



Lidl Great Britain Limited

Geo-Environmental Investigation Report

Lidl, Stoneham Lane, Eastleigh

16th August 2022

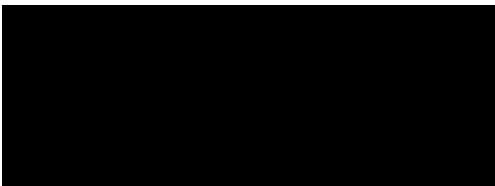


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Issued by: Obsidian Geo-Consulting Limited
Unit C4
Castle Vale Enterprise Park
Park Lane
Birmingham
B35 6LJ

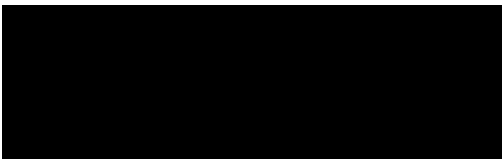
T: 0121 747 2288
M: 0771 552 7530
W: www.obsidian-geoconsulting.co.uk

Prepared by:



Ben Murphy BSc(Hons) MSc FGS
Senior Geo-Environmental Engineer

Reviewed and Approved for Release by:



Steven Dempsey BSc(Hons) MSc CGeol EurGeol FGS
Director



Revision	Date	Comments	Prepared By:	Checked and Approved By:
-	May 2022	First Issue	BM	SD
A	28 th July 2022	Updated Proposed Site Layout, Boundary and Inclusion of Supplementary Asbestos Investigation and Assessment	BM	SD
B	16 th August 2022	Updated Proposed Site Layout Drawing	BM	SD



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Drawings

21-1500-P/001/A	Site Location Plan
21-1500-P/004/A	Exploratory Hole Location Plan – Supplementary Investigation
21-1500-P/005/A	Asbestos Impacted Made Ground Plan
20321-AD-110	Proposed Site Plan

Appendices

Appendix A	Photographic Record – Supplementary Investigation
Appendix B	Exploratory Hole Records
Appendix C	Chemical Laboratory Analysis Results
Appendix D	OB-Screen Human Health Screening Assessment
Appendix E	Gas and Groundwater Monitoring Results
Appendix F	TRL DCP Results



Summary

Development Proposals	The development proposals include the construction of a new Lidl store, access, car park and peripheral soft landscaping. The store will be located in the north of the site with the car park in the south, with access to the site situated at the western boundary.
Site Setting and History	The site is broadly square in dimension; however the south-east boundary of the site is arced. The site is shown on the appended Site Location Plan (21-1500-P/001/A), and centred on National Grid Reference 444170, 117580. A review of the available historical maps from 1868 indicate that the site has remained an open field and later, a sports pitch. More recently, the site has been used as a site compound for the adjacent construction work to the north and west.
Ground Investigation Methodology	<u>Original Investigation – April 2022</u> Ten window sample boreholes (WS01-WS10) were advanced across the site to depths of up to 5.00m begl using a small, tracked, light percussion window sampling rig between 26th and 27th April 2022. Eight TRL DCP's undertaken within proposed car parking and access areas in order to calculate CBR values. Gas and groundwater monitoring wells were installed within WS01, WS04, WS07 and WS10. <u>Supplementary Asbestos Investigation – June 2022</u> Following the identification of Asbestos and assessed risk during the original investigation and assessment, the client instructed two further days of investigation works to obtain a higher density of samples that could be screened for the presence of Asbestos. A further fifteen window sample boreholes (WS101-WS115) were advanced across the site to depths of up to 2.00m begl using a small, tracked, light percussion window sampling rig between 30th June 2022 and 1st July 2022.
Encountered Strata	The ground conditions encountered in the exploratory holes across the site typically comprised a relatively consistent thickness of Made Ground with a variable composition overlying medium dense to very dense, typically granular River Terrace Deposits.
Contamination Assessment	The results of the analysis have been reviewed and compared against appropriate screening criteria for Human Health within a Commercial end use scenario. None of the recorded concentrations for Metals, Cyanide, Phenol, PAHs, TPH, BTEX, MTBE, pesticides or herbicides exceeded their respective screening values. Loose chrysotile fibres were identified within WS04 at 0.10m begl with Made Ground containing brick, concrete, ceramic and glass. Subsequent Asbestos quantification analysis has confirmed the asbestos in WS04 is present at a significant/notable concentration of 0.232%. Loose chrysotile fibres were identified within WS04 at 0.10m begl with Made Ground containing brick, concrete, ceramic and glass. Subsequent Asbestos quantification analysis has confirmed the asbestos in WS04 is present at a significant/notable concentration of 0.232%. A total of thirty eight samples of the Made Ground have been screened for Asbestos across the two phases of investigation. Given the density of samples that have been screened, we have sufficient confidence to suggest that the one positive identification is an isolated hotspot and not representative of the wider Made Ground, despite the Made Ground having similar descriptions in other areas. The presence of potential Asbestos elsewhere cannot be of course ruled out, however the potential for it to be present is now considered low. Again this position is only possible due to the density of the sample data set. We consider that the identified Asbestos is present as a result of the importation of crushed demolition arisings from an off-site source, used to form the surfacing for the temporary compound on site. It would be beneficial for the client to insist that the Asbestos impacted Made Ground materials be removed from site prior to acquisition, as clearly, Asbestos impacted Made Ground materials have been imported to site without sufficient measures or controls in place by the recent site occupiers.
Ground Gas Risk Assessment	In line with the recommendations provided in CIRIA 665, a GSV of 0.0040l/hr has been calculated for carbon dioxide. Based on the GSV, the site is likely to be classified as 'Characteristic Situation 1' (Very Low Risk) in accordance with CIRIA Report C665, whereby no ground gas protection measures are required. However, given the timescales provided by the client, it was not possible to undertake one of the monitoring visits during a low atmospheric pressure (<1000mb), therefore it would be prudent to undertake an additional monitoring visit during a low-pressure event in order to assess the worst-



	case gas conditions scenario. It would also be prudent to budget for incorporation of a basic gas protection membrane at this stage, until this additional visit has been undertaken. No Radon protective measures are required for the site.
Waste Assessment	A level 1 waste characterisation of all the recorded chemical laboratory analysis results, with the exception of Asbestos in WS04 would indicate that the Made Ground on site would be classified as Non-Hazardous Waste. Further Waste Acceptance Criteria (WAC) analysis has been carried out on a single sample of Made Ground from WS01 at 0.20m begl, which would further indicate that an Inert Waste classification, which is a sub-category of Non-Hazardous may also be appropriate. However, given the presence of asbestos fibres at 0.232% within Made Ground in WS04 at 0.10m begl, this material would likely attract a Hazardous Waste classification. The material within the defined area around WS04 should be excavated and removed from site. Given the presence of asbestos fibres within the Made Ground, it is recommended that any excavated material from site should be stockpiled and sampled prior to removal to facilitate further waste classification and WAC analysis to confirm the materials' classification. The natural strata on site would be classified as default Inert Waste.
Geotechnical Assessment	A conventional 'strip' or 'pad' type foundation is likely to be an appropriate foundation solution for the proposed Lidl store, together with a suspended floor slab. A minimum founding depth of 1.50m begl is considered appropriate taking account of suitable bearing characteristics of the underlying River Terrace Deposits and the likely proposed loadings. As a guide for a 0.60m wide strip foundation taken down to a depth of 1.50m, a net allowable bearing pressure of at least 100kN/m² would be appropriate. For a 2.00m by 2.00m pad foundation at this depth, 110kN/m² would be appropriate. Given the presence of horizontally and vertically intermittent cohesive content within the River Terrace Deposits, it is recommended that horizontal reinforcement is utilised within the foundations to mitigate the impacts of differential settlement. If a raft type foundation is utilised for the proposed store foundation, then this would further mitigate the impact of differential settlement.
Recommendations	• Undertake a gas monitoring visit during a low atmospheric pressure event, to assess the worst-case gas generation scenario. • Submission of this report and assessment to the Local Authority Environmental Health/Contaminated Land Officer and water supply authority.



1 Introduction

Obsidian Geo-Consulting Ltd (Obsidian) was commissioned by Lidl Great Britain Limited (the Client) to carry out a Geo-Environmental Ground Investigation and Assessment for their proposed site at Stoneham Lane, Eastleigh.

The development proposals include the construction of a new Lidl store, access, car park and peripheral soft landscaping. The store will be located in the north of the site with the car park in the south, with access to the site situated at the western boundary.

For the preparation of this document, we have been provided with the following plans:

- EDI Surveys Ltd buried utilities survey drawing ref. 20152/T/01-01 dated December 2021.
- One Design Architects Ltd Proposed Site Plan Ref. 20321-AD-110, dated May 2022.

Obsidian have previously undertaken a Geo-Environmental Desk Study for the site as detailed in the Obsidian Geo-Environmental Desk Study Report Ref. 21-1500-P-R1-A dated 28th July 2022.

The first issue of this Geo-Environmental Investigation report was issued in May 2022. The initial investigation and assessment identified a potential risk from the presence of Asbestos within the Made Ground at exploratory hole position WS04. The client subsequently commissioned a supplementary investigation to further assess the presence of Asbestos on site by obtaining additional samples for Asbestos screening at a laboratory.

In addition, Obsidian was also made aware by the planning consultant for the project that the proposed layout and planning boundary for the site had been changed. The report was therefore issued as Revision A, dated 28th July 2022 and included the findings of the supplementary Asbestos investigation and assessment and the updated, proposed layout plan.

Obsidian was subsequently made aware in August 2022 that the proposed layout drawing had been changed to the drawing referenced above, however there is no revision referenced on the drawing. This report has therefore issued as Revision B, dated 16th August 2022.

1.1 Objective

The objective of this assessment is to support the planning application for the development of the site by identifying any potentially significant constraints to future proposed developments associated with the likely ground conditions prevalent beneath the site and the surrounding area and to identify any potential areas of environmental liability or geotechnical constraints associated with the site.

1.2 Scope

This assessment was carried out to an agreed brief as set out in Obsidian's proposal (ref. BM/21-1500-Q/L001, dated 20th July 2021). The instructed scope of works includes the following:

- Two days of window sampling using a tracked window sampling rig.
- Installation of four gas/groundwater monitoring wells and four return gas monitoring visits.
- Four TRL probes to calculate CBR values.
- Chemical laboratory analysis of selected soil samples.
- Geotechnical laboratory analysis of selected soil samples.
- Production of a geo-environmental interpretative report.



1.3 Limitations

This report has been prepared by Obsidian with all reasonable skill, care and attention within the terms of the Contract with the Client and taking account of the information made available by the Client, as well as the manpower and resources devoted to it by agreement with the Client. Obsidian disclaims any responsibility to the Client and others in respect of any matters outside the scope of the above Contract.

This report has been produced on behalf of the Client and no responsibility is accepted to any Third Party for all or any part. This report should not be relied upon or transferred to any other parties without the express written authorisation of Obsidian. If any unauthorised Third Party comes into possession of this report, they rely on it at their own risk and the authors owe them no duty of care or skill.

Any plans appended to this report should not be used for scaling purposes.

2 The Site

2.1 Site Location

The site is broadly square in dimension; however the south-east boundary of the site is arced. The site is shown on the appended Site Location Plan (21-1500-P/001/A), and centred on National Grid Reference 444170, 117580. The nearest postcode to the site is: SO50 9SB.

2.2 Site Description

The site is surrounded to the west, north-west, and north by developments, some of which have not long been constructed, and as a result the site has recently been used as a construction compound.

The site is bounded by wooden hoarding with access via a lockable steel gate in the north-western corner.

A significant amount of surface debris is present with small stockpiles of waste construction materials and a stockpile of soil in the north of the site. It would appear that a significant volume of granular Made Ground has been imported and compacted across the site surface to create a compound and set-down areas. Some localised, surface ponding is present within the south of the site.

Some service inspection covers are visible as well as some peripheral excavations, assumed to be the termination points for new, buried services entering the site.

During the supplementary investigation, it was observed that the site was being used to store equipment being used by a civils contractor working off-site and that additional stockpiles of excavated arisings had been deposited on site as a result of some street works excavations that were taking place just outside the site. We understand the stockpiles were to be temporary and the contractor was doing so with the permission of the current site owner.

3 Review of Previous Desk Study Report

The site has been the subject of a previous Geo-Environmental Desk Study:

- Obsidian Geo-Consulting Limited, Geo-Environmental Desk Study Report 21-1500-P-R1-A dated 28th July 2022.

The salient points of the Desk Study are detailed within the following sections.



3.1 Site History

A review of the available historical maps from 1868 indicate that the site has remained an open field and later, a sports pitch. More recently, the site has been used as a site compound for the adjacent construction work to the north and west.

3.2 Geology, Hydrogeology and Hydrology

3.2.1 Geology

The mapped superficial and bedrock geological succession is summarised in Table 3.1 below:

Table 3.1: Geological Succession

Geology	Age	Stratigraphic Name	Description
Superficial Geology	Quaternary Period.	River Terrace Deposits (undifferentiated) - Sand and Gravel.	Superficial deposits formed in local environments dominated by rivers. Rivers were depositing mainly sand and gravel detrital material, to form floodplain alluvium.
Bedrock	Ypresian Age.	Thames Group - Clay, Silt, Sand and Gravel.	Sedimentary Bedrock formed approximately 34 to 56 million years ago in the Palaeogene Period. The local environment was previously dominated by shallow seas.

Made Ground deposits will be present in areas where ground improvement or drainage has been required as part of the sites use as a construction compound, or along the periphery of the site.

3.2.2 Hydrogeology

The site is within a Secondary A superficial aquifer designation, and the bedrock is designated as unproductive strata. The superficial aquifer is classified as having medium vulnerability.

Both the site and surrounding area do not contain any Source Protection Zones. The nearest water abstraction is >1600m from the site. The site is located within an area described as having potential for groundwater flooding to occur at surface.

3.2.3 Hydrology

There are 6 sizeable pools within the surrounding area of the site, five of which are within 500m of the site. Monks Brook runs to the east of the site, trending north to south, as well as various associated drains/small tributaries.

The site is not within an area which has a designated risk of flooding from surface water.

3.3 Environmental Considerations from Desk Study

The salient issues relating to the site and surrounding area are summarised below:

Potential low to medium level risks have been identified at this site, relating to identified human health receptors posed by the presence of localised metals, PAH, TPH, asbestos, herbicides and/or pesticides.

There is potential for elevated pH and water-soluble sulphate within near surface Made Ground, both on and off site, and low to medium level risk of Ground Gas from Made Ground, off-site pools, and off-site landfills.

No Radon protective measures are required for the site.

3.4 Geotechnical Considerations from Desk Study

Given the site proposals, and in view of the published geology and the expected ground conditions, it is likely that conventional strip or trench fill foundations will be appropriate for the proposed



buildings. The depth of Made Ground, topsoil and the strength of underlying natural soils should be assessed to determine this. If a significant thickness of Made Ground or strata with poor bearing capacities are present, a deeper foundation solution, such as piles may be a more suitable option.

There is the potential for elevated water-soluble sulphate concentrations to be present in any Made Ground and strata underlying the site. The concrete classification required for any foundation solution should therefore be assessed accordingly.

3.5 Preliminary Conceptual Site Model

The preliminary Source-Pathway-Receptor relationships identified during the Desk Study are summarised as follows:

Table 3.2: Preliminary Source-Pathway-Receptor Relationships

Source Material/Activity	Potential Contaminant	Pathways	Receptor	Risk
Off-site pools.	Methane, Carbon Dioxide, Carbon Monoxide, Hydrogen Sulphide.	Migration of Ground Gas/vapours.	Future site workers, Customers, Construction workers.	Low-medium.
On-site Made Ground.	Methane, Carbon Dioxide, Carbon Monoxide, Hydrogen Sulphide.	Migration of Ground Gas/vapours.	Future site workers, Customers, Construction workers.	Low-medium.
	Asbestos containing materials.	Inhalation.	Future site workers, customers, construction workers.	Low-medium.
	Metals, TPH, PAH.	Inhalation, dermal contact, ingestion.	Future site workers, customers, construction workers.	Low-medium.
	PAH, TPH.	Direct contact.	Water supply pipes.	Low-medium.
	Water-soluble sulphate.	Aggressive attack.	Buried concrete.	Low-medium.
On-site topsoil.	Herbicides and pesticides	Inhalation, Ingestion, Dermal contact	Future site workers, Customers, Construction workers.	Low.
On-site soil stockpile.	Asbestos containing materials.	Inhalation.	Future site workers, Customers, Construction workers.	Low.
	Metals, TPH, PAH.	Inhalation, dermal contact, ingestion.	Future site workers, Customers, Construction workers.	Low.
	PAH, TPH.	Direct contact.	Water supply pipes.	Low.
	Water-soluble sulphate.	Aggressive attack.	Buried concrete.	Low.
	Herbicides and pesticides	Inhalation, Ingestion, Dermal contact	Future site workers, Customers, Construction workers.	Low.
Made Ground Off-site.	Metals, TPH, PAH.	Inhalation, dermal contact, ingestion.	Future site workers, customers, construction workers.	Low-medium.
On-site burnt material.	Metals	Dermal contact, ingestion, inhalation.	Construction workers.	Low
Off-site landfill.	Methane, Carbon Dioxide, Carbon Monoxide, Hydrogen Sulphide.	Migration of Ground Gas/vapours.	Future site workers, Customers, Construction workers.	Low-medium.
	Metals, PAH, TPH.	Migration of Mobile Contaminants	Future site workers, Customers, Construction workers	Low.



4 Investigation Methodology

4.1 Objective

The objective of this assessment is to support the planning application for the development of the site by identifying any potentially significant constraints to future proposed developments associated with the likely ground conditions prevalent beneath the site and the surrounding area and to identify any potential areas of environmental liability or geotechnical constraints associated with the site.

4.2 Clearance of Underground Services

All exploratory holes were positioned in order to avoid known services marked on the subsequent EDI Surveys Ltd buried utilities survey plan. In addition, all exploratory hole locations were scanned on site by Obsidian using a cable avoidance tool (CAT) and signal generator (Genny).

4.3 Exploratory Holes

4.3.1 Original Investigation – April 2022

Ten window sample boreholes (WS01-WS10) were advanced across the site to depths of up to 5.00m begl using a small, tracked, light percussion window sampling rig between 26th and 27th April 2022.

Eight TRL DCP's (DCP01, DCP01A, DCP01B, DCP02, DCP02A, DCP02B, DCP03 and DCP04) were undertaken within proposed car parking and access areas in order to calculate CBR values.

Gas and groundwater monitoring wells were installed within WS01, WS04, WS07 and WS10 to depths of 1.80m, 3.50m, 1.60m and 2.50m begl, respectively. The wells were constructed using 32mm HDPE plain pipe in a bentonite seal from existing ground level to depths of 1.00m begl and 32mm HDPE slotted pipe in a gravel surround to the base of the pipes. The wells were fitted with a gas tap assembly at ground level suitable for connection to proprietary gas monitoring equipment and a lockable cover at ground level to provide protection. The other exploratory holes were backfilled with arisings and reinstated at surface.

4.3.2 Supplementary Asbestos Investigation – June 2022

Following the identification of Asbestos and assessed risk during the original investigation and assessment, the client instructed two further days of investigation works to obtain a higher density of samples that could be screened for the presence of Asbestos.

A further fifteen window sample boreholes (WS101-WS115) were advanced across the site to depths of up to 2.00m begl using a small, tracked, light percussion window sampling rig between 30th June 2022 and 1st July 2022.

The approximate locations of the exploratory holes are shown on the appended Exploratory Hole Location Plan-Supplementary Investigation (21-1500-P/004/A).

4.4 Logging and Sampling

Engineer's logs of the strata encountered were developed in accordance with BS EN ISO 14688 and BS EN 14689 and copies are presented as Appendix B.

Standard Penetration Tests (SPT's) were taken at regular intervals within the window sample boreholes to provide 'N' values for empirical assessment of strength and density parameters of the strata.



Environmental soil samples and small disturbed soil samples were taken at selected depths in all exploratory holes, placed in appropriate containers and submitted for chemical and geotechnical laboratory testing.

4.5 Chemical Laboratory Analysis

Selected soil samples were subjected to appropriate chemical testing at the MCERTS and UKAS accredited laboratory of i2 Analytical for a suite of potential contaminants taking account of the Preliminary Conceptual Site Model and site observations. The scheduled chemical laboratory analyses of soils are summarised in Tables 4.1 and 4.2 below:

Table 4.1: Scheduled Chemical Laboratory Analysis – Original Investigation

Analysis Type	Number of Samples
Metals	8
PAH	8
Asbestos Screen	8
Asbestos Quantification	1
TPH CWG	2
BTEX and MTBE	2
Soil Organic Matter	6
Pesticides	2
Herbicides	2
Waste Acceptance Criteria	1

Table 4.2: Scheduled Chemical Laboratory Analysis – Supplementary Asbestos Investigation

Analysis Type	Number of Samples
Asbestos Screen	30

The results of the chemical laboratory analysis are presented in Appendix C.

4.6 Geotechnical Laboratory Analysis

Selected soil samples were subjected to appropriate geotechnical testing at the UKAS accredited laboratories of i2 Analytical. The scheduled geotechnical laboratory analysis is summarised in Table 4.2 below:

Table 4.3: Scheduled Geotechnical Laboratory Analysis

Analysis Type	Number of Samples
pH	18
Water Soluble Sulphate	18

The results of the pH and water-soluble sulphate testing are included with the chemical testing results presented as Appendix C.

5 Results of Investigation

5.1 Recorded Strata

The ground conditions encountered in the exploratory holes across the site typically comprised a relatively consistent thickness of Made Ground with a variable composition overlying medium dense to very dense, typically granular River Terrace Deposits.

5.1.1 Made Ground

Made Ground was encountered from surface within all exploratory holes across the site. The surface Made Ground typically comprised an imported granular material comprising brick, bitumen, metal, glass, wood, chert, ceramic, concrete, tile and localised ash deposits. Organic materials were also



encountered locally (namely WS07 and WS10) and were typically accompanied with an organic odour. This surface material was encountered to depths of between 0.30m and 1.30m begl and is likely to be associated with the formation of a compacted surface layer for site access routes, cabins and set-down areas when used as a construction compound during the development of the adjacent areas.

Beneath this surface layer, a reworked natural material was encountered locally (WS04, WS08, WS09 and WS10, WS103) containing anthropogenic materials (predominantly brick), which was encountered to depths of between 0.65m and 1.50m begl. A reworked topsoil material containing organic and anthropogenic materials was encountered between 0.35m and 0.50m begl in WS01. This topsoil material is likely to be a remnant of the former site, prior to the presence of the construction site compound.

5.1.2 River Terrace Deposits

River Terrace Deposits were encountered across the site beneath the Made Ground to a maximum investigation depth of 5.00m begl. Typically, the River Terrace Deposits can be divided into to three different strata, gravelly clays and sands, gravels and sand with depth. Directly beneath the Made Ground, gravelly clays and sands with rootlets were encountered variably across the site to depths of between 0.70m and 1.10m begl. These materials are underlain by medium dense to very dense sandy and clayey gravels to depths of 2.70m to 3.70m begl. Beneath these gravels in WS02, WS03, WS04 and WS06 is a brown, silty, slightly clayey sand, which was encountered to a maximum investigation depth of 5.00m begl.

5.1.3 London Clay Formation

The London Clay Formation was not encountered within the maximum investigation depth of 5.00m begl.

5.2 Standard Penetration Tests (SPT's)

SPT's were undertaken within the window sample boreholes at regular intervals. The recorded, uncorrected SPT 'N' Values are summarised in Table 5.1 below:

Table 5.1: Uncorrected SPT 'N' Values

Depth (m) below existing ground level	Exploratory Hole													
	WS01	WS02	WS03	WS04	WS05	WS06	WS07	WS08	WS09	WS10	WS105	WS113	WS114	WS115
1.00	18	18	16	18	28	28	30	27	20	14	20	19	28	19
1.60	-	-	-	-	-	-	>50	-	-	-	-	-	-	-
2.00	27	25	13	14	>50	20	-	21	18	23	23	24	14	-
2.80	>50	-	-	-	-	-	-	-	-	-	-	-	-	-
3.00	-	28	19	11	-	11	-	>50	>50	>50	-	-	-	-
4.00	-	>50	>50	27	-	>50	-	-	-	-	-	-	-	-
4.50	-	-	-	>50	-	-	-	-	-	-	-	-	-	-

-	No Data
	Made Ground
	River Terrace Deposits

The 'N' Values highlight the presence of River Terrace Deposits comprising medium dense gravels and sand becoming very dense with depth (N=11 to N=>50) with localised Made Ground in WS10 (N=14) and WS105 (N=20) between 1.00 and 1.50m begl.



5.3 Groundwater Observations

During the drilling works groundwater was only encountered within WS03 at a depth of 3.00m begl. No groundwater was encountered within any of the wells during the subsequent monitoring programme.

5.4 Chemical Laboratory Analysis Results

The results of the chemical laboratory analysis have been reviewed and screened in line with the current legislative framework and criteria to assess the risk to human health.

The screening has been undertaken using the Obsidian OB-Screen Human Health Screening Tool which compares the recorded concentrations to the DEFRA 'Category 4 Screening Levels' (C4SL's) and the LQM/CIEH 'Suitable 4 Use Levels' (S4UL's) to be protective of human health. Where C4SL's and S4UL's are not available, the EIC/AGS/CL:AIRE Generic Assessment Criteria (GAC's) have been used. Given the proposals, the Commercial end use scenario has been adopted.

Soil Organic Matter (SOM) analysis has been undertaken to determine the most appropriate screening values for organic contaminants. Screening values relating to 1.0% have been adopted for the screening assessment.

The results of the screening assessment are presented in Appendix D.

5.4.1 Metals

Eight samples have been analysed for metals. None of the recorded concentrations exceed their adopted screening values.

5.4.2 Total Cyanide and Phenol

Eight samples have been analysed for total cyanide and phenol. None of the recorded concentrations exceed their adopted screening values.

5.4.3 PAHs

Eight samples were analysed for a suite of speciated PAH's. None of the PAH compounds were recorded at concentrations above their adopted screening values.

5.4.4 TPH CWG

Two samples were analysed for TPH CWG. None of the fractions were recorded at concentrations above their adopted screening values.

5.4.5 BTEX and MTBE

Two samples were analysed for BTEX and MTBE. None of the tested compounds were recorded at concentrations above their adopted screening values.

5.4.6 Herbicides

Two samples were analysed for a suite of Herbicides. None of the tested herbicides were recorded at concentrations above their lower laboratory limit of detection.

5.4.7 Pesticides

Two samples were analysed for a suite of pesticides. None of the tested pesticides were recorded at concentrations above their lower laboratory limit of detection.

5.4.8 Asbestos

During the original investigation, eight samples were screened for the presence of fibrous asbestos materials. A single sample from WS04 at 0.10m begl, returned a positive identification for loose Chrysotile Asbestos fibres.



Subsequent Asbestos quantification analysis has confirmed the asbestos in WS04 is present at a significant/notable concentration of 0.232%.

Although asbestos identified with WS04 had only been identified within imported Made Ground in one exploratory hole location, the presence of what appeared to be imported Made Ground materials with a similar profile across the site would suggest that although not detected elsewhere during the original investigation, asbestos could have been present across other areas of the site and between exploratory hole positions.

Obsidian returned to site to undertake further ground investigation works and as a result, scheduled Asbestos screening on thirty further samples of Made Ground from locations between the previous investigation locations. The further analysis did not identify any further Asbestos. WS04 therefore remains the only location where Asbestos has been positively identified.

5.5 Geotechnical Laboratory Analysis Results

A total of eighteen samples were tested for pH and water-soluble sulphate. Due to the predominantly granular nature of the encountered ground conditions, no samples were tested for natural moisture content and plasticity index.

5.5.1 pH and Water-Soluble Sulphate

Of the eighteen samples tested, eight were from Made Ground and ten were from the natural strata. The results are summarised in Table 5.2.

Table 5.2: pH and Water-Soluble Sulphate Results Summary

Analysis	Made Ground		Natural Strata	
	Min Value	Max Value	Min Value	Max Value
pH	5.8	10.1	6.0	8.1
Water-Soluble Sulphate	39.1mg/l	944mg/l	4.3mg/l	70.2mg/l

The results of the pH and water-soluble sulphate testing indicate that the risk posed to future buried concrete structures in the natural strata is low, the risk to concrete structures within the Made Ground is medium.

5.6 Ground Gas Monitoring Results

Gas monitoring results have been compared to guidance presented in CIRIA Report C665, Assessing Risks Posed by Hazardous Ground Gases to Buildings, 2007.

CIRIA C665 indicates that ground gas protection measures may be necessary in new buildings on sites where methane concentrations exceed a threshold value of 1% v/v and/or where carbon dioxide concentrations exceed a threshold value of 5% v/v. The gas flow rate is also considered in the required level of protection.

Maximum methane (CH₄) and carbon dioxide (CO₂) concentrations, as percentage volume in air (%v/v), minimum oxygen (O₂) concentrations (%v/v), maximum carbon monoxide (CO) and hydrogen sulphide (H₂S) concentrations, in parts per million (ppm), and gas flow rates in litres per hour (l/hr) have been monitored in the four monitoring wells on four occasions.

The ground gas monitoring results are presented in Appendix D and the results are summarised in Table 5.3.

Table 5.3 Ground Gas/Groundwater Monitoring Results Summary

Well	Methane Concentrations (% v/v)	Carbon Dioxide concentrations (% v/v)	Flow Rates (l/hr)
WS01	<0.1	0.8 – 4.8	<0.1
WS04	<0.1	0.7 – 2.2	<0.1



Well	Methane Concentrations (% v/v)	Carbon Dioxide concentrations (% v/v)	Flow Rates (l/hr)
WS07	<0.1	0.5 – 2.7	<0.1
WS10	<0.1	0.1 – 4.4	<0.1

During the gas monitoring programme, no positive flow rates were observed, and atmospheric pressure ranged between 1013mb and 1024mb.

6 Environmental Assessment

6.1 Soil

Representative soil samples from across the site have been scheduled for a suite of analyses. The analysis has included a suite comprising Metals, Cyanide, Phenol, PAHs, TPH, BTEX, MTBE, pesticides, herbicides and Asbestos.

The results of the analysis have been reviewed and compared against appropriate screening criteria for Human Health within a Commercial end use scenario. None of the recorded concentrations for Metals, Cyanide, Phenol, PAHs, TPH, BTEX, MTBE, pesticides or herbicides exceeded their respective screening values.

Loose chrysotile fibres were identified within WS04 at 0.10m begl with Made Ground containing brick, concrete, ceramic and glass. Subsequent Asbestos quantification analysis has confirmed the asbestos in WS04 is present at a significant/notable concentration of 0.232%. A total of thirty eight samples of the Made Ground have been screened for Asbestos across the two phases of investigation. Given the density of samples that have been screened, we have sufficient confidence to suggest that the one positive identification is an isolated hotspot and not representative of the wider Made Ground, despite the Made Ground having similar descriptions in other areas. The presence of potential Asbestos elsewhere cannot be of course ruled out, however the potential for it to be present is now considered low. Again this position is only possible due to the density of the sample data set.

We consider that the identified Asbestos is present as a result of the importation of crushed demolition arisings from an off-site source, used to form the surfacing for the temporary compound on site.

It would be beneficial for the client to insist that the Asbestos impacted Made Ground materials be removed from site prior to acquisition, as clearly, Asbestos impacted Made Ground materials have been imported to site without sufficient measures or controls in place by the recent site occupiers.

Based on the concentration levels in WS04, the Made Ground in this area is likely to attract a Hazardous Waste Classification given it is more than twice the accepted Hazardous Waste threshold of 0.1%. Further testing may enable the volume to be reduced. Given the location of the proposed store, it is likely that the excavations undertaken to construct the proposed store will interact with the Asbestos impacted Made Ground. To facilitate this, we have assessed the area in and around WS04 with additional exploratory holes WS101 to WS105 encircling the area, forming a pentagon shaped area as shown on the appended Asbestos Impacted Made Ground Plan ref. 21-1500-P/005/A.

Locations WS101 to WS105 all recorded negative for Asbestos at multiple depths through the Made Ground profile. Based on the data available, if the worst case scenario for the Asbestos impacted area projects outwards from WS04 to each of these five locations, then for indicative purposes and for the targeting of excavation and off-site removal, the Asbestos impacted area is approximately 335m². We anticipate that this will translate to a volume of approximately 270m³. In addition, with reference to the attached plan, there is a split in ground level mid-way through the impacted area.



The Asbestos was identified within the lower area and so to further delineate and potentially reduce the total volume removed, it may be possible to excavate the area labelled as Area A initially, shown on the attached plan and remove this from site as Hazardous Waste, and then undertake some further spot checks with some Asbestos screening along the interface with the raised area marked as Area B. If the results come back negative, then again, using the density of the test data as a guide, it may be possible that excavations can be terminated, with no further excavation works needed in the area we have marked as Area B. This may reduce the total volume removed as Hazardous Waste to approximately 170m³.

A procedure should be put in place during any earthworks that should any suspected Asbestos be visually identified elsewhere on site; a Geo-Environmental specialist should be contacted immediately so that further assessment can be undertaken.

As a precautionary measure, in the proposed, peripheral soft landscaped areas, where Made Ground is anticipated to remain following rationalisation of final development formation levels, consideration should be given for the soft landscaping to include a high visibility geotextile, overlain by 450mm of clean verified topsoil/sub-soil.

The results of the pH and water-soluble sulphate testing indicate that the risk posed to future buried concrete structures is low to medium. This is further discussed in Section 7.4.

6.2 Ground Gas Risk Assessment

The preliminary risk assessment from the Desk Study identified the ground gas risk to be low to medium for generation of gases from Made Ground and superficial deposits. To date, four gas monitoring visits have been undertaken.

A maximum carbon dioxide concentration of 4.8% v/v has been recorded during the monitoring visits. No flow has been detected above the instrument lower detection limit of 0.1l/hr.

The maximum carbon dioxide concentration of 4.8% v/v and a gas flow rate of 0.1l/hr have been selected to calculate an initial Gas Screening Value (GSV) for the site in accordance with CIRIA Report C665 to determine the required level of carbon dioxide protection measures for the proposed future site development.

The GSV is calculated as follows:

$$\text{GSV} = (\text{Gas Concentration}/100) \times \text{Flow Rate}$$

In line with the recommendations provided in CIRIA 665, a GSV of 0.0040l/hr has been calculated for carbon dioxide. Based on the GSV, the site is likely to be classified as 'Characteristic Situation 1' (Very Low Risk) in accordance with CIRIA Report C665, whereby no ground gas protection measures are required.

However, given the timescales provided by the client, it was not possible to undertake one of the monitoring visits during a low atmospheric pressure (<1000mb), therefore it would be prudent to undertake an additional monitoring visit during a low-pressure event in order to assess the worst-case gas conditions scenario. It would also be prudent to budget for incorporation of a basic gas protection membrane at this stage, until this additional visit has been undertaken.

No Radon protective measures are required for the site.



6.3 Revised Conceptual Site Model

The revised Conceptual Site Model based on the information obtained from the intrusive investigation, the Human Health Risk Assessment and Ground Gas Risk Assessment has confirmed that the potential pollutant linkages in Table 6.1 remain.

Table 6.1: Preliminary Source-Pathway-Receptor Relationships

Source Material/Activity	Potential Contaminant	Pathways	Receptor	Risk
Asbestos identified within Made Ground in WS04	Asbestos containing materials	Inhalation	Future site workers, Customers, Construction workers	Low
Made Ground and Natural Strata	Carbon Dioxide	Migration of Ground Gas/vapours.	Future site workers, Customers, Construction workers.	Low (pending further monitoring at low atmospheric pressure)

6.4 Health and Safety

The Principal Contractor should provide an assessment of the appropriate procedures required to protect site workers from the materials likely to be encountered at the site.

The following basic health and safety measures should be adopted as a minimum during the site development works:

- Basic Personal Protective Equipment (PPE) including hard hats, gloves, coveralls and steel toe-capped boots to be worn at all times;
- Eating, drinking and smoking to be forbidden except in designated mess areas; and
- Breathing equipment to be available for those working in confined or unventilated spaces.

If ground conditions should differ significantly from those encountered during the intrusive investigation, including the discovery of any visible or odorous contamination, site redevelopment works should be suspended until the suspect material has been inspected and assessed by a competent Geo-Environmental Engineer.

6.5 Waste Disposal

The reuse of soils as engineered fill should be undertaken in accordance with an appropriate Environment Agency licence as defined in the statutory guidance on the 'Definition of Waste' or CL:AIRE Code of Practice.

A level 1 waste characterisation of all the recorded chemical laboratory analysis results, with the exception of Asbestos in WS04 would indicate that the Made Ground on site would be classified as Non-Hazardous Waste. Further Waste Acceptance Criteria (WAC) analysis has been carried out on a single sample of Made Ground from WS01 at 0.20m begl, which would further indicate that an Inert Waste classification, which is a sub-category of Non-Hazardous may also be appropriate.

However, given the presence of asbestos fibres at 0.232% within Made Ground in WS04 at 0.10m begl, this material would likely attract a Hazardous Waste classification. The material within the defined area around WS04 should be excavated and removed from site.



Given the presence of asbestos fibres within the Made Ground, it is recommended that any excavated material from site should be stockpiled and sampled prior to removal to facilitate further waste classification and WAC analysis to confirm the materials' classification.

The natural strata on site would be classified as default Inert Waste.

6.6 Regulator Liaison

It is recommended that this report be submitted to the Local Authority Environmental Health Officer for review and comment prior to any irrevocable action taking place.

No specific risk has been identified for proposed water supply pipes; however, it is recommended that the results of this assessment are confirmed with the local water supply authority prior to any water supply pipes being installed.

6.7 Environmental Protection

The following environmental protection measures should be adopted as a minimum during the site redevelopment works:

- Covering or dampening of spoil to prevent the spread of dust;
- Containment of surface water runoff to prevent the pollution of surface water drains, sewers etc and;
- Cleaning and washing of boots, vehicle wheels and other equipment at site entry and exit points to prevent the spread of mud.

7 Geotechnical Assessment

7.1 Introduction

Ground conditions across the site are considered to be in line with the anticipated, published geology for the site and surrounding area.

The recorded SPT 'N' values taken from exploratory locations within proximity of the proposed building footprint are summarised in Table 7.1.

Table 7.1: Uncorrected SPT 'N' Values – Proposed Building Footprint

Depth (m) below existing ground level	Exploratory Hole									
	WS01	WS02	WS03	WS04	WS05	WS06	WS105	WS113	WS114	WS115
1.00	18	18	16	18	28	28	20	19	28	19
2.00	27	25	13	14	>50	20	23	24	14	-
2.80	>50	-	-	-	-	-	-	-	-	-
3.00	-	28	19	11	-	11	-	-	-	-
4.00	-	>50	>50	27	-	>50	-	-	-	-
4.50	-	-	-	>50	-	-	-	-	-	-

-	No Data
	Made Ground
	River Terrace Deposits



7.2 Foundations and Floor Slab

A conventional 'strip' or 'pad' type foundation is likely to be an appropriate foundation solution for the proposed Lidl store, together with a suspended floor slab. A minimum founding depth of 1.50m begl is considered appropriate taking account of suitable bearing characteristics of the underlying River Terrace Deposits and the likely proposed loadings.

As a guide for a 0.60m wide strip foundation taken down to a depth of 1.50m, a net allowable bearing pressure of at least 100kN/m² would be appropriate. For a 2.00m by 2.00m pad foundation at this depth, 110kN/m² would be appropriate.

Given the presence of horizontally and vertically intermittent cohesive content within the River Terrace Deposits, it is recommended that horizontal reinforcement is utilised within the foundations to mitigate the impacts of differential settlement. If a raft type foundation is utilised for the proposed store foundation, then this would further mitigate the impact of differential settlement.

In accordance with EC7, these values must be checked against the actual proposed factored foundation design loads. At this stage, the foundation loadings are not known.

7.3 Construction

Anticipated excavation depths should be readily achieved using conventional plant (wheeled back-actor or similar) within the Made Ground and natural strata.

Support must be provided for all excavations requiring entry by site workers in accordance with guidance presented in CIRIA Report 97 'Trenching Practice'.

It is considered unlikely that groundwater ingress will occur within the anticipated range of excavation on site.

7.4 Concrete Specification

The ground conditions, pH values and water-soluble sulphate concentrations have been assessed for potential aggressive attack on concrete in accordance with BRE Special Digest 1 'Concrete in Aggressive Ground (2005)'.

The results indicate that overall, the natural soils beneath the site fall within Design Sulphate Class DS-1 and ACEC (Aggressive Chemical Environment for Concrete) Class AC-1s. The mean of the highest two values within the Made Ground has provided a Design Sulphate Class DS-2 and ACEC Class AC-1s.

The specific concrete mixes for the DS Class to be used at the site will be determined, mindful of the ACEC Class, by the site-specific concrete requirements in terms of the required durability and structural performance. These are assessed in terms of the Structural Performance Level (SPL) and any Additional Protection Measures (APM).

7.5 Pavement Design

TRL DCP's were undertaken at four locations within the proposed parking areas. The TRL DCP results are included within Appendix F.

The in-situ TRL DCP data has been used to calculate the following values:

Table 7.2: Calculated In-situ CBR Values



TRL DCP Location	Depth Range	Strata	Calculated CBR %
DCP01B	0mm – 230mm	Made Ground	16
DCP01B	230mm – 350mm	Made Ground	10
DCP01B	350mm – 675mm	Made Ground	7
DCP01B	675mm – 865mm	Made Ground/Natural Strata	21
DCP04	0mm – 180mm	Made Ground	13
DCP04	180mm – 380mm	Made Ground	9
DCP04	380mm – 630mm	Made Ground	17
DCP04	630mm – 735mm	Made Ground	10
DCP04	735mm – 870mm	Natural Strata	7

Given the presence of significant gravel/cobbles of brick, concrete and other anthropogenic materials observed within the Made Ground, of the eight TRL DCPs undertaken, only two (DCP01B and DCP04) have provided values that are considered to be representative of site conditions. Calculated CBR values for the site have taken from the near surface Made Ground and the very top of the natural strata in these two locations. The calculated CBR values of between 7 and 21 with the Made Ground, highlight the variable composition of Made Ground across the site. A value of 7 within the natural strata is likely to be representative of the granular and gravelly nature of the near surface natural soils. Although CBR values are typically high, it is likely that the variability will deem the Made Ground to be unsuitable for pavement design. This material may require re-compaction or the importation of materials to supplement the design parameters.

The above calculated values should be taken as indicative only and should not be used for deriving a design CBR value.

Further proof testing of eventual, exposed formation levels will be required during the construction phase.

7.6 Soakaways

Soakaway testing has not been undertaken as part of this investigation or current instructed works, however proposals are being developed to undertake soakaway testing. It is however considered that given the prevalence of granular material across the site and the absence of any recorded groundwater it is likely that soakaways would be a viable drainage option for the site. Soakaway tests in accordance with BRE 365 will be undertaken in due course.

8 Recommendations

We recommend the following steps be taken to enable the proposed development to progress:

- Undertake a gas monitoring visit during a low atmospheric pressure event, to assess the worst-case gas generation scenario.
- Submission of this report and assessment to the Local Authority Environmental Health/Contaminated Land Officer and water supply authority.



Drawings





Key

 Site Location



Project:
Lidl, Stoneham Lane, Eastleigh

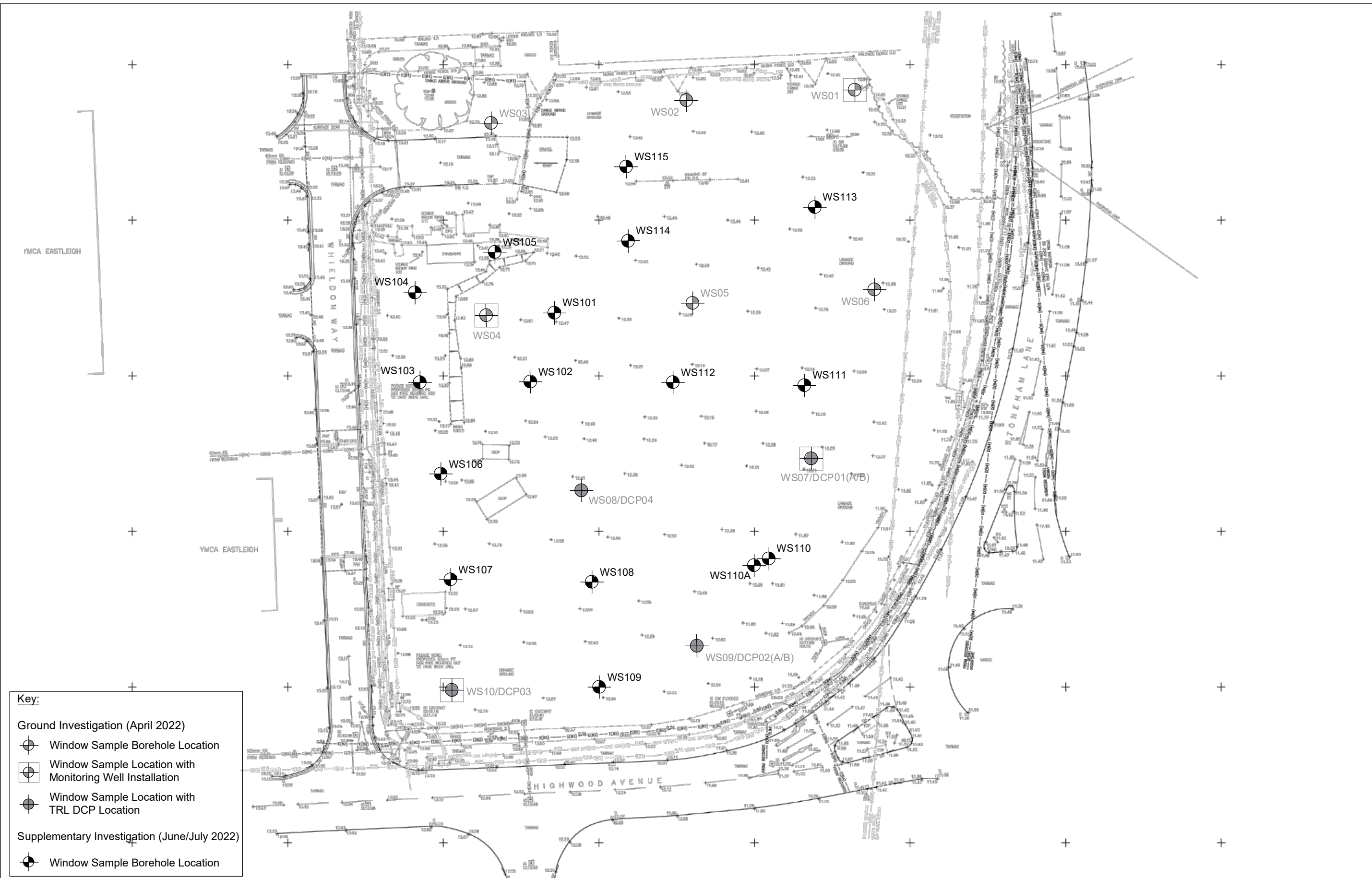
Title:
Site Location Plan

Project No: 21-1500-P

Drawing No: 001

Revision: A

Scale: NTS



Key:

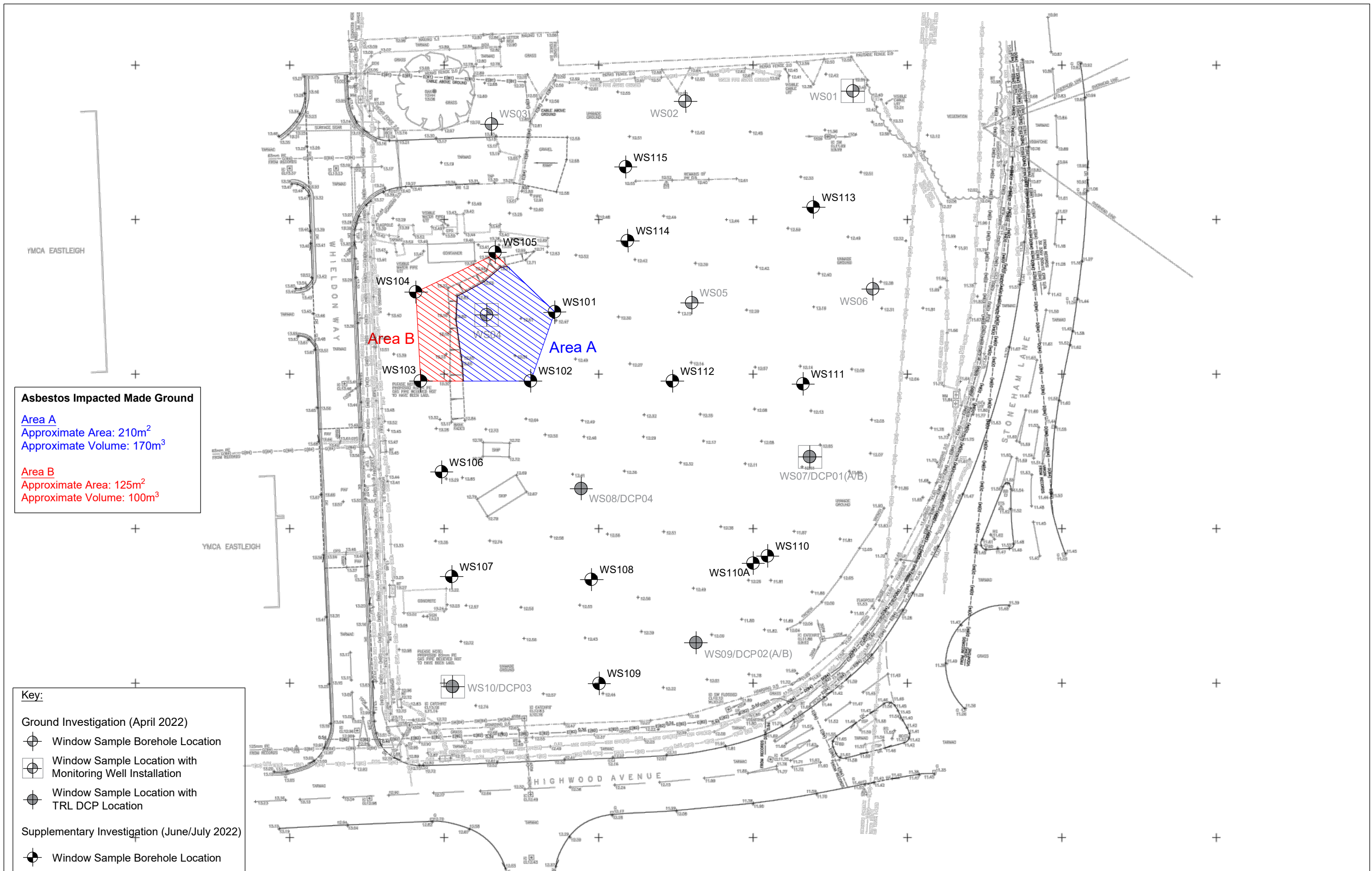
Ground Investigation (April 2022)

- Window Sample Borehole Location
- Window Sample Location with Monitoring Well Installation
- Window Sample Location with TRL DCP Location

Supplementary Investigation (June/July 2022)

- Window Sample Borehole Location

		PROJECT: Lidl, Stoneham Lane, Eastleigh		PROJECT NO: 21-1500-P	DRAWING NO: 004
		TITLE: Exploratory Hole Location Plan - Supplementary Investigation		REVISION: A	SCALE: NTS
				DRAWN BY: BM	DATE: 04/07/2022
				APPROVED BY: SMD	DATE: 04/07/2022



PROJECT:

Lidl, Stoneham Lane, Eastleigh

TITLE:

Asbestos Impacted Made Ground Plan

PROJECT NO: 21-1500-P

DRAWING NO: 005

REVISION: A

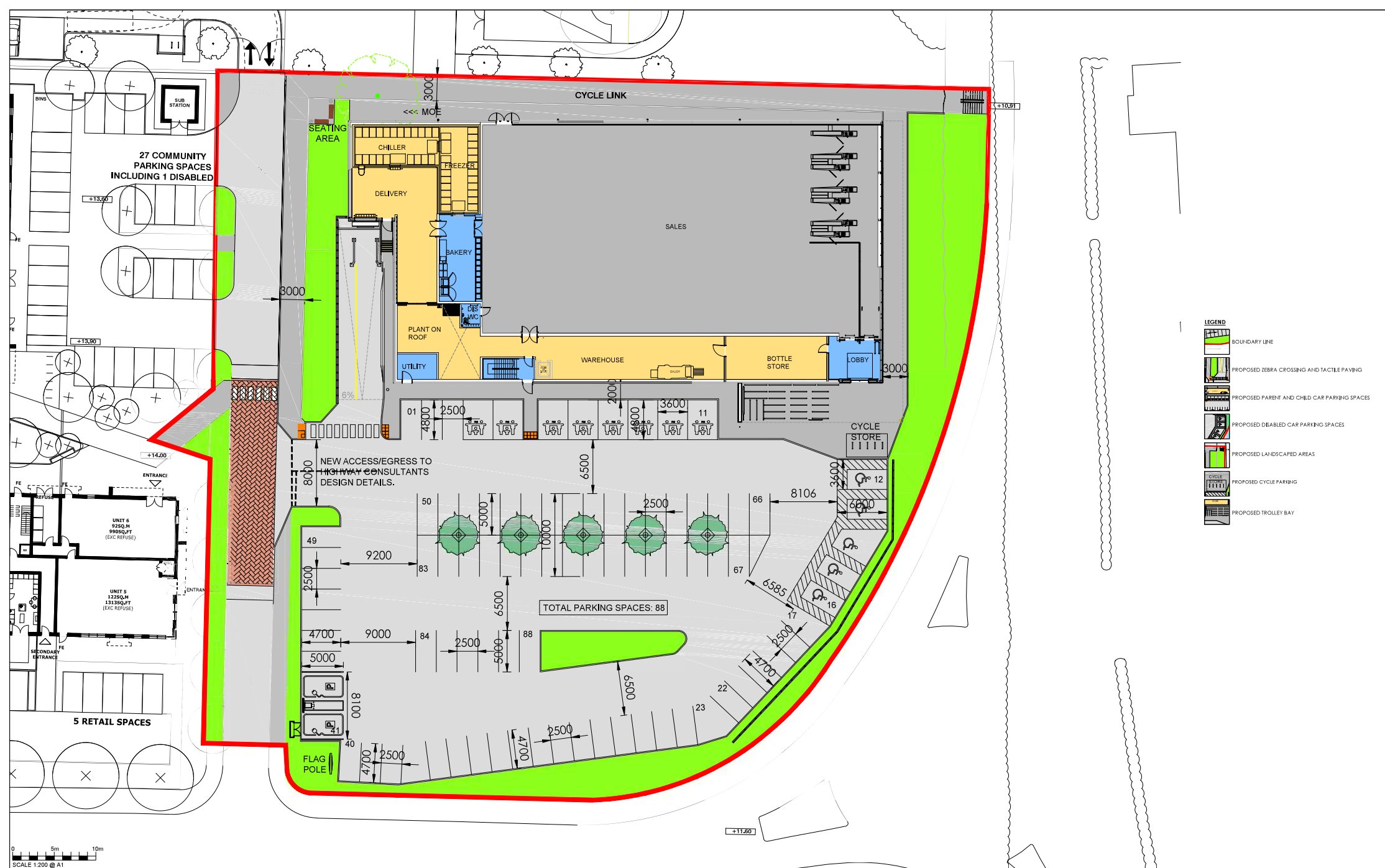
SCALE: NTS

DRAWN BY: BM

DATE: 22/07/2022

APPROVED BY: SMD

DATE: 22/07/2022



Appendix A
Photographic Record – Supplementary
Investigation





Photograph 1 – An example of the rig on position.



Photograph 2 – A view of some of the plant and materials being stored on site during the supplementary investigation.



Photograph 3 – A view of the excavated materials from off-site works being stockpiled on site during the supplementary investigation.



Photograph 4 – A view of the excavated materials from off-site works being stockpiled on site during the supplementary investigation.



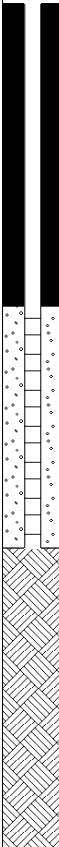
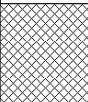
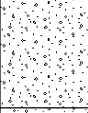
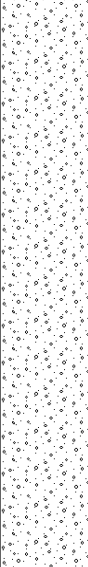
Appendix B

Exploratory Hole Records



Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 26/04/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS01	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.35 0.50 0.90	   	MADE GROUND: Comprising dark brown, slightly clayey, slightly silty, gravelly sand. Gravel is fine to coarse, subangular brick, chert, ceramic and occasional nails.	1 	

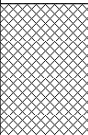
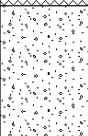
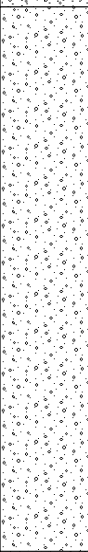
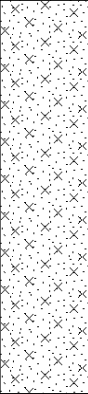
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 2.80m begl due to barrel and SPT refusal. 4. Gas and groundwater monitoring well installed as detailed above.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 26/04/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS02	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES	N=18 (4,5/4,5,5,4)	0.45			MADE GROUND: Comprising dark grey, very gravelly sand. Gravel is fine to coarse, subangular chert, concrete, glass and brick.	1
		0.60	ES					Brown, slightly clayey, silty, gravelly SAND with fine rootlets. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
		1.00	SPT		0.90			Medium dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
		1.50	D	N=25 (4,6/7,6,6,6)	2.70			Medium dense, becoming very dense, brown, very silty, locally clayey SAND. RIVER TERRACE DEPOSITS	3
		2.00	SPT						
		2.80	D						
		3.00	SPT	N=28 (6,6/5,7,7,9)					
		3.60	D						
		4.00	SPT	N=50 (11,10/50 for 265mm)	4.00				

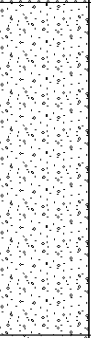
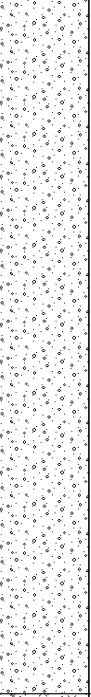
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 4.00 m begl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 26/04/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS03	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES		0.30			MADE GROUND: Comprising dark grey, very gravelly sand. Gravel is fine to coarse, subangular chert, ash, concrete, glass and brick.	1
		1.00 1.00	D SPT	N=16 (1,2/2,4,4,6)	1.40			Brown, slightly clayey, silty, gravelly SAND with fine rootlets. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
		2.00 2.00	D SPT	N=13 (3,3/3,4,3,3)				Medium dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	2
		3.00	SPT	N=19 (4,4/5,5,5,4)					3
		3.80 4.00	D SPT	N=50 (6,8/50 for 285mm)	3.70 4.00			Medium dense, becoming very dense, brown, very silty, slightly clayey SAND. RIVER TERRACE DEPOSITS	4
								End of Borehole at 4.000m	5

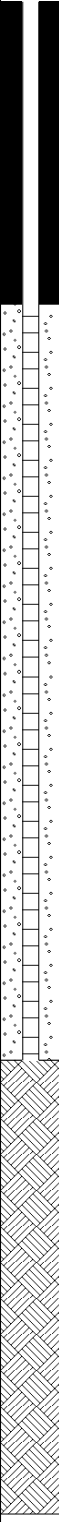
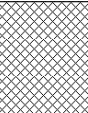
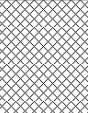
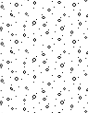
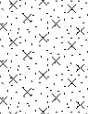
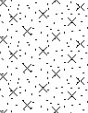
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater encountered at 3.00m begl during drilling. 3. Borehole terminated at 4.00 m begl due to SPT refusal. 4. Borehole collapse to 2.00m begl during drilling. 5. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

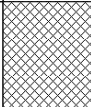
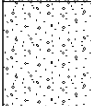
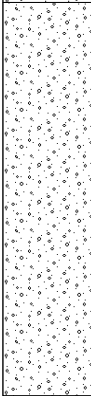
Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 26/04/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS04	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES					MADE GROUND: Comprising dark grey, very gravelly sand. Gravel is fine to coarse, subangular chert, ash, concrete, ceramic, glass and brick.	
		0.50	ES		0.40			MADE GROUND: Comprising reworked, brown, silty clay, with plastic.	
					0.80				
		1.00	SPT	N=18 (2,3/3,3,6,6)				Medium dense, brown, slightly clayey, silty, gravelly SAND with fine rootlets. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	1
		1.50	D		1.40				
		2.00	SPT	N=14 (4,4/4,4,3,3)				Medium dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	2
		3.00	SPT	N=11 (1,3/3,2,3,3)	3.00			Medium dense, becoming very dense, brown, very silty, slightly clayey SAND. RIVER TERRACE DEPOSITS	3
		3.50	D						
		4.00	SPT	N=27 (4,4/4,7,7,9)					4
		4.50	SPT	N=50 (11,13/50 for 220mm)					
					5.00				
End of Borehole at 5.000m									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole collapse to 3.50m begl. 4. Gas and groundwater monitoring well installed as detailed above.

		Percussion Drilling Log									
Project Name: Lidl, Stoneham Lane, Eastleigh				Client: Lidl Great Britain Ltd				Date: 26/04/2022			
Location:				Contractor: Obsidian Geo-Consulting Ltd							
Project No. : 21-1500-P				Crew Name: Exploration Ltd				Drilling Equipment: Tracked window sampling rig			
Borehole Number WS05		Hole Type WS		Level		Logged By BM		Scale 1:25		Page Number Sheet 1 of 1	
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description			
		Depth (m)	Type	Results							
		0.20	ES		0.35			MADE GROUND: Comprising dark grey, very gravelly sand. Gravel is fine to coarse, subangular chert, ash, concrete, ceramic, glass and brick.		1	
								Brown, slightly clayey, silty, gravelly SAND with fine rootlets. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS			
								Medium dense, becoming very dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS			
		1.00 1.00	D SPT	N=28 (6,6/7,7,7,7)							
		2.00	SPT	N=51 (9,13/51 for 210mm)	2.00		End of Borehole at 2.000m		2		
									3		
									4		
									5		
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation
Remarks											
1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 2.00 m begl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.											

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 26/04/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS06	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.30	ES					MADE GROUND: Comprising dark grey, very gravelly sand. Gravel is fine to coarse, subangular chert, ash, concrete, ceramic, glass and brick.	1
		0.60	ES						
					0.80			Dark brown, very clayey, locally gravelly SAND with rootlets, Gravel is fine to coarse, subangular chert.	
		1.00	SPT	N=28 (7,8/7,7,8,6)	1.00			RIVER TERRACE DEPOSITS	
								Medium dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert.	
		1.70	D					RIVER TERRACE DEPOSITS	
		2.00	SPT	N=20 (4,5/5,5,5,5)					
		2.60	D						2
		3.00	SPT	N=11 (2,3/2,3,3,3)	3.00				
								Medium dense, becoming very dense, brown, very silty, slightly clayey SAND.	3
		4.00	SPT	N=50 (8,9/50 for 275mm)	4.00				4
								End of Borehole at 4.000m	
									5

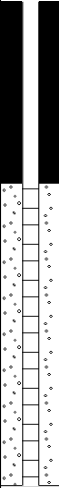
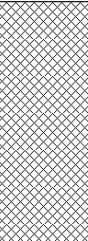
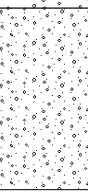
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 4.00 m begl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 27/04/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS07	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.50	ES					MADE GROUND: Comprising dark brown to black, clayey, locally gravelly sandy silt to organic silt. Gravel is fine to coarse, subangular brick, wood and organic material.	
		0.90	D		0.80			Brown, very clayey, slightly sandy GRAVEL of fine to coarse, subangular chert.	
		1.00	SPT	N=30 (5,7/7,7,8,8)	1.00			RIVER TERRACE DEPOSITS Dense, becoming very dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert.	1
		1.50	D						
		1.60	SPT	N=50 (10,12/50 for 275mm)	1.60				
								End of Borehole at 1.600m	2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks 1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 1.60m begl due to barrel and SPT refusal. 4. Gas and groundwater monitoring well installed as detailed above.										
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Date: 27/04/2022

Contractor: Obsidian Geo-Consulting Ltd

Drilling Equipment: Tracked window sampling rig

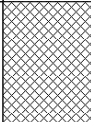
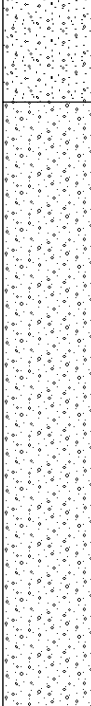
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Sheet 1 of 1[illegible]

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 3.00 m bgl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.



Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 27/04/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS09	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	ES					MADE GROUND: Comprising dark brown, gravelly clay with a slight organic odour. Gravel is fine to coarse, subangular brick, concrete, glass, chert, ceramic and rare organic material.	
					0.40				
					0.65				
		0.90	D						
		1.00	SPT	N=20 (4,5/4,5,5,6)	1.00			Brown, slightly clayey, silty, gravelly SAND. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	1
		1.50	D						
		2.00	SPT	N=18 (4,5/4,4,5,5)				Medium dense, becoming very dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	2
		2.50	D						
		3.00	SPT	N=50 (8,10/50 for 255mm)	3.00			End of Borehole at 3.000m	3
									4
									5

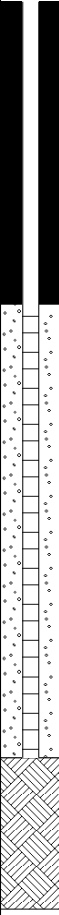
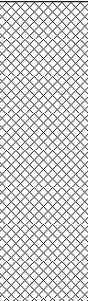
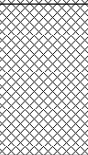
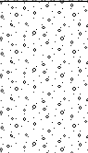
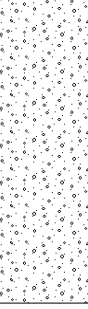
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 3.00 m begl due to SPT refusal. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 27/04/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS10	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

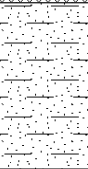
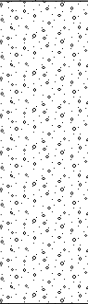
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	ES					MADE GROUND: Comprising dark brown, gravelly clay with a slight organic odour. Gravel is fine to coarse, subangular brick, concrete, glass, chert, ceramic and rare organic material.	
		0.60	ES						
		1.00	SPT	N=14 (2,3/2,4,4,4)	1.00			MADE GROUND: Comprising reworked, very silty, slightly gravelly clay with roolets. Gravel is fine, subangular chert.	1
		1.60	D		1.50			Medium dense, becoming very dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
		2.00	SPT	N=23 (5,6/6,6,5,6)					2
		2.80	D						
		3.00	SPT	N=50 (25 for 125mm/50 for 275mm)	3.00			End of Borehole at 3.000m	3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 3.00m begl due to SPT refusal. 4. Gas and groundwater monitoring well installed as detailed above.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS101	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	D		0.20			MADE GROUND: Comprising sandy gravel of fine to coarse, subangular brick, block and concrete.	1
		0.30	D		0.45			MADE GROUND: Comprising reworked dark brown, very silty, slightly clayey, slightly gravelly sand. Gravel is fine to coarse, subangular chert.	
					1.00			Brown, very clayey, slightly gravelly SAND with localised firm sandy clay. Gravel is fine to medium, subangular chert. RIVER TERRACE DEPOSITS	
					2.00			Brown, slightly clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
								End of Borehole at 2.000m	2
									3
									4
									5

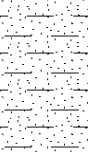
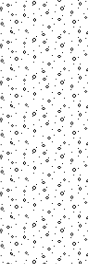
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS102	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.30			MADE GROUND: Comprising sandy gravel of fine to coarse, subangular brick, block and concrete.	1
		0.50	D		0.45			MADE GROUND: Comprising reworked dark brown locally black, very silty, slightly clayey, slightly gravelly sand. Gravel is fine to coarse, subangular chert.	
					1.10			Brown, very clayey, slightly gravelly SAND with localised firm sandy clay. Gravel is fine to medium, subangular chert. RIVER TERRACE DEPOSITS	
					2.00			Brown, slightly clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
								End of Borehole at 2.000m	2
									3
									4
									5

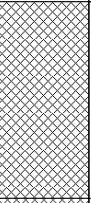
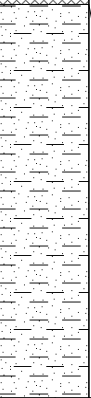
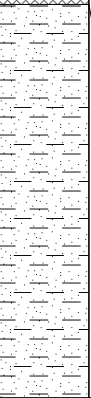
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS103	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

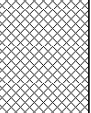
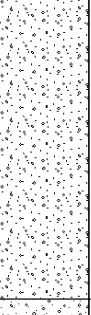
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.65 0.70			MADE GROUND: Comprising dark brown, clayey, gravelly sand. Gravel is fine to coarse, subangular limestone, brick, granite and concrete.	1
		0.50	D					MADE GROUND: Comprising reworked, dark brown, gravelly SAND. Gravel is fine to medium, subangular chert.	
		0.60	D					Firm, brown, slightly gravelly, sandy CLAY with horizons of very clayey SAND. Gravel is fine to medium, subangular chert. RIVER TERRACE DEPOSITS	
		1.60	D		2.00			End of Borehole at 2.000m	2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks 1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.										
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Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS104	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.05	D		0.10			MADE GROUND: Comprising brown, very gravelly sand. Gravel is fine to coarse, subangular brick, concrete, tile and chert.	1
		0.40	D		0.60			MADE GROUND: Comprising silty, slightly clayey, very gravelly sand. Gravel is fine to coarse, subangular block, brick, concrete, chert, glass, tile and fine organic material.	
		0.70	D		0.80			MADE GROUND: Comprising dark brown, slightly gravelly, clayey sand. Gravel is fine to coarse, subangular brick and chert.	
		1.50	D		1.80			Brown, slightly clayey, silty, gravelly SAND to firm, sandy CLAY. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	2
					2.00			Brown, slightly clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS End of Borehole at 2.000m	
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.

Date: 30/06/2022

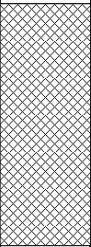
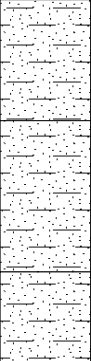
Contractor: Obsidian Geo-Consulting Ltd

Drilling Equipment: Tracked window sampling rig

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Sheet 1 of 1[illegible]

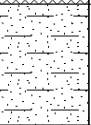
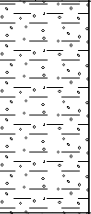
Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS106	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	D		0.80			MADE GROUND: Comprising dark brown, very gravelly sand. Gravel is fine to coarse, subangular brick, bitumen, concrete and occasional organic material.	1
		0.30	D						
		0.70	D						
					1.20		Dark brown, very silty, slightly clayey SAND. RIVER TERRACE DEPOSITS	2	
					1.70		Brown, very clayey, slightly gravelly SAND. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS		
					2.00		Brown, clayey, gravelly SAND. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS		
					End of Borehole at 2.000m				

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS107	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

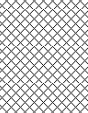
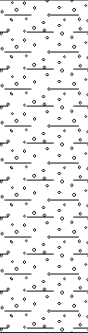
Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	D		0.15			MADE GROUND: Comprising dark brown, very gravelly sand. Gravel is fine to coarse, subangular brick, bitumen, concrete and occasional organic material.	1
		0.30	D		0.45			MADE GROUND: Comprising reworked brown, clayey sand.	
					0.60			MADE GROUND: Comprising dark brown and dark grey, sandy gravel of fine to coarse, subangular chert.	
					1.00			Dark brown, very silty, slightly clayey SAND. RIVER TERRACE DEPOSITS	
					1.70			Firm, sandy CLAY to clayey SAND. RIVER TERRACE DEPOSITS	
					2.00			Brown, slightly clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
								End of Borehole at 2.000m	

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks 1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.										
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Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS108	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	D		0.20			MADE GROUND: Comprising grey clayey, gravelly sand. Gravel is fine to coarse, subangular chert, occasional brick and metal.	1
		0.40	D		0.60			MADE GROUND: Comprising reworked dark brown, silty, slightly gravelly, clayey sand. Gravel is fine to medium, subangular chert.	
					0.90			Dark brown, very silty, slightly clayey SAND. RIVER TERRACE DEPOSITS	
					2.00			Brown, slightly clayey, slightly sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
								End of Borehole at 2.000m	
									2
									3
									4
									5

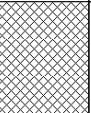
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS109	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D					MADE GROUND: Comprising brown, sandy, very gravelly clay. Gravel is fine to coarse, subangular chert, brick and occasional clinker and glass.	
		0.50	D		0.40			MADE GROUND: Comprising reworked dark brown, silty, slightly gravelly, clayey sand. Gravel is fine to medium, subangular chert.	
					0.60			Brown, silty, slightly clayey sand. RIVER TERRACE DEPOSITS	1
					0.85			Brown, slightly clayey, slightly sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
					2.00			End of Borehole at 2.000m	2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS110	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
					1.00			NO RECOVERY DUE TO POSSIBLE OBSTRUCTION	1
								End of Borehole at 1.000m	
									2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 1.00m begl with no recovery due to possible obstruction - Borehole moved (WS110A). 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh

Client: Lidl Great Britain Ltd

Date: 30/06/2022

Location:

Contractor: Obsidian Geo-Consulting Ltd

Project No. : 21-1500-P

Crew Name: Exploration Ltd

Drilling Equipment: Tracked window sampling rig

Borehole Number
WS110A

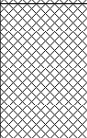
Hole Type	WS
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
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87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

Level

Logged By
BM

Scale
1:25

Page Number
Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D		0.25			MADE GROUND: Comprising brown, gravelly, sandy clay. Gravel is fine to coarse, subangular brick, concrete, slate and chert.	1
		0.30	D		0.40			MADE GROUND: Comprising black, slightly gravelly sand. Gravel is fine ash and fine to coarse, subangular chert.	
		0.60	D				MADE GROUND: Comprising reworked dark brown, clayey sand with rare subangular brick.		
		0.85			Brown, gravelly, clayey SAND. Gravel is fine to coarse, subangular chert.				
		1.00			RIVER TERRACE DEPOSITS				
					End of Borehole at 1.000m				
									2
									3
									4
									5

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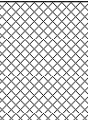
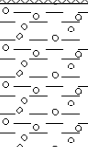
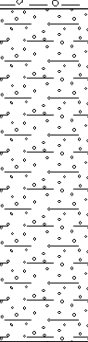
Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated at 1.00m bgl due to barrel refusal in natural strata. 4. Borehole backfilled with arisings upon completion.



Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS111	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D					MADE GROUND: Comprising dark brown, very gravelly clay. Gravel is fine to coarse, subangular brick, concrete and occasional ash.	
					0.40			Firm, dark brown, sandy, gravelly CLAY. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
					0.90			Brown, slightly clayey, slightly sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	1
					2.00			End of Borehole at 2.000m	2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 30/06/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS112	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.15	D					MADE GROUND: Comprising brown sandy GRAVEL of fine to coarse, subangular chert and occasional metal.	1
		0.40	D		0.30			MADE GROUND: Comprising reworked, brown gravelly sand. Gravel is fine to coarse, subangular chert and occasional brick.	
					0.50			Brown, gravelly sand. Gravel is fine to coarse, subangular chert.	
					0.75			RIVER TERRACE DEPOSITS Medium dense, becoming very dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert.	
					2.00			End of Borehole at 2.000m	2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.



Date: 01/07/2022

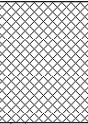
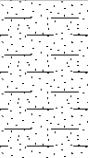
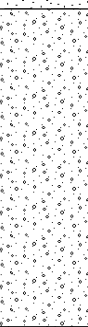
Contractor: Obsidian Geo-Consulting Ltd

Drilling Equipment: Tracked window sampling rig

Page Number
Sheet 1 of 1[illegible]

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 01/07/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS114	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.10	D		0.40			MADE GROUND: Comprising dark brown, sandy gravel of subangular brick, chert, ash and block.	1
								Brown, clayey SAND. RIVER TERRACE DEPOSITS	
		1.00	SPT	N=28 (5,7/7,8,7,6)	0.95			Medium dense, brown, clayey, sandy GRAVEL of fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
		2.00	SPT	N=14 (4,4/4,4,3,3)	2.00			End of Borehole at 2.000m	2
									3
									4
									5

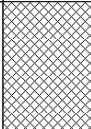
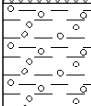
Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 2.00m begl. 4. Borehole backfilled with arisings upon completion.

Percussion Drilling Log

Project Name: Lidl, Stoneham Lane, Eastleigh		Client: Lidl Great Britain Ltd		Date: 01/07/2022	
Location:		Contractor: Obsidian Geo-Consulting Ltd			
Project No. : 21-1500-P		Crew Name: Exploration Ltd		Drilling Equipment: Tracked window sampling rig	
Borehole Number WS115	Hole Type WS	Level	Logged By BM	Scale 1:25	Page Number Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description	
		Depth (m)	Type	Results					
		0.20	D					MADE GROUND: Comprising dark brown, gravelly sand. Gravel is fine to coarse, subangular brick, chert.	1
		0.50	D		0.45 0.65			MADE GROUND: Comprising dark grey, very gravelly clay. Gravel is fine to coarse, subangular chert, wood and brick.	
								Firm brown, slightly gravelly CLAY. Gravel is fine to coarse, subangular chert. RIVER TERRACE DEPOSITS	
		1.00	SPT	N=19 (6,5/5,5,5,4)	1.00			End of Borehole at 1.000m	
									2
									3
									4
									5

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks
 1. Window sample position scanned with Cable Avoidance Tool and Genny prior to drilling. 2. Groundwater not encountered during drilling. 3. Borehole terminated in natural strata at 1.00m begl due to collapse of Made Ground. 4. Borehole backfilled with arisings upon completion.

Appendix C

Chemical Laboratory Analysis Results





Ben Murphy
Obsidian Geo-Consulting Ltd
Unit C4
Castle Vale Enterprise Park
Park Lane
Birmingham
West Midlands
B35 6LJ

t: (07715) 527530

e: steven.dempsey@obsidian-geoconsulting.co.uk

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

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 22-55568

Replaces Analytical Report Number: 22-55568, issue no. 1
Additional analysis undertaken.

Project / Site name:	Stoneham Lane, Eastleigh	Samples received on:	29/04/2022
Your job number:	21-1500-P	Samples instructed on/ Analysis started on:	29/04/2022
Your order number:	00903	Analysis completed by:	16/05/2022
Report Issue Number:	2	Report issued on:	16/05/2022
Samples Analysed:	1 vac multi sample - 18 soil samples		

Sign



Adam Fenwick
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

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.

Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260174	2260175	2260176	2260177	2260178	2260179
Sample Reference				WS01	WS02	WS04	WS06	WS07	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.60	0.10	0.60	0.50	0.40
Date Sampled				26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						
Stone Content	%	0.1	NONE	45	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.6	12	6.4	11	14	10
Total mass of sample received	kg	0.001	NONE	0.5	1	0.8	0.8	0.8	0.8

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	0.232	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	0.232	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SZS	SZS	SZS	SZS	SZS	SZS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	5.8	10.1	7.1	9.2	8.0
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	78	380	1900	710	840	500
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.039	0.19	0.94	0.36	0.42	0.25
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	39.1	189	944	356	422	249
Sulphide	mg/kg	1	MCERTS	6.6	< 1.0	20	20	19	< 1.0
Organic Matter (automated)	%	0.1	MCERTS	2.7	-	1.7	3	-	2

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.44	< 0.05	1.1	< 0.05	0.45	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.27	< 0.05	0.45	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.5	< 0.05	2.9	< 0.05	0.89	0.4
Pyrene	mg/kg	0.05	MCERTS	1.1	< 0.05	2.5	< 0.05	0.86	0.44
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.52	< 0.05	0.91	< 0.05	0.62	0.37
Chrysene	mg/kg	0.05	MCERTS	0.62	< 0.05	0.74	< 0.05	0.48	0.26
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.5	< 0.05	0.53	< 0.05	0.73	0.39
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.4	< 0.05	0.5	< 0.05	0.29	0.25
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.48	< 0.05	0.52	< 0.05	0.68	0.44
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.43	< 0.05	0.33	< 0.05	0.35	0.24
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.46	< 0.05	0.35	< 0.05	0.43	0.29

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	6.74	< 0.80	10.7	< 0.80	5.78	3.08
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Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260174	2260175	2260176	2260177	2260178	2260179
Sample Reference				WS01	WS02	WS04	WS06	WS07	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.60	0.10	0.60	0.50	0.40
Date Sampled				26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022	27/04/2022
Time Taken				None Supplied	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	9.4	7.1	10	8.1	7.9	9.5
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	0.4	1.3	1.6	1	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	17	18	15	16	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	12	27	22	19	23
Lead (aqua regia extractable)	mg/kg	1	MCERTS	35	16	38	42	32	29
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.4	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	9.9	12	9.4	11	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	64	40	73	50	61	68

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	MCERTS	-	-	< 10	-	< 10	-

TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.001	MCERTS	-	-	< 0.001	-	< 0.001	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	< 1.0	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	4.7	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	11	-	12	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	71	-	52	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	MCERTS	-	-	87	-	64	-

Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
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Lab Sample Number				2260174	2260175	2260176	2260177	2260178	2260179
Sample Reference				WS01	WS02	WS04	WS06	WS07	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.60	0.10	0.60	0.50	0.40
Date Sampled				26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						

Pesticides

Alachlor	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Aldrin	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Azinphos-ethyl	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Azinphos-methyl	µg/kg	10	NONE	-	< 10	< 10	-	-	-
BHC-alpha (benzene hexachloride)	µg/kg	10	NONE	-	< 10	< 10	-	-	-
BHC-beta	µg/kg	10	NONE	-	< 10	< 10	-	-	-
BHC-delta	µg/kg	10	NONE	-	< 10	< 10	-	-	-
BHC-gamma (Lindane, gamma HCH)	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Bifenthrin	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Carbophenothion	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Chlordane-cis	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Chlordane-trans	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Chlorfenvinphos	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Chlorothalonil	µg/kg	20	NONE	-	< 20	< 20	-	-	-
Chlorpyrifos	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Cyfluthrin (Sum)	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Cyhalothrin (Lambda)	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Cypermethrin (Sum)	µg/kg	10	NONE	-	< 10	< 10	-	-	-
DDD-o,p'	µg/kg	10	NONE	-	< 10	< 10	-	-	-
DDD-p,p'	µg/kg	10	NONE	-	< 10	< 10	-	-	-
DDE-o,p'	µg/kg	10	NONE	-	< 10	< 10	-	-	-
DDE-p,p'	µg/kg	10	NONE	-	< 10	< 10	-	-	-
DDT-o,p'	µg/kg	10	NONE	-	< 10	< 10	-	-	-
DDT-p,p'	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Deltamethrin	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Demeton-O	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Demeton-S	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Diazinon	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Dichlorobenzonitrile, 2,6-	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Dichlorvos	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Dieldrin	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Dimethoate	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Dimethylvinphos	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Endrin	µg/kg	20	NONE	-	< 20	< 20	-	-	-
Endrin aldehyde	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Endrin ketone	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Ethion	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Etrinfos	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Fenitrothion	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Fenthion	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Fenvalerate (Sum)	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Heptachlor	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Heptachlor exo-epoxide	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Isodrin	µg/kg	20	NONE	-	< 20	< 20	-	-	-
Malathion	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Methacrifos	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Methoxychlor, p,p'-	µg/kg	20	NONE	-	< 20	< 20	-	-	-

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Lab Sample Number				2260174	2260175	2260176	2260177	2260178	2260179
Sample Reference				WS01	WS02	WS04	WS06	WS07	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.60	0.10	0.60	0.50	0.40
Date Sampled				26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						
Mevinphos, E+Z	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Omethoate	µg/kg	20	NONE	-	< 20	< 20	-	-	-
Parathion	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Parathion-methyl	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Pendimethalin	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Permethrin, Cis-	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Permethrin, Trans-	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Phorate	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Phosalone	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Phosphamidon (Sum)	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Pirimiphos-ethyl	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Pirimiphos-methyl	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Propetamphos	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Propyzamide	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Tecnazene	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Tetrachlorobenzene, 1,2,4,5-	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Trichlorobenzene, 1,2,3-	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Trichlorobenzene, 1,3,5-	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Trifluralin	µg/kg	10	NONE	-	< 10	< 10	-	-	-

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 Project / Site name: Stoneham Lane, Eastleigh
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Lab Sample Number				2260174	2260175	2260176	2260177	2260178	2260179
Sample Reference				WS01	WS02	WS04	WS06	WS07	WS08
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.60	0.10	0.60	0.50	0.40
Date Sampled				26/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						

Herbicides

Aldicarb	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Aldicarb Sulfone	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Aldicarb Sulfoxide	µg/kg	50	NONE	-	< 50	< 50	-	-	-
Atrazine	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Carbaryl	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Carbofuran	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Carbofuran, 3-OH	µg/kg	20	NONE	-	< 20	< 20	-	-	-
Chlortoluron	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Cyanazine	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Diflufenzuron	µg/kg	50	NONE	-	< 50	< 50	-	-	-
Diuron	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Fluometuron	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Isoproturon	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Linuron	µg/kg	20	NONE	-	< 20	< 20	-	-	-
Methiocarb	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Methomyl	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Oxamyl	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Prometryn	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Propazine	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Propoxur	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Siduron	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Simazine	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Tebuthiuron	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Terbutylazine	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Terbutryn	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Thiadiazuron	µg/kg	10	NONE	-	< 10	< 10	-	-	-
Trietazine	µg/kg	10	NONE	-	< 10	< 10	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

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Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260180	2260181	2260182	2260183	2260184	2260185
Sample Reference				WS09	WS10	WS01	WS02	WS03	WS04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	1.00	2.80	1.00	1.50
Date Sampled				27/04/2022	27/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
Time Taken				None Supplied	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	61	54	< 0.1	< 0.1	57
Moisture Content	%	0.01	NONE	7.9	7.6	6.8	12	10	5.1
Total mass of sample received	kg	0.001	NONE	0.8	0.8	0.5	0.5	0.5	0.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	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	SZS	SZS	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.7	8.6	6.0	6.5	6.4	7.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	440	190	140	48	100	31
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.22	0.094	0.07	0.024	0.052	0.015
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	220	93.8	70.3	24.2	51.5	15.3
Sulphide	mg/kg	1	MCERTS	1.9	7.8	-	-	-	-
Organic Matter (automated)	%	0.1	MCERTS	2.4	2.5	-	-	-	-

Total Phenols

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

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-	-
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	0.36	-	-	-	-
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-	-
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	-	-	-	-
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.72	-	-	-	-
Anthracene	mg/kg	0.05	MCERTS	< 0.05	0.49	-	-	-	-
Fluoranthene	mg/kg	0.05	MCERTS	0.33	3.2	-	-	-	-
Pyrene	mg/kg	0.05	MCERTS	0.32	2.6	-	-	-	-
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.24	1.5	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	0.25	1.5	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.05	MCERTS	0.35	1.4	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.05	MCERTS	0.18	0.95	-	-	-	-
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.31	1.4	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.19	1.2	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.32	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.23	1.3	-	-	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	2.4	16.9	-	-	-	-
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Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260180	2260181	2260182	2260183	2260184	2260185
Sample Reference				WS09	WS10	WS01	WS02	WS03	WS04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	1.00	2.80	1.00	1.50
Date Sampled				27/04/2022	27/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
Time Taken				None Supplied	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	8.3	27	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	1	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	-	-	-	-
Chromium (hexavalent)	mg/kg	1.2	NONE	< 1.2	< 1.2	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	17	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	29	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	56	35	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	11	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	69	85	-	-	-	-

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	-	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	MCERTS	-	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-	-

Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260180	2260181	2260182	2260183	2260184	2260185
Sample Reference				WS09	WS10	WS01	WS02	WS03	WS04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	1.00	2.80	1.00	1.50
Date Sampled				27/04/2022	27/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						
Pesticides									
Alachlor	µg/kg	10	NONE	-	-	-	-	-	-
Aldrin	µg/kg	10	NONE	-	-	-	-	-	-
Azinphos-ethyl	µg/kg	10	NONE	-	-	-	-	-	-
Azinphos-methyl	µg/kg	10	NONE	-	-	-	-	-	-
BHC-alpha (benzene hexachloride)	µg/kg	10	NONE	-	-	-	-	-	-
BHC-beta	µg/kg	10	NONE	-	-	-	-	-	-
BHC-delta	µg/kg	10	NONE	-	-	-	-	-	-
BHC-gamma (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	-	-	-	-
Bifenthrin	µg/kg	10	NONE	-	-	-	-	-	-
Carbophenothion	µg/kg	10	NONE	-	-	-	-	-	-
Chlordane-cis	µg/kg	10	NONE	-	-	-	-	-	-
Chlordane-trans	µg/kg	10	NONE	-	-	-	-	-	-
Chlorfenvinphos	µg/kg	10	NONE	-	-	-	-	-	-
Chlorothalonil	µg/kg	20	NONE	-	-	-	-	-	-
Chlorpyrifos	µg/kg	10	NONE	-	-	-	-	-	-
Cyfluthrin (Sum)	µg/kg	10	NONE	-	-	-	-	-	-
Cyhalothrin (Lambda)	µg/kg	10	NONE	-	-	-	-	-	-
Cypermethrin (Sum)	µg/kg	10	NONE	-	-	-	-	-	-
DDD-o,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDD-p,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDE-o,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDE-p,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDT-o,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDT-p,p'	µg/kg	10	NONE	-	-	-	-	-	-
Deltamethrin	µg/kg	10	NONE	-	-	-	-	-	-
Demeton-O	µg/kg	10	NONE	-	-	-	-	-	-
Demeton-S	µg/kg	10	NONE	-	-	-	-	-	-
Diazinon	µg/kg	10	NONE	-	-	-	-	-	-
Dichlorobenzonitrile, 2,6-	µg/kg	10	NONE	-	-	-	-	-	-
Dichlorvos	µg/kg	10	NONE	-	-	-	-	-	-
Dieldrin	µg/kg	10	NONE	-	-	-	-	-	-
Dimethoate	µg/kg	10	NONE	-	-	-	-	-	-
Dimethylvinphos	µg/kg	10	NONE	-	-	-	-	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	-	-	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	-	-	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	-	-	-	-	-
Endrin	µg/kg	20	NONE	-	-	-	-	-	-
Endrin aldehyde	µg/kg	10	NONE	-	-	-	-	-	-
Endrin ketone	µg/kg	10	NONE	-	-	-	-	-	-
Ethion	µg/kg	10	NONE	-	-	-	-	-	-
Etrinfos	µg/kg	10	NONE	-	-	-	-	-	-
Fenitrothion	µg/kg	10	NONE	-	-	-	-	-	-
Fenthion	µg/kg	10	NONE	-	-	-	-	-	-
Fenvalerate (Sum)	µg/kg	10	NONE	-	-	-	-	-	-
Heptachlor	µg/kg	10	NONE	-	-	-	-	-	-
Heptachlor exo-epoxide	µg/kg	10	NONE	-	-	-	-	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	-	-	-	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	-	-	-	-	-
Isodrin	µg/kg	20	NONE	-	-	-	-	-	-
Malathion	µg/kg	10	NONE	-	-	-	-	-	-
Methacrifos	µg/kg	10	NONE	-	-	-	-	-	-
Methoxychlor, p,p'-	µg/kg	20	NONE	-	-	-	-	-	-

Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260180	2260181	2260182	2260183	2260184	2260185
Sample Reference				WS09	WS10	WS01	WS02	WS03	WS04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	1.00	2.80	1.00	1.50
Date Sampled				27/04/2022	27/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						
Mevinphos, E+Z	µg/kg	10	NONE	-	-	-	-	-	-
Omethoate	µg/kg	20	NONE	-	-	-	-	-	-
Parathion	µg/kg	10	NONE	-	-	-	-	-	-
Parathion-methyl	µg/kg	10	NONE	-	-	-	-	-	-
Pendimethalin	µg/kg	10	NONE	-	-	-	-	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	-	-	-	-	-
Permethrin, Cis-	µg/kg	10	NONE	-	-	-	-	-	-
Permethrin, Trans-	µg/kg	10	NONE	-	-	-	-	-	-
Phorate	µg/kg	10	NONE	-	-	-	-	-	-
Phosalone	µg/kg	10	NONE	-	-	-	-	-	-
Phosphamidon (Sum)	µg/kg	10	NONE	-	-	-	-	-	-
Pirimiphos-ethyl	µg/kg	10	NONE	-	-	-	-	-	-
Pirimiphos-methyl	µg/kg	10	NONE	-	-	-	-	-	-
Propetamphos	µg/kg	10	NONE	-	-	-	-	-	-
Propyzamide	µg/kg	10	NONE	-	-	-	-	-	-
Tecnazene	µg/kg	10	NONE	-	-	-	-	-	-
Tetrachlorobenzene, 1,2,4,5-	µg/kg	10	NONE	-	-	-	-	-	-
Trichlorobenzene, 1,2,3-	µg/kg	10	NONE	-	-	-	-	-	-
Trichlorobenzene, 1,3,5-	µg/kg	10	NONE	-	-	-	-	-	-
Trifluralin	µg/kg	10	NONE	-	-	-	-	-	-

Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
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Lab Sample Number				2260180	2260181	2260182	2260183	2260184	2260185
Sample Reference				WS09	WS10	WS01	WS02	WS03	WS04
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.20	1.00	2.80	1.00	1.50
Date Sampled				27/04/2022	27/04/2022	26/04/2022	26/04/2022	26/04/2022	26/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						

Herbicides

Aldicarb	µg/kg	10	NONE	-	-	-	-	-	-
Aldicarb Sulfone	µg/kg	10	NONE	-	-	-	-	-	-
Aldicarb Sulfoxide	µg/kg	50	NONE	-	-	-	-	-	-
Atrazine	µg/kg	10	NONE	-	-	-	-	-	-
Carbaryl	µg/kg	10	NONE	-	-	-	-	-	-
Carbofuran	µg/kg	10	NONE	-	-	-	-	-	-
Carbofuran, 3-OH	µg/kg	20	NONE	-	-	-	-	-	-
Chlortoluron	µg/kg	10	NONE	-	-	-	-	-	-
Cyanazine	µg/kg	10	NONE	-	-	-	-	-	-
Diflufenzuron	µg/kg	50	NONE	-	-	-	-	-	-
Diuron	µg/kg	10	NONE	-	-	-	-	-	-
Fluometuron	µg/kg	10	NONE	-	-	-	-	-	-
Isoproturon	µg/kg	10	NONE	-	-	-	-	-	-
Linuron	µg/kg	20	NONE	-	-	-	-	-	-
Methiocarb	µg/kg	10	NONE	-	-	-	-	-	-
Methomyl	µg/kg	10	NONE	-	-	-	-	-	-
Oxamyl	µg/kg	10	NONE	-	-	-	-	-	-
Prometryn	µg/kg	10	NONE	-	-	-	-	-	-
Propazine	µg/kg	10	NONE	-	-	-	-	-	-
Propoxur	µg/kg	10	NONE	-	-	-	-	-	-
Siduron	µg/kg	10	NONE	-	-	-	-	-	-
Simazine	µg/kg	10	NONE	-	-	-	-	-	-
Tebuthiuron	µg/kg	10	NONE	-	-	-	-	-	-
Terbutylazine	µg/kg	10	NONE	-	-	-	-	-	-
Terbutryn	µg/kg	10	NONE	-	-	-	-	-	-
Thiadiazuron	µg/kg	10	NONE	-	-	-	-	-	-
Trietazine	µg/kg	10	NONE	-	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260186	2260187	2260188	2260189	2260190	2260191
Sample Reference				WS05	WS06	WS07	WS08	WS09	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.60	1.50	2.00	0.90	1.60
Date Sampled				26/04/2022	26/04/2022	26/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	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	59	62	60	48	< 0.1	53
Moisture Content	%	0.01	NONE	6.7	3.3	5.7	9.1	10	7.5
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5	0.5	0.5	0.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	7.9	8.1	7.5	6.6	7.5
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	8.6	13	30	20	9	51
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0043	0.0066	0.015	0.0099	0.0045	0.026
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	4.3	6.6	14.9	9.9	4.5	25.7
Sulphide	mg/kg	1	MCERTS	-	-	-	-	-	-
Organic Matter (automated)	%	0.1	MCERTS	-	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-	-
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Speciated PAHs

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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	MCERTS	-	-	-	-	-	-
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Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260186	2260187	2260188	2260189	2260190	2260191
Sample Reference				WS05	WS06	WS07	WS08	WS09	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.60	1.50	2.00	0.90	1.60
Date Sampled				26/04/2022	26/04/2022	26/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	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	-	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-	-
Chromium (hexavalent)	mg/kg	1.2	NONE	-	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-	-

Monoaromatics & Oxygenates

Benzene	µg/kg	1	MCERTS	-	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	MCERTS	-	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.001	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-	-

Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260186	2260187	2260188	2260189	2260190	2260191
Sample Reference				WS05	WS06	WS07	WS08	WS09	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.60	1.50	2.00	0.90	1.60
Date Sampled				26/04/2022	26/04/2022	26/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						
Pesticides									
Alachlor	µg/kg	10	NONE	-	-	-	-	-	-
Aldrin	µg/kg	10	NONE	-	-	-	-	-	-
Azinphos-ethyl	µg/kg	10	NONE	-	-	-	-	-	-
Azinphos-methyl	µg/kg	10	NONE	-	-	-	-	-	-
BHC-alpha (benzene hexachloride)	µg/kg	10	NONE	-	-	-	-	-	-
BHC-beta	µg/kg	10	NONE	-	-	-	-	-	-
BHC-delta	µg/kg	10	NONE	-	-	-	-	-	-
BHC-gamma (Lindane, gamma HCH)	µg/kg	10	NONE	-	-	-	-	-	-
Bifenthrin	µg/kg	10	NONE	-	-	-	-	-	-
Carbophenothion	µg/kg	10	NONE	-	-	-	-	-	-
Chlordane-cis	µg/kg	10	NONE	-	-	-	-	-	-
Chlordane-trans	µg/kg	10	NONE	-	-	-	-	-	-
Chlorfenvinphos	µg/kg	10	NONE	-	-	-	-	-	-
Chlorothalonil	µg/kg	20	NONE	-	-	-	-	-	-
Chlorpyrifos	µg/kg	10	NONE	-	-	-	-	-	-
Cyfluthrin (Sum)	µg/kg	10	NONE	-	-	-	-	-	-
Cyhalothrin (Lambda)	µg/kg	10	NONE	-	-	-	-	-	-
Cypermethrin (Sum)	µg/kg	10	NONE	-	-	-	-	-	-
DDD-o,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDD-p,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDE-o,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDE-p,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDT-o,p'	µg/kg	10	NONE	-	-	-	-	-	-
DDT-p,p'	µg/kg	10	NONE	-	-	-	-	-	-
Deltamethrin	µg/kg	10	NONE	-	-	-	-	-	-
Demeton-O	µg/kg	10	NONE	-	-	-	-	-	-
Demeton-S	µg/kg	10	NONE	-	-	-	-	-	-
Diazinon	µg/kg	10	NONE	-	-	-	-	-	-
Dichlorobenzonitrile, 2,6-	µg/kg	10	NONE	-	-	-	-	-	-
Dichlorvos	µg/kg	10	NONE	-	-	-	-	-	-
Dieldrin	µg/kg	10	NONE	-	-	-	-	-	-
Dimethoate	µg/kg	10	NONE	-	-	-	-	-	-
Dimethylvinphos	µg/kg	10	NONE	-	-	-	-	-	-
Endosulfan I (alpha isomer)	µg/kg	10	NONE	-	-	-	-	-	-
Endosulfan II (beta isomer)	µg/kg	10	NONE	-	-	-	-	-	-
Endosulfan sulfate	µg/kg	10	NONE	-	-	-	-	-	-
Endrin	µg/kg	20	NONE	-	-	-	-	-	-
Endrin aldehyde	µg/kg	10	NONE	-	-	-	-	-	-
Endrin ketone	µg/kg	10	NONE	-	-	-	-	-	-
Ethion	µg/kg	10	NONE	-	-	-	-	-	-
Etrinfos	µg/kg	10	NONE	-	-	-	-	-	-
Fenitrothion	µg/kg	10	NONE	-	-	-	-	-	-
Fenthion	µg/kg	10	NONE	-	-	-	-	-	-
Fenvalerate (Sum)	µg/kg	10	NONE	-	-	-	-	-	-
Heptachlor	µg/kg	10	NONE	-	-	-	-	-	-
Heptachlor exo-epoxide	µg/kg	10	NONE	-	-	-	-	-	-
Hexachlorobenzene	µg/kg	10	NONE	-	-	-	-	-	-
Hexachlorobutadiene	µg/kg	10	NONE	-	-	-	-	-	-
Isodrin	µg/kg	20	NONE	-	-	-	-	-	-
Malathion	µg/kg	10	NONE	-	-	-	-	-	-
Methacrifos	µg/kg	10	NONE	-	-	-	-	-	-
Methoxychlor, p,p'-	µg/kg	20	NONE	-	-	-	-	-	-

Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260186	2260187	2260188	2260189	2260190	2260191
Sample Reference				WS05	WS06	WS07	WS08	WS09	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.60	1.50	2.00	0.90	1.60
Date Sampled				26/04/2022	26/04/2022	26/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						
Mevinphos, E+Z	µg/kg	10	NONE	-	-	-	-	-	-
Omethoate	µg/kg	20	NONE	-	-	-	-	-	-
Parathion	µg/kg	10	NONE	-	-	-	-	-	-
Parathion-methyl	µg/kg	10	NONE	-	-	-	-	-	-
Pendimethalin	µg/kg	10	NONE	-	-	-	-	-	-
Pentachlorobenzene	µg/kg	10	NONE	-	-	-	-	-	-
Permethrin, Cis-	µg/kg	10	NONE	-	-	-	-	-	-
Permethrin, Trans-	µg/kg	10	NONE	-	-	-	-	-	-
Phorate	µg/kg	10	NONE	-	-	-	-	-	-
Phosalone	µg/kg	10	NONE	-	-	-	-	-	-
Phosphamidon (Sum)	µg/kg	10	NONE	-	-	-	-	-	-
Pirimiphos-ethyl	µg/kg	10	NONE	-	-	-	-	-	-
Pirimiphos-methyl	µg/kg	10	NONE	-	-	-	-	-	-
Propetamphos	µg/kg	10	NONE	-	-	-	-	-	-
Propyzamide	µg/kg	10	NONE	-	-	-	-	-	-
Tecnazene	µg/kg	10	NONE	-	-	-	-	-	-
Tetrachlorobenzene, 1,2,4,5-	µg/kg	10	NONE	-	-	-	-	-	-
Trichlorobenzene, 1,2,3-	µg/kg	10	NONE	-	-	-	-	-	-
Trichlorobenzene, 1,3,5-	µg/kg	10	NONE	-	-	-	-	-	-
Trifluralin	µg/kg	10	NONE	-	-	-	-	-	-

Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

Lab Sample Number				2260186	2260187	2260188	2260189	2260190	2260191
Sample Reference				WS05	WS06	WS07	WS08	WS09	WS10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00	2.60	1.50	2.00	0.90	1.60
Date Sampled				26/04/2022	26/04/2022	26/04/2022	27/04/2022	27/04/2022	27/04/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status						

Herbicides

Aldicarb	µg/kg	10	NONE	-	-	-	-	-	-
Aldicarb Sulfone	µg/kg	10	NONE	-	-	-	-	-	-
Aldicarb Sulfoxide	µg/kg	50	NONE	-	-	-	-	-	-
Atrazine	µg/kg	10	NONE	-	-	-	-	-	-
Carbaryl	µg/kg	10	NONE	-	-	-	-	-	-
Carbofuran	µg/kg	10	NONE	-	-	-	-	-	-
Carbofuran, 3-OH	µg/kg	20	NONE	-	-	-	-	-	-
Chlortoluron	µg/kg	10	NONE	-	-	-	-	-	-
Cyanazine	µg/kg	10	NONE	-	-	-	-	-	-
Diflufenzuron	µg/kg	50	NONE	-	-	-	-	-	-
Diuron	µg/kg	10	NONE	-	-	-	-	-	-
Fluometuron	µg/kg	10	NONE	-	-	-	-	-	-
Isoproturon	µg/kg	10	NONE	-	-	-	-	-	-
Linuron	µg/kg	20	NONE	-	-	-	-	-	-
Methiocarb	µg/kg	10	NONE	-	-	-	-	-	-
Methomyl	µg/kg	10	NONE	-	-	-	-	-	-
Oxamyl	µg/kg	10	NONE	-	-	-	-	-	-
Prometryn	µg/kg	10	NONE	-	-	-	-	-	-
Propazine	µg/kg	10	NONE	-	-	-	-	-	-
Propoxur	µg/kg	10	NONE	-	-	-	-	-	-
Siduron	µg/kg	10	NONE	-	-	-	-	-	-
Simazine	µg/kg	10	NONE	-	-	-	-	-	-
Tebuthiuron	µg/kg	10	NONE	-	-	-	-	-	-
Terbuthylazine	µg/kg	10	NONE	-	-	-	-	-	-
Terbutryn	µg/kg	10	NONE	-	-	-	-	-	-
Thiadiazuron	µg/kg	10	NONE	-	-	-	-	-	-
Trietazine	µg/kg	10	NONE	-	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 22-55568
Project / Site name: Stoneham Lane, Eastleigh
Your Order No: 00903

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
2260176	WS04	0.10	115	Loose Fibres	Chrysotile	0.232	0.232

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

i2 Analytical

7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results							
Report No:	22-55568						
					Client: OBSIDIAN		
Location	Stoneham Lane, Eastleigh						
Lab Reference (Sample Number)	2260192				Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date	26/04/2022				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WS01						
Depth (m)	0.20						
Solid Waste Analysis							
TOC (%)**	1.0				3%	5%	6%
Loss on Ignition (%) **	2.5				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.30				1	--	--
Mineral Oil (mg/kg) _{EH, ID, CU, AL} #	130				500	--	--
Total PAH (WAC-17) (mg/kg)	7.19				100	--	--
pH (units)**	8.3				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	17				--	To be evaluated	To be evaluated
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
(BS EN 12457 - 3 preparation utilising end over end leaching procedure)	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.010	< 0.010		< 0.050	0.5	2	25
Barium *	0.022	0.010		0.11	20	100	300
Cadmium *	< 0.0005	< 0.0005		< 0.0020	0.04	1	5
Chromium *	0.0033	< 0.0010		0.0085	0.5	10	70
Copper *	0.025	0.011		0.12	2	50	100
Mercury *	< 0.0015	< 0.0015		< 0.010	0.01	0.2	2
Molybdenum *	0.0040	< 0.0030		< 0.020	0.5	10	30
Nickel *	0.0073	0.0043		0.046	0.4	10	40
Lead *	0.0091	< 0.0050		< 0.020	0.5	10	50
Antimony *	< 0.0050	< 0.0050		< 0.020	0.06	0.7	5
Selenium *	< 0.010	< 0.010		< 0.040	0.1	0.5	7
Zinc *	0.027	0.0047		0.067	4	50	200
Chloride *	< 4.0	< 4.0		< 15	800	15000	25000
Fluoride	0.70	0.17		2.2	10	150	500
Sulphate *	8.2	3.2		36	1000	20000	50000
TDS*	140	63		690	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.13	< 0.13		< 0.50	1	-	-
DOC	23	18		180	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.30						
Dry Matter (%)	96						
Moisture (%)	3.9						
Stage 1							
Volume Eluate L2 (litres)	0.34						
Filtered Eluate VE1 (litres)	0.16						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.					* = UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation					** = MCFRTS accredited		

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

Analytical Report Number : 22-55568

Project / Site name: Stoneham Lane, Eastleigh

* 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 *
2260174	WS01	None Supplied	0.2	Brown loam and clay with vegetation and stones.
2260175	WS02	None Supplied	0.6	Brown sandy clay with gravel and vegetation.
2260176	WS04	None Supplied	0.1	Brown loam with gravel and vegetation.
2260177	WS06	None Supplied	0.6	Brown clay and loam with gravel and vegetation.
2260178	WS07	None Supplied	0.5	Brown clay and loam with gravel and vegetation.
2260179	WS08	None Supplied	0.4	Brown clay and sand with gravel and vegetation.
2260180	WS09	None Supplied	0.1	Brown clay and loam with gravel and vegetation.
2260181	WS10	None Supplied	0.2	Brown clay and loam with gravel and stones.
2260182	WS01	None Supplied	1	Brown clay and sand with stones and gravel
2260183	WS02	None Supplied	2.8	Brown sand with gravel and vegetation.
2260184	WS03	None Supplied	1	Brown sand with gravel.
2260185	WS04	None Supplied	1.5	Brown clay and sand with stones and gravel
2260186	WS05	None Supplied	1	Brown clay and sand with stones and gravel
2260187	WS06	None Supplied	2.6	Brown clay and sand with stones and gravel
2260188	WS07	None Supplied	1.5	Brown clay and sand with stones and gravel
2260189	WS08	None Supplied	2	Brown clay and sand with stones and gravel
2260190	WS09	None Supplied	0.9	Brown clay and sand with gravel and vegetation.
2260191	WS10	None Supplied	1.6	Brown clay and sand with stones and gravel
2260192	WS01	None Supplied	0.2	Brown clay and loam with gravel and vegetation.

Analytical Report Number : 22-55568

Project / Site name: Stoneham Lane, Eastleigh

Water matrix abbreviations:

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
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
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 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
Preparation WAC leachate		In-house method	L043-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270. MCERTS accredited except Coronene.	L064-PL	D	MCERTS
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033-PL	W	ISO 17025
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025

Analytical Report Number : 22-55568

Project / Site name: Stoneham Lane, Eastleigh

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 in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031-PL	W	NONE
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037-PL	W	ISO 17025
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	MCERTS
Pesticides by GC-MS/MS	Determination of Pesticides in soil by GC MS/MS	In-house method	L055B-PL	W	NONE
Herbicides by LC-MS	Determination of Herbicides in soil by LC MS	In-house method	L056B-PL	W	NONE
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
Organic matter (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
PCB's by GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
BTEX (Sum of BTEX compounds) in soil	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Hexavalent chromium in soil (Lower Level)	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance on Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In house method.	L047-PL	D	MCERTS
Mineral Oil in Soil C10 - C40	Determination of dichloromethane/hexane extractable hydrocarbons in soil by GC-MS.	In-house method based on USEPA 8270	L076-PL	D	NONE
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	MCERTS
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L023-PL	D	MCERTS
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L039-PL	W	ISO 17025

Analytical Report Number : 22-55568

Project / Site name: Stoneham Lane, Eastleigh

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	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

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' 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

**Ben Murphy**

Obsidian Geo-Consulting Ltd
Unit C4
Castle Vale Enterprise Park
Park Lane
Birmingham
West Midlands
B35 6LJ

t: (07715) 527530

e: steven.dempsey@obsidian-geoconsulting.co.uk

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

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 22-69356

Project / Site name: Stoneham Lane Eastleigh

Samples received on: 05/07/2022

Your job number: 21 1500 P

**Samples instructed on/
Analysis started on:** 05/07/2022

Your order number: 00955

Analysis completed by: 12/07/2022

Report Issue Number: 1

Report issued on: 12/07/2022

Samples Analysed: 30 soil samples

Sig

Adam Fenwick
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

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.

Analytical Report Number: 22-69356

Project / Site name: Stoneham Lane Eastleigh

Your Order No: 00955

Lab Sample Number				2338504	2338505	2338506	2338507	2338508
Sample Reference				WS04	WS101	WS101	WS102	WS102
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.10	0.30	0.20	0.40
Date Sampled				26/04/2022	30/06/2022	30/06/2022	30/06/2022	30/06/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Asbestos in Soil				Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID				N/A	N/A	N/A	BPA	BPA

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-69356

Project / Site name: Stoneham Lane Eastleigh

Your Order No: 00955

Lab Sample Number				2338509	2338510	2338511	2338512	2338513
Sample Reference				WS103	WS103	WS104	WS104	WS104
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20	0.50	0.05	0.40	0.70
Date Sampled				30/06/2022	30/06/2022	30/06/2022	30/06/2022	30/06/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Asbestos in Soil				Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID				N/A	N/A	N/A	BPA	BPA

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-69356

Project / Site name: Stoneham Lane Eastleigh

Your Order No: 00955

Lab Sample Number				2338514	2338515	2338516	2338517	2338518
Sample Reference				WS105	WS105	WS105	WS106	WS106
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.50	0.95	0.10	0.30
Date Sampled				30/06/2022	30/06/2022	30/06/2022	30/06/2022	30/06/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Asbestos in Soil				Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID				N/A	N/A	N/A	MWI	MWI

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-69356

Project / Site name: Stoneham Lane Eastleigh

Your Order No: 00955

Lab Sample Number				2338519	2338520	2338521	2338522	2338523
Sample Reference				WS106	WS107	WS108	WS109	WS110A
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.10	0.10	0.20	0.20
Date Sampled				30/06/2022	30/06/2022	30/06/2022	30/06/2022	30/06/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Asbestos in Soil				Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID				N/A	N/A	N/A	MWI	MWI

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-69356

Project / Site name: Stoneham Lane Eastleigh

Your Order No: 00955

Lab Sample Number				2338524	2338525	2338526	2338527	2338528
Sample Reference				WS110A	WS111	WS112	WS112	WS113
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.20	0.15	0.40	0.05
Date Sampled				30/06/2022	30/06/2022	30/06/2022	30/06/2022	01/07/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Asbestos in Soil				Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID				N/A	N/A	N/A	MDB	MDB

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number: 22-69356

Project / Site name: Stoneham Lane Eastleigh

Your Order No: 00955

Lab Sample Number				2338529	2338530	2338531	2338532	2338533
Sample Reference				WS113	WS113	WS114	WS115	WS115
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30	0.60	0.10	0.20	0.50
Date Sampled				01/07/2022	01/07/2022	01/07/2022	01/07/2022	01/07/2022
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		
Asbestos in Soil				Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID				N/A	N/A	N/A	MDB	MDB

U/S = Unsuitable Sample I/S = Insufficient Sample

Analytical Report Number : 22-69356

Project / Site name: Stoneham Lane Eastleigh

Water matrix abbreviations:

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

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' 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.

Appendix D

OB-Screen Human Health Screening Assessment



OBScreen Human Health Screening Assessment

Project Name:	Lidl, Stoneham Lane, Eastleigh
Project Number:	21-1500-P
Assessment Date:	17/05/2022
End Use Scenario:	Commercial 1.0% SOM

Project Name:	Lidl, Stoneham Lane, Eastleigh
Project Number:	21-1500-P
End Use Scenario:	Commercial 1.0% SOM

Metals		Exploratory Hole Ref		WS01	WS02	WS04	WS06	WS07	WS08	WS09	WS10
		Additional Ref									
		Sample Depth (m)		0.2	0.6	0.1	0.6	0.5	0.4	0.1	0.2
Determinand	Screening Value	Source	Units								
Arsenic (As)	640	C4SL	mg/kg	9.4	7.1	10	8.1	7.9	9.5	8.3	27
W/S Boron	240,000	S4UL	mg/kg	1.1	0.4	1.3	1.6	1	1.1	0.6	1
Cadmium (Cd)	410	C4SL	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	49	C4SL	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Copper (Cu)	68,000	S4UL	mg/kg	20	12	27	22	19	23	21	29
Lead (Pb)	2,300	C4SL	mg/kg	35	16	38	42	32	29	56	35
Mercury (Hg)	1,100	S4UL	mg/kg	< 0.3	< 0.3	0.4	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (Ni)	980	S4UL	mg/kg	12	9.9	12	9.4	11	12	10	11
Selenium (Se)	12,000	S4UL	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (Zn)	730,000	S4UL	mg/kg	64	40	73	50	61	68	69	85
Cyanide	34	OBScreen	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Concentrations Highlighted in Red Exceed their Adopted Screening Value

Project Name:	Lidl, Stoneham Lane, Eastleigh
Project Number:	21-1500-P
End Use Scenario:	Commercial 1.0% SOM

PAH Based on 1% SOM		Exploratory Hole Ref		WS01	WS02	WS04	WS06	WS07	WS08	WS09	WS10
		Additional Ref									
		Sample Depth (m)		0.2	0.6	0.1	0.6	0.5	0.4	0.1	0.2
Determinand	Screening Value	Source	Units								
Naphthalene	190	S4UL	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	83,000	S4UL	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.36
Acenaphthene	84,000	S4UL	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	63,000	S4UL	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	22,000	S4UL	mg/kg	0.44	< 0.05	1.1	< 0.05	0.45	< 0.05	< 0.05	0.72
Anthracene	520,000	S4UL	mg/kg	0.27	< 0.05	0.45	< 0.05	< 0.05	< 0.05	< 0.05	0.49
Fluoranthene	23,000	S4UL	mg/kg	1.5	< 0.05	2.9	< 0.05	0.89	0.4	0.33	3.2
Pyrene	54,000	S4UL	mg/kg	1.1	< 0.05	2.5	< 0.05	0.86	0.44	0.32	2.6
Benzo(a)anthracene	170	S4UL	mg/kg	0.52	< 0.05	0.91	< 0.05	0.62	0.37	0.24	1.5
Chrysene	350	S4UL	mg/kg	0.62	< 0.05	0.74	< 0.05	0.48	0.26	0.25	1.5
Benzo(b)fluoranthene	44	S4UL	mg/kg	0.5	< 0.05	0.53	< 0.05	0.73	0.39	0.35	1.4
Benzo(k)fluoranthene	1,200	S4UL	mg/kg	0.4	< 0.05	0.5	< 0.05	0.29	0.25	0.18	0.95
Benzo(a)pyrene	35	S4UL	mg/kg	0.48	< 0.05	0.52	< 0.05	0.68	0.44	0.31	1.4
Indeno(1,2,3-cd)pyrene	500	S4UL	mg/kg	0.43	< 0.05	0.33	< 0.05	0.35	0.24	0.19	1.2
Dibenz(a,h)anthracene	3.5	S4UL	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.32
Benzo(ghi)perylene	3,900	S4UL	mg/kg	0.46	< 0.05	0.35	< 0.05	0.43	0.29	0.23	1.3
Total Phenols (monohydric)	440	S4UL	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Concentrations Highlighted in Red Exceed their Adopted Screening Value

Project Name:	Lidl, Stoneham Lane, Eastleigh
Project Number:	21-1500-P
End Use Scenario:	Commercial 1.0% SOM

TPH, BTEX & MTBE Based on 1.0% SOM		Exploratory Hole Ref		WS04	WS08
		Additional Ref		MG	MG
		Sample Depth (m)		0.30	0.40
Determinand	Screening Value	Source	Units		
TPH					
Aliphatic >C5 - C6	3,200	S4UL	mg/kg	< 0.001	< 0.001
Aliphatic >C6 - C8	7,800	S4UL	mg/kg	< 0.001	< 0.001
Aliphatic >C8 - C10	2,000	S4UL	mg/kg	< 0.001	< 0.001
Aliphatic >C10 - C12	9,700	S4UL	mg/kg	< 1.0	< 1.0
Aliphatic >C12 - C16	59,000	S4UL	mg/kg	< 2.0	< 2.0
Aliphatic >C16 - C21	1,600,000	S4UL	mg/kg	< 8.0	< 8.0
Aliphatic >C21 - C34	1,600,000	S4UL	mg/kg	< 8.0	< 8.0
Aromatic >C5 - C7	27	C4SL Benzene	mg/kg	< 0.001	< 0.001
Aromatic >C7 - C8	56,000	S4UL	mg/kg	< 0.001	< 0.001
Aromatic >C8 - C10	3,500	S4UL	mg/kg	< 0.001	< 0.001
Aromatic >C10 - C12	16,000	S4UL	mg/kg	< 1.0	< 1.0
Aromatic >C12 - C16	36,000	S4UL	mg/kg	4.7	< 2.0
Aromatic >C16 - C21	28,000	S4UL	mg/kg	11	12
Aromatic >C21 - C35	28,000	S4UL	mg/kg	71	52
BTEX & MTBE					
Benzene	27,000	C4SL	ug/kg	< 1.0	< 1.0
Toluene	56,000,000	S4UL	ug/kg	< 1.0	< 1.0
Ethylbenzene	5,700,000	S4UL	ug/kg	< 1.0	< 1.0
m & p-xylene	5,900,000	S4UL	ug/kg	< 1.0	< 1.0
o-xylene	6,600,000	S4UL	ug/kg	< 1.0	< 1.0
MTBE	7,900,000	EIC/AGS/CL:AIRE	ug/kg	< 1.0	< 1.0

Concentrations Highlighted in Red Exceed their Adopted Screening Value

LQM S4UL Publication Ref: S4UL3698

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Appendix E

Gas & Groundwater Monitoring Results



Ground Gas Monitoring Results



Project Name:	Stoneham Lane, Eastleigh.
Project Number:	21-1500-P
Client:	Lidl Great Britain Ltd

Date:	06/05/2022
Visit:	1 of 4

Barometric Pressure (mb)	
Start:	1024
Finish:	1023
Trend:	Falling

Ambient Concentration (% vol)	
CH ₄ :	0.0
CO ₂ :	0.1
O ₂ :	19.7

Monitoring Well	Peak					Steady					Low	Steady	Flow Rate	Groundwater Level	Notes
	CH ₄	CH ₄	CO ₂	CO	H ₂ S	CH ₄	CH ₄	CO ₂	CO	H ₂ S	O ₂	O ₂			
	% lcl	% v/v	% v/v	ppm	ppm	% lcl	% v/v	% v/v	ppm	ppm	% v/v	% v/v	l/hr	m (bgl)	
WS01	ND	ND	4.8	ND	ND	ND	ND	4.8	ND	ND	15.0	15.1	0	NGW	
WS04	ND	ND	0.9	ND	ND	ND	ND	0.9	ND	ND	18.8	18.8	0	NGW	
WS07	ND	ND	0.5	ND	ND	ND	ND	0.5	ND	ND	18.9	18.9	0	NGW	
WS10	ND	ND	0.5	ND	ND	ND	ND	0.5	ND	ND	19.2	19.2	0	NGW	

Key	
ND =	No gas detected
NGW =	No groundwater encountered

Monitoring Equipment:	GFM436 Gas Analyser
Weather Conditions:	Sunny, slight cloud.
Surface Conditions:	Dry.
Operator:	WT.

Ground Gas Monitoring Results



Project Name:	Stoneham Lane, Eastleigh.
Project Number:	21-1500-P
Client:	Lidl Great Britain Ltd

Date:	16/05/2022
Visit:	2 of 4

Barometric Pressure (mb)	
Start:	1013
Finish:	1013
Trend:	Steady

Ambient Concentration (% vol)	
CH ₄ :	0.1
CO ₂ :	0.0
O ₂ :	19.3

Monitoring Well	Peak					Steady					Low	Steady	Flow Rate	Groundwater Level	Notes
	CH ₄	CH ₄	CO ₂	CO	H ₂ S	CH ₄	CH ₄	CO ₂	CO	H ₂ S	O ₂	O ₂			
	% lcl	% v/v	% v/v	ppm	ppm	% lcl	% v/v	% v/v	ppm	ppm	% v/v	% v/v			
WS01	ND	ND	3.6	ND	ND	ND	ND	3.6	ND	ND	16.3	16.3	0	NGW	
WS04	ND	ND	1.2	ND	ND	ND	ND	1.2	ND	ND	18.2	18.2	0	NGW	
WS07	ND	ND	2.7	ND	ND	ND	ND	2.7	ND	ND	9.4	9.4	0	NGW	
WS10	ND	ND	0.5	ND	ND	ND	ND	0.5	ND	ND	18.5	18.5	0	NGW	

Key	
ND =	No gas detected
NGW =	No groundwater encountered

Monitoring Equipment:	GFM436 Gas Analyser
Weather Conditions:	Dry, sunny, clear.
Surface Conditions:	Dry.
Operator:	HI

Ground Gas Monitoring Results



Project Name:	Stoneham Lane, Eastleigh.
Project Number:	21-1500-P
Client:	Lidl Great Britain Ltd

Date:	27/05/2022
Visit:	3 of 4

Barometric Pressure (mb)	
Start:	1022
Finish:	1020
Trend:	Steady

Ambient Concentration (% vol)	
CH ₄ :	0.1
CO ₂ :	0.1
O ₂ :	19.3

Monitoring Well	Peak					Steady					Low	Steady	Flow Rate	Groundwater Level	Notes
	CH ₄	CH ₄	CO ₂	CO	H ₂ S	CH ₄	CH ₄	CO ₂	CO	H ₂ S	O ₂	O ₂			
	% lcl	% v/v	% v/v	ppm	ppm	% lcl	% v/v	% v/v	ppm	ppm	% v/v	% v/v			
WS01	ND	ND	0.8	ND	ND	ND	ND	0.1	ND	ND	19.3	19.3	0	NGW	
WS04	ND	ND	2.2	ND	ND	ND	ND	2.2	ND	ND	17.4	17.4	0	NGW	
WS07	ND	ND	0.5	ND	ND	ND	ND	0.5	ND	ND	19.1	19.1	0	NGW	
WS10	ND	ND	0.1	ND	ND	ND	ND	0.1	ND	ND	19.6	19.6	0	NGW	

Key	
ND =	No gas detected
NGW =	No groundwater encountered

Monitoring Equipment:	GFM436 Gas Analyser
Weather Conditions:	Sunny, clear.
Surface Conditions:	Dry.
Operator:	WT.

Ground Gas Monitoring Results



Project Name:	Stoneham Lane, Eastleigh.
Project Number:	21-1500-P
Client:	Lidl Great Britain Ltd

Date:	31/05/2022
Visit:	4 of 4

Barometric Pressure (mb)	
Start:	1014
Finish:	1013
Trend:	Steady

Ambient Concentration (% vol)	
CH ₄ :	0.0
CO ₂ :	0.1
O ₂ :	20.9

Monitoring Well	Peak					Steady					Low	Steady	Flow Rate	Groundwater Level	Notes
	CH ₄	CH ₄	CO ₂	CO	H ₂ S	CH ₄	CH ₄	CO ₂	CO	H ₂ S	O ₂	O ₂			
	% lcl	% v/v	% v/v	ppm	ppm	% lcl	% v/v	% v/v	ppm	ppm	% v/v	% v/v			
WS01	ND	ND	3.3	10	ND	ND	ND	3.3	ND	ND	17.4	17.5	0	NGW	
WS04	ND	ND	0.7	ND	ND	ND	ND	0.7	ND	ND	19.4	19.4	0	NGW	
WS07	ND	ND	2.4	10	ND	ND	ND	2.4	ND	ND	15.5	15.5	0	NGW	
WS10	ND	ND	4.4	10	ND	ND	ND	4.4	ND	ND	12.5	12.5	0	NGW	

Key	
ND =	No gas detected
NGW =	No groundwater encountered

Monitoring Equipment:	GFM436 Gas Analyser
Weather Conditions:	Cloud, heavy showers.
Surface Conditions:	Dry becoming saturated.
Operator:	WT.

Appendix F

TRL DCP Results



TRL DCP Field Test Record Sheet



Project Name:	Stoneham Lane, Eastleigh
Project Number:	21-1500-P
Client:	Lidl
TRL DCP Ref:	DCP01
Depth at Start of Test (mm begl):	0.00 (Ground Level)
Date:	27/04/2022
Comments:	Test undertaken from surface. DCP terminated at 145mm due to obstruction.

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
0	45	0	0
1	70	25	25
2	83	38	13
3	95	50	12
4	105	60	10
5	115	70	10
6	125	80	10
7	140	95	15
8	165	120	25
9	170	125	5
10	180	135	10
11	190	145	10
12	-	-	-
13	-	-	-
14	-	-	-
15	-	-	-
16	-	-	-
17	-	-	-
18	-	-	-
19	-	-	-
20	-	-	-
21	-	-	-
22	-	-	-
23	-	-	-
24	-	-	-
25	-	-	-
26	-	-	-
27	-	-	-
28	-	-	-
29	-	-	-
30	-	-	-
31	-	-	-
32	-	-	-
33	-	-	-
34	-	-	-
35	-	-	-
36	-	-	-
37	-	-	-
38	-	-	-
39	-	-	-
40	-	-	-
41	-	-	-
42	-	-	-
43	-	-	-
44	-	-	-
45	-	-	-
46	-	-	-
47	-	-	-
48	-	-	-
49	-	-	-
50	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
51	-	-	-
52	-	-	-
53	-	-	-
54	-	-	-
55	-	-	-
56	-	-	-
57	-	-	-
58	-	-	-
59	-	-	-
60	-	-	-
61	-	-	-
62	-	-	-
63	-	-	-
64	-	-	-
65	-	-	-
66	-	-	-
67	-	-	-
68	-	-	-
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	-	-	-
74	-	-	-
75	-	-	-
76	-	-	-
77	-	-	-
78	-	-	-
79	-	-	-
80	-	-	-
81	-	-	-
82	-	-	-
83	-	-	-
84	-	-	-
85	-	-	-
86	-	-	-
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	-	-	-
92	-	-	-
93	-	-	-
94	-	-	-
95	-	-	-
96	-	-	-
97	-	-	-
98	-	-	-
99	-	-	-
100	-	-	-
101	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
102	-	-	-
103	-	-	-
104	-	-	-
105	-	-	-
106	-	-	-
107	-	-	-
108	-	-	-
109	-	-	-
110	-	-	-
111	-	-	-
112	-	-	-
113	-	-	-
114	-	-	-
115	-	-	-
116	-	-	-
117	-	-	-
118	-	-	-
119	-	-	-
120	-	-	-
121	-	-	-
122	-	-	-
123	-	-	-
124	-	-	-
125	-	-	-
126	-	-	-
127	-	-	-
128	-	-	-
129	-	-	-
130	-	-	-
131	-	-	-
132	-	-	-
133	-	-	-
134	-	-	-
135	-	-	-
136	-	-	-
137	-	-	-
138	-	-	-
139	-	-	-
140	-	-	-
141	-	-	-
142	-	-	-
143	-	-	-
144	-	-	-
145	-	-	-
146	-	-	-
147	-	-	-
148	-	-	-
148	-	-	-
149	-	-	-
150	-	-	-
151	-	-	-

TRL DCP Field Test Record Sheet



Project Name:	Stoneham Lane, Eastleigh
Project Number:	21-1500-P
Client:	Lidl
TRL DCP Ref:	DCP01A
Depth at Start of Test (mm begl):	0.00 (Ground Level)
Date:	27/04/2022
Comments:	Test undertaken from surface. DCP terminated at 125mm due to obstruction.

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
0	50	0	0
1	80	30	30
2	95	45	15
3	110	60	15
4	115	65	5
5	120	70	5
6	125	75	5
7	-	-	-
8	-	-	-
9	-	-	-
10	-	-	-
11	-	-	-
12	-	-	-
13	-	-	-
14	-	-	-
15	-	-	-
16	-	-	-
17	-	-	-
18	-	-	-
19	-	-	-
20	-	-	-
21	-	-	-
22	-	-	-
23	-	-	-
24	-	-	-
25	-	-	-
26	-	-	-
27	-	-	-
28	-	-	-
29	-	-	-
30	-	-	-
31	-	-	-
32	-	-	-
33	-	-	-
34	-	-	-
35	-	-	-
36	-	-	-
37	-	-	-
38	-	-	-
39	-	-	-
40	-	-	-
41	-	-	-
42	-	-	-
43	-	-	-
44	-	-	-
45	-	-	-
46	-	-	-
47	-	-	-
48	-	-	-
49	-	-	-
50	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
51	-	-	-
52	-	-	-
53	-	-	-
54	-	-	-
55	-	-	-
56	-	-	-
57	-	-	-
58	-	-	-
59	-	-	-
60	-	-	-
61	-	-	-
62	-	-	-
63	-	-	-
64	-	-	-
65	-	-	-
66	-	-	-
67	-	-	-
68	-	-	-
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	-	-	-
74	-	-	-
75	-	-	-
76	-	-	-
77	-	-	-
78	-	-	-
79	-	-	-
80	-	-	-
81	-	-	-
82	-	-	-
83	-	-	-
84	-	-	-
85	-	-	-
86	-	-	-
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	-	-	-
92	-	-	-
93	-	-	-
94	-	-	-
95	-	-	-
96	-	-	-
97	-	-	-
98	-	-	-
99	-	-	-
100	-	-	-
101	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
102	-	-	-
103	-	-	-
104	-	-	-
105	-	-	-
106	-	-	-
107	-	-	-
108	-	-	-
109	-	-	-
110	-	-	-
111	-	-	-
112	-	-	-
113	-	-	-
114	-	-	-
115	-	-	-
116	-	-	-
117	-	-	-
118	-	-	-
119	-	-	-
120	-	-	-
121	-	-	-
122	-	-	-
123	-	-	-
124	-	-	-
125	-	-	-
126	-	-	-
127	-	-	-
128	-	-	-
129	-	-	-
130	-	-	-
131	-	-	-
132	-	-	-
133	-	-	-
134	-	-	-
135	-	-	-
136	-	-	-
137	-	-	-
138	-	-	-
139	-	-	-
140	-	-	-
141	-	-	-
142	-	-	-
143	-	-	-
144	-	-	-
145	-	-	-
146	-	-	-
147	-	-	-
148	-	-	-
148	-	-	-
149	-	-	-
150	-	-	-
151	-	-	-

TRL DCP Field Test Record Sheet



Project Name:	Stoneham Lane, Eastleigh
Project Number:	21-1500-P
Client:	Lidl
TRL DCP Ref:	DCP01B
Depth at Start of Test (mm begl):	0.00 (Ground Level)
Date:	27/04/2022
Comments:	Test undertaken from surface.

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
0	35	0	0
1	45	10	10
2	60	25	15
3	70	35	10
4	90	55	20
5	110	75	20
6	120	85	10
7	130	95	10
8	140	105	10
9	160	125	20
10	185	150	25
11	205	170	20
12	230	195	25
13	245	210	15
14	265	230	20
15	290	255	25
16	330	295	40
17	345	310	15
18	360	325	15
19	385	350	25
20	420	385	35
21	470	435	50
22	520	485	50
23	560	525	40
24	600	565	40
25	630	595	30
26	650	615	20
27	675	640	25
28	710	675	35
29	720	685	10
30	730	695	10
31	745	710	15
32	760	725	15
33	770	735	10
34	780	745	10
35	790	755	10
36	800	765	10
37	815	780	15
38	830	795	15
39	845	810	15
40	855	820	10
41	870	835	15
42	885	850	15
43	900	865	15
44	-	-	-
45	-	-	-
46	-	-	-
47	-	-	-
48	-	-	-
49	-	-	-
50	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
51	-	-	-
52	-	-	-
53	-	-	-
54	-	-	-
55	-	-	-
56	-	-	-
57	-	-	-
58	-	-	-
59	-	-	-
60	-	-	-
61	-	-	-
62	-	-	-
63	-	-	-
64	-	-	-
65	-	-	-
66	-	-	-
67	-	-	-
68	-	-	-
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	-	-	-
74	-	-	-
75	-	-	-
76	-	-	-
77	-	-	-
78	-	-	-
79	-	-	-
80	-	-	-
81	-	-	-
82	-	-	-
83	-	-	-
84	-	-	-
85	-	-	-
86	-	-	-
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	-	-	-
92	-	-	-
93	-	-	-
94	-	-	-
95	-	-	-
96	-	-	-
97	-	-	-
98	-	-	-
99	-	-	-
100	-	-	-
101	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
102	-	-	-
103	-	-	-
104	-	-	-
105	-	-	-
106	-	-	-
107	-	-	-
108	-	-	-
109	-	-	-
110	-	-	-
111	-	-	-
112	-	-	-
113	-	-	-
114	-	-	-
115	-	-	-
116	-	-	-
117	-	-	-
118	-	-	-
119	-	-	-
120	-	-	-
121	-	-	-
122	-	-	-
123	-	-	-
124	-	-	-
125	-	-	-
126	-	-	-
127	-	-	-
128	-	-	-
129	-	-	-
130	-	-	-
131	-	-	-
132	-	-	-
133	-	-	-
134	-	-	-
135	-	-	-
136	-	-	-
137	-	-	-
138	-	-	-
139	-	-	-
140	-	-	-
141	-	-	-
142	-	-	-
143	-	-	-
144	-	-	-
145	-	-	-
146	-	-	-
147	-	-	-
148	-	-	-
148	-	-	-
149	-	-	-
150	-	-	-
151	-	-	-

TRL DCP Field Test Record Sheet



Project Name:	Stoneham Lane, Eastleigh
Project Number:	21-1500-P
Client:	Lidl
TRL DCP Ref:	DCP02
Depth at Start of Test (mm begl):	0.00 (Ground Level)
Date:	27/04/2022
Comments:	Test undertaken from surface. DCP terminated at 185mm due to obstruction.

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
0	40	0	0
1	60	20	20
2	70	30	10
3	85	45	15
4	95	55	10
5	105	65	10
6	115	75	10
7	130	90	15
8	140	100	10
9	150	110	10
10	155	115	5
11	160	120	5
12	165	125	5
13	170	130	5
14	175	135	5
15	179	139	4
16	180	140	1
17	182	142	2
18	185	145	3
19	185	145	0
20	185	145	0
21	-	-	-
22	-	-	-
23	-	-	-
24	-	-	-
25	-	-	-
26	-	-	-
27	-	-	-
28	-	-	-
29	-	-	-
30	-	-	-
31	-	-	-
32	-	-	-
33	-	-	-
34	-	-	-
35	-	-	-
36	-	-	-
37	-	-	-
38	-	-	-
39	-	-	-
40	-	-	-
41	-	-	-
42	-	-	-
43	-	-	-
44	-	-	-
45	-	-	-
46	-	-	-
47	-	-	-
48	-	-	-
49	-	-	-
50	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
51	-	-	-
52	-	-	-
53	-	-	-
54	-	-	-
55	-	-	-
56	-	-	-
57	-	-	-
58	-	-	-
59	-	-	-
60	-	-	-
61	-	-	-
62	-	-	-
63	-	-	-
64	-	-	-
65	-	-	-
66	-	-	-
67	-	-	-
68	-	-	-
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	-	-	-
74	-	-	-
75	-	-	-
76	-	-	-
77	-	-	-
78	-	-	-
79	-	-	-
80	-	-	-
81	-	-	-
82	-	-	-
83	-	-	-
84	-	-	-
85	-	-	-
86	-	-	-
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	-	-	-
92	-	-	-
93	-	-	-
94	-	-	-
95	-	-	-
96	-	-	-
97	-	-	-
98	-	-	-
99	-	-	-
100	-	-	-
101	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
102	-	-	-
103	-	-	-
104	-	-	-
105	-	-	-
106	-	-	-
107	-	-	-
108	-	-	-
109	-	-	-
110	-	-	-
111	-	-	-
112	-	-	-
113	-	-	-
114	-	-	-
115	-	-	-
116	-	-	-
117	-	-	-
118	-	-	-
119	-	-	-
120	-	-	-
121	-	-	-
122	-	-	-
123	-	-	-
124	-	-	-
125	-	-	-
126	-	-	-
127	-	-	-
128	-	-	-
129	-	-	-
130	-	-	-
131	-	-	-
132	-	-	-
133	-	-	-
134	-	-	-
135	-	-	-
136	-	-	-
137	-	-	-
138	-	-	-
139	-	-	-
140	-	-	-
141	-	-	-
142	-	-	-
143	-	-	-
144	-	-	-
145	-	-	-
146	-	-	-
147	-	-	-
148	-	-	-
148	-	-	-
149	-	-	-
150	-	-	-
151	-	-	-

TRL DCP Field Test Record Sheet



Project Name:	Stoneham Lane, Eastleigh
Project Number:	21-1500-P
Client:	Lidl
TRL DCP Ref:	DCP02A
Depth at Start of Test (mm begl):	0.00 (Ground Level)
Date:	27/04/2022
Comments:	Test undertaken from surface. DCP terminated at 70mm due to obstruction.

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
0	40	0	0
1	60	20	20
2	61	21	1
3	67	27	6
4	70	30	3
5	70	30	0
6	70	30	0
7	70	30	0
8	-	-	-
9	-	-	-
10	-	-	-
11	-	-	-
12	-	-	-
13	-	-	-
14	-	-	-
15	-	-	-
16	-	-	-
17	-	-	-
18	-	-	-
19	-	-	-
20	-	-	-
21	-	-	-
22	-	-	-
23	-	-	-
24	-	-	-
25	-	-	-
26	-	-	-
27	-	-	-
28	-	-	-
29	-	-	-
30	-	-	-
31	-	-	-
32	-	-	-
33	-	-	-
34	-	-	-
35	-	-	-
36	-	-	-
37	-	-	-
38	-	-	-
39	-	-	-
40	-	-	-
41	-	-	-
42	-	-	-
43	-	-	-
44	-	-	-
45	-	-	-
46	-	-	-
47	-	-	-
48	-	-	-
49	-	-	-
50	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
51	-	-	-
52	-	-	-
53	-	-	-
54	-	-	-
55	-	-	-
56	-	-	-
57	-	-	-
58	-	-	-
59	-	-	-
60	-	-	-
61	-	-	-
62	-	-	-
63	-	-	-
64	-	-	-
65	-	-	-
66	-	-	-
67	-	-	-
68	-	-	-
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	-	-	-
74	-	-	-
75	-	-	-
76	-	-	-
77	-	-	-
78	-	-	-
79	-	-	-
80	-	-	-
81	-	-	-
82	-	-	-
83	-	-	-
84	-	-	-
85	-	-	-
86	-	-	-
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	-	-	-
92	-	-	-
93	-	-	-
94	-	-	-
95	-	-	-
96	-	-	-
97	-	-	-
98	-	-	-
99	-	-	-
100	-	-	-
101	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
102	-	-	-
103	-	-	-
104	-	-	-
105	-	-	-
106	-	-	-
107	-	-	-
108	-	-	-
109	-	-	-
110	-	-	-
111	-	-	-
112	-	-	-
113	-	-	-
114	-	-	-
115	-	-	-
116	-	-	-
117	-	-	-
118	-	-	-
119	-	-	-
120	-	-	-
121	-	-	-
122	-	-	-
123	-	-	-
124	-	-	-
125	-	-	-
126	-	-	-
127	-	-	-
128	-	-	-
129	-	-	-
130	-	-	-
131	-	-	-
132	-	-	-
133	-	-	-
134	-	-	-
135	-	-	-
136	-	-	-
137	-	-	-
138	-	-	-
139	-	-	-
140	-	-	-
141	-	-	-
142	-	-	-
143	-	-	-
144	-	-	-
145	-	-	-
146	-	-	-
147	-	-	-
148	-	-	-
148	-	-	-
149	-	-	-
150	-	-	-
151	-	-	-

TRL DCP Field Test Record Sheet



Project Name:	Stoneham Lane, Eastleigh
Project Number:	21-1500-P
Client:	Lidl
TRL DCP Ref:	DCP02B
Depth at Start of Test (mm begl):	0.00 (Ground Level)
Date:	27/04/2022
Comments:	Test undertaken from surface. DCP terminated at 235mm due to refusal.

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
0	45	0	0
1	70	25	25
2	80	35	10
3	81	36	1
4	81	36	0
5	90	45	9
6	95	50	5
7	100	55	5
8	110	65	10
9	115	70	5
10	120	75	5
11	125	80	5
12	130	85	5
13	135	90	5
14	140	95	5
15	142	97	2
16	147	102	5
17	150	105	3
18	152	107	2
19	155	110	3
20	160	115	5
21	165	120	5
22	170	125	5
23	175	130	5
24	178	133	3
25	180	135	2
26	182	137	2
27	185	140	3
28	190	145	5
29	195	150	5
30	199	154	4
31	201	156	2
32	205	160	4
33	210	165	5
34	210	165	0
35	215	170	5
36	217	172	2
37	220	175	3
38	222	177	2
39	225	180	3
40	230	185	5
41	230	185	0
42	235	190	5
43	235	190	0
44	235	190	0
45	-	-	-
46	-	-	-
47	-	-	-
48	-	-	-
49	-	-	-
50	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
51	-	-	-
52	-	-	-
53	-	-	-
54	-	-	-
55	-	-	-
56	-	-	-
57	-	-	-
58	-	-	-
59	-	-	-
60	-	-	-
61	-	-	-
62	-	-	-
63	-	-	-
64	-	-	-
65	-	-	-
66	-	-	-
67	-	-	-
68	-	-	-
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	-	-	-
74	-	-	-
75	-	-	-
76	-	-	-
77	-	-	-
78	-	-	-
79	-	-	-
80	-	-	-
81	-	-	-
82	-	-	-
83	-	-	-
84	-	-	-
85	-	-	-
86	-	-	-
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	-	-	-
92	-	-	-
93	-	-	-
94	-	-	-
95	-	-	-
96	-	-	-
97	-	-	-
98	-	-	-
99	-	-	-
100	-	-	-
101	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
102	-	-	-
103	-	-	-
104	-	-	-
105	-	-	-
106	-	-	-
107	-	-	-
108	-	-	-
109	-	-	-
110	-	-	-
111	-	-	-
112	-	-	-
113	-	-	-
114	-	-	-
115	-	-	-
116	-	-	-
117	-	-	-
118	-	-	-
119	-	-	-
120	-	-	-
121	-	-	-
122	-	-	-
123	-	-	-
124	-	-	-
125	-	-	-
126	-	-	-
127	-	-	-
128	-	-	-
129	-	-	-
130	-	-	-
131	-	-	-
132	-	-	-
133	-	-	-
134	-	-	-
135	-	-	-
136	-	-	-
137	-	-	-
138	-	-	-
139	-	-	-
140	-	-	-
141	-	-	-
142	-	-	-
143	-	-	-
144	-	-	-
145	-	-	-
146	-	-	-
147	-	-	-
148	-	-	-
148	-	-	-
149	-	-	-
150	-	-	-
151	-	-	-

TRL DCP Field Test Record Sheet



Project Name:	Stoneham Lane, Eastleigh
Project Number:	21-1500-P
Client:	Lidl
TRL DCP Ref:	DCP03
Depth at Start of Test (mm begl):	0.00 (Ground Level)
Date:	27/04/2022
Comments:	Test undertaken from surface. DCP terminated at 310mm due to refusal.

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
0	40	0	0
1	90	50	50
2	110	70	20
3	125	85	15
4	135	95	10
5	150	110	15
6	175	135	25
7	200	160	25
8	220	180	20
9	235	195	15
10	260	220	25
11	275	235	15
12	280	240	5
13	290	250	10
14	290	250	0
15	295	255	5
16	300	260	5
17	305	265	5
18	310	270	5
19	310	270	0
20	-	-	-
21	-	-	-
22	-	-	-
23	-	-	-
24	-	-	-
25	-	-	-
26	-	-	-
27	-	-	-
28	-	-	-
29	-	-	-
30	-	-	-
31	-	-	-
32	-	-	-
33	-	-	-
34	-	-	-
35	-	-	-
36	-	-	-
37	-	-	-
38	-	-	-
39	-	-	-
40	-	-	-
41	-	-	-
42	-	-	-
43	-	-	-
44	-	-	-
45	-	-	-
46	-	-	-
47	-	-	-
48	-	-	-
49	-	-	-
50	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
51	-	-	-
52	-	-	-
53	-	-	-
54	-	-	-
55	-	-	-
56	-	-	-
57	-	-	-
58	-	-	-
59	-	-	-
60	-	-	-
61	-	-	-
62	-	-	-
63	-	-	-
64	-	-	-
65	-	-	-
66	-	-	-
67	-	-	-
68	-	-	-
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	-	-	-
74	-	-	-
75	-	-	-
76	-	-	-
77	-	-	-
78	-	-	-
79	-	-	-
80	-	-	-
81	-	-	-
82	-	-	-
83	-	-	-
84	-	-	-
85	-	-	-
86	-	-	-
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	-	-	-
92	-	-	-
93	-	-	-
94	-	-	-
95	-	-	-
96	-	-	-
97	-	-	-
98	-	-	-
99	-	-	-
100	-	-	-
101	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
102	-	-	-
103	-	-	-
104	-	-	-
105	-	-	-
106	-	-	-
107	-	-	-
108	-	-	-
109	-	-	-
110	-	-	-
111	-	-	-
112	-	-	-
113	-	-	-
114	-	-	-
115	-	-	-
116	-	-	-
117	-	-	-
118	-	-	-
119	-	-	-
120	-	-	-
121	-	-	-
122	-	-	-
123	-	-	-
124	-	-	-
125	-	-	-
126	-	-	-
127	-	-	-
128	-	-	-
129	-	-	-
130	-	-	-
131	-	-	-
132	-	-	-
133	-	-	-
134	-	-	-
135	-	-	-
136	-	-	-
137	-	-	-
138	-	-	-
139	-	-	-
140	-	-	-
141	-	-	-
142	-	-	-
143	-	-	-
144	-	-	-
145	-	-	-
146	-	-	-
147	-	-	-
148	-	-	-
148	-	-	-
149	-	-	-
150	-	-	-
151	-	-	-

TRL DCP Field Test Record Sheet

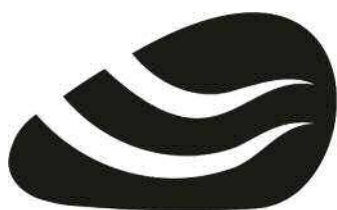


Project Name:	Stoneham Lane, Eastleigh
Project Number:	21-1500-P
Client:	Lidl
TRL DCP Ref:	DCP04
Depth at Start of Test (mm begl):	0.00 (Ground Level)
Date:	27/04/2022
Comments:	Test undertaken from surface.

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
0	50	0	0
1	85	35	35
2	110	60	25
3	130	80	20
4	155	105	25
5	160	110	5
6	185	135	25
7	200	150	15
8	210	160	10
9	230	180	20
10	260	210	30
11	290	240	30
12	320	270	30
13	360	310	40
14	385	335	25
15	410	360	25
16	430	380	20
17	440	390	10
18	460	410	20
19	470	420	10
20	480	430	10
21	490	440	10
22	510	460	20
23	520	470	10
24	530	480	10
25	550	500	20
26	565	515	15
27	585	535	20
28	600	550	15
29	625	575	25
30	640	590	15
31	660	610	20
32	680	630	20
33	710	660	30
34	730	680	20
35	760	710	30
36	785	735	25
37	820	770	35
38	850	800	30
39	880	830	30
40	920	870	40
41	-	-	-
42	-	-	-
43	-	-	-
44	-	-	-
45	-	-	-
46	-	-	-
47	-	-	-
48	-	-	-
49	-	-	-
50	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
51	-	-	-
52	-	-	-
53	-	-	-
54	-	-	-
55	-	-	-
56	-	-	-
57	-	-	-
58	-	-	-
59	-	-	-
60	-	-	-
61	-	-	-
62	-	-	-
63	-	-	-
64	-	-	-
65	-	-	-
66	-	-	-
67	-	-	-
68	-	-	-
69	-	-	-
70	-	-	-
71	-	-	-
72	-	-	-
73	-	-	-
74	-	-	-
75	-	-	-
76	-	-	-
77	-	-	-
78	-	-	-
79	-	-	-
80	-	-	-
81	-	-	-
82	-	-	-
83	-	-	-
84	-	-	-
85	-	-	-
86	-	-	-
87	-	-	-
88	-	-	-
89	-	-	-
90	-	-	-
91	-	-	-
92	-	-	-
93	-	-	-
94	-	-	-
95	-	-	-
96	-	-	-
97	-	-	-
98	-	-	-
99	-	-	-
100	-	-	-
101	-	-	-

Blow	Reading on Scale (mm)	Depth (mm begl)	Penetration (mm)
102	-	-	-
103	-	-	-
104	-	-	-
105	-	-	-
106	-	-	-
107	-	-	-
108	-	-	-
109	-	-	-
110	-	-	-
111	-	-	-
112	-	-	-
113	-	-	-
114	-	-	-
115	-	-	-
116	-	-	-
117	-	-	-
118	-	-	-
119	-	-	-
120	-	-	-
121	-	-	-
122	-	-	-
123	-	-	-
124	-	-	-
125	-	-	-
126	-	-	-
127	-	-	-
128	-	-	-
129	-	-	-
130	-	-	-
131	-	-	-
132	-	-	-
133	-	-	-
134	-	-	-
135	-	-	-
136	-	-	-
137	-	-	-
138	-	-	-
139	-	-	-
140	-	-	-
141	-	-	-
142	-	-	-
143	-	-	-
144	-	-	-
145	-	-	-
146	-	-	-
147	-	-	-
148	-	-	-
148	-	-	-
149	-	-	-
150	-	-	-
151	-	-	-



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