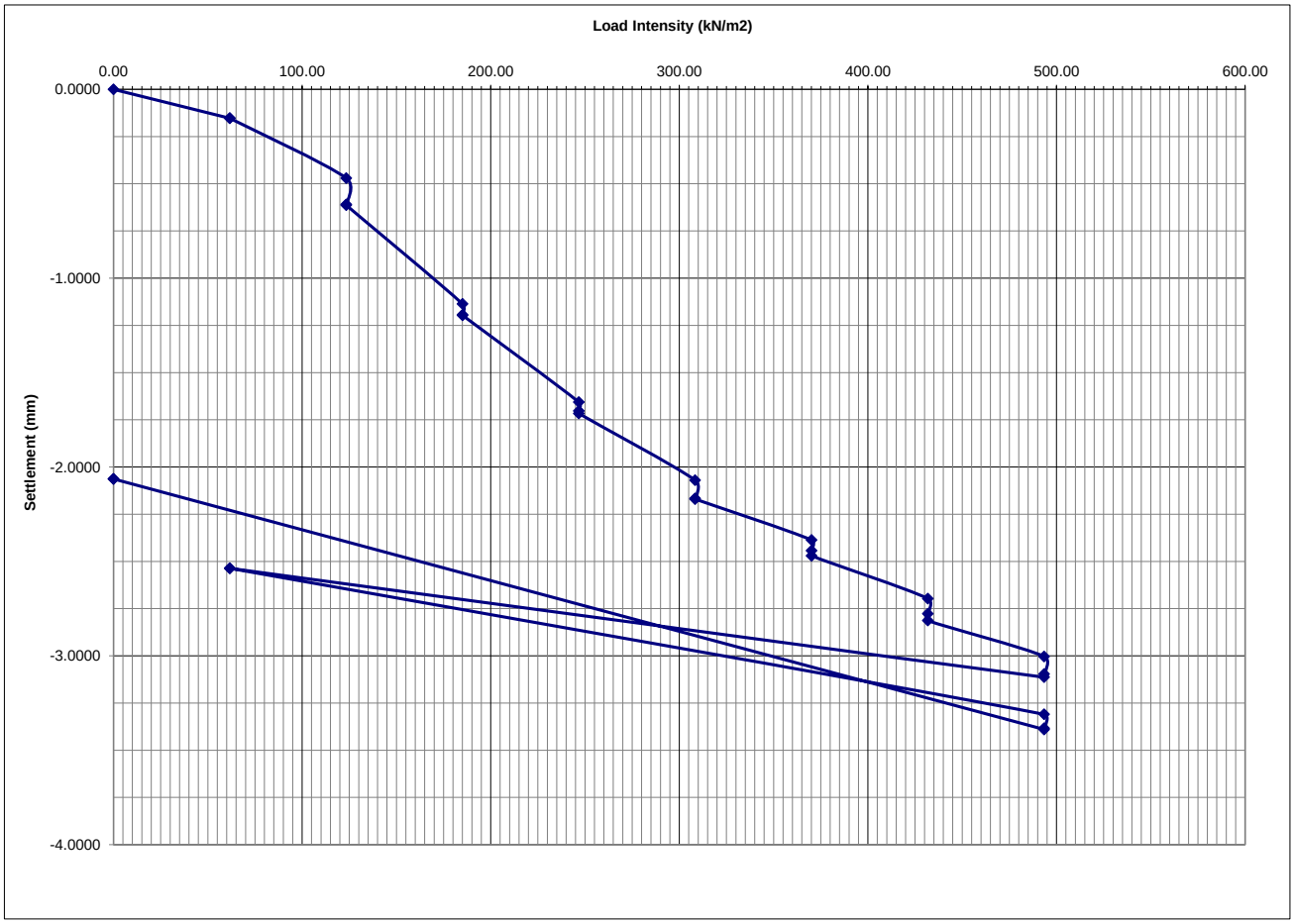
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	R. Walker	26/02/2024	R. Walker	26/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	26/02/2024
Site Ref:	16-613	**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):	493.45	**Northing:**	N/A
Maximum Deformation (mm):	-3.39	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 27%

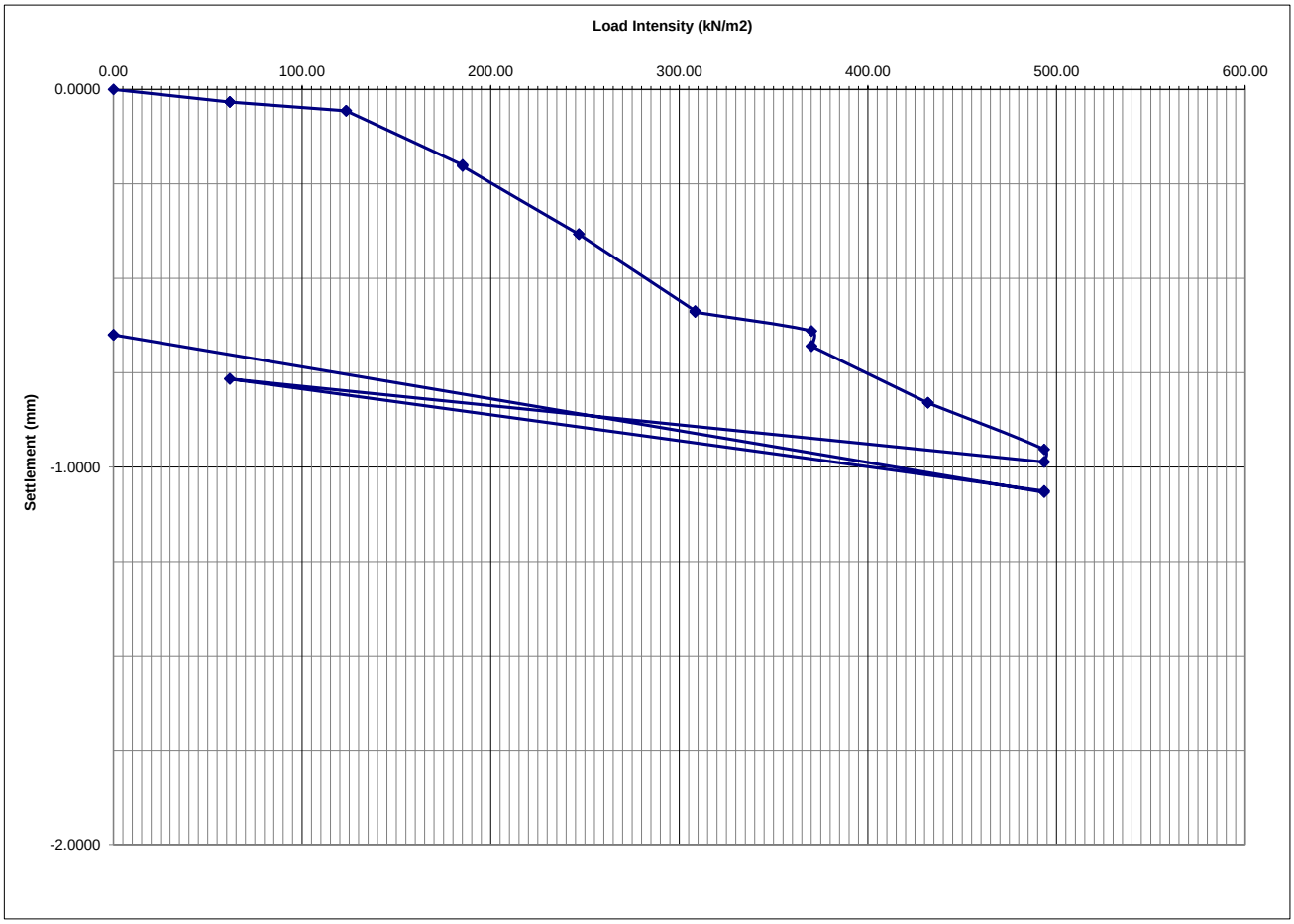
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	R. Walker	26/02/2024	R. Walker	26/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	26/02/2024
Site Ref:	16-613	**Type of Kentledge:**	13 Tonne Excavator
Test No.:	CBR105	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	493.45	**Northing:**	N/A
Maximum Deformation (mm):	-1.07	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value in Excess of 141%

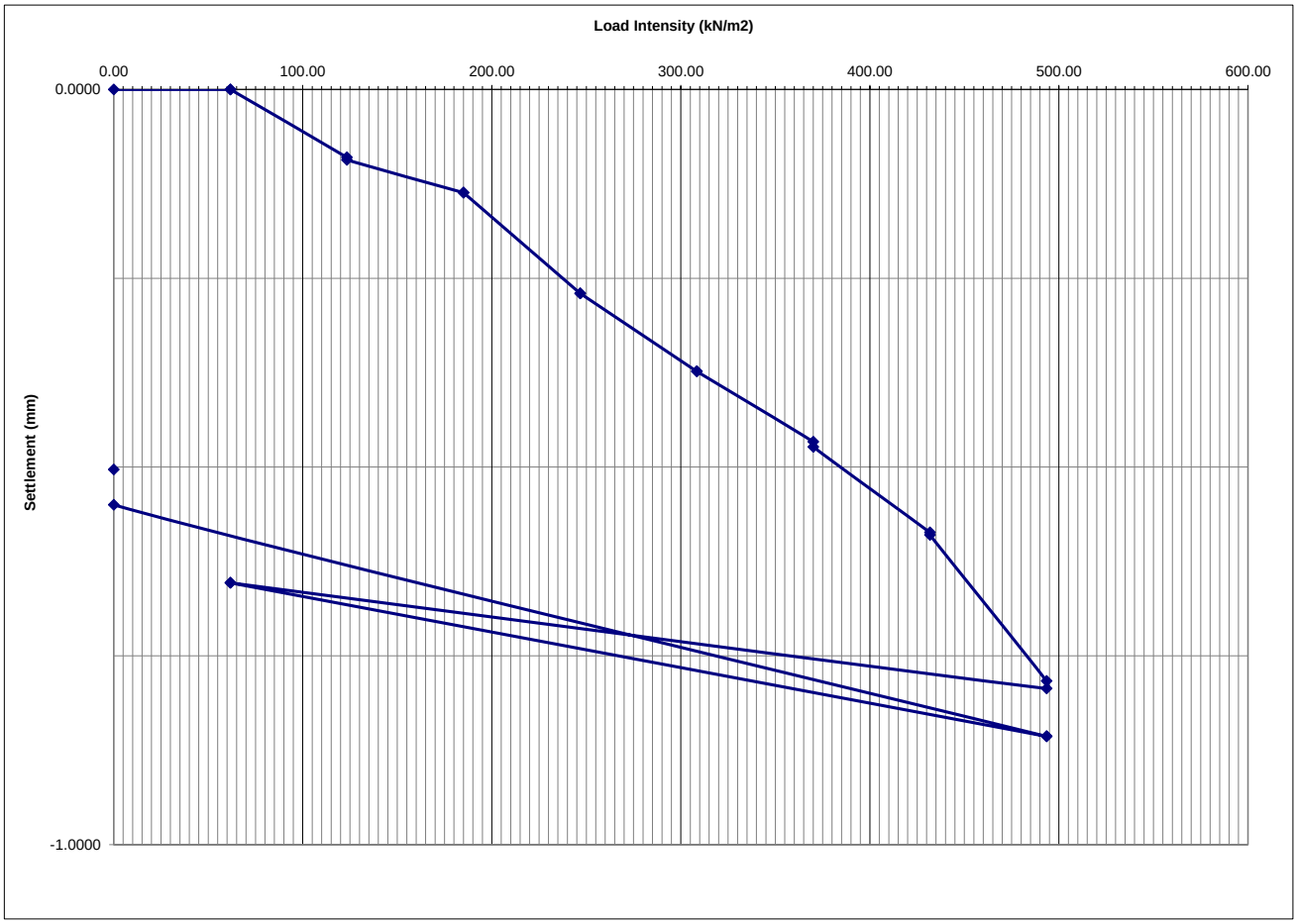
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	R. Walker	26/02/2024	R. Walker	26/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	26/02/2024
Site Ref:	16-613	**Type of Kentledge:**	13 Tonne Excavator
Test No.:	CBR106	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	493.45	**Northing:**	N/A
Maximum Deformation (mm):	-0.86	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value in Excess of 141%

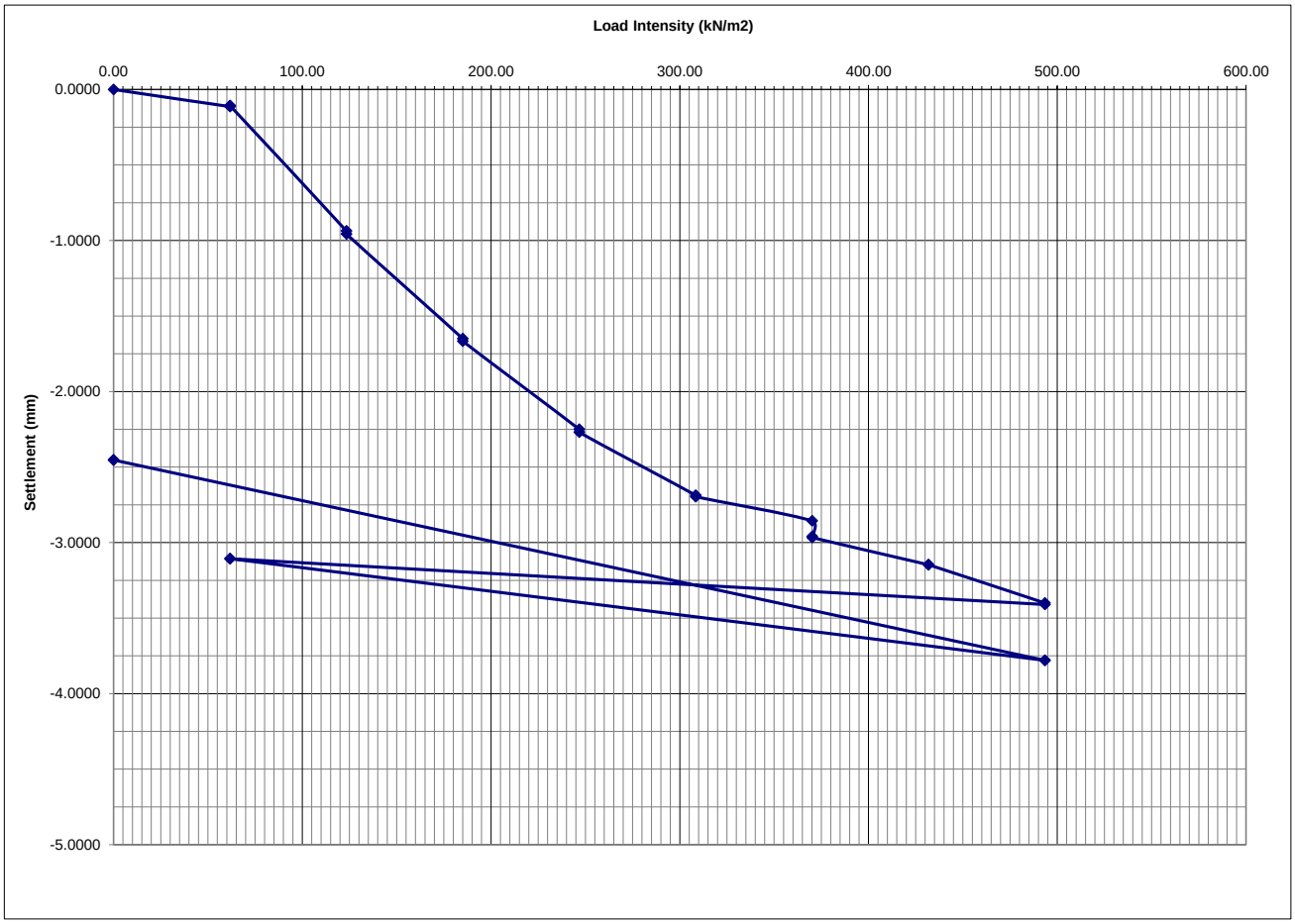
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	R. Walker	26/02/2024	R. Walker	26/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	26/02/2024
Site Ref:	16-613	**Type of Kentledge:**	13 Tonne Excavator
Test No.:	CBR107	**Test Depth (m bgl):**	GL
Plate Diameter (mm)	450	**Easting:**	N/A
Maximum Applied Pressure (kN/m2):	493.45	**Northing:**	N/A
Maximum Deformation (mm):	-3.78	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 18%

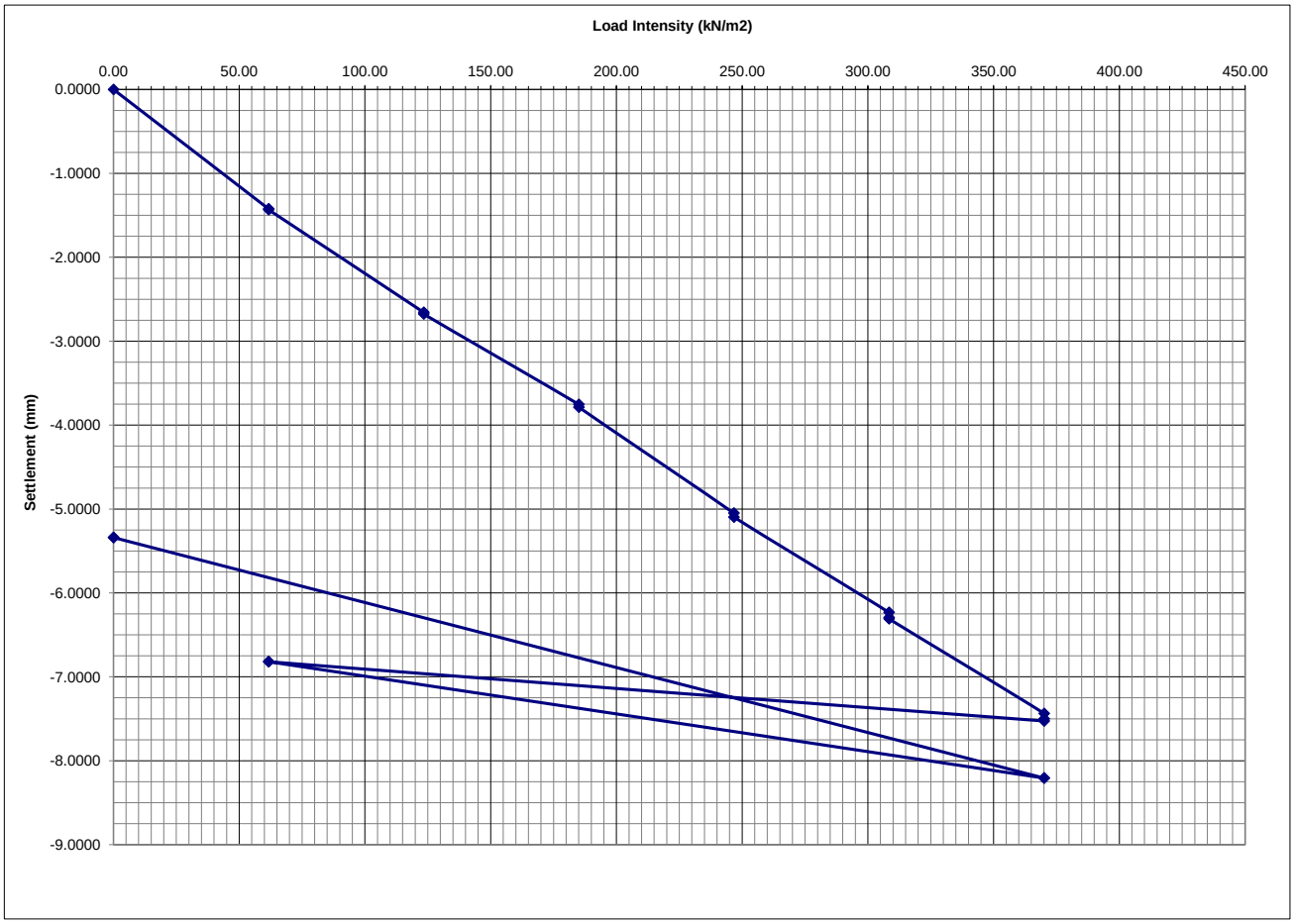
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
S. Juhasz	R. Walker	26/02/2024	R. Walker	26/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	05/02/2024
Site Ref:	16-613	**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):	-8.21	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 3%

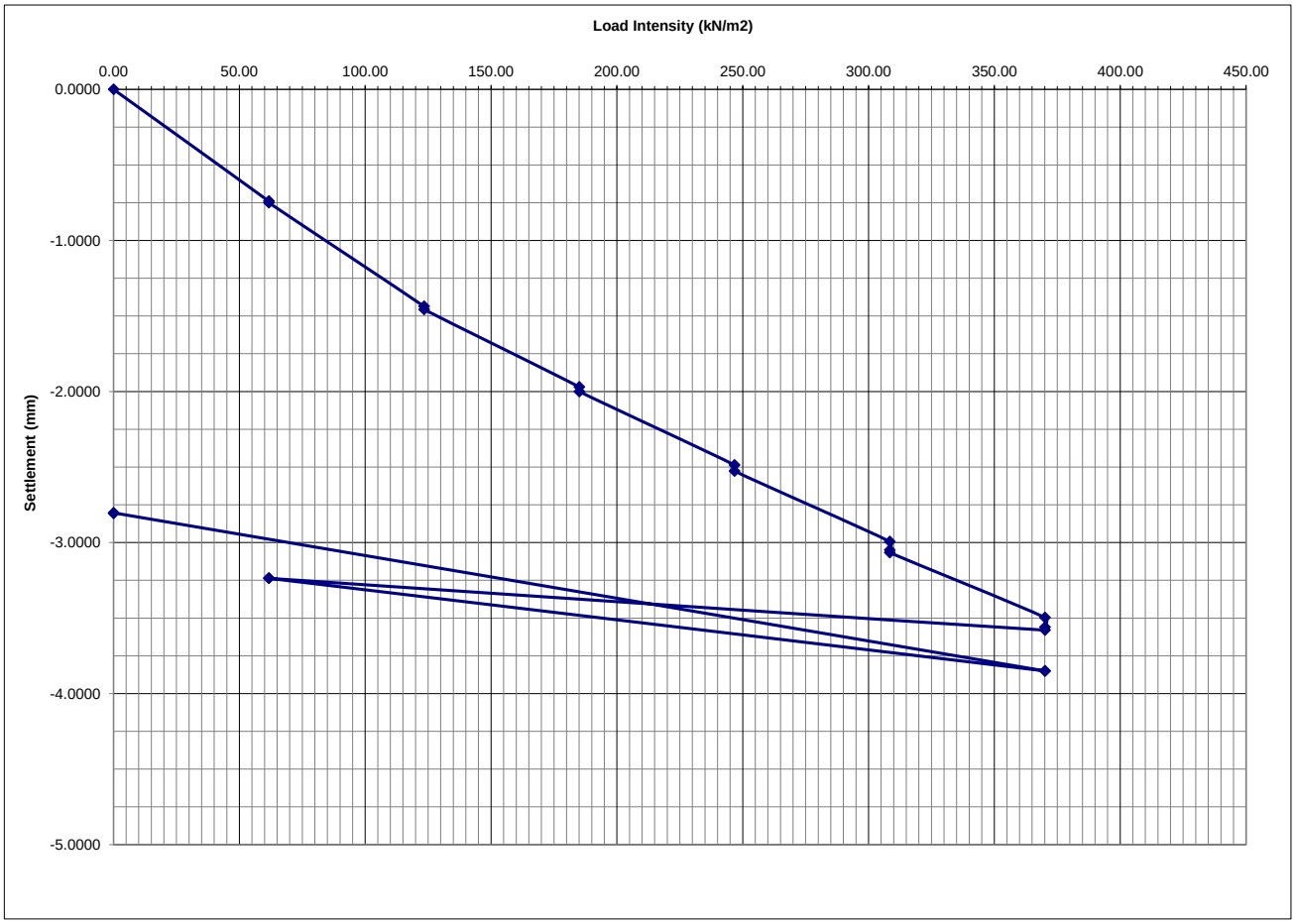
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Preston	R. Walker	05/02/2024	R. Walker	05/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	05/02/2024
Site Ref:	16-613	**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):	-3.85	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 10%

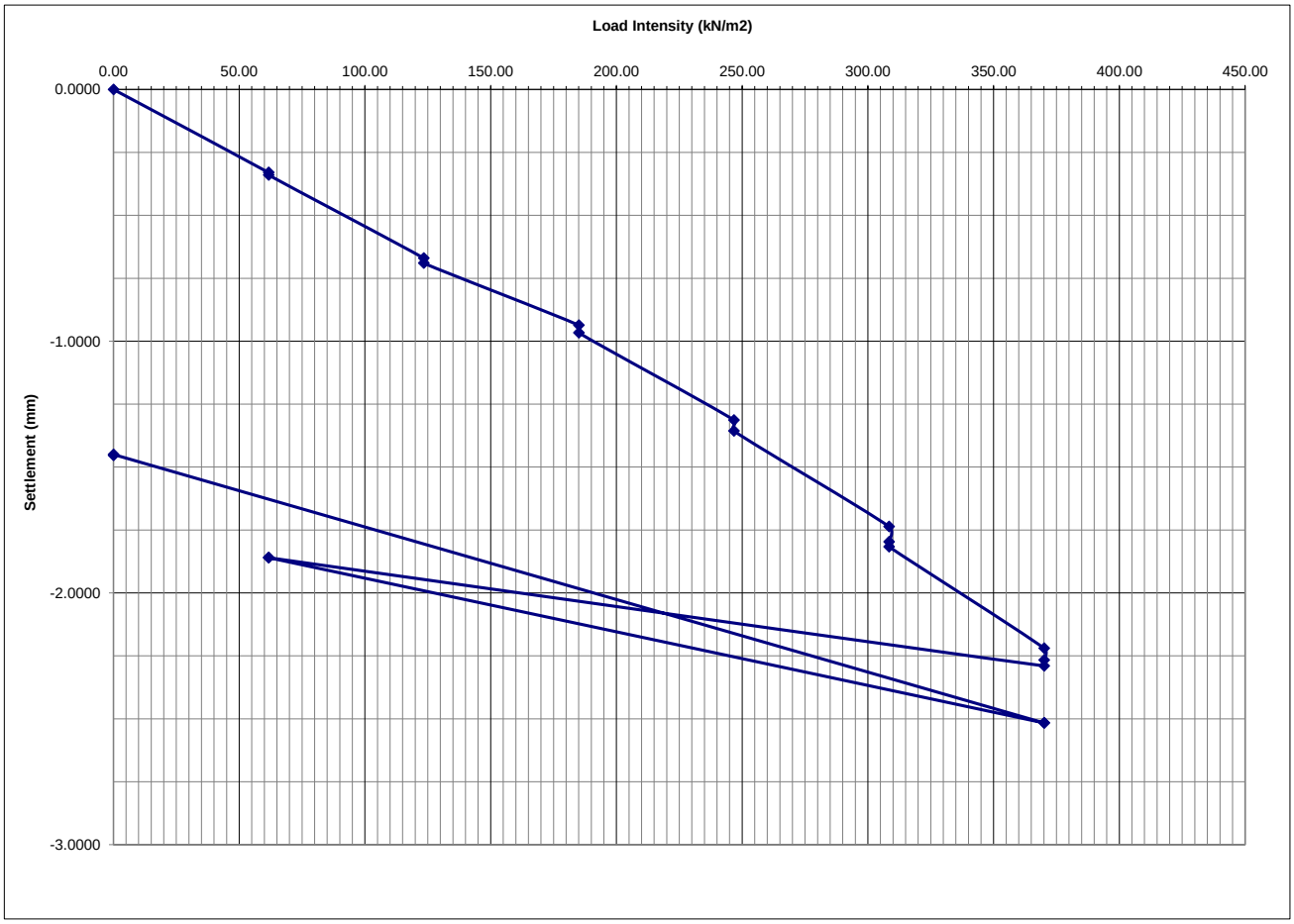
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Preston	R. Walker	05/02/2024	R. Walker	05/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	05/02/2024
Site Ref:	16-613	**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):	-2.52	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 39%

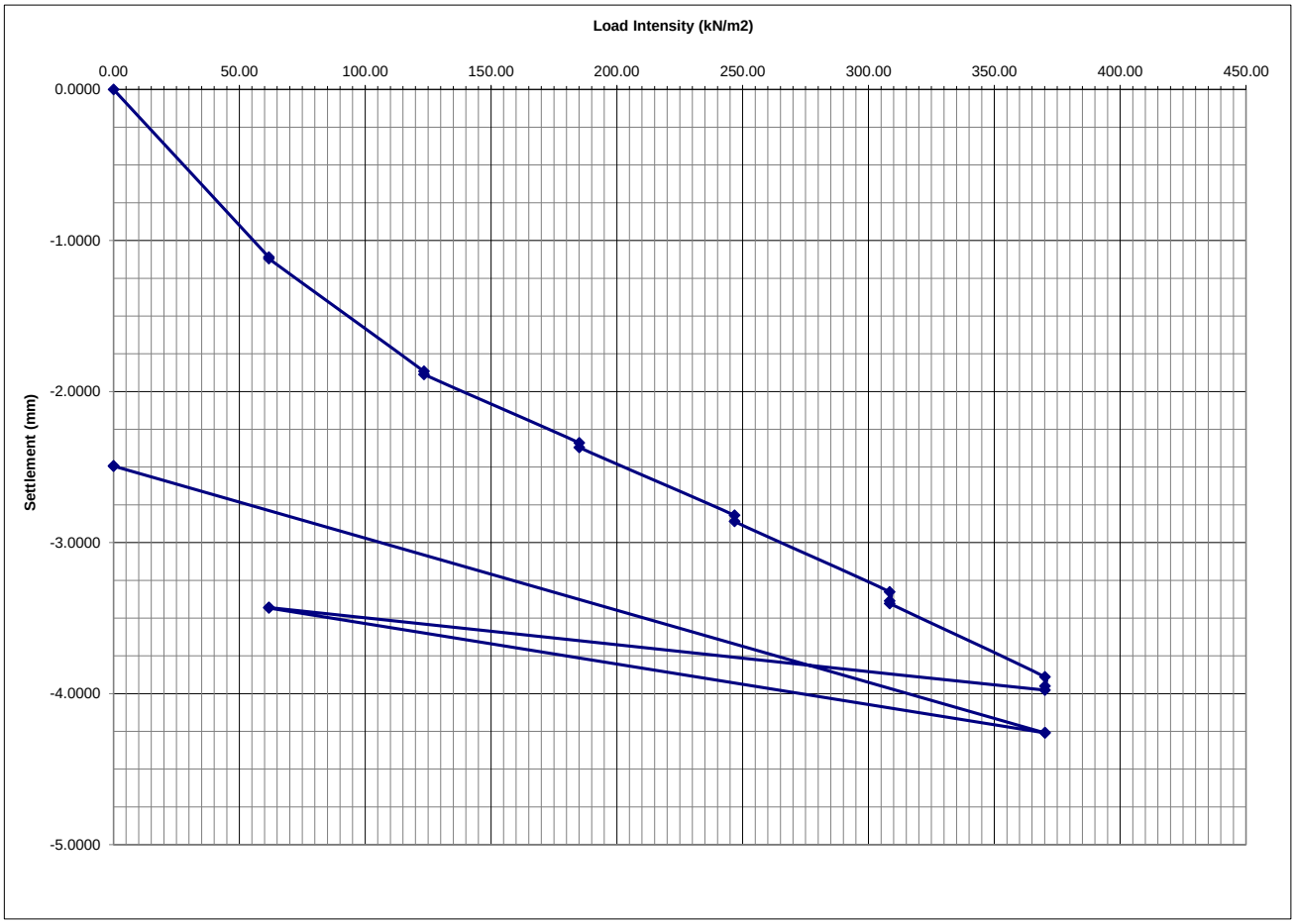
Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Preston	R. Walker	05/02/2024	R. Walker	05/02/2024

Vertical Deformation Test-Equivalent CBR Value

In Accordance with BS1377: Part 9:1990

Site Name:	**Laystall Street**	**Test Date:**	05/02/2024
Site Ref:	16-613	**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):	-4.26	**Weather:**	Dry
Strata Description:	Aggregate		



Equivalent CBR Value of 5%

Comments

Site Engineer:	Checked By:	Date:	Approved By:	Date:
T. Preston	R. Walker	05/02/2024	R. Walker	05/02/2024