



**59 UPPER CHORLTON ROAD, WHALLEY RANGE, MANCHESTER, M16 7RQ
PHASE 1 ENVIRONMENTAL ASSESSMENT**

**PART 1
REPORT AND
APPENDICES A to C.**

5th October 2021
Our Ref: 42173R1/Iss-RevB

Armistead Property Limited
1 Crossland Road
Chorlton
Manchester
M21 9GU

5th October 2021

Our Ref: 42173R1/Iss-RevB

PDF BY EMAIL ONLY

Armistead Property Limited
1 Crossland Road
Chorlton
Manchester
M21 9GU

Dear Armistead Property Limited,

**59 UPPER CHORLTON ROAD, WHALLEY RANGE, MANCHESTER, M16 7RQ
PHASE 1 ENVIRONMENTAL ASSESSMENT**

Overview

We write, following your instruction, to provide a Phase 1 environmental assessment to assist in residential development at 59 Upper Chorlton Road, Whalley Range, Manchester, M16 7RQ ('the site'). Figure 1 shows the site location (centred on National Grid Reference 382827, 395640). Figure 2 and Simon James Architects Drawing Nos 089-PL-OS1revE and 089-PL-GStrevE show the current site layout and boundary location.

In December 2019, Manchester City Council (MCC) granted planning permission for development at the site involving:

'Erection of four storey extension to rear elevation, dormer extension and elevational alterations involved in refurbishment of 10 existing 1 bed/bedsit flats to provide 17 flats (11 x 1 bed, 4 x 2 bed and 2 x 3 bed) following demolition of existing industrial units' (Ref: R124976/FO/2019).

The proposed development layout is shown in Simon James Architects Drawing No 089-PL-GL1revE.

The planning permission includes Condition 10, requiring that prior to the development commencing, 'a report (the Preliminary Risk Assessment) to identify and evaluate all potential sources and impacts of any ground contamination, groundwater contamination and/or ground gas relevant to the site shall be submitted to and approved in writing by the City Council as local planning authority' (*condition continues*).

This report has been prepared to assist the discharge of Condition 10, by providing information to help assess potential geo-environmental and land contamination issues that may affect the development.

The report provides details of the environmental site setting based on a site walkover and information gathered from publicly available environmental/geological information from public bodies (including the Environment Agency (EA) (via DATA.GOV.UK) and British Geological Survey (BGS)) via a Groundsure Insight report reproduced in Appendix C. A review of current and historical Ordnance Survey mapping data has also been completed. The assessment includes a

conceptual model, a land contamination preliminary risk assessment, risk evaluation and conclusions and recommendations to assist in furthering development at the site.

The site walkover was undertaken on the 16th September 2021, photographs of the site are included in Appendix B.

Limitations of Assessment

The report has been prepared under umbrella frameworks laid out in non-statutory UK guidance provided here: <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm> and in R&D66:2008 ('Guidance for the safe development of housing on land affected by contamination'), as well as in general accordance with the current National Planning Policy Framework. Information provided to or obtained by Peak Environmental Solutions has been relied upon in good faith. Our investigations exclude (i) surveys to identify the presence injurious and invasive weeds; (ii) surveys to identify the presence of asbestos containing materials in buildings and; (iii) surveys to identify geotechnical risk/issues, including those associated to potential mining legacy concerns. This report is subject to our standard terms of business and the attached limitations and exceptions.

Existing Site Layout

The site occupies an area of ~0.17 hectares and is located in Walley Range, a mixed, but predominantly residential suburb of Manchester located ~2.5 km to the south-west of the city centre. The site currently consists of:

-)] An asphalt surfaced driveway off Upper Chorlton Road that extends into a parking/yard located in the north-west/west of the site (Photos 1-5).
-)] A large, two storey, residential property with a basement that has been converted for use as 10 residential apartments (Photos 1, 2, 3 and 10).
-)] A grass/landscaped garden area for the residential property located in the north of the site next to Upper Chorlton Road (Photo 6).
-)] A series of single storey extensions to the residential building that form workshop/warehouse spaces and occupy the whole of the south and south-eastern parts of the site (Photo 9).
-)] A narrow un-surfaced area located to the north-east of the residential building.

The two storey house was empty and disused at the time of the walkover. The property includes a large, dry basement. The area was partially inspected and appeared to be dry and used for general storage (Photo 10).

The single storey warehouse buildings were not accessible during the walkover. It is understood that these buildings do not have basements and that they have been used until recently as a joinery workshop and for carpet sales. The warehouse construction dates and styles vary. A possible former domestic garage structure located in the southern corner of the site has been incorporated into the structure (Photo 9). The warehouses were generally poor state of repair, with several holes in the roofs (Photo 9).

No areas of permanent waste storage or disposal were identified at the site during the walkover. Temporary waste storage was ongoing in the yard area, garden and to some extent within the main building. Old furniture, mattresses and cardboard waste was present in several areas.

No bulk liquid (including oil) storage was on-going at the time of the walkover and none is understood to be present. The house and warehouses are understood to be connected to mains gas, electricity and drainage within Upper Chorlton Road.

Other than the basement, no underground structures (excluding underground services) were identified. No visual or olfactory evidence to suggest the presence of ground contamination was observed.

The site is flat at an elevation of ~34m above Ordnance Datum (AOD). The area around the site is also flat.

Surrounding Land Use

The site is located in a mixed, but predominantly residential area. Land uses surrounding the site are as follows:

-) **North-east:** A Sikh temple/education centre is located immediately to the north-east. Beyond, ~25m from the site, is a large MOT testing centre/garage. Houses and a pub are present beyond the garage.
-) **South-east:** Houses extend ~270m south-east to a school and ~160m south to a church, with further houses beyond.
-) **South-west:** A day nursery is located immediately to the south-west, with houses beyond. Houses and small commercial properties on Upper Chorlton Road are present further to the south-west. An army reserve centre and mail sorting centre are present within ~150m to the west of the site.
-) **North-west:** Beyond Upper Chorlton Road to the north-west is a small supermarket and a former motor spares garage that has been recently demolished. To the north and to the north of the former garage are houses extending at least 300m.

Other than a car repair garage, no industrial land uses are currently located near the site.

Proposed Site Layout

The proposed development layout is shown in Simon James Architects Drawing No 089-PL-GL1revE (Figures Section).

The existing residential building will be retained and refurbished. The single storey warehouse extensions will be demolished and replaced with a residential apartment block that will be constructed as an extension to the existing residential building. Parking will be located in the south-west and south of the site. The exiting garden area in the north-west will be retained and an additional soft landscaped amenity space will be added in the east of the site.

Geological, Hydrogeological & Hydrological Setting

The 1:50,000 scale BGS geology map for the area records the presence of superficial deposits beneath the site consisting of Quaternary Devensian Glaciofluvial sand and gravel. Bedrock geology consists of the Triassic Wilmslow Sandstone Formation.

The site is not located within the Coal Authority Reporting Area, indicating that underground coal mining has not occurred in the area and will not affect the development.

Radon Maps provided by Public Health England (PHE) indicate that the site is located within an area where the maximum radon potential is less than 1%. Radon protection measures should not be required for the proposed property.

The superficial deposits immediately beneath the site are classified as a Secondary A Aquifer, indicating that they may represent an important local groundwater resource. The bedrock deposits are classified as a Principal Aquifer and may represent a regionally important groundwater resource. There are however no groundwater abstractions recorded on the EA database within 500m of the site. The site is not located within a Source Protection Zone (SPZ) set by the EA for the protection of important groundwater resources (Appendix C).

There are no surface water features shown on the local OS mapping within 1km of the site (there may be culverted watercourses). Surface water from the site and the surrounding area is likely to eventually enter the River Irwell located to the north and flowing west.

The site is in an area that the EA have categorised as having a low probability of flooding (less than 1 in 1,000 annual probability of river or sea flooding).

Ecologically Sensitive Areas

The Government Information website www.magic.gov.uk lists conservation designations for the area. There are no designated areas including Sites of Special Scientific Interest, Areas of Outstanding Natural Beauty, Environmentally Sensitive Areas, National Nature Reserves, Local Nature Reserves or Specially Protected Areas within 1 km of the site. No Scheduled Ancient Monuments are located near the site.

Site History & Potentially Contaminative Landuse

Historic Ordnance Survey (OS) maps for the site (1848 to present day) are attached and provide supporting information about previous on and off-site land use, including potentially contaminative land uses on or around the site. Aerial photography for the period between 2000 and 2021 has also been viewed via Google Earth Pro.

At the time of the first OS in 1848/9, Upper Chorlton Road has been established to the north-west of the then un-developed site. The surrounding area is also largely undeveloped, although a small number of large residential houses have been established.

Considerable residential development occurs at and around the site in the period between 1848 and 1889. The residential property currently located at the site is constructed and recorded as Wellfield. Gardens extend north-east from the building. A small structure assumed to be the garage currently present at the southern tip of the site is also shown for the first time. Two glass roofed structures are recorded on the south-east boundary. Possible embankments are recorded in the north-west of the site. No industrial developments are shown in the near vicinity.

By 1908, an additional building has been constructed in the south-east of the site and a tramway is shown within Upper Chorlton Road. By 1922, the site is recorded as 'Wellfield Laundry' indicating

that the site use is no longer solely residential. In 1932, the Wellfield Works (Linen) is recorded, with the two larger site buildings joined to form one structure. Several additional buildings are recorded on the south-western boundary. Around the site, a Billiards Hall is shown immediately to the north-east for the first time, the army reserve centre currently present to the west has been built (recorded as a Drill Hall) and an un-named larger structure is shown ~40m to the west.

In 1949 and 1951, the site is recorded as the 'Westfield Works (Linen)'. By 1972, the site is recorded as a 'Warehouse'. The former billiards hall is also recorded as a warehouse and the large previously un-named structure to the west as a 'Garage'. The tramway is no longer shown.

The warehouse use continues to be recorded on all of the subsequent mapping, with the buildings joined in their current layout sometime after 2003. The Sikh temple next door is established between 2009 and 2013. The former garage to the west is demolished between 2018 and 2020.

Warehouses 1 and 2 (shown in Figure 3) are understood to have been used in recent years as follows:

-) Warehouse 1: Partiality occupied by a joinery workshop, Barnes carpet showroom has been expanding into this warehouse.
-) Warehouse 2: Used by Barnes carpet showroom and storage.

Contemporary Potentially Contaminative On-Site & Off-site Landuses

No industrial plants or facilities permitted to operate by the EA have been identified within the site boundaries. No current permitted activities have been identified within 500m of the site.

Vehicle repair activities are on-going in relatively close proximity to the north-east and, until recently, occurred to the west/north-west. No other contemporary industrial land uses have been identified within 500m of the site (Appendix C).

Contamination Sources - Registered Waste Operations, Infilled Land and Pollution Incidents

No pollution incidents that are considered likely to affect the development have been identified on the EA database at the site or in the near vicinity (Appendix C).

No currently operational or historic landfill sites are recorded on the EA database within 500m of the site (Appendix C).

Contaminants & Hazards of Concern

The Phase 1 process has identified the following potential issues that may affect the development:

-) The site was developed and used as a residential house until sometime prior to 1922 when the buildings were expanded and the whole of the site appears to have been used as a laundry. The laundry gradually expanded over time and is recorded in the 1930s and beyond as a linen works.

If the laundry/linen works use included dry cleaning, this represents a potentially significant source of ground contamination in the form of chlorinated solvents which can remain in the ground for long periods. No information about the exact activities at the site during this period has been obtained as part of the Phase 1 process.

-)] In the early 1970s, the site is recorded as a 'warehouse'. Recent use has included joinery and carpet storage. Significant ground contamination resulting from these more recent site uses is currently considered unlikely, but the exact use over the whole of this period remains unknown.
-)] Based on their construction dates, the site buildings may include asbestos containing materials (ACMs). ACMs may also be present in site soils.
-)] Garages are/have been located in relatively close proximity to the site and may represent a source of ground contamination that could migrate towards the site. Significant impacts are currently considered unlikely however.

No other potential contaminants or sources of contamination have been identified during the Phase 1 assessment process.

Some concentrations of the following contaminants in particular may be present as a result of a history of development at the site and local ground conditions:

-)] Arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, vanadium, zinc.
-)] Asbestos containing materials (ACMs).
-)] Banded total petroleum hydrocarbons (TPH) fractions C6-C35.
-)] Priority 16 polycyclic aromatic hydrocarbons (PAHs): naphthalene, acenaphthene, acenaphthylene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo-a-anthracene, chrysene, benzo-b-fluoranthene, benzo-k-fluoranthene, benzo-a-pyrene, dibenzo-a,h-anthracene, benzo-g,h,i-perylene, indeno-1,2,3-c,d-pyrene.
-)] Chlorinated solvents.

Risk Assessment

The qualitative PRA is presented in Table 1 and considers the proposed residential development. The PRA includes an initial conceptual site model to assess the relative significance of risks associated with relevant pollutant linkages identified by a source-pathway-receptor analysis. The relative assessment of risk is based on the following:

-)] The likelihood (probability) of an event occurring, taking into account the presence of the hazard & receptor, as well the plausibility of the pathway. The likelihood is defined as the chance of a particular event occurring in a given period of time;
-)] The severity of the potential consequence, taking into account the relative significance the hazard (typically site specific) and the relative sensitivity of the receptor. Severity or consequence can be defined as adverse effect(s) or harm arising from a hazard that impairs receptor function/condition in the short term (acute) or longer term (chronic);
-)] Risk classification (very low to very high) using a risk matrix that combines 'consequence' and 'likelihood'; the risk matrix is detailed in Appendix E;
-)] For the purposes of the qualitative assessment, identified very low and low risks will be considered acceptable for the redeveloped use.

Table 1: Post-Development Conceptual Site Model & Preliminary Risk Assessment

Relevant Pollutant Linkages			Risk Assessment			
Source/Hazard	Pathway	Sensitive Receptor	Consequence	Likelihood	Preliminary Risk Classification	Comments
Inorganic/organic substances in soils & groundwater	Direct contact (Ingestion & Dermal) Inhalation of soil dust Internal and external inhalation of organic vapour Migration of organic contaminants into plastic water supply pipes Ingestion of site grown vegetables	Human Health Future site users	Medium	Likely	Moderate	Laundry use of the site may have resulted in the presence of chlorinated solvents in the ground. Some ground contamination may also have resulted from other historic uses.
	Soils leaching to groundwater Perched water discharge to groundwater Lateral groundwater flow	Controlled Waters Groundwater	Medium	Likely	Moderate	Sensitive groundwater resources are present beneath the site but are not utilised in close proximity.
	Groundwater discharge to surface waters Direct surface run-off	Controlled Waters Surface water	Medium	Unlikely	Low risk	Surface water is not present in close proximity.
Asbestos fibres/fragments in shallow soils	Inhalation of soil dust Direct contact (Ingestion & Dermal)	Human Health Future site users	Medium	Low Likelihood	Moderate to low	ACMs may be present in made ground/shallow soils at the site.
Aggressive ground conditions	Direct contact with contaminated soils & pore water	BBM&S Buildings, building materials and services	Medium	Unlikely	Low	-

Note: Identified Very Low and Low risks are considered acceptable for the redeveloped use

BBM&S: Buildings, building materials and services.

The PRA does not specifically consider risks to construction workers during the development who may come into contact with site soils. Protection of workers should be achieved via routine precautions and compliance with relevant construction health and safety statutory/non-statutory guidance and codes of practice.

Conclusions and Recommendations

A Phase 1 environmental assessment has been undertaken for the site to support the proposed redevelopment. The purpose of the assessment was to:

1. Determine the potential for land contamination issues arising from the current or historical uses of the site and surrounding area; and
2. Provide an assessment of potential risks that identified land contamination issues may pose to sensitive receptors on the developed site (including future site users, controlled waters and infrastructure).

The PRA has identified low to moderate risks to the identified receptors associated with potential land contamination and other related sources/hazards at the site. The following actions should be incorporated into the development scheme to manage the identified potential land contamination risks:

-) The current buildings should be assessed for potential ACMs via an appropriate HSG264 compliant asbestos demolition survey. The recommendations of the survey should be implemented in line with CAR-2012, with all ACMs handled appropriately and removed for appropriate off-site disposal.
-) A walkover survey of the existing warehouses should be completed to highlight potential sources of ground contamination such as oil or other bulk liquid storage. These should be recorded and used in Phase 2 design, as appropriate.
-) Following demolition of the existing building and site clearance, Phase 2 investigation should be completed. In particular, the investigation should:
 - *Establish if the site has been contaminated as a result of its historic use.*
 - *Establish soil quality in future garden/landscaped areas.*
-) The Phase 2 should be followed by generic quantitative/qualitative human health and controlled water risk assessments, as necessary, to identify the significance of any soil contamination present.
-) Following the Phase 2 investigation, the initial conceptual model and risk evaluation should be refined, reducing the uncertainties highlighted by this report. It is recommended that the scope of the Phase 2 be agreed in advance with the contaminated land department at MCC. The Phase 2 report should include conclusions and recommendations for any further investigation or risk assessment work.
-) If required, a remediation/protection strategy should be developed to ensure that new buildings and site soils (including imported soils/sub-soil) do not represent a potentially unacceptable risk to the future site occupants.
-) A discovery strategy should be developed for use during the redevelopment should unexpected impacted made ground deposits and/or natural soils and waste deposits be encountered. The strategy should include a protocol for characterising and dealing with any encountered contamination, including liaison with MCC.
-) New site services should be laid in clean service corridors.
-) Below ground water supply services should comply with industry best practice for site development and the requirements of the water utility company.

We trust that the above meets your requirements. If you have queries, please do not hesitate to contact us.

Yours sincerely,

For and on behalf of Peak Environmental Solutions Limited



Clare Dainton
Director

Enc.

- Figures:

Figure 1: Site Location Plan

Figure 2: 2021 Aerial Photograph

Figure 3: Photo Location Plan

Simon James Architects Drawing Nos 089-PL-OS1revE & 089-PL-GStrevE: Current Site Layout Plans

Simon James Architects Drawing No 089-PL-GL1revE: Proposed Site Layout

- Appendix A: Limitations & Exceptions
- Appendix B: Site Walkover Photographs
- Appendix C: Groundsure Insight Report
- Appendix D: Historical Map Pack
- Appendix E: Risk Matrix

FIGURES



Scale: Not to scale



PEAK ENVIRONMENTAL
SOLUTIONS

Site: 59 Chorlton Road, Whalley Range, Manchester, M16 7QR

Project: 42173R1

Beechfield, Ninelands Road, Hathersage
Derbyshire, S32 1BJ
Tel: 01433 659071
www.peakenvironmentalsolutions.com



Figure 2 | 2021 Aerial Photograph

◇ Site Boundary (indicative)

Scale: Not to scale



**PEAK ENVIRONMENTAL
SOLUTIONS**

Site: 59 Chorlton Road, Whalley Range, Manchester, M16 7QR

Project: 42173R1

Beechfield, Ninelands Road, Hathersage
Derbyshire, S32 1BJ
Tel: 01433 659071
www.peakenvironmentalsolutions.com

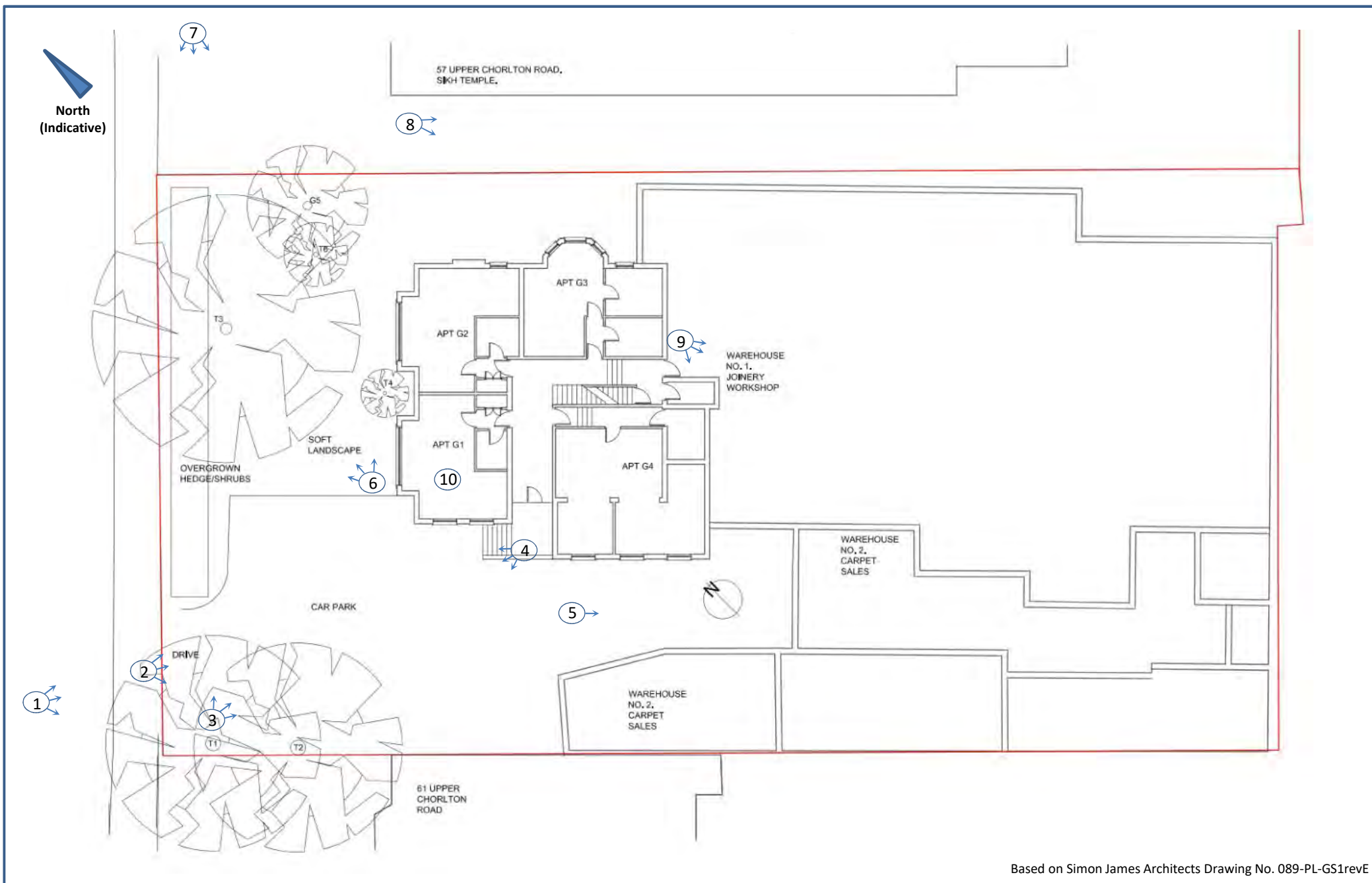


Figure 3 Photo Location Plan

Site Boundary (indicative)

Scale: Not to scale

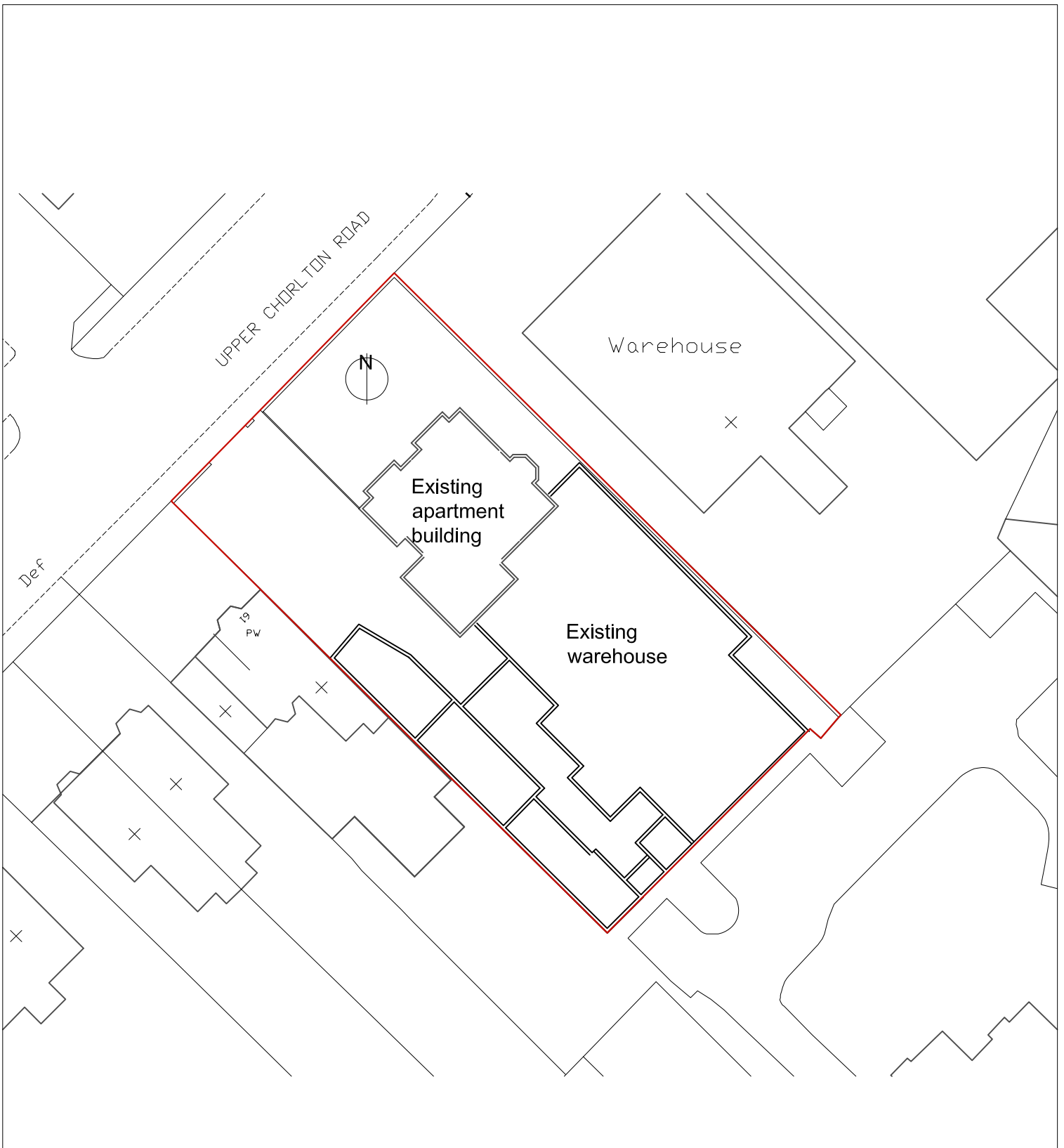


**PEAK ENVIRONMENTAL
SOLUTIONS**

Site: 59 Chorlton Road, Whalley Range, Manchester, M16 7QR

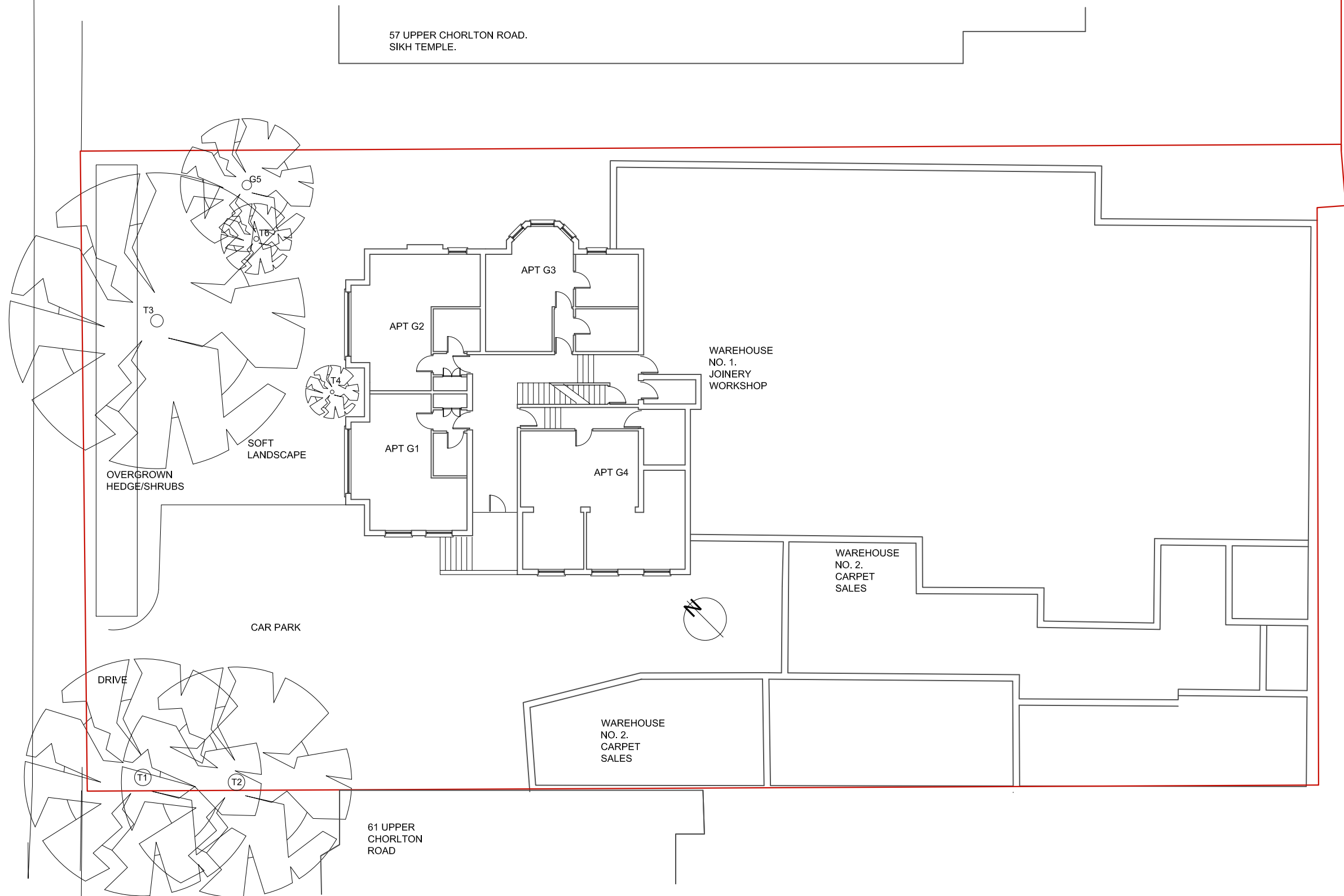
Project: 42173R1

Beechfield, Ninelands Road, Hathersage
Derbyshire, S32 1BJ
Tel: 01433 659071
www.peakenvironmentalsolutions.com



Revision E. 30/09/19. Revised scheme submission .

PROJECT			59 Upper Chorlton Road, Whalley Range, Manchester.		
SCALE			CLIENT		
1 : 500 @ A4			David Evans		
DWG No.			DRAWING TITLE		
089 -PL- OS1 revE			Location plan		
CONTRACT NO:		STAGE CODE	REV.		
089		Planning	—		
ISSUED	30/09/19		e	sj simon james arq ltd/architects UK: 120 Grosvenor st, All Saints, Manchester, M1 7HL Spain: Enrique Larreta 1, 4b, Chamartin, Madrid, 29036	



Revision E. 30/09/19. Revised scheme submission .

PROJECT			59 Upper Chorlton Road, Whalley Range, Manchester.		
SCALE			CLIENT		
1 : 200 @ A3			David Evans		
DWG No.			DRAWING TITLE		
089 -PL- GS1revE			Existing Site plan		
CONTRACT NO.		STAGE CODE	REV.		
089		Planning	—		
ISSUED	30/09/19		e	sj simon james arq ltd/architects UK: 120 Grosvenor st, All Saints, Manchester, M1 7HL Spain: Enrique Larreta 1, 4b, Chamartín, Madrid, 29036	

APPENDIX A

LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

Armistead Property Limited (the Client) has requested that a Phase 1 Environmental Assessment (the 'Project') be performed at the site. The report (and any copies of it) have been prepared for the sole use and reliance of the Client. This report s (and any copies of it) shall not be relied upon or transferred to any other parties without the express written authorisation of Peak Environmental Solutions limited. If an unauthorised third party comes into possession of this report, (and any copies of it) they rely on it at their peril and the authors owe them no duty of care and skill. Findings and opinions conveyed in the services should only be used by competent persons acting on the behalf of the Client and the findings and opinions conveyed in the services should only be used for the intended use. Copyright of reports & documents remains with Peak Environmental Solutions Limited. The project and report are subject to Peak Environmental Solutions standard terms and conditions.

Authorised or unauthorised copies of this document may come into the possession of organisations that are designated under the Freedom of Information Act 2000 ("the Act"). Such organisations that are designated in the Act are requested by Peak Environmental Solutions to respect the above statements relating to confidentiality and copyright.

Our investigations exclude (i) surveys to identify the presence injurious and invasive weeds; (ii) surveys to identify the presence of asbestos containing materials in buildings and; (iii) surveys to identify geotechnical risk/issues, including those associated to potential mining legacy concerns.

The findings and opinions conveyed via this report are based on information obtained from a variety of sources as detailed within this report, and which Peak Environmental Solutions Limited believes are reliable. Nevertheless, Peak Environmental Solutions Limited cannot and does not guarantee the authenticity or reliability of the information it has relied upon. The report represents the findings and opinions of experienced geo-environmental consultants. Peak Environmental Solutions Limited does not provide legal advice and the advice of lawyers may also be required.

The opinions presented in this report are based on a review of records, available investigation reports and historical sources. Peak Environmental Solutions Limited has found indicators that suggest that geo-environmental hazards may exist at the site and these may warrant mitigation or consideration appropriate to the end use stated by the Client. Not finding such indicators does not mean that geo-environmental hazards do not exist at the site. In addition, the Risk Assessment did not include any enquiry with respect to substances not included within the substances of concern.

The Client is advised that the geo-environmental conditions stated within reports supplied to Peak Environmental Solutions Limited are subject to change. Certain indicators of the presence of geo-environmental hazards may have been latent at the time of the most recent site reconnaissance and may subsequently have become observable. It is possible that Peak Environmental Solutions research, while fully appropriate for the Project, failed to indicate the existence of important information sources. Assuming such sources actually exist, their information could not have been considered in the formulation of Peak Environmental Solutions findings and opinions.

Certain indicators or evidence of geo-environmental hazards may have been outside the very limited portion of the subsurface investigated or monitored, latent at the time of this work or only partially intercepted by the works and thus their full significance could not have been appreciated. Groundwater levels are particularly susceptible to variations due to seasonal or other effects. Accordingly, it is possible that Peak Environmental Solutions work, whilst fully appropriate for the Project failed to indicate the presence or significance of geo-environmental hazards. Assuming the presence of a hazard, it could not have been considered in the formulation of Peak Environmental Solutions findings and opinions. The subsurface geological profiles and other descriptions are generalised by necessity and have been based on the information found at the locations of the exploratory holes and depths sampled and tested.

Any interpretation of the results of the Project have been based on the proposed site usage and the findings are not valid should the proposed land use and/or the regulatory regime/guidance change. Where interpretation is based on public domain guidance/protocols/models/software/code, Peak Environmental Solutions is not liable for errors in the guidance/protocols/models/software/code.

Peak Environmental Solutions Limited believes that providing information about limitations is essential to help the Client identify and thereby manage their risks. These risks can be mitigated, but they cannot be eliminated, through additional research. Peak Environmental Solutions Limited will on request, advise the client of the additional research opportunities available, their impact on risk, and their cost.

In preparing this report, it has been assumed that all past and present occupants have provided all relevant and other information, especially relating to known or potential geo-environmental hazards. This report is not required to identify insufficiencies or mistakes in the information provided by the user/owner or from any other source, but has sought to compensate for these where obvious in the light of other information.

APPENDIX B



Photo 1: Google Streetview Image of the site entrance from April 2021



Photo 2



**PEAK ENVIRONMENTAL
SOLUTIONS**

Site: 59 Chorlton Road, Whalley Range, Manchester, M16 7QR

Project: 42173R1

Beechfield, Ninelands Road, Hathersage
Derbyshire, S32 1BJ
Tel: 01433 659071
www.peakenvironmentalsolutions.com



Photo 3

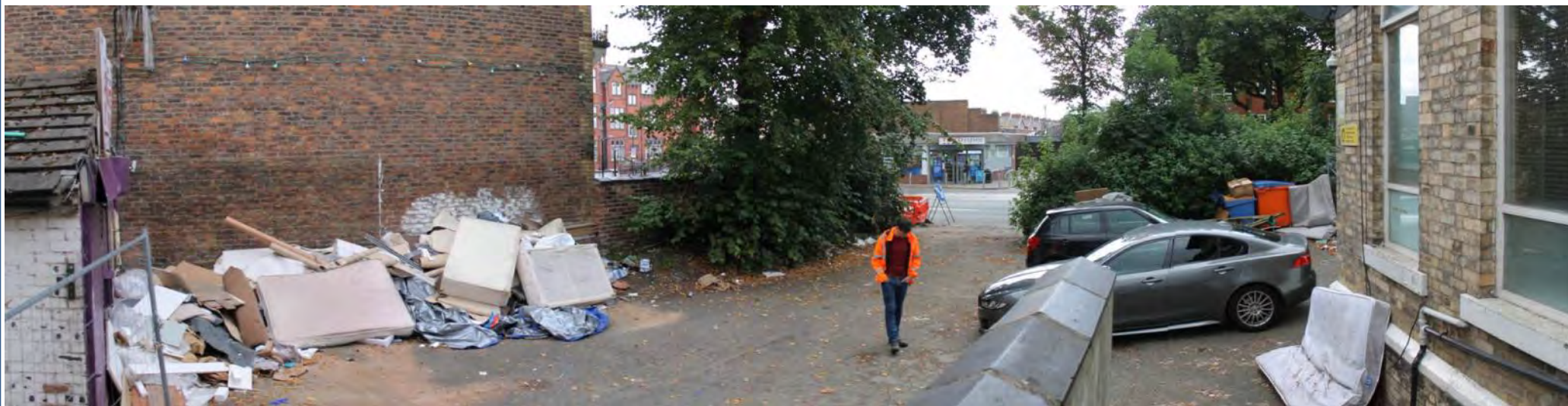


Photo 4



**PEAK ENVIRONMENTAL
SOLUTIONS**

Site: 59 Chorlton Road, Whalley Range, Manchester, M16 7QR

Project: 42173R1

Beechfield, Ninelands Road, Hathersage
Derbyshire, S32 1BJ
Tel: 01433 659071
www.peakenvironmentalsolutions.com



Photo 5



Photo 6



**PEAK ENVIRONMENTAL
SOLUTIONS**

Site: 59 Chorlton Road, Whalley Range, Manchester, M16 7QR

Project: 42173R1

Beechfield, Ninelands Road, Hathersage
Derbyshire, S32 1BJ
Tel: 01433 659071
www.peakenvironmentalsolutions.com



Photo 7



Photo 8



Photo 9: Taken from a first floor fire escape at the rear of the main building looking across the warehouse roofs



Photo 10: Main apartment building basement area



**PEAK ENVIRONMENTAL
SOLUTIONS**

Site: 59 Chorlton Road, Whalley Range, Manchester, M16 7QR

Project: 42173R1

Beechfield, Ninelands Road, Hathersage
Derbyshire, S32 1BJ
Tel: 01433 659071
www.peakenvironmentalsolutions.com

APPENDIX C

59, UPPER CHORLTON ROAD, MANCHESTER, M16 7RQ

Order Details

Date: 29/09/2021
Your ref: 42173
Our Ref: HMD-8224460
Client: Peak Environmental Solutions

Site Details

Location: 382828 395641
Area: 0.17 ha
Authority: [Manchester City Council](#)



© Crown copyright and database rights 2021. Ordnance Survey licence 100035207

Summary of findings

p. 2 **Aerial image**

p. 8

OS MasterMap site plan

p.12 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
13	1.1	<u>Historical industrial land uses</u>	0	0	0	8	-
14	1.2	<u>Historical tanks</u>	0	0	2	1	-
14	1.3	<u>Historical energy features</u>	0	0	5	15	-
15	1.4	Historical petrol stations	0	0	0	0	-
16	1.5	<u>Historical garages</u>	0	3	3	1	-
16	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
17	2.1	<u>Historical industrial land uses</u>	0	0	0	12	-
18	2.2	<u>Historical tanks</u>	0	0	2	1	-
18	2.3	<u>Historical energy features</u>	0	0	11	29	-
20	2.4	Historical petrol stations	0	0	0	0	-
20	2.5	<u>Historical garages</u>	0	5	7	2	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
22	3.1	Active or recent landfill	0	0	0	0	-
22	3.2	Historical landfill (BGS records)	0	0	0	0	-
23	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
23	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
23	3.5	<u>Historical waste sites</u>	0	0	3	0	-
24	3.6	Licensed waste sites	0	0	0	0	-
24	3.7	<u>Waste exemptions</u>	0	0	1	3	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
25	4.1	<u>Recent industrial land uses</u>	1	0	9	-	-
26	4.2	<u>Current or recent petrol stations</u>	0	0	1	0	-
27	4.3	Electricity cables	0	0	0	0	-
27	4.4	Gas pipelines	0	0	0	0	-
27	4.5	Sites determined as Contaminated Land	0	0	0	0	-



27	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
27	4.7	Regulated explosive sites	0	0	0	0	-
28	4.8	Hazardous substance storage/usage	0	0	0	0	-
28	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
28	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
28	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	1	0	1	-
29	4.12	<u>Radioactive Substance Authorisations</u>	0	0	0	1	-
29	4.13	<u>Licensed Discharges to controlled waters</u>	0	0	1	0	-
29	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
30	4.15	Pollutant release to public sewer	0	0	0	0	-
30	4.16	List 1 Dangerous Substances	0	0	0	0	-
30	4.17	List 2 Dangerous Substances	0	0	0	0	-
30	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	2	0	-
31	4.19	Pollution inventory substances	0	0	0	0	-
31	4.20	Pollution inventory waste transfers	0	0	0	0	-
31	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
32	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
33	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
34	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
35	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
35	5.5	Groundwater vulnerability- local information	None (within 0m)				
36	5.6	<u>Groundwater abstractions</u>	0	0	0	4	17
42	5.7	<u>Surface water abstractions</u>	0	0	0	0	5
43	5.8	Potable abstractions	0	0	0	0	0
44	5.9	Source Protection Zones	0	0	0	0	-
44	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
45	6.1	Water Network (OS MasterMap)	0	0	0	-	-

45	6.2	Surface water features	0	0	0	-	-
46	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
46	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
47	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
48	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (within 50m)				
48	7.2	Historical Flood Events	0	0	0	-	-
48	7.3	Flood Defences	0	0	0	-	-
48	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
49	7.5	Flood Storage Areas	0	0	0	-	-
50	7.6	Flood Zone 2	None (within 50m)				
50	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
51	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding					
53	9.1	<u>Groundwater flooding</u>	Moderate-High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
54	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
54	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
54	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
54	10.4	Special Protection Areas (SPA)	0	0	0	0	0
55	10.5	National Nature Reserves (NNR)	0	0	0	0	0
55	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
55	10.7	Designated Ancient Woodland	0	0	0	0	0
55	10.8	Biosphere Reserves	0	0	0	0	0
56	10.9	Forest Parks	0	0	0	0	0
56	10.10	Marine Conservation Zones	0	0	0	0	0
56	10.11	Green Belt	0	0	0	0	0
56	10.12	Proposed Ramsar sites	0	0	0	0	0



56	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
57	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
57	10.15	Nitrate Sensitive Areas	0	0	0	0	0
57	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
58	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
59	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
60	11.1	World Heritage Sites	0	0	0	-	-
61	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
61	11.3	National Parks	0	0	0	-	-
61	11.4	<u>Listed Buildings</u>	0	0	4	-	-
62	11.5	<u>Conservation Areas</u>	1	0	0	-	-
62	11.6	Scheduled Ancient Monuments	0	0	0	-	-
62	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
63	12.1	<u>Agricultural Land Classification</u>	Urban (within 250m)				
64	12.2	Open Access Land	0	0	0	-	-
64	12.3	Tree Felling Licences	0	0	0	-	-
64	12.4	Environmental Stewardship Schemes	0	0	0	-	-
64	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
65	13.1	Priority Habitat Inventory	0	0	0	-	-
65	13.2	Habitat Networks	0	0	0	-	-
65	13.3	Open Mosaic Habitat	0	0	0	-	-
65	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
66	14.1	<u>10k Availability</u>	Identified (within 500m)				
67	14.2	<u>Artificial and made ground (10k)</u>	0	0	0	1	-
68	14.3	<u>Superficial geology (10k)</u>	1	0	0	0	-



69	14.4	Landslip (10k)	0	0	0	0	-
70	14.5	<u>Bedrock geology (10k)</u>	2	0	0	2	-
71	14.6	<u>Bedrock faults and other linear features (10k)</u>	1	0	0	1	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
72	15.1	<u>50k Availability</u>	Identified (within 500m)				
73	15.2	Artificial and made ground (50k)	0	0	0	0	-
73	15.3	Artificial ground permeability (50k)	0	0	-	-	-
74	15.4	<u>Superficial geology (50k)</u>	1	0	0	0	-
75	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
75	15.6	Landslip (50k)	0	0	0	0	-
75	15.7	Landslip permeability (50k)	None (within 50m)				
76	15.8	<u>Bedrock geology (50k)</u>	2	0	0	2	-
77	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
77	15.10	<u>Bedrock faults and other linear features (50k)</u>	1	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
78	16.1	<u>BGS Boreholes</u>	0	0	20	-	-
Page	Section	Natural ground subsidence					
80	17.1	<u>Shrink swell clays</u>	Negligible (within 50m)				
81	17.2	<u>Running sands</u>	Very low (within 50m)				
82	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
83	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
84	17.5	<u>Landslides</u>	Very low (within 50m)				
85	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
86	18.1	Natural cavities	0	0	0	0	-
86	18.2	BritPits	0	0	0	0	-
86	18.3	Surface ground workings	0	0	0	-	-
86	18.4	Underground workings	0	0	0	0	0
87	18.5	Historical Mineral Planning Areas	0	0	0	0	-



87	18.6	Non-coal mining	0	0	0	0	0
87	18.7	Mining cavities	0	0	0	0	0
87	18.8	<u>JPB mining areas</u>	Identified (within 0m)				
88	18.9	Coal mining	None (within 0m)				
88	18.10	Brine areas	None (within 0m)				
88	18.11	Gypsum areas	None (within 0m)				
88	18.12	Tin mining	None (within 0m)				
88	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
89	19.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
90	20.1	<u>BGS Estimated Background Soil Chemistry</u>	2	0	-	-	-
90	20.2	<u>BGS Estimated Urban Soil Chemistry</u>	2	5	-	-	-
91	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
92	21.1	Underground railways (London)	0	0	0	-	-
92	21.2	Underground railways (Non-London)	0	0	0	-	-
92	21.3	Railway tunnels	0	0	0	-	-
92	21.4	Historical railway and tunnel features	0	0	0	-	-
92	21.5	Royal Mail tunnels	0	0	0	-	-
93	21.6	Historical railways	0	0	0	-	-
93	21.7	Railways	0	0	0	-	-
93	21.8	Crossrail 1	0	0	0	0	-
93	21.9	Crossrail 2	0	0	0	0	-
93	21.10	HS2	0	0	0	0	-

Recent aerial photograph



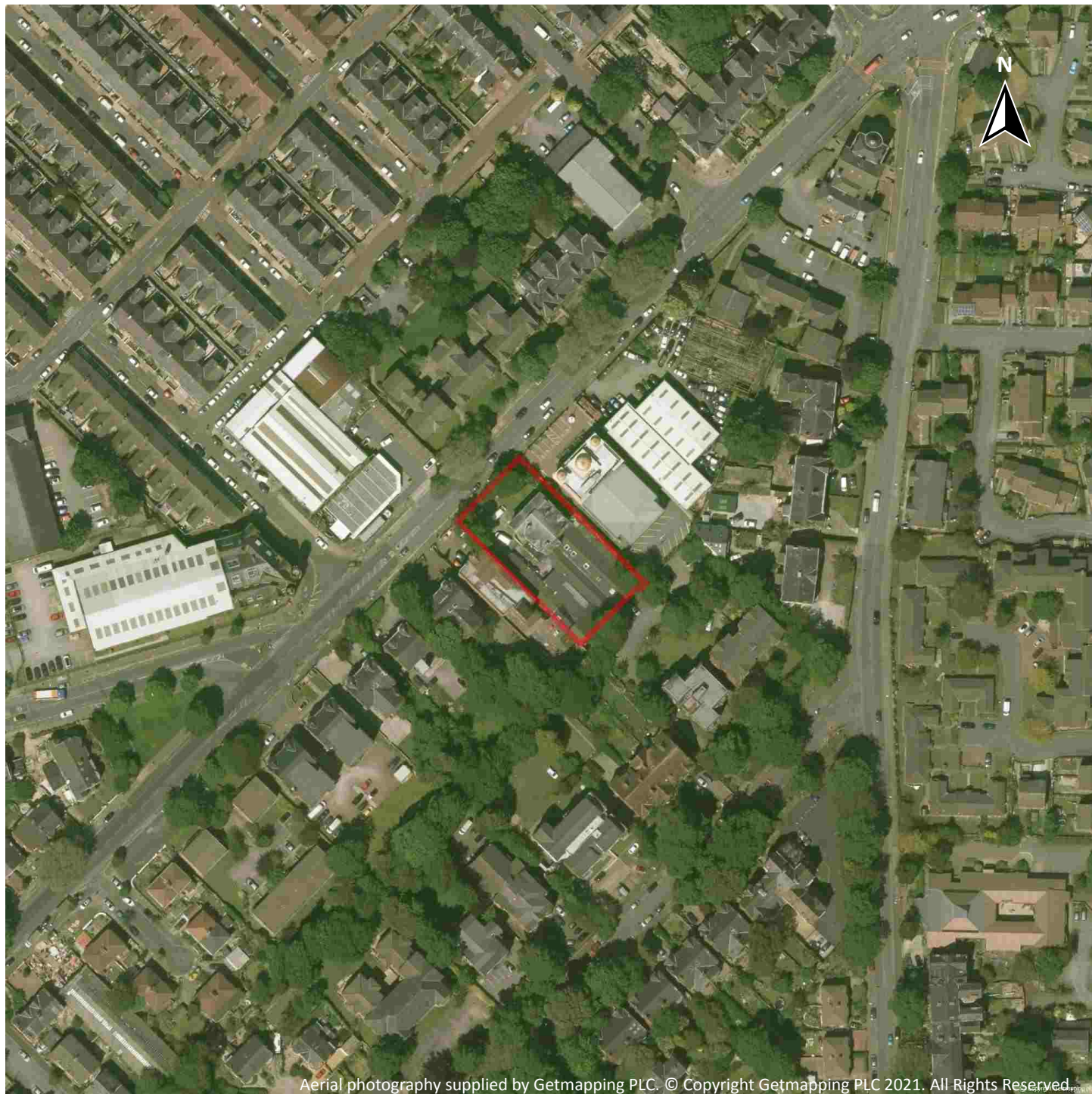
Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2021. All Rights Reserved

Capture Date: 22/04/2019

Site Area: 0.17ha



Recent site history - 2015 aerial photograph

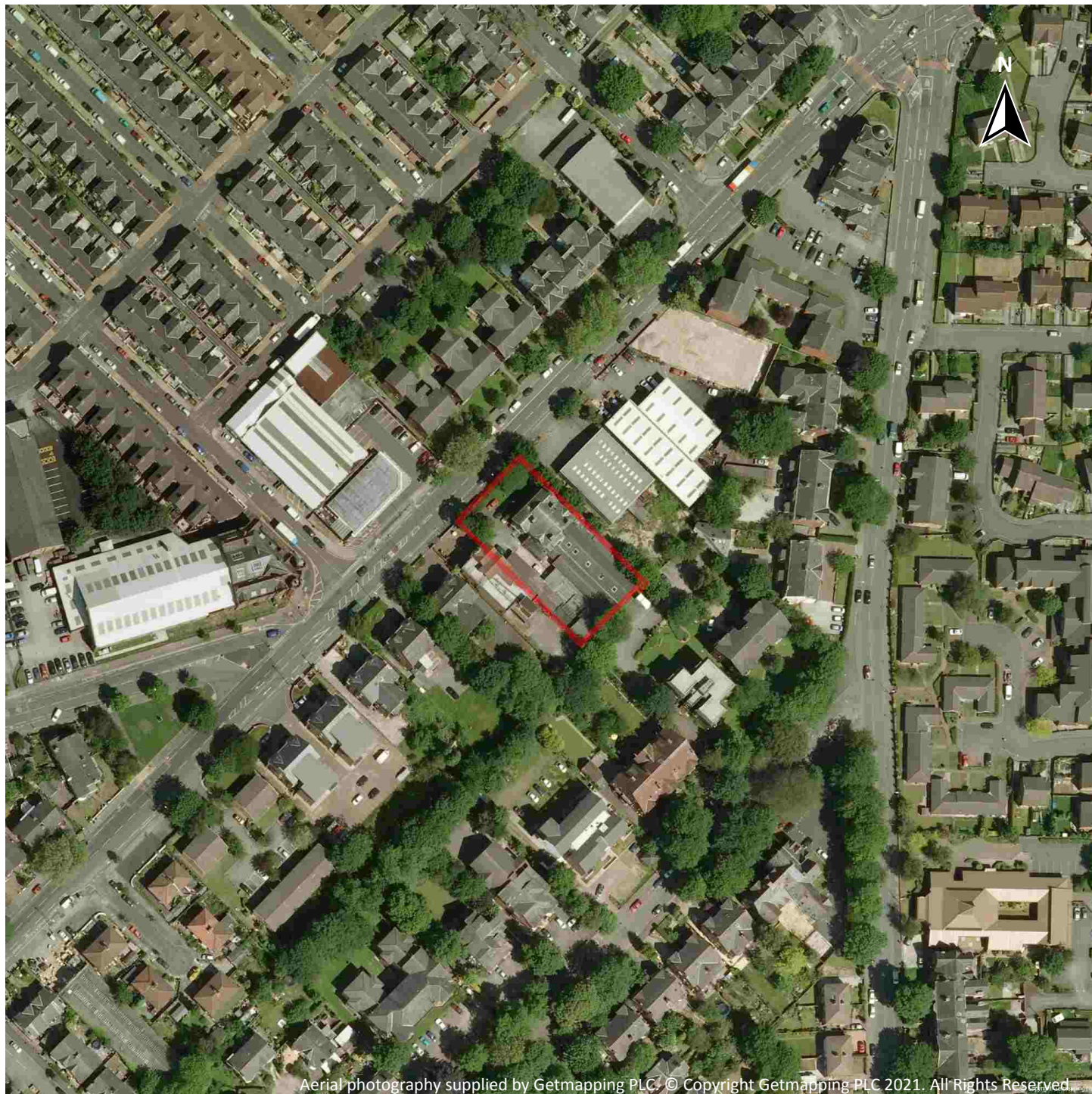


Capture Date: 11/06/2015

Site Area: 0.17ha



Recent site history - 2009 aerial photograph

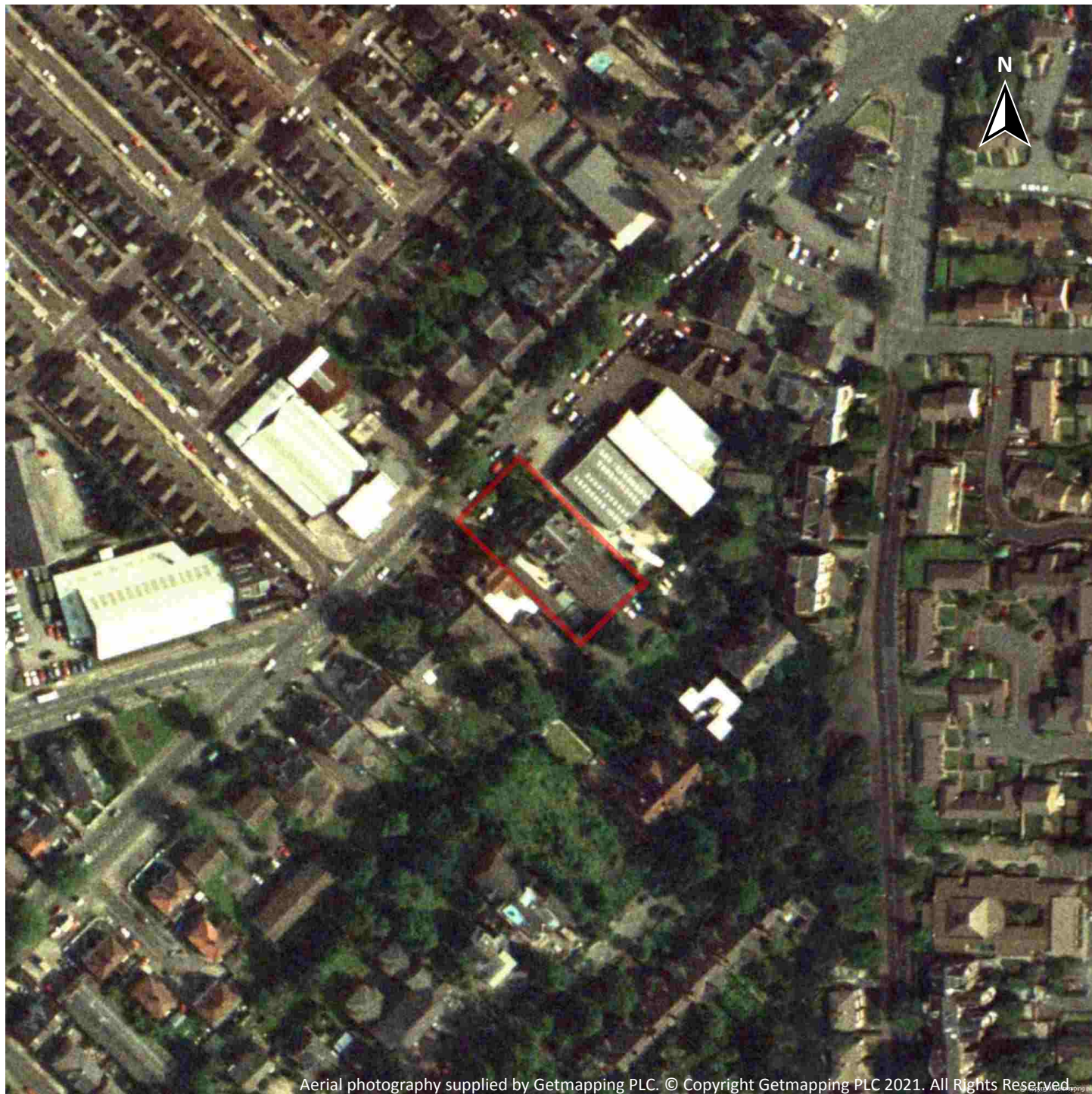


Capture Date: 02/06/2009

Site Area: 0.17ha



Recent site history - 2000 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2021. All Rights Reserved.

Capture Date: 27/06/2000

Site Area: 0.17ha



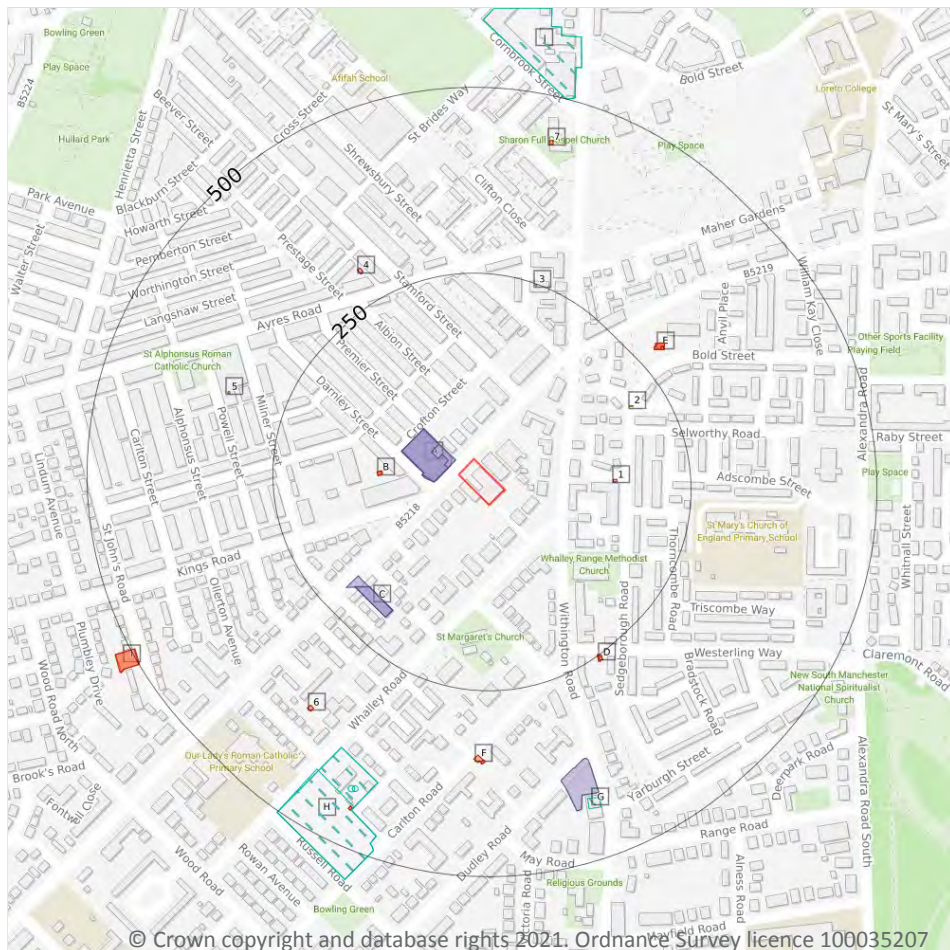
OS MasterMap site plan



Site Area: 0.17ha



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

8

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 13**

ID	Location	Land use	Dates present	Group ID
H	382m SW	Hospital	1956 - 1971	883466



ID	Location	Land use	Dates present	Group ID
H	382m SW	Hospital	1978	937952
G	416m S	Police Station	1988 - 1994	920505
H	418m SW	Unspecified Tank	1896	987950
H	420m SW	Unspecified Tank	1938	908483
H	424m SW	Hospital	1985 - 1994	983124
J	500m N	Unspecified Works	1978	869833
J	500m N	Unspecified Works	1985	856072

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

3

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 13**

ID	Location	Land use	Dates present	Group ID
2	202m NE	Unspecified Tank	1891	115776
3	248m N	Unspecified Tank	1891	115774
5	327m W	Unspecified Tank	1908	115775

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

20

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 13**



ID	Location	Land use	Dates present	Group ID
B	103m W	Electricity Substation	1972 - 1989	77102
B	103m W	Electricity Substation	1992	68719
1	146m E	Electricity Substation	1995 - 1998	69279
D	249m SE	Electricity Substation	1981 - 1987	72485
D	249m SE	Electricity Substation	1991	73455
E	275m NE	Electricity Substation	1949	80174
E	275m NE	Electricity Substation	1977	81588
E	276m NE	Electricity Substation	1978	75412
E	282m NE	Electricity Substation	1995	81383
E	282m NE	Electricity Substation	1997	82814
E	282m NE	Electricity Substation	1998	83361
4	291m NW	Electricity Substation	1972 - 1992	66232
F	337m S	Electricity Substation	1981 - 1991	78244
F	343m S	Electricity Substation	1987	66843
6	361m SW	Electricity Substation	1987 - 1991	81708
7	435m N	Electricity Substation	1977 - 1989	65803
H	445m SW	Electricity Substation	1981 - 1991	78743
H	446m SW	Electricity Substation	1987	65743
I	495m SW	Electricity Substation	1949	70911
I	495m SW	Electricity Substation	1989	83828

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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

7

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 13**

ID	Location	Land use	Dates present	Group ID
A	16m NW	Garage	1992	20951
A	17m NW	Garage	1981 - 1989	27003
A	17m NW	Garage	1972 - 1985	27816
C	191m SW	Garage	1949 - 1987	24594
C	192m SW	Garage	1992	23942
C	192m SW	Garage	1981 - 1991	24510
G	364m S	Garage	1960 - 1981	24230

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

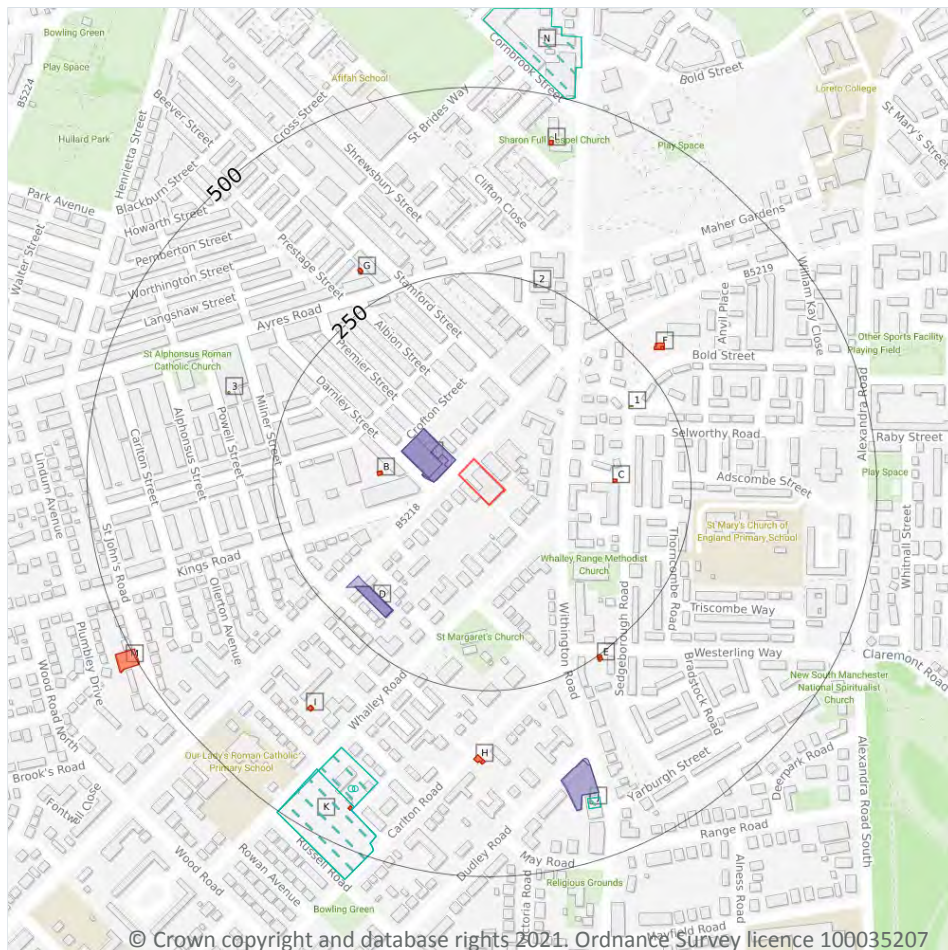
0

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



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

2.1 Historical industrial land uses

Records within 500m

12

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 17**

ID	Location	Land Use	Date	Group ID
K	382m SW	Hospital	1971	883466
K	382m SW	Hospital	1956	883466
K	382m SW	Hospital	1978	937952



ID	Location	Land Use	Date	Group ID
J	416m S	Police Station	1988	920505
J	416m S	Police Station	1994	920505
K	418m SW	Unspecified Tank	1896	987950
K	420m SW	Unspecified Tank	1938	908483
K	424m SW	Hospital	1988	983124
K	424m SW	Hospital	1985	983124
K	424m SW	Hospital	1994	983124
N	500m N	Unspecified Works	1978	869833
N	500m N	Unspecified Works	1985	856072

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

3

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 17**

ID	Location	Land Use	Date	Group ID
1	202m NE	Unspecified Tank	1891	115776
2	248m N	Unspecified Tank	1891	115774
3	327m W	Unspecified Tank	1908	115775

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

40

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 17**



ID	Location	Land Use	Date	Group ID
B	103m W	Electricity Substation	1985	77102
B	103m W	Electricity Substation	1981	77102
B	103m W	Electricity Substation	1989	77102
B	103m W	Electricity Substation	1972	77102
B	103m W	Electricity Substation	1992	68719
C	146m E	Electricity Substation	1995	69279
C	146m E	Electricity Substation	1998	69279
C	146m E	Electricity Substation	1997	69279
E	249m SE	Electricity Substation	1981	72485
E	249m SE	Electricity Substation	1991	73455
E	249m SE	Electricity Substation	1991	73455
E	253m SE	Electricity Substation	1987	72485
F	275m NE	Electricity Substation	1949	80174
F	275m NE	Electricity Substation	1977	81588
F	276m NE	Electricity Substation	1978	75412
F	282m NE	Electricity Substation	1995	81383
F	282m NE	Electricity Substation	1998	83361
F	282m NE	Electricity Substation	1997	82814
G	291m NW	Electricity Substation	1992	66232
G	293m NW	Electricity Substation	1985	66232
G	293m NW	Electricity Substation	1981	66232
G	293m NW	Electricity Substation	1989	66232
G	293m NW	Electricity Substation	1972	66232
H	337m S	Electricity Substation	1981	78244
H	337m S	Electricity Substation	1991	78244
H	337m S	Electricity Substation	1991	78244
H	343m S	Electricity Substation	1987	66843
I	361m SW	Electricity Substation	1991	81708



ID	Location	Land Use	Date	Group ID
I	361m SW	Electricity Substation	1991	81708
I	362m SW	Electricity Substation	1987	81708
L	435m N	Electricity Substation	1989	65803
L	435m N	Electricity Substation	1977	65803
L	435m N	Electricity Substation	1982	65803
L	435m N	Electricity Substation	1986	65803
K	445m SW	Electricity Substation	1981	78743
K	445m SW	Electricity Substation	1991	78743
K	445m SW	Electricity Substation	1991	78743
K	446m SW	Electricity Substation	1987	65743
M	495m SW	Electricity Substation	1949	70911
M	495m SW	Electricity Substation	1989	83828

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

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

14

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 17**

ID	Location	Land Use	Date	Group ID
A	16m NW	Garage	1992	20951

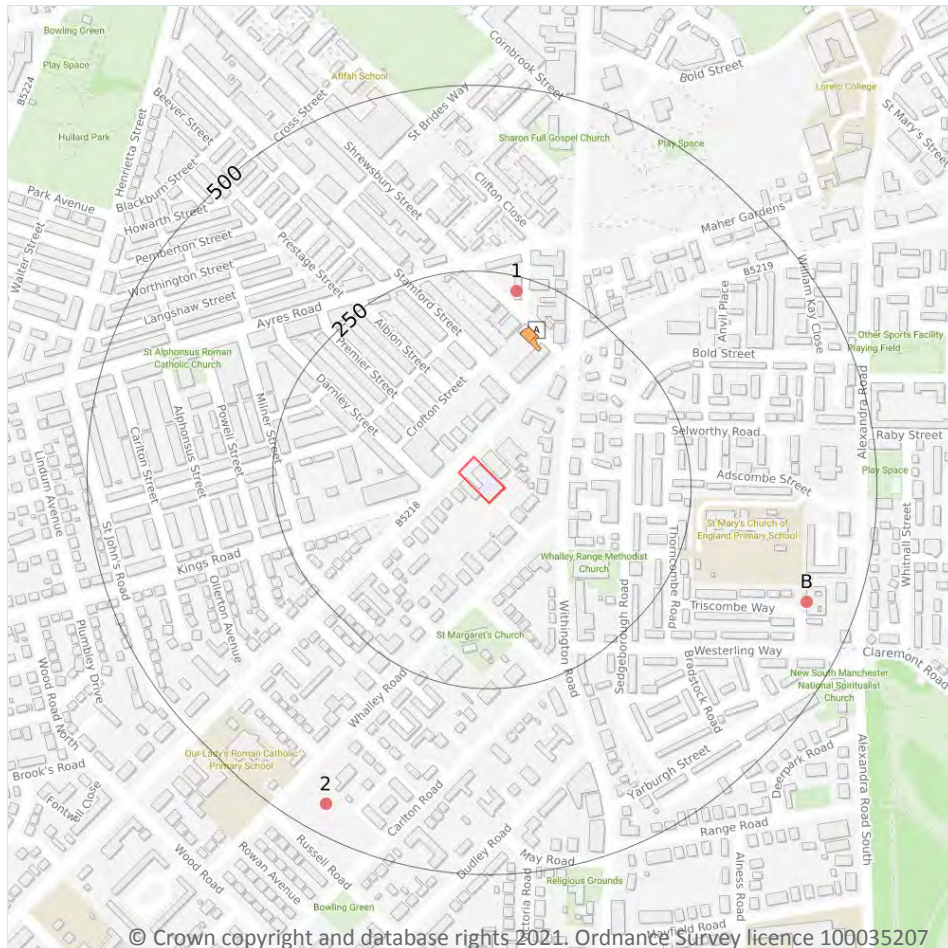


ID	Location	Land Use	Date	Group ID
A	17m NW	Garage	1981	27003
A	17m NW	Garage	1989	27003
A	17m NW	Garage	1985	27816
A	26m NW	Garage	1972	27816
D	191m SW	Garage	1987	24594
D	191m SW	Garage	1960	24594
D	191m SW	Garage	1949	24594
D	192m SW	Garage	1992	23942
D	192m SW	Garage	1981	24510
D	192m SW	Garage	1991	24510
D	192m SW	Garage	1991	24510
J	364m S	Garage	1960	24230
J	366m S	Garage	1981	24230

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical waste sites
- Waste exemptions

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

0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m

0

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.

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

3.5 Historical waste sites

Records within 500m

3

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 22**

ID	Location	Address	Further Details	Date
A	166m NE	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1985
A	166m NE	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1981
A	170m NE	Site Address: N/A	Type of Site: Scrap Metal Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1971

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

3.6 Licensed waste sites

Records within 500m

0

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

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

3.7 Waste exemptions

Records within 500m

4

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.

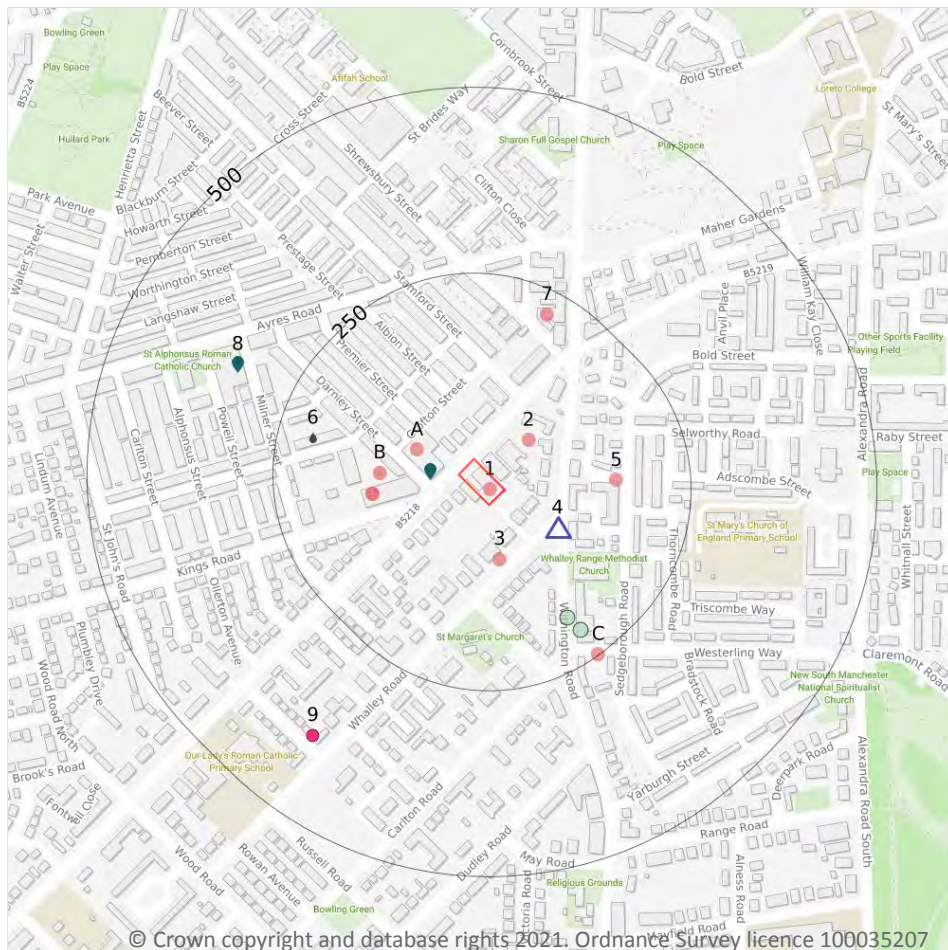
Features are displayed on the Waste and landfill map on **page 22**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	230m N	2 South Croston Street MANCHESTER M16 7WP	EPR/HF0301LK /A001	Using waste exemption	Non- Agricultural Waste Only	Use of waste in construction
B	433m E	ALEXANDRA PARK HEALTH CENTRE, 2, WHITSWOOD CLOSE, MANCHESTER, M16 7AP	WEX156636	Treating waste exemption	Not on a Farm	Sorting and de-naturing of controlled drugs for disposal
B	433m E	Whitswood Pharmacy, 2 Whitswood Close, Moss Side, Manchester, M16 7AP	WEX130222	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
2	462m SW	Manchester Hospital Russell Road MANCHESTER M16 8AJ	EPR/GE5881JS /A001	Treating waste exemption	Non- Agricultural Waste Only	Sorting and de-naturing of controlled drugs for disposal

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- △ Current or recent petrol stations
- Licensed pollutant release (Part A(2)/B)
- Radioactive Substance Authorisations
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

10

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 25**

ID	Location	Company	Address	Activity	Category
1	On site	Flawless Floors	59a, Upper Chorlton Road, Manchester, Greater Manchester, M16 7RQ	Construction Completion Services	Construction Services
A	66m NW	A K Autoparts & Accessories	81a, Darnley Street, Manchester, Greater Manchester, M16 9WD	Vehicle Parts and Accessories	Motoring



ID	Location	Company	Address	Activity	Category
2	70m NE	Auto Technik	45-49, Upper Chorlton Road, Manchester, Greater Manchester, M16 7RW	Vehicle Repair, Testing and Servicing	Repair and Servicing
3	74m S	Electricity Sub Station	Greater Manchester, M16	Electrical Features	Infrastructure and Facilities
B	106m W	Electricity Sub Station	Greater Manchester, M16	Electrical Features	Infrastructure and Facilities
B	119m W	C Squadron 207 Field Hospital	Sir William Coates House, Kings Road, Old Trafford, Manchester, Greater Manchester, M16 7RS	Armed Services	Central and Local Government
B	119m W	207 Field Hospital	Sir William Coates House, Kings Road, Old Trafford, Manchester, Greater Manchester, M16 7RS	Armed Services	Central and Local Government
5	150m E	Electricity Sub Station	Greater Manchester, M16	Electrical Features	Infrastructure and Facilities
7	218m NE	Works	Greater Manchester, M16	Unspecified Works Or Factories	Industrial Features
C	249m SE	Electricity Sub Station	Greater Manchester, M16	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	1
----------------------------	----------

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 25**

ID	Location	Company	Address	LPG	Status
4	87m SE	OBSOLETE	Upper Chorlton Road, Darnley Street, Whalley Range, Manchester, Greater Manchester, M16 7RW	Not Applicable	Obsolete

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

2

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 25**

ID	Location	Address	Details	
A	39m W	Save Service Station, 44 Upper Chorlton Road, Manchester, M16 7RN	Process: Petrol Vapour Recovery Status: Revoked Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
8	332m NW	Flynt Plant Hire, Ayres Rd, M16 0NL	Process: Other Mineral Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.



4.12 Radioactive Substance Authorisations

Records within 500m

1

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

Features are displayed on the Current industrial land use map on **page 25**

ID	Location	Address	Details	
9	390m SW	Bupa Hospitals Ltd, Russell Road, Manchester, Greater Manchester, M16 8AJ	Operator: Bupa Hospitals Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AB9585 Date of approval: 31/03/1991	Effective from: 31/03/1991 Last date of update: 01/01/2015 Status: Revoked/cancelled

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

4.13 Licensed Discharges to controlled waters

Records within 500m

1

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

Features are displayed on the Current industrial land use map on **page 25**

ID	Location	Address	Details	
6	202m W	REGENT RD/ORDSALL LANE, SALFORD	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01SAL0027 Permit Version: 1 Receiving Water: RIVER IRWELL	Status: REVOKED - UNSPECIFIED Issue date: 01/01/1995 Effective Date: 01/01/1995 Revocation Date: 13/07/2005

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

2

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 25**

ID	Location	Details	
C	184m SE	Incident Date: 13/11/2001 Incident Identification: 42576 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
C	207m SE	Incident Date: 13/11/2001 Incident Identification: 42618 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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.

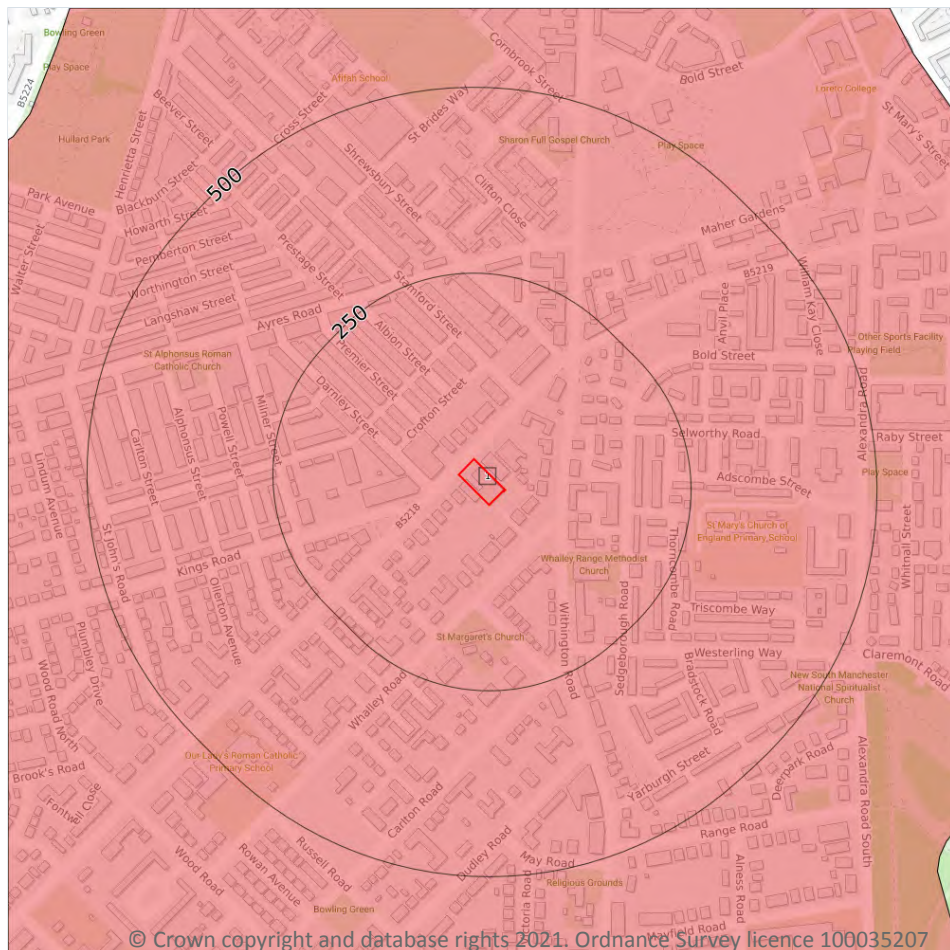
4.21 Pollution inventory radioactive waste

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.

5 Hydrogeology - Superficial aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

1

Aquifer status of groundwater held within superficial geology.

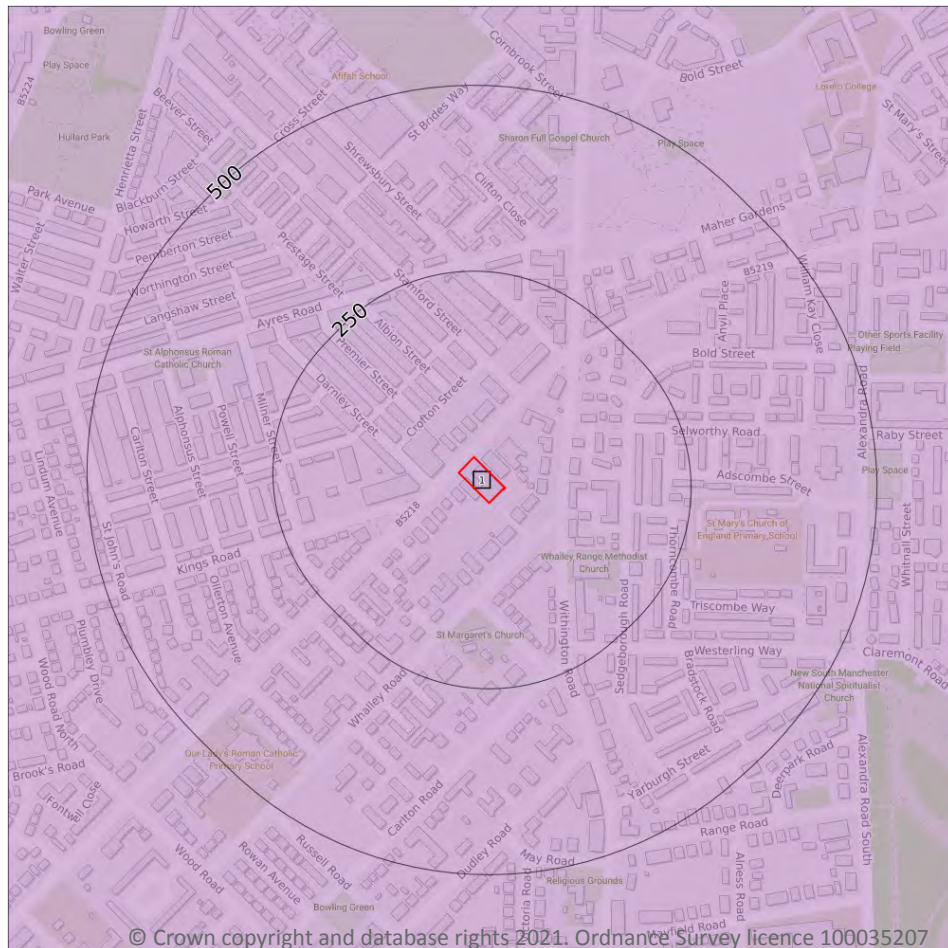
Features are displayed on the Hydrogeology map on **page 32**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

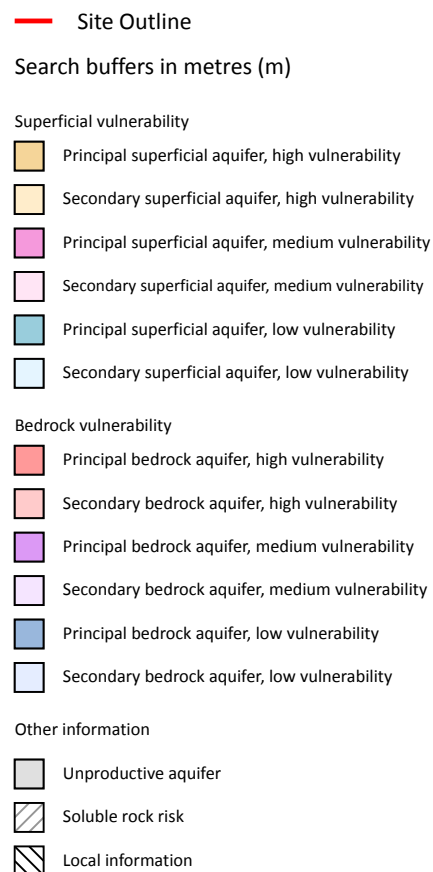
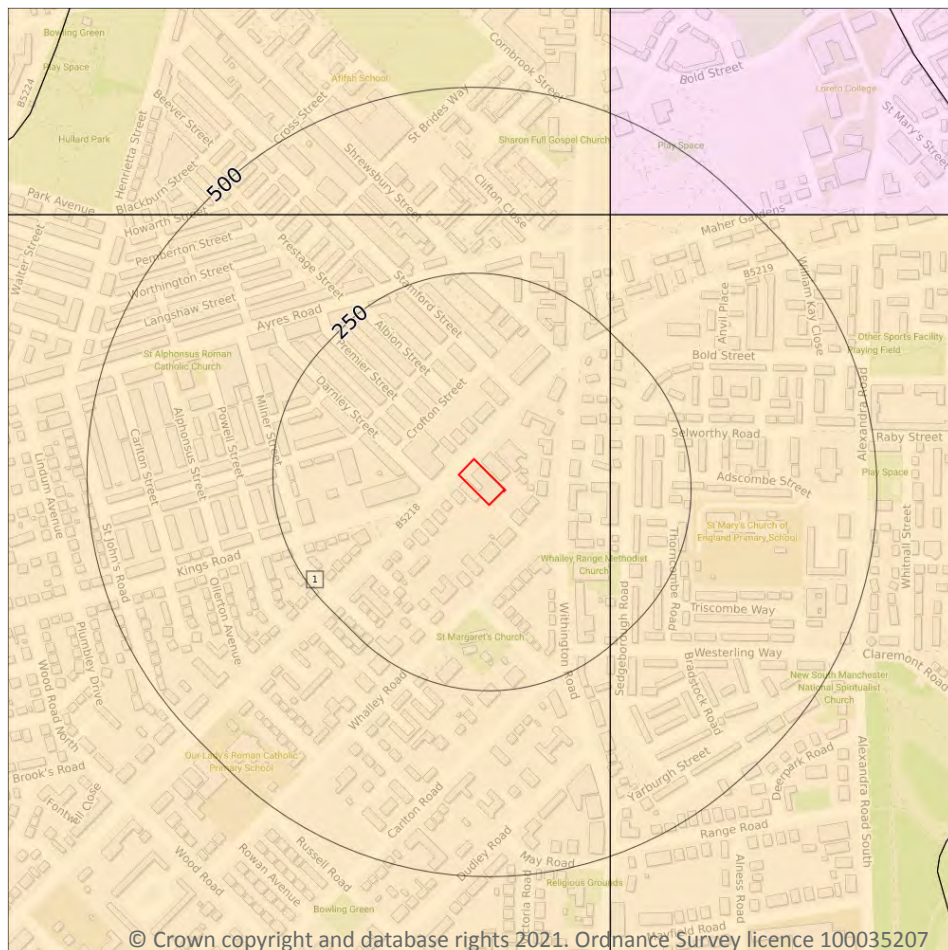
Features are displayed on the Bedrock aquifer map on **page 33**

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

1

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 34**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Low Aquifer type: Principal Flow mechanism: Mixed

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
------------------------	----------

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

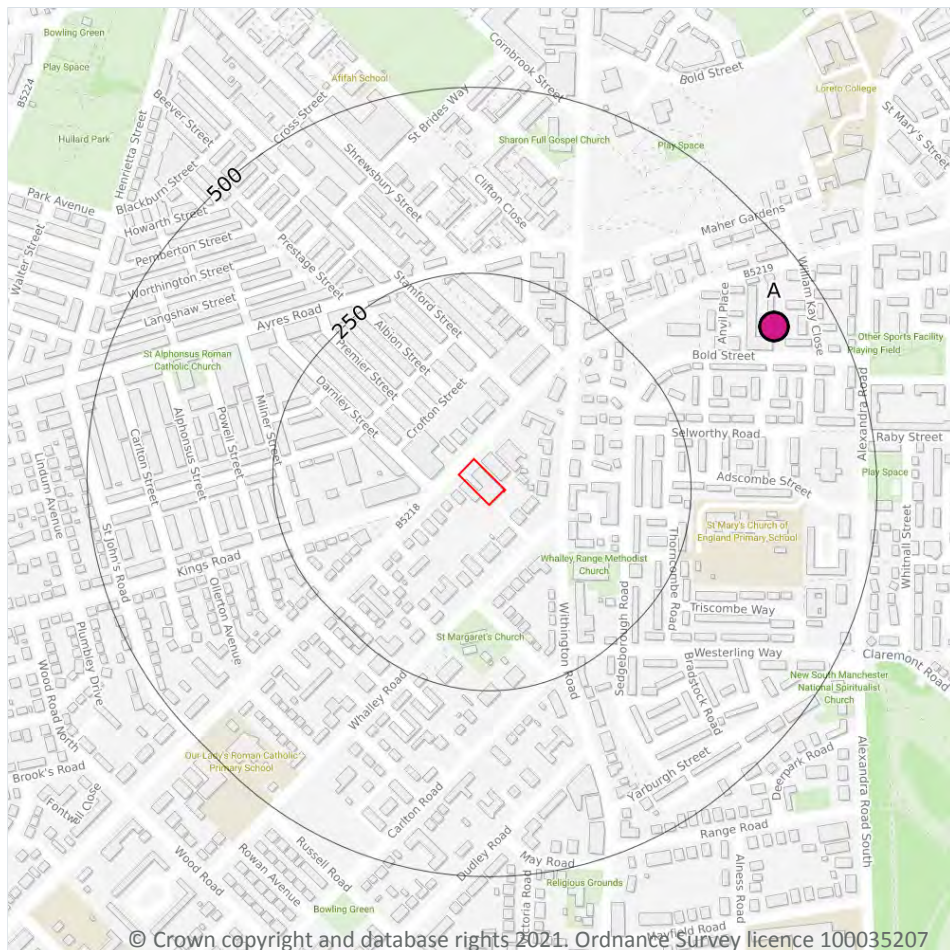
5.5 Groundwater vulnerability- local information

Records on site	0
------------------------	----------

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)**
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

21

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 36**

ID	Location	Details	
A	423m NE	Status: Historical Licence No: 2569007009 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, MOSS LANE WEST MANCHESTER" Data Type: Point Name: HYDES BREWERY LTD Easting: 383220 Northing: 395850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 21/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 07/10/2000 Version End Date: -
A	423m NE	Status: Historical Licence No: 2569007009 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, MOSS LANE WEST MANCHESTER" Data Type: Point Name: HYDES BREWERY LTD Easting: 383220 Northing: 395850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 21/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 07/10/2000 Version End Date: -
A	423m NE	Status: Historical Licence No: 2569007009 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, MOSS LANE WEST MANCHESTER Data Type: Point Name: HYDES BREWERY LTD Easting: 383220 Northing: 395850	Annual Volume (m ³): 66826.2 Max Daily Volume (m ³): 372.772 Original Application No: - Original Start Date: 21/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 07/10/2000 Version End Date: -
A	423m NE	Status: Historical Licence No: 2569007009 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, MOSS LANE WEST MANCHESTER Data Type: Point Name: HYDES BREWERY LTD Easting: 383220 Northing: 395850	Annual Volume (m ³): 66826.2 Max Daily Volume (m ³): 372.772 Original Application No: - Original Start Date: 21/02/1966 Expiry Date: - Issue No: 103 Version Start Date: 19/07/2018 Version End Date: -

ID	Location	Details	
-	1044m E	Status: Active Licence No: 2569007007 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES MOSS SIDE MANCHESTER Data Type: Point Name: Heineken UK Ltd Easting: 383865 Northing: 395909	Annual Volume (m ³): 227,000 Max Daily Volume (m ³): 900 Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 103 Version Start Date: 08/05/2014 Version End Date: -
-	1044m E	Status: Active Licence No: 2569007007 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES MOSS SIDE MANCHESTER Data Type: Point Name: Heineken UK Ltd Easting: 383865 Northing: 395909	Annual Volume (m ³): 227,000 Max Daily Volume (m ³): 900 Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 103 Version Start Date: 08/05/2014 Version End Date: -
-	1075m E	Status: Historical Licence No: 2569007007 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, MOSS SIDE, MANCHESTER" Data Type: Point Name: SCOTTISH COURAGE BREWING LTD Easting: 383900 Northing: 395900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/08/1995 Version End Date: -
-	1075m E	Status: Historical Licence No: 2569007007 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, MOSS SIDE, MANCHESTER" Data Type: Point Name: SCOTTISH COURAGE BREWING LTD Easting: 383900 Northing: 395900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/08/1995 Version End Date: -



ID	Location	Details	
-	1075m E	Status: Historical Licence No: 2569007007 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, MOSS SIDE, MANCHESTER Data Type: Point Name: SCOTTISH COURAGE BREWING LTD Easting: 383900 Northing: 395900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 31/12/2003 Version End Date: -
-	1075m E	Status: Historical Licence No: 2569007007 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, MOSS SIDE, MANCHESTER Data Type: Point Name: SCOTTISH COURAGE BREWING LTD Easting: 383900 Northing: 395900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 31/12/2003 Version End Date: -
-	1075m E	Status: Historical Licence No: 2569007007 Details: General Cooling (Existing Licences Only) (High Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES MOSS SIDE MANCHESTER Data Type: Point Name: Heineken UK Ltd Easting: 383900 Northing: 395900	Annual Volume (m ³): 227000 Max Daily Volume (m ³): 900 Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 23/11/2009 Version End Date: -
-	1075m E	Status: Historical Licence No: 2569007007 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES MOSS SIDE MANCHESTER Data Type: Point Name: Heineken UK Ltd Easting: 383900 Northing: 395900	Annual Volume (m ³): 227000 Max Daily Volume (m ³): 900 Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 23/11/2009 Version End Date: -

ID	Location	Details	
-	1400m NE	Status: Active Licence No: NW/069/0004/003 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT MANCHESTER METROPOLITAN UNIVERSITY Data Type: Point Name: Manchester Metropolitan University Easting: 383715 Northing: 396746	Annual Volume (m ³): 274,115 Max Daily Volume (m ³): 751 Original Application No: - Original Start Date: 20/09/2013 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/01/2015 Version End Date: -
-	1400m NE	Status: Active Licence No: NW/069/0004/003 Details: Heat Pump Direct Source: Ground Water - North West Region Point: BOREHOLE AT MANCHESTER METROPOLITAN UNIVERSITY Data Type: Point Name: Manchester Metropolitan University Easting: 383715 Northing: 396746	Annual Volume (m ³): 274,115 Max Daily Volume (m ³): 751 Original Application No: - Original Start Date: 20/09/2013 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/01/2015 Version End Date: -
-	1542m W	Status: Historical Licence No: 2569007080 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT WARWICK ROAD SOUTH Data Type: Point Name: TRAFFORD METAL FINISHERS MANCHESTER LTD Easting: 381290 Northing: 395320	Annual Volume (m ³): 75000 Max Daily Volume (m ³): 432 Original Application No: - Original Start Date: 10/02/1999 Expiry Date: 10/02/2009 Issue No: 103 Version Start Date: 14/05/2007 Version End Date: -
-	1591m NW	Status: Historical Licence No: 2569007002 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT 371 ORDSALL LANE, MANCHESTER 5" Data Type: Point Name: COLGATE PALMOLIVE LTD Easting: 381600 Northing: 396700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 08/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 05/12/1985 Version End Date: -



ID	Location	Details	
-	1591m NW	Status: Historical Licence No: 2569007002 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT 371 ORDSALL LANE, MANCHESTER 5 Data Type: Point Name: Cerep III Investment R Sarl Easting: 381600 Northing: 396700	Annual Volume (m ³): 409140 Max Daily Volume (m ³): 1636.56 Original Application No: - Original Start Date: 08/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 29/10/2009 Version End Date: -
-	1813m W	Status: Historical Licence No: NW/069/0007/007 Details: Heat Pump Direct Source: Ground Water - North West Region Point: BOREHOLE A - TRAFFORD TOWN HALL, MANCHESTER Data Type: Point Name: Trafford Borough Council Easting: 380999 Northing: 395892	Annual Volume (m ³): 175000 Max Daily Volume (m ³): 1440 Original Application No: - Original Start Date: 02/10/2012 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 02/10/2012 Version End Date: -
-	1865m W	Status: Historical Licence No: NW/069/0007/007 Details: Heat Pump Direct Source: Ground Water - North West Region Point: BOREHOLE B - TRAFFORD TOWN HALL, MANCHESTER Data Type: Point Name: Trafford Borough Council Easting: 380940 Northing: 395833	Annual Volume (m ³): 175000 Max Daily Volume (m ³): 1440 Original Application No: - Original Start Date: 02/10/2012 Expiry Date: 31/03/2019 Issue No: 1 Version Start Date: 02/10/2012 Version End Date: -
-	1968m NE	Status: Active Licence No: NW/069/0006/003 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE 1 AT LOWER CHATHAM STREET Data Type: Point Name: Manchester Metropolitan University Easting: 384180 Northing: 397091	Annual Volume (m ³): 283,240 Max Daily Volume (m ³): 1,532 Original Application No: - Original Start Date: 04/04/2014 Expiry Date: 31/03/2027 Issue No: 2 Version Start Date: 04/04/2014 Version End Date: -

ID	Location	Details	
-	1968m NE	Status: Active Licence No: NW/069/0006/003 Details: Heat Pump Direct Source: Ground Water - North West Region Point: BOREHOLE 1 AT LOWER CHATHAM STREET Data Type: Point Name: Manchester Metropolitan University Easting: 384180 Northing: 397091	Annual Volume (m ³): 283,240 Max Daily Volume (m ³): 1,532 Original Application No: - Original Start Date: 04/04/2014 Expiry Date: 31/03/2027 Issue No: 2 Version Start Date: 04/04/2014 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

5

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 36**

ID	Location	Details	
-	1591m NW	Status: Historical Licence No: 2569007001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "MANCHESTER SHIP CANAL AT PREMISES, ORDSALL LANE, MANCHESTER" Data Type: Point Name: COLGATE PALMOLIVE LTD Easting: 381600 Northing: 396700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/04/1992 Version End Date: -
-	1591m NW	Status: Historical Licence No: 2569007001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT PREMISES, ORDSALL LANE, MANCHESTER Data Type: Point Name: COLGATE PALMOLIVE LTD Easting: 381600 Northing: 396700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/04/1992 Version End Date: -



ID	Location	Details	
-	1591m NW	Status: Historical Licence No: 2569007001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: MANCHESTER SHIP CANAL AT PREMISES ORDSALL LANE MANCHESTER Data Type: Point Name: Cerep III Investment R Sarl Easting: 381600 Northing: 396700	Annual Volume (m ³): 1,363,800 Max Daily Volume (m ³): 4909.68 Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 102 Version Start Date: 29/10/2009 Version End Date: -
-	1757m N	Status: Historical Licence No: 2569007053 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "R IRWELL AT IRWELL WORKS, ORDSALL LANE, SALFORD" Data Type: Point Name: CDS COMPUTER DESIGN SYSTEMS LTD Easting: 382500 Northing: 397400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 22/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1987 Version End Date: -
-	1757m N	Status: Historical Licence No: 2569007053 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: R IRWELL AT IRWELL WORKS, ORDSALL LANE, SALFORD Data Type: Point Name: CDS COMPUTER DESIGN SYSTEMS LTD Easting: 382500 Northing: 397400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 22/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1987 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m

0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

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



5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

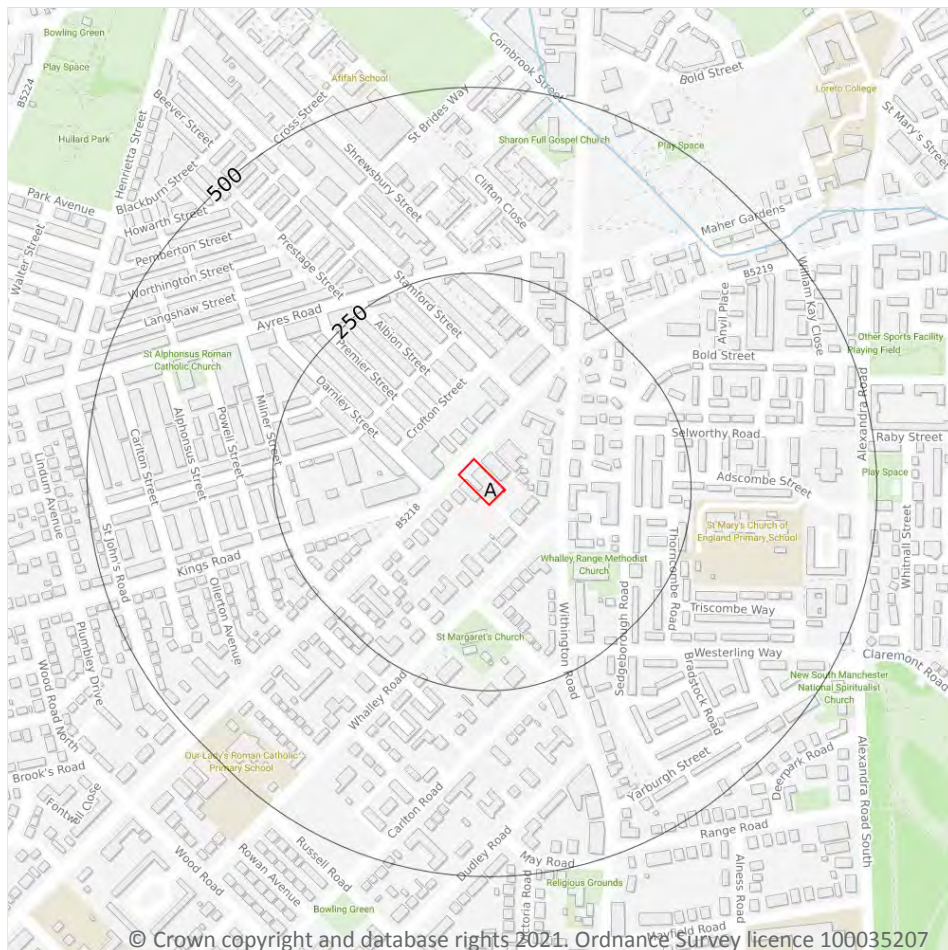
0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

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



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

0

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

0

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.



This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 45**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River WB catchment	Irwell / Manchester Ship Canal (Irk to confluence with Upper Mersey)	GB112069061452	Croal Irwell	Irwell

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

6.4 WFD Surface water bodies

Records identified

1

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on **page 45**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1512m NW	River	Irwell / Manchester Ship Canal (Irk to confluence with Upper Mersey)	GB112069061452	Moderate	Good	Moderate	2016

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



6.5 WFD Groundwater bodies

Records on site

1

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 45**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Manchester and East Cheshire Permo-Triassic Sandstone Aquifers	<u>GB41201G101100</u>	Poor	Poor	Poor	2015

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



7 River and coastal flooding

7.1 Risk of Flooding from Rivers and Sea (RoFRaS)

Records within 50m**0**

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance).

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

7.2 Historical Flood Events

Records within 250m**0**

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

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

7.3 Flood Defences

Records within 250m**0**

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

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

7.4 Areas Benefiting from Flood Defences

Records within 250m**0**

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

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



7.5 Flood Storage Areas

Records within 250m

0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

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

7.7 Flood Zone 3

Records within 50m

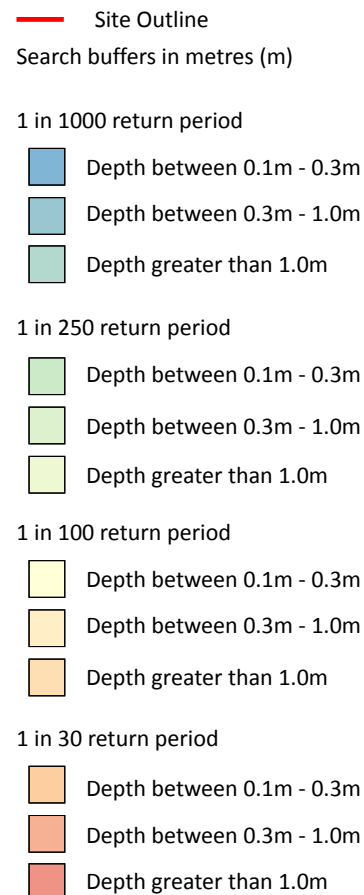
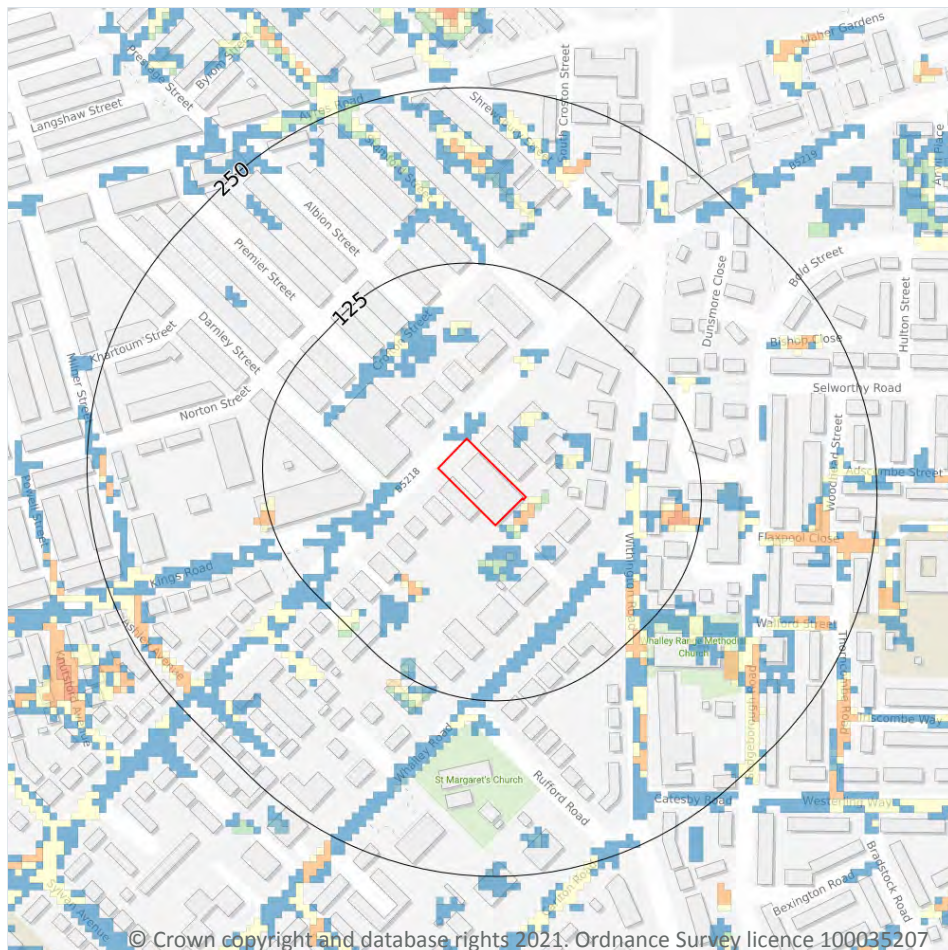
0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

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



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 1000 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.1m - 0.3m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 51**

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

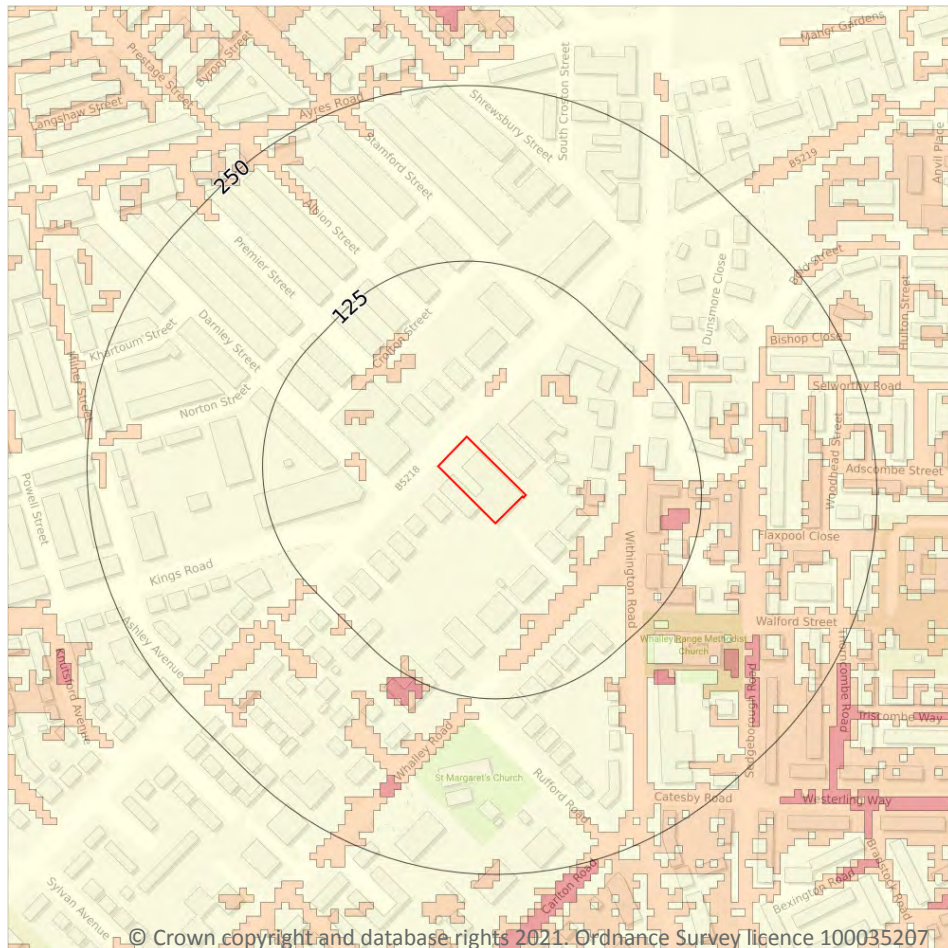
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.1m and 0.3m
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

Moderate

Highest risk within 50m

Moderate-High

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 53**

This data is sourced from Ambient Risk Analytics.

10 Environmental designations

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m

0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.



10.5 National Nature Reserves (NNR)

Records within 2000m

0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m

0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m

0

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m

0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m**0**

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m**0**

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m**0**

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m**0**

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m**0**

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.



10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

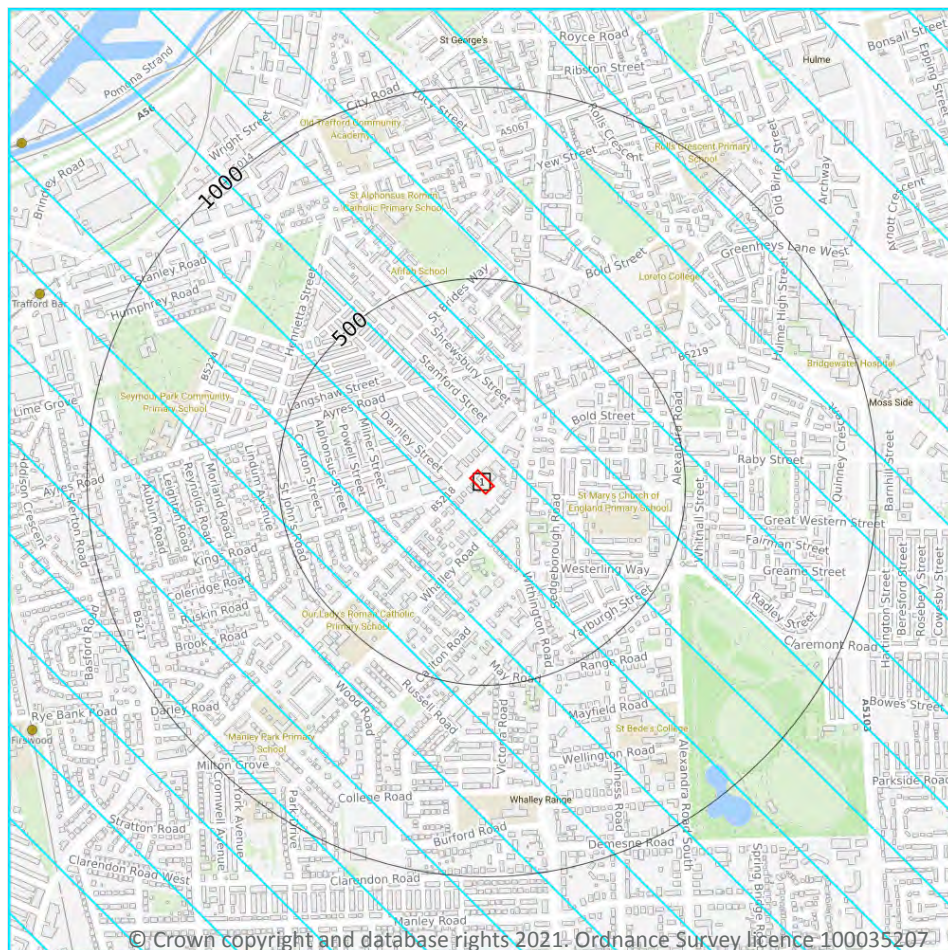
0

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

This data is sourced from Natural England and Natural Resources Wales.



SSSI Impact Zones and Units



10.17 SSSI Impact Risk Zones

Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 58**

ID	Location	Type of developments requiring consultation
1	On site	Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons > 4000m². Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m

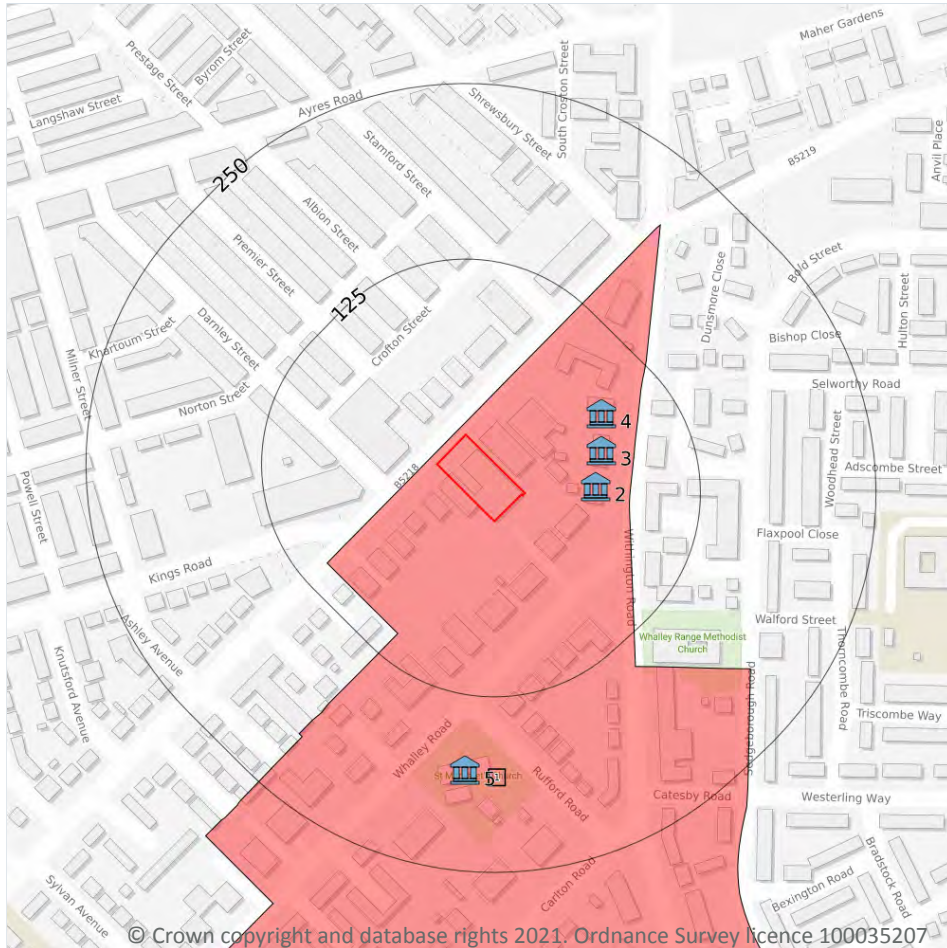
0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.



11 Visual and cultural designations



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m

4

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

Features are displayed on the Visual and cultural designations map on **page 60**

ID	Location	Name	Grade	Reference Number	Listed date
2	51m E	Nos. 12 And 14, Withington Road, Whalley Range, Manchester, M16	II	1255033	03/10/1974
3	62m NE	8 And 10, Withington Road, Whalley Range, Manchester, M16	II	1270483	03/10/1974
4	78m NE	Nos. 4 And 6, Withington Road, Whalley Range, Manchester, M16	II	1255032	03/10/1974
5	179m S	Church Of St Margaret, Whalley Range, Manchester, M16	II	1254863	03/10/1974



This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

1

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

Features are displayed on the Visual and cultural designations map on **page 60**

ID	Location	Name	District	Date of designation
1	On site	Whalley Range	Manchester	01/10/1991

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

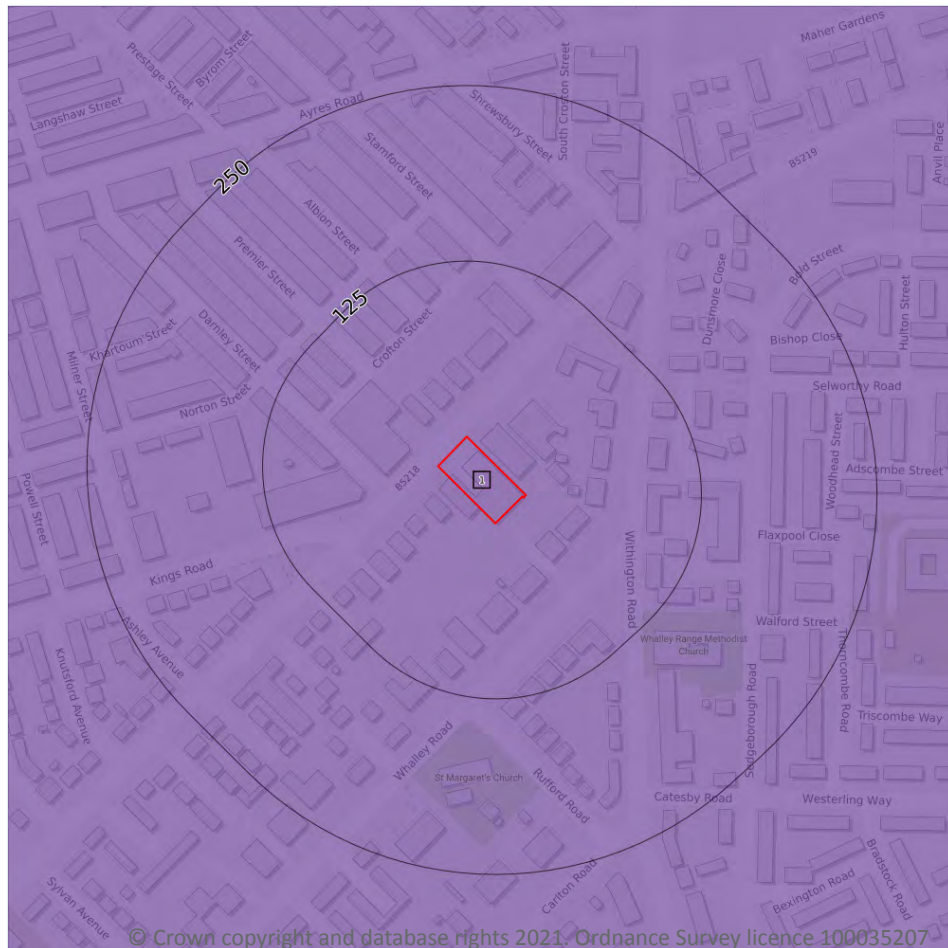
0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.



12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m

1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 63**

ID	Location	Classification	Description
1	On site	Urban	-

This data is sourced from Natural England.



12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m

0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.

13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m**0**

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m**0**

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m**0**

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

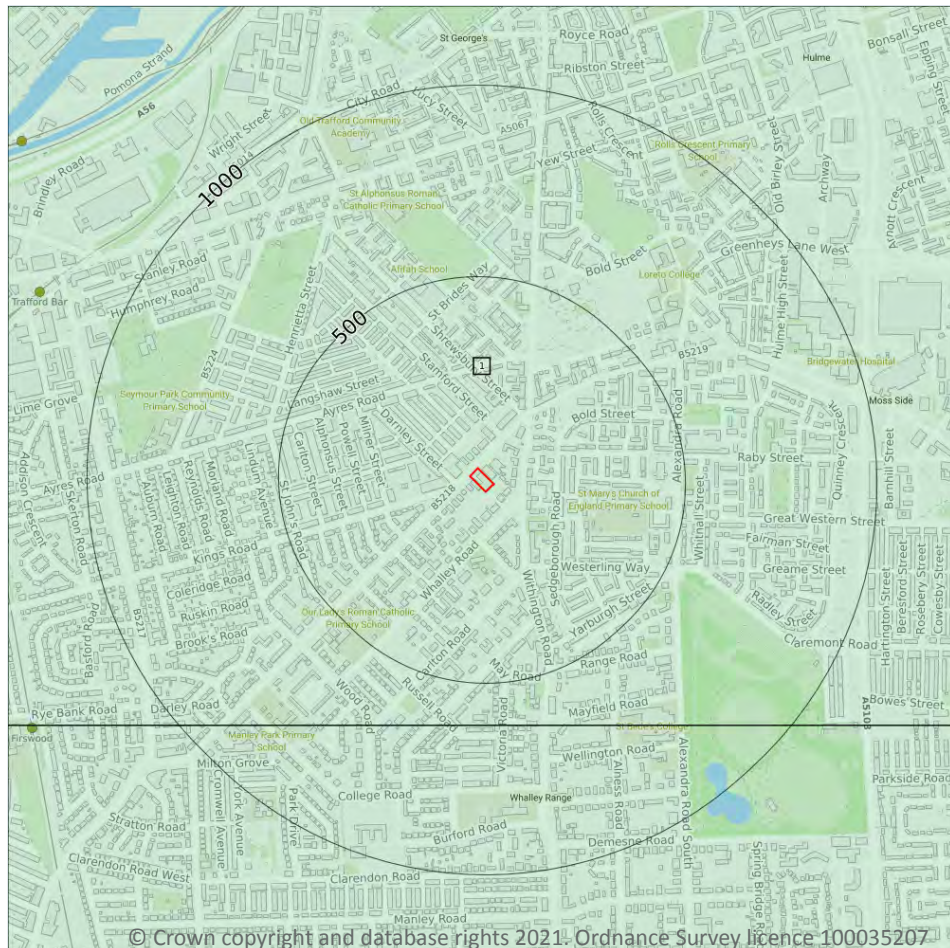
Records within 250m**0**

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

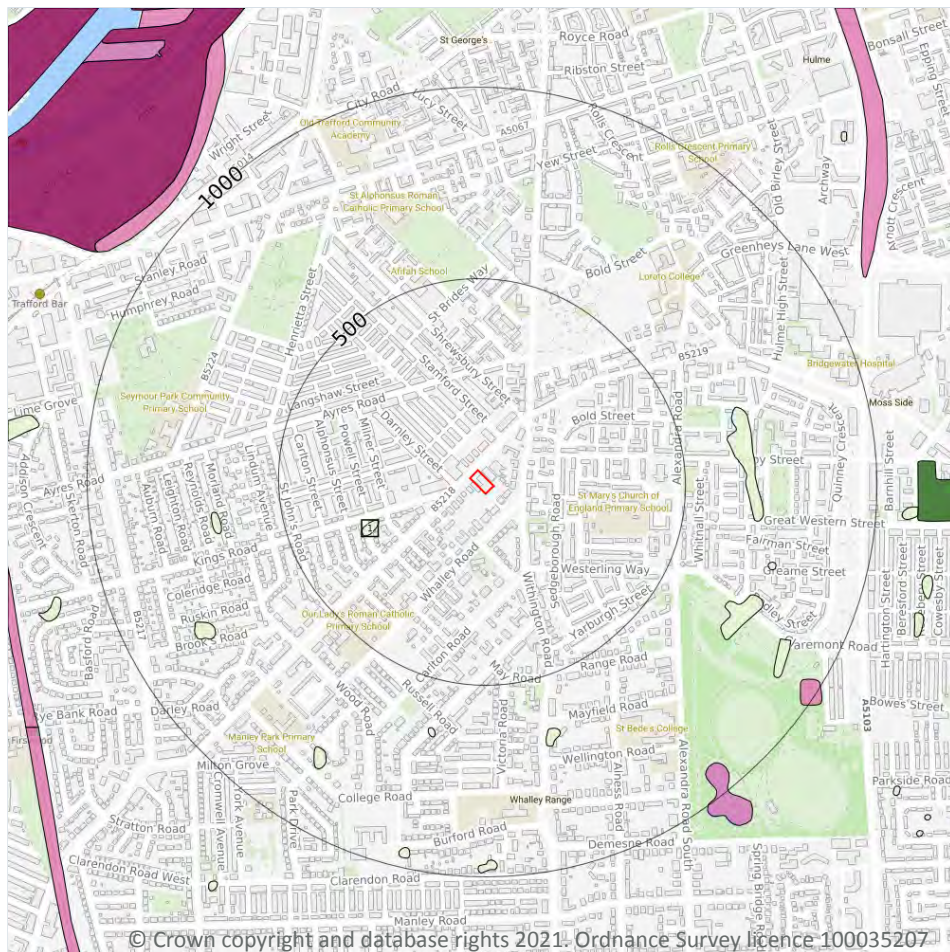
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 66**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SJ89NW

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground



- Site Outline
- Search buffers in metres (m)
- Reclaimed ground
 - Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

© Crown copyright and database rights 2021. Ordnance Survey licence 100035207

14.2 Artificial and made ground (10k)

Records within 500m

1

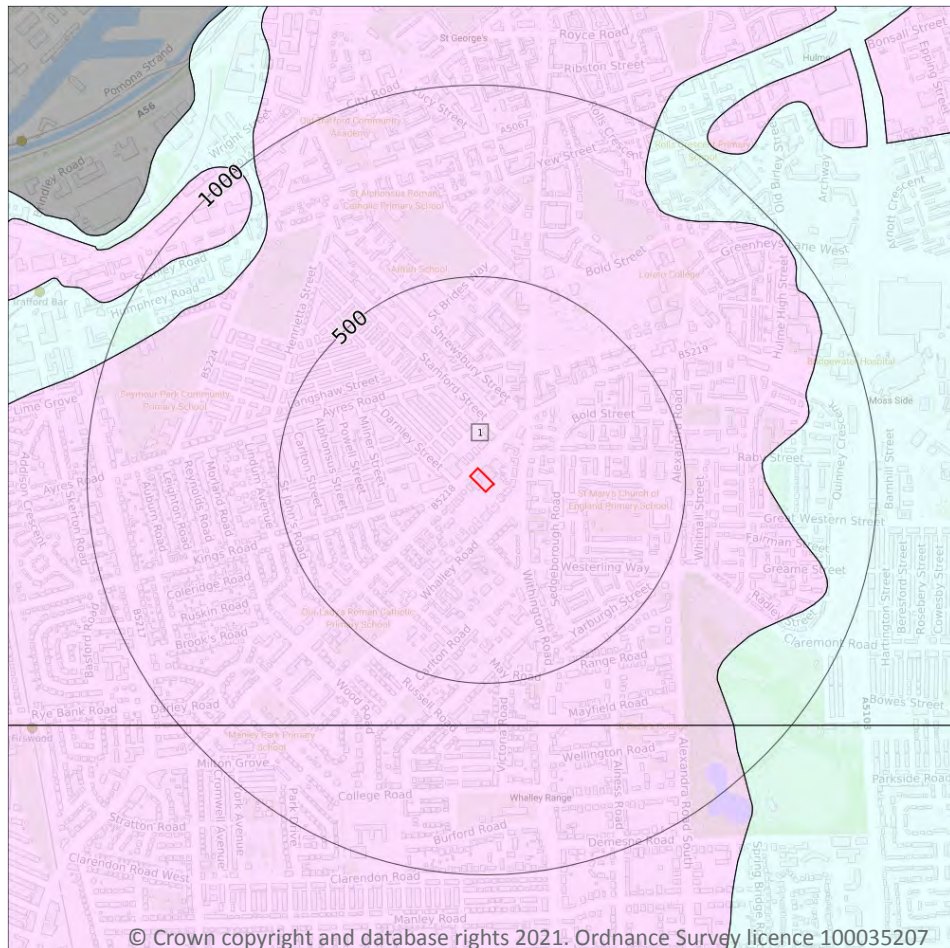
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 67**

ID	Location	LEX Code	Description	Rock description
1	264m SW	WMGR-ARTDP	Infilled Ground	Artificial Deposit

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

1

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 68**

ID	Location	LEX Code	Description	Rock description
1	On site	GFSDDD-XSV	Glaciofluvial Sheet Deposits, Devensian - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

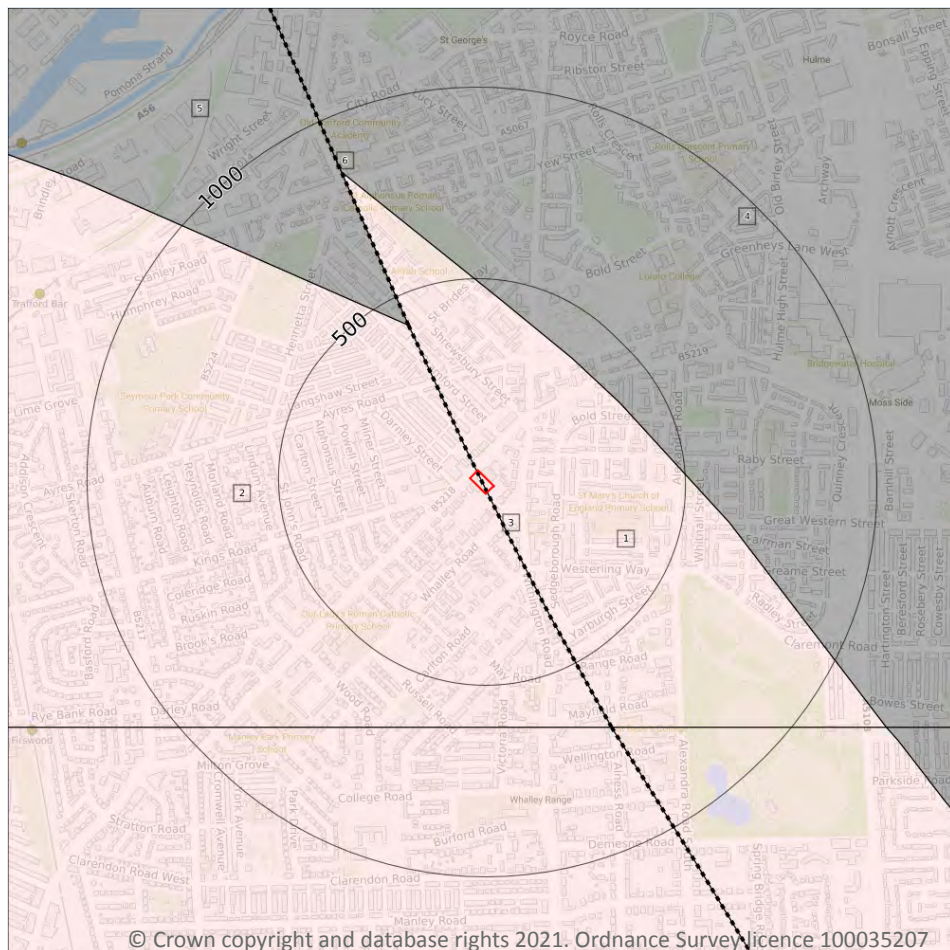
0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

..... Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

4

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 70**

ID	Location	LEX Code	Description	Rock age
1	On site	WLSF-SDST	Wilmslow Sandstone Formation - Sandstone	Early Triassic Epoch
2	On site	WLSF-SDST	Wilmslow Sandstone Formation - Sandstone	Early Triassic Epoch
4	382m NE	CPB-SDST	Chester Pebble Beds Formation - Sandstone	Early Triassic Epoch
5	419m NW	CPB-SDST	Chester Pebble Beds Formation - Sandstone	Early Triassic Epoch



This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

2

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

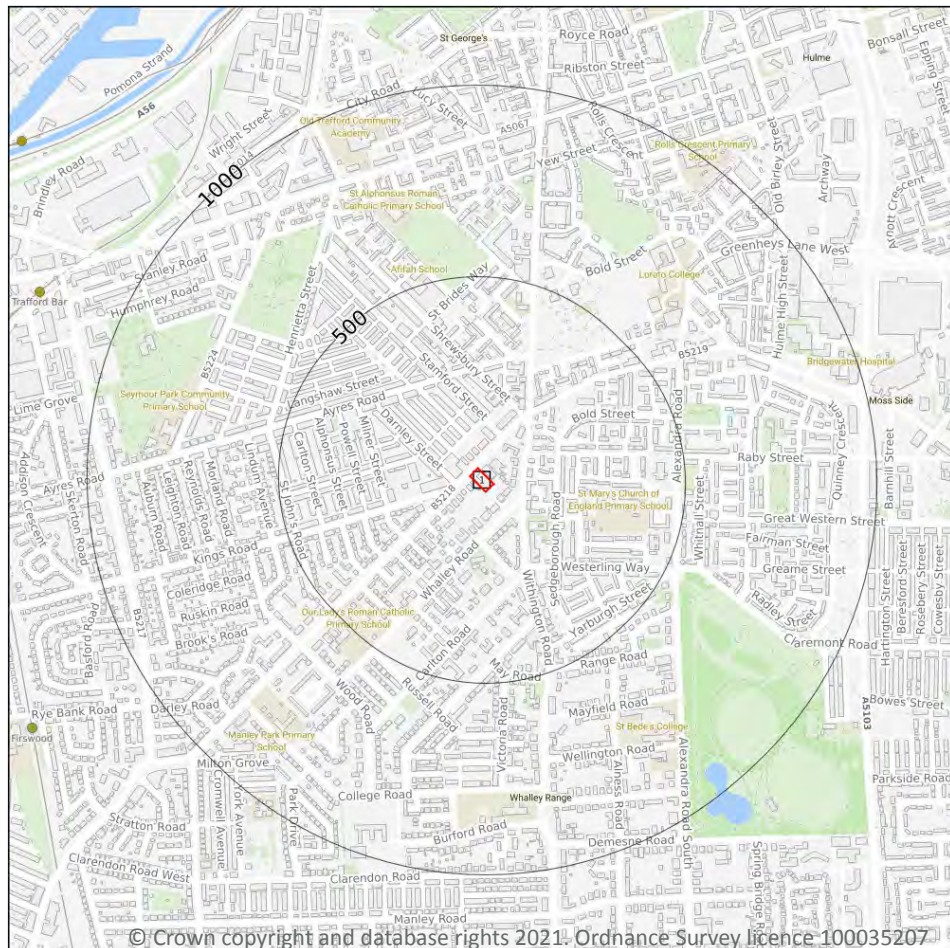
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 70**

ID	Location	Category	Description
3	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side
6	419m NW	FAULT	Normal fault, inferred; crossmarks on downthrow side

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline
Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 72**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW085_manchester_v4

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Artificial and made ground

15.2 Artificial and made ground (50k)

Records within 500m

0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

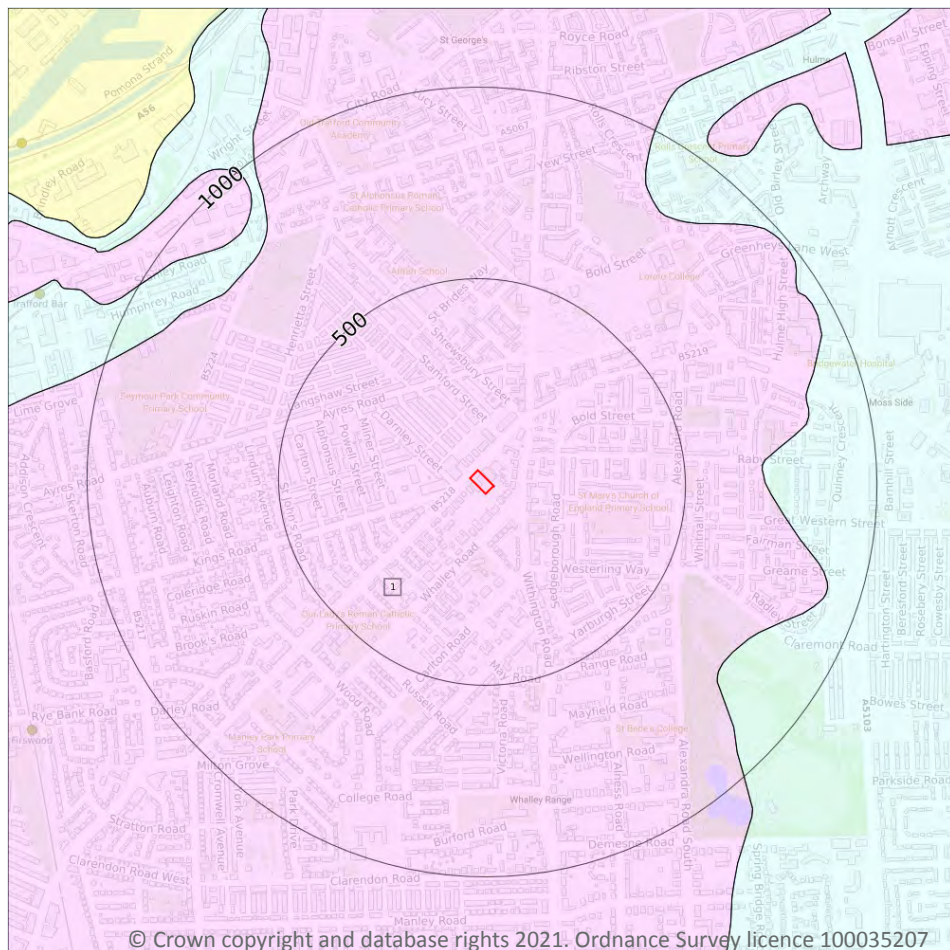
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

1

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 74**

ID	Location	LEX Code	Description	Rock description
1	On site	GFSDDD-XSV	GLACIOFLUVIAL SHEET DEPOSITS, DEVENSIAN	SAND AND GRAVEL

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Very High	High

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m**0**

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

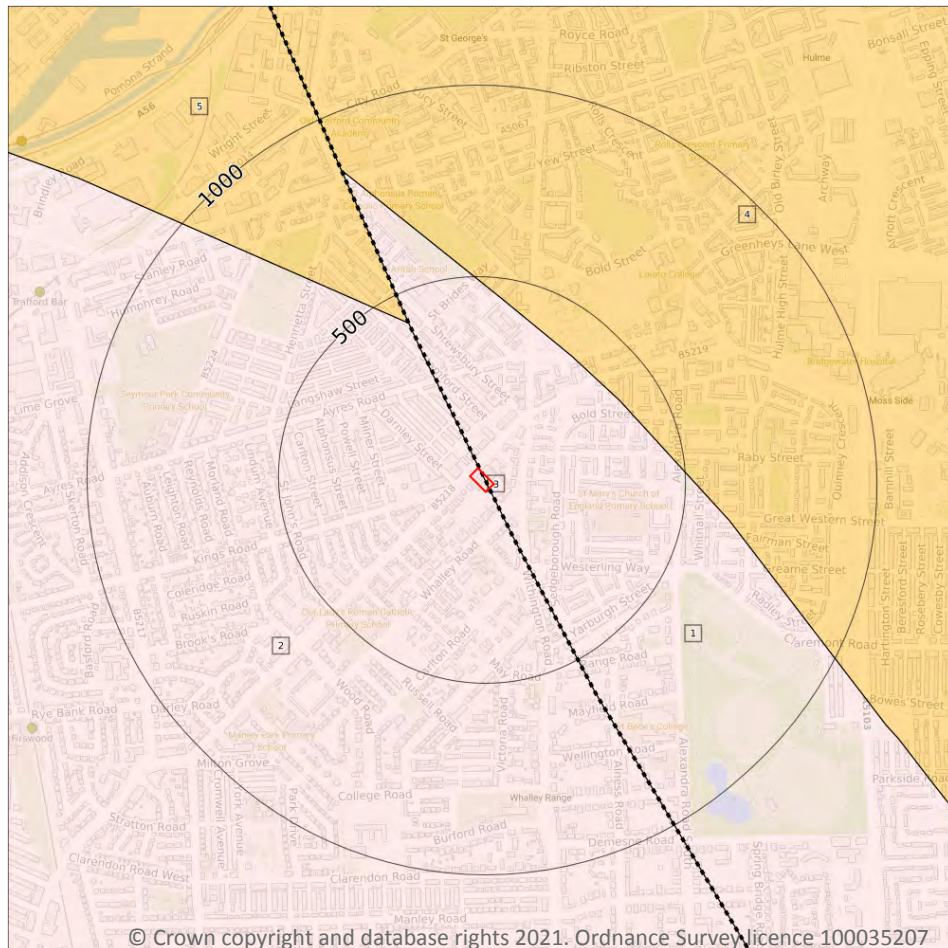
Records within 50m**0**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

..... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

4

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 76**

ID	Location	LEX Code	Description	Rock age
1	On site	WLSF-SDST	WILMSLOW SANDSTONE FORMATION - SANDSTONE	-
2	On site	WLSF-SDST	WILMSLOW SANDSTONE FORMATION - SANDSTONE	-
4	381m NE	CHES-SDST	CHESTER FORMATION - SANDSTONE	OLENEKIAN
5	420m NW	CHES-SDST	CHESTER FORMATION - SANDSTONE	OLENEKIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	High	High

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

1

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

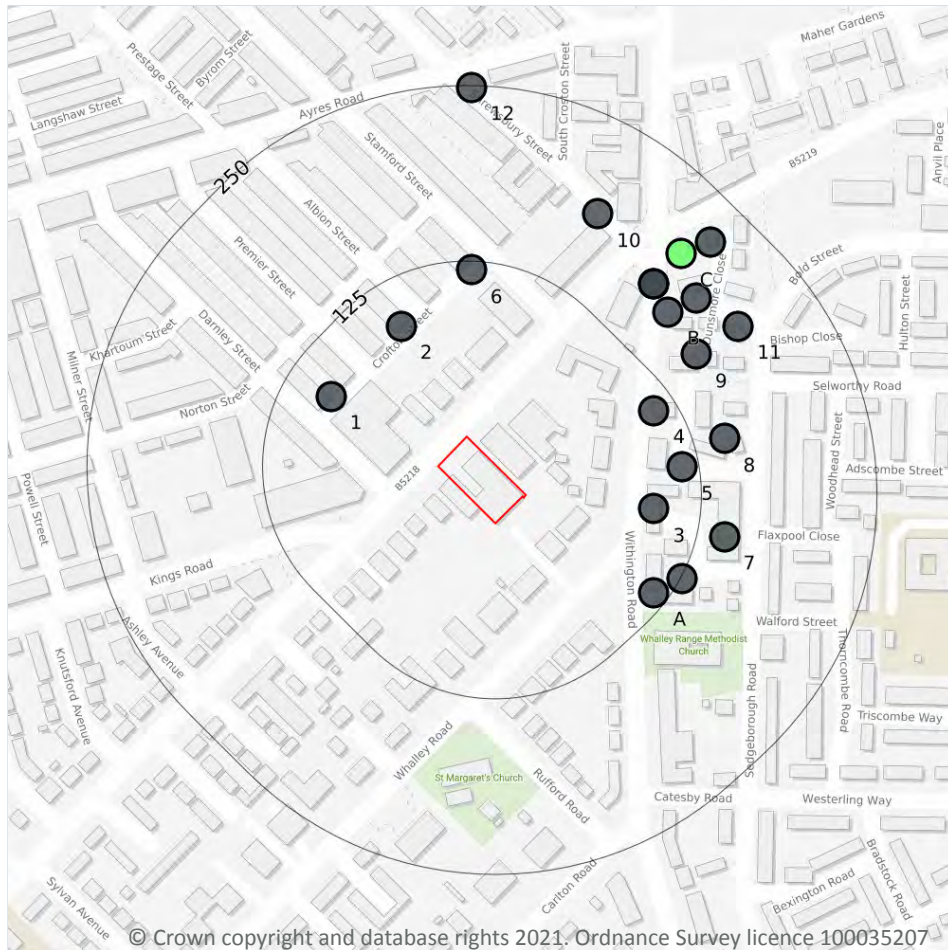
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 76**

ID	Location	Category	Description
3	On site	FAULT	Fault, inferred

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

20

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 78**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	91m NW	382720 395700	CROFTON STREET SEWERAGE BH1	-	Y	N/A
2	92m NW	382770 395750	CROFTON STREET SEWERAGE BH2	-	Y	N/A
3	92m E	382950 395620	WITHINGTON ROAD 2	-	Y	N/A

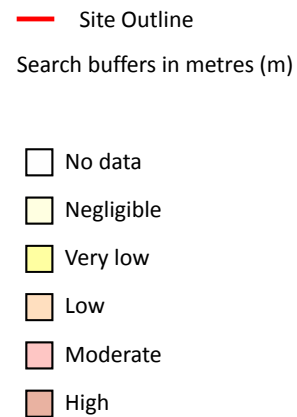


ID	Location	Grid reference	Name	Length	Confidential	Web link
4	109m NE	382950 395690	WITHINGTON ROAD 3	-	Y	N/A
5	113m E	382970 395650	WITHINGTON ROAD 6	-	Y	N/A
A	115m SE	382950 395560	WITHINGTON ROAD 1	-	Y	N/A
6	119m N	382820 395790	CROFTON STREET SEWERAGE BH3	-	Y	N/A
A	126m SE	382970 395570	WITHINGTON ROAD 5	-	Y	N/A
7	144m E	383000 395600	WITHINGTON ROAD 9	-	Y	N/A
8	147m E	383000 395670	WITHINGTON ROAD 10	-	Y	N/A
9	157m NE	382980 395730	WITHINGTON ROAD 7	-	Y	N/A
B	164m NE	382960 395760	WITHINGTON ROAD 4	-	Y	N/A
B	171m NE	382950 395780	HYDE BROS QUEENS BREWERY BROOKS BAR 2	-	Y	N/A
B	171m NE	382950 395780	HYDE BROS QUEENS BREWERY BROOKS BAR 1	-	Y	N/A
10	184m NE	382910 395830	SHREWSBURY STREET SEWERAGE OLD TRAFFORD 5	-	Y	N/A
B	185m NE	382980 395770	WITHINGTON ROAD 8	-	Y	N/A
11	193m NE	383010 395750	WITHINGTON ROAD 11	-	Y	N/A
C	200m NE	382969 395802	MANCHESTER CORP. BROOKS BAR	10.06	N	1042290
C	221m NE	382990 395810	WITHINGTON ROAD 12	-	Y	N/A
12	249m N	382820 395920	SHREWSBURY STREET SEWERAGE OLD TRAFFORD 4	-	Y	N/A

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

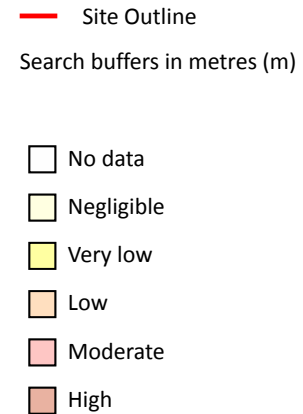
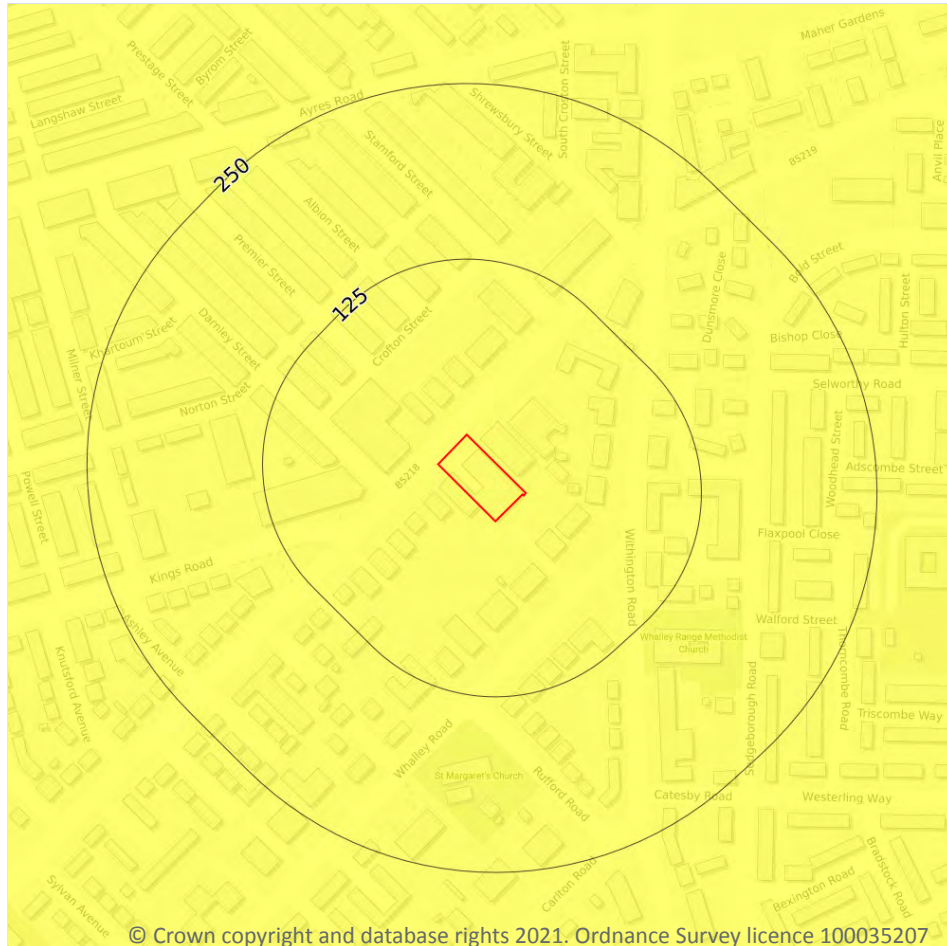
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 80**

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

1

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

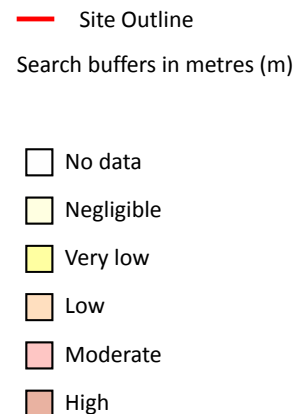
Features are displayed on the Natural ground subsidence - Running sands map on **page 81**

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

1

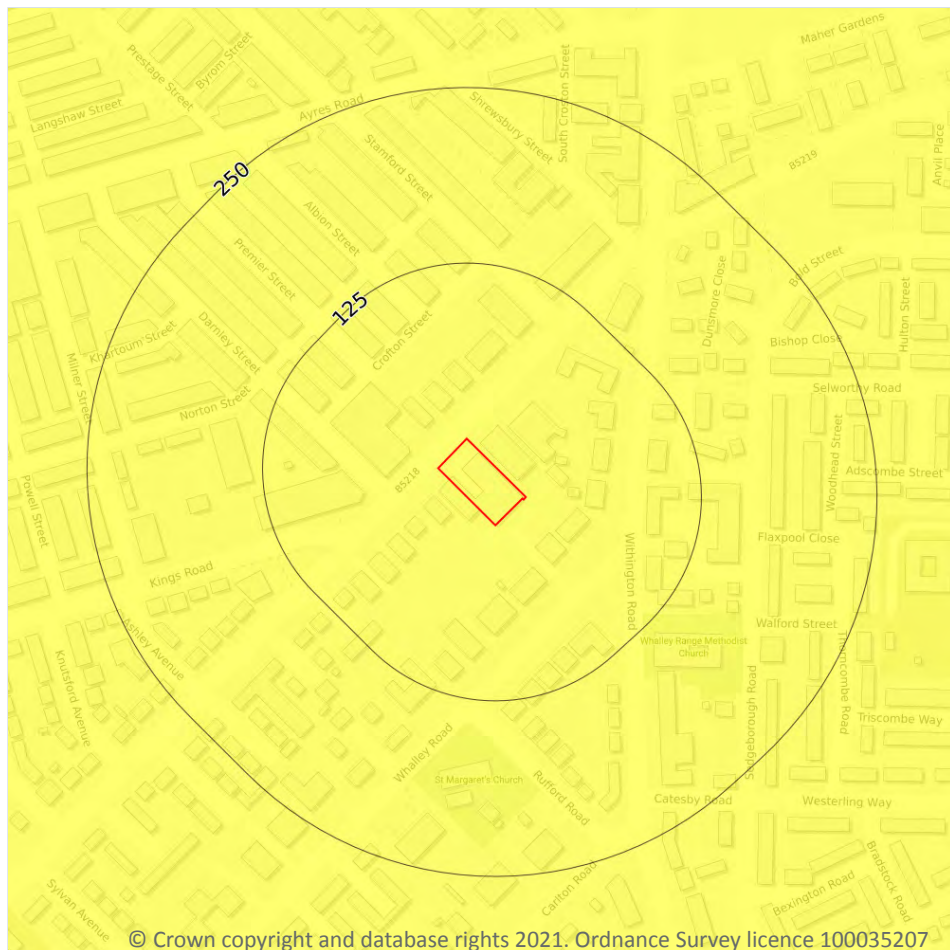
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 82**

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

1

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

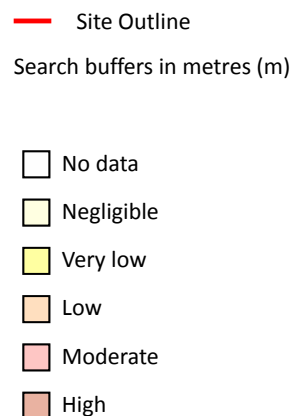
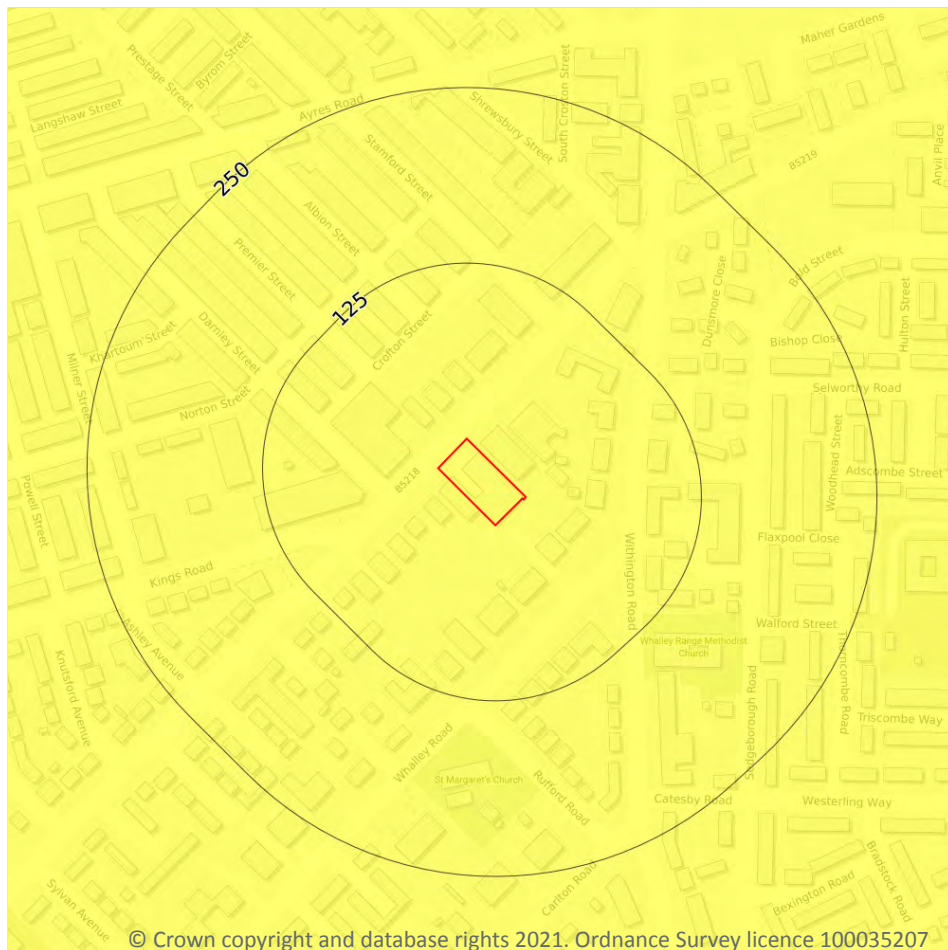
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 83**

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m

1

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

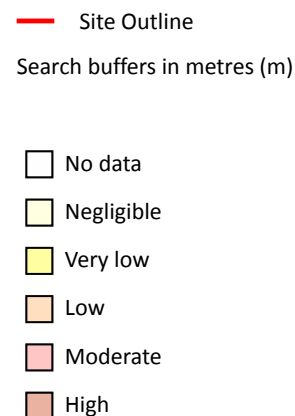
Features are displayed on the Natural ground subsidence - Landslides map on **page 84**

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 85**

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities

18.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

0

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This data is sourced from Ordnance Survey/Groundsure.



18.5 Historical Mineral Planning Areas

Records within 500m

0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site

1

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

Location	Details
On site	Whilst outside of an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) may have information such as mining plans and maps held within their archive that have occurred within 1km of this property. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk .

This data is sourced from Johnson Poole and Bloomer.



18.9 Coal mining

Records on site	0
-----------------	---

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0
-----------------	---

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

18.13 Clay mining

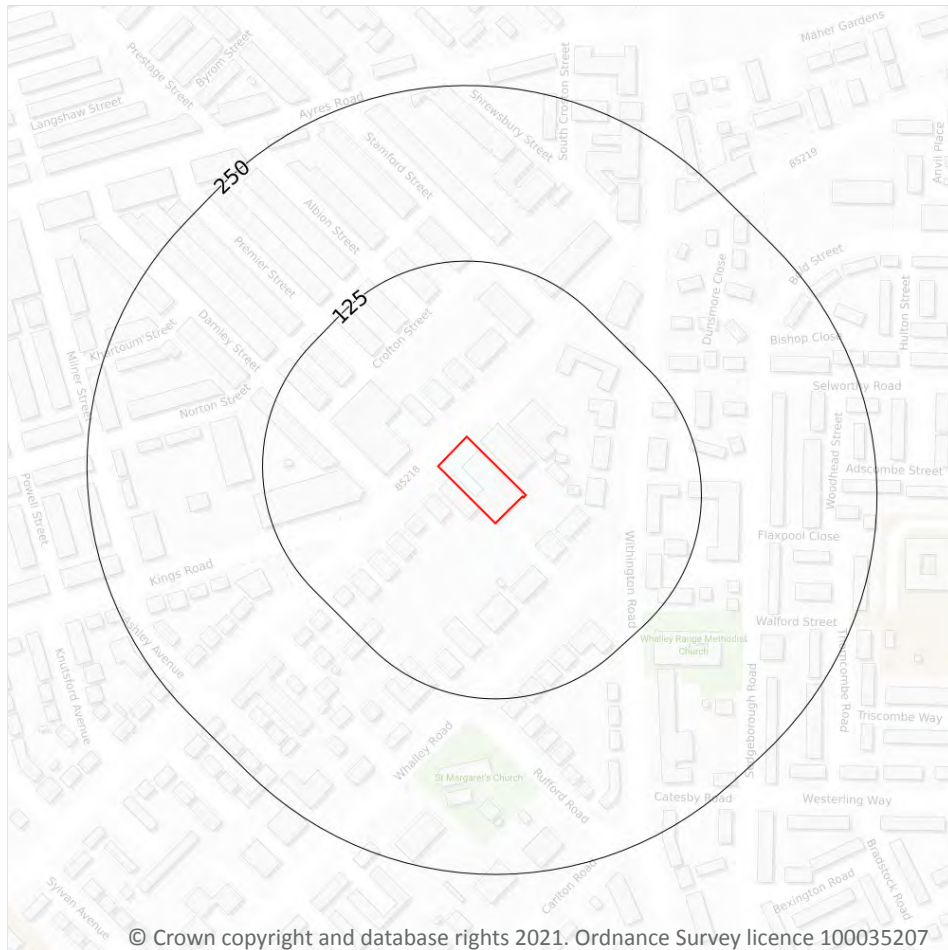
Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).



19 Radon



— Site Outline
Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

19.1 Radon

Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 89**

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None**

This data is sourced from the British Geological Survey and Public Health England.



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

2

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

7

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
On site	24	4.2	85	58	0.6	67	43	30	11
On site	25	4.4	210	144	1.1	70	37	31	7
10m S	25	4.4	233	160	1.2	74	38	31	7
29m N	25	4.4	191	131	1	72	36	30	7
33m SW	24	4.2	82	56	0.5	68	36	30	11
33m NW	25	4.4	92	63	0.6	69	50	31	12



Location	Arsenic (mg/kg)	Bioaccessible Arsenic (mg/kg)	Lead (mg/kg)	Bioaccessible Lead (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Nickel (mg/kg)	Tin (mg/kg)
41m E	23	4	73	50	0.3	75	23	30	10

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



21 Railway infrastructure and projects

21.1 Underground railways (London)

Records within 250m**0**

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m**0**

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m**0**

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m**0**

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m**0**

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.



This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m

0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m

0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.



Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference>.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: <https://www.groundsure.com/terms-and-conditions-jan-2020/>.

