



**1-6 May Cottages
39-47 Hollingdean Road
Brighton
BN2 4AA**

**Ground Contamination
Risk Assessment and
Remediation Strategy**

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This report is not intended to be either an ecological, archaeological or flood risk assessment. An appropriate specialist should be consulted about any concerns that may arise in this regard.

EXECUTIVE SUMMARY

The following presents a summary of the main findings of the report. It is emphasised that no reliance should be placed on any individual point until the whole of the report has been read as other sections of the report may put into context the information contained herein.

It is proposed to redevelop the site located at 39-47 Hollingdean Road, Brighton to provide a multi-storey block of flats with some limited soft landscaping.

The site currently comprises a row of terraced houses and their gardens.

The site comprised open land at the time of the earliest inspected historical map, dated 1875. The existing houses were first shown on the site on the 1911 mapping revision.

Reference to geological datasets indicates that the site is expected to be underlain by Head deposits overlying the White Chalk Subgroup. The ground investigation encountered made ground to the full depth of the investigation which was limited to 1.0m.

The Head deposits are classed as a Secondary Undifferentiated Stratum. The White Chalk Subgroup is classed as a Principal Aquifer. The site lies within an Environment Agency Source Protection Zone I (Inner Catchment).

The ground investigation recorded the made ground to contain concentrations of lead above published soil screening values. Remedial works are considered to be required within soft landscaped areas in order to sever the identified pollutant linkage.

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1. INTRODUCTION

It is proposed to redevelop the site located at 39-47 Hollingdean Road, Brighton to provide a multi-storey block of flats with some limited soft landscaping. The development forms the second phase of a wider development, with construction of the first phase currently in progress to the south and east of the site. A copy of the proposed development layout is presented in Appendix A.

Ashdown Site Investigation Ltd was requested to undertake a ground investigation and to provide a contamination risk assessment to assist with the discharge of planning conditions.

The specific objectives of the works were to:

- a) Establish the expected geology, hydrogeology and hydrology at the site;
- b) Ascertain the development history and current site use;
- c) Develop a preliminary conceptual model of the site identifying potential pollutant linkages relating to end users of the proposed development works, to controlled waters beneath and in the vicinity of the site, or to other off-site sensitive receptors, if identified;
- d) Investigate the shallow ground and groundwater conditions at the site;
- e) Test for the presence of contaminants identified by the preliminary conceptual model; and
- f) Develop a quantitative conceptual model of the site, refining the preliminary model to identify any pollutant linkages that may be present.

The scope of the works covered by this report, and the terms and conditions under which they were undertaken, were set out within the offer letter Q10639/Rev2, dated 11th November 2021. The instruction to proceed was received from the client, Westridge Construction Ltd.

Copies of the historical maps and geo-environmental data referred to in this report are presented within Appendix H.

2. SITE WALKOVER SURVEY

The site comprises an irregular shaped plot of land located at 39-47 Hollingdean Road, Brighton and is centred on the approximate Ordnance Survey national grid reference 532025 105930. A site location plan and site plan are presented as Figure 1 and Figure 2, respectively. Photographs of the site are included in Appendix B.

The site is occupied by a terrace of houses along the northern boundary, with gardens to the south. The southernmost part of the assessment site extends onto the development site which lies to the south and east. This area is currently occupied by prefabricated site offices. The gardens of the houses are being used to store construction materials.

The site is bound by Hollingdean Road to the north and further housing to the west.

3. ENVIRONMENTAL AND GEO-ENVIRONMENTAL DATA REVIEW

3.1 Geological Data Review

3.1.1 Expected Geology and Aquifer Designation

The stratigraphic succession that may be expected to underlie the site is presented in the following table.

Table 1. Expected Strata and Aquifer Designation

Type	Stratum	Aquifer Designation
Superficial	Head	Secondary Undifferentiated Aquifer
Bedrock	White Chalk Subgroup	Principal Aquifer

The superficial Head is a polymict deposit generally comprising clay and sandy clay with variable amounts of gravel and cobbles. The lithology of the Head reflects the nature of the parent solid strata; the gravel and cobble fraction comprising chalk and flint. The material is likely to have been disturbed by intense frost action in a periglacial environment. It is usually poorly sorted but may be stratified where it has been subject to solifluction and/or hillwash and soil creep.

The White Chalk Subgroup comprises a weak, white chalk locally with flint bands together with scattered nodular flints.

3.1.2 Natural Ground Subsidence

Table 2. Natural Ground Subsidence from Groundsure Data

Section	Risk Assessment
Soil Volume Change Potential (Shrink-Swell)	Very Low (on site)
Running Sands	Very Low
Compressible Deposits	Negligible on site. However, an area of Very Low risk is identified 8m west.
Collapsible Deposits	Very Low

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Landslides	Very Low
Ground Dissolution of Soluble Rocks	Low

The low risk of ground dissolution of soluble rocks is a generic entry in respect of the White Chalk Subgroup deposits. These may be expected to have a deeply convoluted upper surface as a result of solution weathering. The presence of natural cavities in the chalk is very rare and solution features, if present, can be expected to be infilled with Quaternary deposits such as the Head.

The infill material may be significantly weaker than the surrounding chalk. Solution features can comprise pipes extending to several metres deep into the chalk or conical depressions and basin shaped structures.

It should be noted that the assessment provided within the data represents a generic assessment only. A site-specific geotechnical assessment would require the undertaking of an intrusive ground investigation.

3.1.3 Mining, Ground Workings and Natural Cavities

Table 3. Mining, Extraction and Natural Cavities from Groundsure Data

Section	Risk Assessment
Natural Cavities	No natural cavity records are identified within 500m of the site.
BritPits	No BritPits records are identified within 500m of the site.
Surface Ground Workings	A reservoir is identified 50m and 81m north, along with a pond and "unspecified heap". However, all of these entries refer to the location of an extant covered reservoir, the boundary of which lies ~80m to the north of the site, and is set at a higher level than the site.
Underground Workings	An unspecified shaft is located 184m to the north west of site.
Historical Mineral Planning Areas	No records are identified within 500m of the site.
Non-Coal Mining	The site lies within an area where the data states that "Sporadic underground mining of restricted extent may have occurred." However, the data goes on to state that "Potential for difficult ground conditions is unlikely and localised and are at a level where they need not be considered."
Mining Cavities	No records are identified within 500m of the site.
Johnson Poole and Bloomer	No records are identified on the site.
Coal Mining	No records are identified on the site.
Brine Areas	No records are identified on the site.
Gypsum Areas	No records are identified on the site.
Tin Mining	No records are identified on the site.
Clay Mining	No records are identified on the site.

The reference to non-coal mining is discussed further below.

Historically, chalk deposits were often mined locally. Most commonly historical mines characteristically comprise a narrow shaft with a number of chambers radiating from the base. These structures are colloquially known as "deneholes", "chalk-wells" or "chalkangles". The

depth of the features reflects the depth to the underlying chalk bedrock. The shaft width was commonly in the order of 2m to 3m, widening out into galleries at depth. The chalk was extracted for soil improvement and was usually applied directly to fields though sometimes the chalk was processed, typically by burning in kilns where the chalk was used to produce quicklime (calcium oxide). Once they had reached their limits the mines were commonly capped. Various capping techniques were used; examples include the use of upturned trees or brick arching. Records pertaining to the distribution of these localised mines are incomplete, usually being limited to features marked as shafts or the occurrence of circular depressions on historic Ordnance Survey maps. In the field they are most likely to be visible as shallow depressions, if at all.

Site inspection and inspection of historical maps extending back in time to 1873 does not reveal the presence of any significant features at the site though, for reasons given above, their presence cannot be fully discounted. Whilst the risk of mines being present beneath the site is considered to be very low, it is nonetheless recommended that all stripped formation levels should be inspected for evidence of historical backfilled shafts as a precaution.

3.1.4 Radon

Table 4. Radon

Section	Risk Assessment
Radon Affected Areas	The site is reported to be within an area where between 1% and 3% of properties are above the action level requiring radon gas protection measures to be installed in new buildings.
Radon Protection Measures	No radon protection measures are reported by the British Geological Survey to be necessary in the construction of new dwellings or extensions.

3.1.5 Soil Chemistry

The estimated background soil chemistry does not pose an unacceptable risk in the context of the site.

3.2 Hydrogeological and Hydrological Data Review

3.2.1 Groundwater Abstractions

The closest groundwater abstraction licence is recorded to lie 99m to the north of the site. The licence is for a portable water supply and refers to the location of the reservoir discussed in Table 3.

3.2.2 Surface Water Abstractions

No surface water abstraction licences are indicated within 2km of the Site.

3.2.3 Groundwater Source Protection Zones

The site lies within an Environment Agency Source Protection Zone I (Inner Catchment).

3.2.4 Surface Water Features

No significant surface water features are recorded within 250m of the site.

3.2.5 River and Coastal Flooding

3.2.5.1 Flooding from Rivers and Sea (RoFRaS)

No RoFRaS records are identified within 50m of the site.

3.2.5.2 Historical Flood Events

No historical flood events are identified within 250m of the site.

3.2.5.3 Flood Defences

No flood defences or areas benefitting from flood defences are recorded within 250m of the site.

3.2.5.4 Flood Storage Areas

No flood storage areas are recorded within 250m of the site.

3.2.5.5 Flood Zones

The site does not lie within an Environment Agency Flood Zone 2 or 3.

3.2.6 Surface Water Flooding

The highest surface water flooding risk on site and within 50m of the site is a 1 in 30 year event with a depth greater than 1.0m.

3.2.7 Groundwater Flooding

The highest groundwater flooding risk on site is reported to be "High". The highest risk within 50m of the site is reported to be "High".

3.3 Geo-Environmental Data Review

3.3.1 Historical Industrial Sites

The following table summarises past land uses of the site and the surrounding area extracted from 1:10,000 and 1:10,560 historical maps.

Table 5. Historical Industrial Sites

Section	Remarks
Historical Industrial Land Uses Identified from 1:10,560 and 1:10,000 scale mapping	<p>Historical railway sidings and associated buildings are identified 15m to the south west. A historical railway station is also identified 27m south west and an unspecified works 51m south, on the opposite side of the historical railway line.</p> <p>The railway line and station were formerly set on an embankment which has subsequently been removed, and the area of both these, and the former works, redeveloped as part of the existing supermarket. As such, these are not considered to represent viable sources of contamination.</p>
Historical Tank Database Identified from 1:1,250 and 1:2,500 scale mapping	The closest entry refers to a historical gas works 86m north west of the site. Due to the distance from the site these are not considered to present viable sources of contamination.
Historical Energy Features Identified from 1:1,250 and 1:2,500 scale mapping	The closest entries refer to historical substations 49m to the east and 68m north west. Due to the distance from the site these are not considered to present viable sources of contamination.
Historical Petrol Stations Identified from 1:1,250 and 1:2,500 scale mapping	No historical petrol stations are identified within 100m of the site.
Historical Garages Identified from 1:1,250 and 1:2,500 scale mapping	The data identifies a historical garage on site, though this is a geo-referencing error as the former garage actually lay immediately to the west of the site.
Historical Military Sites	No historical military sites are identified within 100m of the site.

3.3.2 Landfill and Other Waste Sites

The following table summarises the location of waste sites either on the site or within the surrounding area (within 250m of the site).

Table 6. Landfill and Other Waste Sites

Section	Remarks
Active or Recent Landfills	No active or recent landfills are identified within 250m of the site.
Historical Landfill (BGS Records/LA/Mapping Records EA Records)	The closest is recorded as 300m south east of site for inert waste. Given the distance to the site this is not considered to represent a viable source of ground gas generation which could impact the site.
Historical Waste Sites	No entries are listed within 100m of the site.
Licensed Waste Sites	No entries are listed within 100m of the site.
Waste Exemptions	Multiple waste exemptions refer to a site 62m east, which is a waste recovery and recycling project. Given the distance and nature of the entries, these are not considered to pose a viable source of contamination.

3.3.3 Current Industrial Land Use

The relevant current industrial land uses are discussed in the table below.

Table 7. Current Industrial Land Uses

Section	Remarks
<p>Recent Industrial Land Use</p>	<p>There appears to be a slight geo-referencing error for a number of the entries in this section.</p> <p>A car sales yard was formerly located on the site, in one of the terraced houses, with the former yard area to the south east used for vehicle storage. A vehicle repair workshop is located on the opposite side of Hollingdean Road to the west of the site and a factory is identified some 50m to the north west.</p> <p>Given the nature of the on-site use (business premises rather than actual vehicle storage) this is not considered to represent a viable source of contamination.</p> <p>Due to the nature and distance of the off-site sources identified, these are not considered to represent viable sources of contamination.</p>
<p>Current or Recent Petrol stations</p>	<p>The area immediately west of the site, which is now occupied by housing, was formerly a petrol filling station before being developed as a block of flats around 2011.</p> <p>The development was carried out under planning application ref: BH2010/00498. The planning portal contains a copy of a Closure Report on the decommissioning works (ref: 44319988/MARP0004, Issue 3, 4th October 2007) which details how the site was remediated by way of the removal of the former tanks, interceptor and residual contaminated soils.</p>
<p>Electricity Cables / Gas Pipelines</p>	<p>No underground high voltage cables or high-pressure pipes are identified within 100m of the site.</p>
<p>Sites determined as Contaminated Land</p>	<p>No sites determined as contaminated land are identified within 100m of the site.</p>
<p>Control of Major Accident Hazards (COMAH) Sites</p>	<p>No COMAH sites are identified within 100m of the site.</p>
<p>Regulated Explosive Sites</p>	<p>No regulated explosive sites are identified within 100m of the site.</p>
<p>Hazardous Substance Storage/Usage</p>	<p>No consents have been granted for hazardous substance storage/usage within 100m of the site.</p>
<p>Historical Licenced Industrial Activities (IPC)</p>	<p>No records are recorded within 100m of the site.</p>
<p>Licenced Industrial Activities (Part A(1))</p>	<p>No records are identified within 100m of the site.</p>
<p>Licenced Pollutant Release (Part A(2)/B)</p>	<p>The former petrol station to the west held a permit for vapour recovery, no enforcement notifications are listed. A permit for respraying of vehicles is also listed for the vehicle repair workshop further west on the opposite side of Hollingdean Road. In view of the distance this is not considered to represent a viable source of contamination.</p>
<p>Radioactive Substance Authorisations</p>	<p>No records are identified within 100m of the site.</p>
<p>Licenced Discharges to Controlled Waters</p>	<p>No records are identified within 100m of the site.</p>
<p>Pollutant Release to Surface Water / Public Sewer</p>	<p>No records are identified within 100m of the site.</p>
<p>List 1 / List 2 Dangerous Substances</p>	<p>No records are identified within 100m of the site.</p>
<p>Pollution Incidents (EA/NRW)</p>	<p>No pollution incidents are identified within 100m of the site.</p>

Section	Remarks
Pollution Inventory Substances / Waste Transfers / Radioactive Waste	No records are identified within 100m of the site.

3.3.4 Sensitive Land Use

No sensitive land uses at risk from contamination are identified within 1km of the site.

3.3.5 Railway Infrastructure and Projects

As discussed earlier, historical railways lines and a station were present to the south west of the site.

4. HISTORICAL MAP REVIEW

Historical Ordnance Survey maps covering the area of the site have been reviewed and are summarised in the following table.

It is noted that each map presents information applicable at the time of the survey (or revision date) and is subject to surveying and cartographic errors and/or advances. Revisions to maps are made at irregular intervals and it is possible that significant developments may have taken place on or within the vicinity of the site that are not shown on the maps.

'In the Vicinity of the Site' generally refers to features of relevance within approximately 250m of the site boundary but may also include more distant features if considered to be pertinent to the assessment of the development history.

Table 8. Summary of Significant Features Identified on Historical Maps

Map Details	On-Site	In the Vicinity of the Site
1875 1:2,500	The site comprises part of an open piece of land	Hollingdean Road runs along the north of the site. An embankment is shown ~25m south west with a railway line on it. Lewes Road Station is located on the embankment ~40m to the south. A gas works is located ~90m to the north west. A covered reservoir is located ~80m to the north
1898 1:2,500		Buildings are now shown immediately to the east and west of the site.
1911 1:2,500	A row of terraced structures is shown in the north of the site on the footprint of the existing buildings.	The gas works is no longer labelled, though the tanks are still shown.
1952 1:1,250		An electrical substation is located 50m to the east of site. A garage is located ~20m north west on the opposite side of Hollingdean Road.

Map Details	On-Site	In the Vicinity of the Site
1971-1973 1:1,250		A garage is located directly to the west of site. An electrical factory is now present ~30m north west.
1987 1:1,1250		The configuration of the site to the west has changed but it is still labelled as a garage. The railway line to the south west has been removed and the area closest to the site is now occupied by ramps and buildings on the footprint of the existing supermarket.
1989 1:1,250		The electrical factory to the north west is now labelled as a Works.
2012 Aerial Photo		The former garage to the west has been redeveloped with a large building now occupying the majority of the site.

5. PRELIMINARY CONTAMINATION RISK ASSESSMENT

5.1 Introduction

The risk assessment considers the potential sources of contamination identified, the receptors that may be present in view of the development proposals and the contaminant pathways by which these may be linked. A complete pollutant linkage is only deemed to exist where all three are present and a site is considered suitable for use where no complete pollutant linkages are identified.

Where a complete pollutant linkage is deemed to be present, an assessment of the level of risk associated with the pollutant linkage has been carried out in line with current guidance¹.

The level of risk is determined using the risk matrix presented in the following table. Classifications of probability, consequence and risk are presented in Appendix C.

Table 9. Risk Assessment Matrix

		Probability			
		Very Low	Low	Moderate	High
Consequence	Very Minor	Negligible	Very Low	Low	Low/Moderate
	Minor	Very Low	Low	Low/Moderate	Moderate
	Moderate	Low	Low/Moderate	Moderate	High
	Severe	Low/Moderate	Moderate	High	Very High

5.2 Basis of Assessment

The development is to comprise a new residential building together with some limited areas of decorative communal soft landscaping where end users can expect to come into contact with the

¹ Contaminated Land Risk Assessment: A guide to good practice, CIRIA C552, 2001.

underlying soils, where soil derived dusts may be generated but where the growing of any significant volumes of fruit or vegetables would either not be permitted or would not be feasible.

The proposed development layout is presented in Appendix A. Should the proposed development plans be altered, a revised risk assessment may be required.

It is noted that an asbestos survey of existing structures and infrastructure² was beyond the brief of this report. The risk assessment has been undertaken on the basis that should asbestos be identified within buildings or infrastructure, these materials will be removed appropriately by licensed contractors and asbestos materials disposed of in accordance with legal requirements prior to demolition or other works in order to avoid contaminating soils at the site.

The findings of the preliminary contamination assessment have been used to inform the ground investigation works which are discussed in the following sections of the report.

5.3 Potential Contamination Sources Identified

The following potential sources of contamination have been identified by the preliminary contamination risk assessment:

- Made ground associated with site development and former railway embankment to the south west.
- Garage directly to the west of site.

As discussed in the previous sections, although a petrol filling station was formerly located immediately to the west of the site, this site was remediated as part of its development in 2011. As such, the potential risk from this source is considered to be very low.

5.4 Preliminary Conceptual Model

The preliminary conceptual model for the proposed development is presented in Appendix D.

² As defined under Section 5(a) of the Control of Asbestos Regulations, 2012.

6. GROUND INVESTIGATION

6.1 Introduction

The ground investigation comprised the excavation of a series of dynamic sampler boreholes and hand dug pits. The intrusive work was carried out on 17th November 2021. The exploratory hole locations are shown on Figure 2.

Descriptions of the strata encountered and comments on groundwater conditions are shown in the exploratory hole records given in Appendix E, together with notes to assist in their interpretation.

6.2 Exploratory Holes

6.2.1 Dynamic Sampler Boreholes

Three boreholes, designated BH04, BH05 and BH07, were drilled to a depth of up to 1.0m below ground level.

The boreholes were formed by a 1.0m long, open ended, hollow steel tube of up to 100mm in diameter. The hollow steel tubes contained a removable plastic liner. The tubes were driven into the ground by means of a hand-held hydraulic hammer. The tubes were extracted from the ground using a hydraulic operated jack and the sample recovered from the plastic liner.

6.2.2 Trial Pits

Four trial pits, designated BH01 to BH03 and BH06 were dug using hand tools to depths of between 0.50m and 1.0m below ground level.

6.3 Sampling

Disturbed samples of soil were taken at the depths shown in the exploratory hole records and were collected in plastic tubs or amber jars fitted with gas tight lids.

On collection the amber jars were stored in cool boxes with cooling blocks to maintain temperatures below 4°C until transferred to refrigerators upon return to the office and subsequently forwarded to the external accredited chemical testing laboratory.

6.4 Laboratory Testing

Laboratory testing was scheduled by Ashdown Site Investigation Ltd. Results from the laboratory tests are provided in Appendix F.

Chemical (contamination) testing of selected samples was undertaken by a laboratory with recognised (UKAS and MCERTS) accreditation for quality control.

7. GROUND CONDITIONS

7.1 Stratigraphy

7.1.1 Surface Covering

Boreholes BH01 and BH06 were undertaken beneath paving slabs some 50mm thick. No surfacing materials were encountered in borehole BH05 or BH07.

The remaining exploratory holes were excavated through a surface cover of topsoil some 200mm to 250mm in thickness.

7.1.2 Made Ground/Reworked Soils

Made ground, generally comprising slightly gravelly slightly sandy clay was recorded to the full depth of each position. The gravel fraction comprised variable quantities of chalk, flint, brick, concrete, glass, metal and charcoal like material.

7.2 Stability

Each of the exploratory holes was recorded to remain stable during the course of drilling and excavation.

8. QUANTITATIVE CONTAMINATION ASSESSMENT

8.1 Analysis of Contamination Test Results

Comparison of the results of the laboratory testing has been made against the 'Suitable For Use Levels' (S4UL)³ or, in lieu of an S4UL being developed for lead, the Category 4 Screening Level (C4SL)⁴. These are collectively referred to as soil screening values (SSV).

In view of the development proposal, the SSV utilised in this assessment are those calculated for the generic 'Public Open Space near Residential Housing' (POS_{resi}) land use⁵. The POS_{resi} land use is intended to be representative of a predominately grassed area adjacent to high density housing, such as the central green area on many 1930 – 1970s housing estates and smaller areas commonly incorporated in new developments as informal grassed areas, or more formal landscaped areas with a mixture of open space which is covered in soil with planting. It is assumed that the close proximity to the place of residence will allow the tracking back of soil into residential properties to occur. The critical receptor for this land use is considered to be a young female child resident on site from ages >3 to <9. Exposure routes that are considered include the potential for ingestion of the soil and dust (both indoor and outdoor), dermal contact with soil and dust (both indoor and outdoor), the inhalation of dust (both indoor and outdoor) and the potential outdoor inhalation of soil vapours.

For the assessment of risk to controlled waters a qualitative assessment has been undertaken based upon the concentrations of contaminants recorded within the soil samples and the information obtained about the sensitivity of the underlying strata or nearby surface water receptors.

8.1.1 Heavy Metals

The following table summarises the SSV along with the maximum and minimum concentrations of the heavy metals tested for.

Table 10. Summary of Test Results for Heavy Metals

Contaminant	SSV (mg/kg)	No. of Samples	Minimum Concentration (mg/kg)	Maximum concentration (mg/kg)	Limit of Detection (mg/kg)	No of exceedances
Arsenic	79	9	5.4	36.4	1	0
Cadmium	120	9	0.6	2.5	0.5	0
Chromium	1500	9	14	39.3	5	0
Copper	12000	9	14.9	194	5	0
Lead	630	9	68.3	1880	5	6
Mercury	120	9	<LOD	5.5	0.5	0
Nickel	230	9	12.5	43.5	5	0
Selenium	1100	9	<LOD	1.1	1	0
Zinc	81000	9	82.5	1670	5	0
Hexavalent Chromium	7.7	9	<LOD	<LOD	0.8	0
Water Soluble Boron	21000	9	<LOD	1.2	0.5	0

³ Nathanail, C.P, et al., The LQM/CIEH S4ULs for Human Health Risk Assessment, 2015, Land Quality Press, Nottingham. Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3071.

⁴ SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination. Final Project Report, published by DEFRA, 2014.

⁵ SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination. Final Project Report, published by DEFRA, 2014.

Six of the nine samples tested recorded concentrations of lead well above the screening value. The made ground soils are considered to pose an unacceptable risk to end users in the context of the proposed development.

At the concentrations recorded, the heavy metals would not be expected to exhibit significant mobility within the soils and are therefore not considered to pose an unacceptable risk to controlled waters beneath the site.

8.1.2 Asbestos

No suspected asbestos materials were noted within any of the exploratory holes undertaken at the site. None of the eight samples screened recorded the presence of any asbestos materials.

In view of the screening carried out, there does not appear to be a significant risk to end users from asbestos materials within the shallow soils. It is noted that due to the heterogeneity of made ground, there will always remain the potential for localised asbestos materials to be encountered during construction works, though the likelihood of this is considered to be low. All workers at the site should be made aware of what actions to take in the event that suspected asbestos materials are identified at any time during the development works.

8.1.3 Polycyclic Aromatic Hydrocarbon (PAH) Compounds

The following table summarises the soil screening values, maximum and minimum concentrations for the PAH compounds tested for.

Table 11. Summary of Test Results for PAH Compounds

Contaminant	SSV (mg/kg)	No. of Samples	Minimum Concentration (mg/kg)	Maximum concentration (mg/kg)	Limit of Detection (mg/kg)	No of exceedances
Naphthalene	4900	9	<LOD	0.6	0.1	0
Acenaphthylene	15000	9	<LOD	0.4	0.1	0
Acenaphthene	15000	9	<LOD	0.2	0.1	0
Fluorene	9900	9	<LOD	0.1	0.1	0
Phenanthrene	3100	9	<LOD	1.8	0.1	0
Anthracene	74000	9	<LOD	0.6	0.1	0
Fluoranthene	3100	9	<LOD	5.1	0.1	0
Pyrene	7400	9	<LOD	4.4	0.1	0
Benz(a)anthracene	29	9	<LOD	2.5	0.1	0
Chrysene	57	9	<LOD	3.5	0.1	0
Benzo(b)fluoranthene	7.1	9	<LOD	4.2	0.1	0
Benzo(k)fluoranthene	190	9	<LOD	4.5	0.1	0
Benzo(a)pyrene	5.7	9	<LOD	4.3	0.1	0
Indeno(123-cd)pyrene	82	9	<LOD	3.6	0.1	0
Dibenz(ah)anthracene	0.57	9	<LOD	0.5	0.1	0
Benzo(ghi)perylene	640	9	<LOD	3.2	0.1	0

None of the samples tested recorded concentrations of individual PAH compounds above their respective SSV. There is not considered to be an unacceptable risk to end users from PAH compounds within the shallow soils.

At the concentrations recorded, PAH compounds would not be expected to exhibit significant mobility within the soils and are therefore not considered to pose an unacceptable risk to controlled waters beneath the site.

8.1.4 Petroleum Hydrocarbons and BTEX compounds

The following table lists the screening values for petroleum hydrocarbon equivalent carbon weight fractions calculated for 1% organic content.

Table 12. Soil Screening Values for petroleum hydrocarbon equivalent carbon weight fractions

Petroleum Hydrocarbon Fraction	SSV (mg/kg)	Petroleum Hydrocarbon Fraction	SSV (mg/kg)
Aliphatic EC 5-6	570000	Aromatic EC 5-7	56000
Aliphatic EC >6-8	600000	Aromatic EC >7-8	56000
Aliphatic EC >8-10	13000	Aromatic EC >8-10	5000
Aliphatic EC >10-12	13000	Aromatic EC >10-12	5000
Aliphatic EC >12-16	13000	Aromatic EC >12-16	5100
Aliphatic EC >16-35	250000	Aromatic EC >16-21	3800
Aliphatic EC >35-44	250000	Aromatic EC >21-35	3800
		Aromatic EC >35-44	3800

Table 13. Soil Screening Values for BTEX Compounds

Compound	SSV (mg/kg)	Compound	SSV (mg/kg)
Benzene	72	Ethylbenzene	24000
Toluene	56000	<i>p</i> -Xylene ¹	41000

¹ Xylene has three structural isomers, the SSV presented is for *p*-Xylene, which has the most conservative SSV.

Full speciation of the concentrations of petroleum hydrocarbons by aromatic and aliphatic fractions was not undertaken on all samples. Where this was not done, the results of the testing can still be compared with the more stringent of the screening values for the respective equivalent carbon weight fraction and, where the concentration recorded is found to be lower, it can be reasonably concluded that no significant risk is present.

None of the samples recorded any significant concentrations of petroleum hydrocarbons, all equivalent carbon weight fractions and BTEX compounds were present at concentrations well below their respective screening values.

There is not considered to be an unacceptable risk to either end users or controlled waters from the largely negligible concentrations of petroleum hydrocarbons present within the made ground soils.

Comparison of the test results with screening criteria for water supply pipes⁶ indicates that the protection of water supply services is unlikely to be required. However, it is noted that the testing undertaken to date does not encompass all of the contaminants that may be required by water supply companies for assessment purposes. Notwithstanding the above it is strongly

⁶ Set out within Table 3.1 of the Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites, UK Water Industry Research, 2010.

recommended that designers consult with the proposed water supply company to ascertain whether they require further laboratory testing and assessment specific to proposed routes of services.

8.2 Ground Gases

No potential sources of ground gas generation have been identified either on or in the vicinity of the site by the preliminary risk assessment.

As part of a ground investigation on the adjacent area to the south and east, monitoring of standpipes for the concentrations of bulk gases was undertaken at the request of the client. No significant concentrations of ground gases or elevated gas flow rates were recorded during the monitoring period. The assessment concluded that no gas protection measures were required for the proposed development.

In the absence of any potential source of ground gas generation and in view of the works carried out on the adjacent Phase 1 development area, there is not considered to be a need for any gas protection measures in the proposed development.

8.3 Quantitative Contamination Risk Assessment

8.3.1 Contamination Source Identified

The following source of contamination has been identified by the quantitative contamination risk assessment:

- Made ground containing concentrations of lead above soil screening values.

8.3.2 Quantitative Conceptual Model

The quantitative conceptual model for the proposed development is presented in Appendix G.

9. REMEDIATION STRATEGY

The presence of complete pollutant linkages means that remedial works will be required as part of the proposed development. The remediation works detailed herein have been prepared in line with current guidance and have been developed to meet the technical objectives for the development, the major drivers behind which are:

- To achieve successful remediation within a particular timescale and budget;
- Familiarity with the methodology by the developer/ground worker;
- Confidence that the remediation can be carried out by good technical practices; and
- Likely success of the style of remediation.

9.1 Options Appraisal

The driver for remediation at the site is the presence of made ground soils containing concentrations of lead that pose an unacceptable level of risk to human health in the context of the development. There are no in situ or ex situ remediation techniques available to reduce the concentrations of lead within the made ground soils to below that of the published screening values.

The method chosen for remediation must be achievable by the groundworker, using techniques that they are familiar with. Given the proposed development layout, and the limited amount of soft landscaping proposed, it is considered that the remediation proposals should comprise the provision of a cover system, to sever the contaminant pathways, in areas where the end users may reasonably be expected to be exposed to the soils or soil derived dust.

9.2 Protection of Human Health

Within all proposed areas of soft landscaping (as shown on the development layout in Appendix A), a cover system of at least 300mm of verified "clean" topsoil and/or subsoil underlain by a high visibility geotextile marker geogrid should be placed to sever the contaminant pathway.

Should any tree planting be proposed within areas of soft landscaping, then the depth of the cover system would need to be locally deepened to that required for the tree pit.

Elsewhere on the site the presence of building cover, roadways and permanent access ways comprising hard cover will also act to sever the contaminant pathways and thereby reduce the risk to end users to an acceptable level.

9.3 Protection of Controlled Waters

The risk assessment did not identify any unacceptable risks to controlled waters beneath the site and therefore no specific remedial works are considered necessary in this regard.

9.4 Protection of Services

All service providers' requirements must be fully adhered to in order to reduce the risk to end users and services to an acceptable level.

Details of any measures required by service providers and confirmation of their implementation should be included within the verification report.

9.5 Risks to Other Potential Receptors

All construction workers must undertake their own risk assessment, based upon the works to be carried out and the proposed method by which this will be achieved, in accordance with current health and safety legislation. Their assessment should take into account all available information about the site, including that presented within this report.

Appropriate working procedures and PPE should be adopted to ensure the health and safety of the site operatives. Instruction should be given in the recognition of potentially hazardous materials. All site personnel should be appropriately briefed on the discovery strategy, presented below, and what actions they must take in the event that further evidence of contamination is identified or suspected.

9.6 Watching Brief on Development Works

If, during the course of the site clearance and development works, any materials not previously identified by the investigation that are suspected of being 'contaminants' are encountered, then the following procedure should apply:

- All works in that area should cease and the site manager should be informed.
- Advice should be sought from suitably qualified and experienced personnel as to whether any further site inspection, sampling, testing and/or assessment is deemed necessary.
- If required, the conclusions of any assessment and any proposed remedial works (if required) should be agreed by the local authority.
- If necessary, full details of any remedial works should be included in the verification report for the site.

Suspected 'contamination' may take the following form, though it is noted that this list is not exhaustive and site operatives should ask if they are at all unsure of any findings:

- Soil or water looks oily and/or has an oily odour
- Soil or water has a solvent type of odour
- Significant quantities of man-made materials within fill such as paint cans, car parts, glass fragments
- Suspected asbestos containing materials (insulating boards, cement, loose fibres etc.)
- Significant volumes of clinker like or ashy material
- Sand bags, and/or subsurface concrete structures
- Animal carcasses or evidence of animal burial pits

10. VERIFICATION PLAN

10.1 Inspection of the High Visibility Geotextile Marker

For those areas where remediation is required, the stripped formation level should be inspected prior to placement of any cover soils to confirm that there is sufficient depth available to enable placement of the required thickness of cover soils, and to document the placement of the high visibility geotextile marker.

A photographic record of all stripped formations, and of the placed high visibility geotextile marker will be maintained for inclusion in the verification report.

10.2 Cover System Depth

The final depth of cover material placed in all areas where it is required should be confirmed by use of tape measurements made within excavations to the base of the cover soils.

Photographic evidence of the depth of cover soils present will be included in the verification report.

10.3 Imported Materials

Any imported material from a potentially contaminated (e.g. industrial) site should be rejected. It is recommended that chemical testing results are obtained and supplied for comment prior to accepting the soils on site.

Once imported materials have been brought to site they should be stockpiled and protected from cross contamination with any other materials already on site. They will then be inspected, sampled and tested by Ashdown Site Investigation Ltd.

The table below summarises the soil screening values⁷ against which any imported soils will be assessed.

Table 14. Calculated soil screening values for imported soils

Contaminant	Screening Value (mg/kg)	Contaminant	Screening Value (mg/kg)
Arsenic	40	Selenium	430
Cadmium	85	Zinc	40000
Chromium	910	Hexavalent Chromium	6
Copper	7100	Water Soluble Boron	11000
Lead	310	Benzo(a)pyrene*	1.2
Mercury	56	Asbestos	None detected
Nickel	180		

* As a surrogate marker for concentrations of PAH compounds

It is noted that the SSV are only protective of long-term risk to human health and do not necessarily represent suitable concentrations for planting or landscaping. If necessary, a horticulturalist should be consulted in this regard.

All soils must be free from any visual or olfactory evidence of suspected petroleum hydrocarbon contamination and should contain no significant quantity of putrescible material (incl. wood or paper). Along with testing for the contaminants listed above, testing should also be undertaken to confirm the absence of any significant concentrations of petroleum hydrocarbons.

All soils used as surface dressing or as part of the cover system must be free from propagules of aggressive weeds, fragments of glass, bricks, concrete, wire or other potentially hazardous

⁷ Comprising 'Suitable For Use Levels' (S4ULs), 'The LQM/CIEH Suitable 4 Use Levels, 2015' and for lead, the Category 4 Screening Level (C4SL), SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination. Final Project Report, published by DEFRA, 2014 calculated for the generic "Residential" land use, but without the pathways associated with ingestion of site grown vegetables and ingestion of soil attached to vegetables (As defined within Science Report SC050021/SR3, January 2009, with the amendments discussed in the LQM/CIEH report)

foreign matter and bulk vegetative growth, in order to ensure negligible risk of subsequent weed problems (introduced in the soil) or traumatic injury.

In the event that any individual sample of imported material records concentrations of contaminants above the screening values listed above, the following method of assessment will be undertaken:

- Statistical analysis of the results, along with an assessment of whether any statistical 'outliers' should be removed from the dataset and treated as 'hotspots'. If the data indicates that the majority of the soil mass as a whole may be considered to contain contaminant concentrations below the screening values then it may be deemed suitable to remain.
- Depending on the findings of the analysis additional testing (which may include retests of the original sample) may be undertaken along with further analysis of the results to determine if this is representative of a widespread issue, or may be attributed to a smaller part of the site, or batch of imported soils.
- Liaison with the regulators may be undertaken to agree whether or not the materials are to be considered suitable to remain.

Where testing and analysis identify a significant failure and the procedures above do not provide sufficient evidence that the imported materials are suitable to remain, then the imported soils will be removed and replaced with other suitable soils.

11. REGULATORY APPROVAL

This report should be submitted to the Local Authority for their review and approval. The conclusions drawn and recommendations made within this report should be considered as provisional until such time as the report is approved by regulators (and/or warrantors), and any associated conditions are discharged.

Copies of comments from regulators/warrantors should be included within the verification report.

Ashdown Site Investigation Ltd.

FIGURES

Figure 1 Site Location Plan

Figure 2 Site Plan

APPENDIX A

Proposed Development Layout

APPENDIX B

Site Walkover Photographs



View looking west across rear gardens of residential properties located at 39-47 Hollingdean Road



View looking north west across rear gardens of residential properties located at 39-47 Hollingdean Road.

Site Walkover Photographs	Project Name	Project Ref
	39-47 Hollingdean Road, Brighton	P15063

APPENDIX C

Classification of Probability, Consequence and Risk

Probability of risk being realised	
Classification	Definition
High	There is a pollution linkage and an event that either appears very likely in the short term and almost inevitable over the long term or there is evidence at the receptor of harm or pollution.
Moderate	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place and is less likely in the shorter term.
Very Low	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

Consequence of risk being realised		
Classification	Category	Definition
Severe	Human Health	Short term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA.
	Controlled Waters	Short term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource.
	Property	Catastrophic damage to buildings/property.
	Ecological Systems	A short term risk to a particular ecosystem or organisation forming part of such ecosystem.
Moderate	Human Health	Chronic damage to Human Health.
	Controlled Waters	Pollution of sensitive water resources (note: Water Resources Act contains no scope for considering significance of pollution).
	Ecological System	A significant change in a particular ecosystem or organism forming part of such ecosystem.
Minor	Controlled Waters	Pollution of non-sensitive water resources.
	Property	Significant damage to crops, buildings, structures and services.
	Ecological Systems	Damage to sensitive buildings/structures/services or the environment.
Very Minor	Human Health	Non-permanent health effects to human health (easily prevented by means such as personal protective clothing, etc).
	Property	Easily repairable effects of damage to buildings, structures and services.
	Project	Harm, although not necessarily significant harm, which may result in a financial loss or expenditure to resolve.

Risk classification definitions	
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) is required and remedial works may be necessary in the short term and are likely over the long term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. Some remedial works may be required in the longer term.
Low	It is possible that harm could arise to a designated receptor from an identified hazard, but there is a low likelihood of this hazard occurring and if realised, harm would at worst normally be mild.
Very Low	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

APPENDIX D

Preliminary Conceptual Model

39-47 Hollingdean Road, Brighton				Preliminary Conceptual Model		P15063	
Potential Source	Potential Receptor	Potential Contaminants	Potential Pathway	Complete Linkage Present?	Probability	Consequence	Risk
• Made ground associated with site development and former railway embankment to the south west	End Users	Asbestos, Heavy Metals and PAH Compounds	Dermal contact with soil and dust (indoor & outdoor)	Yes	P2: Low	C3: Moderate	Low/Moderate
			Ingestion of soil and indoor dust	Yes	P2: Low	C3: Moderate	Low/Moderate
			Consumption of home-grown produce and attached soil	No private gardens proposed			N/A
			Inhalation of soil dust (indoor and outdoor)	Yes	P2: Low	C3: Moderate	Low/Moderate
			Inhalation of soil vapours	Contaminants do not pose a risk via this pathway.			N/A
			Inhalation of soil gases/ Risk of explosion	No potential gas source identified			N/A
	End Users (via Water Supply Pipework)	Asbestos, Heavy Metals and PAH Compounds	Contamination of incoming services	Contaminants do not pose a risk via this pathway.			N/A
Groundwater	Asbestos, Heavy Metals and PAH Compounds	Migration to groundwater	Yes	P1: Very Low	C3: Moderate	Low	
Garage directly to the west of site.	End Users	Petroleum Hydrocarbons	Dermal contact with soil and dust (indoor & outdoor)	Yes	P1: Very Low	C2: Minor	Very Low
			Ingestion of soil and indoor dust	Yes	P1: Very Low	C2: Minor	Very Low
			Consumption of home-grown produce and attached soil	No private gardens proposed			N/A
			Inhalation of soil dust (indoor and outdoor)	Yes	P1: Very Low	C2: Minor	Very Low
			Inhalation of soil vapours	Yes	P1: Very Low	C2: Minor	Very Low
			Inhalation of soil gases/ Risk of explosion	No potential gas source identified			N/A
	End Users (via Water Supply Pipework)	Petroleum Hydrocarbons	Contamination of incoming services	Yes	P1: Very Low	C2: Minor	Very Low
Groundwater	Petroleum Hydrocarbons	Migration to groundwater	Yes	P1: Very Low	C3: Moderate	Low	

APPENDIX E

Exploratory Hole Notes
Exploratory Hole Records

NOTES FOR THE INTERPRETATION OF EXPLORATORY HOLE RECORDS

1 Symbols and abbreviations

Samples

U	'Undisturbed' Sample: - 100mm diameter by 450mm long. The number of blows to drive in the sampling tube is shown after the test index letter in the SPT column.
U _o	Sample not obtained
U*	Full penetration of sample not obtained
Pi	Piston Sample: 'Undisturbed' sample 100mm diameter by 600mm long.
D	Disturbed Sample
R	Root Sample
B	Bulk Disturbed Sample
W	Water Sample
J	Jar Sample (sample taken in amber glass jar fitted with gas tight lid)
T	Tub Sample
Vi	Vial Sample

In situ Testing

S	Standard penetration test (SPT): Using the split spoon sampler.
C	Standard Penetration Test (SPT): using a solid cone instead of the sampler - conducted usually in coarse grained soils or weak rocks.
V	Shear Vane Test: Undrained shear strength (cohesion) (kN/m ²) shown within the Vane/Pen Test and N Value column.
H	Hand penetrometer Test: Undrained shear strength (cohesion) (kN/m ²) shown within the Vane/Pen Test and N Value column.
P	Perth Penetrometer Test: Number of blows for 300mm penetration shown under Vane/Pen Test and N Value column.

Excavation Method

CP	Cable Percussion Borehole
WLS	Dynamic Sampler Borehole using windowless sampler tubes
WS	Dynamic Sampler Borehole using window sampler tubes
TP	Trial Pit excavated using mechanic excavator
HDP	Trial Pit excavated using hand tools

2 Soil Description

Description and classification of soils has been carried out using as a general basis the British Standard Geotechnical investigation and testing – Identification and classification of soil, Part 1 Identification and description (BS EN ISO 14688-1) and Part 2 Principles of classification (BS EN 14688-2) as well as the BS5930 code of Practice for Ground Investigations.

3 Rock Description

Description and classification of rocks has been carried out using as a general basis the British Standard Geotechnical investigation and testing – Identification and classification of rock, Part 1 Identification and classification (BS EN ISO 14689-1) as well as the BS5930 code of Practice for Ground Investigations. TCR – Total Core Recovery, SCR – Solid Core Recovery, RQD – Rock Quality Designation, NI – Non Intact, If – indicative fracture spacing (min/ave/max), FI – Fracture Index.

4 Chalk Description

Chalk description is based on BS EN ISO 14688, BS EN ISO 14689 and BS5930. The classification of chalk generally follows the guidance offered by the Construction Industry Research and Information Association (CIRIA) C574, 'Engineering in Chalk'. This is based on assessment of chalk density, discontinuity and aperture spacing, and the proportion of intact chalk to silt of chalk.

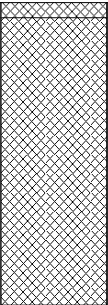
Site Name: Hollingdean Road, Brighton

Job Number: P15063

Start Date: 17/11/2021

End Date: 17/11/2021

Trial Pit Number: **BH01**

Samples and In Situ Testing				Legend	Depth/ Reduced Level	Stratum Description
Sample/ Test Type	Depth From (m)	Depth To (m)	Test Result			
J T	0.10				0.00	Paving slab. MADE GROUND: Dark brown slightly gravelly slightly sandy clay. Gravel is subangular to subrounded fine to coarse chalk, flint, brick, concrete, glass and metal.
J T	0.40				0.05	
J T	0.65				1.00	
						End of trial pit at 1.00m

<p>Remarks</p> <p>Groundwater: Trial pit dry on completion.</p> <p>Stability: Trial pit stable on completion.</p> <p>Notes: n/a</p>	Excavation Method: HDP
	Pit Length: n/a
	Pit Width: n/a
	Made By: BA


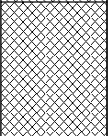
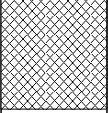
Site Name: Hollingdean Road, Brighton

Job Number: P15063

Start Date: 17/11/2021

End Date: 17/11/2021

Trial Pit Number: **BH02**

Samples and In Situ Testing				Legend	Depth/ Reduced Level	Stratum Description
Sample/ Test Type	Depth From (m)	Depth To (m)	Test Result			
JT	0.10				0.00	Topsoil.
JT	0.35				0.20	MADE GROUND: Dark brown slightly gravelly slightly sandy clay. Gravel is subangular to subrounded fine to coarse chalk, flint, brick, concrete, glass and metal.
JT	0.70				1.00	
						End of trial pit at 1.00m

<p>Remarks</p> <p>Groundwater: Trial pit dry on completion.</p> <p>Stability: Trial pit stable on completion.</p> <p>Notes: n/a</p>	Excavation Method: HDP
	Pit Length: n/a
	Pit Width: n/a
	Made By: BA


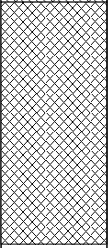
Site Name: Hollingdean Road, Brighton

Job Number: P15063

Start Date: 17/11/2021

End Date: 17/11/2021

Trial Pit Number: **BH03**

Samples and In Situ Testing				Legend	Depth/ Reduced Level	Stratum Description
Sample/ Test Type	Depth From (m)	Depth To (m)	Test Result			
J T	0.10				0.00	Topsoil.
J T	0.50				0.20	MADE GROUND: Dark brown slightly gravelly slightly sandy clay. Gravel is subangular to subrounded fine to coarse chalk, flint, brick, concrete, glass and metal.
J T	0.90				1.00	
						End of trial pit at 1.00m

<p>Remarks</p> <p>Groundwater: Trial pit dry on completion.</p> <p>Stability: Trial pit stable on completion.</p> <p>Notes: n/a</p>	Excavation Method: HDP
	Pit Length: n/a
	Pit Width: n/a
	Made By: BA


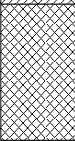


Site Name: Hollingdean Road, Brighton

Job Number: P15063

Start Date: 17/11/2021

End Date: 17/11/2021

Borehole Number: **BH04**

Samples and In Situ Testing					Legend	Depth	Stratum Description
Standpipe	Sample/ Test Type	Depth From (m)	Depth To (m)	Test Result			
	J T	0.20				0.00	Topsoil.
	J T	0.45				0.25	MADE GROUND: Brown sandy clayey subangular to subrounded fine to coarse gravel of chalk, brick, tile and flint.
	J T	0.80				0.70	REWORKED: Brown sandy clayey subangular to subrounded fine to coarse gravel of chalk and flint.
						1.00	End of borehole at 1.00m

Remarks

Groundwater: Exploratory hole dry on completion.

Stability: Exploratory hole stable on completion.

Notes: n/a

Excavation Method: WS

Borehole Diameter: Various

Made By: BA

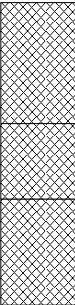
Site Name: Hollingdean Road, Brighton

Job Number: P15063

Start Date: 17/11/2021

End Date: 17/11/2021

Borehole Number: **BH05**

Samples and In Situ Testing					Legend	Depth	Stratum Description
Standpipe	Sample/ Test Type	Depth From (m)	Depth To (m)	Test Result			
	J T	0.20				0.00	MADE GROUND: Dark brown slightly gravelly slightly sandy clay. Gravel is subangular to subrounded fine to coarse chalk, flint, brick, concrete, glass and metal.
	J T	0.50				0.40	MADE GROUND: Brown and white gravelly clay. Gravel is subangular to subrounded fine to coarse chalk and flint.
	J T	0.70				0.65	MADE GROUND: Brown slightly gravelly slightly sandy clay. Gravel is subangular to subrounded fine to coarse chalk, brick, flint and charcoal-like material.
						1.00	End of borehole at 1.00m

Remarks

Groundwater: Exploratory hole dry on completion.

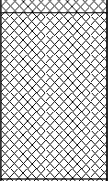
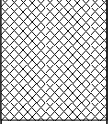
Stability: Exploratory hole stable on completion.

Notes: n/a

Excavation Method: WS

Borehole Diameter: Various

Made By: BA

Samples and In Situ Testing				Legend	Depth/ Reduced Level	Stratum Description
Sample/ Test Type	Depth From (m)	Depth To (m)	Test Result			
JT	0.10				0.00 0.05	Paving slab. MADE GROUND: Dark brown slightly gravelly slightly sandy clay. Gravel is subangular to subrounded fine to coarse chalk, flint, brick, concrete, glass and metal.
JT	0.50				0.60	MADE GROUND: Brown slightly gravelly slightly sandy clay. Gravel is subangular to subrounded fine to coarse chalk, brick, charcoal-like material and glass.
JT	0.80				1.00	End of trial pit at 1.00m

<p>Remarks</p> <p>Groundwater: Trial pit dry on completion.</p> <p>Stability: Trial pit stable on completion.</p> <p>Notes: n/a</p>	Excavation Method: HDP
	Pit Length: n/a
	Pit Width: n/a
	Made By: BA

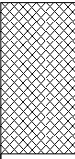
Site Name: Hollingdean Road, Brighton

Job Number: P15063

Start Date: 17/11/2021

End Date: 17/11/2021

Borehole Number: **BH07**

Samples and In Situ Testing							
Standpipe	Sample/ Test Type	Depth From (m)	Depth To (m)	Test Result	Legend	Depth	Stratum Description
	J T	0.10				0.00	MADE GROUND: Sandy gravel of concrete, brick and flint.
	J T	0.40				0.50	
							End of borehole at 0.50m

Remarks

Groundwater: Exploratory hole dry on completion.

Stability: Exploratory hole stable on completion.

Notes: No further progress below 0.50m depth - obstruction.

Excavation Method: WS

Borehole Diameter: Various

Made By: BA

APPENDIX F

Contamination Laboratory Test Results



Unit A2
Windmill Road
Ponswood Industrial Estate
St Leonards on Sea
East Sussex
TN38 9BY
Telephone: (01424) 718618

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THE ENVIRONMENTAL LABORATORY LTD

Analytical Report Number: 21-37218

Issue: 1

Date of Issue: 26/11/2021

Contact: Lab Results

Customer Details: Ashdown Site Investigation Ltd
Unit 3 The Grain Store
Ditchling Common Business Park
Ditchling Common
West Sussex BN6 8SG

Quotation No: Q15-00267

Order No: 9965

Customer Reference: P15063_00622

Date Received: 19/11/2021

Date Approved: 26/11/2021

Details: Hollingdean Road, Brighton

Approved by: 

Mike Varley, General Manager

Any comments, opinions or interpretations expressed herein are outside the scope of UKAS accreditation (Accreditation Number 2683)

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Sample Summary

Report No.: 21-37218, issue number 1

Elab No.	Client's Ref.	Date Sampled	Date Scheduled	Description	Deviations
258329	BH01 0.40	17/11/2021	19/11/2021	Silty loam	
258330	BH01 0.65	17/11/2021	19/11/2021	Silty loam + chalk	
258331	BH02 0.10	17/11/2021	19/11/2021	Silty loam	
258332	BH02 0.35	17/11/2021	19/11/2021	Silty loam	
258333	BH02 0.70	17/11/2021	19/11/2021	Sandy silty loam	
258334	BH03 0.50	17/11/2021	19/11/2021	Silty loam	
258335	BH03 0.90	17/11/2021	19/11/2021	Silty loam	
258336	BH04 0.45	17/11/2021	19/11/2021	Silty loam + chalk	
258337	BH04 0.80	17/11/2021	19/11/2021	Silty loam + chalk	
258338	BH05 0.20	17/11/2021	19/11/2021	Silty loam	
258339	BH05 0.50	17/11/2021	19/11/2021	Silty loam + chalk	
258340	BH05 0.70	17/11/2021	19/11/2021	Silty loam	
258341	BH06 0.10	17/11/2021	19/11/2021	Silty loam	
258342	BH06 0.80	17/11/2021	19/11/2021	Silty loam	
258343	BH07 0.40	17/11/2021	19/11/2021	Sandy silty loam	

Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258329
Customer Reference	
Sample ID	
Sample Type	SOIL
Sample Location	BH01
Sample Depth (m)	0.40
Sampling Date	17/11/2021

Determinand	Codes	Units	LOD	
Soil sample preparation parameters				
Moisture Content	N	%	0.1	17.8
Material removed	N	%	0.1	49.1
Description of Inert material removed	N		0	Stones,clinker
Metals				
Arsenic	M	mg/kg	1	22.6
Cadmium	M	mg/kg	0.5	1.2
Chromium	M	mg/kg	5	27.2
Copper	M	mg/kg	5	116
Lead	M	mg/kg	5	1300
Mercury	M	mg/kg	0.5	2.5
Nickel	M	mg/kg	5	27.9
Selenium	M	mg/kg	1	< 1.0
Zinc	M	mg/kg	5	628
Inorganics				
Hexavalent Chromium	N	mg/kg	0.8	< 0.8
Acid Soluble Sulphate (SO4)	U	%	0.02	0.11
Acid Soluble Sulphate (SO4)	N	mg/kg	200	1100
Water Soluble Boron	N	mg/kg	0.5	0.6
Miscellaneous				
pH	M	pH units	0.1	7.9
Soil Organic Matter	U	%	0.1	3.9
Organics				
>C8-C10 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0
>C10-C12 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0
>C12-C16 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0
>C16-C21 BCB (EH_1D_Total)	N	mg/kg	1	2.3
>C21-C35 BCB (EH_1D_Total)	N	mg/kg	1	37.7
>C35-C40 BCB (EH_1D_Total)	N	mg/kg	1	8.8
Total (>C8-C40) BCB (EH_1D_Total)	N	mg/kg	1	48.8

Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258329
Customer Reference	
Sample ID	
Sample Type	SOIL
Sample Location	BH01
Sample Depth (m)	0.40
Sampling Date	17/11/2021

Determinand	Codes	Units	LOD	
Polyaromatic hydrocarbons				
Naphthalene	M	mg/kg	0.1	0.2
Acenaphthylene	M	mg/kg	0.1	0.1
Acenaphthene	M	mg/kg	0.1	< 0.1
Fluorene	M	mg/kg	0.1	< 0.1
Phenanthrene	M	mg/kg	0.1	1.0
Anthracene	M	mg/kg	0.1	0.1
Fluoranthene	M	mg/kg	0.1	2.5
Pyrene	M	mg/kg	0.1	2.1
Benzo(a)anthracene	M	mg/kg	0.1	1.3
Chrysene	M	mg/kg	0.1	1.7
Benzo(b)fluoranthene	M	mg/kg	0.1	2.0
Benzo(k)fluoranthene	M	mg/kg	0.1	2.0
Benzo(a)pyrene	M	mg/kg	0.1	1.8
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	1.4
Dibenzo(a,h)anthracene	M	mg/kg	0.1	0.2
Benzo[g,h,i]perylene	M	mg/kg	0.1	1.3
Total PAH(16)	M	mg/kg	0.4	17.9
BTEX				
Benzene	M	ug/kg	10	n/t
Toluene	M	ug/kg	10	n/t
Ethylbenzene	M	ug/kg	10	n/t
Xylenes	M	ug/kg	10	n/t
MTBE	N	ug/kg	10	n/t
TPH CWG				
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	n/t



Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258330	258331
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH01	BH02
Sample Depth (m)	0.65	0.10
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Soil sample preparation parameters					
Moisture Content	N	%	0.1	n/t	16.6
Material removed	N	%	0.1	n/t	52.0
Description of Inert material removed	N		0	n/t	Stones,clinker
Metals					
Arsenic	M	mg/kg	1	n/t	25.4
Cadmium	M	mg/kg	0.5	n/t	1.3
Chromium	M	mg/kg	5	n/t	27.6
Copper	M	mg/kg	5	n/t	112
Lead	M	mg/kg	5	n/t	1240
Mercury	M	mg/kg	0.5	n/t	5.5
Nickel	M	mg/kg	5	n/t	25.8
Selenium	M	mg/kg	1	n/t	1.1
Zinc	M	mg/kg	5	n/t	742
Inorganics					
Hexavalent Chromium	N	mg/kg	0.8	n/t	< 0.8
Acid Soluble Sulphate (SO4)	U	%	0.02	n/t	0.08
Acid Soluble Sulphate (SO4)	N	mg/kg	200	n/t	770
Water Soluble Boron	N	mg/kg	0.5	n/t	0.5
Miscellaneous					
pH	M	pH units	0.1	n/t	7.8
Soil Organic Matter	U	%	0.1	n/t	4.3
Organics					
>C8-C10 BCB (EH_1D_Total)	N	mg/kg	1	n/t	< 1.0
>C10-C12 BCB (EH_1D_Total)	N	mg/kg	1	n/t	< 1.0
>C12-C16 BCB (EH_1D_Total)	N	mg/kg	1	n/t	< 1.0
>C16-C21 BCB (EH_1D_Total)	N	mg/kg	1	n/t	2.3
>C21-C35 BCB (EH_1D_Total)	N	mg/kg	1	n/t	33.8
>C35-C40 BCB (EH_1D_Total)	N	mg/kg	1	n/t	5.4
Total (>C8-C40) BCB (EH_1D_Total)	N	mg/kg	1	n/t	41.4

Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258330	258331
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH01	BH02
Sample Depth (m)	0.65	0.10
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Polyaromatic hydrocarbons					
Naphthalene	M	mg/kg	0.1	n/t	0.2
Acenaphthylene	M	mg/kg	0.1	n/t	0.3
Acenaphthene	M	mg/kg	0.1	n/t	< 0.1
Fluorene	M	mg/kg	0.1	n/t	< 0.1
Phenanthrene	M	mg/kg	0.1	n/t	1.8
Anthracene	M	mg/kg	0.1	n/t	0.3
Fluoranthene	M	mg/kg	0.1	n/t	4.7
Pyrene	M	mg/kg	0.1	n/t	3.9
Benzo(a)anthracene	M	mg/kg	0.1	n/t	2.3
Chrysene	M	mg/kg	0.1	n/t	3.3
Benzo(b)fluoranthene	M	mg/kg	0.1	n/t	4.2
Benzo(k)fluoranthene	M	mg/kg	0.1	n/t	3.8
Benzo(a)pyrene	M	mg/kg	0.1	n/t	4.0
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	n/t	3.5
Dibenzo(a,h)anthracene	M	mg/kg	0.1	n/t	0.5
Benzo[g,h,i]perylene	M	mg/kg	0.1	n/t	3.2
Total PAH(16)	M	mg/kg	0.4	n/t	36.2
BTEX					
Benzene	M	ug/kg	10	^ < 10.0	n/t
Toluene	M	ug/kg	10	^ < 10.0	n/t
Ethylbenzene	M	ug/kg	10	^ < 10.0	n/t
Xylenes	M	ug/kg	10	^ < 10.0	n/t
MTBE	N	ug/kg	10	< 10.0	n/t
TPH CWG					
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	< 1.0	n/t
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	^ < 1.0	n/t
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	^ < 1.0	n/t
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	^ < 1.0	n/t
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	^ < 1.0	n/t
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	^ < 1.0	n/t
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	< 1.0	n/t
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	< 1.0	n/t
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	^ < 1.0	n/t
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	^ < 1.0	n/t
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	^ 1.2	n/t
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	^ 10.3	n/t
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	^ < 1.0	n/t
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	12.2	n/t
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	12.3	n/t



Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258332	258333
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH02	BH02
Sample Depth (m)	0.35	0.70
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Soil sample preparation parameters					
Moisture Content	N	%	0.1	20.6	n/t
Material removed	N	%	0.1	26.5	n/t
Description of Inert material removed	N		0	Stones,clinker	n/t
Metals					
Arsenic	M	mg/kg	1	24.8	n/t
Cadmium	M	mg/kg	0.5	1.2	n/t
Chromium	M	mg/kg	5	30.1	n/t
Copper	M	mg/kg	5	115	n/t
Lead	M	mg/kg	5	1250	n/t
Mercury	M	mg/kg	0.5	2.5	n/t
Nickel	M	mg/kg	5	27.8	n/t
Selenium	M	mg/kg	1	< 1.0	n/t
Zinc	M	mg/kg	5	757	n/t
Inorganics					
Hexavalent Chromium	N	mg/kg	0.8	< 0.8	n/t
Acid Soluble Sulphate (SO4)	U	%	0.02	0.07	n/t
Acid Soluble Sulphate (SO4)	N	mg/kg	200	710	n/t
Water Soluble Boron	N	mg/kg	0.5	0.6	n/t
Miscellaneous					
pH	M	pH units	0.1	7.8	n/t
Soil Organic Matter	U	%	0.1	4.8	n/t
Organics					
>C8-C10 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	n/t
>C10-C12 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	n/t
>C12-C16 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	n/t
>C16-C21 BCB (EH_1D_Total)	N	mg/kg	1	1.1	n/t
>C21-C35 BCB (EH_1D_Total)	N	mg/kg	1	20.0	n/t
>C35-C40 BCB (EH_1D_Total)	N	mg/kg	1	3.7	n/t
Total (>C8-C40) BCB (EH_1D_Total)	N	mg/kg	1	24.7	n/t

Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258332	258333
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH02	BH02
Sample Depth (m)	0.35	0.70
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Polyaromatic hydrocarbons					
Naphthalene	M	mg/kg	0.1	0.2	n/t
Acenaphthylene	M	mg/kg	0.1	0.4	n/t
Acenaphthene	M	mg/kg	0.1	< 0.1	n/t
Fluorene	M	mg/kg	0.1	< 0.1	n/t
Phenanthrene	M	mg/kg	0.1	1.8	n/t
Anthracene	M	mg/kg	0.1	0.5	n/t
Fluoranthene	M	mg/kg	0.1	5.1	n/t
Pyrene	M	mg/kg	0.1	4.4	n/t
Benzo(a)anthracene	M	mg/kg	0.1	2.5	n/t
Chrysene	M	mg/kg	0.1	3.5	n/t
Benzo(b)fluoranthene	M	mg/kg	0.1	4.1	n/t
Benzo(k)fluoranthene	M	mg/kg	0.1	4.5	n/t
Benzo(a)pyrene	M	mg/kg	0.1	4.3	n/t
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	3.6	n/t
Dibenzo(a,h)anthracene	M	mg/kg	0.1	0.5	n/t
Benzo[g,h,i]perylene	M	mg/kg	0.1	3.2	n/t
Total PAH(16)	M	mg/kg	0.4	38.6	n/t
BTEX					
Benzene	M	ug/kg	10	n/t	< 10.0
Toluene	M	ug/kg	10	n/t	< 10.0
Ethylbenzene	M	ug/kg	10	n/t	< 10.0
Xylenes	M	ug/kg	10	n/t	< 10.0
MTBE	N	ug/kg	10	n/t	< 10.0
TPH CWG					
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	< 1.0
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	< 1.0
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	< 1.0
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	1.2
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	8.9
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	11.1
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	n/t	11.7



Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258334	258335
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH03	BH03
Sample Depth (m)	0.50	0.90
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Soil sample preparation parameters					
Moisture Content	N	%	0.1	21.3	n/t
Material removed	N	%	0.1	32.3	n/t
Description of Inert material removed	N		0	Stones,clinker	n/t
Metals					
Arsenic	M	mg/kg	1	36.4	n/t
Cadmium	M	mg/kg	0.5	2.5	n/t
Chromium	M	mg/kg	5	39.3	n/t
Copper	M	mg/kg	5	180	n/t
Lead	M	mg/kg	5	1880	n/t
Mercury	M	mg/kg	0.5	3.0	n/t
Nickel	M	mg/kg	5	43.5	n/t
Selenium	M	mg/kg	1	< 1.0	n/t
Zinc	M	mg/kg	5	1670	n/t
Inorganics					
Hexavalent Chromium	N	mg/kg	0.8	< 0.8	n/t
Acid Soluble Sulphate (SO4)	U	%	0.02	0.12	n/t
Acid Soluble Sulphate (SO4)	N	mg/kg	200	1200	n/t
Water Soluble Boron	N	mg/kg	0.5	1.1	n/t
Miscellaneous					
pH	M	pH units	0.1	8.0	n/t
Soil Organic Matter	U	%	0.1	5.5	n/t
Organics					
>C8-C10 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	n/t
>C10-C12 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	n/t
>C12-C16 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	n/t
>C16-C21 BCB (EH_1D_Total)	N	mg/kg	1	2.2	n/t
>C21-C35 BCB (EH_1D_Total)	N	mg/kg	1	37.4	n/t
>C35-C40 BCB (EH_1D_Total)	N	mg/kg	1	7.2	n/t
Total (>C8-C40) BCB (EH_1D_Total)	N	mg/kg	1	46.9	n/t

Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258334	258335
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH03	BH03
Sample Depth (m)	0.50	0.90
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Polyaromatic hydrocarbons					
Naphthalene	M	mg/kg	0.1	0.1	n/t
Acenaphthylene	M	mg/kg	0.1	0.1	n/t
Acenaphthene	M	mg/kg	0.1	< 0.1	n/t
Fluorene	M	mg/kg	0.1	< 0.1	n/t
Phenanthrene	M	mg/kg	0.1	1.2	n/t
Anthracene	M	mg/kg	0.1	0.3	n/t
Fluoranthene	M	mg/kg	0.1	3.2	n/t
Pyrene	M	mg/kg	0.1	2.7	n/t
Benzo(a)anthracene	M	mg/kg	0.1	1.5	n/t
Chrysene	M	mg/kg	0.1	2.0	n/t
Benzo(b)fluoranthene	M	mg/kg	0.1	2.1	n/t
Benzo(k)fluoranthene	M	mg/kg	0.1	2.2	n/t
Benzo(a)pyrene	M	mg/kg	0.1	2.2	n/t
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	1.8	n/t
Dibenzo(a,h)anthracene	M	mg/kg	0.1	0.4	n/t
Benzo[g,h,i]perylene	M	mg/kg	0.1	1.6	n/t
Total PAH(16)	M	mg/kg	0.4	21.5	n/t
BTEX					
Benzene	M	ug/kg	10	n/t	< 10.0
Toluene	M	ug/kg	10	n/t	< 10.0
Ethylbenzene	M	ug/kg	10	n/t	< 10.0
Xylenes	M	ug/kg	10	n/t	< 10.0
MTBE	N	ug/kg	10	n/t	< 10.0
TPH CWG					
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	< 1.0
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	< 1.0
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	1.2
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	8.1
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	4.4
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	13.9
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	< 1.0
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	< 1.0
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	6.7
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	71.4
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	24.6
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	104
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	n/t	118



Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258336	258337
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH04	BH04
Sample Depth (m)	0.45	0.80
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Soil sample preparation parameters					
Moisture Content	N	%	0.1	19.0	n/t
Material removed	N	%	0.1	< 0.1	n/t
Description of Inert material removed	N		0	None	n/t
Metals					
Arsenic	M	mg/kg	1	^ 8.6	n/t
Cadmium	M	mg/kg	0.5	^ 0.7	n/t
Chromium	M	mg/kg	5	^ 14.0	n/t
Copper	M	mg/kg	5	^ 41.5	n/t
Lead	M	mg/kg	5	^ 439	n/t
Mercury	M	mg/kg	0.5	^ < 0.5	n/t
Nickel	M	mg/kg	5	^ 13.4	n/t
Selenium	M	mg/kg	1	^ < 1.0	n/t
Zinc	M	mg/kg	5	^ 228	n/t
Inorganics					
Hexavalent Chromium	N	mg/kg	0.8	< 0.8	n/t
Acid Soluble Sulphate (SO4)	U	%	0.02	0.06	n/t
Acid Soluble Sulphate (SO4)	N	mg/kg	200	560	n/t
Water Soluble Boron	N	mg/kg	0.5	< 0.5	n/t
Miscellaneous					
pH	M	pH units	0.1	^ 8.0	n/t
Soil Organic Matter	U	%	0.1	2.2	n/t
Organics					
>C8-C10 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	n/t
>C10-C12 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	n/t
>C12-C16 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	n/t
>C16-C21 BCB (EH_1D_Total)	N	mg/kg	1	1.8	n/t
>C21-C35 BCB (EH_1D_Total)	N	mg/kg	1	33.7	n/t
>C35-C40 BCB (EH_1D_Total)	N	mg/kg	1	8.5	n/t
Total (>C8-C40) BCB (EH_1D_Total)	N	mg/kg	1	44.0	n/t

Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258336	258337
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH04	BH04
Sample Depth (m)	0.45	0.80
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Polyaromatic hydrocarbons					
Naphthalene	M	mg/kg	0.1	^ < 0.1	n/t
Acenaphthylene	M	mg/kg	0.1	^ < 0.1	n/t
Acenaphthene	M	mg/kg	0.1	^ < 0.1	n/t
Fluorene	M	mg/kg	0.1	^ < 0.1	n/t
Phenanthrene	M	mg/kg	0.1	^ 0.3	n/t
Anthracene	M	mg/kg	0.1	^ < 0.1	n/t
Fluoranthene	M	mg/kg	0.1	^ 0.9	n/t
Pyrene	M	mg/kg	0.1	^ 0.7	n/t
Benzo(a)anthracene	M	mg/kg	0.1	^ 0.4	n/t
Chrysene	M	mg/kg	0.1	^ 0.5	n/t
Benzo(b)fluoranthene	M	mg/kg	0.1	^ 0.6	n/t
Benzo(k)fluoranthene	M	mg/kg	0.1	^ 0.7	n/t
Benzo(a)pyrene	M	mg/kg	0.1	^ 0.6	n/t
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	^ 0.5	n/t
Dibenzo(a,h)anthracene	M	mg/kg	0.1	^ < 0.1	n/t
Benzo[g,h,i]perylene	M	mg/kg	0.1	^ 0.4	n/t
Total PAH(16)	M	mg/kg	0.4	^ 6.1	n/t
BTEX					
Benzene	M	ug/kg	10	n/t	^ < 10.0
Toluene	M	ug/kg	10	n/t	^ < 10.0
Ethylbenzene	M	ug/kg	10	n/t	^ < 10.0
Xylenes	M	ug/kg	10	n/t	^ < 10.0
MTBE	N	ug/kg	10	n/t	< 10.0
TPH CWG					
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	< 1.0
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	^ < 1.0
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	^ < 1.0
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	^ < 1.0
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	^ 13.4
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	^ 5.6
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	20.7
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	< 0.01
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	< 1.0
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	^ < 1.0
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	^ < 1.0
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	^ 1.1
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	^ 3.3
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	^ 1.9
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	6.6
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	n/t	27.3



Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258338	258339
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH05	BH05
Sample Depth (m)	0.20	0.50
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Soil sample preparation parameters					
Moisture Content	N	%	0.1	17.9	16.4
Material removed	N	%	0.1	39.1	< 0.1
Description of Inert material removed	N		0	Stones,clinker	None
Metals					
Arsenic	M	mg/kg	1	24.4	^ 5.4
Cadmium	M	mg/kg	0.5	1.3	^ 0.7
Chromium	M	mg/kg	5	30.3	^ 16.4
Copper	M	mg/kg	5	157	^ 14.9
Lead	M	mg/kg	5	1520	^ 68.3
Mercury	M	mg/kg	0.5	2.4	^ < 0.5
Nickel	M	mg/kg	5	30.3	^ 12.5
Selenium	M	mg/kg	1	< 1.0	^ < 1.0
Zinc	M	mg/kg	5	647	^ 82.5
Inorganics					
Hexavalent Chromium	N	mg/kg	0.8	< 0.8	< 0.8
Acid Soluble Sulphate (SO4)	U	%	0.02	n/t	0.05
Acid Soluble Sulphate (SO4)	N	mg/kg	200	n/t	530
Water Soluble Boron	N	mg/kg	0.5	0.7	< 0.5
Miscellaneous					
pH	M	pH units	0.1	7.8	^ 8.2
Soil Organic Matter	U	%	0.1	4.1	1.3
Organics					
>C8-C10 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	< 1.0
>C10-C12 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	< 1.0
>C12-C16 BCB (EH_1D_Total)	N	mg/kg	1	< 1.0	< 1.0
>C16-C21 BCB (EH_1D_Total)	N	mg/kg	1	2.0	< 1.0
>C21-C35 BCB (EH_1D_Total)	N	mg/kg	1	91.5	< 1.0
>C35-C40 BCB (EH_1D_Total)	N	mg/kg	1	30.9	< 1.0
Total (>C8-C40) BCB (EH_1D_Total)	N	mg/kg	1	124	< 1.0

Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258338	258339
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH05	BH05
Sample Depth (m)	0.20	0.50
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Polyaromatic hydrocarbons					
Naphthalene	M	mg/kg	0.1	0.6	^ < 0.1
Acenaphthylene	M	mg/kg	0.1	0.1	^ < 0.1
Acenaphthene	M	mg/kg	0.1	< 0.1	^ < 0.1
Fluorene	M	mg/kg	0.1	0.1	^ < 0.1
Phenanthrene	M	mg/kg	0.1	0.8	^ < 0.1
Anthracene	M	mg/kg	0.1	0.1	^ < 0.1
Fluoranthene	M	mg/kg	0.1	2.1	^ < 0.1
Pyrene	M	mg/kg	0.1	1.8	^ < 0.1
Benzo(a)anthracene	M	mg/kg	0.1	1.0	^ < 0.1
Chrysene	M	mg/kg	0.1	1.4	^ < 0.1
Benzo(b)fluoranthene	M	mg/kg	0.1	1.3	^ < 0.1
Benzo(k)fluoranthene	M	mg/kg	0.1	1.5	^ < 0.1
Benzo(a)pyrene	M	mg/kg	0.1	1.5	^ < 0.1
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	1.2	^ < 0.1
Dibenzo(a,h)anthracene	M	mg/kg	0.1	0.2	^ < 0.1
Benzo[g,h,i]perylene	M	mg/kg	0.1	1.1	^ < 0.1
Total PAH(16)	M	mg/kg	0.4	14.9	^ < 0.4
BTEX					
Benzene	M	ug/kg	10	n/t	n/t
Toluene	M	ug/kg	10	n/t	n/t
Ethylbenzene	M	ug/kg	10	n/t	n/t
Xylenes	M	ug/kg	10	n/t	n/t
MTBE	N	ug/kg	10	n/t	n/t
TPH CWG					
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	n/t
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	n/t	n/t
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	n/t
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	n/t	n/t
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	n/t	n/t
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	n/t
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	n/t	n/t
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	n/t
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	n/t	n/t
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	n/t	n/t
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	n/t	n/t



Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258340	258341
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH05	BH06
Sample Depth (m)	0.70	0.10
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Soil sample preparation parameters					
Moisture Content	N	%	0.1	n/t	20.0
Material removed	N	%	0.1	n/t	30.2
Description of Inert material removed	N		0	n/t	Stones,clinker
Metals					
Arsenic	M	mg/kg	1	n/t	31.9
Cadmium	M	mg/kg	0.5	n/t	1.7
Chromium	M	mg/kg	5	n/t	36.7
Copper	M	mg/kg	5	n/t	194
Lead	M	mg/kg	5	n/t	1520
Mercury	M	mg/kg	0.5	n/t	2.0
Nickel	M	mg/kg	5	n/t	41.0
Selenium	M	mg/kg	1	n/t	< 1.0
Zinc	M	mg/kg	5	n/t	1320
Inorganics					
Hexavalent Chromium	N	mg/kg	0.8	n/t	< 0.8
Acid Soluble Sulphate (SO4)	U	%	0.02	n/t	0.14
Acid Soluble Sulphate (SO4)	N	mg/kg	200	n/t	1400
Water Soluble Boron	N	mg/kg	0.5	n/t	1.2
Miscellaneous					
pH	M	pH units	0.1	n/t	7.6
Soil Organic Matter	U	%	0.1	n/t	4.9
Organics					
>C8-C10 BCB (EH_1D_Total)	N	mg/kg	1	n/t	1.2
>C10-C12 BCB (EH_1D_Total)	N	mg/kg	1	n/t	< 1.0
>C12-C16 BCB (EH_1D_Total)	N	mg/kg	1	n/t	< 1.0
>C16-C21 BCB (EH_1D_Total)	N	mg/kg	1	n/t	2.6
>C21-C35 BCB (EH_1D_Total)	N	mg/kg	1	n/t	36.1
>C35-C40 BCB (EH_1D_Total)	N	mg/kg	1	n/t	4.0
Total (>C8-C40) BCB (EH_1D_Total)	N	mg/kg	1	n/t	43.8

Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258340	258341
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH05	BH06
Sample Depth (m)	0.70	0.10
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Polyaromatic hydrocarbons					
Naphthalene	M	mg/kg	0.1	n/t	0.2
Acenaphthylene	M	mg/kg	0.1	n/t	0.1
Acenaphthene	M	mg/kg	0.1	n/t	< 0.1
Fluorene	M	mg/kg	0.1	n/t	< 0.1
Phenanthrene	M	mg/kg	0.1	n/t	1.4
Anthracene	M	mg/kg	0.1	n/t	0.2
Fluoranthene	M	mg/kg	0.1	n/t	3.5
Pyrene	M	mg/kg	0.1	n/t	3.3
Benzo(a)anthracene	M	mg/kg	0.1	n/t	1.6
Chrysene	M	mg/kg	0.1	n/t	2.0
Benzo(b)fluoranthene	M	mg/kg	0.1	n/t	2.4
Benzo(k)fluoranthene	M	mg/kg	0.1	n/t	2.4
Benzo(a)pyrene	M	mg/kg	0.1	n/t	2.5
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	n/t	1.8
Dibenzo(a,h)anthracene	M	mg/kg	0.1	n/t	0.3
Benzo[g,h,i]perylene	M	mg/kg	0.1	n/t	1.8
Total PAH(16)	M	mg/kg	0.4	n/t	23.6
BTEX					
Benzene	M	ug/kg	10	< 10.0	n/t
Toluene	M	ug/kg	10	< 10.0	n/t
Ethylbenzene	M	ug/kg	10	< 10.0	n/t
Xylenes	M	ug/kg	10	< 10.0	n/t
MTBE	N	ug/kg	10	< 10.0	n/t
TPH CWG					
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	< 1.0	n/t
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	< 1.0	n/t
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	< 1.0	n/t
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	< 1.0	n/t
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	< 1.0	n/t



Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258342	258343
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH06	BH07
Sample Depth (m)	0.80	0.40
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Soil sample preparation parameters					
Moisture Content	N	%	0.1	n/t	9.5
Material removed	N	%	0.1	n/t	61.5
Description of Inert material removed	N		0	n/t	Stones
Metals					
Arsenic	M	mg/kg	1	n/t	15.2
Cadmium	M	mg/kg	0.5	n/t	0.6
Chromium	M	mg/kg	5	n/t	26.5
Copper	M	mg/kg	5	n/t	45.1
Lead	M	mg/kg	5	n/t	184
Mercury	M	mg/kg	0.5	n/t	< 0.5
Nickel	M	mg/kg	5	n/t	17.9
Selenium	M	mg/kg	1	n/t	< 1.0
Zinc	M	mg/kg	5	n/t	168
Inorganics					
Hexavalent Chromium	N	mg/kg	0.8	n/t	< 0.8
Acid Soluble Sulphate (SO4)	U	%	0.02	n/t	0.30
Acid Soluble Sulphate (SO4)	N	mg/kg	200	n/t	3000
Water Soluble Boron	N	mg/kg	0.5	n/t	< 0.5
Miscellaneous					
pH	M	pH units	0.1	n/t	11.0
Soil Organic Matter	U	%	0.1	n/t	1.8
Organics					
>C8-C10 BCB (EH_1D_Total)	N	mg/kg	1	n/t	< 1.0
>C10-C12 BCB (EH_1D_Total)	N	mg/kg	1	n/t	< 1.0
>C12-C16 BCB (EH_1D_Total)	N	mg/kg	1	n/t	5.4
>C16-C21 BCB (EH_1D_Total)	N	mg/kg	1	n/t	23.6
>C21-C35 BCB (EH_1D_Total)	N	mg/kg	1	n/t	147
>C35-C40 BCB (EH_1D_Total)	N	mg/kg	1	n/t	52.8
Total (>C8-C40) BCB (EH_1D_Total)	N	mg/kg	1	n/t	229

Results Summary

Report No.: 21-37218, issue number 1

ELAB Reference	258342	258343
Customer Reference		
Sample ID		
Sample Type	SOIL	SOIL
Sample Location	BH06	BH07
Sample Depth (m)	0.80	0.40
Sampling Date	17/11/2021	17/11/2021

Determinand	Codes	Units	LOD		
Polyaromatic hydrocarbons					
Naphthalene	M	mg/kg	0.1	n/t	< 0.1
Acenaphthylene	M	mg/kg	0.1	n/t	0.1
Acenaphthene	M	mg/kg	0.1	n/t	0.2
Fluorene	M	mg/kg	0.1	n/t	0.1
Phenanthrene	M	mg/kg	0.1	n/t	1.5
Anthracene	M	mg/kg	0.1	n/t	0.6
Fluoranthene	M	mg/kg	0.1	n/t	4.5
Pyrene	M	mg/kg	0.1	n/t	4.1
Benzo(a)anthracene	M	mg/kg	0.1	n/t	2.0
Chrysene	M	mg/kg	0.1	n/t	2.3
Benzo(b)fluoranthene	M	mg/kg	0.1	n/t	2.6
Benzo(k)fluoranthene	M	mg/kg	0.1	n/t	2.8
Benzo(a)pyrene	M	mg/kg	0.1	n/t	2.7
Indeno(1,2,3-cd)pyrene	M	mg/kg	0.1	n/t	2.3
Dibenzo(a,h)anthracene	M	mg/kg	0.1	n/t	0.5
Benzo[g,h,i]perylene	M	mg/kg	0.1	n/t	2.6
Total PAH(16)	M	mg/kg	0.4	n/t	29.1
BTEX					
Benzene	M	ug/kg	10	< 10.0	n/t
Toluene	M	ug/kg	10	< 10.0	n/t
Ethylbenzene	M	ug/kg	10	< 10.0	n/t
Xylenes	M	ug/kg	10	< 10.0	n/t
MTBE	N	ug/kg	10	< 10.0	n/t
TPH CWG					
>C5-C6 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C6-C8 Aliphatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C8-C10 Aliphatic (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	< 1.0	n/t
>C10-C12 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
>C12-C16 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
>C16-C21 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
>C21-C35 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
>C35-C40 Aliphatic (EH_2D_AL)	M	mg/kg	1	< 1.0	n/t
Total aliphatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AL)	N	mg/kg	1	< 1.0	n/t
>C5-C7 Aromatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C7-C8 Aromatic (HS_1D_MS)	N	mg/kg	0.01	< 0.01	n/t
>C8-C10 Aromatic (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	< 1.0	n/t
>C10-C12 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
>C12-C16 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
>C16-C21 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
>C21-C35 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
>C35-C40 Aromatic (EH_2D_AR)	M	mg/kg	1	< 1.0	n/t
Total aromatic hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_AR)	N	mg/kg	1	< 1.0	n/t
Total petroleum hydrocarbons (>C5 - C40) (HS_1D_MS+EH_2D_Total)	N	mg/kg	1	< 1.0	n/t

Results Summary

Report No.: 21-37218, issue number 1

Asbestos Results

Analytical result only applies to the sample as submitted by the client. Any comments, opinions or interpretations (marked #) in this report are outside UKAS accreditation (Accreditation No2683). They are subjective comments only which must be verified by the client.

Elab No	Depth (m)	Clients Reference	Description of Sample Matrix #	Asbestos Identification	Gravimetric Analysis Total (%)	Gravimetric Analysis by ACM Type (%)	Free Fibre Analysis (%)	Total Asbestos (%)
258329	0.40	BH01	Brown sandy Soil,Stones	No asbestos detected	n/t	n/t	n/t	n/t
258331	0.10	BH02	Brown sandy Soil,Stones	No asbestos detected	n/t	n/t	n/t	n/t
258332	0.35	BH02	Brown Sandy Soil,Stones,Glass	No asbestos detected	n/t	n/t	n/t	n/t
258334	0.50	BH03	Brown Sandy Soil,Stones	No asbestos detected	n/t	n/t	n/t	n/t
258336	0.45	BH04	Brown Sandy Soil,Stones	No asbestos detected	n/t	n/t	n/t	n/t
258339	0.50	BH05	Brown Soil,Stones	No asbestos detected	n/t	n/t	n/t	n/t
258341	0.10	BH06	Brown Sandy	No asbestos detected	n/t	n/t	n/t	n/t
258343	0.40	BH07	Brown Sandy Soil,Stones	No asbestos detected	n/t	n/t	n/t	n/t

Method Summary

Report No.: 21-37218, issue number 1

Parameter	Codes	Analysis Undertaken On	Date Tested	Method Number	Technique
Soil					
Hexavalent chromium	N	As submitted sample	22/11/2021	110	Colorimetry
pH	M	Air dried sample	25/11/2021	113	Electromeric
Acid Soluble Sulphate	U	Air dried sample	23/11/2021	115	Ion Chromatography
Aqua regia extractable metals	M	Air dried sample	22/11/2021	118	ICPMS
PAH (GC-FID)	M	As submitted sample	22/11/2021	133	GC-FID
Low range Aliphatic hydrocarbons soil	N	As submitted sample	22/11/2021	181	GC-MS
Low range Aromatic hydrocarbons soil	N	As submitted sample	22/11/2021	181	GC-MS
BTEX in solids	M	As submitted sample	22/11/2021	181A	GC-MS
Water soluble boron	N	Air dried sample	22/11/2021	202	Colorimetry
Basic carbon banding in soil	N	As submitted sample	22/11/2021	218	GC-FID
TPH CWG soil by gc-gc	M	As submitted sample	22/11/2021	271	
Asbestos identification	U	Air dried sample	24/11/2021	280	Microscopy
Soil organic matter	U	Air dried sample	24/11/2021	BS1377:P3	Titrimetry

Tests marked N are not UKAS accredited

Report Information

Report No.: 21-37218, issue number 1

Key

U	hold UKAS accreditation
M	hold MCERTS and UKAS accreditation
N	do not currently hold UKAS accreditation
^	MCERTS accreditation not applicable for sample matrix
*	UKAS accreditation not applicable for sample matrix
S	Subcontracted to approved laboratory UKAS Accredited for the test
SM	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
NS	Subcontracted to approved laboratory. UKAS accreditation is not applicable.
I/S	Insufficient Sample
U/S	Unsuitable sample
n/t	Not tested
<	means "less than"
>	means "greater than"

LOD LOD refers to limit of detection, except in the case of pH soils and pH waters where it means limit of discrimination.
Soil sample results are expressed on an air dried basis (dried at < 30°C), and are uncorrected for inert material removed.
ELAB are unable to provide an interpretation or opinion on the content of this report.
The results relate only to the sample received.
PCB congener results may include any coeluting PCBs
Uncertainty of measurement for the determinands tested are available upon request
Unless otherwise stated, sample information has been provided by the client. This may affect the validity of the results.

Deviation Codes

-
- | | |
|---|--|
| a | No date of sampling supplied |
| b | No time of sampling supplied (Waters Only) |
| c | Sample not received in appropriate containers |
| d | Sample not received in cooled condition |
| e | The container has been incorrectly filled |
| f | Sample age exceeds stability time (sampling to receipt) |
| g | Sample age exceeds stability time (sampling to analysis) |

Where a sample has a deviation code, the applicable test result may be invalid.

Sample Retention and Disposal

All soil samples will be retained for a period of one month
All water samples will be retained for 7 days following the date of the test report
Charges may apply to extended sample storage

TPH Classification - HWOL Acronym System

HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
2D	GC-GC - Double coil gas chromatography
#1	EH_Total but with humics mathematically subtracted
#2	EH_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry

APPENDIX G

Quantitative Conceptual Model

39-47 Hollingdean Road, Brighton				Quantitative Conceptual Model		P15063	
Source	Receptor	Contaminants	Pathway	Complete Linkage Present?	Probability	Consequence	Risk
• Made ground	End Users	Lead	Dermal contact with soil and dust (indoor & outdoor)	Yes	P3: Moderate	C3: Moderate	Moderate
			Ingestion of soil and indoor dust	Yes	P3: Moderate	C3: Moderate	Moderate
			Consumption of home-grown produce and attached soil	No private gardens proposed			N/A
			Inhalation of soil dust (indoor and outdoor)	Yes	P3: Moderate	C3: Moderate	Moderate
			Inhalation of soil vapours	Identified contaminant(s) do not pose a risk via this pathway			N/A
			Inhalation of soil gases/ Risk of explosion	No potential sources of ground gas identified.			N/A
	End Users (via Water Supply Pipework)		Contamination of incoming services	Identified contaminant(s) do not pose a risk via this pathway			N/A
	Groundwater	Lead	Migration to groundwater	Yes	P1: Very Low	C1: Very Minor	Negligible

APPENDIX H

Enviro+GeoInsight Report
Historical Maps

Hollingdean Road, Brighton, BN2 4AA

Order Details

Date: 09/03/2021
Your ref: P15063_
Our Ref: GS-7639772
Client: Ashdown Site Investigation Ltd.

Site Details

Location: 532025 105930
Area: 0.06 ha
Authority: [Brighton and Hove City Council](#)



Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

p.13

groundsure.com/insightuserguide

Contact us with any questions at:

info@groundsure.com

08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	<u>Historical industrial land uses</u>	0	8	50	51	-
19	1.2	<u>Historical tanks</u>	0	0	8	8	-
20	1.3	<u>Historical energy features</u>	0	2	11	12	-
21	1.4	Historical petrol stations	0	0	0	0	-
21	1.5	<u>Historical garages</u>	2	1	9	18	-
23	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
24	2.1	<u>Historical industrial land uses</u>	0	12	63	66	-
30	2.2	<u>Historical tanks</u>	0	0	21	25	-
32	2.3	<u>Historical energy features</u>	0	5	28	24	-
34	2.4	Historical petrol stations	0	0	0	0	-
34	2.5	<u>Historical garages</u>	3	2	13	30	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
37	3.1	Active or recent landfill	0	0	0	0	-
37	3.2	Historical landfill (BGS records)	0	0	0	0	-
38	3.3	<u>Historical landfill (LA/mapping records)</u>	0	0	0	1	-
38	3.4	<u>Historical landfill (EA/NRW records)</u>	0	0	0	1	-
38	3.5	<u>Historical waste sites</u>	0	0	3	7	-
41	3.6	<u>Licensed waste sites</u>	0	0	0	5	-
42	3.7	<u>Waste exemptions</u>	0	0	14	16	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
46	4.1	<u>Recent industrial land uses</u>	0	6	27	-	-
49	4.2	<u>Current or recent petrol stations</u>	0	1	1	3	-
49	4.3	Electricity cables	0	0	0	0	-
49	4.4	Gas pipelines	0	0	0	0	-
49	4.5	Sites determined as Contaminated Land	0	0	0	0	-



50	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
50	4.7	Regulated explosive sites	0	0	0	0	-
50	4.8	Hazardous substance storage/usage	0	0	0	0	-
50	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
50	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
51	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	2	3	5	-
52	4.12	Radioactive Substance Authorisations	0	0	0	0	-
52	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
52	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
53	4.15	Pollutant release to public sewer	0	0	0	0	-
53	4.16	List 1 Dangerous Substances	0	0	0	0	-
53	4.17	List 2 Dangerous Substances	0	0	0	0	-
53	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	0	6	-
54	4.19	Pollution inventory substances	0	0	0	0	-
54	4.20	Pollution inventory waste transfers	0	0	0	0	-
55	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
56	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
57	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
58	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
59	5.4	<u>Groundwater vulnerability- soluble rock risk</u>	Identified (within 0m)				
59	5.5	Groundwater vulnerability- local information	None (within 0m)				
60	5.6	<u>Groundwater abstractions</u>	0	0	1	0	7
62	5.7	Surface water abstractions	0	0	0	0	0
63	5.8	<u>Potable abstractions</u>	0	0	1	0	0
63	5.9	<u>Source Protection Zones</u>	1	0	1	1	-
63	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
64	6.1	Water Network (OS MasterMap)	0	0	0	-	-



64	6.2	Surface water features	0	0	0	-	-
65	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
65	6.4	WFD Surface water bodies	0	0	0	-	-
65	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
67	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (within 50m)				
67	7.2	Historical Flood Events	0	0	0	-	-
67	7.3	Flood Defences	0	0	0	-	-
67	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
68	7.5	Flood Storage Areas	0	0	0	-	-
69	7.6	Flood Zone 2	None (within 50m)				
69	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
70	8.1	<u>Surface water flooding</u>	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding					
72	9.1	<u>Groundwater flooding</u>	High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
73	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
74	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
74	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
74	10.4	Special Protection Areas (SPA)	0	0	0	0	0
74	10.5	National Nature Reserves (NNR)	0	0	0	0	0
75	10.6	<u>Local Nature Reserves (LNR)</u>	0	0	0	0	10
75	10.7	Designated Ancient Woodland	0	0	0	0	0
76	10.8	<u>Biosphere Reserves</u>	1	0	0	0	0
76	10.9	Forest Parks	0	0	0	0	0
76	10.10	Marine Conservation Zones	0	0	0	0	0
76	10.11	Green Belt	0	0	0	0	0
77	10.12	Proposed Ramsar sites	0	0	0	0	0

77	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
77	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
77	10.15	Nitrate Sensitive Areas	0	0	0	0	0
78	10.16	<u>Nitrate Vulnerable Zones</u>	1	1	0	0	0
79	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
80	10.18	SSSI Units	0	0	0	0	0

Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
81	11.1	World Heritage Sites	0	0	0	-	-
82	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
82	11.3	National Parks	0	0	0	-	-
82	11.4	<u>Listed Buildings</u>	0	0	2	-	-
83	11.5	<u>Conservation Areas</u>	0	1	0	-	-
83	11.6	Scheduled Ancient Monuments	0	0	0	-	-
83	11.7	<u>Registered Parks and Gardens</u>	0	0	1	-	-

Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
84	12.1	<u>Agricultural Land Classification</u>	Urban (within 250m)				
85	12.2	Open Access Land	0	0	0	-	-
85	12.3	Tree Felling Licences	0	0	0	-	-
85	12.4	Environmental Stewardship Schemes	0	0	0	-	-
85	12.5	Countryside Stewardship Schemes	0	0	0	-	-

Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
86	13.1	<u>Priority Habitat Inventory</u>	0	0	2	-	-
87	13.2	Habitat Networks	0	0	0	-	-
87	13.3	Open Mosaic Habitat	0	0	0	-	-
87	13.4	Limestone Pavement Orders	0	0	0	-	-

Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
88	14.1	<u>10k Availability</u>	Identified (within 500m)				
89	14.2	<u>Artificial and made ground (10k)</u>	0	1	2	3	-
91	14.3	<u>Superficial geology (10k)</u>	1	0	0	0	-



92	14.4	Landslip (10k)	0	0	0	0	-
93	14.5	<u>Bedrock geology (10k)</u>	1	1	1	2	-
94	14.6	<u>Bedrock faults and other linear features (10k)</u>	0	0	1	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
95	15.1	<u>50k Availability</u>	Identified (within 500m)				
96	15.2	<u>Artificial and made ground (50k)</u>	0	1	0	0	-
97	15.3	<u>Artificial ground permeability (50k)</u>	0	1	-	-	-
98	15.4	<u>Superficial geology (50k)</u>	1	0	0	0	-
99	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
99	15.6	Landslip (50k)	0	0	0	0	-
99	15.7	Landslip permeability (50k)	None (within 50m)				
100	15.8	<u>Bedrock geology (50k)</u>	1	1	1	1	-
101	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
101	15.10	<u>Bedrock faults and other linear features (50k)</u>	0	0	1	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
102	16.1	<u>BGS Boreholes</u>	0	3	17	-	-
Page	Section	Natural ground subsidence					
104	17.1	<u>Shrink swell clays</u>	Very low (within 50m)				
105	17.2	<u>Running sands</u>	Very low (within 50m)				
106	17.3	<u>Compressible deposits</u>	Very low (within 50m)				
108	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
109	17.5	<u>Landslides</u>	Low (within 50m)				
111	17.6	<u>Ground dissolution of soluble rocks</u>	Low (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
113	18.1	Natural cavities	0	0	0	0	-
114	18.2	BritPits	0	0	0	0	-
114	18.3	<u>Surface ground workings</u>	0	0	21	-	-
115	18.4	<u>Underground workings</u>	0	0	1	8	6
116	18.5	Historical Mineral Planning Areas	0	0	0	0	-



116	18.6	<u>Non-coal mining</u>	1	0	0	0	1
116	18.7	Mining cavities	0	0	0	0	0
117	18.8	JPB mining areas	None (within 0m)				
117	18.9	Coal mining	None (within 0m)				
117	18.10	Brine areas	None (within 0m)				
117	18.11	Gypsum areas	None (within 0m)				
117	18.12	Tin mining	None (within 0m)				
118	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
119	19.1	<u>Radon</u>	Between 1% and 3% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
120	20.1	<u>BGS Estimated Background Soil Chemistry</u>	1	2	-	-	-
120	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
120	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
121	21.1	Underground railways (London)	0	0	0	-	-
121	21.2	Underground railways (Non-London)	0	0	0	-	-
122	21.3	Railway tunnels	0	0	0	-	-
122	21.4	<u>Historical railway and tunnel features</u>	2	15	8	-	-
123	21.5	Royal Mail tunnels	0	0	0	-	-
123	21.6	<u>Historical railways</u>	0	1	0	-	-
124	21.7	<u>Railways</u>	0	0	8	-	-
124	21.8	Crossrail 1	0	0	0	0	-
124	21.9	Crossrail 2	0	0	0	0	-
125	21.10	HS2	0	0	0	0	-



Recent aerial photograph



Capture Date: 01/04/2019

Site Area: 0.06ha



Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 9 March 2021

Recent site history - 2018 aerial photograph



Capture Date: 28/06/2018

Site Area: 0.06ha



Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 9 March 2021

Recent site history - 2012 aerial photograph



Capture Date: 13/09/2012

Site Area: 0.06ha



Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 9 March 2021

Recent site history - 2005 aerial photograph



Capture Date: 17/04/2005

Site Area: 0.06ha



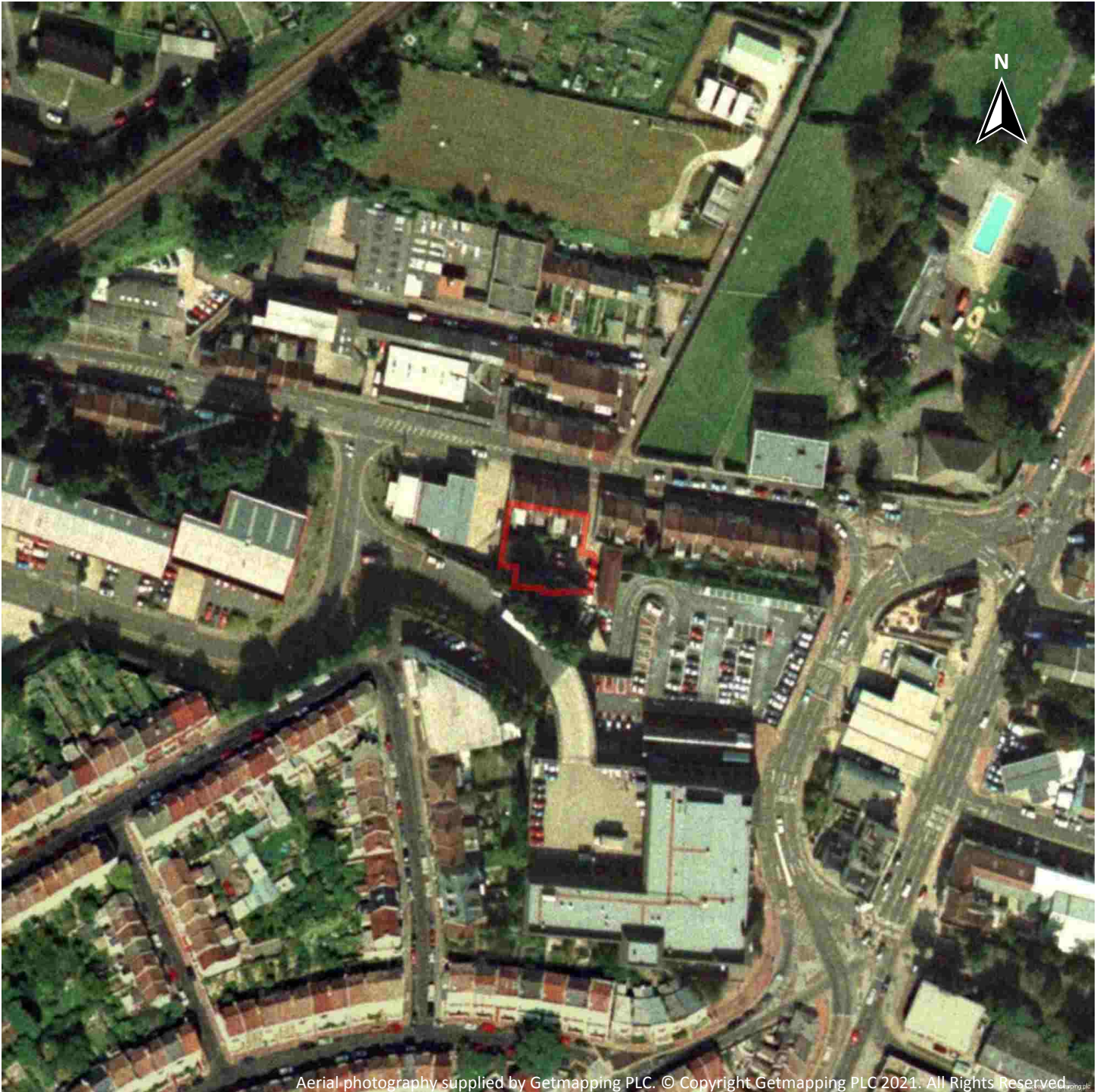
Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 9 March 2021

Recent site history - 1999 aerial photograph



Capture Date: 04/09/1999

Site Area: 0.06ha



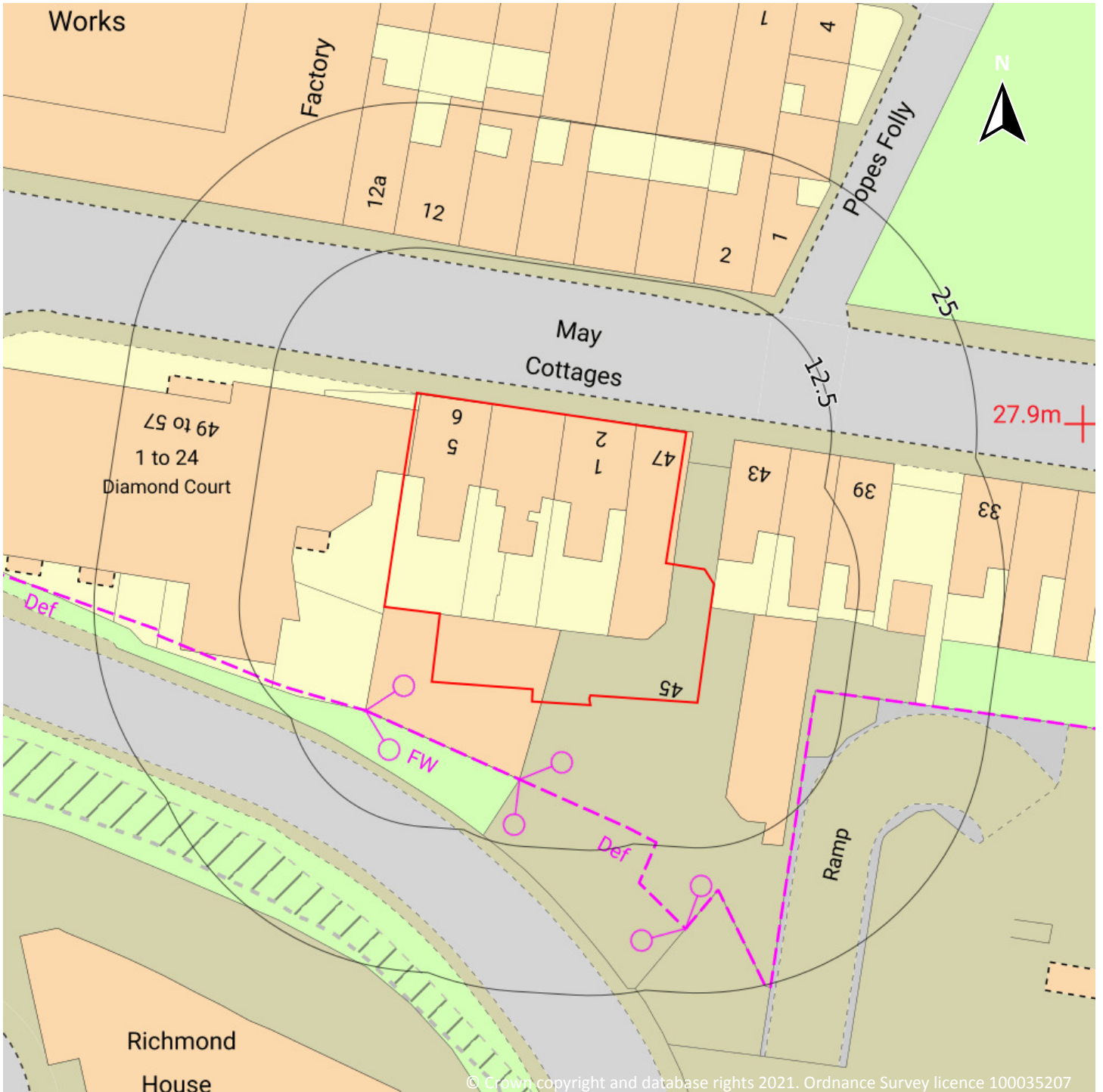
Contact us with any questions at:

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Date: 9 March 2021

OS MasterMap site plan



Site Area: 0.06ha



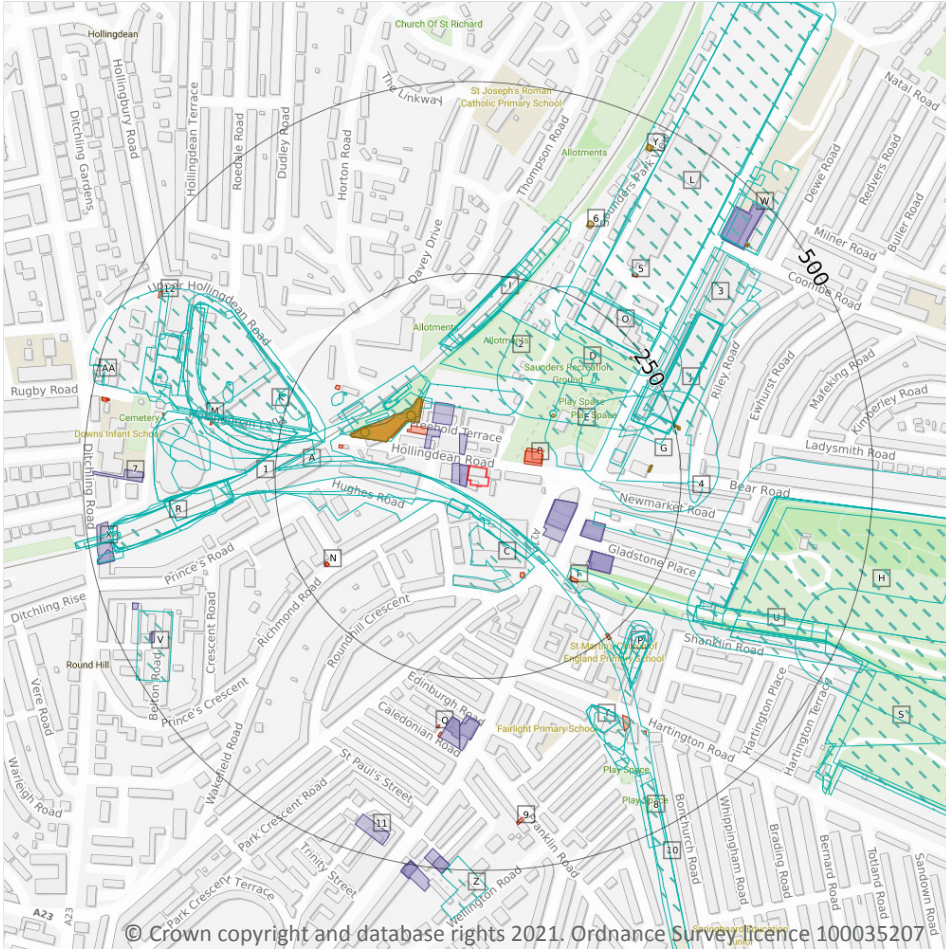
Contact us with any questions at:

info@groundsure.com

08444 159 000

Date: 9 March 2021

1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical garages

1.1 Historical industrial land uses

Records within 500m **109**

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
A	14m SW	Railway Sidings	1932	2206115



ID	Location	Land use	Dates present	Group ID
1	15m SW	Railway Sidings	1875	2182740
A	17m SW	Railway Sidings	1897 - 1909	2212116
A	17m SW	Railway Sidings	1938 - 1963	2274851
A	27m S	Railway Station	1875	2152607
A	27m SW	Railway Building	1932 - 1938	2186725
A	27m SW	Railway Station	1897 - 1909	2271657
A	37m SW	Railway Building	1963	2148115
C	51m S	Unspecified Works	1963	2159411
A	72m N	Unspecified Heap	1963	2135844
D	82m NE	Nursery	1897	2161127
E	84m NE	Water Works	1875	2139687
A	88m NW	Gas Works	1875 - 1897	2258690
A	95m NW	Gasometer	1875 - 1897	2179870
A	95m NW	Unspecified Tank	1909	2153555
A	105m NW	Railway Sidings	1938	2289757
E	107m NE	Unspecified Tank	1875	2153556
G	119m E	Smithy	1897	2177717
2	122m N	Nurseries	1909	2168185
A	123m NW	Railway Building	1932	2148114
A	123m NW	Railway Buildings	1932	2163349
A	124m NW	Railway Building	1897 - 1909	2171770
A	124m NW	Railway Sidings	1938	2259996
A	135m W	Gasometer	1875 - 1909	2221844
H	144m E	Cemetery	1963	2190383
I	145m N	Cuttings	1963 - 1994	2216332
I	152m N	Cuttings	1875	2252963
I	154m N	Cuttings	1897	2239463
A	158m NW	Railway Building	1963 - 1994	2210026



ID	Location	Land use	Dates present	Group ID
I	158m N	Cuttings	1938	2172021
I	158m N	Cuttings	1909	2293621
I	159m N	Cuttings	1932	2258274
G	159m E	Smithy	1909	2240617
J	166m E	Bus Depot	1973	2174811
D	172m NE	Unspecified Ground Workings	1973	2132687
D	176m NE	Pumping Station	1909	2151678
G	176m E	Pumping Station	1897	2151679
A	184m NW	Unspecified Heap	1875	2135843
A	184m NW	Unspecified Shaft	1875	2142996
K	191m W	Unspecified Depot	1973 - 1994	2185013
J	197m E	Tramway Depot	1938	2235939
J	197m E	Tramway Depot	1909	2271287
G	199m E	Tramway Sidings	1932	2151110
J	199m E	Tramway Depot	1932	2170191
L	200m NE	Barracks	1875	2285309
M	201m W	Railway Sidings	1963	2233306
3	202m E	Unspecified Works	1963	2159414
M	210m W	Corporation Depot	1963	2294758
M	211m W	Corporation Depot	1938	2257340
M	211m W	Corporation Depot	1932	2264036
M	214m W	Corporation Depot	1897 - 1909	2289192
L	222m NE	Infantry Barracks	1897	2162395
O	223m NE	Hospital	1932 - 1938	2183140
L	223m NE	Artillery Barracks	1909	2192823
J	224m E	Bus Depot	1994	2248533
J	224m E	Bus Depot	1963	2279625
M	227m W	Abattoir	1938	2187161



ID	Location	Land use	Dates present	Group ID
M	227m W	Abattoir	1897 - 1909	2245702
K	250m W	Unspecified Heap	1875	2135841
M	251m W	Abattoir	1932	2264467
K	257m W	Unspecified Shaft	1875	2142995
P	258m SE	Unspecified Heap	1932	2206174
4	259m E	Unspecified Pit	1875	2123786
P	265m SE	Unspecified Heap	1875	2211289
L	265m NE	Artillery Barracks	1932 - 1938	2271381
P	265m SE	Unspecified Ground Workings	1938	2208129
P	265m SE	Unspecified Ground Workings	1897 - 1909	2265407
H	298m SE	Cemetery	1875	2217528
R	304m W	Cuttings	1897	2285431
R	305m W	Cuttings	1938	2231973
R	305m W	Cuttings	1909	2259740
R	306m W	Cuttings	1875	2211885
R	306m W	Cuttings	1932	2294662
S	313m SE	Cemetery	1930 - 1938	2253335
H	313m SE	Cemeteries	1909	2192670
H	313m SE	Cemeteries	1938	2202511
H	313m SE	Cemetery	1897	2232935
T	315m SE	Unspecified Heap	1909	2223837
T	315m SE	Unspecified Heap	1938	2264203
T	318m SE	Unspecified Heap	1932	2285077
M	320m W	Unspecified Heap	1875	2135842
T	326m SE	Unspecified Heap	1875	2189163
R	328m W	Cuttings	1963 - 1994	2179043
M	329m W	Unspecified Shaft	1875	2142994
U	335m SE	Cuttings	1932	2251773



ID	Location	Land use	Dates present	Group ID
M	335m W	Unspecified Ground Workings	1875	2132688
H	347m SE	Cemetery	1932	2184952
U	349m SE	Cuttings	1963	2242158
H	366m SE	Cemeteries	1973 - 1994	2195594
U	367m SE	Cuttings	1973 - 1994	2212242
T	369m SE	Unspecified Pit	1963 - 1973	2212858
M	391m W	Destructor	1932	2212970
T	396m SE	Unspecified Heap	1930	2135840
M	405m W	Destructor	1938	2222932
M	405m W	Destructor	1897 - 1909	2253568
M	408m W	Unspecified Heap	1875	2135868
M	418m W	Unspecified Shaft	1875	2142993
V	420m SW	Flour Windmill	1875	2151621
8	424m SE	Cuttings	1963 - 1973	2177972
W	428m NE	Unspecified Factory	1963	2150924
W	428m NE	Laundry	1897	2132396
10	438m SE	Cuttings	1897	2175929
S	445m E	Cemetery	1875 - 1897	2180026
X	456m W	Railway Tunnel	1932	2176650
X	457m W	Tunnel	1973 - 1994	2174625
X	459m W	Tunnel	1938	2172540
X	459m W	Tunnel	1897 - 1909	2230504
Z	482m S	Police Station	1963	2162613
AA	487m W	Fire Station	1909	2128140

This data is sourced from Ordnance Survey / Groundsure.



1.2 Historical tanks

Records within 500m

16

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
A	86m NW	Gas Works	1898	403549
A	91m NW	Gas Works	1875	394710
A	94m NW	Unspecified Tank	1875 - 1911	394800
E	108m NE	Unspecified Tank	1875 - 1898	381675
A	137m W	Unspecified Tank	1875 - 1911	392582
G	207m E	Tanks	1952 - 1986	382185
G	208m E	Tanks	1952 - 1972	398126
G	249m E	Tanks	1985 - 1986	398879
G	250m E	Tanks	1972	396021
6	340m NE	Unspecified Tank	1952 - 1990	384513
M	403m W	Unspecified Tank	1875	384698
W	444m NE	Unspecified Tank	1997	384430
W	444m NE	Unspecified Tank	1987 - 1990	404252
W	446m NE	Unspecified Tank	1952 - 1965	400147
Y	464m NE	Unspecified Tank	1952 - 1965	404198
Y	464m NE	Unspecified Tank	1988	384149

This data is sourced from Ordnance Survey / Groundsure.



1.3 Historical energy features

Records within 500m

25

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
B	49m E	Electricity Substation	1952 - 1972	266288
B	49m E	Electricity Substation	1985 - 1986	258573
A	68m NW	Electricity Substation	1994	276367
A	86m NW	Gas Works	1898	289373
A	91m NW	Gas Works	1875	290718
C	120m S	Electricity Substation	1985 - 1986	260486
F	159m SE	Electricity Substation	1972 - 1986	269610
A	166m W	Electricity Substation	1994	276512
A	196m NW	Electricity Substation	1969 - 1994	266181
N	210m SW	Electricity Substation	1971 - 1989	262387
N	211m SW	Electricity Substation	1994	273985
O	234m NE	Electricity Substation	1987 - 1990	269415
P	246m SE	Electricity Substation	1972 - 1986	264586
5	314m NE	Electricity Substation	1987 - 1997	266566
Q	315m S	Electricity Substation	1987 - 1989	283334
Q	324m S	Electricity Substation	1971 - 1994	292508
M	338m W	Electricity Substation	1994	265717
T	346m SE	Electricity Substation	1972	241895
T	378m SE	Electricity Substation	1985 - 1986	276038
9	433m S	Electricity Substation	1989	260371
12	456m NW	Electricity Substation	1969 - 1994	269609



ID	Location	Land use	Dates present	Group ID
AA	476m W	Electricity Substation	1969	253046
AA	478m W	Electricity Substation	1994	253694
AA	478m W	Electricity Substation	1994	253719
AA	479m W	Electricity Substation	1977	283339

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0
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Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	30
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Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
A	On site	Garage	1971 - 1972	80945
A	On site	Garage	1985 - 1986	84039
A	16m NW	Garage	1952	73113
A	54m NW	Garages	1952	74206
A	58m NW	Motor Body Repair Works	1969 - 1977	82502
F	87m E	Garage	1985 - 1986	80663
F	88m SE	Garage	1972	77222



ID	Location	Land use	Dates present	Group ID
F	135m E	Garage	1985 - 1986	85395
F	136m SE	Garage	1972	75090
F	159m SE	Garage	1985 - 1986	85027
F	161m SE	Garage	1972	75892
F	161m SE	Garage	1952	79458
Q	298m S	Garage	1971 - 1972	81825
Q	302m S	Garage	1952	80056
Q	302m S	Garage	1987	80281
Q	302m S	Garage	1985 - 1986	83788
7	421m W	Garage	1989 - 1994	80858
W	427m NE	Garage	1997	79133
W	428m NE	Garage	1987	76884
W	428m NE	Garage	1988 - 1990	81332
11	451m S	Garage	1951 - 1972	85371
V	453m SW	Garages	1952	74209
V	457m W	Garages	1952	74207
X	470m W	Garage	1987	84156
X	470m W	Garage	1971	76540
Z	475m S	Garage	1989 - 1996	85498
Z	484m S	Garage	1951	78282
Z	494m S	Garage	1996	76078
Z	496m S	Garage	1951 - 1972	82617
Z	496m S	Garage	1989	82984

This data is sourced from Ordnance Survey / Groundsure.



1.6 Historical military land

Records within 500m

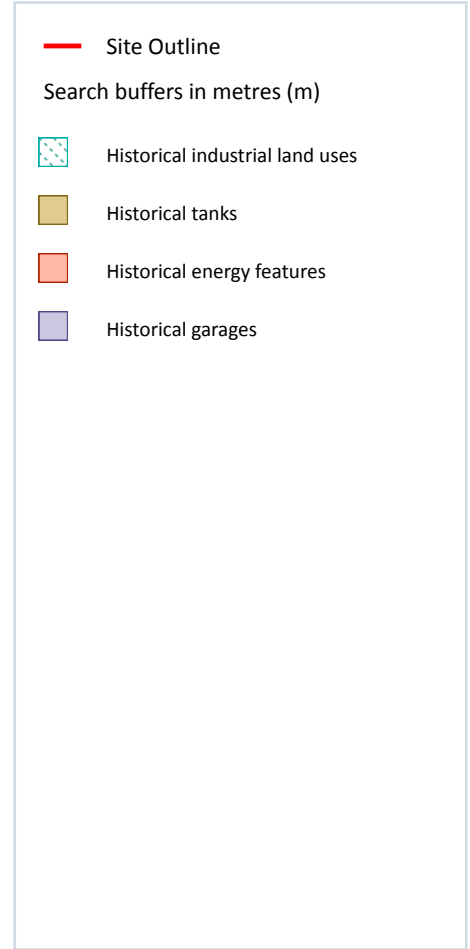
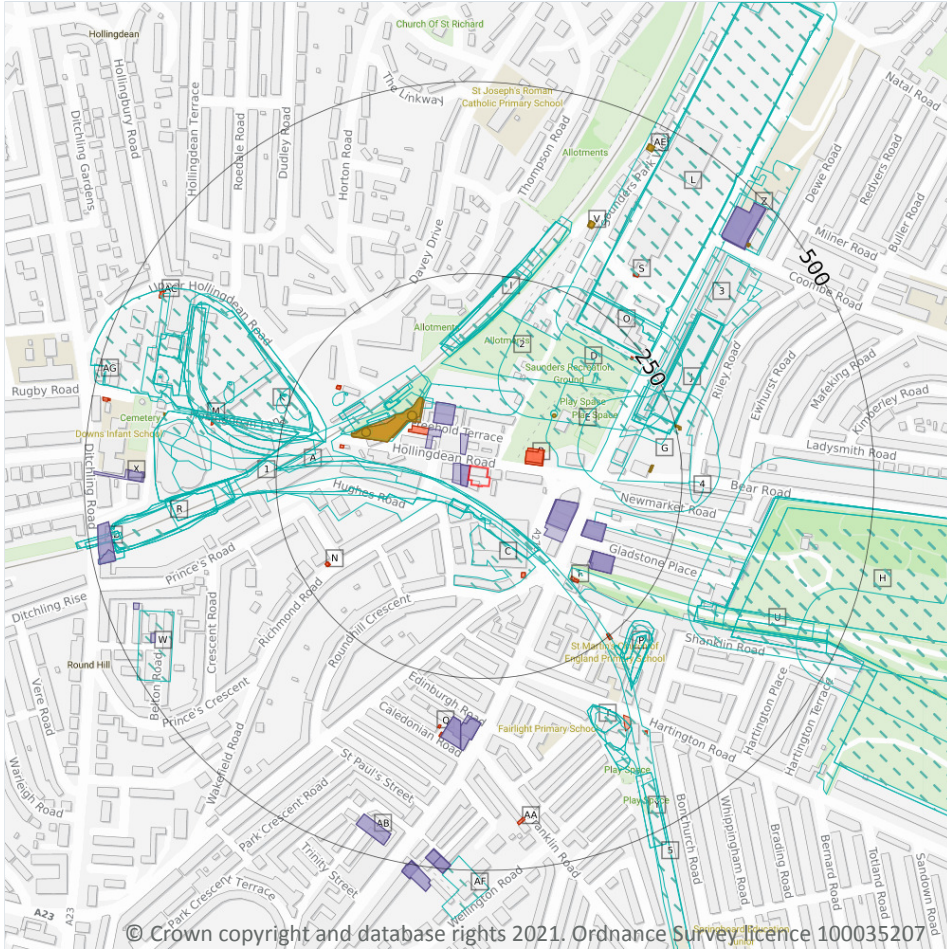
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Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.



2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m **141**

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 24**

ID	Location	Land Use	Date	Group ID
A	14m SW	Railway Sidings	1932	2206115
1	15m SW	Railway Sidings	1875	2182740
A	17m SW	Railway Sidings	1938	2274851

ID	Location	Land Use	Date	Group ID
A	17m SW	Railway Sidings	1909	2212116
A	17m SW	Railway Sidings	1897	2212116
A	27m S	Railway Station	1875	2152607
A	27m SW	Railway Building	1938	2186725
A	27m SW	Railway Station	1909	2271657
A	27m SW	Railway Station	1897	2271657
A	28m SW	Railway Building	1932	2186725
A	37m SW	Railway Building	1963	2148115
A	45m SW	Railway Sidings	1963	2274851
C	51m S	Unspecified Works	1963	2159411
A	72m N	Unspecified Heap	1963	2135844
D	82m NE	Nursery	1897	2161127
E	84m NE	Water Works	1875	2139687
A	88m NW	Gas Works	1897	2258690
A	90m NW	Gas Works	1875	2258690
A	95m NW	Gasometer	1897	2179870
A	95m NW	Unspecified Tank	1909	2153555
A	98m NW	Gasometer	1875	2179870
A	105m NW	Railway Sidings	1938	2289757
E	107m NE	Unspecified Tank	1875	2153556
G	119m E	Smithy	1897	2177717
2	122m N	Nurseries	1909	2168185
A	123m NW	Railway Building	1932	2148114
A	123m NW	Railway Buildings	1932	2163349
A	124m NW	Railway Building	1909	2171770
A	124m NW	Railway Building	1897	2171770
A	124m NW	Railway Sidings	1938	2259996
A	135m W	Gasometer	1909	2221844



ID	Location	Land Use	Date	Group ID
A	135m W	Gasometer	1897	2221844
A	137m W	Gasometer	1875	2221844
H	144m E	Cemetery	1963	2190383
I	145m N	Cuttings	1994	2216332
I	145m N	Cuttings	1973	2216332
I	145m N	Cuttings	1963	2216332
I	152m N	Cuttings	1875	2252963
I	154m N	Cuttings	1897	2239463
A	158m NW	Railway Building	1994	2210026
A	158m NW	Railway Building	1973	2210026
A	158m NW	Railway Building	1963	2210026
I	158m N	Cuttings	1938	2172021
I	158m N	Cuttings	1909	2293621
I	159m N	Cuttings	1932	2258274
G	159m E	Smithy	1909	2240617
J	166m E	Bus Depot	1973	2174811
D	172m NE	Unspecified Ground Workings	1973	2132687
D	176m NE	Pumping Station	1909	2151678
G	176m E	Pumping Station	1897	2151679
A	184m NW	Unspecified Heap	1875	2135843
A	184m NW	Unspecified Shaft	1875	2142996
K	191m W	Unspecified Depot	1994	2185013
K	191m W	Unspecified Depot	1973	2185013
J	197m E	Tramway Depot	1938	2235939
J	197m E	Tramway Depot	1909	2271287
G	199m E	Tramway Sidings	1932	2151110
J	199m E	Tramway Depot	1932	2170191
L	200m NE	Barracks	1875	2285309



ID	Location	Land Use	Date	Group ID
M	201m W	Railway Sidings	1963	2233306
3	202m E	Unspecified Works	1963	2159414
M	210m W	Corporation Depot	1963	2294758
M	211m W	Corporation Depot	1938	2257340
M	211m W	Corporation Depot	1932	2264036
M	214m W	Corporation Depot	1909	2289192
M	214m W	Corporation Depot	1897	2289192
L	222m NE	Infantry Barracks	1897	2162395
O	223m NE	Hospital	1932	2183140
O	223m NE	Hospital	1938	2183140
L	223m NE	Artillery Barracks	1909	2192823
J	224m E	Bus Depot	1994	2248533
J	224m E	Bus Depot	1963	2279625
M	227m W	Abattoir	1938	2187161
M	227m W	Abattoir	1909	2245702
M	227m W	Abattoir	1897	2245702
K	250m W	Unspecified Heap	1875	2135841
M	251m W	Abattoir	1932	2264467
K	257m W	Unspecified Shaft	1875	2142995
P	258m SE	Unspecified Heap	1932	2206174
P	258m SE	Unspecified Heap	1932	2206174
4	259m E	Unspecified Pit	1875	2123786
P	265m SE	Unspecified Heap	1875	2211289
L	265m NE	Artillery Barracks	1938	2271381
P	265m SE	Unspecified Ground Workings	1938	2208129
P	265m SE	Unspecified Ground Workings	1909	2265407
P	265m SE	Unspecified Ground Workings	1897	2265407
L	269m NE	Artillery Barracks	1932	2271381



ID	Location	Land Use	Date	Group ID
H	298m SE	Cemetery	1875	2217528
R	304m W	Cuttings	1897	2285431
R	305m W	Cuttings	1938	2231973
R	305m W	Cuttings	1909	2259740
R	306m W	Cuttings	1875	2211885
R	306m W	Cuttings	1932	2294662
H	313m SE	Cemetery	1932	2253335
H	313m SE	Cemeteries	1938	2202511
H	313m SE	Cemeteries	1909	2192670
H	313m SE	Cemetery	1897	2232935
T	315m SE	Unspecified Heap	1938	2264203
T	315m SE	Unspecified Heap	1909	2223837
T	318m SE	Unspecified Heap	1932	2285077
T	318m SE	Unspecified Heap	1932	2285077
M	320m W	Unspecified Heap	1875	2135842
T	326m SE	Unspecified Heap	1875	2189163
R	328m W	Cuttings	1994	2179043
R	328m W	Cuttings	1973	2179043
R	328m W	Cuttings	1963	2179043
M	329m W	Unspecified Shaft	1875	2142994
U	335m SE	Cuttings	1932	2251773
M	335m W	Unspecified Ground Workings	1875	2132688
H	347m SE	Cemetery	1932	2184952
U	349m SE	Cuttings	1963	2242158
H	366m SE	Cemeteries	1994	2195594
H	366m SE	Cemeteries	1973	2195594
U	367m SE	Cuttings	1994	2212242
U	367m SE	Cuttings	1973	2212242



ID	Location	Land Use	Date	Group ID
T	369m SE	Unspecified Pit	1973	2212858
T	369m SE	Unspecified Pit	1963	2212858
M	391m W	Destructor	1932	2212970
M	391m W	Destructor	1932	2212970
T	396m SE	Unspecified Heap	1930	2135840
M	405m W	Destructor	1938	2222932
M	405m W	Destructor	1909	2253568
M	405m W	Destructor	1897	2253568
M	408m W	Unspecified Heap	1875	2135868
M	418m W	Unspecified Shaft	1875	2142993
W	420m SW	Flour Windmill	1875	2151621
Y	424m SE	Cuttings	1973	2177972
Y	424m SE	Cuttings	1963	2177972
Z	428m NE	Unspecified Factory	1963	2150924
Z	428m NE	Laundry	1897	2132396
5	438m SE	Cuttings	1897	2175929
H	445m E	Cemetery	1875	2180026
AD	456m W	Railway Tunnel	1932	2176650
AD	456m W	Railway Tunnel	1932	2176650
AD	457m W	Tunnel	1994	2174625
AD	457m W	Tunnel	1973	2174625
AD	459m W	Tunnel	1938	2172540
AD	459m W	Tunnel	1909	2230504
AD	459m W	Tunnel	1897	2230504
AF	482m S	Police Station	1963	2162613
AG	487m W	Fire Station	1909	2128140

This data is sourced from Ordnance Survey / Groundsure.



2.2 Historical tanks

Records within 500m

46

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 24**

ID	Location	Land Use	Date	Group ID
A	86m NW	Gas Works	1898	403549
A	91m NW	Gas Works	1875	394710
A	91m NW	Gas Works	1875	394710
A	94m NW	Unspecified Tank	1875	394800
A	94m NW	Unspecified Tank	1875	394800
A	94m NW	Unspecified Tank	1898	394800
A	94m NW	Unspecified Tank	1911	394800
E	108m NE	Unspecified Tank	1875	381675
E	108m NE	Unspecified Tank	1875	381675
E	108m NE	Unspecified Tank	1898	381675
A	137m W	Unspecified Tank	1875	392582
A	137m W	Unspecified Tank	1875	392582
A	137m W	Unspecified Tank	1898	392582
A	137m W	Unspecified Tank	1911	392582
G	207m E	Tanks	1985	382185
G	207m E	Tanks	1986	382185
G	208m E	Tanks	1972	398126
G	208m E	Tanks	1952	398126
G	208m E	Tanks	1952	382185
G	249m E	Tanks	1985	398879
G	249m E	Tanks	1986	398879
G	250m E	Tanks	1972	396021
V	340m NE	Unspecified Tank	1987	384513



ID	Location	Land Use	Date	Group ID
V	340m NE	Unspecified Tank	1988	384513
V	340m NE	Unspecified Tank	1988	384513
V	340m NE	Unspecified Tank	1990	384513
V	341m NE	Unspecified Tank	1954	384513
V	341m NE	Unspecified Tank	1965	384513
V	341m NE	Unspecified Tank	1952	384513
V	341m NE	Unspecified Tank	1954	384513
M	403m W	Unspecified Tank	1875	384698
M	403m W	Unspecified Tank	1875	384698
Z	444m NE	Unspecified Tank	1997	384430
Z	444m NE	Unspecified Tank	1987	404252
Z	445m NE	Unspecified Tank	1988	404252
Z	445m NE	Unspecified Tank	1988	404252
Z	445m NE	Unspecified Tank	1990	404252
Z	446m NE	Unspecified Tank	1954	400147
Z	446m NE	Unspecified Tank	1965	400147
Z	446m NE	Unspecified Tank	1952	400147
AE	464m NE	Unspecified Tank	1954	404198
AE	464m NE	Unspecified Tank	1965	404198
AE	464m NE	Unspecified Tank	1952	404198
AE	464m NE	Unspecified Tank	1988	384149
AE	464m NE	Unspecified Tank	1988	384149
AE	464m NE	Unspecified Tank	1954	404198

This data is sourced from Ordnance Survey / Groundsure.



2.3 Historical energy features

Records within 500m

57

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 24**

ID	Location	Land Use	Date	Group ID
B	49m E	Electricity Substation	1972	266288
B	49m E	Electricity Substation	1952	266288
B	49m E	Electricity Substation	1952	266288
B	49m E	Electricity Substation	1985	258573
B	49m E	Electricity Substation	1986	258573
A	68m NW	Electricity Substation	1994	276367
A	68m NW	Electricity Substation	1994	276367
A	86m NW	Gas Works	1898	289373
A	91m NW	Gas Works	1875	290718
A	91m NW	Gas Works	1875	290718
C	120m S	Electricity Substation	1985	260486
C	120m S	Electricity Substation	1986	260486
F	159m SE	Electricity Substation	1986	269610
F	164m SE	Electricity Substation	1972	269610
A	166m W	Electricity Substation	1994	276512
A	166m W	Electricity Substation	1994	276512
A	196m NW	Electricity Substation	1977	266181
A	196m NW	Electricity Substation	1969	266181
A	197m NW	Electricity Substation	1994	266181
A	197m NW	Electricity Substation	1994	266181
N	210m SW	Electricity Substation	1971	262387
N	211m SW	Electricity Substation	1994	273985
N	211m SW	Electricity Substation	1994	273985



ID	Location	Land Use	Date	Group ID
N	211m SW	Electricity Substation	1987	262387
N	211m SW	Electricity Substation	1987	262387
N	211m SW	Electricity Substation	1989	262387
O	234m NE	Electricity Substation	1987	269415
O	234m NE	Electricity Substation	1988	269415
O	234m NE	Electricity Substation	1988	269415
O	234m NE	Electricity Substation	1990	269415
P	246m SE	Electricity Substation	1985	264586
P	246m SE	Electricity Substation	1986	264586
P	247m SE	Electricity Substation	1972	264586
S	314m NE	Electricity Substation	1987	266566
Q	315m S	Electricity Substation	1987	283334
Q	315m S	Electricity Substation	1987	283334
Q	315m S	Electricity Substation	1989	283334
S	315m NE	Electricity Substation	1997	266566
S	315m NE	Electricity Substation	1990	266566
Q	324m S	Electricity Substation	1971	292508
Q	324m S	Electricity Substation	1994	292508
Q	324m S	Electricity Substation	1994	292508
M	338m W	Electricity Substation	1994	265717
M	338m W	Electricity Substation	1994	265717
T	346m SE	Electricity Substation	1972	241895
T	378m SE	Electricity Substation	1985	276038
T	378m SE	Electricity Substation	1986	276038
AA	433m S	Electricity Substation	1989	260371
AA	433m S	Electricity Substation	1989	260371
AC	456m NW	Electricity Substation	1994	269609
AC	456m NW	Electricity Substation	1977	269609



ID	Location	Land Use	Date	Group ID
AC	456m NW	Electricity Substation	1969	269609
AC	456m NW	Electricity Substation	1994	269609
AG	476m W	Electricity Substation	1969	253046
AG	478m W	Electricity Substation	1994	253694
AG	478m W	Electricity Substation	1994	253719
AG	479m W	Electricity Substation	1977	283339

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0
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Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m	48
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Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 24**

ID	Location	Land Use	Date	Group ID
A	On site	Garage	1972	80945
A	On site	Garage	1985	84039
A	On site	Garage	1986	84039
A	10m W	Garage	1971	80945
A	16m NW	Garage	1952	73113
A	54m NW	Garages	1952	74206
A	58m NW	Motor Body Repair Works	1977	82502



ID	Location	Land Use	Date	Group ID
A	58m NW	Motor Body Repair Works	1969	82502
F	87m E	Garage	1985	80663
F	87m E	Garage	1986	80663
F	88m SE	Garage	1972	77222
F	135m E	Garage	1985	85395
F	135m E	Garage	1986	85395
F	136m SE	Garage	1972	75090
F	159m SE	Garage	1985	85027
F	159m SE	Garage	1986	85027
F	161m SE	Garage	1972	75892
F	161m SE	Garage	1952	79458
Q	298m S	Garage	1972	81825
Q	302m S	Garage	1952	80056
Q	302m S	Garage	1971	81825
Q	302m S	Garage	1987	80281
Q	302m S	Garage	1987	80281
Q	302m S	Garage	1985	83788
Q	302m S	Garage	1986	83788
X	421m W	Garage	1994	80858
X	423m W	Garage	1989	80858
Z	427m NE	Garage	1997	79133
Z	428m NE	Garage	1987	76884
Z	428m NE	Garage	1988	81332
Z	428m NE	Garage	1988	81332
Z	428m NE	Garage	1990	81332
AB	451m S	Garage	1951	85371
AB	451m S	Garage	1972	85371
W	453m SW	Garages	1952	74209

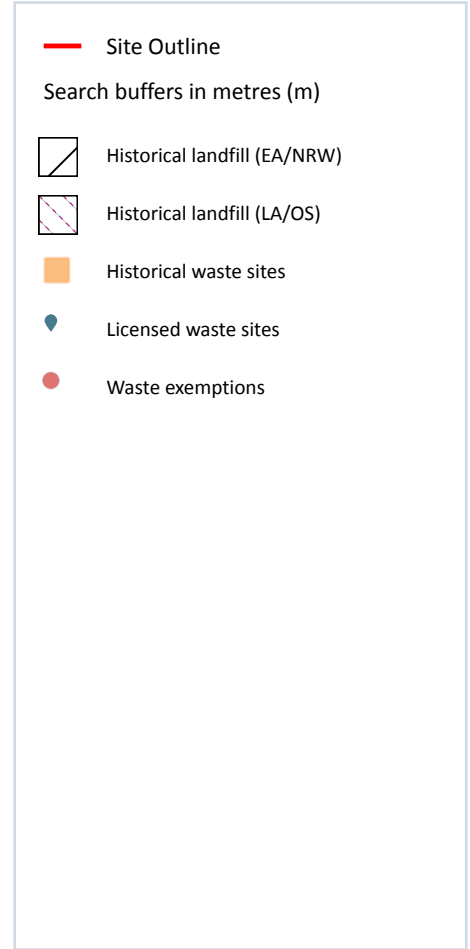
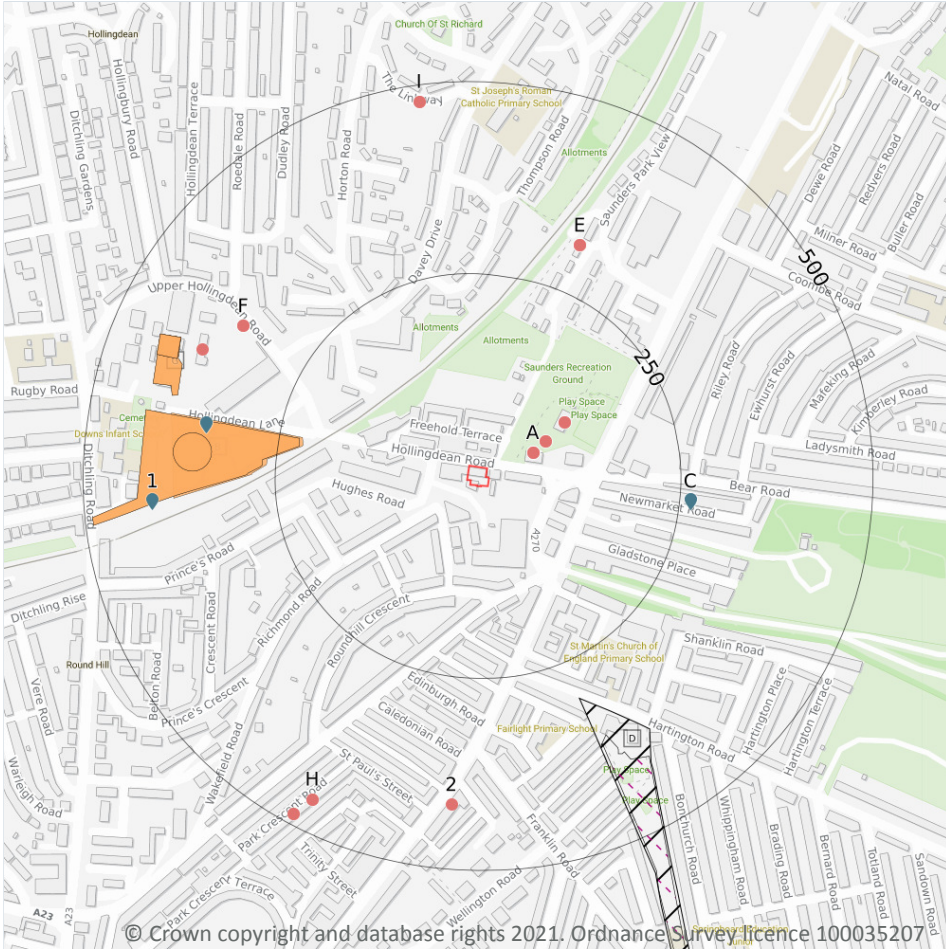


ID	Location	Land Use	Date	Group ID
W	457m W	Garages	1952	74207
AD	470m W	Garage	1987	84156
AD	470m W	Garage	1987	84156
AD	470m W	Garage	1971	76540
AF	475m S	Garage	1996	85498
AF	477m S	Garage	1989	85498
AF	477m S	Garage	1989	85498
AF	484m S	Garage	1951	78282
AF	494m S	Garage	1996	76078
AF	496m S	Garage	1951	82617
AF	496m S	Garage	1972	82617
AF	496m S	Garage	1989	82984
AF	496m S	Garage	1989	82984

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



3.1 Active or recent landfill

Records within 500m **0**

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m **0**

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m

1

Landfill sites identified from Local Authority records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 37**

ID	Location	Site address	Source	Data type
D	358m SE	Picton Street, Brighton	Brighton & Hove City Council	Polygon

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m

1

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on **page 37**

ID	Location	Details		
D	300m SE	Site Address: Picton Street, Brighton, Sussex Licence Holder Address: -	Waste Licence: Yes Site Reference: 27-353, WR4-023 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 31/08/1990 Licence Surrender: 31/12/1990	Operator: - Licence Holder: - First Recorded 31/12/1955 Last Recorded: 31/12/1960

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m

10

Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 37**

ID	Location	Address	Further Details	Date
B	217m W	Site Address: N/A	Type of Site: Corporation Dust Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1875
B	222m W	Site Address: N/A	Type of Site: Corporation Dust Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1875
B	222m W	Site Address: N/A	Type of Site: Corporation Dust Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1875
B	334m W	Site Address: Hollingdean Lane, BRIGHTON, East Sussex, BN1 7BB	Type of Site: Waste/Material Recovery Building Planning application reference: BH/2006/00900 Description: Scheme comprises construction of Materials Recovery Facility building of 3750 sqm, Waste Transfer Station building of 1900 sqm, 2 storey visitor centre/office building of 180 sqm raised on pillars with changing rooms, messroom, toilets and facilities. Scheme includes ancillary infrastructure including gatehouse building and weighbridge. The scheme also includes formation of a new access, 24 space car park, landscaping sewer system and associated works. Construction - concrete, internal partitions, steel cladding walls; steel cladding roof; aluminium framed, double glazed windows; industrial doors (unspecified), timber doors; passenger lifts; pad foundations; steel frame; planting, road drainage site works; bathroom fittings. An application for planning permission was granted by Brighton & Hove B.C. Please note the value given is a guideline for the whole scheme. Demolition work has commenced. Data source: Historic Planning Application Data Type: Point	16/10/2006



ID	Location	Address	Further Details	Date
B	334m W	Site Address: Former Abattoir & Depot Site, Hollingdean Lane, BRIGHTON, East Sussex, BN1 7BB	Type of Site: Waste Transfer Station Planning application reference: BH2006/00900 Description: Scheme comprises construction and operation of a materials recovery facility, waste transfer station and visitors centre/office building and ancillary infrastructure including gatehouse building and weigh bridge, parking, access, sewer system and associated works. An application (ref: BH2006/00900) for detailed planning permission was granted by Brighton & Hove B.C. Works have commenced. Data source: Historic Planning Application Data Type: Point	14/05/2007
G	390m W	Site Address: N/A	Type of Site: Destructor Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1929
G	390m W	Site Address: N/A	Type of Site: Destructor Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1929
G	404m W	Site Address: N/A	Type of Site: Destructor Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1938
G	404m W	Site Address: N/A	Type of Site: Destructor Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1909
G	404m W	Site Address: N/A	Type of Site: Destructor Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1897

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.



3.6 Licensed waste sites

Records within 500m
5

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

 Features are displayed on the Waste and landfill map on **page 37**

ID	Location	Details		
C	263m E	Site Name: Bear Road Site Address: Vehicle Breaking Yard, Bear Road, Brighton, East Susse Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HIL001 EPR reference: EA/EPR/EP3494HW/A001 Operator: Hill R Waste Management licence No: 19710 Annual Tonnage: 5000	Issue Date: 02/02/1995 Effective Date: - Modified:: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked
C	263m E	Site Name: Bear Road Site Address: Vehicle Breaking Yard, Bear Road, Brighton, East Susse Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: HIL001 EPR reference: EA/EPR/EP3494HW/A001 Operator: Hill R Waste Management licence No: 19710 Annual Tonnage: 5000	Issue Date: 02/02/1995 Effective Date: - Modified:: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked
B	346m W	Site Name: Hollingdean Depot Site Address: Hollingdean Depot, Hollingdean Lane, Brighton, East Sussex, BN1 7GA Correspondence Address: Veolia Environmental Services, Poles Lane, Otterbourne, Winchester, Hampshire, SO21 2EA	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO011 EPR reference: - Operator: South Downs Waste Services Limited Waste Management licence No: 100185 Annual Tonnage: 0	Issue Date: 31/03/2008 Effective Date: - Modified:: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
B	346m W	Site Name: Hollingdean Depot Site Address: Hollingdean Depot, Hollingdean Lane, Brighton, East Sussex, BN1 7GA Correspondence Address: Veolia Environmental Services, Poles Lane, Otterbourne, Winchester, Hampshire, SO21 2EA	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO011 EPR reference: - Operator: South Downs Waste Services Limited Waste Management licence No: 100185 Annual Tonnage: 0	Issue Date: 31/03/2008 Effective Date: - Modified:: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
1	410m W	Site Name: Hollingdean M R F & W T S Facility Site Address: Land / Premises At, Hollingdean Lane, Hollingdean, Brighton, East Sussex, BN1 7BB Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO140 EPR reference: EA/EPR/NP3499VS/V002 Operator: Veolia E S South Downs Ltd Waste Management licence No: 100185 Annual Tonnage: 159999	Issue Date: 31/03/2008 Effective Date: 07/12/2010 Modified:: 04/08/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m

30

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 37**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	62m E	Saunders Park Depot, Lewes Road, Brighton, BN2 4NH	WEX169573	Using waste exemption	Not on a farm	Use of waste in the construction of entertainment or educational installations etc
A	62m E	Saunders Park Depot, Lewes Road, Brighton, BN2 4NH	WEX169573	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods



ID	Location	Site	Reference	Category	Sub-Category	Description
A	62m E	Saunders Park Depot, Lewes Road, Brighton, BN2 4NH	WEX169573	Treating waste exemption	Not on a farm	Recovery of textiles
A	62m E	Saunders Park Depot, Lewes Road, Brighton, BN2 4NH	WEX169573	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	62m E	Saunders Park Depot, Lewes Road, Brighton, BN2 4NH	WEX169573	Treating waste exemption	Not on a farm	Sorting mixed waste
A	62m E	Saunders Park Depot, Lewes Road, Brighton, BN2 4NH	WEX169573	Treating waste exemption	Not on a farm	Manual treatment of waste
A	62m E	Saunders Park Depot, Lewes Road, Brighton, BN2 4NH	WEX169573	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
A	62m E	Saunders Park Depot, Lewes Road, Brighton, BN2 4NH	WEX169573	Storing waste exemption	Not on a farm	Storage of waste in secure containers
A	83m NE	Shabitat Saunders Park Brighton East Sussex BN2 4AY	EPR/HH0179P F/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in secure containers
A	83m NE	Shabitat Saunders Park Brighton East Sussex BN2 4AY	EPR/HH0179P F/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in a secure place
A	83m NE	Shabitat Saunders Park Brighton East Sussex BN2 4AY	EPR/HH0179P F/A001	Treating waste exemption	Non- Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
A	117m NE	SAUNDERS PARK VIEW DEPOT LEWES ROAD BRIGHTON EAST SUSSEX BN2 4AY	EPR/UH0412J M/A001	Treating waste exemption	Non- Agricultural Waste Only	Sorting mixed waste
A	117m NE	SAUNDERS PARK VIEW DEPOT LEWES ROAD BRIGHTON EAST SUSSEX BN2 4AY	EPR/UH0412J M/A001	Treating waste exemption	Non- Agricultural Waste Only	Manual treatment of waste
A	117m NE	SAUNDERS PARK VIEW DEPOT LEWES ROAD BRIGHTON EAST SUSSEX BN2 4AY	EPR/UH0412J M/A001	Treating waste exemption	Non- Agricultural Waste Only	Recovery of textiles



ID	Location	Site	Reference	Category	Sub-Category	Description
E	314m N	Saunders Park Depot, Saunders Park, Brighton, BN2 4AY	WEX006137	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	314m N	Saunders Park Depot, Saunders Park, Brighton, BN2 4AY	WEX006137	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	314m N	Saunders Park Depot, Saunders Park, Brighton, BN2 4AY	WEX006136	Treating waste exemption	Not on a farm	Sorting mixed waste
E	314m N	Saunders Park Depot, Saunders Park, Brighton, BN2 4AY	WEX006136	Treating waste exemption	Not on a farm	Recovery of textiles
E	314m N	Saunders Park Depot, Saunders Park, Brighton, BN2 4AY	WEX006136	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
F	346m NW	-	WEX193375	Treating waste exemption	Not on a farm	Recovery of textiles
F	346m NW	-	WEX193375	Storing waste exemption	Not on a farm	Storage of waste in secure containers
F	346m NW	-	WEX193375	Storing waste exemption	Not on a farm	Storage of waste in a secure place
G	379m NW	HOLLINGDEAN DEPOT, UPPER HOLLINGDEAN ROAD, BRIGHTON, BN1 7GA	WEX163947	Treating waste exemption	Not on a Farm	Aerobic composting and associated prior treatment
2	417m S	169, LEWES ROAD, BRIGHTON, BN2 3LD	WEX231917	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
H	459m SW	50, PARK CRESCENT ROAD, BRIGHTON, BN2 3HS	WEX225682	Treating waste exemption	Not on a farm	Recovery of scrap metal
H	459m SW	50, PARK CRESCENT ROAD, BRIGHTON, BN2 3HS	WEX080255	Treating waste exemption	Not on a farm	Recovery of scrap metal
I	478m N	65 The Linkway BRIGHTON BN1 7EJ	EPR/XF0130EN /A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in a secure place
I	478m N	65 The Linkway BRIGHTON BN1 7EJ	EPR/XF0130EN /A001	Treating waste exemption	Non- Agricultural Waste Only	Recovery of scrap metal

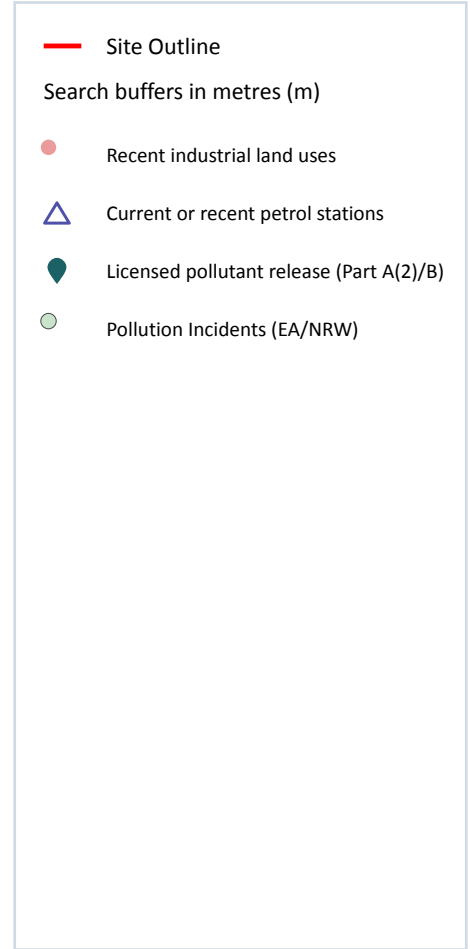
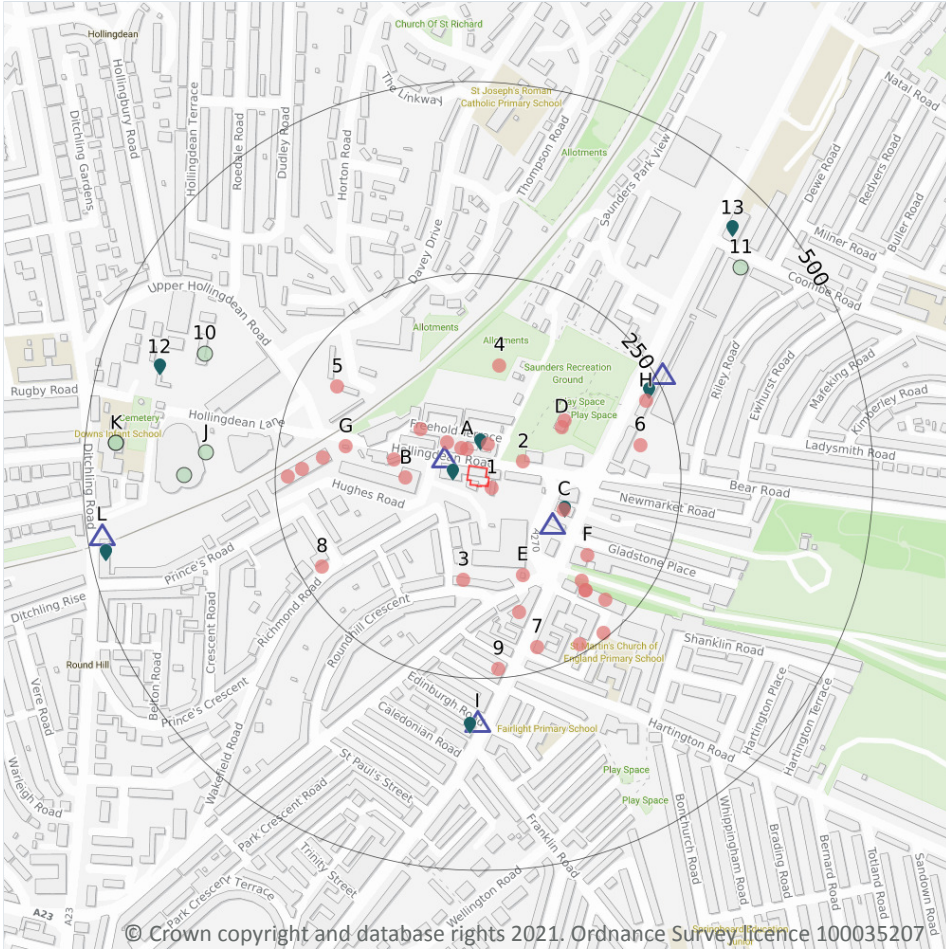


ID	Location	Site	Reference	Category	Sub-Category	Description
H	487m SW	50 Park Crescent Road BRIGHTON BN2 3HS	EPR/EF0735E W/A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in a secure place
H	487m SW	50 Park Crescent Road BRIGHTON BN2 3HS	EPR/EF0735E W/A001	Treating waste exemption	Non- Agricultural Waste Only	Recovery of scrap metal

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m

33

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 46**

ID	Location	Company	Address	Activity	Category
1	6m E	Abbott & Son Car Sales	45, Hollingdean Road, Brighton, East Sussex, BN2 4AA	Secondhand Vehicles	Motoring
A	22m N	J S Micklam Motor Engineers	12a, Hollingdean Road, Brighton, East Sussex, BN2 4AA	Vehicle Repair, Testing and Servicing	Repair and Servicing

ID	Location	Company	Address	Activity	Category
A	26m NW	Factory	East Sussex, BN2	Unspecified Works Or Factories	Industrial Features
A	31m N	The Park Studios	3, Freehold Terrace, Brighton, East Sussex, BN2 4AB	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
A	42m NW	Works	East Sussex, BN2	Unspecified Works Or Factories	Industrial Features
2	48m E	Electricity Sub Station	East Sussex, BN2	Electrical Features	Infrastructure and Facilities
A	80m NW	Works	East Sussex, BN2	Unspecified Works Or Factories	Industrial Features
B	80m W	Amplicon Liveline Ltd	Unit 11 Centenary Industrial Estate, Hughes Road, Brighton, East Sussex, BN2 4AW	General Manufacturing	Industrial Products
B	98m W	Southern Counties Janitorial Supplies	95, Hollingdean Road, Brighton, East Sussex, BN2 4AA	Cleaning Equipment and Supplies	Industrial Products
C	104m E	BP Service Station	100, Lewes Road, Brighton, East Sussex, BN2 3QA	Petrol and Fuel Stations	Road and Rail
D	111m NE	Shabitat	Saunders Park View, Brighton, East Sussex, BN2 4AY	Recycling, Reclamation and Disposal	Recycling Services
D	119m NE	Magpie Recycling Cooperative Ltd	Saunders Park Depot, Lewes Road, Brighton, East Sussex, BN2 4AE	Recycling, Reclamation and Disposal	Recycling Services
3	123m S	Brighton Sash Window	103, Roundhill Crescent, Brighton, East Sussex, BN2 3GP	General Construction Supplies	Industrial Products
E	124m S	Electricity Sub Station	East Sussex, BN2	Electrical Features	Infrastructure and Facilities
4	135m N	Water Pumping Station	East Sussex, BN2	Water Pumping Stations	Industrial Features
F	158m SE	Kwik-Fit (GB) Limited	120-122, Lewes Road, Brighton, East Sussex, BN2 3QB	Vehicle Repair, Testing and Servicing	Repair and Servicing
G	163m W	Electricity Sub Station	East Sussex, BN2	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
E	169m S	C D Scooters	85, Lewes Road, Brighton, East Sussex, BN2 3HZ	New Vehicles	Motoring
F	174m SE	Electricity Sub Station	East Sussex, BN2	Electrical Features	Infrastructure and Facilities
F	186m SE	Pay Less Tyres	21-24, Melbourne Street, Brighton, East Sussex, BN2 3LH	Vehicle Parts and Accessories	Motoring
F	186m SE	Red Lion	21-24, Melbourne Street, Brighton, East Sussex, BN2 3LH	Vehicle Repair, Testing and Servicing	Repair and Servicing
G	190m W	Brighton Tools & Fixings	Unit 6-7 Centenary Industrial Estate, Hughes Road, Brighton, East Sussex, BN2 4AW	Tools Including Machine Shops	Industrial Products
5	200m NW	Electricity Sub Station	East Sussex, BN1	Electrical Features	Infrastructure and Facilities
6	202m E	Bus Depot	East Sussex, BN2	Bus and Coach Stations, Depots and Companies	Public Transport, Stations and Infrastructure
F	213m SE	Patcham Joinery	19-20, Melbourne Street, Brighton, East Sussex, BN2 3LH	General Construction Supplies	Industrial Products
G	216m W	Brighton Sunblinds	Unit 5 Centenary Industrial Estate, Hughes Road, Brighton, East Sussex, BN2 4AW	Curtains and Blinds	Consumer Products
7	219m S	Bedzz Are Us	137-138, Lewes Road, Brighton Marina, Brighton, East Sussex, BN2 3LG	Beds and Bedding	Consumer Products
8	220m SW	Electricity Sub Station	East Sussex, BN2	Electrical Features	Infrastructure and Facilities
H	225m NE	Brighton Electric Recording Co Ltd	43-45, Coombe Terrace, Brighton, East Sussex, BN2 4AD	Recording Studios and Record Companies	IT, Advertising, Marketing and Media Services
G	234m W	SIG Insulation	Unit 4 Centenary Industrial Estate, Hughes Road, Brighton, East Sussex, BN2 4AW	General Construction Supplies	Industrial Products
9	238m S	Rocket Signs & Designs Ltd	72, Lewes Road, Brighton, East Sussex, BN2 3HZ	Signs	Industrial Products
F	239m SE	Electricity Sub Station	East Sussex, BN2	Electrical Features	Infrastructure and Facilities
F	243m SE	Electricity Sub Station	East Sussex, BN2	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.



4.2 Current or recent petrol stations

Records within 500m

5

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 46**

ID	Location	Company	Address	LPG	Status
A	35m W	ESSO	49-57, Hollingdean Road, Hughes Road (Cul De Sac), Brighton, Brighton And Hove, BN2 4AA	Not Applicable	Obsolete
C	96m SE	BP	100, Lewes Road, Upper Lewis Road, Brighton, Brighton And Hove, BN2 3QA	No	Open
H	259m NE	OBSOLETE	1, Pelham Terrace Lewes Road, Coombe Road, Brighton, Brighton And Hove, BN2 4AF	Not Applicable	Obsolete
I	306m S	ESSO	58-62, Lewes Road, Edinburgh Road, Brighton, Brighton And Hove, BN2 3HW	Not Applicable	Obsolete
L	481m W	BP	134, Ditchling Road, Brighton, Brighton And Hove, BN1 4SG	No	Open

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m

0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.



4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m

0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.



4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m
10

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 46**

ID	Location	Address	Details	
A	20m W	Esso Hollingdean Service Station, Hollingdean Rd, BN2 4AA	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
A	32m N	T Reeve & Son, Freehold Terr, Brighton, East Sussex, BN2 4AB	Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
C	103m E	BP University Way Service Station, 100 Lewes Road, Brighton, BN2 6BB	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: Enforcement Details Unknown Date of enforcement: Enforcement Details Unknown Comment: Enforcement Details Unknown
C	103m E	Bp, University Way Service Station, 100 Lewes Road, Brighton, BN2 3QA	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
H	233m NE	Click Clean Clothes Limited, 39-40 Coombe Terrace, Brighton, East Sussex, BN2 4AD	Process: Dry Cleaning Status: Current Permit Permit Type: Part B	Enforcement: Enforcement Details Unknown Date of enforcement: Enforcement Details Unknown Comment: Enforcement Details Unknown
I	311m S	Esso, Lewes Rd, Fill Station Lewes Rd, BN2 3HW	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
12	423m W	A Taubman & Co Ltd, Unit 2, Ash Court Upper Hollingdean Road, Brighton, West Sussex, BN1 7BZ	Process: Pet Food Manufacture Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified



ID	Location	Address	Details	
13	446m NE	Bp Lewes Rd Service Station, Pelham Terrace, BN2 4AF	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
L	480m W	Bp, Express Shopping Downsway Service Station, 134 Ditchling Road, Brighton, BN1 4SG	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
L	480m W	BP Downsway Service Station, Ditchling Road, Brighton, BN1 4SG	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: Enforcement Details Unknown Date of enforcement: Enforcement Details Unknown Comment: Enforcement Details Unknown

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m

0

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.



4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m

6

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 46**

ID	Location	Details	
J	341m W	Incident Date: 12/06/2002 Incident Identification: 84429 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
J	367m W	Incident Date: 29/08/2016 Incident Identification: 1466485 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)

ID	Location	Details	
10	374m NW	Incident Date: 20/07/2010 Incident Identification: 803853 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Effects on Humans	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
11	421m NE	Incident Date: 16/03/2002 Incident Identification: 64408 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
K	459m W	Incident Date: 21/01/2015 Incident Identification: 1308064 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
K	459m W	Incident Date: 19/01/2010 Incident Identification: 746575 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m

0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m

0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



4.21 Pollution inventory radioactive waste

Records within 500m

0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

