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LAND AT 351 STOCKPORT ROAD, MANCHESTER

Phase 1 - Preliminary Risk Assessment

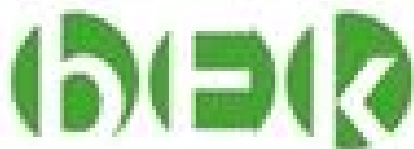


Prepared For

Abdul Ghani

Report Ref: BEK-21877-1

June 2021



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Project Quality Assurance Information Sheet

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Date	June 2021
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Phase 1 - Preliminary Risk Assessment

PROJECT NO: 21877

REPORT REF: BEK-21877-1

DATE: June 2021

REVISION STATUS / HISTORY

Rev	Date	Issue / Comment	Prepared	Checked

GENERAL REPORT LIMITATIONS

BEK Enviro Limited (BEK) has prepared this report for the sole use of the client, showing reasonable skill and care, for the intended purposes as stated in the agreement under which this work was completed. The report may not be relied upon by any other party without the express agreement of the client and BEK. No other warranty, expressed or implied, is made as to the professional advice included in this report.

Where any data supplied by the client or from other sources have been used, it has been assumed that the information is correct. No responsibility can be accepted by BEK for inaccuracies in the data supplied by any other party. The conclusions and recommendations in this report are based on the assumption that all relevant information has been supplied by those bodies from whom it was requested.

No part of this report may be copied or duplicated without the express permission of BEK and the party for whom it was prepared. Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

Unless explicitly agreed otherwise, in writing, this report has been prepared under BEK's limited standard Terms and Conditions as included within our proposal to the Client.

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

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1. INTRODUCTION

1.1 Appointment

- 1.1.1 BEK Enviro (BEK) have been commissioned by Abdul Ghani to carry out an Phase 1 - Preliminary Risk Assessment at a parcel of land at 351 Stockport Road, Manchester (hereafter referred to 'the site') to assess the potential risks from contamination and ground gas based on the development proposals.

1.2 Proposed Development

- 1.2.1 It is proposed to erect 'a new purpose built building to enhance the existing car wash facilities'. The scheme involves the demolition of the existing customer waiting area, staff room, office, car wash store, tyre repair area and free standing canopy. A proposed two storey larger building (comprising waiting room, detailing bays, staff room and stock room) with an attached canopy will be constructed. It is understood that the proposed development will retain the existing shop present in the south-east of the site. An additional 14 secure car parking spaces will be formed to the north-east of the proposed building.

- 1.2.2 At the instruction of the client the area to which this assessment applies includes the footprint of the proposed new build garage only. The client has suggested that no ground will be broken in the construction of the proposed car parking spaces. However, should there be a requirement to break ground in the area of the proposed car park or should landscaped areas be present in this area then there will be a requirement to revise this assessment.

- 1.2.3 The re-development is illustrated on 'Proposed Option Visuals' (Drawing Ref: 1147-0500-F, dated 14/01.20).

1.3 Objective & Scope of Work

- 1.3.1 This report provides the details of the works undertaken by BEK to assess the potential risks from contamination considering the change of use to commercial.

- 1.3.2 To achieve the objective BEK will undertake the following:

- Carry out a site inspection and take photographs
- Review the available relevant background information for the site, including:
 - Recent Ordnance Survey Map
 - Coal Authority Website
 - BGS Web Page
 - Site Specific GroundSure Reports
 - Site Specific Historical Maps
 - Proposed Development Layout Plans

- Develop a preliminary conceptual site model in accordance with guidance to identify potentially significant pollutant linkages specific to the proposed development
- Establish areas of potential concern based on identified risks and/or potential risks
- Identify any actions required to assess or reduce the risks identified

1.4 Limitations

- 1.4.1 The conclusions and recommendations presented in this report are the result of our professional interpretation of the information currently available. BEK reserves the right to amend the conclusions and recommendations if further information becomes available.
- 1.4.2 However, it should be noted that much of the information has been derived from reports written by others and BEK takes no responsibility for the accuracy of that information. Notwithstanding the above, the reports reviewed have all been written by professional environmental consultants with a duty of care to provide relevant and accurate information.
- 1.4.3 This assessment does not include an invasive plants species assessment.

2. SITE DESCRIPTION

2.1 Site Location

- 2.1.1 The site is a parcel of land located off Stockport Road and Richmond Grove East some 3 km to the south-east of Manchester city centre.
- 2.1.2 The National Grid Reference for the centre of the site is 386350 396114. The site location is presented in BEK Drawing No 21877-1, a copy of which is presented in Appendix F.

2.2 Site Layout & Description

- 2.2.1 An engineer from BEK visited the site during May 2021 to carry out a site walkover/inspection. The site can be accessed from Stockport Road and from Richmond Grove. A site layout Plan is presented in Appendix F (BEK Drawing No 21877-2).
- 2.2.2 The site comprises a rectangular shaped plot of land. The majority of the site (central and south-eastern portion) is occupied by single storey buildings and a shipping container. The buildings are used as an existing customer waiting area (located in the west of the site), staff room, office, car wash store, tyre repair area. The shipping container in the south-eastern boundary is used as a barber shop and beauty parlour. The north-eastern, north-western and south-western portion of the site comprises concrete and tarmac hardstanding. An aerial photograph for the site and surrounding area is presented as Figure 1.

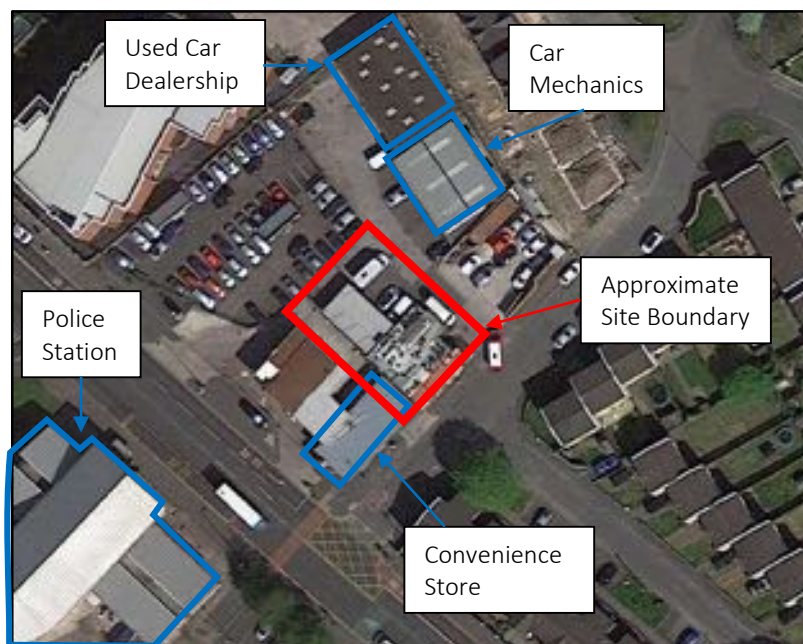


Figure 1: Aerial Image for the Site

Phase 1 - Preliminary Risk Assessment

Land at 351 Stockport Road, Manchester

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- 2.2.3 The car wash store/tyre repair facility contained numerous containers of car wash fluid and, car cleaning equipment, two barrels of diesel, car jacks, a tyre changer and a wheel balancer.
- 2.2.4 The southern corner of the site is occupied by the northern portion of a convenience store.
- 2.2.5 A selection of photographs taken during the site inspection are presented in Appendix E.
- 2.2.6 The land to the north and west of the site is occupied by hardstanding used to store cars associated with a car mechanics and a used car dealership. The land immediately south-west of the site is occupied by the remainder of the convenience store and hardstanding with a freestanding canopy used for car washing. The land to the south-east of the site across Richmond Grove East is occupied by residential properties. Longsight police station is located to the south-west of the site across Stockport Road.

3. SITE HISTORY

- 3.1 The history of the site has been established using historical OS maps supplied by Groundsure. A selection of the maps reviewed is presented in Appendix A.

1848-1849

- 3.2 The earliest available maps show the site to be occupied by an open field. The surrounding area is predominantly occupied by open fields, however there are also a number of large residential properties. An unlabelled road (Stockport Road) is located some 15 m south-west of the site.

1890-1893

- 3.3 These maps show the site to be occupied by the rear half of 4 residential properties, their rear gardens and a small outbuilding. Stockport Road (including a tramway) runs north-west to south-east some 10 m south-west of the site. Richmond Grove East runs perpendicular to Stockport Road immediately south-east of the site. The surrounding area is dominated by residential properties and several schools and churches. A large 'industrial' school is located some 50 m south-west of the site and a large building marked 'Carriage & Tramway Company's Depot' is located some 125 m north-west of the site (see Figure 2).



Figure 2: Extract from 1893 Historic Map

1905-1908

- 3.4 The 1905 and 1908 maps show that a number of additional small outbuildings are located immediately north-east of the site. There are no other significant changes to the site or surrounding area.

1922-1923

- 3.5 These maps show the depot north of the site to have changed use to an underclothing factory and a mineral water works. Furthermore, a number of buildings associated with the school across Stockport Road south-west of the site have been demolished and replaced with new school buildings.

1933-1934

- 3.6 These maps show no changes to the site. A number of buildings north-west of the site have been demolished and the underclothing factory has been extended towards the site. The nearest point of the factory is some 60 m north-west of the site.

1949-1950-1955-1960

- 3.7 These maps show no change to the site. However, 5 terraced properties located immediately north-west of the site have been demolished leaving the land vacant. Additional buildings located some 20 m east of the site have also been demolished.

1965 - 1981

- 3.8 The maps show that the residential properties and outbuildings occupying the site have been demolished and replaced with 3 structures labelled a garage. Numerous buildings located to the south-east of the site have also been demolished and replaced with new residential properties. A portion of the works north of the site has been demolished (see Figure 3).



Figure 3: Extract from 1972-1976 Historic Map

1983-1991

- 3.9 These maps show that one of the structures of site is no longer present. Two new structures labelled 'Garage' are present immediately south-west of the site. Furthermore, new buildings are located some 5 m north-east and 10 m north of the site. There are no other significant changes to the site or surrounding area.

2000-2015

- 3.10 These maps (and Aerial Imagery presented in the Geo+EnviroInsight Report) show that one of the buildings in the north-west of the site has been demolished and replaced with the customer waiting area building. It can also be seen that the hardstanding surrounding the site is used to store cars. The school south-west of the site has been demolished and replaced with a police station. A large building (The Islamic Academy of Manchester) is constructed some 30 m north-west of the site (see Figure 4 & 5).



Figure 4: Extract from 2003 Map



Figure 5: Aerial Image from 2015

2019

- 3.11 An aerial image from the site the Geo+EnviroInsight Report shows the configuration of the building on site to unchanged. However the works some 60 m north-west of the site has been demolished and replaced with a football pitch. Furthermore, a residential development of approximately 6 properties has begun some 10 m north-east of the site (see Figure 6).



Figure 6: Aerial Image from 2019

4. ENVIRONMENTAL SETTING

4.0.1 A Enviro+GeoInsight Report has been obtained from Groundsure and information provided in these reports has been used within this section. A copy of this report is presented in Appendix B.

4.1 Published Geology

4.1.1 The site geology is illustrated in the Enviro+GeoInsight Report which has sourced data from several sources including British Geological Society (BGS), BRITPITS database and the Coal Authority.

4.1.2 Furthermore, site investigation information has been sought from the British Geological Society (BGS) website where 14 exploratory locations are available to view within 250 m of the site (see Figure 7).



Figure 7: Location of BGS Boreholes

4.1.3 Thirteen of the exploratory locations encountered made ground at the ground surface. One location encountered 'Soil and Clay' at the ground surface. Underlying superficial strata was encountered in 12 exploratory locations. The superficial strata encountered in the boreholes can be generally described as 'brown/grey sandy clay'. The deepest borehole reaching a depth of 85 m bedrock of Marl (Mudstone) and Sandstone. Additionally, one of the boreholes recorded fragments of mudstone and sandstone in the clay strata.

4.1.4 Copies of the 5 BGS Borehole records closest to the site are presented in Appendix C.

Made Ground

- 4.1.5 According to the Geo+EnviroInsight report there is no made ground overlying the site. However, it could be seen from the site inspection that made ground was present across the whole site associated with the car washing facility. Furthermore, made ground is anticipated in the south-western half of the site associated with the former residential properties.
- 4.1.6 The groundsure report also identifies 3 features of made ground/infilled ground located 152 m north-west 195 m north-west and 245 m north-east of the site.

Superficial Geology

- 4.1.7 The Enviro+GeoInsight Report states that the superficial geology overlying the site comprises 'Till, Devensian – Diamicton' deposits (Boulder Clay). This is consistent with the superficial strata of sandy clay described in the BGS Borehole records.

Bedrock

- 4.1.8 The underlying solid geology comprises two formations split down the middle from north-west to south-east. The south-western half is underlain by the Manchester Marls Formation (Mudstone) and the north-eastern half is underlain by the Chester Pebble Beds Formation (Sandstone) (see Figure 8).

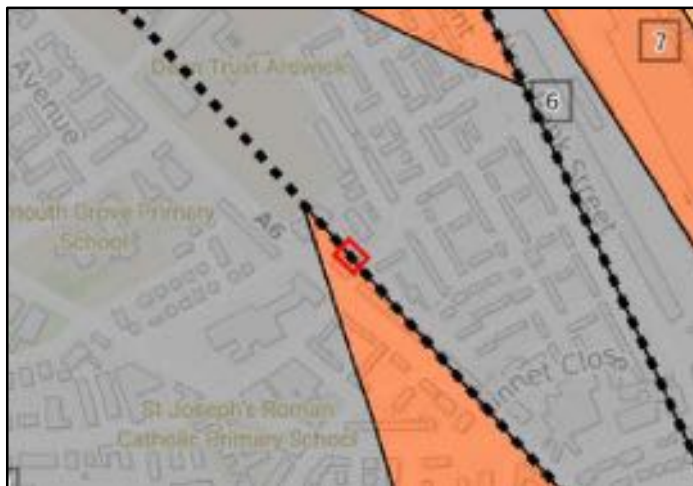


Figure 8: Bedrock Geology, 1:10,000 scale

Linear Features

- 4.1.9 According to the Enviro+GeoInsight Report there is a normal fault running through the centre of the site from north-west to south-east and coincides with boundary between the two bedrock formations.

4.2 Mining & Ground Stability

4.2.1 The information provided by Groundsure indicates that the site is located within an area which may have been affected by coal mining, however information from the Coal Authority Interactive Map indicates that the site does not lie within a Development High Risk Area.

4.2.2 In accordance with the Coal Authorities publication 'Risk Based Approach to Development Management – Guidance for Developers (Version 4 – 2017), sites located within a development low risk area within the coal mining field 'do not pose a public safety or ground stability risk to new development' and 'a desk based coal mining risk assessment is not required'.

4.2.3 There is no evidence for any other mining activities on the site.

4.2.4 In addition to the above, the GeoInsight Report provides hazard ratings associated with ground subsidence at the site, as summarised below:

Shrink-Swell Clay:	Very Low
Landslides:	Very Low
Ground Dissolution of Soluble Rocks:	Negligible
Compressible Deposits:	Negligible
Collapsible Deposits:	Very Low
Running Sands:	Very Low

4.2.5 It can be seen from the above that the site is unlikely to be affected by natural ground instability issues.

4.3 Hydrology

4.3.1 There are no surface features located on or within 250 m of the site.

4.3.2 There are no licenced surface water abstractions located within 250 m of the site

4.3.3 The Geo+EnviroInsight Report states the site at a negligible risk from surface water flooding and is located in Flood Zone 1.

4.4 Hydrogeology

4.4.1 The superficial strata at the site is described as a 'Secondary Undifferentiated Aquifer'. These are described by the EA as 'Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock'

- 4.4.2 The Manchester Marls Formation (Mudstone) bedrock in the south-western half of the site is described as a Secondary B Aquifer. These are described as having 'Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers'.
- 4.4.3 The Chester Pebble Beds Formation (Sandstone) bedrock in the north-eastern half of the site is described as a Principle aquifer. These are described as having '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'.
- 4.4.4 An assessment of the vulnerability of the bedrock aquifers to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological, and soil properties is stated as being 'Low'. These areas 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.
- 4.4.5 There are no groundwater abstractions located within 250 m of the site and the site is not located within a Source Protection Zone.
- 4.5 Contaminated Land & Landfill Activities**
- 4.5.1 There are no current or historic landfill or waste sites located within 250 m of the site.
- 4.5.2 There is one waste exemption located 111 m north-west of the site. The exemption was for the use of waste in construction and is not considered to pose a contaminative risk to the site due to distance.
- 4.5.3 There are no EA recorded pollution incidents located within 250 m of the site.
- 4.5.4 There are no recorded Part A(1), A(2) or IPPC Authorised Activities within 250 m of the site.
- 4.5.5 However, one historic Part B permits have been held for the unloading of petrol into storage at the 'Mercury Filling Station' 5 m south-west the site. No enforcements have been notified. However, the activities carried out at the filling station may have resulted in localised contamination within the vicinity of this feature.
- 4.5.6 Groundsure reports one existing petrol station to be located some 220 m south-east of the site and a recent but obsolete petrol station situated 45 m south-east of the site. These are unlikely to have impacted upon the site.

- 4.5.7 There are 12 current recorded potentially contaminative land uses within 250 m of the site, the closest of which is refer to Vehicle Repair, Testing and Servicing, Vehicle Cleaning Services, Second Hand Vehicle, and Vehicle Hire and Rental companies situated 28 m north of the site.
- 4.5.8 The Enviro+GeoInsight reports 19 historical industrial land uses within 250 m of the site. These features represent the industrial school some 42 m south-west of the site, the numerous unspecified works located between 53 and 177 m north-west of the site, the unspecified works located between 214 and 235 m south-east of the site, and the railway sidings located 238 m north-east of the site. From the historical mapping, the unspecified workings area known to include: a mineral water work, clothing factories, and an electrical engineering works.
- 4.5.9 Groundsure reports 7 historical electricity substations and transformers within 250 m of the site. The nearest of which is situated 90 m south-east of the site. These are unlikely to have impacted upon the site.
- 4.5.10 Groundsure reports a historical garage located on site present from 1976 to 1999.
- 4.6 Sensitive Land Uses**
- 4.6.1 The site is not located within any environmental sensitive areas.
- 4.7 Radon**
- 4.7.1 Groundsure reports that the property is not located in a Radon Affected Area, as '<1% of properties are above the Action Level.'

5. PREVIOUS CONTAMINATED LAND DESK STUDY

- 5.1 Historically, the land at 351 Stockport Road has been subject to the following contaminated land desk study 'Pearl Environmental Ltd, Contaminated Land Desk Study – Car Wash/car hire centre, Junction of Richmond Grove East and Stockport Road, Dated December 2009'.
- 5.2 It should be noted that the Pearl Environmental report has not assessed the exact same site boundary that is assessed in this report. Regardless, the data is relevant and can be used to provide indicative information on the site assessed herein.
- 5.3 In general the report is consistent with the findings of the assessment herein. However, the Pearl Environmental report identifies a historical 'petroleum storage tank(s) below the forecourt'.
- 5.4 Liaison with the client suggests that the tank is situated some 20 m south-west of the site beneath the hardstanding forecourt.

6. POTENTIAL POLLUTANT LINKAGES

6.1 General

6.1.1 This section identifies the potential contaminants of concern, sources, pathways and receptors that may be associated with the site based on its known history and the current condition and with respect to the proposed redevelopment.

6.1.2 This information is used to develop a conceptual model which is a qualitative description of potential sources of environmental pollutants, the pathways by which they are transported and the receptors:

- i) Potential sources of contamination: these include any actual or potentially contaminating materials and activities, located either on or in the vicinity of the site.
- ii) Potential pathways for contamination migration: these comprise the routes or mechanisms by which contaminants may migrate from the source to the receptor including environmental migration pathways and human health exposure pathways.
- iii) Potential receptors of contamination: these include future land users, ecological systems, water resources and property.

6.2 Potential Contaminants of Concern

On-Site Sources of Contamination

6.2.1 The 1890 map shows the site occupied by 4 residential properties and associated gardens and an outbuildings. The site remained this way until 1965 when the residential properties and outbuilding were demolished/cleared and replaced with 3 buildings marked as a Garage. One of the buildings is absent by 1983 and aerial photographs dated to 2009 and 2015 shows that a building in the centre/north of the site was demolished/cleared and replaced with the existing customer waiting area.

6.2.2 The historic use of the site as a Garage may have impacted upon the site. Historic features within the area of the site to be developed may have included pumps/tanks or vehicle inspection pits etc. It is understood that a historic tank is situated under the forecourt some 20 m south-east of the site. Furthermore, a part B permit was held for a 'the unloading of petrol into storage' at the 'Mercury Filling Station' 5 m south-west of the site which is likely to be associated with the on-site and off-site use as a garage. BEK cannot rule out that spillages have not impacted upon the shallow ground in the area to be developed.

6.2.3 Furthermore, localised contamination including metals, fuel, lubricating oils, greases and asbestos associated with the repair/maintenance and storage of vehicles. Notwithstanding the above, the hardstanding ground in this area is likely to have mitigated the impact upon the shallow ground below the development site.

6.2.4 Based on the available background information, made ground is likely to be present across the whole of the site (as well as the land adjacent to the site) associated with former/existing development. It is possible that made ground was imported to these areas of the site to facilitate the development and/or placed as a result of demolition works. The nature, source and extent of any made ground present at the site is unknown and may contain potential contaminants of concern.

Off-Site Sources of Contamination

6.2.5 The 1983 maps shows 2 structures marked as a Garage were present immediately south-west of the site, with associated buildings to the north-east and north of the site. The surrounding area is generally dominated by residential properties, but some historic and current industrial land uses have been/are present including vehicle storage/parking, a school, police station, an industrial school and carriage depot

6.2.6 The potential contaminants of concern that may be present at the site are summarised below:

Contaminants Associated with Made Ground	
Arsenic	Zinc
Cadmium	Cyanide
Chromium	Phenols
Copper	Sulphate
Lead	Polycyclic Aromatic Hydrocarbons (PAHs)
Mercury	Total Petroleum Hydrocarbons
Nickel	pH
Selenium	Asbestos
Contaminants Associated with Garage/Vehicle Repair/Maintenance	
Phenols	BTEX Compounds
Polycyclic Aromatic Hydrocarbons	Semi-Volatile Organic Compounds
Total Petroleum Hydrocarbons	Volatile Organic Compounds
MTBE	Asbestos
Heavy Metals	

Table 1: Potential Contaminants of Concern

6.2.7 It should be noted that the above list represents a broad range of potential contaminants of concern. Additional contaminants of concern may be present if ground conditions differ from those anticipated.

- 6.2.8 Based on available background information, potential risks from ground gas are considered to be low. However, they should be considered if a significant thickness of made ground (>3 m) is present or ground conditions contain a high level of organic matter/contamination.

6.3 Potential Pathways

- 6.3.1 The pathways through which contaminants may reach receptors are in part dependent by the nature and behaviour of the contaminant and the intended end use of the site.

- 6.3.2 The following potential pathways have been identified with respect to the existing site condition, the environmental setting and the re-development of the site for commercial use, which are assessed in the conceptual model:

- Ingestion of contaminated soil (offsite soft landscaped areas only)
- Inhalation of contaminative dust including asbestos fibres (during earthworks)
- Dermal contact (offsite soft landscaped areas only)
- Indoor Inhalation of ground gas/vapours
- Dissolution or suspension (leaching) of contaminants from site soils leading to lateral migration within perched waters to on/off-site receptors. Potential significant pathways include more permeable layers within the made ground/natural strata
- Dissolution or suspension (leaching) of contaminants from site soils leading to contamination of groundwater
- Contamination affecting the integrity of service pipelines and concrete by direct contact

6.4 Receptors

- 6.4.1 Potential site specific receptors that may be affected by contamination at the site are listed below:

Future Site Users

- 6.4.2 Future users of the site could be at risk from contamination present at the site.
- 6.4.3 Potential risks are associated with the indoor inhalation of vapours and/or ground gas in the new build.

Construction Workers

- 6.4.4 The primary risks to construction workers are associated with shallow excavations as asbestos could be present. Asbestos fibres (if present) can be released into the atmosphere during earthworks.
- 6.4.5 Standard personal protective equipment and site specific risk assessments and method statements should reduce risks associated with other contaminants of concern due to short exposure duration.

Off Site Receptors

- 6.4.6 Off site receptors include nearby business users and residents and their pets. Human and animal health could be at risk if asbestos fibres are released during the re-development and/or if contaminants of concern migrate from onsite soils to offsite soils.

Flora

- 6.4.7 Heavy metals can be phytotoxic and if present can represent a potential risk to flora in offsite landscaped areas.

Buildings & Services

- 6.4.8 The integrity of service pipes can be affected by elevated concentrations of specific organic contamination.
- 6.4.9 Risks to buildings (concrete) can occur due to elevated concentrations of sulphate in the shallow ground and extreme pH.

Controlled Waters

- 6.4.10 The underlying superficial Secondary Undifferentiated Aquifer, and Principal Aquifer and Secondary B Aquifer within the bedrock strata are considered to represent potentially significant receptors. Hydraulic continuity between the superficial strata and bedrock is possible and this could result in lateral/vertical migration of contamination and could pose a risk to controlled waters.
- 6.4.11 The site is not located within a groundwater Source Protection Zone. There are no groundwater abstractions within 250 m of the site.
- 6.4.12 Potential risks to controlled waters need to be further considered.

6.5 Preliminary Conceptual Model

- 6.5.1 The identified potential sources of contaminants, pathways and receptors have been assessed to establish plausible pollutant linkages. All potentially significant pollutant linkages are detailed in Table B, in Appendix D.

6.6 Potentially Significant Pollutant Linkages

- 6.6.1 A number of possible 'significant pollutant linkages' have been identified associated with the site.
- 6.6.2 Potential risks relating to the potential harm to the health of humans and/or domestic pets off site due to the potential for direct contact with contaminants in the made ground and the ingestion of contaminated soil/dust **(Link 1)**.
- 6.6.3 There is also the possibility of windblown particulates being inhaled by people/animals off site **(Link 2)**.
- 6.6.4 Human health could be at risk by the inhalation of ground gases **(Link 3)** and/or volatile contamination migrating into properties on site **(Link 4)**.
- 6.6.5 Property (including services, flora and fauna) could be affected by direct contact to high concentrations of contaminants **(Link 5)**.
- 6.6.6 Dissolution or suspension (leaching) of contaminants from site soils leading to lateral migration within perched permeable layers within the made ground/natural strata, underground services and foundations leading to impact on perched water quality. **(Link 6)**.
- 6.6.7 Dissolution or suspension (leaching) of contaminants from site soils leading to impact on the groundwater within the underlying superficial Secondary Undifferentiated Aquifer and within the bedrock principal aquifer and bedrock Secondary B Aquifer. **(Link 7)**.
- 6.6.8 Site investigation is required to identify site specific conditions and assess the risks associated with each identified plausible pollutant linkage.

7. RECOMMENDATIONS

7.1 Based on the findings of the Preliminary Risk Assessment herein, a number of potential risks associated with potential contamination have been identified with respect to the redevelopment of the site.

7.2 To quantify the potential risks BEK recommends that the following works should be undertaken:

Site Investigation

7.3 The investigation should comprise the drilling of a series of window sample boreholes to characterise the shallow ground conditions across the site, to prove the depth of made ground beneath the site, and recover soil samples for chemical testing. The window sample borehole investigation should focus on the area in the south-west of the site where the residential properties and garage have historically been present at the site. Exploratory locations should also be non-targeted to provide indicative information from across the whole site.

7.4 The site investigation should be supervised by an experienced engineer who will be responsible for recording ground conditions encountered. In-situ strength tests (SPTs) will be carried out in natural strata as drilling progresses. Headspace testing using a PID will be carried out on a series of samples if olfactory evidence of contamination is encountered.

7.5 Representative samples will be recovered for chemical testing and geotechnical testing. All samples will be collected in appropriate sampling vessels; samples for chemical testing will be stored in a precooled cool-box and dispatched to the laboratory as soon as possible.

7.6 The chemical test results will help to determine waste classification should it be necessary to remove any soils from site as waste.

Laboratory Testing

7.7 Following a review of the ground conditions encountered, a selection of samples will be tested for the contaminants of concern listed in Table 1 of this report.

7.8 Depending on ground conditions encountered, it may be necessary to test samples for geotechnical properties to inform foundation design.

7.9 All testing will be carried out by a UKAS accredited laboratory to MCERTS standard (where available).

Reporting

- 7.10 The investigation findings should be assessed in accordance with current UK policy and guidance to identify any potentially significant pollutant linkages and determine the requirements for mitigation and/or remediation as well as to provide recommendations for foundation design.
- 7.11 The works undertaken will be detailed in a Site Investigation & Ground Assessment report along with full justifications for the assessment and the conclusions/recommendations.

APPENDIX A

Historical OS Maps

Site Details:

351, STOCKPORT ROAD,
MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: County Series Town Plan

Map date: 1891

Scale: 1:500

Printed at: 1:1,000



Surveyed 1891
Revised N/A
Edition 1891
Copyright N/A
Levelled N/A

Surveyed 1891
Revised N/A
Edition 1891
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Site Details:

351, STOCKPORT ROAD,
MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: County Series

Map date: 1893

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1893
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Site Details:

351, STOCKPORT ROAD,
MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: County Series

Map date: 1908

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1891
Revised 1905
Edition 1908
Copyright N/A
Levelled N/A

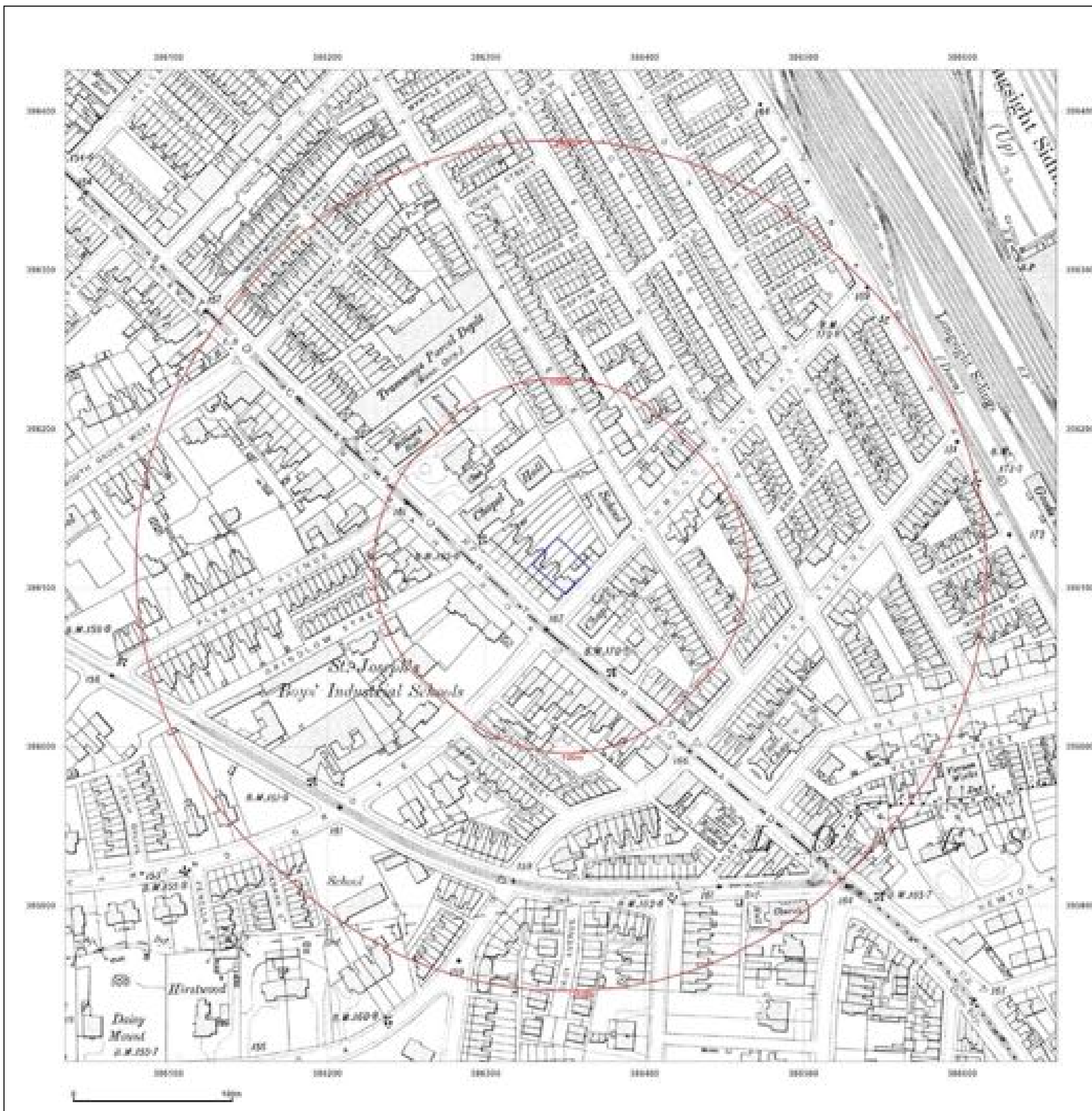


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Site Details:

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MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: County Series

Map date: 1922

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1922
Revised 1916
Edition 1922
Copyright N/A
Levelled 1915

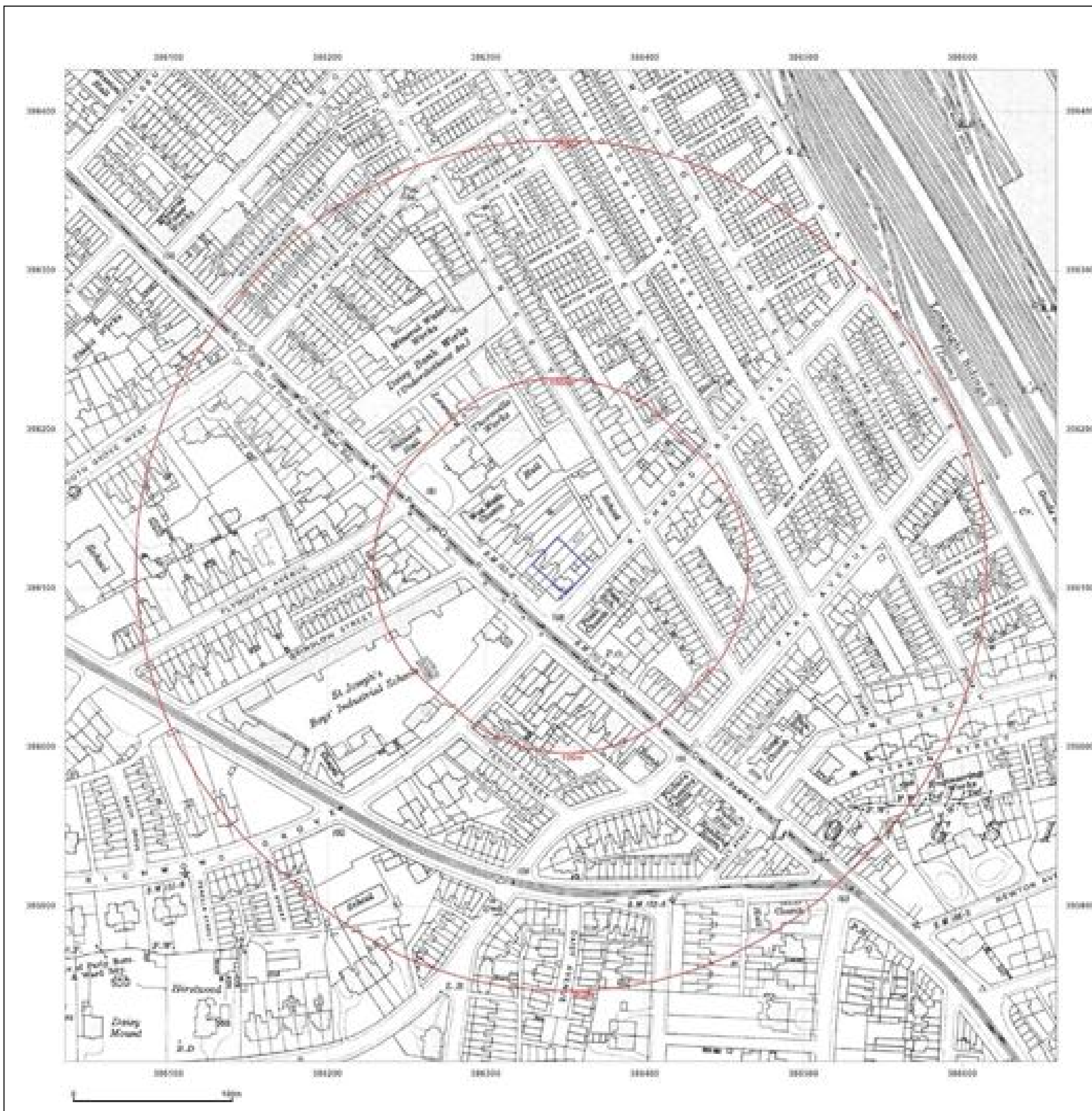


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Site Details:

351, STOCKPORT ROAD,
MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: County Series

Map date: 1933

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1873
Revised 1933
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Site Details:

351, STOCKPORT ROAD,
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Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1949

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1949
Revised 1949
Edition N/A
Copyright 1950
Levelled 1929

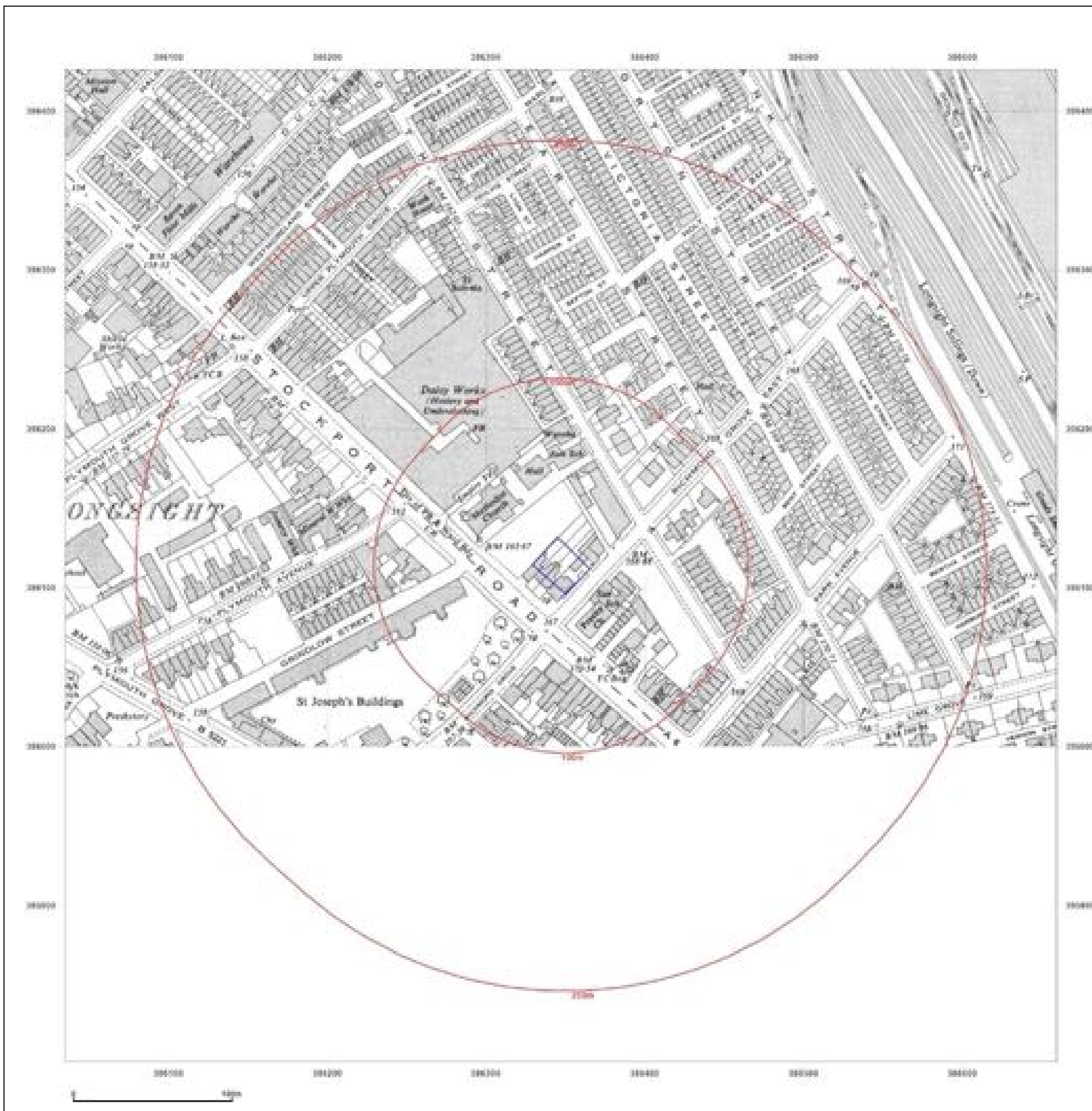


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Site Details:

351, STOCKPORT ROAD,
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Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1949-1950

Scale: 1:1,250

Printed at: 1:2,000



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Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1950-1951

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1949
Revised N/A
Edition N/A
Copyright 1951
Levelled N/A

Surveyed 1950
Revised 1950
Edition N/A
Copyright 1951
Levelled 1949

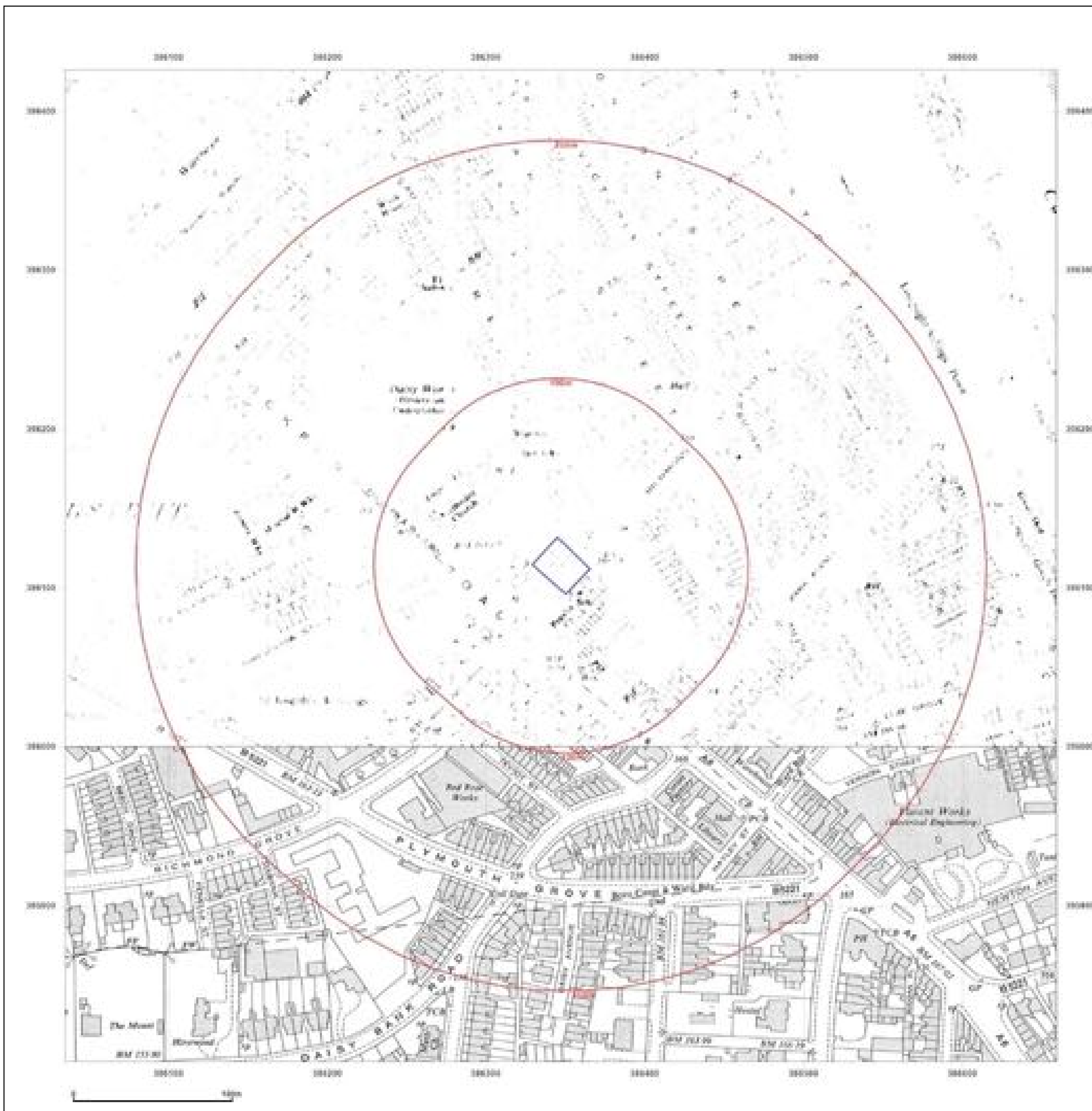


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Site Details:

351, STOCKPORT ROAD,
MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1960

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1960
Revised 1960
Edition N/A
Copyright 1964
Levelled 1959

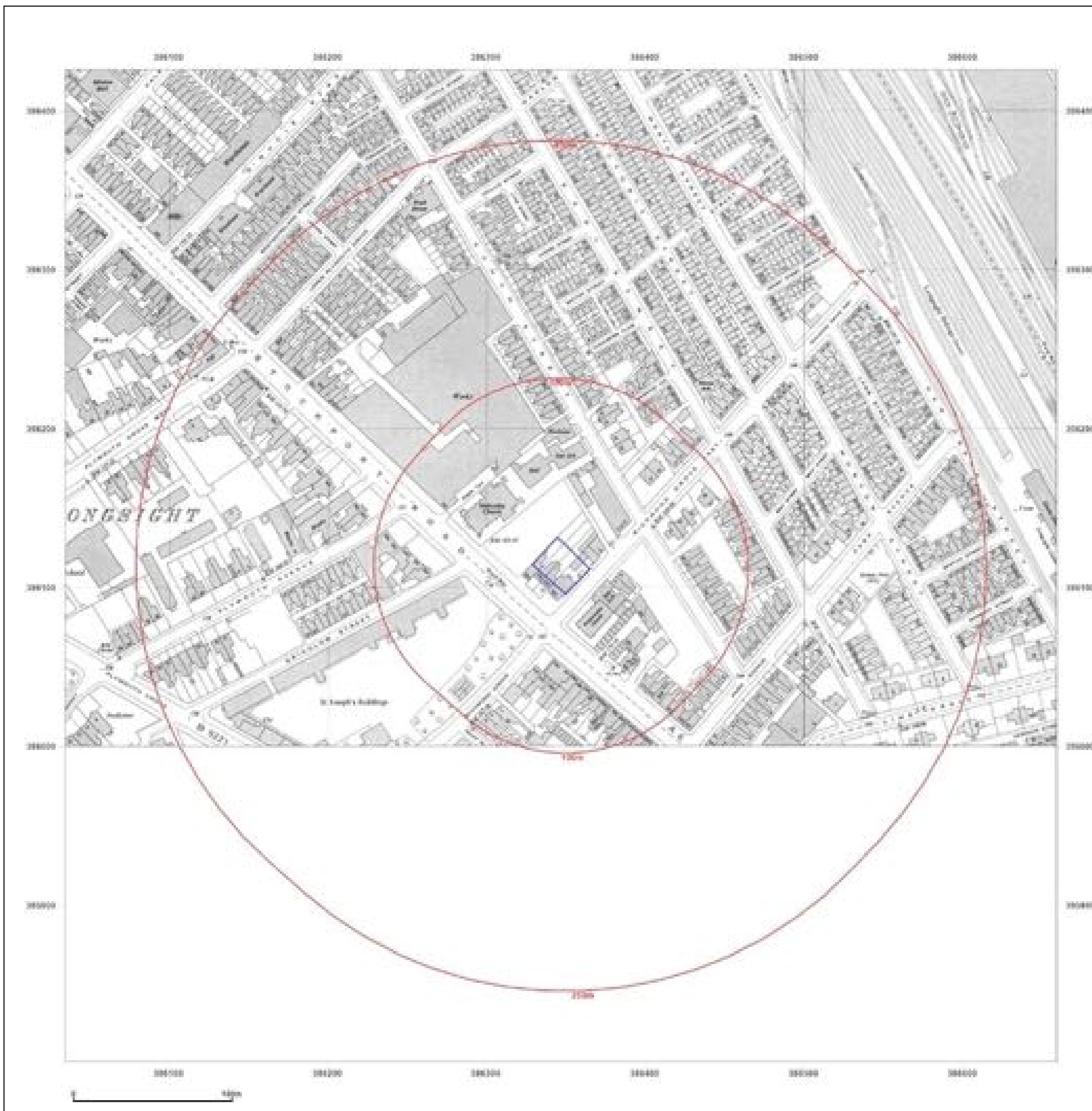


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Site Details:

351, STOCKPORT ROAD,
MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1972-1976

Scale: 1:1,250

Printed at: 1:2,000



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Surveyed 1950 Revised 1971 Edition N/A Copyright 1972 Levelled 1964	Surveyed 1950 Revised 1975 Edition 1976 Copyright 1951 Levelled 1948



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Site Details:

351, STOCKPORT ROAD,
MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1978-1979

Scale: 1:1,250

Printed at: 1:2,000



Surveyed N/A Revised N/A Edition N/A Copyright 1978 Levelled N/A	
Surveyed N/A Revised N/A Edition N/A Copyright 1979 Levelled 1964	Surveyed N/A Revised N/A Edition N/A Copyright 1979 Levelled 1964

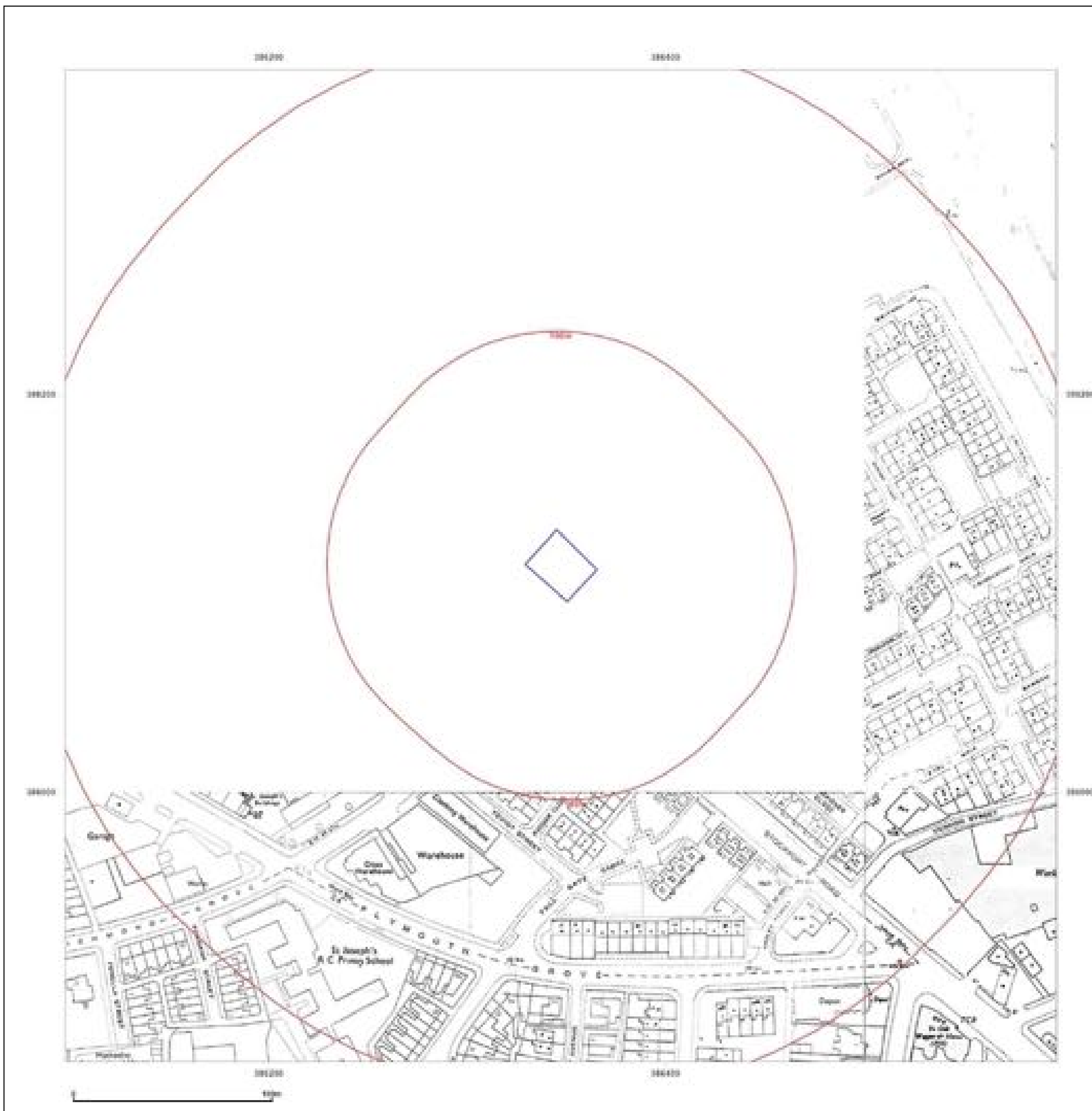


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Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1991

Scale: 1:1,250

Printed at: 1:2,000



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Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1991-1992

Scale: 1:1,250

Printed at: 1:2,000



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Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1991-1993

Scale: 1:1,250

Printed at: 1:2,000



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Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1992-1995

Scale: 1:1,250

Printed at: 1:2,000



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Surveyed 1995 Revised 1995 Edition N/A Copyright 1995 Levelled N/A		Surveyed 1993 Revised 1993 Edition N/A Copyright 1993 Levelled N/A

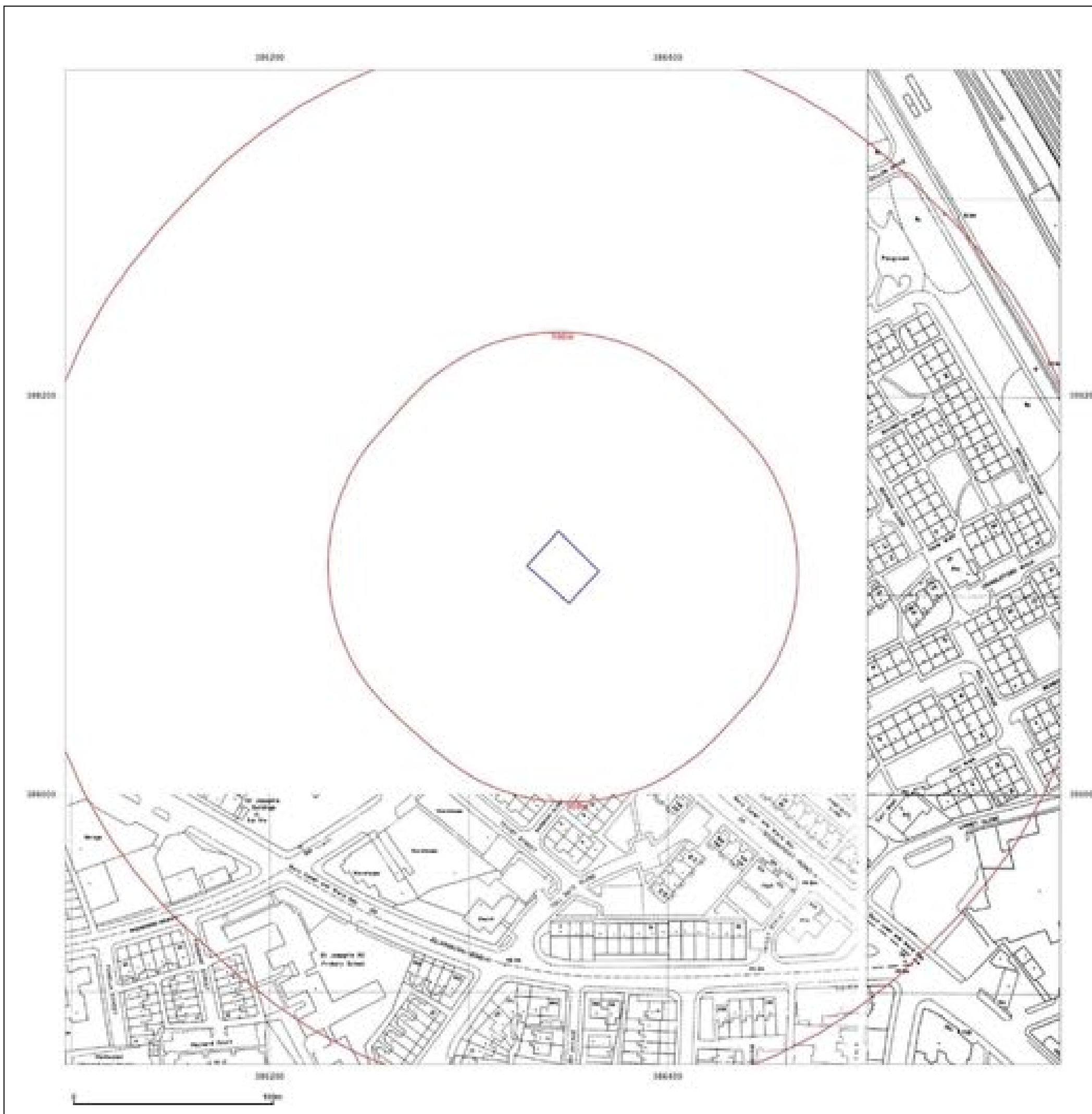


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Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 1994-1995

Scale: 1:1,250

Printed at: 1:2,000



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Surveyed 1995 Revised 1995 Edition N/A Copyright 1995 Levelled N/A	

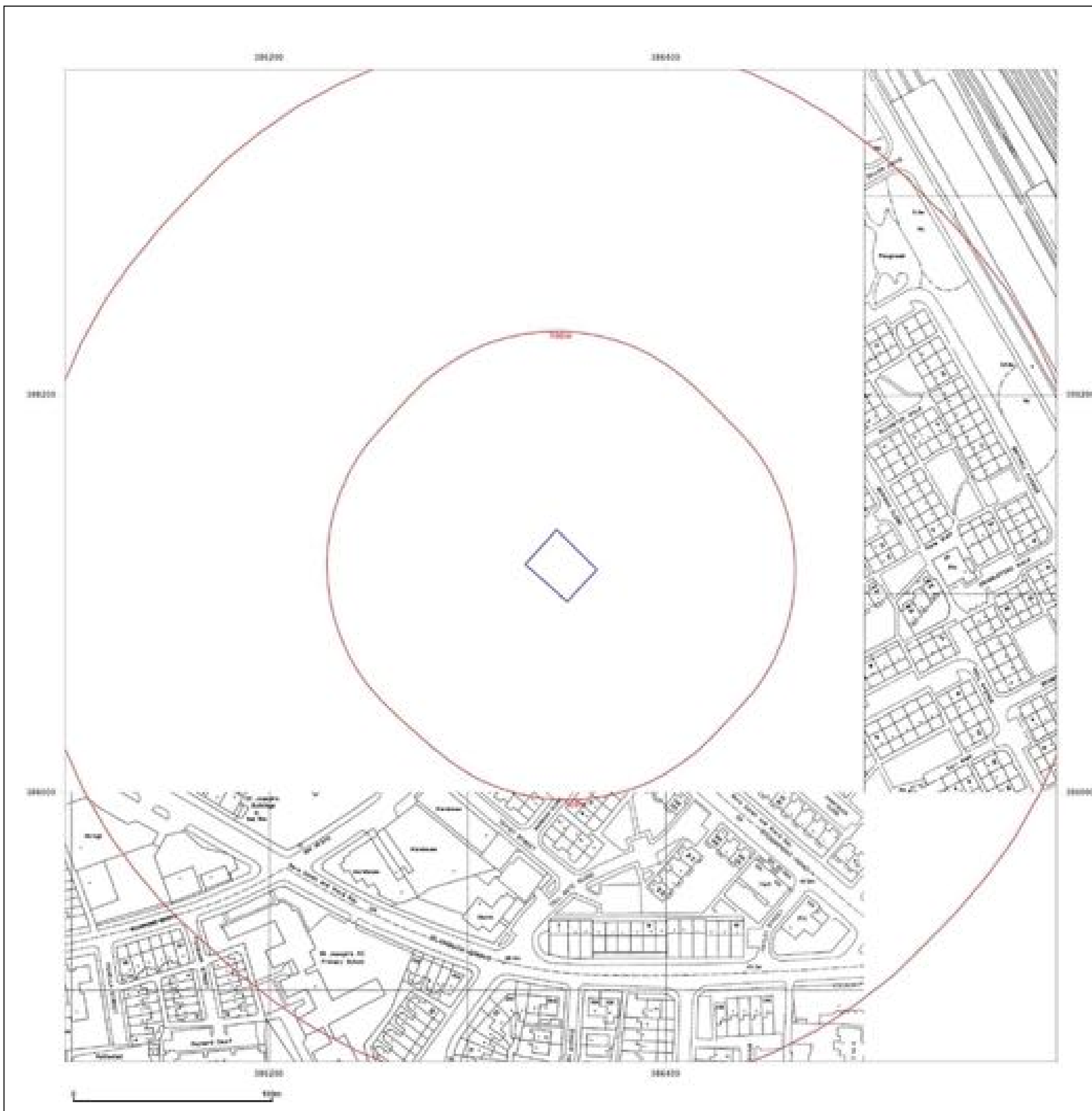


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Site Details:

351, STOCKPORT ROAD,
MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250

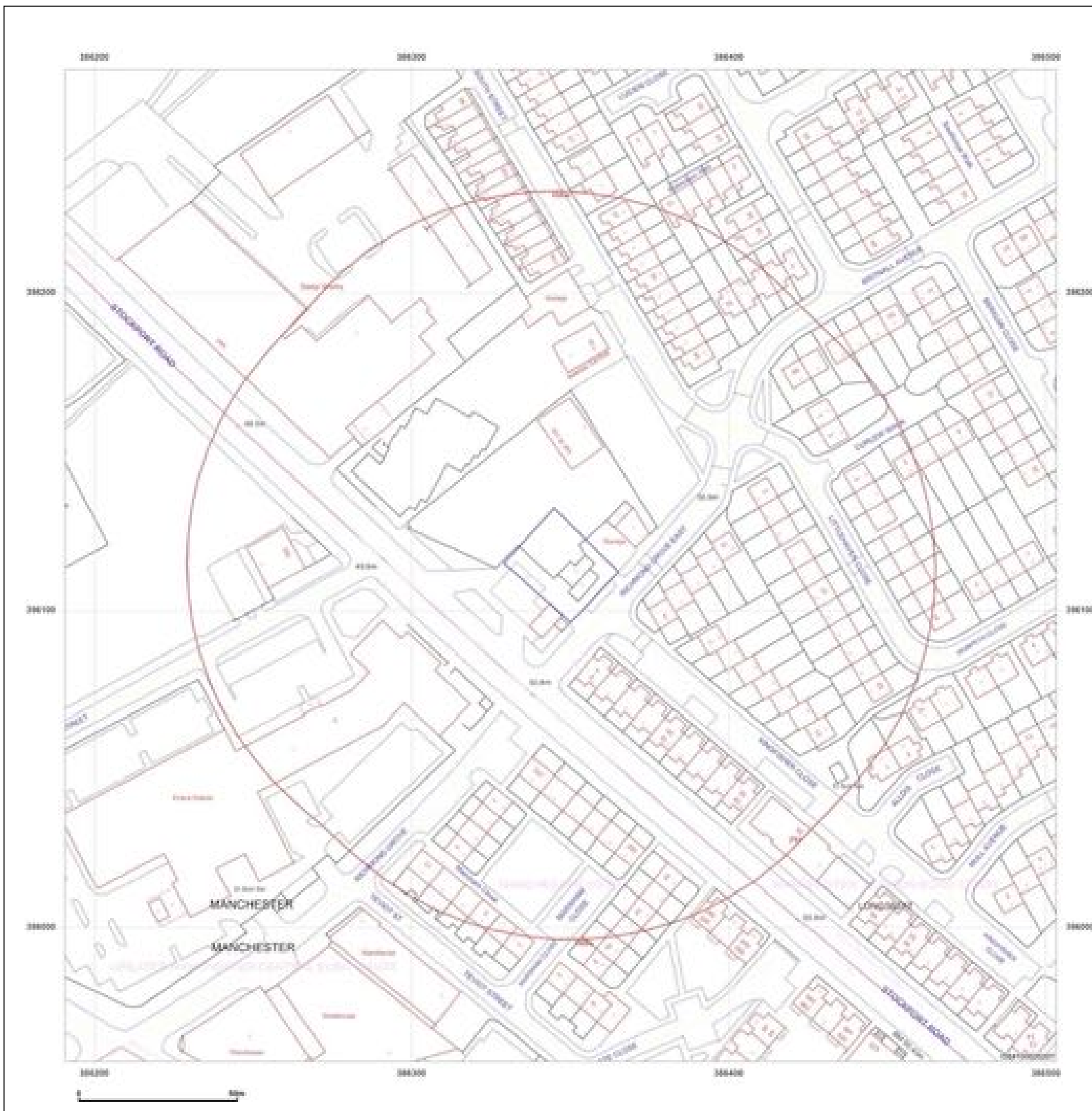


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Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000

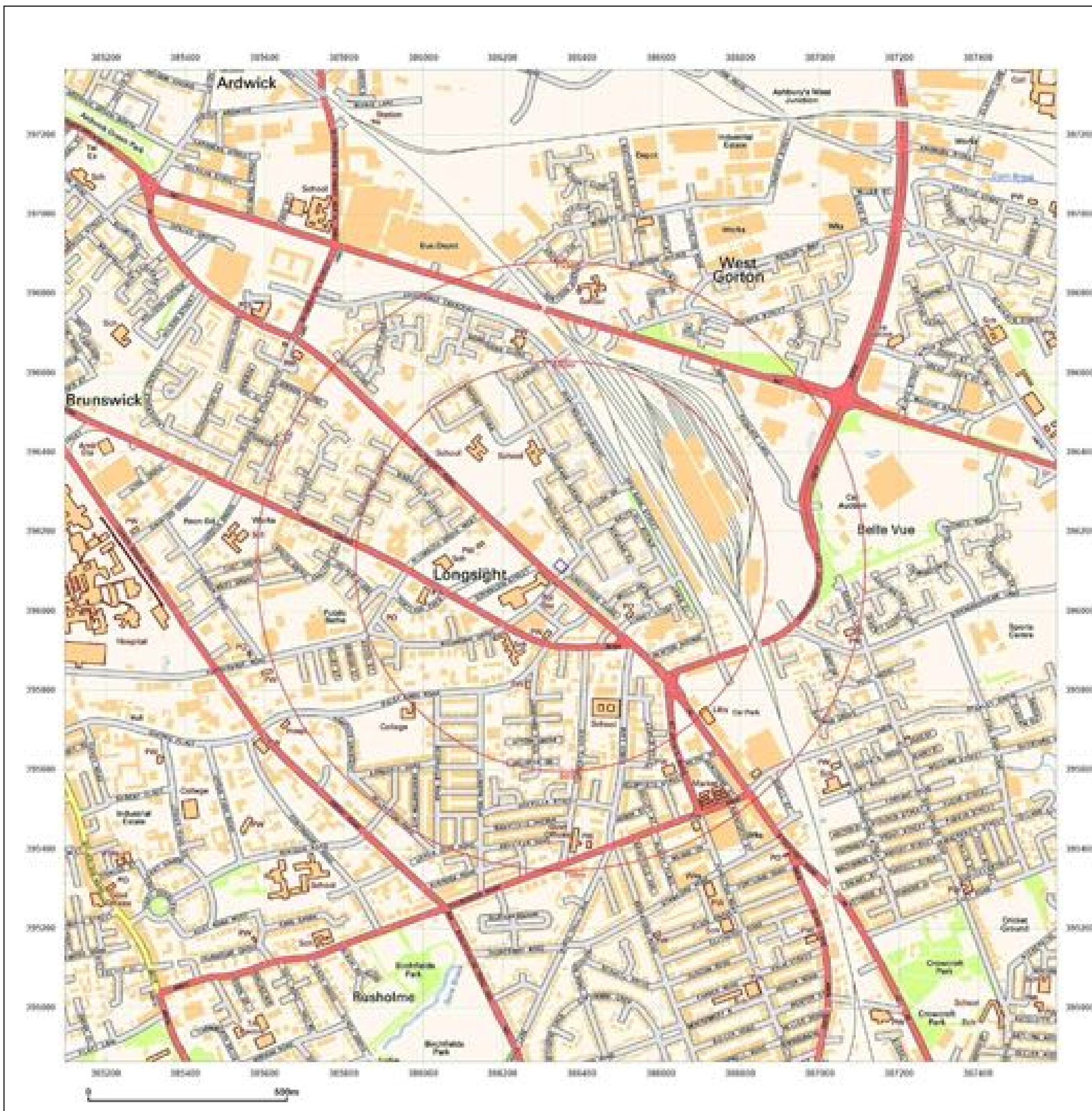


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Site Details:

351, STOCKPORT ROAD,
MANCHESTER, M13 0LF

Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010

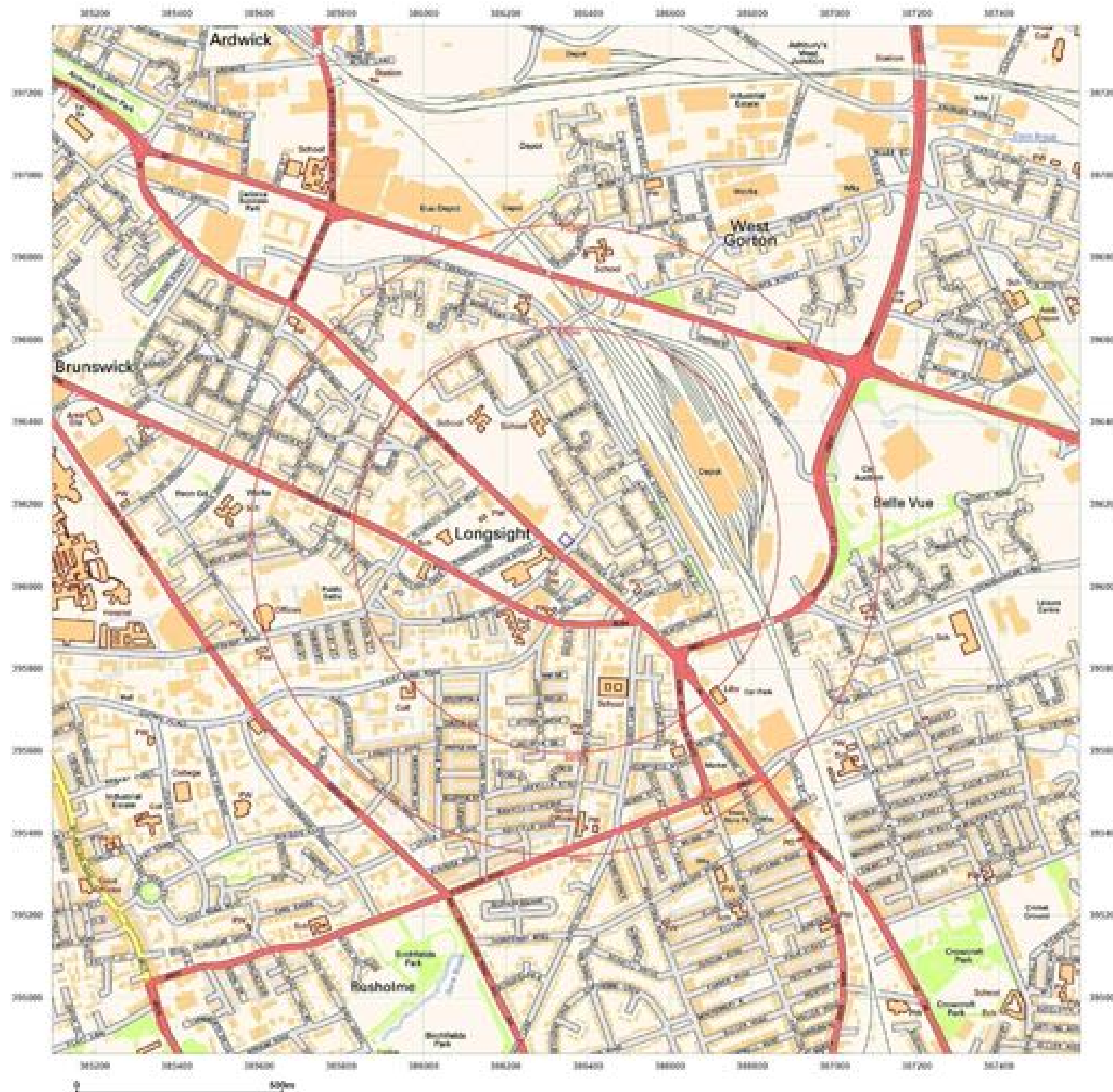


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Client Ref: 7132-21877-J
Report Ref: GS-7961644
Grid Ref: 386347, 396114

Map Name: National Grid

Map date: 2021

Scale: 1:10,000

Printed at: 1:10,000



2021

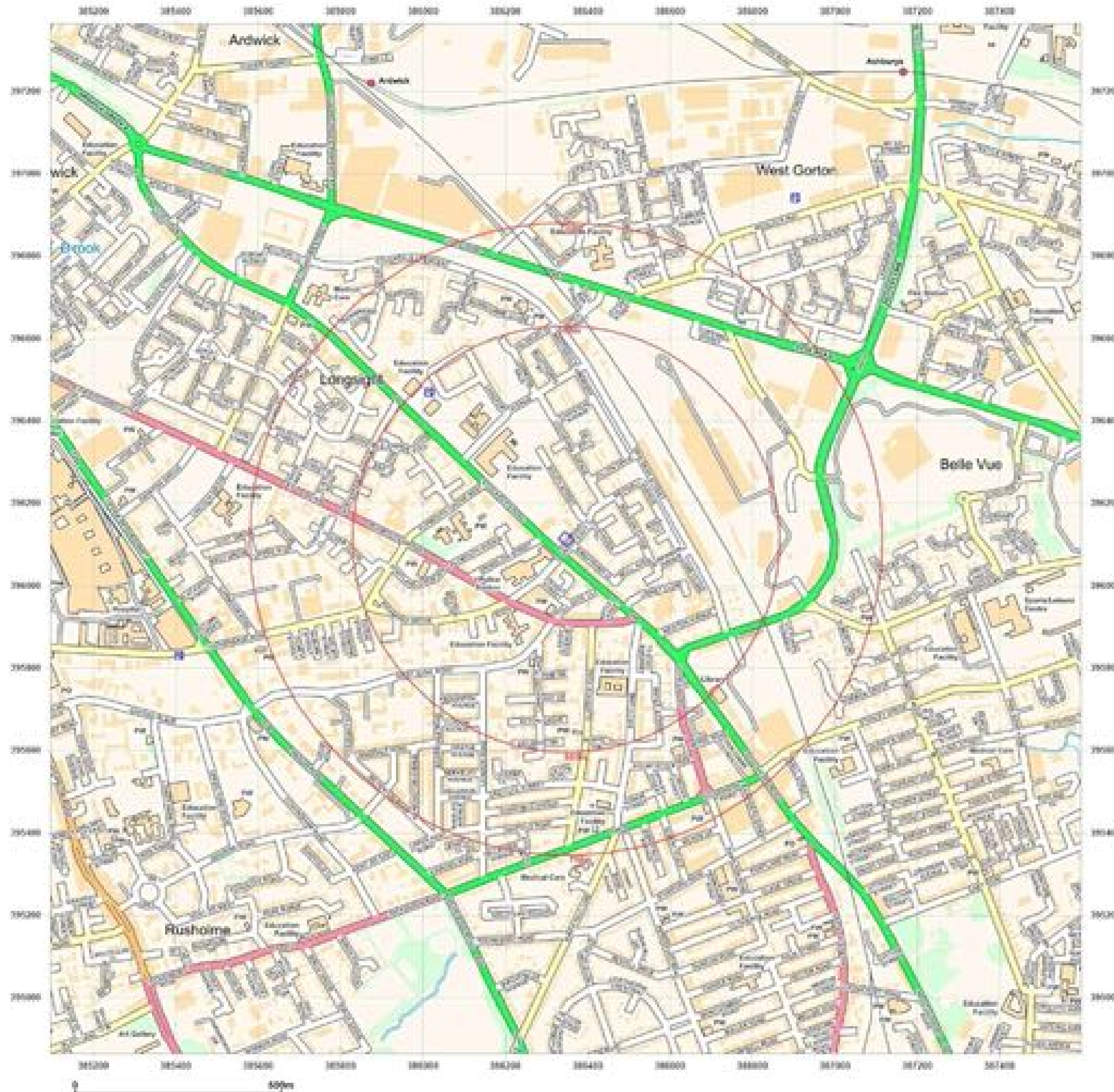


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APPENDIX B

Enviro+GeoInsight Report

351, STOCKPORT ROAD, MANCHESTER, M13 0LF

Order Details

Date: 17/06/2021
Your ref: 7132-21877-J
Our Ref: GS-7961645
Client: bek enviro ltd

Site Details

Location: 386350 396114
Area: 0.06 ha
Authority: [Manchester City Council](#)



Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

p.12

groundsure.com/insightuserguide

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
<u>13</u>	<u>1.1</u>	<u>Historical industrial land uses</u>	0	3	16	82	-
<u>17</u>	<u>1.2</u>	<u>Historical tanks</u>	0	0	0	16	-
<u>18</u>	<u>1.3</u>	<u>Historical energy features</u>	0	0	7	18	-
19	1.4	Historical petrol stations	0	0	0	0	-
<u>20</u>	<u>1.5</u>	<u>Historical garages</u>	3	0	3	10	-
21	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
<u>22</u>	<u>2.1</u>	<u>Historical industrial land uses</u>	0	3	21	110	-
<u>27</u>	<u>2.2</u>	<u>Historical tanks</u>	0	0	0	29	-
<u>29</u>	<u>2.3</u>	<u>Historical energy features</u>	0	0	15	28	-
30	2.4	Historical petrol stations	0	0	0	0	-
<u>31</u>	<u>2.5</u>	<u>Historical garages</u>	4	0	6	15	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
33	3.1	Active or recent landfill	0	0	0	0	-
33	3.2	Historical landfill (BGS records)	0	0	0	0	-
34	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
34	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
<u>34</u>	<u>3.5</u>	<u>Historical waste sites</u>	0	0	0	6	-
35	3.6	Licensed waste sites	0	0	0	0	-
<u>35</u>	<u>3.7</u>	<u>Waste exemptions</u>	0	0	1	1	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
<u>36</u>	<u>4.1</u>	<u>Recent industrial land uses</u>	0	6	6	-	-
<u>37</u>	<u>4.2</u>	<u>Current or recent petrol stations</u>	0	1	1	0	-
38	4.3	Electricity cables	0	0	0	0	-
38	4.4	Gas pipelines	0	0	0	0	-
38	4.5	Sites determined as Contaminated Land	0	0	0	0	-



38	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
38	4.7	Regulated explosive sites	0	0	0	0	-
39	4.8	Hazardous substance storage/usage	0	0	0	0	-
39	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
39	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
39	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	1	0	4	-
40	4.12	Radioactive Substance Authorisations	0	0	0	0	-
40	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
40	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
41	4.15	Pollutant release to public sewer	0	0	0	0	-
41	4.16	List 1 Dangerous Substances	0	0	0	0	-
41	4.17	List 2 Dangerous Substances	0	0	0	0	-
41	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	0	2	-
42	4.19	Pollution inventory substances	0	0	0	0	-
42	4.20	Pollution inventory waste transfers	0	0	0	0	-
42	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
43	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
44	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
46	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
47	5.4	<u>Groundwater vulnerability- soluble rock risk</u>	Identified (within 0m)				
47	5.5	Groundwater vulnerability- local information	None (within 0m)				
48	5.6	<u>Groundwater abstractions</u>	0	0	0	0	9
51	5.7	Surface water abstractions	0	0	0	0	0
51	5.8	Potable abstractions	0	0	0	0	0
51	5.9	Source Protection Zones	0	0	0	0	-
52	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
53	6.1	Water Network (OS MasterMap)	0	0	0	-	-



53	6.2	Surface water features	0	0	0	-	-
54	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
54	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
55	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
56	7.1	Risk of Flooding from Rivers and Sea (RoFRaS)	None (within 50m)				
56	7.2	Historical Flood Events	0	0	0	-	-
56	7.3	Flood Defences	0	0	0	-	-
56	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
57	7.5	Flood Storage Areas	0	0	0	-	-
58	7.6	Flood Zone 2	None (within 50m)				
58	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
59	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.1m - 0.3m (within 50m)				
Page	Section	Groundwater flooding					
61	9.1	<u>Groundwater flooding</u>	Moderate (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
62	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
62	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
62	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
62	10.4	Special Protection Areas (SPA)	0	0	0	0	0
63	10.5	National Nature Reserves (NNR)	0	0	0	0	0
63	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
63	10.7	Designated Ancient Woodland	0	0	0	0	0
63	10.8	Biosphere Reserves	0	0	0	0	0
64	10.9	Forest Parks	0	0	0	0	0
64	10.10	Marine Conservation Zones	0	0	0	0	0
64	10.11	Green Belt	0	0	0	0	0
64	10.12	Proposed Ramsar sites	0	0	0	0	0



64	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
65	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
65	10.15	Nitrate Sensitive Areas	0	0	0	0	0
65	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
66	<u>10.17</u>	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
67	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
68	11.1	World Heritage Sites	0	0	0	-	-
69	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
69	11.3	National Parks	0	0	0	-	-
69	<u>11.4</u>	<u>Listed Buildings</u>	0	0	1	-	-
70	11.5	Conservation Areas	0	0	0	-	-
70	11.6	Scheduled Ancient Monuments	0	0	0	-	-
70	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
71	<u>12.1</u>	<u>Agricultural Land Classification</u>	Urban (within 250m)				
72	12.2	Open Access Land	0	0	0	-	-
72	12.3	Tree Felling Licences	0	0	0	-	-
72	12.4	Environmental Stewardship Schemes	0	0	0	-	-
72	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
73	<u>13.1</u>	<u>Priority Habitat Inventory</u>	0	0	1	-	-
74	13.2	Habitat Networks	0	0	0	-	-
74	13.3	Open Mosaic Habitat	0	0	0	-	-
74	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
75	<u>14.1</u>	<u>10k Availability</u>	Identified (within 500m)				
76	<u>14.2</u>	<u>Artificial and made ground (10k)</u>	0	0	3	2	-
78	<u>14.3</u>	<u>Superficial geology (10k)</u>	1	0	0	0	-



79	14.4	Landslip (10k)	0	0	0	0	-
80	14.5	<u>Bedrock geology (10k)</u>	2	0	2	5	-
81	14.6	<u>Bedrock faults and other linear features (10k)</u>	1	0	1	1	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
82	15.1	<u>50k Availability</u>	Identified (within 500m)				
83	15.2	Artificial and made ground (50k)	0	0	0	0	-
83	15.3	Artificial ground permeability (50k)	0	0	-	-	-
84	15.4	<u>Superficial geology (50k)</u>	1	0	0	0	-
85	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
85	15.6	Landslip (50k)	0	0	0	0	-
85	15.7	Landslip permeability (50k)	None (within 50m)				
86	15.8	<u>Bedrock geology (50k)</u>	2	0	2	5	-
87	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
87	15.10	<u>Bedrock faults and other linear features (50k)</u>	1	0	1	1	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
88	16.1	<u>BGS Boreholes</u>	0	0	18	-	-
Page	Section	Natural ground subsidence					
90	17.1	<u>Shrink swell clays</u>	Very low (within 50m)				
91	17.2	<u>Running sands</u>	Very low (within 50m)				
92	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
93	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
94	17.5	<u>Landslides</u>	Very low (within 50m)				
95	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
96	18.1	Natural cavities	0	0	0	0	-
97	18.2	BritPits	0	0	0	0	-
97	18.3	<u>Surface ground workings</u>	0	0	2	-	-
97	18.4	Underground workings	0	0	0	0	0
97	18.5	Historical Mineral Planning Areas	0	0	0	0	-



98	18.6	Non-coal mining	0	0	0	0	0
98	18.7	Mining cavities	0	0	0	0	0
98	18.8	<u>JPB mining areas</u>	Identified (within 0m)				
98	18.9	<u>Coal mining</u>	Identified (within 0m)				
99	18.10	Brine areas	None (within 0m)				
99	18.11	Gypsum areas	None (within 0m)				
99	18.12	Tin mining	None (within 0m)				
99	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
100	19.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
101	20.1	<u>BGS Estimated Background Soil Chemistry</u>	2	1	-	-	-
101	20.2	<u>BGS Estimated Urban Soil Chemistry</u>	2	4	-	-	-
102	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
103	21.1	Underground railways (London)	0	0	0	-	-
103	21.2	Underground railways (Non-London)	0	0	0	-	-
104	21.3	Railway tunnels	0	0	0	-	-
104	21.4	<u>Historical railway and tunnel features</u>	0	0	18	-	-
105	21.5	Royal Mail tunnels	0	0	0	-	-
105	21.6	Historical railways	0	0	0	-	-
105	21.7	Railways	0	0	0	-	-
105	21.8	Crossrail 1	0	0	0	0	-
106	21.9	Crossrail 2	0	0	0	0	-
106	21.10	HS2	0	0	0	0	-



Recent aerial photograph



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Capture Date: 22/04/2019

Site Area: 0.06ha



Recent site history - 2015 aerial photograph



Capture Date: 11/06/2015

Site Area: 0.06ha



Recent site history - 2009 aerial photograph



Capture Date: 02/06/2009

Site Area: 0.06ha



Recent site history - 2000 aerial photograph



Capture Date: 19/06/2000

Site Area: 0.06ha



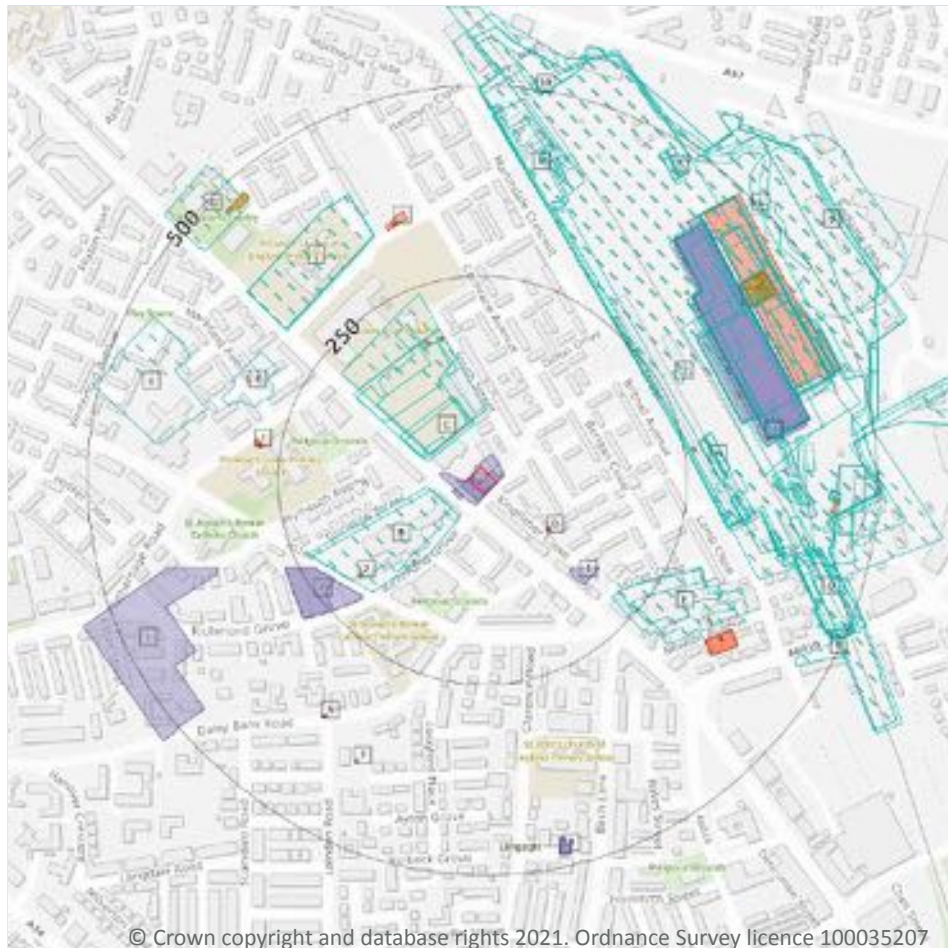
OS MasterMap site plan



Site Area: 0.06ha



1 Past land use



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

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1.1 Historical industrial land uses

Records within 500m

101

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
B	42m SW	Industrial Schools	1923	810529



ID	Location	Land use	Dates present	Group ID
B	43m SW	Industrial School	1915	833221
C	49m NW	Unspecified Works	1923	846835
C	53m NW	Unspecified Works	1978	873225
C	55m NW	Unspecified Works	1968	865723
C	55m NW	Unspecified Works	1915	978273
C	56m NW	Unspecified Works	1934 - 1938	855501
C	118m NW	Unspecified Works	1915 - 1923	879723
C	177m NW	Unspecified Depot	1978	818415
F	214m SE	Unspecified Works	1968	982550
F	214m SE	Unspecified Works	1978	921889
F	237m SE	Unspecified Works	1985 - 1991	857941
G	238m NE	Railway Sidings	1905	926388
G	238m NE	Railway Sidings	1934 - 1938	846711
G	238m NE	Railway Sidings	1915	877097
G	239m NE	Railway Sidings	1890	965072
G	241m NE	Railway Sidings	1923	864851
G	244m NE	Coal and Mineral Yard	1956 - 1968	905157
G	244m NE	Railway Sidings	1956 - 1978	936874
G	257m NE	Railway Sidings	1985 - 1991	935022
H	270m E	Goods Shed	1915 - 1938	859033
3	272m NE	Railway Building	1985 - 1991	851232
H	273m E	Railway Building	1890 - 1905	956105
4	277m NW	Unspecified Works	1915	830415
H	277m E	Goods Depot	1956	827991
H	279m E	Railway Building	1968	859188
H	288m E	Railway Building	1968	924351
H	299m E	Railway Building	1934	901797
H	301m E	Railway Building	1915	973325



ID	Location	Land use	Dates present	Group ID
H	308m E	Railway Building	1985	970986
H	308m E	Railway Building	1934	908345
H	308m E	Railway Building	1905 - 1915	958861
J	308m NW	Unspecified Works	1905 - 1915	975686
H	308m E	Railway Building	1890	947296
J	310m NW	Unspecified Commercial/Industrial	1923	796809
J	310m NW	Unspecified Works	1934	912690
H	311m E	Railway Building	1956 - 1968	854821
G	312m NE	Carriage and Engine Works	1851	810038
G	321m NE	Carriage Shed	1905	863440
G	321m NE	Engine Sheds	1890	833304
K	328m NE	Railway Sidings	1851	946744
G	333m NE	Carriage Shed	1915 - 1938	891037
G	341m NE	Carriage Shed	1978	917624
G	343m NE	Carriage Shed	1956 - 1968	957874
M	347m N	Railway Buildings	1890 - 1905	928727
G	351m NE	Carriage Shed	1985 - 1991	855512
M	351m N	Unspecified Commercial/Industrial	1923 - 1934	937217
6	355m W	Nursery	1851	831876
K	362m E	Railway Building	1934	910725
K	362m E	Railway Building	1915	936741
K	365m E	Railway Building	1934	908687
K	366m E	Railway Building	1915	917587
K	367m E	Railway Buildings	1956	833661
K	368m E	Railway Building	1923	881987
K	371m E	Railway Building	1978	882426
K	375m E	Railway Building	1968 - 1978	908096
K	382m E	Railway Building	1934	914226



ID	Location	Land use	Dates present	Group ID
K	382m E	Railway Building	1915	937461
K	388m E	Railway Building	1985	861162
K	388m E	Railway Building	1923	966418
M	389m N	Railway Building	1890	820467
G	399m NE	Engine Shed	1934 - 1938	918924
G	399m NE	Engine Shed	1915	931434
G	400m NE	Engine Shed	1923	888894
G	400m NE	Engine Shed	1905	922423
O	402m E	Railway Stations	1905	814476
O	403m E	Railway Station	1915 - 1923	973631
M	405m N	Railway Building	1985 - 1991	938150
G	406m NE	Engine Shed	1956 - 1968	888766
O	406m E	Railway Station	1890	858979
K	409m E	Railway Building	1890	820454
M	409m N	Railway Building	1890 - 1978	975813
G	412m NE	Railway Building	1968	820465
G	412m NE	Railway Buildings	1956	833662
O	418m E	Railway Station	1934 - 1938	869790
G	420m NE	Railway Building	1890	820466
O	422m E	Railway Station	1956	852523
G	423m NE	Engine Shed	1985	897967
G	423m NE	Engine Shed	1991	989370
O	424m E	Railway Station	1968	898946
K	436m E	Railway Building	1934	959600
K	436m E	Railway Building	1915	976534
K	436m E	Railway Building	1905	862302
K	441m E	Railway Building	1923	867684
K	447m E	Railway Building	1978	882619



ID	Location	Land use	Dates present	Group ID
P	450m NE	Railway Building	1923	984113
K	451m E	Railway Buildings	1968	833683
G	451m NE	Engine Shed	1978	955034
G	453m NE	Railway Building	1968	820455
P	453m NE	Railway Building	1934	978248
P	454m NE	Railway Building	1905	968317
8	455m SE	Cuttings	1851	795821
Q	457m NW	Brewery	1915 - 1923	963544
P	460m NE	Railway Building	1956 - 1968	889614
K	469m E	Railway Building	1991	853011
9	471m NE	Unspecified Commercial/Industrial	1978	796811
G	471m NE	Railway Building	1923	820464
G	471m NE	Railway Buildings	1985 - 1991	986837
S	483m NE	Railway Building	1968 - 1978	887522
S	483m NE	Unspecified Ground Workings	1905	800650
10	492m N	Railway Building	1923	820468

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

16

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
F	329m SE	Tanks	1950	107100
G	335m E	Unspecified Tank	1981 - 1994	126170



ID	Location	Land use	Dates present	Group ID
G	350m NE	Unspecified Tank	1949 - 1960	134271
G	351m NE	Unspecified Tank	1949	135996
7	386m SW	Unspecified Tank	1933	115796
G	409m NE	Gas Works	1949	145454
G	427m NE	Gasometer	1893 - 1933	126586
G	429m NE	Tanks	1981 - 1988	128293
G	431m NE	Unspecified Tank	1949	115799
G	434m NE	Gasometer	1949	108522
G	434m NE	Unspecified Tank	1949 - 1960	128016
K	440m E	Unspecified Tank	1949 - 1960	133344
G	444m NE	Unspecified Tank	1949	115805
Q	463m NW	Tanks	1949	122912
Q	463m NW	Tanks	1949 - 1960	125221
Q	468m NW	Tanks	1949	143538

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

25

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

Features are displayed on the Past land use map on **page 13**

ID	Location	Land use	Dates present	Group ID
D	90m SE	Electricity Substation	1991 - 1999	79654
D	91m SE	Electricity Transformer	1976	63778
B	125m SW	Electricity Substation	1999	62163
C	173m NW	Electricity Substation	1949 - 1976	64757



ID	Location	Land use	Dates present	Group ID
C	173m N	Electricity Substation	1991	67834
C	173m N	Electricity Substation	1999	74096
2	184m SW	Electricity Substation	1979 - 1995	80292
H	259m E	Electricity Substation	1994	62167
I	274m W	Electricity Substation	1976	78899
I	274m W	Electricity Substation	1999	74146
I	275m W	Electricity Substation	1991	80912
L	333m N	Electricity Substation	1999	68265
L	335m N	Electricity Substation	1976 - 1991	74895
F	343m SE	Electricity Substation	1950	64578
F	344m SE	Electricity Substation	1979	70640
N	356m SW	Electricity Transformer	1972 - 1992	78828
F	357m SE	Electricity Substation	1983	73883
N	358m SW	Electricity Substation	1995	62165
F	358m SE	Electricity Substation	1996	75556
F	358m SE	Electricity Substation	1993	81099
F	358m SE	Electricity Substation	1993	83762
G	407m NE	Power Depot	1949	63697
G	409m NE	Gas Works	1949	82782
G	427m NE	Gasometer	1893 - 1933	82926
G	434m NE	Gasometer	1949	59715

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

16

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	On site	Garage	1999	21254
A	On site	Garage	1976	23388
A	On site	Garage	1991	27184
1	149m SE	Garage	1972	20307
E	206m SW	Garage	1991 - 1995	26329
E	219m SW	Garage	1972 - 1979	25559
G	320m NE	Carriage Shed	1893 - 1908	25140
G	336m NE	Carriage Shed	1922 - 1933	26877
G	336m NE	Carriage Shed	1949	22452
G	336m NE	Carriage Shed	1949 - 1960	26762
G	340m NE	Carriage Shed	1988	21461
G	342m NE	Carriage Shed	1981	22063
5	349m W	Garage	1991	20312
R	461m S	Garage	1979 - 1992	25607
R	461m S	Garage	1972	22965
R	464m S	Garage	1995	23250

This data is sourced from Ordnance Survey / Groundsure.



1.6 Historical military land

Records within 500m

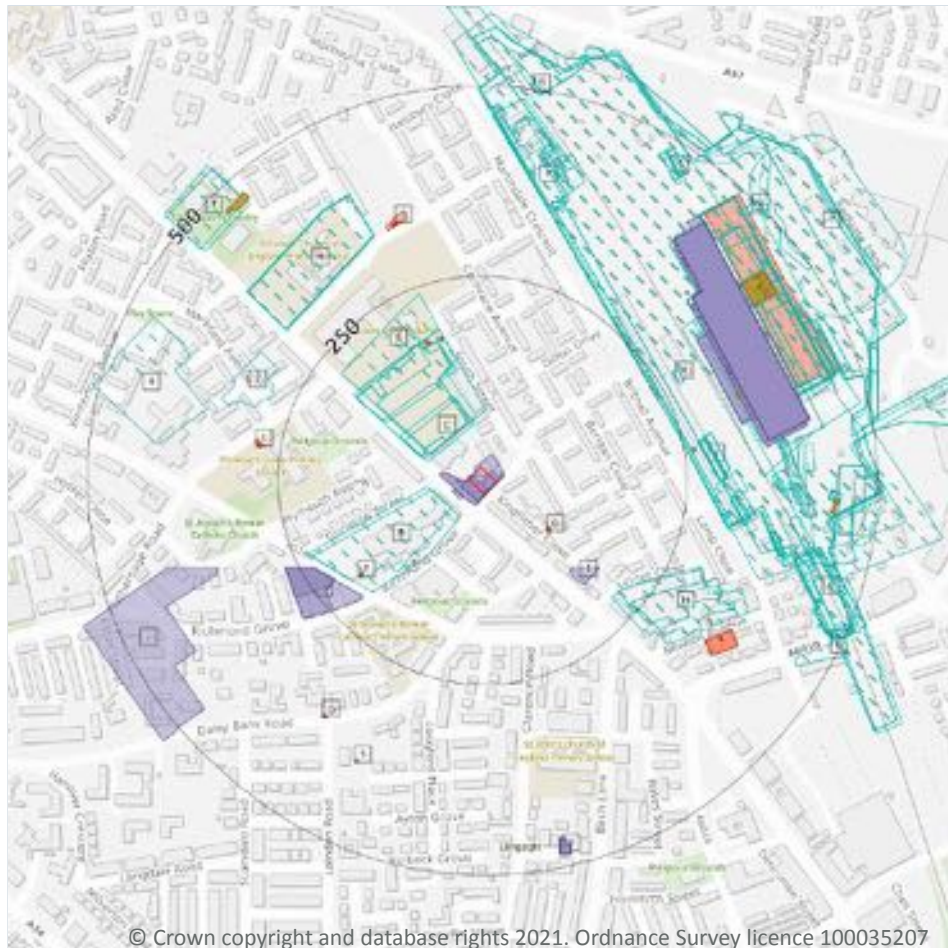
0

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

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2.1 Historical industrial land uses

Records within 500m

134

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 22**

ID	Location	Land Use	Date	Group ID
B	42m SW	Industrial Schools	1923	810529
B	43m SW	Industrial School	1915	833221
C	49m NW	Unspecified Works	1923	846835



ID	Location	Land Use	Date	Group ID
C	53m NW	Unspecified Works	1978	873225
C	55m NW	Unspecified Works	1968	865723
C	55m NW	Unspecified Works	1915	978273
C	56m NW	Unspecified Works	1938	855501
C	56m NW	Unspecified Works	1934	855501
C	118m NW	Unspecified Works	1923	879723
C	124m NW	Unspecified Works	1915	879723
E	177m NW	Unspecified Depot	1978	818415
H	214m SE	Unspecified Works	1968	982550
H	214m SE	Unspecified Works	1978	921889
H	237m SE	Unspecified Works	1985	857941
H	237m SE	Unspecified Works	1991	857941
I	238m NE	Railway Sidings	1905	926388
I	238m NE	Railway Sidings	1938	846711
I	238m NE	Railway Sidings	1934	846711
I	238m NE	Railway Sidings	1915	877097
I	239m NE	Railway Sidings	1890	965072
I	241m NE	Railway Sidings	1923	864851
I	244m NE	Railway Sidings	1956	936874
I	244m NE	Coal and Mineral Yard	1956	905157
I	244m NE	Railway Sidings	1968	936874
I	257m NE	Railway Sidings	1985	935022
I	257m NE	Railway Sidings	1978	936874
I	257m NE	Railway Sidings	1991	935022
J	270m E	Goods Shed	1938	859033
J	270m E	Goods Shed	1934	859033
J	270m E	Goods Shed	1915	859033
J	270m E	Goods Shed	1923	859033



ID	Location	Land Use	Date	Group ID
K	272m NE	Railway Building	1985	851232
K	272m NE	Railway Building	1991	851232
J	273m E	Railway Building	1905	956105
J	273m E	Railway Building	1890	956105
2	277m NW	Unspecified Works	1915	830415
J	277m E	Goods Depot	1956	827991
J	279m E	Railway Building	1968	859188
J	288m E	Railway Building	1968	924351
J	299m E	Railway Building	1934	901797
J	301m E	Railway Building	1915	973325
J	308m E	Railway Building	1985	970986
J	308m E	Railway Building	1934	908345
J	308m E	Railway Building	1915	958861
M	308m NW	Unspecified Works	1915	975686
J	308m E	Railway Building	1905	958861
J	308m E	Railway Building	1890	947296
M	310m NW	Unspecified Works	1934	912690
M	310m NW	Unspecified Works	1905	975686
M	310m NW	Unspecified Commercial/Industrial	1923	796809
J	311m E	Railway Building	1956	854821
J	311m E	Railway Building	1968	854821
I	312m NE	Carriage and Engine Works	1851	810038
I	321m NE	Carriage Shed	1905	863440
I	321m NE	Engine Sheds	1890	833304
N	328m NE	Railway Sidings	1851	946744
I	333m NE	Carriage Shed	1938	891037
I	333m NE	Carriage Shed	1934	891037
I	333m NE	Carriage Shed	1915	891037



ID	Location	Land Use	Date	Group ID
I	333m NE	Carriage Shed	1923	891037
I	341m NE	Carriage Shed	1978	917624
I	343m NE	Carriage Shed	1956	957874
I	343m NE	Carriage Shed	1968	957874
P	347m N	Railway Buildings	1890	928727
I	351m NE	Carriage Shed	1985	855512
I	351m NE	Carriage Shed	1991	855512
P	351m N	Unspecified Commercial/Industrial	1923	937217
P	351m N	Unspecified Commercial/Industrial	1934	937217
P	351m N	Railway Buildings	1905	928727
4	355m W	Nursery	1851	831876
N	362m E	Railway Building	1934	910725
N	362m E	Railway Building	1915	936741
N	365m E	Railway Building	1934	908687
N	366m E	Railway Building	1915	917587
N	367m E	Railway Buildings	1956	833661
N	368m E	Railway Building	1923	881987
N	371m E	Railway Building	1978	882426
N	375m E	Railway Building	1978	908096
N	376m E	Railway Building	1968	908096
N	382m E	Railway Building	1934	914226
N	382m E	Railway Building	1915	937461
N	388m E	Railway Building	1985	861162
N	388m E	Railway Building	1923	966418
P	389m N	Railway Building	1890	820467
I	399m NE	Engine Shed	1938	918924
I	399m NE	Engine Shed	1934	918924
I	399m NE	Engine Shed	1915	931434

ID	Location	Land Use	Date	Group ID
I	400m NE	Engine Shed	1905	922423
I	400m NE	Engine Shed	1923	888894
R	402m E	Railway Stations	1905	814476
R	403m E	Railway Station	1915	973631
P	405m N	Railway Building	1985	938150
P	405m N	Railway Building	1991	938150
I	406m NE	Engine Shed	1968	888766
R	406m E	Railway Station	1890	858979
R	408m E	Railway Station	1923	973631
N	409m E	Railway Building	1890	820454
P	409m N	Railway Building	1890	975813
I	410m NE	Engine Shed	1956	888766
P	412m N	Railway Building	1978	975813
I	412m NE	Railway Building	1968	820465
I	412m NE	Railway Buildings	1956	833662
R	418m E	Railway Station	1938	869790
R	418m E	Railway Station	1934	869790
I	420m NE	Railway Building	1890	820466
R	422m E	Railway Station	1956	852523
I	423m NE	Engine Shed	1985	897967
I	423m NE	Engine Shed	1991	989370
R	424m E	Railway Station	1968	898946
N	436m E	Railway Building	1934	959600
N	436m E	Railway Building	1915	976534
N	436m E	Railway Building	1905	862302
N	441m E	Railway Building	1923	867684
N	447m E	Railway Building	1978	882619
S	450m NE	Railway Building	1923	984113



ID	Location	Land Use	Date	Group ID
N	451m E	Railway Buildings	1968	833683
I	451m NE	Engine Shed	1978	955034
I	453m NE	Railway Building	1968	820455
S	453m NE	Railway Building	1934	978248
S	454m NE	Railway Building	1905	968317
6	455m SE	Cuttings	1851	795821
T	457m NW	Brewery	1923	963544
S	460m NE	Railway Building	1968	889614
S	461m NE	Railway Building	1956	889614
T	463m NW	Brewery	1915	963544
N	469m E	Railway Building	1991	853011
7	471m NE	Unspecified Commercial/Industrial	1978	796811
I	471m NE	Railway Buildings	1985	986837
I	471m NE	Railway Buildings	1991	986837
I	471m NE	Railway Building	1923	820464
V	483m NE	Railway Building	1968	887522
V	483m NE	Unspecified Ground Workings	1905	800650
V	486m NE	Railway Building	1978	887522
8	492m N	Railway Building	1923	820468

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

29

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 22**

ID	Location	Land Use	Date	Group ID
H	329m SE	Tanks	1950	107100



ID	Location	Land Use	Date	Group ID
I	335m E	Unspecified Tank	1991	126170
I	335m E	Unspecified Tank	1988	126170
I	336m E	Unspecified Tank	1994	126170
I	336m E	Unspecified Tank	1981	126170
I	350m NE	Unspecified Tank	1949	134271
I	351m NE	Unspecified Tank	1960	134271
I	351m NE	Unspecified Tank	1949	135996
5	386m SW	Unspecified Tank	1933	115796
I	409m NE	Gas Works	1949	145454
I	410m NE	Gas Works	1949	145454
I	427m NE	Gasometer	1933	126586
I	427m NE	Gasometer	1893	126586
I	427m NE	Gasometer	1908	126586
I	427m NE	Gasometer	1922	126586
I	429m NE	Tanks	1988	128293
I	430m NE	Tanks	1981	128293
I	431m NE	Unspecified Tank	1949	115799
I	434m NE	Gasometer	1949	108522
I	434m NE	Unspecified Tank	1949	128016
I	434m NE	Unspecified Tank	1960	128016
N	440m E	Unspecified Tank	1949	133344
N	440m E	Unspecified Tank	1949	133344
N	440m E	Unspecified Tank	1960	133344
I	444m NE	Unspecified Tank	1949	115805
T	463m NW	Tanks	1949	122912
T	463m NW	Tanks	1949	125221
T	463m NW	Tanks	1960	125221
T	468m NW	Tanks	1949	143538

This data is sourced from Ordnance Survey / Groundsure.



2.3 Historical energy features

Records within 500m

43

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 22**

ID	Location	Land Use	Date	Group ID
D	90m SE	Electricity Substation	1999	79654
D	90m SE	Electricity Substation	1991	79654
D	90m SE	Electricity Substation	1991	79654
D	91m SE	Electricity Transformer	1976	63778
B	125m SW	Electricity Substation	1999	62163
E	173m NW	Electricity Substation	1949	64757
E	173m NW	Electricity Substation	1976	64757
E	173m NW	Electricity Substation	1949	64757
E	173m N	Electricity Substation	1991	67834
E	173m N	Electricity Substation	1991	67834
E	173m N	Electricity Substation	1999	74096
F	184m SW	Electricity Substation	1979	80292
F	184m SW	Electricity Substation	1991	80292
F	184m SW	Electricity Substation	1992	80292
F	186m SW	Electricity Substation	1995	80292
J	259m E	Electricity Substation	1994	62167
L	274m W	Electricity Substation	1976	78899
L	274m W	Electricity Substation	1999	74146
L	275m W	Electricity Substation	1991	80912
L	275m W	Electricity Substation	1991	80912
O	333m N	Electricity Substation	1999	68265
O	335m N	Electricity Substation	1976	74895
O	335m N	Electricity Substation	1991	74895



ID	Location	Land Use	Date	Group ID
O	335m N	Electricity Substation	1991	74895
H	343m SE	Electricity Substation	1950	64578
H	344m SE	Electricity Substation	1979	70640
Q	356m SW	Electricity Transformer	1979	78828
Q	356m SW	Electricity Transformer	1991	78828
Q	356m SW	Electricity Transformer	1992	78828
Q	357m SW	Electricity Transformer	1972	78828
H	357m SE	Electricity Substation	1983	73883
Q	358m SW	Electricity Substation	1995	62165
H	358m SE	Electricity Substation	1993	81099
H	358m SE	Electricity Substation	1996	75556
H	358m SE	Electricity Substation	1993	83762
I	407m NE	Power Depot	1949	63697
I	409m NE	Gas Works	1949	82782
I	410m NE	Gas Works	1949	82782
I	427m NE	Gasometer	1933	82926
I	427m NE	Gasometer	1893	82926
I	427m NE	Gasometer	1908	82926
I	427m NE	Gasometer	1922	82926
I	434m NE	Gasometer	1949	59715

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

25

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 22**

ID	Location	Land Use	Date	Group ID
A	On site	Garage	1991	27184
A	On site	Garage	1991	27184
A	On site	Garage	1999	21254
A	On site	Garage	1976	23388
1	149m SE	Garage	1972	20307
G	206m SW	Garage	1995	26329
G	219m SW	Garage	1979	25559
G	219m SW	Garage	1991	26329
G	219m SW	Garage	1992	26329
G	220m SW	Garage	1972	25559
I	320m NE	Carriage Shed	1893	25140
I	320m NE	Carriage Shed	1908	25140
I	336m NE	Carriage Shed	1922	26877
I	336m NE	Carriage Shed	1933	26877
I	336m NE	Carriage Shed	1949	22452
I	336m NE	Carriage Shed	1949	26762
I	336m NE	Carriage Shed	1960	26762
I	340m NE	Carriage Shed	1988	21461
I	342m NE	Carriage Shed	1981	22063
3	349m W	Garage	1991	20312
U	461m S	Garage	1979	25607
U	461m S	Garage	1991	25607
U	461m S	Garage	1992	25607



ID	Location	Land Use	Date	Group ID
U	461m S	Garage	1972	22965
U	464m S	Garage	1995	23250

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



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

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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

6

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 33**

ID	Location	Address	Further Details	Date
A	401m N	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1991
A	401m N	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1993
A	423m N	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1995

ID	Location	Address	Further Details	Date
A	423m N	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1994
A	423m N	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1997
A	423m N	Site Address: N/A	Type of Site: Scrap Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1994

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

2

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.

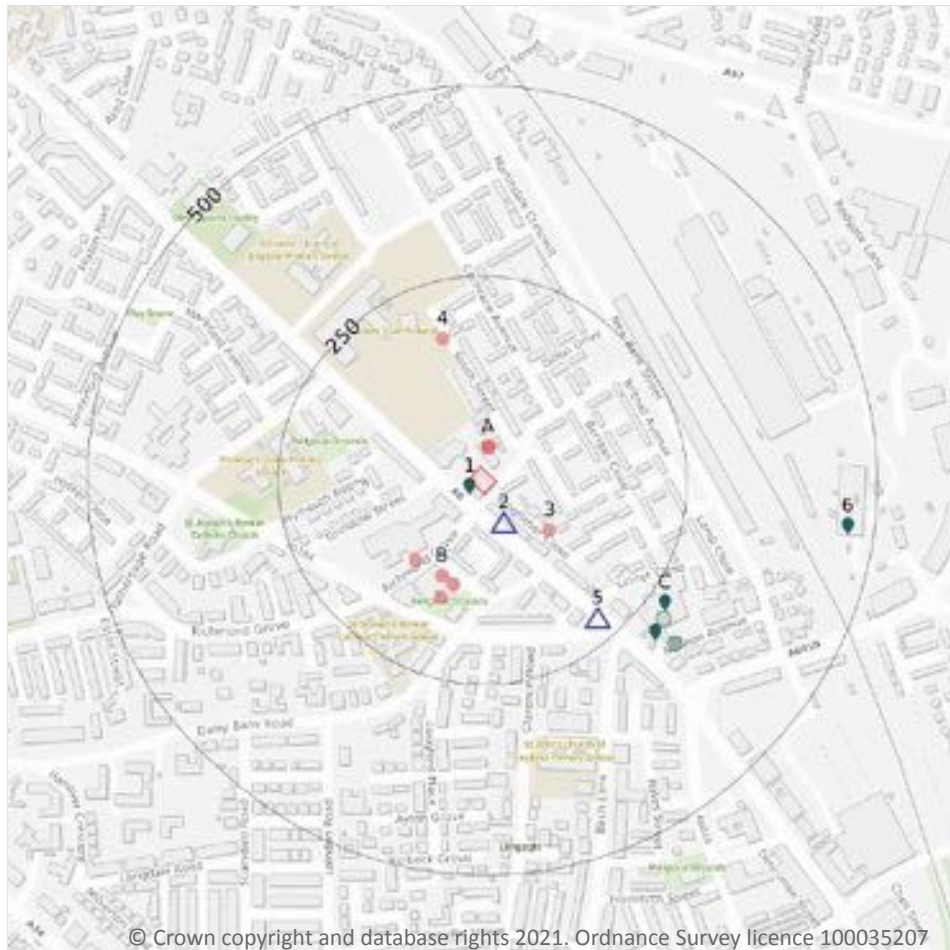
Features are displayed on the Waste and landfill map on **page 33**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	111m NW	-	WEX235976	Using waste exemption	Not on a farm	Use of waste in construction
2	365m NW	St Lukes Primary School Langport Avenue MANCHESTER M12 4NG	EPR/ZH0513JZ /A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste in construction

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)
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

12

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 36**

ID	Location	Company	Address	Activity	Category
A	27m N	Limitless Customs Ltd	351, Stockport Road, Manchester, Greater Manchester, M13 0LF	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	28m N	Brantingham Auto Centre Ltd	351, Stockport Road, Manchester, Greater Manchester, M13 0LF	Vehicle Repair, Testing and Servicing	Repair and Servicing



ID	Location	Company	Address	Activity	Category
A	28m N	Central Auto Clean	351, Stockport Road, Manchester, Greater Manchester, M13 0LF	Vehicle Cleaning Services	Personal, Consumer and Other Services
A	28m N	Kar & Car	351, Stockport Road, Manchester, Greater Manchester, M13 0LF	Vehicle Repair, Testing and Servicing	Repair and Servicing
A	28m N	Manchester Autoz Ltd	351, Stockport Road, Manchester, Greater Manchester, M13 0LF	Secondhand Vehicles	Motoring
A	28m N	Elliotts	351, Stockport Road, Manchester, Greater Manchester, M13 0LF	Vehicle Hire and Rental	Hire Services
3	94m SE	Electricity Sub Station	Greater Manchester, M12	Electrical Features	Infrastructure and Facilities
B	121m SW	Warehouse	Greater Manchester, M13	Container and Storage	Transport, Storage and Delivery
B	125m S	Servis Filmsetting Ltd	Richmond House 11, Richmond Grove, Manchester, Greater Manchester, M13 0LN	Plate Makers, Print Finishers and Type Setters	IT, Advertising, Marketing and Media Services
B	126m SW	Electricity Sub Station	Greater Manchester, M13	Electrical Features	Infrastructure and Facilities
B	148m SW	Dimensions Knitwear Ltd	13-15, Richmond Grove, Manchester, Greater Manchester, M13 0LN	Textiles, Fabrics, Silk and Machinery	Industrial Products
4	175m N	Electricity Sub Station	Greater Manchester, M12	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m

2

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 36**

ID	Location	Company	Address	LPG	Status
2	45m SE	UNBRANDED	353, Stockport Road, Longsight, Manchester, Greater Manchester, M13 0LF	Not Applicable	Obsolete
5	220m SE	HARVEST ENERGY	441, Stockport Road, Manchester, Greater Manchester, M12 4JB	No	Open

This data is sourced from Experian.



4.3 Electricity cables

Records within 500m	0
---------------------	---

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0
---------------------	---

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0
---------------------	---

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0
---------------------	---

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0
---------------------	---

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

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

Records within 500m

5

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 36**

ID	Location	Address	Details	
1	5m SW	Mercury Filling Station, 353 Stockport Road, Longsight, M13 0LF	Process: Unloading of Petrol into Storage at Service Stations Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
C	271m SE	GB Auto's, Unit 10-11 Longsight Industrial Estate, Newton Avenue, M12 4EY	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified



ID	Location	Address	Details	
C	286m SE	Bismi Petroleum, 441 Stockport Road, Longsight, M12 4JB	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
C	316m SE	Kingfisher Serv Stn, Stockport Rd, M12 4JB	Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
6	464m E	Alstom Traincare Centre Manchester, West Coast Traincare, Kirkmanshulme Lane, Longsight, M21 4HR	Process: Respraying of Road Vehicles Status: Current Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m

0

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

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

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

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



4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m

0

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

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

4.17 List 2 Dangerous Substances

Records within 500m

0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m

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 36**

ID	Location	Details	
C	282m SE	Incident Date: 20/05/2002 Incident Identification: 79964 Pollutant: Specific Waste Materials Pollutant Description: Vehicles and Vehicle Parts	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
C	316m SE	Incident Date: 11/08/2002 Incident Identification: 99251 Pollutant: Oils and Fuel Pollutant Description: Petrol	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) 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.

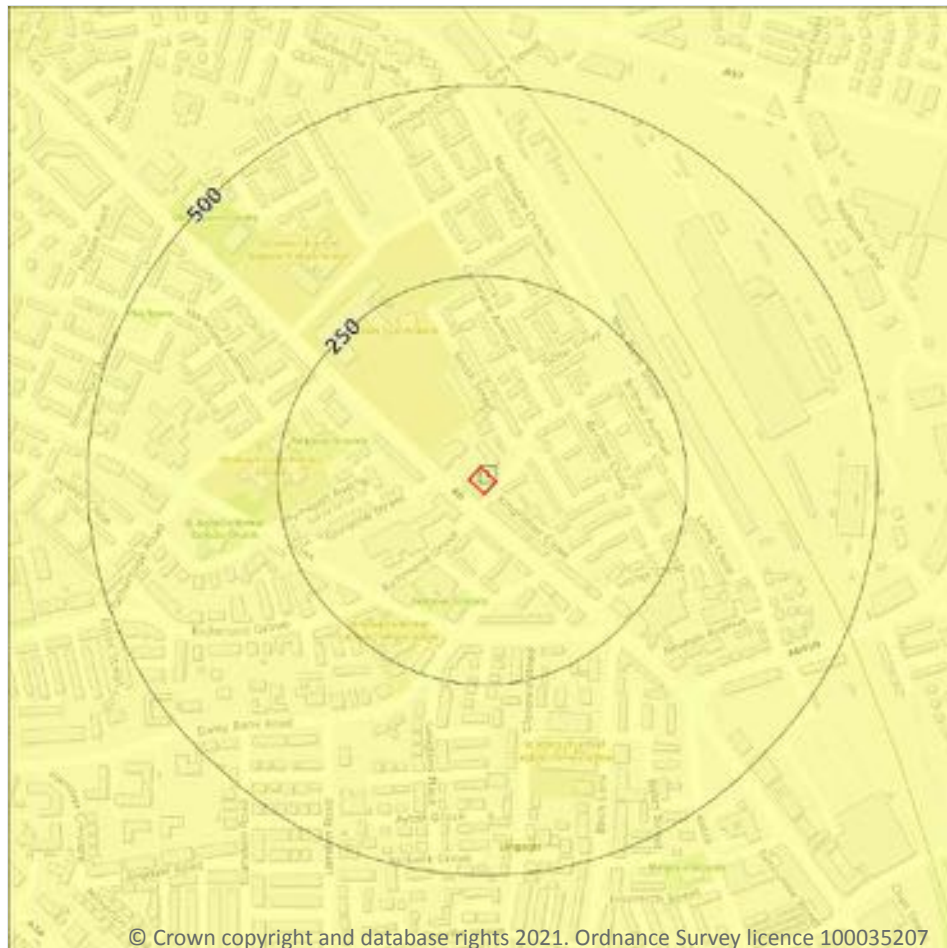
4.21 Pollution inventory radioactive waste

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



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- 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.

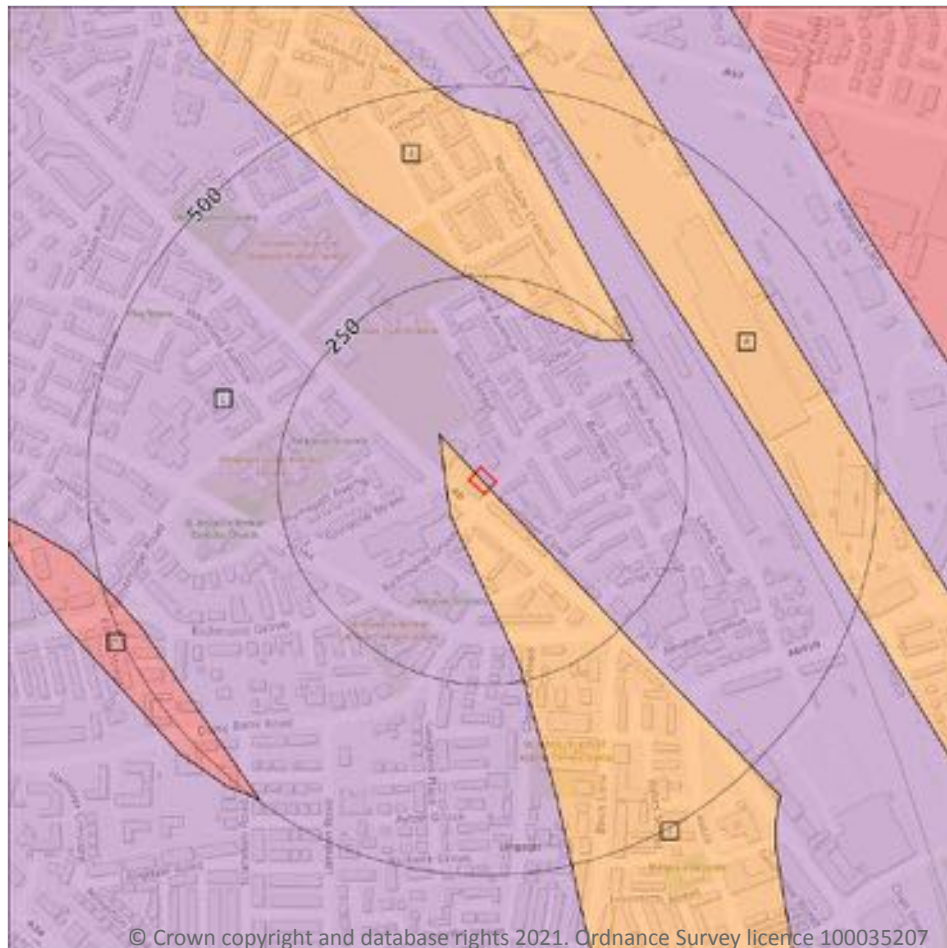
Features are displayed on the Hydrogeology map on **page 43**

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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

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5.2 Bedrock aquifer

Records within 500m

5

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 44**

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
2	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers

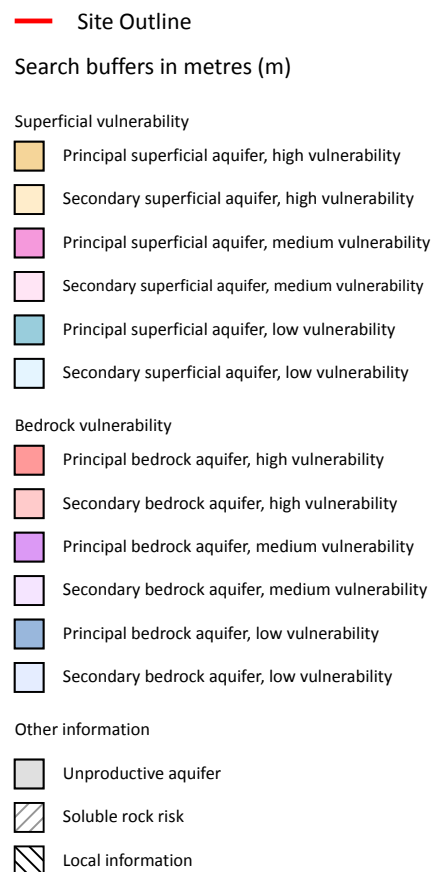


ID	Location	Designation	Description
3	212m N	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
4	322m NE	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
5	464m SW	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.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

2

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 46**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal Flow mechanism: Well connected fractures

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
2	Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.	0.0%

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

5.5 Groundwater vulnerability- local information

Records on site	0
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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

9

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 48**

ID	Location	Details	
1	819m NW	Status: Historical Licence No: NW/069/0004/005 Details: Heat Pump Direct Source: Ground Water - North West Region Point: AREA OF ABSTRACTION - LOWER CARBONIFEROUS LIMESTONE Data Type: Poly4 Name: G T Energy UK Limited Easting: 385729 Northing: 396778	Annual Volume (m ³): 2,049,840 Max Daily Volume (m ³): 8640 Original Application No: - Original Start Date: 17/01/2013 Expiry Date: 16/01/2037 Issue No: 2 Version Start Date: 11/06/2013 Version End Date: -
-	1244m E	Status: Historical Licence No: 2569006042 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: PERMO-TRIASSIC SANDSTONE AT BELLE VUE LEISURE CENTRE Data Type: Point Name: CLIVE BACK Easting: 387590 Northing: 395890	Annual Volume (m ³): 15000 Max Daily Volume (m ³): 276 Original Application No: - Original Start Date: 11/07/2002 Expiry Date: 31/03/2014 Issue No: 3 Version Start Date: 04/02/2009 Version End Date: -
-	1245m E	Status: Historical Licence No: 2569006042 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: PERMO-TRIASSIC SANDSTONE AT BELLE VUE LEISURE CENTRE Data Type: Point Name: CLIVE BACK Easting: 387591 Northing: 395891	Annual Volume (m ³): 10000 Max Daily Volume (m ³): 276 Original Application No: - Original Start Date: 11/07/2002 Expiry Date: 31/03/2014 Issue No: 4 Version Start Date: 29/02/2012 Version End Date: -
-	1245m E	Status: Historical Licence No: NW/069/0006/006 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: PERMO-TRIASSIC SANDSTONE AT BELLE VUE LEISURE CENTRE Data Type: Point Name: The Chief Operating Officer of the Eastlands Trust Easting: 387591 Northing: 395891	Annual Volume (m ³): 8000 Max Daily Volume (m ³): 276 Original Application No: - Original Start Date: 16/05/2014 Expiry Date: 31/03/2016 Issue No: 1 Version Start Date: 16/05/2014 Version End Date: -

ID	Location	Details	
-	1584m E	Status: Historical Licence No: 2569006043 Details: Dust Suppression Direct Source: Ground Water - North West Region Point: PERMO-TRIASSIC SANDSTONE AT BELLE VUE, MANCHESTER Data Type: Point Name: G R A LIMITED Easting: 387950 Northing: 396100	Annual Volume (m ³): 4000 Max Daily Volume (m ³): 22 Original Application No: - Original Start Date: 20/06/2003 Expiry Date: 31/03/2014 Issue No: 2 Version Start Date: 01/04/2008 Version End Date: -
-	1789m NW	Status: Historical Licence No: 2569006001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, BROADIE ST, ARDWICK, MANCHESTER" Data Type: Point Name: MOSELEY RUBBER CO LTD Easting: 385240 Northing: 397540	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: 08/02/1966 Version End Date: -
-	1789m NW	Status: Historical Licence No: 2569006001 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, BROADIE ST, ARDWICK, MANCHESTER Data Type: Point Name: MOSELEY RUBBER CO LTD Easting: 385240 Northing: 397540	Annual Volume (m ³): 331858 Max Daily Volume (m ³): 909.2 Original Application No: - Original Start Date: 08/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/02/1966 Version End Date: -
-	1833m NE	Status: Historical Licence No: 2569006044 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PRESTON STREET, GORTON, MANCHESTER Data Type: Point Name: CEMEX UK MATERIALS LTD Easting: 388030 Northing: 396880	Annual Volume (m ³): 15000 Max Daily Volume (m ³): 115 Original Application No: - Original Start Date: 23/10/2003 Expiry Date: 31/03/2014 Issue No: 3 Version Start Date: 15/10/2007 Version End Date: -



ID	Location	Details	
-	1833m NE	Status: Active Licence No: NW/069/0004/012 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PRESTON STREET, MANCHESTER Data Type: Point Name: Cemex UK Materials Limited Easting: 388030 Northing: 396880	Annual Volume (m ³): 7,500 Max Daily Volume (m ³): 72 Original Application No: - Original Start Date: 19/06/2014 Expiry Date: 31/03/2027 Issue No: 2 Version Start Date: 21/12/2018 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	0
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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.

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

5.8 Potable abstractions

Records within 2000m	0
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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
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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 53**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	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 53**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	3645m 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 53**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
2	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
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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

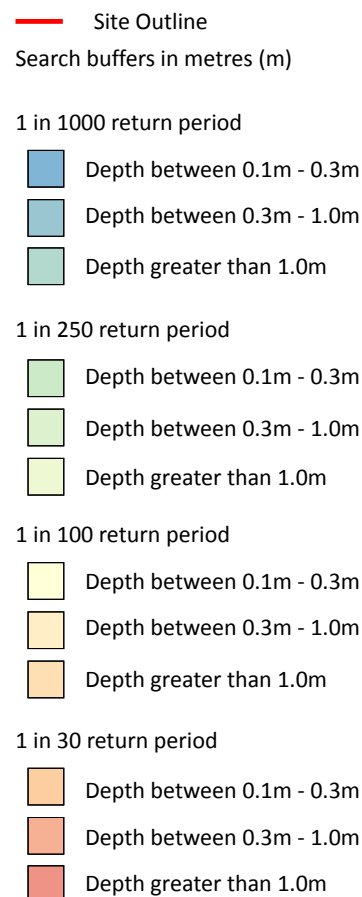
Records within 50m	0
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Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each 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

Negligible

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 59**

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	Negligible
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

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 61**

This data is sourced from Ambiantal 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
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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
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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
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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
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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
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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

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

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

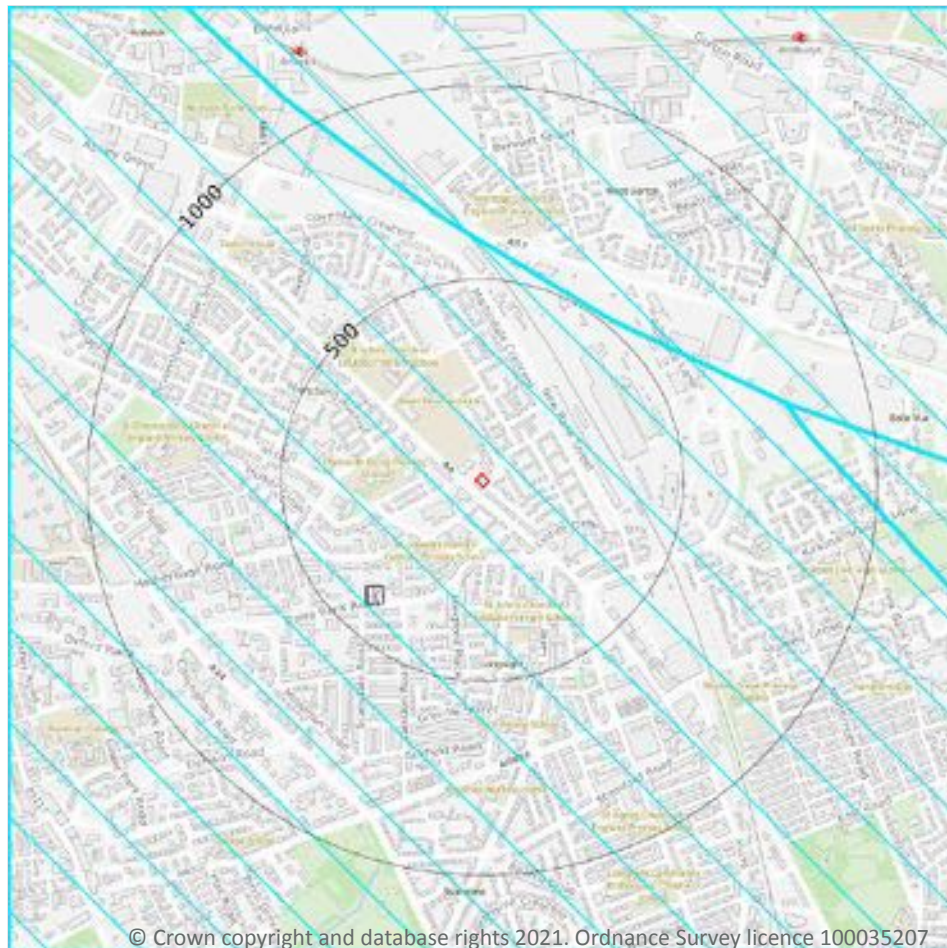
Records within 2000m
0

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



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

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 66**

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

1

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 68**

ID	Location	Name	Grade	Reference Number	Listed date
1	230m NW	Ukranian Club, Ardwick, Manchester, M13	II	1247017	09/04/1982

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

11.5 Conservation Areas

Records within 250m**0**

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.

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

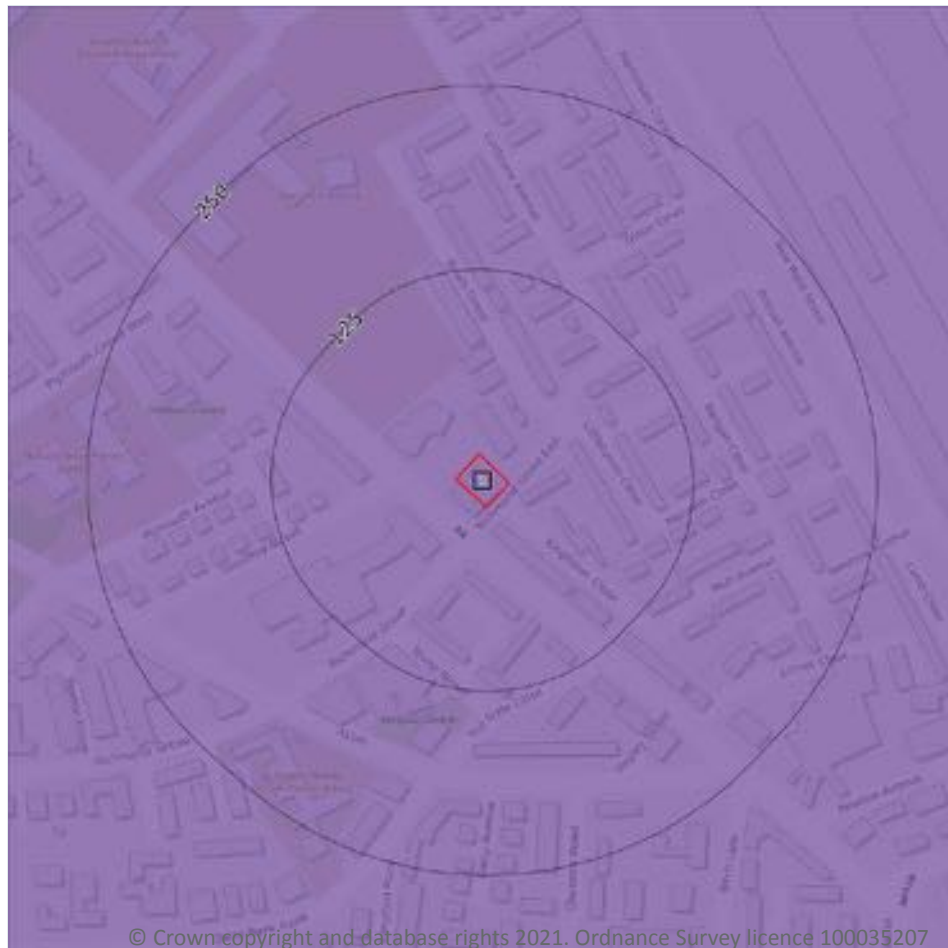
Records within 250m**0**

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 71**

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



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

1

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

Features are displayed on the Habitat designations map on **page 73**

ID	Location	Main Habitat	Other habitats
1	224m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

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

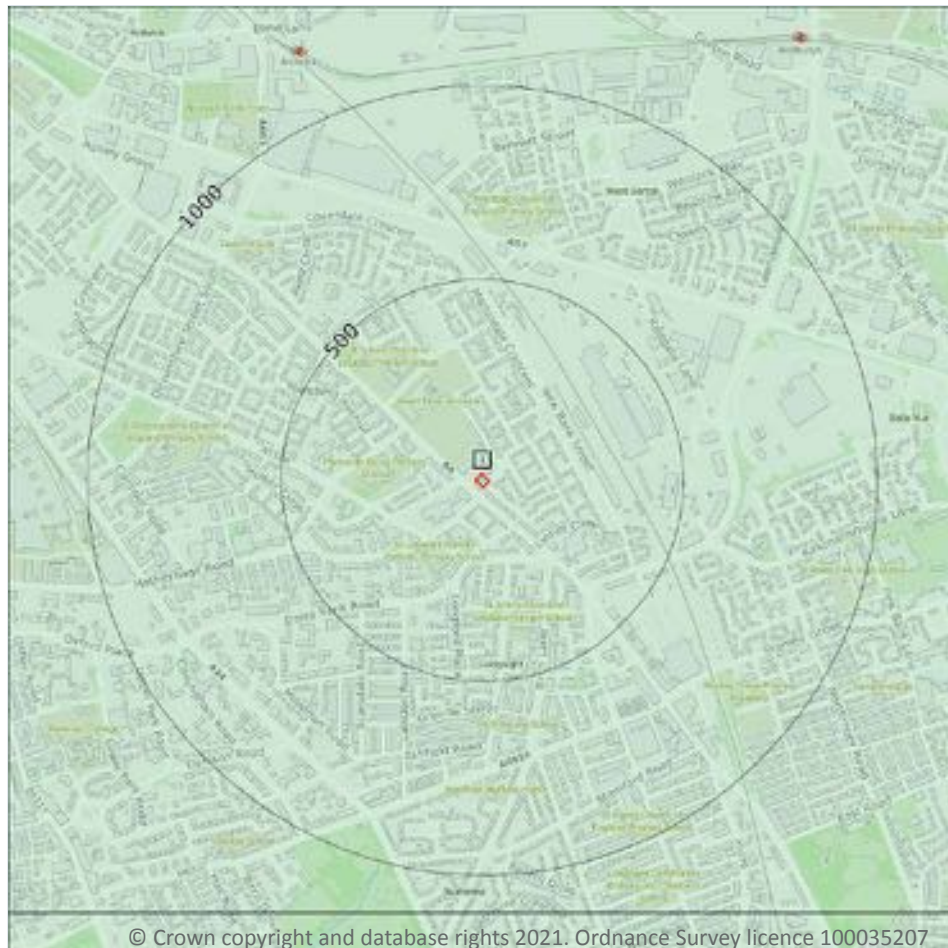
0

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

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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.

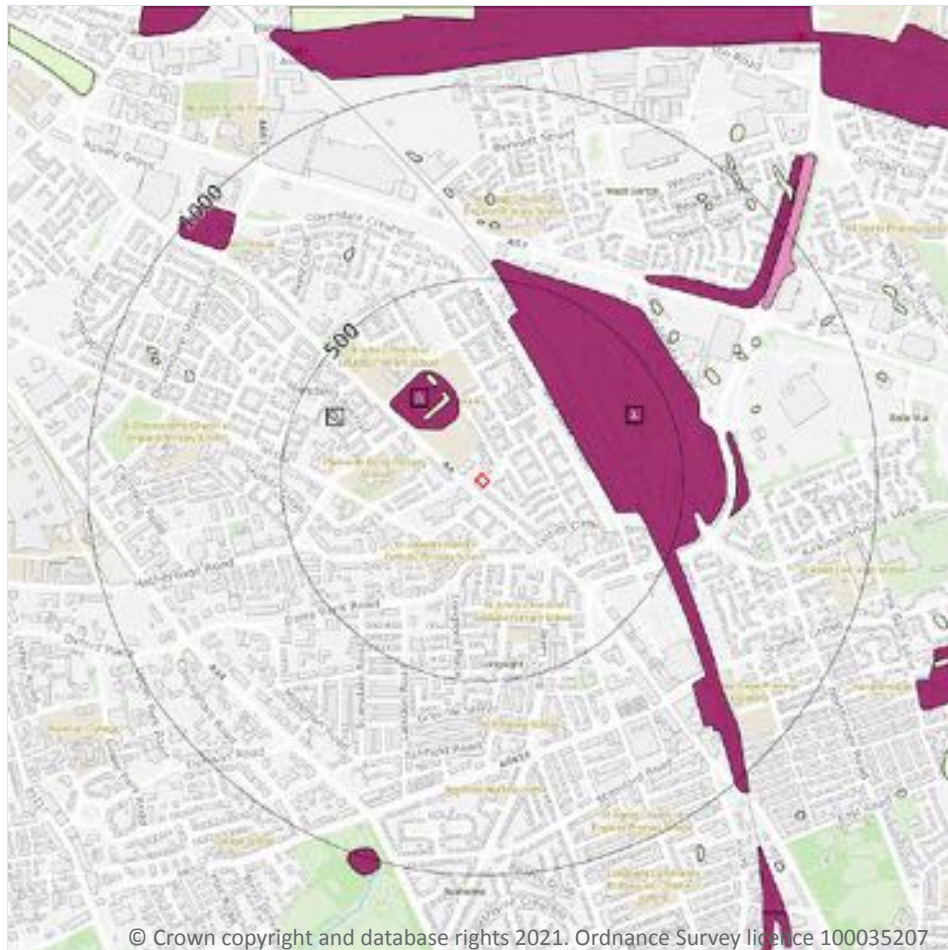
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 75**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	SJ89NE

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

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14.2 Artificial and made ground (10k)

Records within 500m

5

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 76**

ID	Location	LEX Code	Description	Rock description
A	152m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	195m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit
1	245m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	253m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit

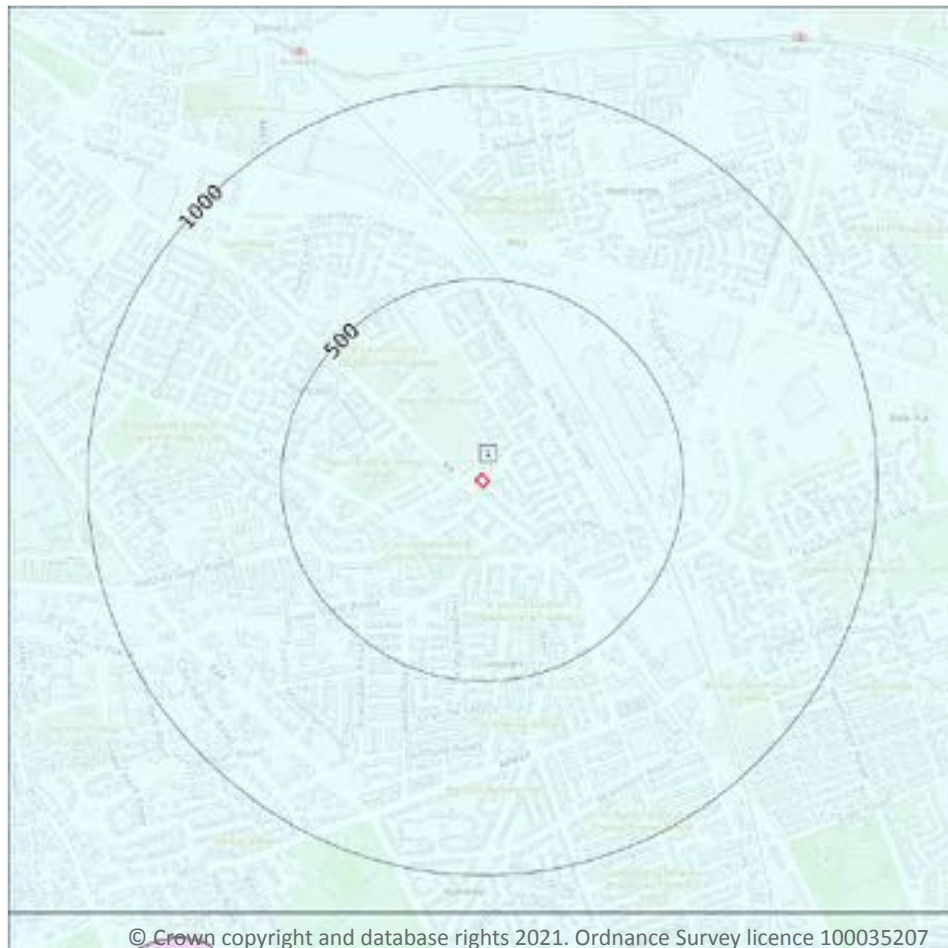


ID	Location	LEX Code	Description	Rock description
2	379m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit

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 78**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

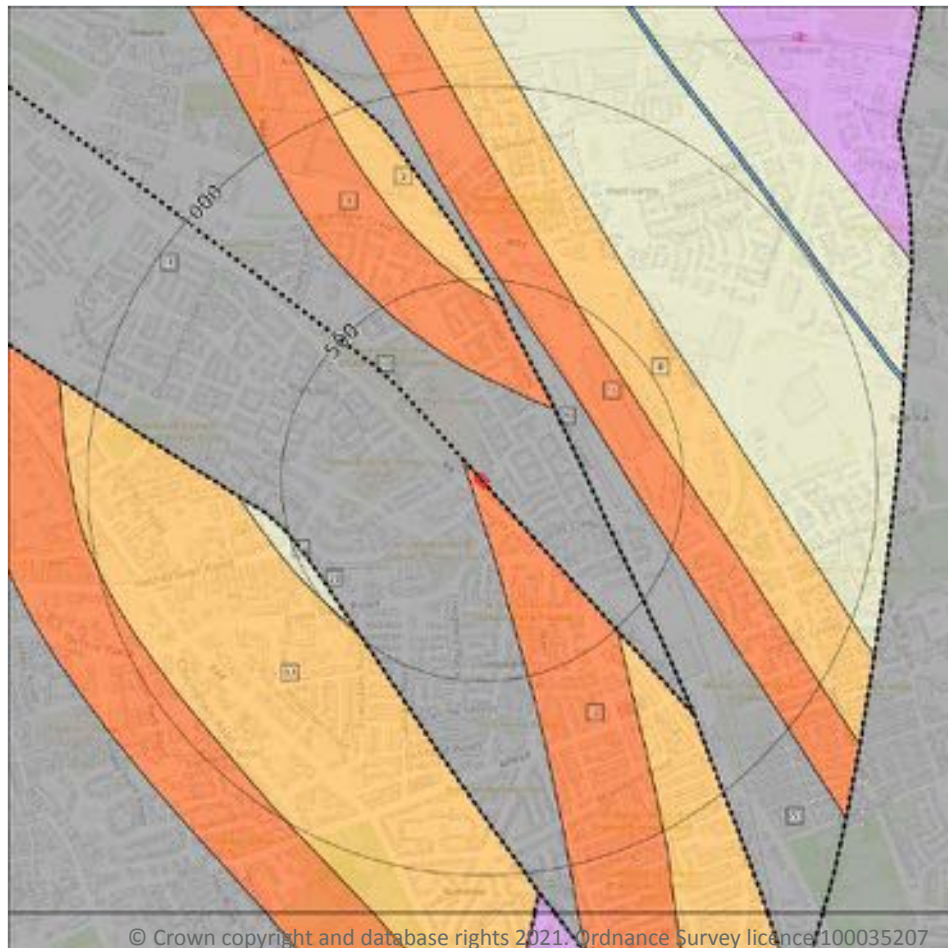
0

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

9

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 80**

ID	Location	LEX Code	Description	Rock age
1	On site	MM-MDST	Manchester Marls Formation - Mudstone	Late Permian Epoch [Obsolete name]
3	On site	CPB-SDST	Chester Pebble Beds Formation - Sandstone	Early Triassic Epoch
4	227m NE	MM-MDST	Manchester Marls Formation - Mudstone	Late Permian Epoch [Obsolete name]



ID	Location	LEX Code	Description	Rock age
5	231m NE	CPB-SDST	Chester Pebble Beds Formation - Sandstone	Early Triassic Epoch
7	306m NE	MM-MDST	Manchester Marls Formation - Mudstone	Late Permian Epoch [Obsolete name]
8	431m NE	CS-SDST	Collyhurst Sandstone Formation - Sandstone	Cisuralian Epoch
9	444m N	CS-SDST	Collyhurst Sandstone Formation - Sandstone	Cisuralian Epoch
10	469m SW	HA-MDSS	Halesowen Formation - Mudstone, Siltstone And Sandstone	Westphalian D Sub-age
12	493m SW	CS-SDST	Collyhurst Sandstone Formation - Sandstone	Cisuralian Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

3

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 80**

ID	Location	Category	Description
2	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side
6	231m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
11	469m SW	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 82**

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 84**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON

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	Mixed	High	Low

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)

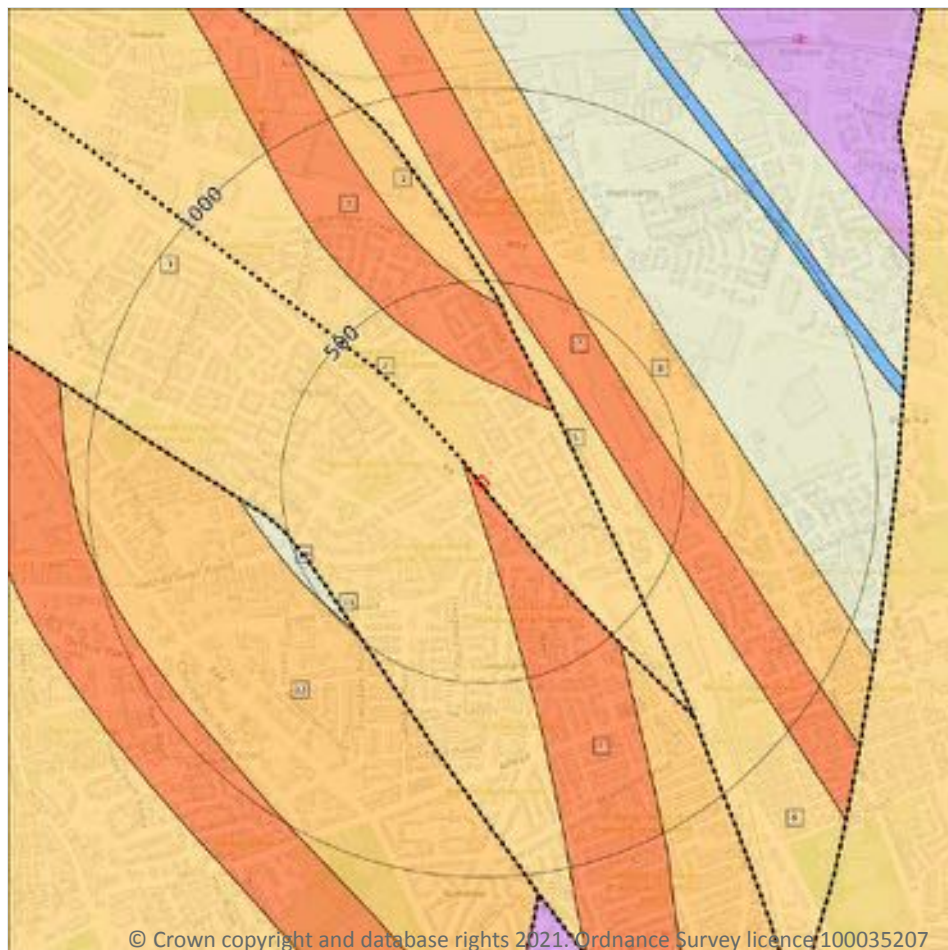
Records within 50m**0**

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

9

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 86**

ID	Location	LEX Code	Description	Rock age
1	On site	MM-MDST	MANCHESTER MARLS FORMATION - MUDSTONE	-
3	On site	CHES-SDST	CHESTER FORMATION - SANDSTONE	OLENEKIAN
4	228m NE	MM-MDST	MANCHESTER MARLS FORMATION - MUDSTONE	-
6	231m NE	CHES-SDST	CHESTER FORMATION - SANDSTONE	OLENEKIAN

ID	Location	LEX Code	Description	Rock age
7	306m NE	MM-MDST	MANCHESTER MARLS FORMATION - MUDSTONE	-
8	431m NE	CS-SDST	COLLYHURST SANDSTONE FORMATION - SANDSTONE	-
9	444m N	CS-SDST	COLLYHURST SANDSTONE FORMATION - SANDSTONE	-
10	469m SW	HA-MDSS	HALESOWEN FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
12	493m SW	CS-SDST	COLLYHURST SANDSTONE FORMATION - SANDSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	2
---------------------------	----------

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	Fracture	Low	Low
On site	Mixed	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	3
----------------------------	----------

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.

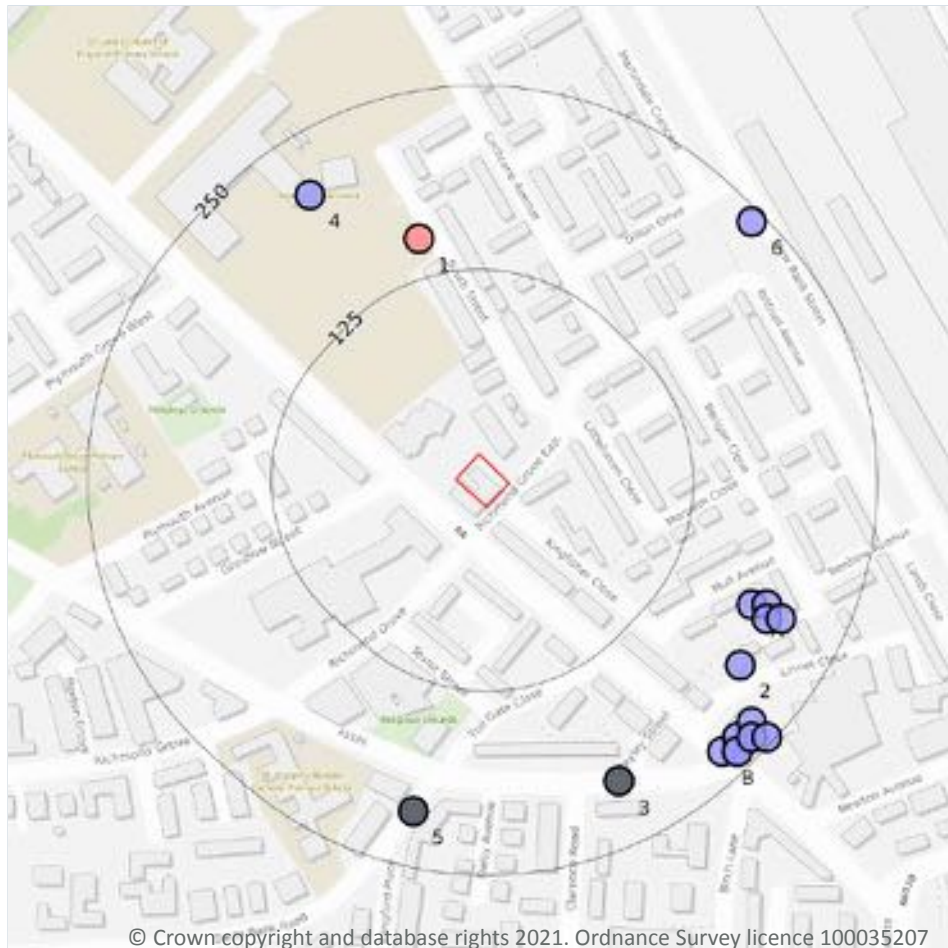
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 86**

ID	Location	Category	Description
2	On site	FAULT	Fault, inferred
5	231m NE	FAULT	Fault, inferred
11	469m SW	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

18

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 88**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	151m N	386304 396278	POWNALLS LTD DAISY WORKS STOCKPORT ROAD	85.34	N	936534
A	184m SE	386530 396030	30 MULL AVENUE TP4	1.0	N	937156
A	193m SE	386540 396030	30 MULL AVENUE TP3	1.5	N	937155



ID	Location	Grid reference	Name	Length	Confidential	Web link
A	198m SE	386540 396020	30 MULL AVENUE TP1	3.0	N	937153
2	199m SE	386522 395989	LIME GROVE LONGSIGHT	-2.0	N	936542
A	207m SE	386550 396020	30 MULL AVENUE TP2	1.0	N	937154
3	207m SE	386440 395910	MALKIN BROOK SEWER REPLACEMENT SCHEME STAGE II 2A	-	Y	N/A
4	210m NW	386230 396308	NEAR UPPER PLYMOUTH GROVE	-2.0	N	936535
5	212m S	386300 395890	MALKIN BROOK SEWER REPLACEMENT SCHEME STAGE II 1	-	Y	N/A
B	231m SE	386510 395930	CAR WASH LINNET CLOSE STOCKPORT RD LONGSIGHT TP 1	2.0	N	937270
B	231m SE	386520 395940	CAR WASH LINNET CLOSE STOCKPORT RD LONGSIGHT TP 2	2.7	N	937271
B	231m SE	386530 395950	CAR WASH LINNET CLOSE STOCKPORT RD LONGSIGHT TP 4	2.5	N	937273
B	238m SE	386520 395930	CAR WASH LINNET CLOSE STOCKPORT RD LONGSIGHT TP 6	3.0	N	937275
B	238m SE	386520 395930	CAR WASH LINNET CLOSE STOCKPORT RD LONGSIGHT TP 5	3.0	N	937274
B	238m SE	386530 395940	CAR WASH LINNET CLOSE STOCKPORT RD LONGSIGHT TP 3	3.2	N	937272
B	238m SE	386530 395940	CAR WASH LINNET CLOSE STOCKPORT RD LONGSIGHT TP 7	3.0	N	937276
6	242m NE	386530 396290	A6 DIVERSION - STOCKPORT ROAD 3	5.0	N	937107
B	245m SE	386540 395940	CAR WASH LINNET CLOSE STOCKPORT RD LONGSIGHT TP 8	2.5	N	937277

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



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

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).

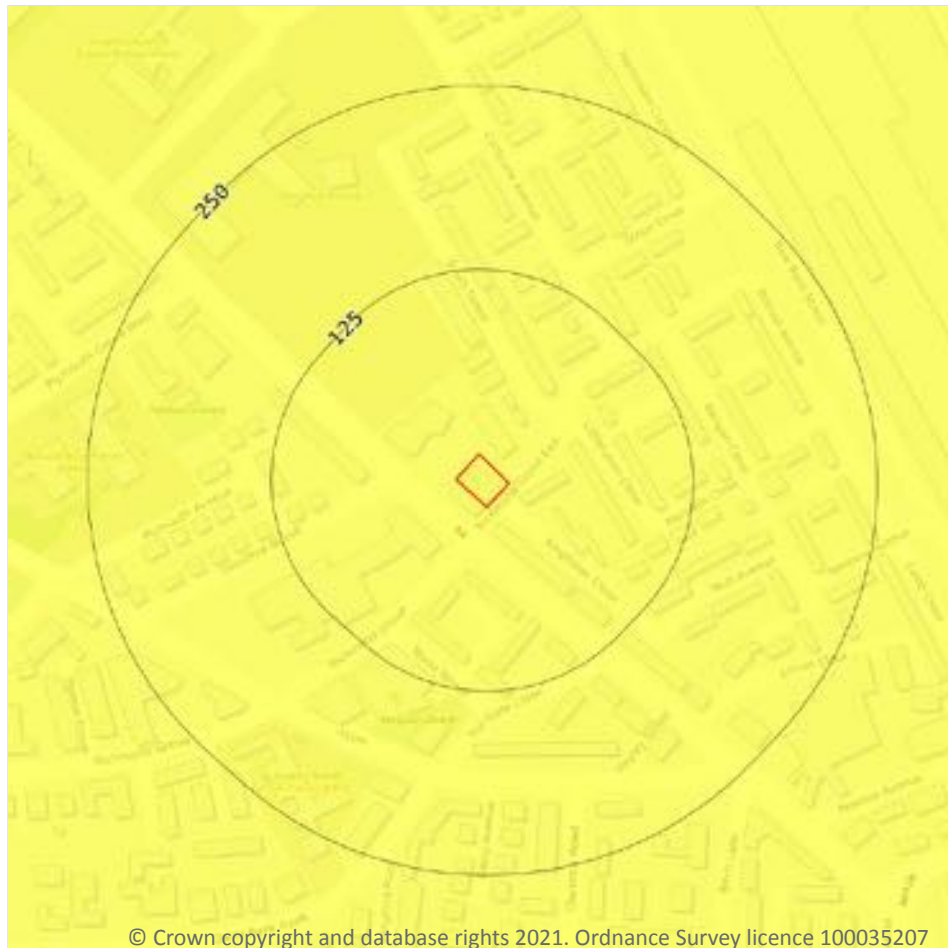
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 90**

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



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

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 91**

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



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

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 92**

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 93**

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



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

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 94**

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



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

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 95**

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



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

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**2**

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 96**

ID	Location	Land Use	Year of mapping	Mapping scale
1	190m NW	Ponds	1851	1:10560
2	247m NW	Pond	1851	1:10560

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	In addition to being located inside an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property which may supplement this information. 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

1

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



Location	Details
On site	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.

This data is sourced from the Coal Authority.

18.10 Brine areas

Records on site	0
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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
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Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
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Generalised areas that may be affected by historical tin mining.

This data is sourced from Mining Searches UK.

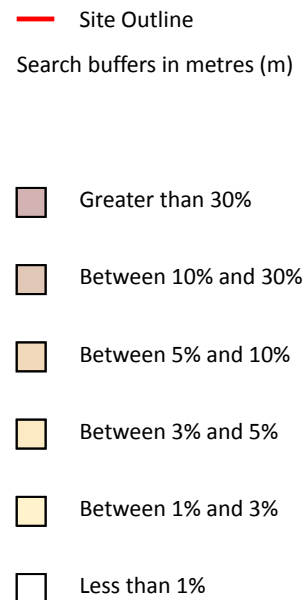
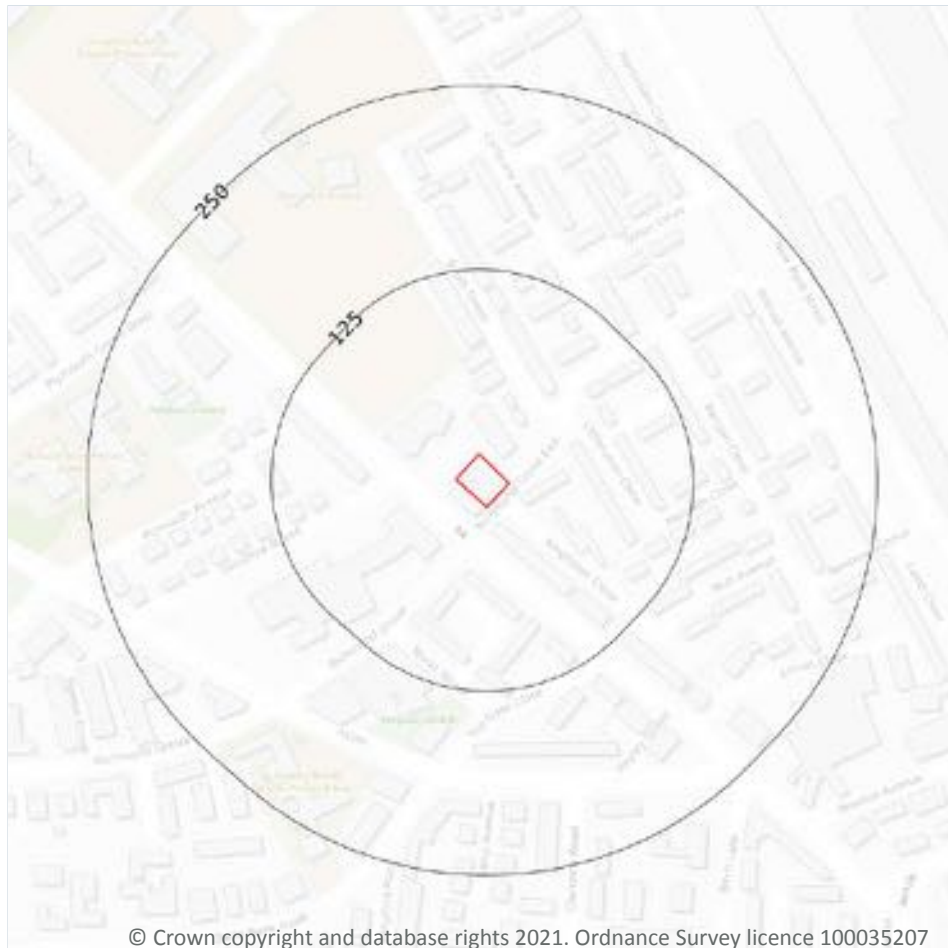
18.13 Clay mining

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



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 100**

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

3

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	25 - 35 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
30m W	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

6

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	16	2.8	63	43	0.3	60	41	20	4
On site	18	3.2	59	41	0.3	63	38	23	4
29m W	15	2.6	68	47	0.3	56	28	18	6
33m SW	18	3.2	53	36	0.3	61	23	22	5



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)
35m E	18	3.2	56	38	0.3	64	15	23	4
37m SE	19	3.3	60	41	0.3	66	19	24	5

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



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 1 Worksites
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

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

18

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.

Features are displayed on the Railway infrastructure and projects map on **page 103**

Location	Land Use	Year of mapping	Mapping scale
236m NE	Railway Sidings	1908	2500
238m NE	Railway	1894	-
238m NE	Railway Sidings	1905	10560
238m NE	Railway Sidings	1938	10560
238m NE	Railway Sidings	1934	10560
238m NE	Railway Sidings	1915	10560
238m NE	Railway Sidings	1893	2500
238m NE	Railway Sidings	1922	2500
238m NE	Railway Sidings	1933	2500
239m NE	Railway Sidings	1890	10560
241m NE	Railway Sidings	1923	10560
244m NE	Railway Sidings	1956	10560
244m NE	Railway Sidings	1968	10560
245m NE	Railway Sidings	1976	-
245m NE	Railway	1909	-
245m NE	Railway Sidings	1949	1250
245m NE	Railway Sidings	1949	2500



Location	Land Use	Year of mapping	Mapping scale
245m NE	Railway Sidings	1960	2500

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/>.



APPENDIX C

BGS Borehole Records

Land at 351 Stockport Road, Manchester – BGS Exploratory Locations

190 Daisy Hale, Stockport Road No. 63 Daisy

SECTION OF Long at Pointe de Longue

Map: One-inch 85. Six-inch 100. **S189NE129**

Height above O.D. 160 Latitude Longitude

Communicated by James Van Batten Ltd. Date of Sinking 27 Sept. 1923

Made by Dip of Strata

Horizontal 2 ft. M/c 110

	Thickness.	Depth from Surface.
Soil clay <u>S1/085C 0</u>	0.00 0 -	0.00 0 -
Grey sand	2.13 7 -	0.13 7 -
Grey mudstone	13.41 44 -	13.56 61 -
Sandstone <del> </del>	0.46 1 6 -	14.02 62 -
Red sandstone	82.77 107 6 -	51.82 170 -
Red mud	1.62 5 -	53.44 175 -
Reddish ls. and sandstone	3.66 12 -	57.10 187 -
Red sandstone	2.44 8 -	59.54 195 -
Reddish red mud	3.96 18 -	63.50 213 -
Red mud	4.57 15 -	68.07 228 -
M.M. Red mud & fossils	0.78 1 -	68.85 234 -
Red mud 1' down hole	0.49 18 -	74.37 244 -
Very soft mud	1.22 4 -	75.59 248 -
Dark red mud	9.75 32 -	85.34 280 -

Land at 351 Stockport Road, Manchester – BGS Exploratory Locations

SYG 8653 9603 739.

STRATA SURVEYS LTD. HOUNES CHAPEL ROAD, WIDDEWORTH, CHESHIRE, CH13 0JB Telephone: 0606 84 4537 Fax: 0606 34 6857				Location No. : 4 Sheet No. 1 of 1. Depth 0 to 4 metres. Date : 1 June 1994							
Job Number : 7697 Site Name : 30 Hull Avenue Client : Manchester City Council				Equipment and Methods Hand Dig Trial Pit Operator/Engineer : GD							
Description of Strata	Ref. Level	Legend	Thickness metres	Depth m	Sample Depth	Sample Depth	Cu	Remarks			
MADE GROUND (till and brick)			0.301	0.301							
Fine brown CLAY End of Hand Auger			0.301	0.601				End of Pit			
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"> Key Sample Types 1 Undisturbed 2 Disturbed 3 Bulk Disturbed 4 Water </td> <td style="width: 30%;"> Progress / Water Levels — Buried Depth — Water Level — Water Strike </td> <td style="width: 40%;"> General Remarks </td> </tr> </table>									Key Sample Types 1 Undisturbed 2 Disturbed 3 Bulk Disturbed 4 Water	Progress / Water Levels — Buried Depth — Water Level — Water Strike	General Remarks
Key Sample Types 1 Undisturbed 2 Disturbed 3 Bulk Disturbed 4 Water	Progress / Water Levels — Buried Depth — Water Level — Water Strike	General Remarks									
Trial Pit Section											

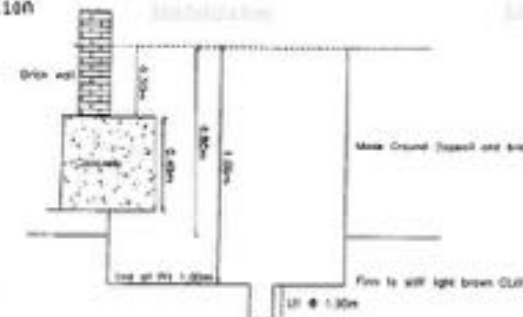
Land at 351 Stockport Road, Manchester – BGS Exploratory Locations

STRATA 8950 4603 738

STRATA SURVEYS LTD., HOLMES CHAPEL ROAD, MIDDLEWICH, CHESHIRE. DN10 0JB Telephone: 0605 84 4537 Fax: 0605 84 6057				Location No. : 3 Sheet No. 1 of 1 Depth 0 to 4 metres. Date : 1 June 1994			
Job Number : 7607 Site Name : 30 Mill Avenue Client : Manchester City Council				Instrument and Methods Hand dug trial pit Operator/Engineer : SO			
Description of Strata	Ref. Level	Legend	Thick. (mm)	Depth (m)	Sample Depth	Sample Type	Remarks
MADE GROUND (ash and brick) --- End of Hand Auger ---			0.50 1.50				Unable to excavate deeper due to dense brick and ash End of Pit
Key: Sample Types: () Undisturbed (X) Disturbed (H) Bulk Disturbed (W) Water In-Situ Tests: (P) Plate Bearing Test (PP) Pocket Penetrometer				Progress / Water Levels: () Borehole Depth (X) Water Level (X) Water Strike General Remarks: Unable to hand auger through brick and ash fill.			
Trial Pit Section MADE GROUND (ash and brick)							

Land at 351 Stockport Road, Manchester – BGS Exploratory Locations

C/SCHAF 8656 9402 716

STRATA SURVEYS LTD., HOLMES CHAPEL ROAD, WIDDELEIGH, CHESHIRE, CN10 6JB Telephone: 0906 84 4637 Fax: 0906 84 6057				Location No. : 1 Sheet No. 1 of 1. Depth 0 to 4 metres. Date : 1 June 1994			
Job Number : 1607 Site Name : 30 Mull Avenue Client : Manchester City Council				Equipment and Methods Hand dig and hand auger Operator/Recorder : GG			
Description of Strata	Ref. Level	Legend	Thick. (mm)	Depth (m)	Sample Location	Sample Notes	Remarks
MADE GROUND (tarmac) and brick		[Cross-hatch pattern]	0.00	1.00			
Fine to stiff light brown CLAY.		[Dotted pattern]	0.20	1.00 - 1.15		N 1	End of Pit Start of Hand Auger @ 1.00m
End of Hand Auger				1.00			End of Hand Auger
Key Sample Types U Undisturbed O Disturbed S Soil Disturbed W Water In-Situ Tests V Vane Test PS Plasticity test Pp Pocket Penetrometer				Progress / Water Levels S Sample Depth L Water Level W Water Strike General Remarks Two men digging for 5 hours in total.			
Trial Pit Section 							

Land at 351 Stockport Road, Manchester – BGS Exploratory Locations

SHEET 0655 9602 737

STRATA SURVEYS LTD., HOLMES CHAPEL ROAD, MIDDLEWICH, CHESHIRE, CW10 0JB Telephone: 0506 84 4837 Fax: 0506 84 6657				Location No. : 2 Sheet No. : of 1. Depth : 0 to 4 metres. Date : 1 June 1994				
Job Number : 7657 Site Name : 30 Mill Avenue Client : Manchester City Council				Equipment and Methods: Hand Dig Trial Pit Operator/Engineer : SB				
Description of Strata	Ref. 12881	Legend	Thickness (m)	Depth #	Sample Tests	Sample Tests	Cu (m)	Remarks
MADE GROUND (Rubble and brick)			0.70	1.00				
Firm to stiff brown slightly sandy CLAY End of Hand Auger			0.30	1.70 1.94				End of Pit
Progress / Water Levels Sample Types 1 Undisturbed 2 Disturbed 3 Bulk Disturbed 4 Water In-situ Tests 1 Vane Test 2a Point Shear Test 2b Pocket Penetrometer				General Remarks				
Trial Pit Section Made Ground (Rubble and brick) Firm to stiff brown slightly sandy clay End of Pit 1.94m								

APPENDIX D

Preliminary Conceptual Model

POTENTIAL RECEPTOR	COMMENTS	Include in PCM
PROPERTY: Other		
On Site		
Crops	None intended on site	✗
Domestic Produce	None intended on site	✗
Livestock	Not applicable	✗
Domestic Animals	Domestic pets owned by future residents	✗
Game	Not applicable	✗
Off Site		
Crops	Not applicable	✗
Domestic Produce	Not applicable	✗
Livestock	Not applicable	✗
Domestic Animals	May belong to adjacent residents	✓
Game	Not applicable	✗
PROPERTY: Buildings		
On Site		
	Commercial Property, services	✓
Off Site		
	Commercial Properties, Residential Properties, services, Flora	✓
HUMANS		
On Site		
Residents	Not applicable	✗
Construction Workers	During ground excavations	✓
Employees and Customers	Employees and customers of the car washing facility	✓
Surface water users	No current surface water abstractions located on site	✗
Off Site		
Residents	Residential properties south-east of the site	✓
Employees and Customers	Employees and customers of the adjacent businesses	✓
Recreational users	No public outdoor parks adjacent to the site.	✗
Groundwater users	No groundwater abstractions within 250 m.	✗
Controlled Waters		
On Site		
Surface Waters	None on site	✗
Groundwater	The superficial strata at the site is described as a 'Secondary Undifferentiated Aquifer'. These are described by the EA as 'Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock'. The underlying 'Manchester Marls Formation' and 'Chester Pebble Beds Formation' bedrock are classified by the EA as 'Secondary B Aquifers'. The site is not located within a source protection zone and there are no groundwater abstractions within 250 m of the site. Regardless, the groundwater in the aquifers are considered potentially significant receptor.	✓
Off Site		
Controlled Waters	None within 250 m of the site	✗
Ecological Systems		
On/Off Site		
SSSIs, national nature reserves, SACs etc	The site is not located within any environmental sensitive areas	✗

Table A: Potential Receptors to be Considered in the Preliminary Conceptual Model

Link	Source	Hazard	Transport Mechanism	Pathway	Medium of Exposure	Receptor	Risk Summary*
1	Contaminated Soils	Direct contact /ingestion of soil of dust	Direct contact with contaminated soil	Dermal contact/ingestion of soil at soil surface	Soil	Humans (offsite) domestic pets	Low
2	Contaminated Soils	Particulate inhalation	Wind blown particles	Inhalation of particulates	Air	Humans (offsite) domestic pets	Low
3	Contaminated Soils	Inhalation of Ground Gas	Degradation of contaminants generating ground gas through unsaturated zone to soil leading to inhalation	Inhalation of Gases	Air	Humans (on-site/ off-site), domestic pets	Low
4	Contaminated Soils	Vapour Inhalation	Volatalisation of organic compounds through unsaturated zone of soil leading to inhalation	Inhalation of Gases	Air	Humans (on-site/ off-site, domestic pets)	Low
5	Contaminated Soils	Damage to structure/services	Direct contact of contaminants with building structures/services	Direct contact	Soil/Water	Structures, services, flora	Low-Medium
6	Contaminated Soils	Degradation of perched water quality	Dissolution or suspension of Contaminants into perched waters	Dissolution or Suspension	Water	Perched Waters	Low-Medium
7	Contaminated Soils	Pollution of underlying groundwater	Dissolution or suspension of contaminants into groundwaters (Bedrock Aquifer)	Dissolution or Suspension	Water	Groundwaters	Low-Medium

Table B: Preliminary Conceptual Model

***Relative Risk Screening and Prioritisation for further Investigation & or Assessment**

High	Higher probability of occurrence and identification of primary sources of contamination with respect to most sensitive receptors.
Medium	Pollutant linkage generally dependent on the presence of other primary pollutant linkages and/or where pollutant linkage generally associated with less sensitive receptors.
Low	Lower probability of occurrence such as based on requirement for significant migration pathway or where pollutant linkage requires the presence of source contaminants at concentration likely to be much higher than other identified pollutant linkages.

APPENDIX E

Photographs



P1: Front of the customer waiting area and tyre changing facility with concrete hardstanding



P2: North-east portion of the site, looking north-west. Tarmac hardstanding covering the outdoor footprint of the site



P3: North-east portion of the site, looking south-east



P4: North-west of the site, looking south-west



P5: Shipping container in the south-east of the site which houses a hair salon and beauty parlour



P6: Interior of the customer waiting area

Comments:



Photographs 1 to 6

This appendix is for illustrative purposes only and is for use only in conjunction with associated reports relating to the project

Site:
Land at 351 Stockport Road,
Manchester

**Title: Appendix E – Site
Photographs**

Project No:
21877

Created By:
Jonathan
Douglas

Date:
22/06/2021

Client: Abdul Ghani



P7: Tyre fitting machine and an ICB in the car wash store/tyre repair facility



P8: Numerous containers of washing fluid in the car wash store/tyre repair facility



P9: Numerous liquid/grease containers in the car wash store/tyre repair facility



P10: Two diesel barrels (left) and a wheel balancer (right) in the car wash store/tyre repair facility



P11: Barrel of diesel in the car wash store/tyre repair facility



P12: Convenience store located in the southern corner of the site and south of the site

Comments:



Photographs 7 to 12

This appendix is for illustrative purposes only and is for use only in conjunction with associated reports relating to the project

Site:
Land at 351 Stockport Road,
Manchester

Title: Appendix E – Site
Photographs

Project No:
21877

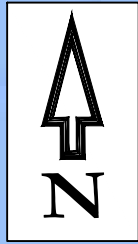
Created By:
Jonathan
Douglas

Date:
22/06/2021

Client: Abdul Ghani

APPENDIX F

Drawings



LEGEND

— SITE LOCATION

REV	DESCRIPTION	DATE	BY



GEO-ENVIRONMENTAL CONSULTING ENGINEERS
Suite One, No 3 Mitton Road Business Park, Mitton Road,
Whalley, Lancashire BB7 9YE
Tel: 01254 377622 Mob: 07906753583
Email: mbuckley@bekenviron.co.uk
Web: www.bekenviron.co.uk

CLIENT.

CENTRAL AUTO CLEAN

JOB TITLE.

LAND AT 351 STOCKPORT ROAD, MANCHESTER

DRAWING TITLE.

SITE LOCATION PLAN

SCALE © A3. N/T'S	DRAWN BY. D.E.	APPROVED BY. M.B.	DATE. 22/06/21
DRAWING No. 21877-1			REV. -



LEGEND

— SITE FOOTPRINT

REV	DESCRIPTION	DATE	BY



GEO-ENVIRONMENTAL CONSULTING ENGINEERS
Suite One, No 3 Mitton Road Business Park, Mitton Road,
Whalley, Lancashire BB7 9YE
Tel: 01254 377622 Mob: 07906753583
Email: mbuckley@bekenviro.co.uk
Web: www.bekenviro.co.uk

CLIENT.

CENTRAL AUTO CLEAN

JOB TITLE.

LAND AT 351 STOCKPORT ROAD, MANCHESTER

DRAWING TITLE.

SITE LAYOUT PLAN

SCALE © A3. N'TS	DRAWN BY. D.E.	APPROVED BY. M.B.	DATE. 22/06/21
DRAWING No. 21877-2			REV. -

