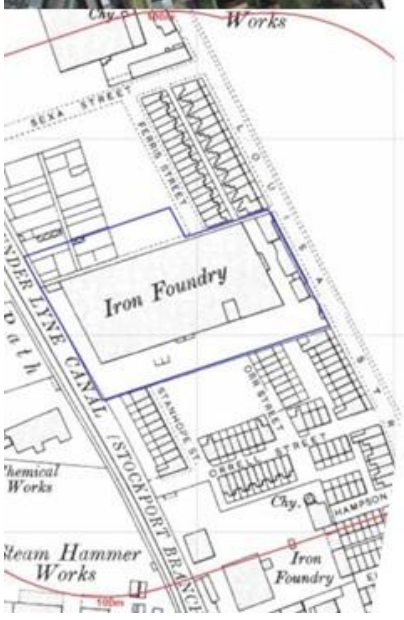






EARTH ENVIRONMENTAL & GEOTECHNICAL

Phase I GeoEnvironmental Desk Study

Louisa Street

Openshaw

June 2022

For

Westchurch Homes

Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business Centre
Houldsworth Street
Stockport
SK5 6DA

Tel : 01619756088

Email
headoffice@earthenvironmental.co.uk

www.earthenvironmental.co.uk

PHASE I GEOENVIRONMENTAL DESK STUDY

LOUISA STREET

OPENSHAW

FOR

WESTCHURCH HOMES

Earth Environmental & Geotechnical Ltd
Houldsworth Mill Business & Arts Centre
Houldsworth Street
Stockport
SK5 6DA

www.earthenvironmental.co.uk

Tel: 0161 975 6088

Report No. A4755/22/FDS **JUNE 2022**

Report Title:	**Louisa Street, Openshaw** **Phase I GeoEnvironmental Desk Study**
Report Reference:	**A4755/22/FDS**
Client:	**Westchurch Homes**
Issue Date:	**26th June 2022**
Drafted By:	**H Richards**
Reviewed By:	**A Ellams**
Authorised By:	**A Czarnecki**

This document has been prepared for the titled project (or named part thereof) and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authorisation being obtained from Earth Environmental & Geotechnical. Earth Environmental & Geotechnical accepts no responsibility or liability for the consequences of the use of this document, wholly or in part, for any other purpose than that for which it was commissioned. Any persons so using or relying upon this document for such other purpose do so at their own risk.

This report was prepared for the sole use of the Client and shall not be relied upon or transferred to any other party without the express written authorisation of Earth Environmental & Geotechnical. It may contain material subject to copyright or obtained subject to license; unauthorised copying of this report will be in breach of copyright/license.

The findings and opinions provided in this document are given in good faith and are subject to the limitations imposed by employing site assessment methods and techniques, appropriate to the time of investigation and within the limitations and constraints defined within this document. The findings and opinions are relevant to the dates when the assessment was undertaken but should not necessarily be relied upon to represent conditions at a substantially later date.

The findings and opinions conveyed in this report are based on information obtained from a variety of sources as detailed and which Earth Environmental & Geotechnical assumes to be reliable but have not been independently confirmed. Therefore, Earth Environmental & Geotechnical cannot and does not guarantee the authenticity or reliability of third-party information it has relied upon.

Where opinions expressed in this report are based on current available guidelines and legislation, no liability can be accepted by Earth Environmental & Geotechnical for the effects of any future changes to such guidelines and legislation.

The limitations of liability of Earth Environmental & Geotechnical for the contents of this document have been agreed with the Client, as set out in the terms and conditions of offer and related contract documentation.

EARTH ENVIRONMENTAL & GEOTECHNICAL

CONTENTS

1.0 INTRODUCTION 1
Appointment 1
Objective 2
Scope 2
2.0 SITE LOCATION AND DESCRIPTION 3
Site Utility Services 4
3.0 ENVIRONMENTAL SETTING 5
Ground Workings 5
Mining and Other Underground Workings 5
Radon Potential 5
Geology 5
Hydrogeology and Hydrology 6
Landfill & Waste Management Activity 7
Industrial Land Use Information 8
Environmental Permits, Incidents and Registers 9
Environmentally Sensitive Sites 10
Ecology 10
Archaeology 10
Potential Flood Risks 10
Previous Site Investigations 11
4.0 SITE HISTORY 12
5.0 WALKOVER SURVEY 21
6.0 PRELIMINARY CONTAMINATION RISK ASSESSMENT 23
Introduction 23
Potential Sources 24
Potential Receptors 25
Potential Pathways 25
7.0 GEOTECHNICAL HAZARDS ASSOCIATED WITH THE DEVELOPMENT 28
8.0 CONCLUSIONS & RECOMMENDATIONS 30
Conclusions 30
Recommendations 31

FIGURES

Figure 1 Proposed Development Plan
Figure 2 Site Location Plan
Figure 3 Site Photograph
Figure 4 OS Map Extract: 1848
Figure 5 OS Map Extract: 1893
Figure 6 OS Map Extract: 1908
Figure 7 OS Map Extract: 1933
Figure 8 OS Map Extract: 1956
Figure 9 OS Map Extract: 1981
Figure 10 OS Map Extract: 2001
Figure 11 Google Earth Image 2009
Figure 12 Google Earth Image 2017
Figure 13 Google Earth Image 2021
Figure 14 Site Features Plan
Figure 15 Site Walkover Photo Locations

TABLES

Table 1 Environmental Permits, Incidents and Registers within 500m of the Site
Table 2 Summary of Site History
Table 3 Consequence, Probability and Risk
Table 4 Estimation of Level of Risk by Comparison of Consequence and Probability
Table 5 Preliminary Conceptual Model
Table 6 Summary of Geotechnical Hazards

APPENDICES

Appendix 1 GroundSure Reports
Appendix 2 Site Photographs
Appendix 3 Site Walkover Notes
Appendix 4 Report Limitations

1.0 INTRODUCTION

Appointment

1.1 Earth Environmental & Geotechnical Ltd has been commissioned by Westchurch Homes (the Client) to undertake a Phase I GeoEnvironmental Desk Study for a proposed development off Louisa Street, Openshaw.

1.2 It is understood that the client wishes to demolish remaining existing buildings on site and construct a combination of approximately sixteen houses with private gardens and three apartment blocks, all with parking and soft landscaping.

1.3 Vehicle access will be gained from Louisa Street located to the east of the site.

1.4 A development plan for the site is shown in Figure 1 below.

Figure 1: Proposed Development Plan



Objective

1.5 The purpose of the Desk Study is to collate available geological and environmental data for the site (and its environment) and provide a preliminary geotechnical and geo-environmental appraisal, with a site-specific conceptual model. This enables a preliminary assessment of geo-environmental risks to be undertaken and, if necessary, provides information for the design of a Phase 2 Ground Investigation.

Scope

1.6 The Phase I Environmental Desk Study comprises of a site reconnaissance visit and a review of the following information sources, some of which was provided by the client.

- British Geological Survey online maps.
- Google Earth imagery.
- Environment Agency online mapping data.
- Historical Ordnance Survey maps.
- The site and surrounding areas environmental, geological, and mining data presented in the site specific GroundSure Reports (Appendix 1).
- Coal Authority Interactive Viewer.
- Manchester City Council Planning Portal.

2.0 SITE LOCATION AND DESCRIPTION

2.1 The site is located to the west of Louisa Street, north of Old Ashton Road (A635), Openshaw, Manchester. The National Grid Reference for the centre of the site is SJ 88592 97635 (X:388592, Y: 397635), with the closest postcode being M11 1AD.

2.2 The site, previously an Iron foundry since the early 1900s is now mostly vacant hard standing, majority of the buildings on site having been demolished between 2017 and 2018.

2.3 There are brick-built derelict buildings fronting on to Louisa Street, long brick sheds with corrugated iron rooves to the north and a couple of smaller brick buildings on the south side of the entrance, one of which is a garage with a corrugated roof (suspected to be asbestos). There is an electricity substation on the northeast corner of the site.

2.4 The site is accessed via locked metal gates from Louisa Street.

2.5 The site is littered and has several unused cars. There is an overhead cable on the south of the site and a brick wall on the north side.

2.6 The maximum dimensions of the proposed site are 82m north to south and 120m east to west. The site occupies an area of approximately 0.93 hectares.

2.7 The immediate surrounding area is mainly residential with Victorian brick terraces and new builds however there are areas that were previously heavy industrial sites that have been converted for commercial, retail, and light industrial use. Including Venus Foods on Ferris Street to the north of the site and Yamaha Motorcycles to the south. Immediately to the south of the site is a green space which joins the cycle path along the line of the filled in Ashton-Under Lyne Canal.

Figure 2: Site Location Plan



Figure 3: Site Photograph



Site Utility Services

2.8 Site service plans have been obtained for the site on behalf of the client in April 2022. The status of all services should be checked prior to any development (including site investigation) commencing.

3.0 ENVIRONMENTAL SETTING

3.1 The geology of the site is covered by British Geological Survey (BGS) online data and the site specific GroundSure Enviro+Geo Insight report (Appendix 1).

3.2 Environmental conditions are covered by Environment Agency (EA) and British Geological Survey (BGS) online data, and the site specific GroundSure Enviro+Geo Insight report (Appendix 1).

Ground Workings

3.3 There are 24 records of historical surface ground workings identified within 250m of the site boundary. Three onsite records refer to a refuse pit (1890) and a canal mapped between 1956 and 1968.

3.4 Off site records include the canal 5m southwest, unspecified pits and ground workings, ponds, brick fields and a brick works.

3.5 According to the BGS, there are 3 records of British Pits within 500m of the site. The closest is 197m northeast and refers to the ceased Wayne Street Brick Field.

Mining and Other Underground Workings

3.6 Reference to the Coal Authority Interactive viewer shows the site is located within an identified coal mining area, but not within a Development High Risk Area.

3.7 There are no records of natural cavities within 500m of the site.

3.8 There are no records for non-coal mining areas identified within 1km of the site.

3.9 There are no records of non-coal mining cavities, which may result in subsidence, located within 1km of the site.

3.10 There are no records for historical underground working features, identified from Ordnance Survey Mapping, within 1km of the site.

3.11 There are no areas of brine extraction, gypsum extraction, tin mining or clay mining on the site.

Radon Potential

3.12 The site is not located in a Radon Affected Area. Less than 1% of the properties on site are estimated to be above the Action Level. Therefore, radon protection measures are not required.

Geology

3.13 The BGS states that the site is underlain by artificial deposits of infilled ground.

3.14 The site is shown to be underlain by superficial deposits of Devensian glacial till (Boulder Clay).

3.15 The solid geology beneath the site is mapped as the Early Triassic Chester Pebble Beds Formation, a fine to coarse grained sandstone, commonly pebbly with conglomerates and sporadic siltstones.

3.16 There are no records of linear features within 500m of the site boundary.

3.17 There are no records of landslips within 500m of the site.

3.18 There are 27 BGS borehole records identified within 250m of the site. The closest borehole is located 58m north of the site and drilled to 9.29m. I t encountered 0.7m of soft clay and fill underlain by compact dense brown silty sand.

3.19 The site is in an area where the hazard rating is very low with regard to shrink swell clays, running sands, collapsible deposits, and landslides and negligible with regard to compressible deposits and dissolution of soluble rocks.

Hydrogeology and Hydrology

3.20 The superficial deposits of Devensian Till are classified by the Environment Agency (EA) as a Secondary Undifferentiated Aquifer with a low-high permeability and mixed flow type. The BGS states the following:

> ***Secondary Undifferentiated Aquifer*** *'Assigned where it is not possible to attribute either a category A or B 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'*

3.21 The Chester Pebble Beds Formation is classified by the Environment Agency (EA) as a Principal Aquifer. The sandstone has a high to moderate permeability and a mixed flow type. The BGS states the following:

> ***Principal Aquifer*** *'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.'*

3.22 The groundwater vulnerability of the site has been classified as a low vulnerability for both superficial deposits and bedrock. The soil leaching potential is also low. The BGS states:

> ***Low vulnerability****- 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.'*

3.23 There are 28 groundwater abstraction licence records within 2km of the site. The closest is an historical licence, issued in 1985 for a borehole on the "Air Products Chemicals Ltd" site at Clayton, 758m northwest.

3.24 There are 8 surface water abstraction licence records within 2km of the site. The closest record is an historical licence 778m northwest of the site, for a point on the Ashton Canal for the abstraction of water for general cooling in 1969.

3.25 There are no potable water abstraction licence records within 2km of the site.

3.26 The site is not located within a Source Protection Zone or Source Protection Zone of a confined aquifer.

3.27 There are no water network entries within 250m of the site.

3.28 There are no water surface water features identified within 250m of the site.

3.29 There is 1 record of a Water Framework Directive (WDF) surface water body. This refers to the River Irwell, 4.8km west of the site, which had a failed chemical rating and a moderate ecological rating in 2019.

3.30 There is 1 record of a Water Framework Directive (WDF) groundwater body located on-site. The record refers to the Manchester and East Cheshire Permo-Triassic Sandstone Aquifers which had a poor chemical rating in 2019.

Landfill & Waste Management Activity

3.31 There are no records for current Environment Agency/Natural Resource Wales landfill records within 500m of the site.

3.32 There are no records of a BGS/DoE non-operational landfill sites within 500m of the site.

3.33 There is 1 record of an historical landfill from the Local Authority and Historical Mapping records within 500m of the site. This refers to a refuse tip 336m north of the site.

3.34 There are 3 records of an historical Environment Agency/Natural Resource Wales landfills within 500m of the site. There is an onsite record which refers to an inert liquid sludge permit pertaining to the Stockport Branch Canal. The closest offsite record is 235m north at Clayton Industrial Estate.

3.35 There are 3 records of historical waste sites from the Local Authority and Historical Mapping records within 500m of the site. The closest record is an incinerator located 264m north of the site, mapped in 1949.

3.36 There are 3 records of current Environment Agency/Natural Resources Wales licensed waste sites within 500m of the site. The closest being 55m to the southwest at CBA House, Sandford Lane which refers to a licence to treat waste to produce soil. The licence was issued in 2012.

3.37 There are 48 records of a waste treatment, transfer or disposal site which are exempt from needing a permit within 500m of the site. There is an onsite record (and two for the same address) which refers to the storage of waste in a secure place (non-agricultural waste only) at 67-69 Louisa Street. The closest offsite record is 102m South at Ashton Old Road for storage of waste in a secure place.

Industrial Land Use Information

3.38 There are 275 records of potentially contaminative historical land uses identified within 500m of the site. 10 onsite records refer to an iron foundry (1905 to 1968) unspecified commercial / industrial use and a refuse pit (1890).

3.39 Within 100m there are: unspecified works, mills, steelworks, steam hammer works, electric motor works, unspecified foundries, unspecified commercial / industrial use, a cotton mill, chimney, corporation yard and railway sidings. Further afield there are brick works, unspecified pits, sand pits and underground workings, an electric substation, engineering works, boiler works, iron works, engineering works, a rifle range, engine sheds, chemical works, dye works, unspecified works.

3.40 There are 10 records of current potentially contaminative land uses identified within 250m of the site. The closest record is an electricity substation located 92m southwest of the site. Other records close by refer to Ideal Recycling Ltd 102m South and Evonick adhesives and sealants 113m southeast.

3.41 There are 76 records of historical tanks identified within 500m of the site. The closest offsite record refers to an unspecified tank 70m northwest of the site mapped in 1922.

3.42 There are 62 records of historical energy features identified within 500m of the site, all of which refer to electricity substations. The closest record is an electricity substation 89m southwest of the site, first mapped in 1979.

3.43 There are 22 records of historical garages within 500m of the site. The closest record of a garage is located 115m to the south, mapped in 1995.

3.44 There are 3 records of a current petrol or fuel sites within 500m of the site two of which are obsolete. The closest operational petrol station is at Morrisons 404m southeast of the site.

3.45 There are no records of an historical petrol or fuel sites within 500m of the site.

3.46 There are no National Grid high voltage underground electricity transmission cables within 500m of the site.

3.47 There are no National Grid high-pressure gas transmission pipelines within 500m of the site.

3.48 There are 19 historical railway and tunnel features identified within 250m of the site. The closest record is a railway siding located 43m south of the site mapped in 1933.

3.49 There are no historical railway lines identified within 250m of the site.

3.50 There are no current active railway line records identified within 250m of the site.

3.51 There are no underground railway lines or tunnels identified within 250m of the site.

3.52 The site is not within 500m of the route of the High Speed 2 rail project.

3.53 The site is not within 500m of the route of the Crossrail 1 or Crossrail 2 rail project.

Environmental Permits, Incidents and Registers

3.54 The Groundsure Report includes records of environmental permits, incidents, and registers within 500m of the site, which are summarised in Table 1 overleaf.

Table 1: Environmental Permits, Incidents and Registers within 500m of the Site

Permit/Incident/Register	Number
Sites Determined as Contaminated Land under Part 2A EPA 1990	10
Dangerous or Hazardous (COMAH and NIHHS) Sites	0
Regulated Explosive Sites	0
Planning Hazardous Substance Consents and Enforcements	0
Historical Licensed Industrial Activities (IPC)	0
Part A (1) and IPPC Authorised Activities	0
Part A (2) and Part B Activities and Enforcements	4
Licensed Discharge Consents	0
Pollutant Release to Surface Waters (Red List)	0
List 1 Dangerous Substances Inventory Sites	0
List 2 Dangerous Substances Inventory Sites	0
Substantiated Pollution Incidents (Category 1 and 2)	1
Pollutant Release to Public Sewer	0
Pollution Inventory Substances, Wastes and Radioactive Wastes	0
Category 3 or 4 Radioactive Substance Authorisations	0

3.55 There are 10 sites determined as Contaminated Land under Part 2a of the Environmental Protection Act 1990. The closest site is 85m north on Iris Avenue (1,5,6,7,8), Kenchester Avenue (1-24) and Louisa Street (142-158 – even numbers), Sexa Street (1-23 odd numbers) and Eastern Bypass (odd numbers) which is contaminated with arsenic, heavy metals and polyaromatic hydrocarbons.

3.56 There are 4 records of a Part A (2) and Part B installation regulated under the Environmental Permitting Regulations 2016 for the release of substances of the environment within 500m of the site. The closest record refers to an historical Part B permit issued to Openshaw service station on South Street 302m southwest of the site for petrol vapour recovery.

3.57 There has been 1 record of a substantiated pollution incident since 2006 within 500m of the site. This refers to an incident in November 2002, 30m southwest of the site involving construction and demolition materials waste, which had a minor impact (category 3) on land and no impact on water or air.

3.58 There are no other records of Environmental Permits, Incident or Registers within 500m of the site.

Environmentally Sensitive Sites

3.59 There are no records of Sites of Special Scientific Interest (SSSI) within 2km of the site.

3.60 There are no Conserved Wetland sites (Ramsar sites) or Special Areas of Conservation (SAC) within 2 km of the site.

3.61 There are no Special Protection Areas of Conservation (SPA) within 200m of the site.

3.62 There are no National Nature Reserves (NNR) within 2km of the site.

3.63 There is one Local Nature Reserves (LNR) within 200m of the site. This is the Clayton Vale Nature Reserve located 1.4km north of the site.

3.64 There are 2 records of Green Belt within 2km of the site. The records refer to the Merseyside and Greater Manchester green belt in Manchester and Tameside, located 1.3km and 1.7km north of the site.

Ecology

3.65 An ecological assessment of the site falls outside the brief of this report. Where considered necessary, advice should be sought from an ecological specialist in this respect.

3.66 The site is within an area classified as Urban Land.

Archaeology

3.67 An archaeological assessment falls outside the brief of this report. Where considered necessary, advice should be sought from an archaeological specialist in this respect.

3.68 There are no records of a listed buildings within 250m of the site.

3.69 There are no Conservation Areas within 250m of the site.

3.70 There are no records of Ancient Monuments or Registered Parks and Gardens within 250m of the site

3.71 There are no records of World Heritage Sites within 250m of the site.

Potential Flood Risks

3.72 Detailed assessment of flood risks is outside the scope of this report. However, the site does not lie within 50m of an Environment Agency Zone 2 or 3 floodplain.

3.73 There are no records of a flood risk from rivers and sea (RoFRaS) within 50m of the site.

3.74 There are no records of historical flood events recorded within 250m of the site.

3.75 There are no records of flood defences located within 250m of the site.

3.76 There are no records of areas benefiting from flood defences located within 250m of the site.

3.77 There are no records of areas used for flood storage within 250m of the site.

3.78 The risk of surface water flooding occurring on-site (because of extreme rainfall) in a 1-to-100-year return period according to data from the Ambiental Risk Analytics surface water FloodMap is between 0.1m and 0.3m.

3.79 The highest risk of groundwater flooding occurring on-site, based on the Ambiental Risk Analytics 1 in 100-year 5m Digital Terrain Model is moderate.

Previous Site Investigations

3.80 F10502 March 1979 An application was put in to use the former Louisa Street Foundry to store hygiene and pharmaceutical products. This was withdrawn in June 1979.

3.81 035052 August 1989 Application for 128 dwellings with associated parking and landscaping on land to the north of the site bound by Manchester and Ashton-U-Lyne Canal, Sexa Street, Louisa Street and Clayton Brook Road.

3.82 No relevant applications or site investigations within the vicinity of the site made in the last five years were recorded on the Manchester City Council Planning Portal.

4.0 SITE HISTORY

4.1 The historical development of the site has been determined by reference historical plans and Google Earth imagery. The reviewed historical plans comprise only readily available records and may be limited; however, the information available to date indicates that additional searches are unlikely to add to our understanding of the site. The earliest available historical mapping covering the site dates to 1848.

4.2 The site history is summarised in Table 2, below, followed by selected extracts from maps and aerial photographs.

Table 2: Summary of Site History

Date	On-Site History	Surrounding Land Use History
1848 1:10,560	The site is pastureland adjacent to and east of the Manchester (Stockport Branch) Canal.	200m to the south is Openshaw Cotton Mill and there is a chimney mapped. The main road (Ashton Old Road) runs east west 250m south of the site, along which there are number of dwellings. 400m to the north is a sand pit. Clayton Dye Works is 750m to the east
1890-1892 1:10,560 1893 1:2,500	The site is vacant, however there are rows of terrace houses immediately adjacent to the south.	There has been a rapid spate of construction along the main road 250m to the south with dwellings, mills and an engineering and iron works (200m to SW). Town's Yard is located 200m northwest of the site. A sand pit is located immediately east of the site. Beetle Works (Cotton finishing) is located 150m south of the site. Victoria Cotton Mill has been built 50m to the west on the opposite bank of the canal. An iron foundry is located 500m northeast of the site. There is a Steam Hammer Works 150m to the south and an Iron Works 250m south. There are a brick works 500m and 750m to the east. Gorton Engine Sheds, Locomotive Works and railway sidings lie 500m southwest and a sawmill 400m to the southeast.
1905 - 1906 1:10,560 1908 1:2,500	An Iron Foundry has been built on the site.	There is an electric Motor Works 100m to the north. Iron foundries lie 150m to the northwest and 100m to the south. Terraced houses have been built to the north of the site (Ferris Street). Town's Yard is now a corporation yard. There is a new brick field 200m to the east, replacing the sand pit.

Date	On-Site History	Surrounding Land Use History
		There is a chemical works, and a soap works 500m to the north. Schools are located 250m west and east of the site with associated grounds. Residential development to the west of the site. An electricity substation is located 200m south of the site. Chemical works are located 70m southwest of the site.
1923 1:10,560 1922 1:2,500	No significant change	North Street Engineering Works has been constructed 500m to the northwest and there is a rifle range 400m to the northwest. Rows of terraced houses have been built to the east. (Louisa Street, Chedle Street and Sandywell Street) Brickfield to the east is now disused. Steam hammer works have extended north and are now located 50m southwest of the site. A tank is located 90m northwest of the site.
1933 1:2,500 1933 - 1938, 1934 - 1938 1:10,560	No significant change	Victoria Steel Works has been built 50m to the west. Allotment gardens are located 10m north of the site. There is a calico dying and printing works 100m to the south. Houses have been built to the east over the old brick works site. Allotment gardens are located 500m northeast of the site. Openshaw Bridge Works (insulating material) is located 150m southeast of the site.
1956 1:10,560 1951 1:2,500 1949, 1950 1:1,250	No significant change	Houses have been built to the north and northeast of the site. Victoria Cotton Mill to the west of the site is no longer marked on the map although the building exists.
1968 1:10,560 1968 1:1,250	No significant change	A school has been built 350m to the northeast and playing fields constructed 100m east. All surrounding works now labelled as Engineering works.
1974-1979, 1978-1980 1:1,250	No significant change	All Victoria Works to the west is no longer present. An electricity substation is located 100m west of the site. A builder's yard is located 100m south of the site.

Date	On-Site History	Surrounding Land Use History
1981 1:10,000 1980,1985, 1980 1:1,250	The site is now labelled a "works".	The canal has been filled in. The allotment gardens to the north have been replaced by a depot. Engineering works to the north are no longer present. Much of the heavy industrial buildings and railway sidings and sheds to the south of the site have been dismantled and the New Smithfield Market occupies a site 500m to the south. A warehouse has been constructed 400m north of the site. The area to the south of the site is now an open green space.
1991 1:10,000 1986-1991, 1988-1992, 1992-1995, 1994-1995 1:1,250	No significant change	There is an industrial estate built on the old railway sheds and sidings site. Industrial buildings to the west and south of the site have been demolished. An electricity substation is located 130m north of the site. Remaining works the site are now no longer present or replaced by garages. By 1995, small residential development 100m northwest of the site.
2001 1:10,000 Google Earth 2000	No significant change	A large housing estate has been built to the north of the site between Clayton Brook Road, Louisa Street and bound to the west by the line of the old canal. The development of a cycle track, bridleway, and pedestrian route along former Fallowfield railway line and Ashton Canal. Houses have been constructed to replace the industrial buildings demolished in the 1980s. Remaining works to the east now replaced by Victoria House.
2003 1:10,000 2003, 2005 Google Earth	No significant change	A retail park has been built on the site to the southwest which had been vacant since the works were demolished in the 1980's.
2009, 2013 Google Earth	No significant change	Another retail centre has been built north of Ashton Old Road and west of Old Lane.
2016 Google Earth	No significant change	No significant change
2017, 2018 Google Earth	Demolition of the buildings on site	No significant change

2020 Google Earth	Site is mostly vacant with a few small brick buildings remaining fronting on to Louisa Street and long sheds on the north of the site.	Construction of houses to the west behind Hovis Street
2021 Google Earth	No significant change	Demolition of buildings south of Edge Lane 500m east of the site.

Figure 4 OS Map Extract 1848

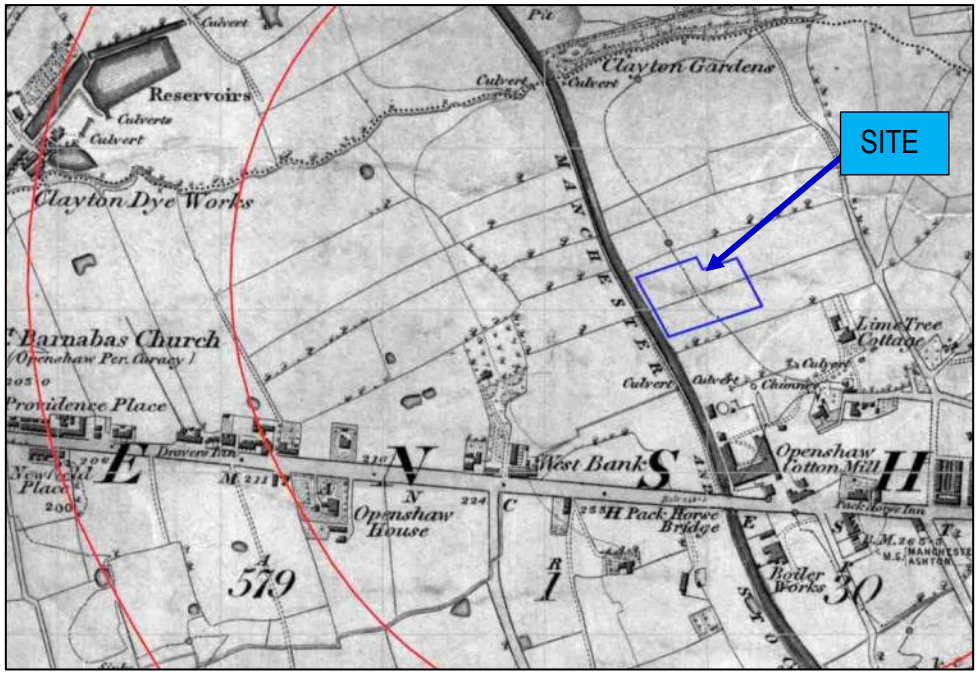


Figure 5 OS Map Extract 1893

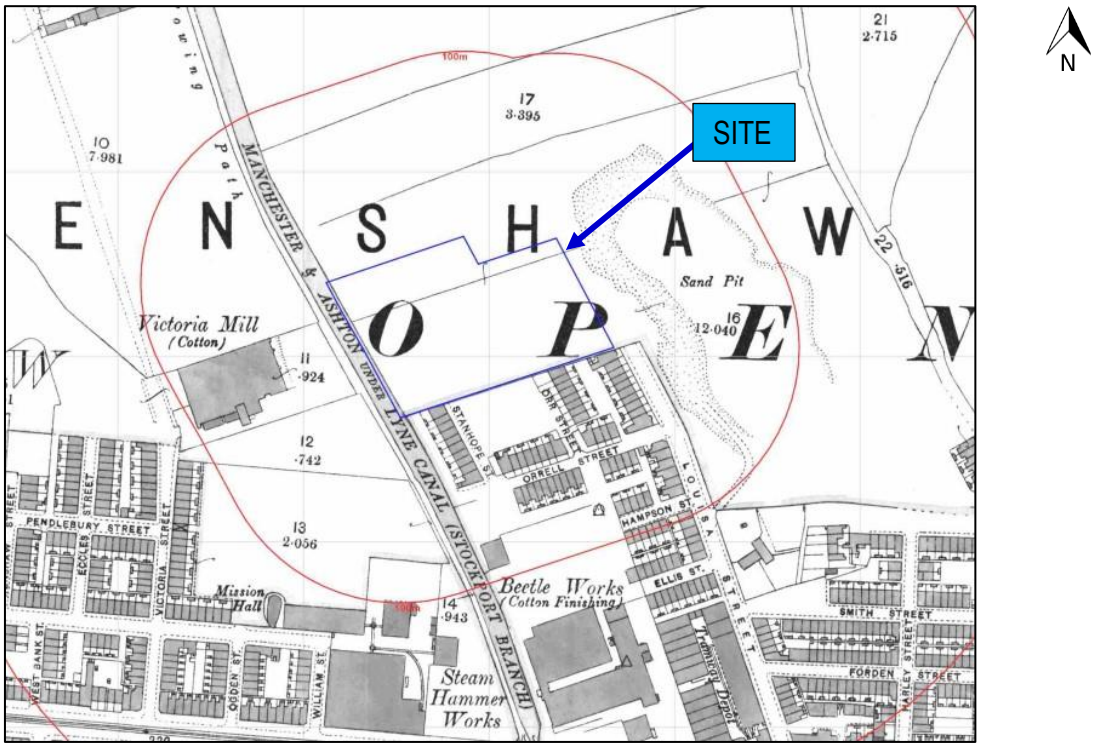


Figure 6 OS Map Extract 1908

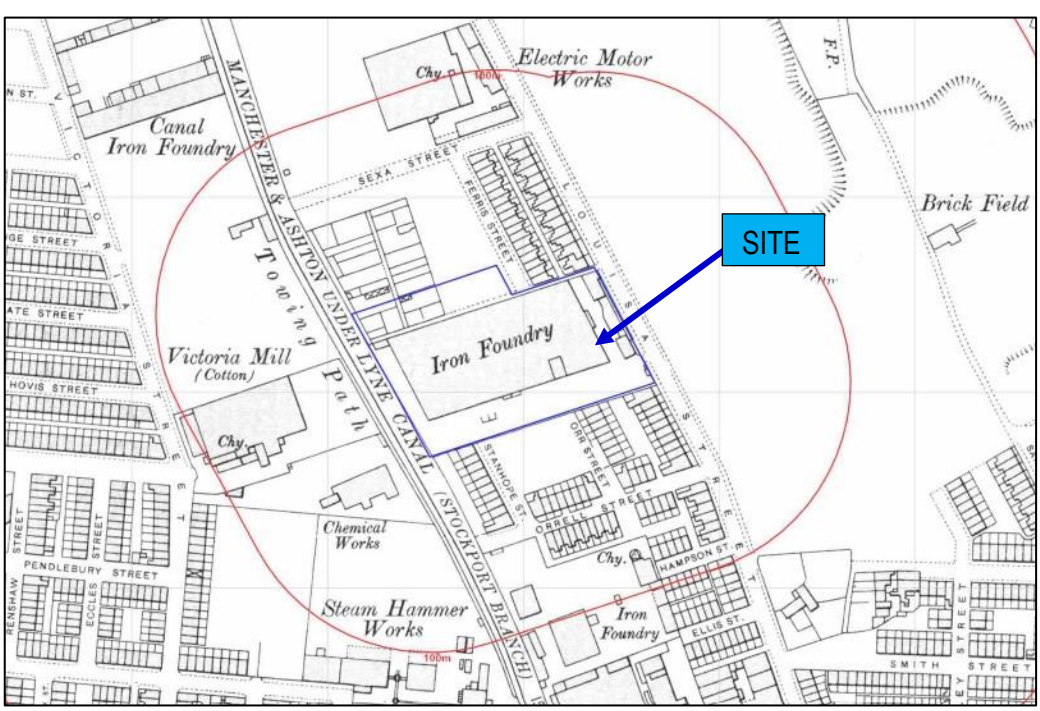


Figure 7 OS Map Extract 1933

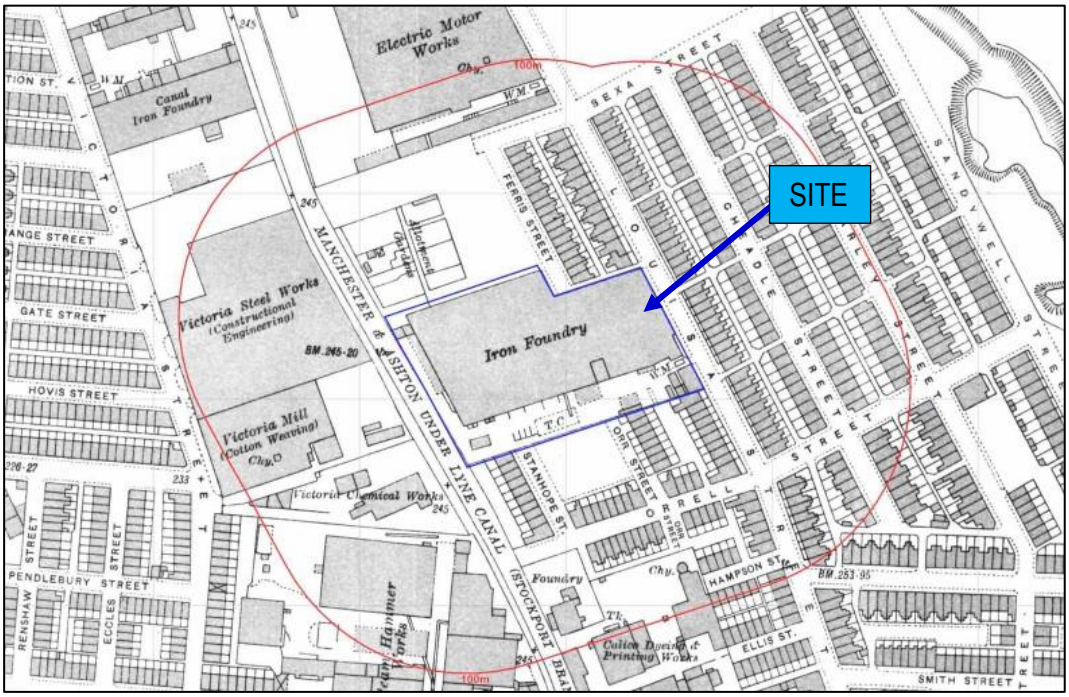


Figure 8 OS Map Extract 1956

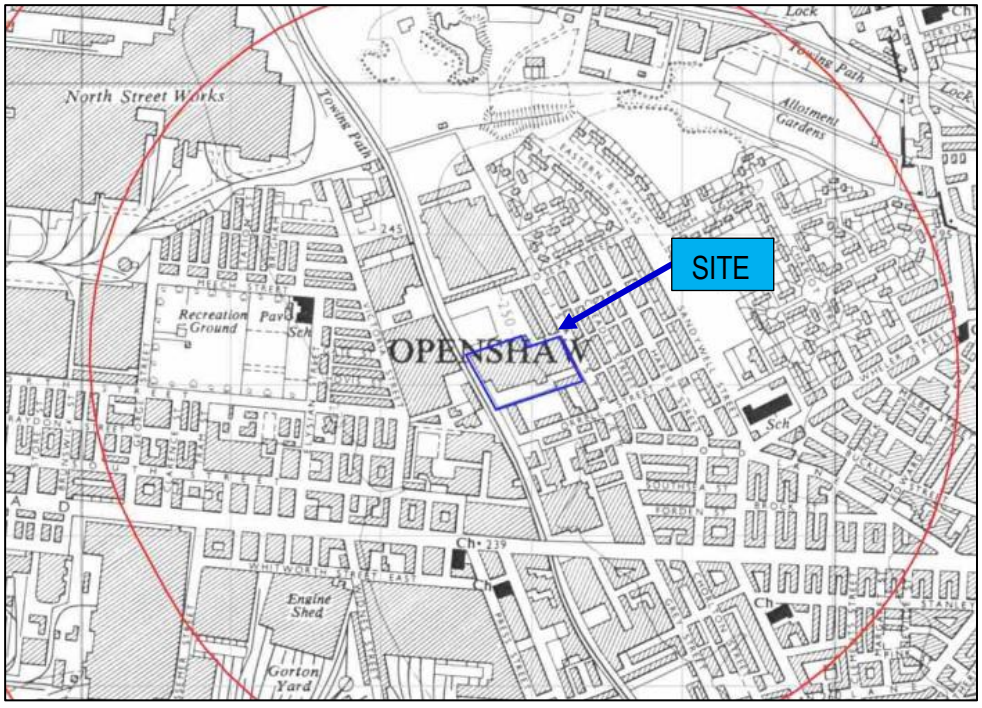


Figure 9 OS Map Extract 1981

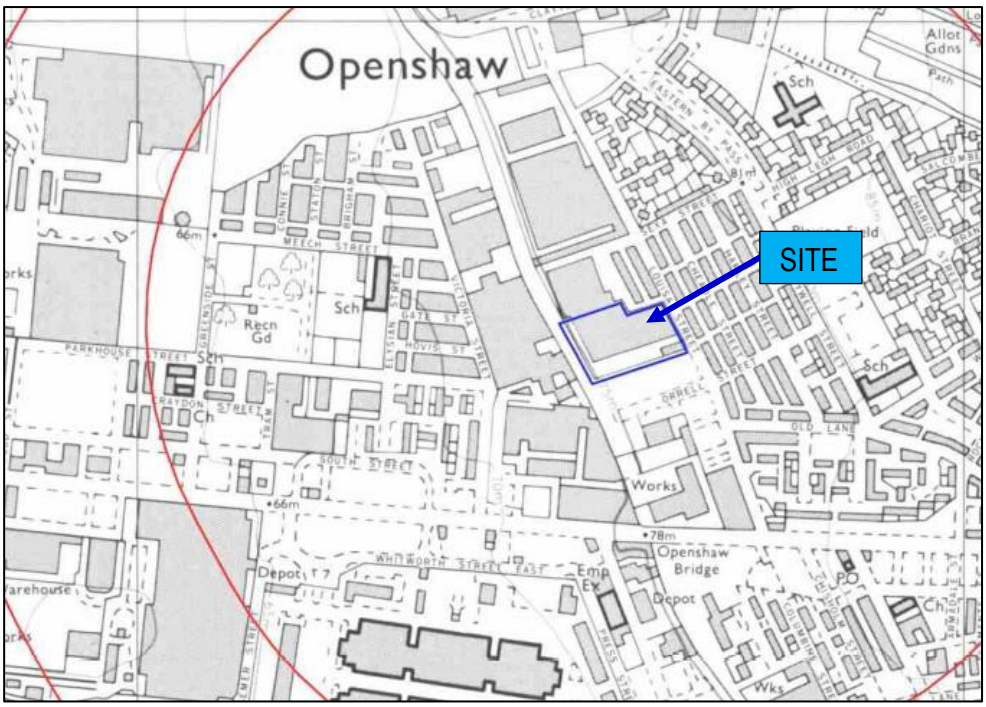


Figure 10 OS Map Extract 2001

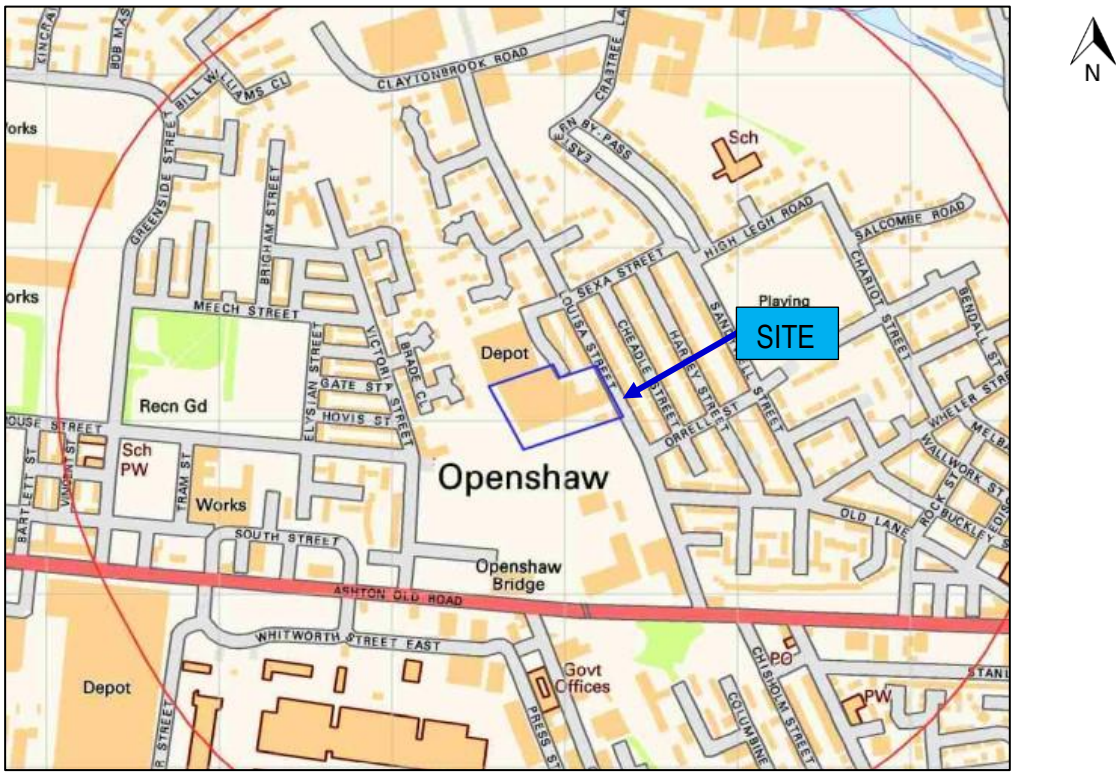


Figure 11 Google Earth Image 2009



Figure 12 Google Earth Image 2017



Figure 13 Google Earth Image 2021



5.0 WALKOVER SURVEY

5.1 A walkover survey was completed on 22nd April 2022. The photographs and notes from this survey are appended to this report as Appendix 2 and Appendix 3 respectively.

5.2 The site is currently accessed via Louisa Street located to the east of the site, by way of two gates.

5.3 The site is predominantly vacant land, covered in a mixture of concrete and tarmac hardstanding, occupied only by a garage to the south of the site along with an electricity substation located in the northeast corner of the site.

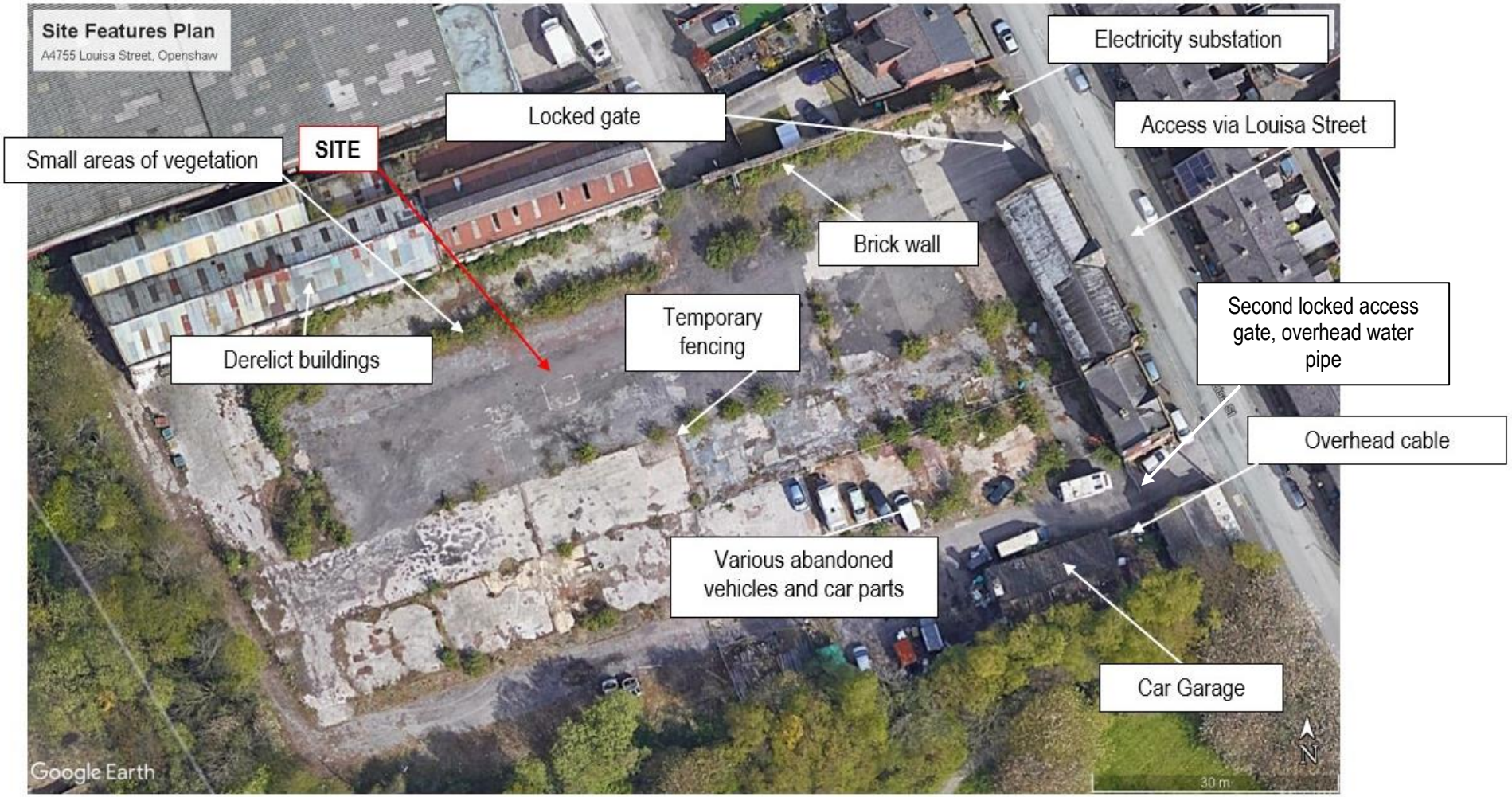
5.4 The site lies flat through and has a various items of litter located across, including dismantled cars and scrap metal.

5.5 An overhead cable runs across the site from the southeast corner to the south. What looks to be a water pipe also runs over the gate way of the southern most gate access the site.

5.6 The site is surrounded by residential properties along with a car garage located close to the site entrance.

5.7 A site features plan is presented as Figure 14 overleaf.

Figure 14: Site Features Plan



6.0 PRELIMINARY CONTAMINATION RISK ASSESSMENT

Introduction

6.1 The following paragraphs outline a Preliminary Risk Assessment (PRA) for the site based on the above desk study information as defined by DEFRA and the EA Model Procedures for the Management of Land Contamination, CLR11(2004).

6.2 Table 5 provides a Preliminary Conceptual Model (PCM) which considers the source-pathway-receptor linkages present alongside the likelihood, severity and risk level as defined within Table 3 and Table 4 below. The assessment of probability, a modified risk table, and certain consequence definitions are based on CIRIA C552 and CLR11.

6.3 Table 5 considers whether a pollution linkage is potentially present and provides a preliminary qualitative assessment of risk based on the information currently available. Where a possible linkage is identified, it does not necessarily mean that a significant risk exists but indicates that further information is required through appropriate site investigation to substantiate the conceptual model.

6.4 The PCM/PRA is based on a residential end use.

Table 3: Consequence, Probability and Risk

Probability	Consequence,	Risk
High Likelihood- There is a pollution linkage and an event either appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution	Very High – acute risk to the human health likely to result in significant harm. Risk of severe or irreversible effect on ground/surface water quality. Catastrophic damage to buildings / property.	Very High – there is a high potential that the source-pathway-receptor scenarios may give rise to harm to human health, or the environment and remedial action is likely to be required.
Likely – there is a pollution linkage, and all the elements are present, which means that it is probable an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.	High – Severe or irreversible effect on human health. Temporary severe or irreversible effect on ground/surface water quality. Reduction of water quality rendering groundwater or surface water unfit to drink and/or substantial adverse impact on groundwater dependant environmental receptors.	High – it is likely that the source-pathway-receptor scenarios may give rise to an impact on human health or the environment, which may require remediation and/or control measures to mitigate risks
Low likelihood– there is a pollutant linkage and circumstances are possible for an event could occur. However, it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter term	Moderate – Long term or short-term moderate effect on human health. Moderate effect on ground/surface water quality, reversible with time. Reduced reliability of a supply at a groundwater or surface water abstraction source	Moderate – it is possible that the source-pathway-receptor scenarios may give rise to an impact on human health or the environment, however it is either relatively unlikely that such would be severe, or if any harm were to occur it is more likely that harm would be mild.
Unlikely – there is a pollution linkage, but circumstances are such that it is doubtful that an event would occur even in the very long term.	Low – Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc.) Slight effect on ground/surface water quality, reversible with time. Marginal reduced reliability of a supply at a groundwater or surface water abstraction source.	Low – it is possible that harm could arise at the source, however it is likely that this would at worst be mild.
		Very Low – it is unlikely that the source-pathway-receptor scenarios will give rise to an impact on human health or the environment.

Table 4: Estimation of Level of Risk by Comparison of Consequence and Probability

		Consequence			
		High	**Moderate**	**Low**	**Very low**
Probability	**High Likelihood**	Very High	High risk	Moderate risk	Moderate to low risk
	Likely	High risk	Moderate risk	Moderate to low risk	Low risk
	Low Likelihood	Moderate risk	Moderate to low risk	Low risk	Very low risk
	Unlikely	Moderate to low risk	Low risk	Very low risk	Very low risk

Potential Sources

6.5 Historically the site was built upon by Joseph Stubbs (manufacturers of textile machinery) in the early 1900's as an Iron Foundry, in an area that was dominated by light and heavy mechanical and electrical industry. It is not known when the foundry closed but an application in the late 70's suggests the site was used for storage. Most of the buildings were demolished between 2017-18.

6.6 The site is located adjacent to an infilled section of a canal.

6.7 Potential onsite sources of contamination include blast furnace slag, refractory waste, and dry dust from the foundry processes of smelting, casting, and rolling. These include metals (e.g., chromium, zinc, and lead), arsenic, nitrates, and sulphates. Asbestos is likely due to the demolition of the buildings on site and mineral oils are commonly associated with electrical equipment.

6.8 The foundry appears to have been constructed on made ground possibly from other industrial sites or from the construction of the canal. This could be a source of contamination as the nature of the man made fill in not known however a refuse pit was mapped on the site in the 1880's. There is also the potential for ground gas.

6.9 After the foundry closed the buildings appear to have had a variety of uses and have been used for storage of unknown materials which could be contaminants.

6.10 There is potential for the presence of contamination associated with the following:

- Areas of Made Ground from on and off-site developments
- Multiple contaminants associated with historical land use of the site
- Asbestos related to the demolition of former buildings on the site and existing garage

Potential Receptors

6.11 The following receptors have been considered for the construction and operational stages of the proposed redevelopment.

- Current site users;
- Adjacent land users;
- Future land users;
- Construction workers during site development works;
- Surface water and Groundwater within the underlying aquifer

Potential Pathways

6.12 The following pathways have been considered for the construction and operational stages of the proposed redevelopment.

- Dermal contact, ingestion, inhalation pathways of potentially contaminated soils.
- Downward vertical migration of leachate to surface waters and shallow groundwater.
- Vertical or lateral migration of ground gas.

Table 5: Preliminary Conceptual Model

Source	Pathway	Receptor	Probability	Consequence	Risk	Comment
Potential soil contamination E.g., Heavy Metals, PAH, TPH, BTEX, PCBs and ground gases.	Dermal contact, ingestion, and inhalation of soils dust	Current Site Users	Likely	Moderate	Moderate	The site is currently mainly hard standing with a few remaining buildings. Majority of buildings were demolished in 2017 and there is some low vegetation present on the site. There are abandoned cars and rubbish on the site. There is potential for contaminated material to exist on site. The risk is therefore considered to be **MODERATE**.
		Adjacent land users	Low Likelihood	Moderate	Moderate to Low	Residential properties are present adjacent to the site. Usual dust control measures should be implemented as part of good site working practices during construction to reduce dust generation. However, there is potential for contaminated material to exist on site. Therefore, the risk is considered **MODERATE to LOW.**
		Future land users	Likely	Moderate	Moderate	The proposed development is construction of residential properties with parking areas and areas of soft landscaping. It is likely that there is some form of contamination on the site. The risk to future site users via direct exposure is **MODERATE.** However, measures taken to remove and replace contaminated topsoil/ made ground and cover the area with hard standing would reduce the risk to **LOW.**

Source	Pathway	Receptor	Probability	Consequence	Risk	Comment
		Construction Workers	High Likelihood	Moderate	High	Construction workers are highly likely be exposed to potentially contaminated made ground and soils during construction works, however exposure duration will be short-term only. The risk to construction workers is considered **HIGH.** Appropriate health and safety measures (in line with CDM and other relevant health and safety guidance) will reduce the risk to **LOW.**
	Downward vertical migration of leachate to shallow groundwater	Groundwater within the Underlying Aquifer	Unlikely	Moderate	Low	The site is mapped as made ground in the eastern part of the site and covered with hardstanding. Superficial deposits are recorded as Devensian Till which will reduce the passage of water into the subsurface. The site is flat and well drained in an urban area where storm water is managed. The groundwater and soil vulnerability for the site is classed as low. The risk to groundwater is therefore considered **LOW.**
	Lateral migration in surface waters	Surface water	Unlikely	Moderate	Low	The site is flat and well drained in an urban area where storm water is managed. There are no waterbodies nearby. Therefore, the perceived risk to surface waters is **LOW.**
	Vertical or lateral migration of ground gas	Current Site Users	Low Likelihood	Moderate	Moderate to Low	Sources of potential ground gas are likely on site due to a mapped refuse pit, made ground and historical site use. However, the site is open and currently covered in hardstanding. The radon risk is low as <1% of properties are above the Action Level. This risk to current site users is therefore **MODERATE to LOW.**
		Adjacent land users	Low Likelihood	Moderate	Moderate to Low	Sources of potential ground gas are likely on site due to a mapped refuse pit, made ground and historical site use. However, the site is open and currently covered in hardstanding. Residences are located on the opposite side of Louisa Street. The risk to adjacent site users from ground gas is therefore considered **MODERATE to LOW.**
		Future land users	Likely	Moderate	Moderate	Sources of potential ground gas are likely on site due to a mapped refuse pit, made ground and historical site use. There is low potential for radon gas. Therefore, the risk is considered **MODERATE.** Gas monitoring and remedial measures will reduce the risk to **LOW.**
		Construction Workers	Low Likelihood	Moderate	Moderate to Low	Construction workers may be exposed to ground gas/depleted oxygen conditions in confined spaces and excavations; however, the duration will be short term. The risk to construction workers from ground gas is considered **MODERATE to LOW.** Appropriate health and safety

Source	Pathway	Receptor	Probability	Consequence	Risk	Comment
						measures (in line with CDM and other relevant health and safety guidance) will reduce the risk to **LOW.**
Asbestos Containing Material (ACM)		Current Site Users	Low Likelihood	Moderate	Moderate to Low	There is potential for ACMs on the site due to the demolished buildings in the made ground beneath the site. Given the age of the existing buildings, ACM may also be present. Asbestos is only harmful when disturbed and the site is predominantly vacant land, covered with hardstanding. The risk to current site users is **MODERATE to LOW.** An asbestos survey is advised.
		Adjacent land users	Low Likelihood	Moderate	Moderate to Low	Residential properties are present adjacent to the site. Further buildings will need to be demolished and asbestos is harmful when disturbed (if present). The risk is considered **MODERATE to LOW.** Dust control measures (dampening down) should be implemented as part of good site working practices. This would reduce the risk to LOW.
		Future land users	Low Likelihood	Moderate	Moderate to Low	The proposed development is construction of residential properties with parking areas and areas of soft landscaping. Areas of the site with potential asbestos will be predominantly covered with the properties and hard standing, however there will be areas of soft landscaping included. Disturbance during construction may cause fibres to become airborne. The risk is therefore considered **MODERATE to LOW.** A pre-demolition asbestos survey and soil contamination assessment will reduce the risk to **LOW.**
		Construction Workers	Likely	Moderate	Moderate	Construction workers may be exposed to potential asbestos during the demolition and ground works for the new construction and site clearance. The duration will be short term. The risk is considered **MODERATE.** Appropriate health and safety measures (in line with CDM and other relevant health and safety guidance) would reduce the risk. A pre-demolition asbestos survey and soil contamination assessment will reduce the risk to **LOW.**

7.0 GEOTECHNICAL HAZARDS ASSOCIATED WITH THE DEVELOPMENT

7.1 In addition to the environmental hazards there are also geotechnical hazards associated with the stability of the ground including load bearing capacity, slope stability and effects of ground mining activities. Local Authorities follow NPPF (2012) which requires that a site is suitable for its new use considering of ground conditions and land instability, including from natural hazards to former activities such as mining. A summary of the geotechnical considerations is provided below in Table 6.

Table 6: Summary of Geotechnical Hazards

Geohazards:	
Highly Compressible Ground	Negligible risk.
Collapsible Soils	Very low risk.
Swelling Clay	Very low risk.
Running Sand	Very low risk.
Ground Dissolution	Negligible risk.
Landslip	Very low risk.
Mining & Quarrying	There is no mining in the area although there was a brick field 197m northeast which was filled in and built upon.
Geotechnical Design Considerations	
Site Clearance	The site has several buildings, long sheds along the north boundary, brick fronted buildings facing Louisa Street and smaller brick buildings in the southeast of the site. There are also abandoned cars and litter on site. This will all need to be cleared prior to works commencing.
Trees	There are no trees on site, just low vegetation. Mature trees are present adjacent the site along the southern and western boundaries.
Existing Buildings/Obstructions	The site has several buildings, long sheds along the north boundary, brick fronted buildings facing Louisa Street and smaller brick buildings in the southeast of the site. There are also abandoned cars and litter on site.
Foundations	The depth and type of proposed foundations would depend on the ground conditions present on site. Geological mapping suggests that there is made ground on site and superficial deposits of Devensian Till. The closest borehole logged 0.7m of soft clay and fill underlain by compact dense brown silty sand.
Floor Slabs	Again, an intrusive geotechnical investigation is recommended prior to any construction works to discover the most suitable floor slab design for the on-site ground conditions.

Geotechnical Design Considerations	
Groundwater	Exact groundwater conditions are not known at this stage. For more detailed knowledge of the groundwater regime, an intrusive geotechnical investigation would be needed. However, it is recorded that the secondary deposits on site are expected to be artificial ground and boulder clay. The site is flat and will utilise the current stormwater / sewer system. The highest risk of groundwater flooding occurring on-site is MODERATE.
Earthworks	Extensive earthworks are not considered necessary on the site, however, the depth of Made Ground encountered and the hardstanding covering the site should be considered.
Slopes	The site topography is flat.
Retaining Walls	There are no retaining walls on the site.
Chemically aggressive ground conditions	Chemically aggressive ground conditions are not expected at this site. However, an intrusive geotechnical investigation would be necessary to confirm this due to the potential extent of made ground.

8.0 CONCLUSIONS & RECOMMENDATIONS

Conclusions

8.1 Historically the site was an Iron Foundry from the early 1900's in an area dominated by heavy industry including, iron and steel works, mills, stream hammer works, electric motor works and railway sheds and sidings.

8.2 Potential current on-site sources of contamination include possible contaminants (heavy metals, mineral acids, arsenic) in made ground related to the iron foundry processes, subsequent works and storage of materials on the site. Ground gas is a possibility as a result of made ground on site and nearby infilled pits. Asbestos contamination is possible resulting from the historical demolished buildings and demolition of onsite buildings.

8.3 There is an onsite record of a permit for inert liquid sludge permit pertaining to the Stockport Branch Canal – however, this is noted to be inert. There is also an on-site record of a refuse tip, but this cannot be observed on historical mapping.

8.4 Potential off-site sources of contamination were identified as chemicals and metals mobilised from historical heavy industrial sites, one of which has been identified as contaminated ground 85m to the north.

8.5 The eastern part of the site is mapped as artificial ground and the solid geology beneath the site is mapped as the Early Triassic Chester Pebble Beds Formation, (Principal Aquifer). Superficial deposits are mapped as Devensian Till (Secondary Undifferentiated Aquifer).

8.6 Given the historical land use, mapped made ground and age of existing buildings still present on the property, the site is at risk of contamination from heavy metals, arsenic, asbestos and has the potential for ground gas.

8.7 The site is not located in a Radon Affected Area, as less than 1% of the properties are above the Action Level.

8.8 Given the potential of contaminative land uses, the overall risk from soil contamination to end users is concluded to be **MODERATE**.

8.9 The risk to construction workers is **HIGH to MODERATE** for potential soil contamination through dermal contact, ingestion, and inhalation of soils dust. This can be minimised by soil testing and putting into practice the appropriate health and safety measures.

8.10 The risk to controlled waters is concluded to be **LOW** based on the current drainage of the site and the site not being proximal to any water bodies.

8.11 The risk from ground gas to end users and construction workers is **MODERATE**.

8.12 The risk from asbestos to end users is **MODERATE** to **LOW** while the risk to construction workers is considered **MODERATE**.

8.13 The site is not located within a flood plain.

Recommendations

8.14 An intrusive investigation should be undertaken to ensure the most up to date geotechnical parameters for the design foundations, floor slabs and pavement construction for the proposed new structures and surrounding area are gained.

8.15 As part of the geotechnical investigation, samples of soil should be recovered for contamination testing.

8.16 Ground gas monitoring standpipes should be also installed to facilitate future monitoring of the ground gas regime.

APPENDIX 1

GROUNDSURE REPORTS

Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

LOUISA STREET, MANCHESTER, M11 1AD

Order Details

Date: 14/04/2022

Your ref: A4755

Our Ref: GS-8674875

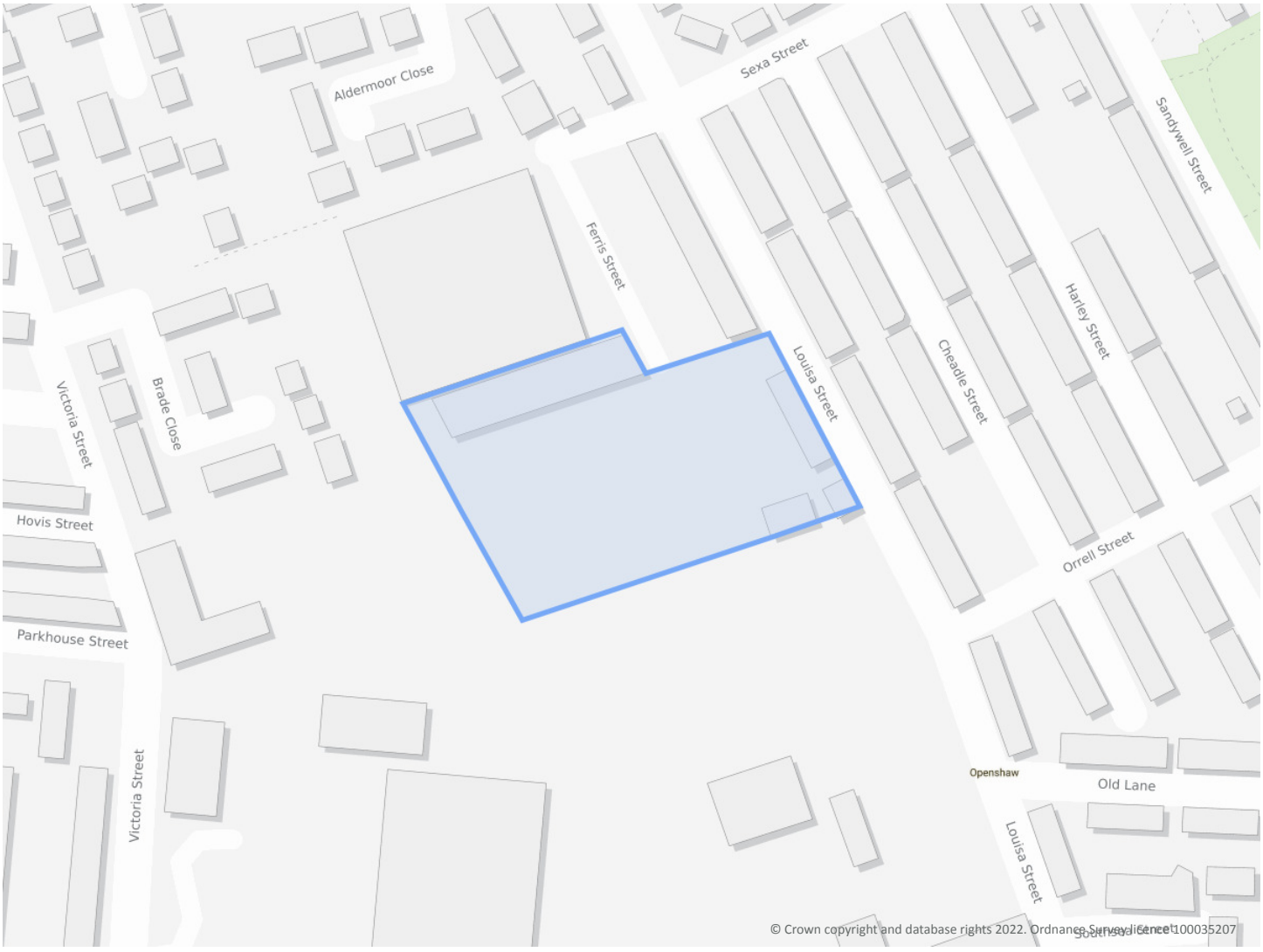
Client: Adam Czarnecki

Site Details

Location: 388591 397626

Area: 0.93 ha

Authority: Manchester City Council



Summary of findings p. 2

OS MasterMap site plan p.12

Aerial image p. 8

groundsure.com/insightuserguide

Contact us with any questions at:
info@groundsure.com
08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	Historical industrial land uses	8	14	57	136	-
21	1.2	Historical tanks	0	0	15	25	-
23	1.3	Historical energy features	0	0	15	14	-
25	1.4	Historical petrol stations	0	0	0	0	-
25	1.5	Historical garages	0	0	1	13	-
26	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
27	2.1	Historical industrial land uses	10	18	67	180	-
37	2.2	Historical tanks	0	0	30	46	-
40	2.3	Historical energy features	0	0	22	40	-
43	2.4	Historical petrol stations	0	0	0	0	-
43	2.5	Historical garages	0	0	2	20	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
45	3.1	Active or recent landfill	0	0	0	0	-
45	3.2	Historical landfill (BGS records)	0	0	0	0	-
46	3.3	Historical landfill (LA/mapping records)	0	0	0	1	-
46	3.4	Historical landfill (EA/NRW records)	1	0	1	1	-
47	3.5	Historical waste sites	0	0	0	3	-
47	3.6	Licensed waste sites	0	0	2	1	-
49	3.7	Waste exemptions	1	2	13	32	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
54	4.1	Recent industrial land uses	0	0	10	-	-
55	4.2	Current or recent petrol stations	0	0	0	3	-
56	4.3	Electricity cables	0	0	0	0	-
56	4.4	Gas pipelines	0	0	0	0	-
56	4.5	Sites determined as Contaminated Land	0	0	6	4	-

57	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
57	4.7	Regulated explosive sites	0	0	0	0	-
58	4.8	Hazardous substance storage/usage	0	0	0	0	-
58	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
58	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
58	**4.11**	**Licensed pollutant release (Part A(2)/B)**	0	0	0	4	-
59	4.12	Radioactive Substance Authorisations	0	0	0	0	-
59	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
59	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
59	4.15	Pollutant release to public sewer	0	0	0	0	-
60	4.16	List 1 Dangerous Substances	0	0	0	0	-
60	4.17	List 2 Dangerous Substances	0	0	0	0	-
60	**4.18**	**Pollution Incidents (EA/NRW)**	0	1	0	0	-
60	4.19	Pollution inventory substances	0	0	0	0	-
61	4.20	Pollution inventory waste transfers	0	0	0	0	-
61	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
62	**5.1**	**Superficial aquifer**	Identified (within 500m)				
64	**5.2**	**Bedrock aquifer**	Identified (within 500m)				
66	**5.3**	**Groundwater vulnerability**	Identified (within 50m)				
67	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
67	5.5	Groundwater vulnerability- local information	None (within 0m)				
68	**5.6**	**Groundwater abstractions**	0	0	0	0	28
75	**5.7**	**Surface water abstractions**	0	0	0	0	8
78	5.8	Potable abstractions	0	0	0	0	0
78	5.9	Source Protection Zones	0	0	0	0	-
78	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
79	6.1	Water Network (OS MasterMap)	0	0	0	-	-

79	6.2	Surface water features	0	0	0	-	-
80	**6.3**	**WFD Surface water body catchments**	1	-	-	-	-
80	**6.4**	**WFD Surface water bodies**	0	0	0	-	-
81	**6.5**	**WFD Groundwater bodies**	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
82	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
82	7.2	Historical Flood Events	0	0	0	-	-
82	7.3	Flood Defences	0	0	0	-	-
83	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
83	7.5	Flood Storage Areas	0	0	0	-	-
84	7.6	Flood Zone 2	None (within 50m)				
84	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
85	**8.1**	**Surface water flooding**	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
87	**9.1**	**Groundwater flooding**	Moderate (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
88	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
89	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
89	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
89	10.4	Special Protection Areas (SPA)	0	0	0	0	0
89	10.5	National Nature Reserves (NNR)	0	0	0	0	0
90	**10.6**	**Local Nature Reserves (LNR)**	0	0	0	0	1
90	10.7	Designated Ancient Woodland	0	0	0	0	0
90	10.8	Biosphere Reserves	0	0	0	0	0
90	10.9	Forest Parks	0	0	0	0	0
91	10.10	Marine Conservation Zones	0	0	0	0	0
91	**10.11**	**Green Belt**	0	0	0	0	2
91	10.12	Proposed Ramsar sites	0	0	0	0	0

91	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
92	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
92	10.15	Nitrate Sensitive Areas	0	0	0	0	0
92	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
93	**10.17**	**SSSI Impact Risk Zones**	2	-	-	-	-
94	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
95	11.1	World Heritage Sites	0	0	0	-	-
95	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
95	11.3	National Parks	0	0	0	-	-
95	11.4	Listed Buildings	0	0	0	-	-
96	11.5	Conservation Areas	0	0	0	-	-
96	11.6	Scheduled Ancient Monuments	0	0	0	-	-
96	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
97	**12.1**	**Agricultural Land Classification**	Urban (within 250m)				
98	12.2	Open Access Land	0	0	0	-	-
98	12.3	Tree Felling Licences	0	0	0	-	-
98	12.4	Environmental Stewardship Schemes	0	0	0	-	-
98	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
99	13.1	Priority Habitat Inventory	0	0	0	-	-
99	13.2	Habitat Networks	0	0	0	-	-
100	**13.3**	**Open Mosaic Habitat**	0	0	1	-	-
100	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
101	**14.1**	**10k Availability**	Identified (within 500m)				
102	**14.2**	**Artificial and made ground (10k)**	1	0	1	2	-
104	**14.3**	**Superficial geology (10k)**	1	0	0	1	-

105	14.4	Landslip (10k)	0	0	0	0	-
106	**14.5**	**Bedrock geology (10k)**	1	1	0	0	-
107	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
108	**15.1**	**50k Availability**	Identified (within 500m)				
109	**15.2**	**Artificial and made ground (50k)**	0	0	2	1	-
110	15.3	Artificial ground permeability (50k)	0	0	-	-	-
111	**15.4**	**Superficial geology (50k)**	1	0	0	1	-
112	**15.5**	**Superficial permeability (50k)**	Identified (within 50m)				
112	15.6	Landslip (50k)	0	0	0	0	-
112	15.7	Landslip permeability (50k)	None (within 50m)				
113	**15.8**	**Bedrock geology (50k)**	1	1	0	0	-
114	**15.9**	**Bedrock permeability (50k)**	Identified (within 50m)				
114	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
115	**16.1**	**BGS Boreholes**	0	0	27	-	-
Page	Section	Natural ground subsidence					
118	**17.1**	**Shrink swell clays**	Very low (within 50m)				
119	**17.2**	**Running sands**	Very low (within 50m)				
120	**17.3**	**Compressible deposits**	Negligible (within 50m)				
121	**17.4**	**Collapsible deposits**	Very low (within 50m)				
122	**17.5**	**Landslides**	Very low (within 50m)				
123	**17.6**	**Ground dissolution of soluble rocks**	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
125	18.1	Natural cavities	0	0	0	0	-
126	**18.2**	**BritPits**	0	0	1	2	-
126	**18.3**	**Surface ground workings**	3	5	16	-	-
127	18.4	Underground workings	0	0	0	0	0
128	18.5	Historical Mineral Planning Areas	0	0	0	0	-

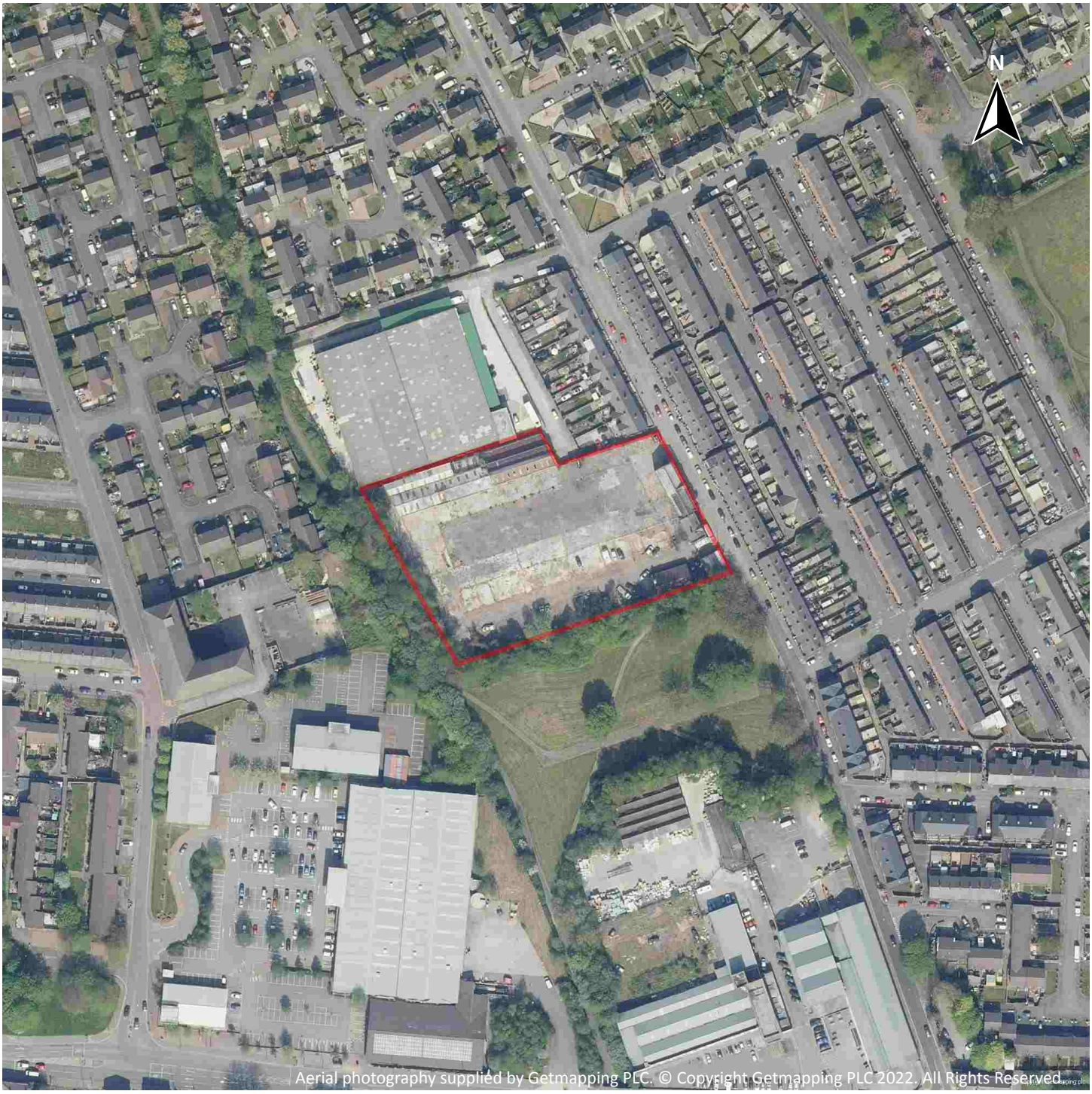
128	18.6	Non-coal mining	0	0	0	0	0
128	18.7	Mining cavities	0	0	0	0	0
128	**18.8**	**JPB mining areas**	Identified (within 0m)				
129	**18.9**	**Coal mining**	Identified (within 0m)				
129	18.10	Brine areas	None (within 0m)				
129	18.11	Gypsum areas	None (within 0m)				
129	18.12	Tin mining	None (within 0m)				
129	18.13	Clay mining	None (within 0m)				

Page	Section	Radon	
130	**19.1**	**Radon**	Less than 1% (within 0m)

Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
131	**20.1**	**BGS Estimated Background Soil Chemistry**	1	2	-	-	-
131	**20.2**	**BGS Estimated Urban Soil Chemistry**	4	6	-	-	-
132	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
133	21.1	Underground railways (London)	0	0	0	-	-
133	21.2	Underground railways (Non-London)	0	0	0	-	-
134	21.3	Railway tunnels	0	0	0	-	-
134	**21.4**	**Historical railway and tunnel features**	0	1	18	-	-
135	21.5	Royal Mail tunnels	0	0	0	-	-
135	21.6	Historical railways	0	0	0	-	-
135	21.7	Railways	0	0	0	-	-
135	21.8	Crossrail 1	0	0	0	0	-
136	21.9	Crossrail 2	0	0	0	0	-
136	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 22/04/2019

Site Area: 0.93ha

Recent site history - 2015 aerial photograph



Capture Date: 11/06/2015

Site Area: 0.93ha

Recent site history - 2009 aerial photograph



Capture Date: 02/06/2009

Site Area: 0.93ha

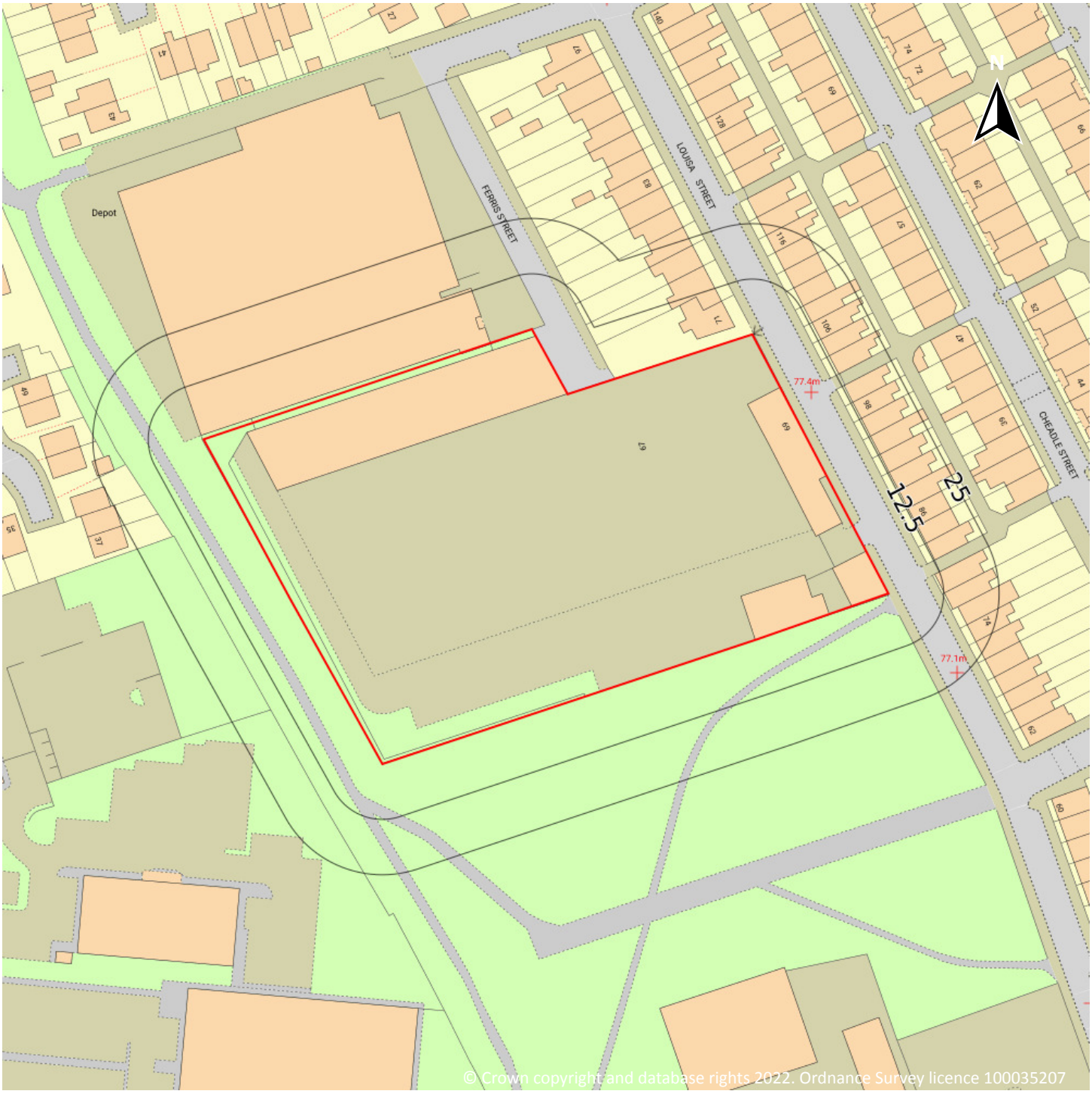
Recent site history - 2000 aerial photograph



Capture Date: 19/06/2000

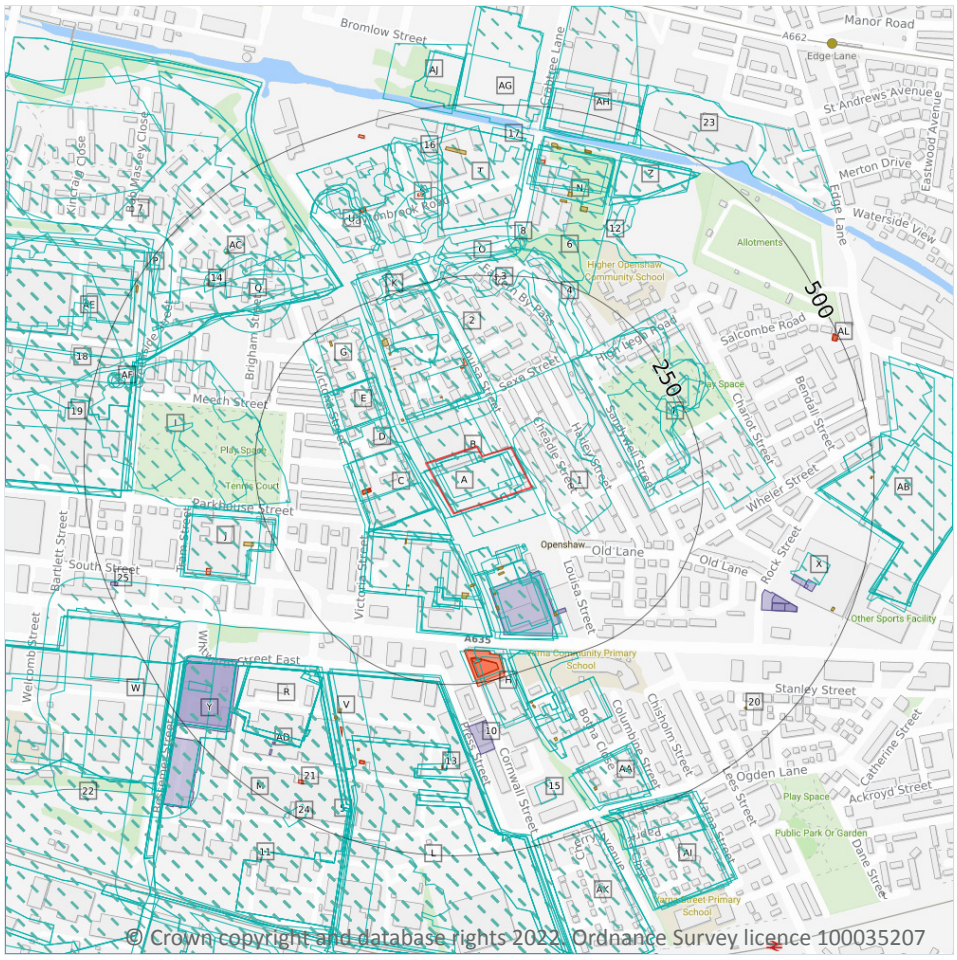
Site Area: 0.93ha

OS MasterMap site plan



Site Area: 0.93ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	215

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
1	**On site**	**Refuse Pit**	**1890**	**834314**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Iron Foundry**	**1923**	**852284**
A	**On site**	**Iron Foundry**	**1968**	**904598**
A	**On site**	**Iron Foundry**	**1915**	**908576**
A	**On site**	**Iron Foundry**	**1905**	**965502**
A	**On site**	**Iron Foundry**	**1934 - 1938**	**979593**
A	**On site**	**Unspecified Commercial/Industrial**	**1985 - 1991**	**979765**
B	**On site**	**Unspecified Commercial/Industrial**	**1956**	**845443**
C	13m SW	Unspecified Works	1968	981831
D	13m SW	Unspecified Commercial/Industrial	1978	796803
C	19m SW	Unspecified Mill	1915	940481
C	19m SW	Unspecified Works	1915 - 1923	856423
C	20m SW	Steel Works	1934 - 1938	931825
C	21m SW	Unspecified Mill	1890 - 1905	857504
D	23m SW	Iron Foundry	1905	930585
C	30m SW	Unspecified Mill	1923	991657
C	32m S	Unspecified Works	1968	875188
C	38m S	Steam Hammer Works	1915	867081
C	38m S	Steam Hammer Works	1934 - 1938	928039
B	40m N	Electric Motor Works	1934	896972
C	41m S	Unspecified Commercial/Industrial	1905	796804
C	43m S	Steam Hammer Works	1923	975783
C	61m S	Unspecified Commercial/Industrial	1905	796800
C	61m S	Unspecified Foundry	1915 - 1923	922940
2	64m N	Corporation Yard	1915	833876
B	64m N	Electric Motor Works	1915 - 1923	926827
B	64m N	Electricity Motor Works	1905	811645
B	70m N	Unspecified Works	1968	830499
B	70m N	Unspecified Commercial/Industrial	1978	886658

ID	Location	Land use	Dates present	Group ID
C	72m S	Unspecified Works	1968	963287
C	74m S	Chimney	1851	835769
C	80m S	Cotton Mill	1851	797898
3	80m NE	Unspecified Ground Workings	1905	901924
E	92m NW	Iron Foundry	1915	857367
E	92m NW	Iron Foundry	1934	915048
E	92m NW	Iron Foundry	1923	922033
C	93m S	Unspecified Works	1978	880526
C	95m S	Railway Sidings	1934 - 1938	972163
C	96m S	Unspecified Works	1915 - 1923	985700
C	110m S	Railway Sidings	1905	889087
C	110m S	Railway Sidings	1923	907186
C	110m S	Railway Sidings	1915	907747
C	125m S	Unspecified Works	1985 - 1991	953446
B	136m N	Unspecified Pit	1890	950240
F	137m NE	Brick Field	1923	933262
B	138m N	Unspecified Pit	1923	868357
B	138m N	Unspecified Pit	1905	898168
F	145m NE	Disused Brick Field	1915	834328
G	150m NW	Corporation Yard	1923 - 1934	883427
F	153m E	Brick Field	1905	924404
4	166m NE	Unspecified Ground Workings	1923	800748
F	192m NE	Unspecified Pit	1923	840714
H	197m S	Unspecified Depot	1985 - 1991	855226
H	198m S	Electric Substation	1915 - 1923	921967
I	206m W	Brick Works	1890	818779
H	213m S	Unspecified Depot	1978	876928
F	213m NE	Unspecified Ground Workings	1934	800747

ID	Location	Land use	Dates present	Group ID
H	214m S	Boiler Works	1851	826525
H	216m S	Iron Works	1923	928662
H	221m S	Iron Works	1934	850711
H	221m S	Iron Works	1938	893233
H	221m S	Iron Works	1915	940747
J	228m W	Unspecified Works	1968	830427
J	235m W	Engineering Works	1915	904653
J	235m W	Engineering Works	1934 - 1938	941769
K	237m N	Unspecified Ground Workings	1923	880372
L	238m S	Locomotive Works	1968	924954
I	239m W	Unspecified Pit	1890	840559
J	239m W	Engineering Works	1923	877806
L	241m S	Locomotive Works	1938 - 1956	867135
F	242m NE	Unspecified Heap	1956	804176
M	246m SW	Unspecified Yard	1956	908731
L	246m S	Locomotive Works	1934	885991
5	247m S	Unspecified Yard	1890	849060
M	247m S	Railway Sidings	1890	974704
L	248m S	Carriage, Wagon and Locomotive Works	1915 - 1923	937994
L	248m S	Locomotive Works	1905	946681
M	248m S	Railway Sidings	1923	902553
M	248m S	Railway Sidings	1905	954032
N	251m NE	Unspecified Works	1985 - 1991	968646
O	251m N	Unspecified Pit	1934 - 1938	891092
J	253m W	Engineering Works	1890	931550
6	261m N	Unspecified Heap	1934 - 1938	851266
O	263m N	Cuttings	1956	795828
K	278m N	Unspecified Pit	1934 - 1938	982746

ID	Location	Land use	Dates present	Group ID
P	285m NW	Railway Sidings	1915	870808
P	285m NW	Railway Sidings	1934 - 1938	882010
P	285m NW	Engineering Works	1934	912693
P	286m NW	Engineering Works	1923	951144
7	287m NW	Steel Works	1956	810023
P	287m NW	Railway Sidings	1956	877918
8	288m N	Unspecified Heap	1905	976853
Q	288m NW	Rifle Range	1915 - 1923	937905
H	291m S	Unspecified Mill	1915	871356
H	291m S	Unspecified Mill	1934 - 1938	921592
H	292m S	Unspecified Mill	1923	976610
H	293m S	Unspecified Works	1915 - 1923	950284
9	296m SW	Unspecified Foundry	1956	809978
M	299m SW	Unspecified Yard	1968	920516
R	299m SW	Engine Shed	1968	927617
P	302m NW	Railway Sidings	1923	924696
R	305m SW	Engine Shed	1956	894658
M	305m SW	Unspecified Yard	1905	952348
M	305m SW	Unspecified Yard	1923	954037
M	306m SW	Unspecified Yard	1934 - 1938	955837
M	306m SW	Unspecified Yard	1915	973521
11	307m SW	Railway Sidings	1968	901995
S	309m N	Old Sand Pit	1934 - 1938	913850
T	311m N	Chemical Works	1923	850414
Q	312m NW	Gravel Pit	1890	807915
M	315m SW	Railway Sidings	1934	886032
M	315m SW	Railway Sidings	1915	954027
M	315m SW	Railway Sidings	1938	975550

ID	Location	Land use	Dates present	Group ID
R	315m SW	Engine Shed	1915	850687
R	315m SW	Engine Shed	1934 - 1938	883429
12	315m N	Refuse Heap	1956 - 1968	875678
R	316m SW	Engine Shed	1905	869312
R	316m SW	Engine Shed	1923	880833
P	316m NW	Railway Sidings	1968	862695
U	316m N	Sand Pit	1851	797602
U	318m N	Unspecified Pit	1890 - 1905	934039
U	318m N	Unspecified Pit	1923	975009
T	321m N	Chemical Works	1934 - 1938	915443
T	321m N	Chemical Works	1915	985767
S	321m N	Sand Pit	1915 - 1923	929098
U	324m N	Unspecified Ground Workings	1915	800749
L	337m S	Railway Sidings	1956	912703
L	337m S	Railway Sidings	1968	966235
S	342m N	Refuse Heap	1956	829161
L	342m S	Railway Sidings	1915	926340
Q	349m NW	Unspecified Ground Workings	1934 - 1938	880101
P	354m NW	Unspecified Works	1968	923446
N	361m N	Railway Sidings	1991	944933
T	369m N	Unspecified Commercial/Industrial	1985 - 1991	965355
W	369m SW	Unspecified Depot	1985	966409
U	371m N	Refuse Heap	1956 - 1968	948721
N	372m N	Forge	1934 - 1938	927324
N	373m N	Unspecified Works	1968	969086
U	381m N	Unspecified Warehouse	1978	931301
U	381m N	Unspecified Warehouse	1985 - 1991	969361
Z	381m N	Unspecified Works	1968 - 1978	962653

ID	Location	Land use	Dates present	Group ID
Y	384m SW	Railway Building	1968	820510
N	385m N	Forge	1923	974769
Y	388m SW	Carriage Repairing Shed	1923	934639
Y	388m SW	Carriage Repairing Shed	1905	973552
N	388m N	Forge	1915	883950
Y	389m SW	Wagon Repair Shed	1934	815796
Y	389m SW	Wagon Repairing Shed	1938	837405
Y	389m SW	Carriage Repairing Shed	1915	939780
Z	393m N	Unspecified Commercial/Industrial	1923	796798
N	397m N	Railway Sidings	1934 - 1938	953757
X	398m E	Sawmill	1890	808366
Z	398m N	Unspecified Works	1915	859228
Z	398m N	Unspecified Works	1934 - 1938	926650
AA	401m S	Unspecified Works	1968 - 1978	875829
AA	401m S	Unspecified Works	1985 - 1991	938462
AA	405m S	Steel Works	1890	810024
Z	406m NE	Iron Foundry	1890	835199
AA	408m S	Engineering Works	1915 - 1923	870147
15	413m S	Unspecified Works	1985 - 1991	896896
AB	414m E	Electrical Engineering Works	1934 - 1938	922087
16	417m N	Unspecified Ground Workings	1956	800750
AB	417m E	Electrical Engineering Works	1956	880349
17	418m N	Unspecified Works	1968	830505
AB	421m E	Unspecified Commercial/Industrial	1991	920794
AB	421m E	Unspecified Works	1985	926037
AC	422m NW	Unspecified Tank	1934	825251
U	425m N	Unspecified Heap	1923 - 1938	906104
18	425m W	Unspecified Works	1985	985355

ID	Location	Land use	Dates present	Group ID
W	426m SW	Unspecified Depot	1968 - 1978	928299
AE	427m W	Engineering Works	1938	884631
W	432m SW	Engineering Works	1934	865117
W	432m SW	Engineering Works	1915	946576
P	433m NW	Unspecified Heap	1985 - 1991	854063
19	434m W	Unspecified Commercial/Industrial	1968	796802
Y	434m SW	Unspecified Depot	1991	876027
W	435m SW	Engineering Works	1923	849347
AE	441m W	Unspecified Works	1978	878377
AF	456m W	Unspecified Tank	1985	902693
AG	460m N	Chemical Works	1915 - 1923	848810
AF	462m W	Unspecified Tank	1968	875915
AH	462m N	Chemical Works	1915 - 1923	898608
AH	463m N	Chemical Works	1890	923576
22	464m SW	Engineering Works	1890 - 1905	949713
AF	464m W	Unspecified Tank	1978	912306
AE	465m W	Dye Works	1851	870141
AH	466m N	Brick Kilns	1851	827902
AH	467m N	Chemical Works	1905	901354
AE	475m NW	Unspecified Works	1991	844894
AG	477m N	Unspecified Works	1985 - 1991	972239
23	478m N	Chemical Works	1934 - 1938	865007
24	479m SW	Railway Building	1923 - 1934	868639
AH	481m N	Unspecified Works	1978	968175
AH	482m N	Unspecified Depot	1985 - 1991	903448
AG	482m N	Unspecified Works	1968 - 1978	910923
AB	484m E	Unspecified Works	1978	915460
AI	484m S	Unspecified Works	1978	927331

ID	Location	Land use	Dates present	Group ID
AI	484m S	Unspecified Works	1968	984653
26	486m NE	Unspecified Ground Workings	1934 - 1938	887584
AB	487m E	Unspecified Works	1968	907935
AI	487m S	Unspecified Works	1985	938344
AJ	487m N	Soap Works	1890	991004
AK	488m S	Unspecified Commercial/Industrial	1905	796816
AK	488m S	Canal Depot	1915	858788
AK	488m S	Canal Depot	1890	859856
AK	488m S	Canal Depot	1934 - 1938	947382
AK	488m S	Canal Depot	1923	984746
AI	489m S	Unspecified Commercial/Industrial	1934	796815
AI	489m S	Unspecified Mill	1890	867414
AI	489m S	Unspecified Mill	1915 - 1923	956130
AI	490m S	Unspecified Mill	1905	962533
AJ	494m N	Soap Works	1905	933371
AJ	494m N	Soap Works	1923	975047
AJ	496m N	Soap Works	1915	875760
AE	496m NW	Engineering Works	1915	870994

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**40**

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 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
D	70m NW	Unspecified Tank	1922	116437
C	78m SW	Unspecified Tank	1949	116436
B	84m N	Tanks	1949 - 1968	133526
C	95m S	Unspecified Tank	1949	116435
C	103m S	Unspecified Tank	1922 - 1933	141921
C	107m S	Unspecified Tank	1949 - 1980	125305
C	116m S	Unspecified Tank	1949 - 1980	134579
C	123m SW	Unspecified Tank	1949	116438
C	129m S	Unspecified Tank	1949	116443
B	144m N	Unspecified Tank	1949	116168
C	149m S	Unspecified Tank	1922	116442
B	167m N	Unspecified Tank	1949	116166
B	181m N	Tanks	1968 - 1979	126978
C	184m S	Tanks	1949 - 1980	135259
G	219m NW	Unspecified Tank	1988	116167
J	278m SW	Unspecified Tank	1986 - 1997	143917
H	296m S	Unspecified Tank	1893	116444
H	302m S	Unspecified Tank	1933	116445
H	304m S	Unspecified Tank	1922	116446
V	329m SW	Unspecified Tank	1933	116465
V	342m SW	Unspecified Tank	1893	116464
H	357m S	Unspecified Tank	1949	116469
N	360m N	Tanks	1950	127740
N	366m N	Unspecified Tank	1950 - 1988	138112
13	368m S	Unspecified Tank	1933	116467
V	370m S	Unspecified Tank	1949	116466
N	376m N	Unspecified Tank	1950	124985
14	412m NW	Unspecified Tank	1968	116164

ID	Location	Land use	Dates present	Group ID
AC	422m NW	Unspecified Tank	1933	116165
T	427m N	Tanks	1922	107022
N	441m N	Tanks	1994	140257
N	443m N	Tanks	1988 - 1994	132381
N	444m N	Unspecified Tank	1988	143474
AA	444m S	Unspecified Tank	1978 - 1980	131035
N	445m N	Unspecified Tank	1994	148786
20	447m SE	Unspecified Tank	1995	116447
X	473m E	Unspecified Tank	1973 - 1992	137559
P	491m NW	Tanks	1968 - 1979	128813
AB	495m E	Unspecified Tank	1949	124876
AB	495m E	Unspecified Tank	1949	144476

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**29**

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 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
C	89m SW	Electricity Substation	1979	79639
C	89m SW	Electricity Substation	1986	85104
C	90m SW	Electricity Substation	1996	70070
C	90m SW	Electricity Substation	1997	72275
C	90m SW	Electricity Substation	1997	74472
C	90m SW	Electricity Substation	1996	83993

ID	Location	Land use	Dates present	Group ID
C	90m SW	Electricity Substation	1988	70015
C	91m SW	Electricity Substation	1997	74689
B	116m N	Electricity Substation	1996 - 1999	76489
B	118m N	Electricity Substation	1991	62222
H	200m S	Electricity Substation	1922	70479
H	200m S	Electricity Substation	1908	78403
H	212m S	Electricity Substation	1995	79890
H	213m S	Electricity Substation	1949 - 1991	70291
H	214m S	Electricity Substation	1980 - 1991	78541
J	350m SW	Electricity Substation	1949 - 1994	82799
V	352m SW	Electricity Substation	1949	62173
S	374m N	Electricity Substation	1994	82356
S	375m N	Electricity Substation	1988	68694
S	375m N	Electricity Substation	1980 - 1985	75348
U	378m N	Electricity Substation	1979 - 1996	66068
U	378m N	Electricity Substation	1972 - 1983	73239
V	384m S	Electricity Substation	1978 - 1991	70199
V	385m S	Electricity Substation	1994	74682
N	416m N	Electricity Substation	1950	73249
21	448m SW	Electricity Substation	1978 - 1994	83339
U	479m N	Electricity Substation	1996	62205
AL	489m NE	Electricity Substation	1979 - 1999	78794
AL	489m NE	Electricity Substation	1988	67549

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 un-grouped 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	14

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 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
C	115m S	Garage	1991 - 1995	24430
10	306m S	Vehicle Dismantlers Yard	1978 - 1991	26985
X	371m SE	Garage	1949	20927
Y	380m SW	Wagon Repairing Shed	1949	20710
Y	386m SW	Wagon Repairing Shed	1933	22391
X	387m SE	Garage	1984	23088
X	390m SE	Garage	1986 - 1992	24324
X	390m SE	Garage	1949	23676
X	403m E	Garage	1973	21854
X	407m SE	Garage	1973	23053
X	423m E	Garage	1986 - 1992	25765
AD	425m SW	Repair Pits	1949	20552
AD	435m SW	Repair Pits	1949	20551
25	483m W	Garage	1991 - 1994	25488

This data is sourced from Ordnance Survey / Groundsure.

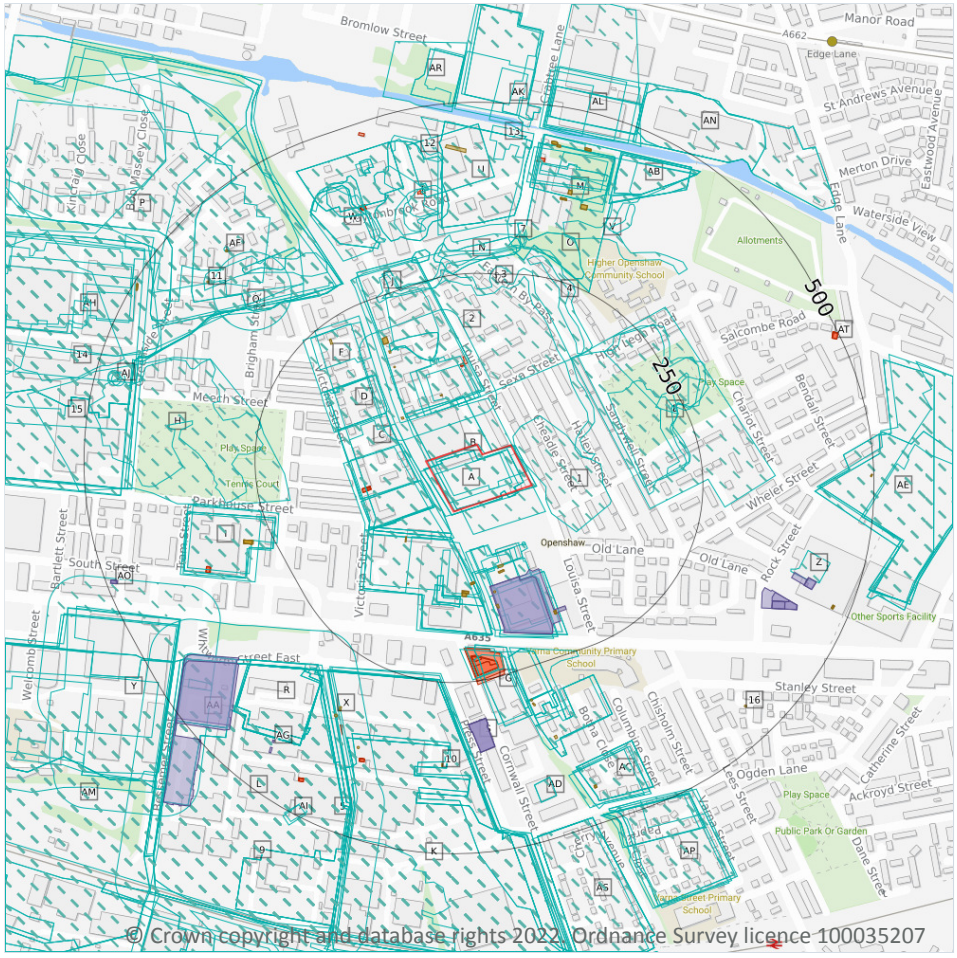
1.6 Historical military land

Records within 500m	0

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

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

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

2.1 Historical industrial land uses

Records within 500m	275

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 27**

ID	Location	Land Use	Date	Group ID
1	**On site**	**Refuse Pit**	**1890**	**834314**
A	**On site**	**Iron Foundry**	**1938**	**979593**
A	**On site**	**Iron Foundry**	**1934**	**979593**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Iron Foundry**	**1915**	**908576**
A	**On site**	**Iron Foundry**	**1905**	**965502**
A	**On site**	**Unspecified Commercial/Industrial**	**1985**	**979765**
A	**On site**	**Unspecified Commercial/Industrial**	**1991**	**979765**
A	**On site**	**Iron Foundry**	**1968**	**904598**
A	**On site**	**Iron Foundry**	**1923**	**852284**
B	**On site**	**Unspecified Commercial/Industrial**	**1956**	**845443**
C	13m SW	Unspecified Commercial/Industrial	1978	796803
C	13m SW	Unspecified Works	1968	981831
C	19m SW	Unspecified Mill	1915	940481
C	19m SW	Unspecified Works	1915	856423
C	20m SW	Steel Works	1934	931825
C	21m SW	Unspecified Mill	1905	857504
C	21m SW	Unspecified Mill	1890	857504
C	23m SW	Iron Foundry	1905	930585
C	23m SW	Steel Works	1938	931825
C	29m SW	Unspecified Works	1923	856423
C	30m SW	Unspecified Mill	1923	991657
C	32m S	Unspecified Works	1968	875188
C	38m S	Steam Hammer Works	1938	928039
C	38m S	Steam Hammer Works	1934	928039
C	38m S	Steam Hammer Works	1915	867081
B	40m N	Electric Motor Works	1934	896972
C	41m S	Unspecified Commercial/Industrial	1905	796804
C	43m S	Steam Hammer Works	1923	975783
C	61m S	Unspecified Commercial/Industrial	1905	796800
C	61m S	Unspecified Foundry	1923	922940
C	62m S	Unspecified Foundry	1915	922940

ID	Location	Land Use	Date	Group ID
2	64m N	Corporation Yard	1915	833876
B	64m N	Electric Motor Works	1915	926827
B	64m N	Electricity Motor Works	1905	811645
B	64m N	Electric Motor Works	1923	926827
B	70m N	Unspecified Commercial/Industrial	1978	886658
B	70m N	Unspecified Works	1968	830499
C	72m S	Unspecified Works	1968	963287
C	74m S	Chimney	1851	835769
C	80m S	Cotton Mill	1851	797898
3	80m NE	Unspecified Ground Workings	1905	901924
D	92m NW	Iron Foundry	1934	915048
D	92m NW	Iron Foundry	1915	857367
D	92m NW	Iron Foundry	1923	922033
C	93m S	Unspecified Works	1978	880526
C	95m S	Railway Sidings	1938	972163
C	95m S	Railway Sidings	1934	972163
C	96m S	Unspecified Works	1923	985700
C	110m S	Railway Sidings	1905	889087
C	110m S	Railway Sidings	1923	907186
C	110m S	Railway Sidings	1915	907747
C	125m S	Unspecified Works	1985	953446
C	125m S	Unspecified Works	1991	953446
C	132m S	Unspecified Works	1915	985700
B	136m N	Unspecified Pit	1890	950240
E	137m NE	Brick Field	1923	933262
B	138m N	Unspecified Pit	1905	898168
B	138m N	Unspecified Pit	1923	868357
E	145m NE	Disused Brick Field	1915	834328

ID	Location	Land Use	Date	Group ID
F	150m NW	Corporation Yard	1923	883427
E	153m E	Brick Field	1905	924404
4	166m NE	Unspecified Ground Workings	1923	800748
F	172m NW	Corporation Yard	1934	883427
E	192m NE	Unspecified Pit	1923	840714
G	197m S	Unspecified Depot	1985	855226
G	197m S	Unspecified Depot	1991	855226
G	198m S	Electric Substation	1915	921967
G	202m S	Electric Substation	1923	921967
H	206m W	Brick Works	1890	818779
G	213m S	Unspecified Depot	1978	876928
E	213m NE	Unspecified Ground Workings	1934	800747
G	214m S	Boiler Works	1851	826525
G	216m S	Iron Works	1923	928662
G	221m S	Iron Works	1938	893233
G	221m S	Iron Works	1934	850711
G	221m S	Iron Works	1915	940747
I	228m W	Unspecified Works	1968	830427
I	235m W	Engineering Works	1938	941769
I	235m W	Engineering Works	1934	941769
I	235m W	Engineering Works	1915	904653
J	237m N	Unspecified Ground Workings	1923	880372
K	238m S	Locomotive Works	1968	924954
H	239m W	Unspecified Pit	1890	840559
I	239m W	Engineering Works	1923	877806
K	241m S	Locomotive Works	1956	867135
E	242m NE	Unspecified Heap	1956	804176
L	246m SW	Unspecified Yard	1956	908731

ID	Location	Land Use	Date	Group ID
K	246m S	Locomotive Works	1934	885991
5	247m S	Unspecified Yard	1890	849060
K	247m S	Locomotive Works	1938	867135
L	247m S	Railway Sidings	1890	974704
K	248m S	Locomotive Works	1905	946681
K	248m S	Carriage, Wagon and Locomotive Works	1923	937994
L	248m S	Railway Sidings	1905	954032
L	248m S	Railway Sidings	1923	902553
M	251m NE	Unspecified Works	1985	968646
M	251m NE	Unspecified Works	1991	968646
N	251m N	Unspecified Pit	1938	891092
N	251m N	Unspecified Pit	1934	891092
I	253m W	Engineering Works	1890	931550
O	261m N	Unspecified Heap	1938	851266
O	261m N	Unspecified Heap	1934	851266
N	263m N	Cuttings	1956	795828
J	278m N	Unspecified Pit	1938	982746
J	278m N	Unspecified Pit	1934	982746
P	285m NW	Railway Sidings	1934	882010
P	285m NW	Engineering Works	1934	912693
P	285m NW	Railway Sidings	1915	870808
P	286m NW	Engineering Works	1923	951144
6	287m NW	Steel Works	1956	810023
P	287m NW	Railway Sidings	1956	877918
7	288m N	Unspecified Heap	1905	976853
Q	288m NW	Rifle Range	1923	937905
G	291m S	Unspecified Mill	1938	921592
G	291m S	Unspecified Mill	1934	921592

ID	Location	Land Use	Date	Group ID
G	291m S	Unspecified Mill	1915	871356
G	292m S	Unspecified Mill	1923	976610
G	293m S	Unspecified Works	1923	950284
G	293m S	Unspecified Works	1915	950284
8	296m SW	Unspecified Foundry	1956	809978
Q	298m NW	Rifle Range	1915	937905
L	299m SW	Unspecified Yard	1968	920516
R	299m SW	Engine Shed	1968	927617
P	302m NW	Railway Sidings	1923	924696
R	305m SW	Engine Shed	1956	894658
L	305m SW	Unspecified Yard	1905	952348
L	305m SW	Unspecified Yard	1923	954037
L	306m SW	Unspecified Yard	1938	955837
L	306m SW	Unspecified Yard	1934	955837
L	306m SW	Unspecified Yard	1915	973521
9	307m SW	Railway Sidings	1968	901995
T	309m N	Old Sand Pit	1938	913850
T	309m N	Old Sand Pit	1934	913850
U	311m N	Chemical Works	1923	850414
Q	312m NW	Gravel Pit	1890	807915
L	315m SW	Railway Sidings	1938	975550
L	315m SW	Railway Sidings	1934	886032
L	315m SW	Railway Sidings	1915	954027
R	315m SW	Engine Shed	1938	883429
R	315m SW	Engine Shed	1934	883429
R	315m SW	Engine Shed	1915	850687
V	315m N	Refuse Heap	1956	875678
R	316m SW	Engine Shed	1905	869312

ID	Location	Land Use	Date	Group ID
R	316m SW	Engine Shed	1923	880833
P	316m NW	Railway Sidings	1968	862695
W	316m N	Sand Pit	1851	797602
W	318m N	Unspecified Pit	1905	934039
W	318m N	Unspecified Pit	1890	934039
W	318m N	Unspecified Pit	1923	975009
U	321m N	Chemical Works	1938	915443
U	321m N	Chemical Works	1934	915443
U	321m N	Chemical Works	1915	985767
T	321m N	Sand Pit	1923	929098
T	321m N	Sand Pit	1915	929098
W	324m N	Unspecified Ground Workings	1915	800749
K	337m S	Railway Sidings	1956	912703
K	337m S	Railway Sidings	1968	966235
T	342m N	Refuse Heap	1956	829161
K	342m S	Railway Sidings	1915	926340
P	345m NW	Railway Sidings	1938	882010
P	345m NW	Railway Sidings	1938	882010
V	346m NE	Refuse Heap	1968	875678
Q	349m NW	Unspecified Ground Workings	1938	880101
Q	349m NW	Unspecified Ground Workings	1934	880101
P	354m NW	Unspecified Works	1968	923446
M	361m N	Railway Sidings	1991	944933
U	369m N	Unspecified Commercial/Industrial	1985	965355
U	369m N	Unspecified Commercial/Industrial	1991	965355
Y	369m SW	Unspecified Depot	1985	966409
W	371m N	Refuse Heap	1956	948721
W	371m N	Refuse Heap	1968	948721

ID	Location	Land Use	Date	Group ID
M	372m N	Forge	1938	927324
M	372m N	Forge	1934	927324
M	373m N	Unspecified Works	1968	969086
W	381m N	Unspecified Warehouse	1985	969361
W	381m N	Unspecified Warehouse	1978	931301
W	381m N	Unspecified Warehouse	1991	969361
AB	381m N	Unspecified Works	1978	962653
AB	381m N	Unspecified Works	1968	962653
AA	384m SW	Railway Building	1968	820510
M	385m N	Forge	1923	974769
AA	388m SW	Carriage Repairing Shed	1905	973552
AA	388m SW	Carriage Repairing Shed	1923	934639
M	388m N	Forge	1915	883950
AA	389m SW	Wagon Repairing Shed	1938	837405
AA	389m SW	Wagon Repair Shed	1934	815796
AA	389m SW	Carriage Repairing Shed	1915	939780
AB	393m N	Unspecified Commercial/Industrial	1923	796798
M	397m N	Railway Sidings	1934	953757
Z	398m E	Sawmill	1890	808366
AB	398m N	Unspecified Works	1938	926650
AB	398m N	Unspecified Works	1934	926650
AB	398m N	Unspecified Works	1915	859228
AC	401m S	Unspecified Works	1985	938462
AC	401m S	Unspecified Works	1978	875829
AC	401m S	Unspecified Works	1991	938462
AC	401m S	Unspecified Works	1968	875829
M	402m N	Railway Sidings	1938	953757
AC	405m S	Steel Works	1890	810024

ID	Location	Land Use	Date	Group ID
AB	406m NE	Iron Foundry	1890	835199
AC	408m S	Engineering Works	1915	870147
AC	409m S	Engineering Works	1923	870147
AD	413m S	Unspecified Works	1985	896896
AD	413m S	Unspecified Works	1991	896896
AE	414m E	Electrical Engineering Works	1938	922087
AE	414m E	Electrical Engineering Works	1934	922087
12	417m N	Unspecified Ground Workings	1956	800750
AE	417m E	Electrical Engineering Works	1956	880349
13	418m N	Unspecified Works	1968	830505
AE	421m E	Unspecified Works	1985	926037
AE	421m E	Unspecified Commercial/Industrial	1991	920794
AF	422m NW	Unspecified Tank	1934	825251
W	425m N	Unspecified Heap	1923	906104
14	425m W	Unspecified Works	1985	985355
Y	426m SW	Unspecified Depot	1978	928299
Y	426m SW	Unspecified Depot	1968	928299
W	426m N	Unspecified Heap	1938	906104
W	426m N	Unspecified Heap	1934	906104
AH	427m W	Engineering Works	1938	884631
Y	432m SW	Engineering Works	1934	865117
Y	432m SW	Engineering Works	1915	946576
P	433m NW	Unspecified Heap	1985	854063
P	433m NW	Unspecified Heap	1991	854063
15	434m W	Unspecified Commercial/Industrial	1968	796802
AA	434m SW	Unspecified Depot	1991	876027
Y	435m SW	Engineering Works	1923	849347
AH	441m W	Unspecified Works	1978	878377

ID	Location	Land Use	Date	Group ID
AJ	456m W	Unspecified Tank	1985	902693
AK	460m N	Chemical Works	1923	848810
AJ	462m W	Unspecified Tank	1968	875915
AL	462m N	Chemical Works	1923	898608
AL	463m N	Chemical Works	1890	923576
AM	464m SW	Engineering Works	1890	949713
AM	464m SW	Engineering Works	1905	949713
AJ	464m W	Unspecified Tank	1978	912306
AH	465m W	Dye Works	1851	870141
AK	466m N	Chemical Works	1915	848810
AL	466m N	Brick Kilns	1851	827902
AL	467m N	Chemical Works	1905	901354
AL	470m N	Chemical Works	1915	898608
AH	475m NW	Unspecified Works	1991	844894
AK	477m N	Unspecified Works	1985	972239
AK	477m N	Unspecified Works	1991	972239
AN	478m N	Chemical Works	1938	865007
AN	478m N	Chemical Works	1934	865007
AI	479m SW	Railway Building	1934	868639
AL	481m N	Unspecified Works	1978	968175
AL	482m N	Unspecified Depot	1985	903448
AL	482m N	Unspecified Depot	1991	903448
AK	482m N	Unspecified Works	1968	910923
AE	484m E	Unspecified Works	1978	915460
AP	484m S	Unspecified Works	1978	927331
AP	484m S	Unspecified Works	1968	984653
AI	485m SW	Railway Building	1923	868639
AQ	486m NE	Unspecified Ground Workings	1938	887584

ID	Location	Land Use	Date	Group ID
AQ	486m NE	Unspecified Ground Workings	1934	887584
AE	487m E	Unspecified Works	1968	907935
AP	487m S	Unspecified Works	1985	938344
AR	487m N	Soap Works	1890	991004
AS	488m S	Canal Depot	1938	947382
AS	488m S	Canal Depot	1934	947382
AS	488m S	Canal Depot	1915	858788
AS	488m S	Unspecified Commercial/Industrial	1905	796816
AS	488m S	Canal Depot	1890	859856
AS	488m S	Canal Depot	1923	984746
AP	489m S	Unspecified Commercial/Industrial	1934	796815
AP	489m S	Unspecified Mill	1915	956130
AP	489m S	Unspecified Mill	1890	867414
AP	489m S	Unspecified Mill	1923	956130
AP	490m S	Unspecified Mill	1905	962533
AR	494m N	Soap Works	1905	933371
AR	494m N	Soap Works	1923	975047
AR	496m N	Soap Works	1915	875760
AH	496m NW	Engineering Works	1915	870994
AK	497m N	Unspecified Works	1978	910923

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**76**

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 27**

ID	Location	Land Use	Date	Group ID
C	70m NW	Unspecified Tank	1922	116437
C	78m SW	Unspecified Tank	1949	116436
B	84m N	Tanks	1968	133526
B	84m N	Tanks	1949	133526
C	95m S	Unspecified Tank	1949	116435
C	103m S	Unspecified Tank	1922	141921
C	103m S	Unspecified Tank	1933	141921
C	107m S	Unspecified Tank	1980	125305
C	107m S	Unspecified Tank	1980	125305
C	107m S	Unspecified Tank	1978	125305
C	107m S	Unspecified Tank	1949	125305
C	116m S	Unspecified Tank	1980	134579
C	116m S	Unspecified Tank	1980	134579
C	117m S	Unspecified Tank	1978	134579
C	117m S	Unspecified Tank	1949	134579
C	119m S	Unspecified Tank	1980	134579
C	119m S	Unspecified Tank	1980	134579
C	120m S	Unspecified Tank	1978	134579
C	123m SW	Unspecified Tank	1949	116438
C	129m S	Unspecified Tank	1949	116443
B	144m N	Unspecified Tank	1949	116168
C	149m S	Unspecified Tank	1922	116442
B	167m N	Unspecified Tank	1949	116166
B	181m N	Tanks	1968	126978
B	182m N	Tanks	1979	126978
C	184m S	Tanks	1978	135259
C	184m S	Tanks	1949	135259
C	184m S	Tanks	1980	135259

ID	Location	Land Use	Date	Group ID
C	184m S	Tanks	1980	135259
F	219m NW	Unspecified Tank	1988	116167
I	278m SW	Unspecified Tank	1986	143917
I	279m SW	Unspecified Tank	1988	143917
I	279m SW	Unspecified Tank	1997	143917
I	279m SW	Unspecified Tank	1997	143917
I	279m SW	Unspecified Tank	1996	143917
I	279m SW	Unspecified Tank	1996	143917
I	279m SW	Unspecified Tank	1995	143917
I	279m SW	Unspecified Tank	1997	143917
G	296m S	Unspecified Tank	1893	116444
G	302m S	Unspecified Tank	1933	116445
G	304m S	Unspecified Tank	1922	116446
X	329m SW	Unspecified Tank	1933	116465
X	342m SW	Unspecified Tank	1893	116464
G	357m S	Unspecified Tank	1949	116469
M	360m N	Tanks	1950	127740
M	361m N	Tanks	1950	127740
M	366m N	Unspecified Tank	1950	138112
M	367m N	Unspecified Tank	1988	138112
M	367m N	Unspecified Tank	1950	138112
10	368m S	Unspecified Tank	1933	116467
X	370m S	Unspecified Tank	1949	116466
M	376m N	Unspecified Tank	1950	124985
M	377m N	Unspecified Tank	1950	124985
11	412m NW	Unspecified Tank	1968	116164
AF	422m NW	Unspecified Tank	1933	116165
U	427m N	Tanks	1922	107022

ID	Location	Land Use	Date	Group ID
M	441m N	Tanks	1994	140257
M	441m N	Tanks	1994	140257
M	443m N	Tanks	1988	132381
M	444m N	Tanks	1994	132381
M	444m N	Unspecified Tank	1988	143474
M	444m N	Tanks	1994	132381
AC	444m S	Unspecified Tank	1980	131035
AC	444m S	Unspecified Tank	1980	131035
AC	445m S	Unspecified Tank	1978	131035
M	445m N	Unspecified Tank	1994	148786
M	445m N	Unspecified Tank	1994	148786
16	447m SE	Unspecified Tank	1995	116447
Z	473m E	Unspecified Tank	1984	137559
Z	473m E	Unspecified Tank	1973	137559
Z	473m E	Unspecified Tank	1986	137559
Z	474m E	Unspecified Tank	1992	137559
P	491m NW	Tanks	1979	128813
P	491m NW	Tanks	1968	128813
AE	495m E	Unspecified Tank	1949	124876
AE	495m E	Unspecified Tank	1949	144476

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**62**

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 27**

ID	Location	Land Use	Date	Group ID
C	89m SW	Electricity Substation	1979	79639
C	89m SW	Electricity Substation	1986	85104
C	90m SW	Electricity Substation	1997	74472
C	90m SW	Electricity Substation	1997	72275
C	90m SW	Electricity Substation	1996	83993
C	90m SW	Electricity Substation	1996	70070
C	90m SW	Electricity Substation	1988	70015
C	91m SW	Electricity Substation	1997	74689
B	116m N	Electricity Substation	1996	76489
B	116m N	Electricity Substation	1999	76489
B	118m N	Electricity Substation	1991	62222
G	200m S	Electricity Substation	1908	78403
G	200m S	Electricity Substation	1922	70479
G	212m S	Electricity Substation	1995	79890
G	213m S	Electricity Substation	1978	70291
G	213m S	Electricity Substation	1949	70291
G	214m S	Electricity Substation	1980	78541
G	214m S	Electricity Substation	1980	78541
G	214m S	Electricity Substation	1991	78541
G	225m S	Electricity Substation	1980	70291
G	225m S	Electricity Substation	1980	70291
G	225m S	Electricity Substation	1991	70291
I	350m SW	Electricity Substation	1949	82799
I	350m SW	Electricity Substation	1978	82799
I	350m SW	Electricity Substation	1994	82799
I	351m SW	Electricity Substation	1980	82799
I	351m SW	Electricity Substation	1980	82799
I	351m SW	Electricity Substation	1991	82799

ID	Location	Land Use	Date	Group ID
I	351m SW	Electricity Substation	1991	82799
X	352m SW	Electricity Substation	1949	62173
T	374m N	Electricity Substation	1994	82356
T	374m N	Electricity Substation	1994	82356
T	375m N	Electricity Substation	1988	68694
T	375m N	Electricity Substation	1980	75348
T	375m N	Electricity Substation	1985	75348
W	378m N	Electricity Substation	1996	66068
W	378m N	Electricity Substation	1995	66068
W	378m N	Electricity Substation	1972	73239
W	378m N	Electricity Substation	1983	73239
W	378m N	Electricity Substation	1979	66068
W	378m N	Electricity Substation	1983	66068
X	384m S	Electricity Substation	1980	70199
X	384m S	Electricity Substation	1980	70199
X	384m S	Electricity Substation	1991	70199
X	384m S	Electricity Substation	1991	70199
X	385m S	Electricity Substation	1978	70199
X	385m S	Electricity Substation	1994	74682
M	416m N	Electricity Substation	1950	73249
M	416m N	Electricity Substation	1950	73249
AI	448m SW	Electricity Substation	1980	83339
AI	448m SW	Electricity Substation	1980	83339
AI	448m SW	Electricity Substation	1991	83339
AI	448m SW	Electricity Substation	1991	83339
AI	448m SW	Electricity Substation	1994	83339
AI	448m SW	Electricity Substation	1978	83339
W	479m N	Electricity Substation	1996	62205

ID	Location	Land Use	Date	Group ID
AT	489m NE	Electricity Substation	1999	78794
AT	489m NE	Electricity Substation	1979	78794
AT	489m NE	Electricity Substation	1979	78794
AT	489m NE	Electricity Substation	1991	78794
AT	489m NE	Electricity Substation	1987	78794
AT	489m NE	Electricity Substation	1988	67549

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	**22**

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'.

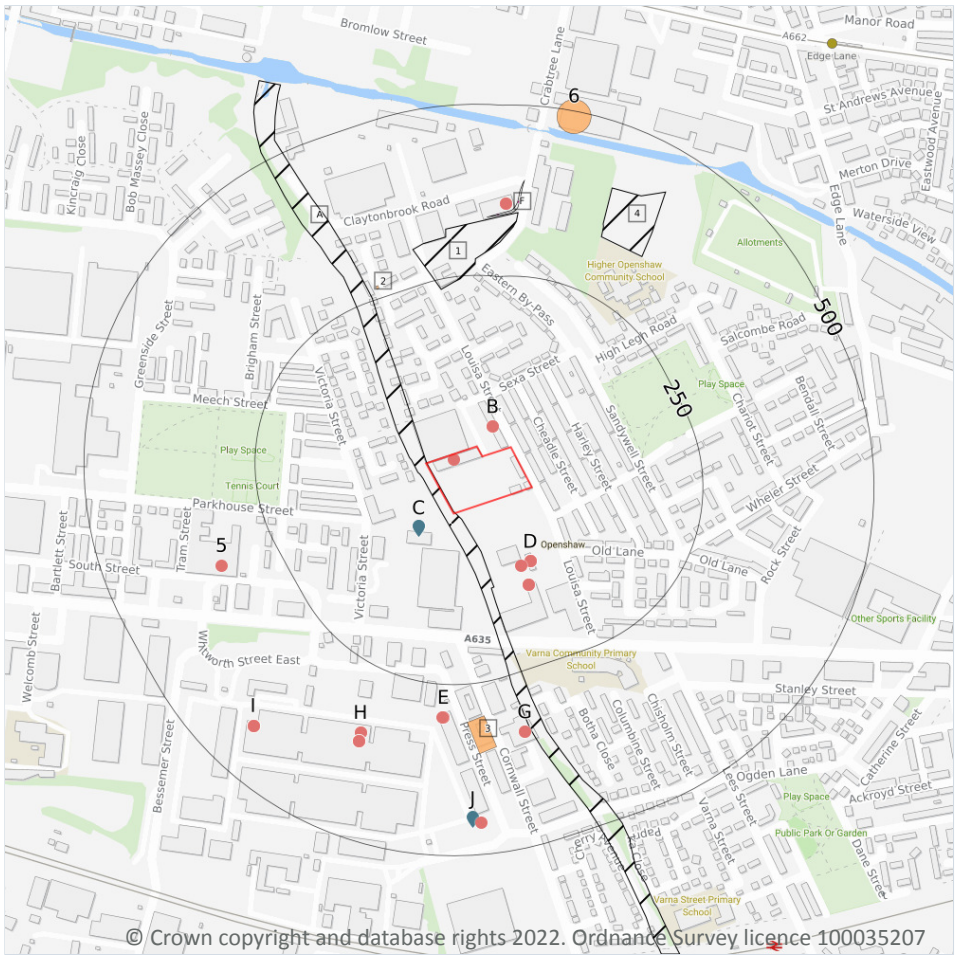
Features are displayed on the Past land use - un-grouped map on **page 27**

ID	Location	Land Use	Date	Group ID
C	115m S	Garage	1995	24430
C	120m S	Garage	1991	24430
S	306m S	Vehicle Dismantlers Yard	1980	26985
S	306m S	Vehicle Dismantlers Yard	1980	26985
S	306m S	Vehicle Dismantlers Yard	1991	26985
S	306m S	Vehicle Dismantlers Yard	1978	26985
Z	371m SE	Garage	1949	20927

ID	Location	Land Use	Date	Group ID
AA	380m SW	Wagon Repairing Shed	1949	20710
AA	386m SW	Wagon Repairing Shed	1933	22391
Z	387m SE	Garage	1984	23088
Z	390m SE	Garage	1986	24324
Z	390m SE	Garage	1992	24324
Z	390m SE	Garage	1949	23676
Z	403m E	Garage	1973	21854
Z	407m SE	Garage	1973	23053
Z	423m E	Garage	1986	25765
Z	424m E	Garage	1992	25765
AG	425m SW	Repair Pits	1949	20552
AG	435m SW	Repair Pits	1949	20551
AO	483m W	Garage	1994	25488
AO	484m W	Garage	1991	25488
AO	484m W	Garage	1991	25488

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



© Crown copyright and database rights 2022. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

Historical landfill (LA/OS)

Historical waste sites

Licensed waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	1

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

Features are displayed on the Waste and landfill map on **page 45**

ID	Location	Site address	Source	Data type
F	336m N	Refuse Tip	1963 mapping	Polygon

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	3

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

Features are displayed on the Waste and landfill map on **page 45**

ID	Location	Details		
A	**On site**	**Site Address: Stockport Branch Canal, Greater Manchester** **Licence Holder Address: -**	**Waste Licence: -** **Site Reference: F056** **Waste Type: Inert, Liquid sludge** **Environmental Permitting Regulations (Waste) Reference: -** **Licence Issue: -** **Licence Surrender: -**	**Operator: -** **Licence Holder: -** **First Recorded -** **Last Recorded: -**
1	235m N	Site Address: Clayton Industrial Estate, Greater Manchester Licence Holder Address: -	Waste Licence: - Site Reference: F048 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded - Last Recorded: -
4	334m NE	Site Address: Crabtree Forge, Crabtree Lane, Forge Lane, Clayton, Manchester Licence Holder Address: -	Waste Licence: Yes Site Reference: RD/LIC/216/81, GDO F049 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 28/04/1982 Licence Surrender: -	Operator: - Licence Holder: Eva Brothers First Recorded 31/12/1942 Last Recorded: 31/12/1992

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

3.5 Historical waste sites

Records within 500m	3

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

Features are displayed on the Waste and landfill map on **page 45**

ID	Location	Address	Further Details	Date
2	264m N	Site Address: N/A	Type of Site: Incinerator Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1949
3	298m S	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
6	467m N	Site Address: Acre Works, Crabtree Lane, Clayton, MANCHESTER, Greater Manchester, M11 1BR	Type of Site: Waste Transfer Depot Planning application reference: 49492 Description: Change of use of industrial into a waste transfer depot. 20 car parking spaces. An application (ref: 49492) for Detailed Planning permission was submitted to Manchester C.C. on 8th March 1996. Data source: Historic Planning Application Data Type: Point	-

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

3.6 Licensed waste sites

Records within 500m	3

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

Features are displayed on the Waste and landfill map on **page 45**

ID	Location	Details		
C	55m SW	Site Name: C B A House Site Address: C B A House, Sandfold Lane, Levenshulme, Manchester, M19 3BJ Correspondence Address: -	Type of Site: Treatment of waste to produce soil 75,000 tpy Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ARM077 EPR reference: EA/EPR/GB3733DT/A001 Operator: Alternative Recycled Materials Limited Waste Management licence No: 104175 Annual Tonnage: 74999	Issue Date: 08/06/2012 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
C	55m SW	Site Name: C B A House Site Address: C B A House, Sandfold Lane, Levenshulme, Manchester, M19 3BJ Correspondence Address: -	Type of Site: Treatment of waste to produce soil 75,000 tpy Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ARM077 EPR reference: EA/EPR/GB3733DT/A001 Operator: Alternative Recycled Materials Limited Waste Management licence No: 104175 Annual Tonnage: 74999	Issue Date: 08/06/2012 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
J	447m S	Site Name: Fairfield Materials Management Ltd Site Address: The Cabin, E22 New Smithfield Market, Whitworth Street East, Openshaw, Manchester, M11 2WJ Correspondence Address: -	Type of Site: Composting Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FAI009 EPR reference: EA/EPR/VP3194CQ/S002 Operator: Fairfield Materials Management Ltd Waste Management licence No: 50411 Annual Tonnage: 0	Issue Date: 10/11/2005 Effective Date: - Modified: - Surrendered Date: Dec 3 2012 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered

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

3.7 Waste exemptions

Records within 500m	**48**

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 45**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	**On site**	**67-69 LOUISA STREET MANCHESTER M11 1AD**	**EPR/HF0307MY/A001**	**Storing waste exemption**	**Non-Agricultural Waste Only**	**Storage of waste in a secure place**
B	36m N	67 Louisa Street Higher Openshaw Manchester M11 1AD	EPR/JF0101MG/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
B	36m N	69 Louisa Street MANCHESTER M11 1AD	EPR/JF0801MY/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
D	102m S	1119A, ASHTON OLD ROAD, MANCHESTER, M11 1AA	WEX279583	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	102m S	1119A, ASHTON OLD ROAD, MANCHESTER, M11 1AA	WEX279583	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
D	102m S	1119A, ASHTON OLD ROAD, MANCHESTER, M11 1AA	WEX140412	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	102m S	1119A, ASHTON OLD ROAD, MANCHESTER, M11 1AA	WEX140412	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
D	102m S	1119A, ASHTON OLD ROAD, MANCHESTER, M11 1AA	WEX090588	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	102m S	1119A, ASHTON OLD ROAD, MANCHESTER, M11 1AA	WEX090588	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	102m S	1119A, ASHTON OLD ROAD, MANCHESTER, M11 1AA	WEX090588	Treating waste exemption	Not on a farm	Sorting mixed waste

ID	Location	Site	Reference	Category	Sub-Category	Description
D	102m S	1119A, ASHTON OLD ROAD, MANCHESTER, M11 1AA	WEX090588	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
D	102m S	1119A, ASHTON OLD ROAD, MANCHESTER, M11 1AA	WEX090588	Treating waste exemption	Not on a farm	Screening and blending of waste
D	104m S	1119 Ashton Old Road Manchester Manchester M11 1AA	EPR/KF0201FL/A001	Treating waste exemption	Non-Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
D	134m S	1119 Ashton Old Road Manchester Manchester M11 1AA	EPR/TE5644NW/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in secure containers
D	134m S	1119 Ashton Old Road Manchester Manchester M11 1AA	EPR/TE5644NW/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
D	134m S	1119 Ashton Old Road Manchester Manchester M11 1AA	EPR/TE5644NW/A001	Treating waste exemption	Non-Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
E	299m S	UNITS E1-4 NEW SMITHFIELD MARKET OPENSHAW MANCHESTER M11 2WJ	EPR/MF0906FU/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in secure containers
E	299m S	UNITS E1-4 NEW SMITHFIELD MARKET OPENSHAW MANCHESTER M11 2WJ	EPR/MF0906FU/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
E	299m S	UNITS E1-4 NEW SMITHFIELD MARKET OPENSHAW MANCHESTER M11 2WJ	EPR/MF0906FU/A001	Treating waste exemption	Non-Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
E	299m S	UNITS E1-4 NEW SMITHFIELD MARKET OPENSHAW MANCHESTER M11 2WJ	EPR/MF0906FU/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste to manufacture finished goods
E	299m S	Units E1 - E2, New Smithfield Market, Openshaw, Manchester, M11 2WJ	EA/EPR/VP3857EW/A001	Treating waste exemption	Not on a farm	Repair or refurbishment of WEEE
5	335m SW	SAXON WORKS, SOUTH STREET, OPENSHAW, MANCHESTER, M11 2FY	WEX224519	Disposing of waste exemption	Not on a farm	Depositing samples of waste for the purposes of testing or analysing them

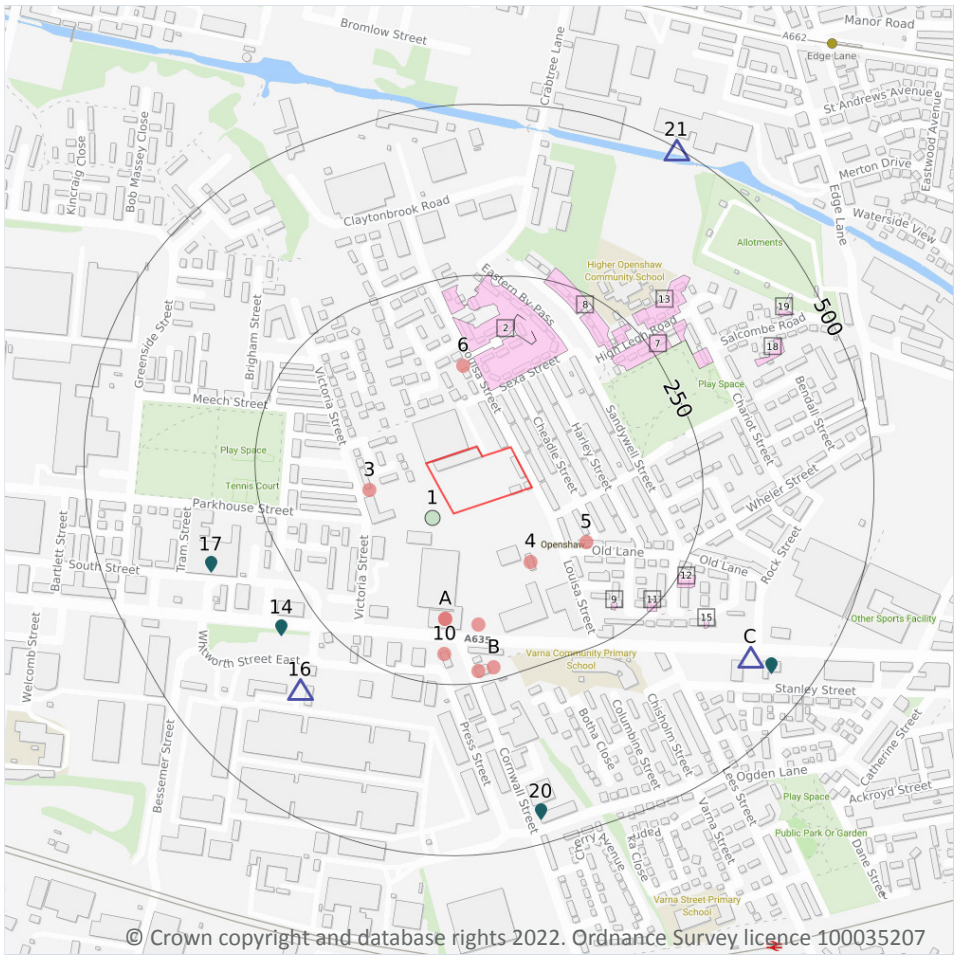
ID	Location	Site	Reference	Category	Sub-Category	Description
G	336m S	6, WIMPORY STREET, MANCHESTER, M11 2FP	WEX279007	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods
G	336m S	6, WIMPORY STREET, MANCHESTER, M11 2FP	WEX139950	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods
H	349m SW	E1-8, New Smithfield Market, Manchester, M11 2WJ	WEX010626	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
H	349m SW	The Cabin, Adj. Unit E22, New Smithfield Market, Openshaw, MANCHESTER, M11 2WJ	WEX000109	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
F	355m N	Yard 1, Crabtree lane, Manchester, M11 1BR	WEX158614	Using waste exemption	Not on a Farm	Use of waste in construction
F	355m N	Yard 1, Crabtree lane, Manchester, M11 1BR	WEX158614	Storing waste exemption	Not on a Farm	Storage of waste in a secure place
H	360m S	Units E1-5 & A36-37, New Smithfield Market, Whitworth Street East, Openshaw, Manchester, M11 2WJ	WEX142651	Storing waste exemption	Not on a farm	Storage of waste in secure containers
H	360m S	Units E1-5 & A36-37, New Smithfield Market, Whitworth Street East, Openshaw, Manchester, M11 2WJ	WEX142651	Storing waste exemption	Not on a farm	Storage of waste in a secure place
H	360m S	Units E1-5 & A36-37, New Smithfield Market, Whitworth Street East, Openshaw, Manchester, M11 2WJ	WEX142651	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
H	360m S	Units E1-5 & A36-37, New Smithfield Market, Whitworth Street East, Openshaw, Manchester, M11 2WJ	WEX142651	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods
H	360m S	Units E1-5 & A36-37, New Smithfield Market, Whitworth Street East, Openshaw, Manchester, M11 2WJ	WEX142651	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
I	427m SW	Units E1 to E4, Whitworth Street East, Openshaw, Manchester, M11 2WJ	WEX215819	Treating waste exemption	Not on a farm	Manual treatment of waste
I	427m SW	Units E1 to E4, Whitworth Street East, Openshaw, Manchester, M11 2WJ	WEX215819	Using waste exemption	Not on a farm	Use of waste for a specified purpose
I	427m SW	Units E1-4, 6-7, New Smithfield Market, Openshaw, Manchester, M11 2WJ	WEX215971	Storing waste exemption	Not on a farm	Storage of waste in a secure place
I	427m SW	Units E1-4, 6-7, New Smithfield Market, Openshaw, Manchester, M11 2WJ	WEX215971	Treating waste exemption	Not on a farm	Manual treatment of waste
I	427m SW	Units E1-4, 6-7, New Smithfield Market, Openshaw, Manchester, M11 2WJ	WEX215971	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
I	427m SW	Units E1-4, 6-7, New Smithfield Market, Openshaw, Manchester, M11 2WJ	WEX215971	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods
I	427m SW	Units E1-4, 6-7, New Smithfield Market, Openshaw, Manchester, M11 2WJ	WEX215971	Using waste exemption	Not on a farm	Use of waste for a specified purpose
I	427m SW	-	WEX264126	Using waste exemption	Not on a farm	Use of waste in the construction of entertainment or educational installations etc
I	427m SW	-	WEX264126	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
I	427m SW	-	WEX264126	Using waste exemption	Not on a farm	Use of waste for a specified purpose
I	427m SW	-	WEX264126	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods
I	427m SW	-	WEX264126	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
I	427m SW	-	WEX264126	Treating waste exemption	Not on a farm	Manual treatment of waste

ID	Location	Site	Reference	Category	Sub-Category	Description
I	427m SW	-	WEX264126	Storing waste exemption	Not on a farm	Storage of waste in a secure place
J	453m S	THE CABIN ADJ UNIT E22 NEW SMITHFIELD MARKET MANCHESTER LANCASHIRE M11 2WJ	EPR/PH0814YS/A001	Treating waste exemption	Non-Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)

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

4 Current industrial land use



© Crown copyright and database rights 2022. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

Recent industrial land uses

Current or recent petrol stations

Sites determined as Contaminated Land

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

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	10

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 54**

ID	Location	Company	Address	Activity	Category
3	92m SW	Electricity Sub Station	Greater Manchester, M11	Electrical Features	Infrastructure and Facilities
4	102m S	Ideal Recycling Ltd	1119a, Ashton Old Road, Manchester, Greater Manchester, M11 1AA	Recycling, Reclamation and Disposal	Recycling Services

ID	Location	Company	Address	Activity	Category
5	113m SE	Evonik	5, Old Lane, Manchester, Greater Manchester, M11 1BE	Adhesives and Sealants	Industrial Products
6	120m N	Electricity Sub Station	Greater Manchester, M11	Electrical Features	Infrastructure and Facilities
A	154m S	Entwistle Group	1033-1047, Ashton Old Road, Manchester, Greater Manchester, M11 2NN	Published Goods	Industrial Products
A	154m S	All Things Print	Ashton Old Road, Higher Openshaw, Manchester, Greater Manchester, M11 2NN	Published Goods	Industrial Products
A	166m S	Electricity Sub Station	Greater Manchester, M11	Electrical Features	Infrastructure and Facilities
10	206m S	Khanco Gk Distrubution Ltd	Unit 1 Smithfield Enterprise Estate, Whitworth Street East, Manchester, Greater Manchester, M11 2NQ	Packaging	Industrial Products
B	232m S	Electricity Sub Station	Greater Manchester, M11	Electrical Features	Infrastructure and Facilities
B	233m S	Electricity Sub Station	Greater Manchester, M11	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**3**

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 54**

ID	Location	Company	Address	LPG	Status
16	342m SW	OBSOLETE	949, Ashton Old Road, South Street, Openshaw, Manchester, Greater Manchester, M11 3LW	Not Applicable	Obsolete
C	404m SE	MORRISONS	1094, Ashton Old Road, South Street, Gorton, Manchester, Greater Manchester, M11 2NG	No	Open
21	497m NE	OBSOLETE	974-998, Ashton New Road, Openshaw, Manchester, Greater Manchester, M11 4PD	Not Applicable	Obsolete

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	10

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

Features are displayed on the Current industrial land use map on **page 54**

ID	Location	Description	Site name	Category	Year identified
2	85m N	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	1,5,7,6,8 Iris Avenue; 1-24 Kenchester Avene; 142-158(even numbers) Louisa Street; 1-23 (odd numbers) Sexa Street;125,127,129,131,133,135,139,141,143,147,149,151,153,155,157,159,161 Eastern Bypass	Contaminated Land	2005
7	195m NE	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	33-37 Chariot Street, M11 1FZ; 2,4,6,8,10,12,14,16,18,20,22,24,26,28,34,36 High Legh Road.	Contaminated Land	2004
8	195m NE	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	1, 5, 7 High Legh Road; 1 Saunton Road. ; 126,128,130,132,134,136,138,142,144,146,148,150,152,154,156,158,160 Eastern By Pass	Contaminated Land	2004
9	204m SE	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	8 Sandywell Close, M11 1EF	Contaminated Land	2004

ID	Location	Description	Site name	Category	Year identified
11	236m SE	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	13,15,17,19 Stenson Square, M11 1FW	Contaminated Land	2004
12	249m SE	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	Land previously knwon as 2 Bruce Walk, Manchester, M11 1ED	Contaminated Land	2004
13	257m NE	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	9,11,13,15,17,19 High Legh Road, M11 1AZ. 49,51,53,70 Chariot Street. 2,4 Saunton Road, M11 1AJ.	Contaminated Land	2004
15	318m SE	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	9 Brock Close, Manchester, M11 1ED	Contaminated Land	2004
18	374m NE	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	1,3,5,6,7,8 Eastcote Avenue, M11 1BQ; 10 Salcombe Road M11 1DQ	Contaminated Land	2004
19	436m NE	Contaminated Land owing to presence of arsenic, heavy metals and polyaromatic hydrocarbons	17,19 Salcombe Road, M11 1DQ	Contaminated Land	2004

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	4

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 54**

ID	Location	Address	Details	
14	302m SW	Openshaw Serv Stn, South St, Ashton Old Rd, M11 3LW	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
17	348m SW	Benson Compomnents Ltd, Saxon Works, South St, Openshaw, M11 2HR	Process: Coating Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

ID	Location	Address	Details	
C	436m SE	Morrisons Openshaw Filling Station, 1216 Ashton Old Road (Turton Street), Openshaw, M11 2NG	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
20	453m S	Cpl Distriburion Ltd, The Coal Yard, Cornwall Street, Openshaw, M11 2NR	Process: Other Mineral Processes Status: Historical 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	1

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 54**

ID	Location	Details	
1	30m SW	Incident Date: 15/11/2002 Incident Identification: 121035 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

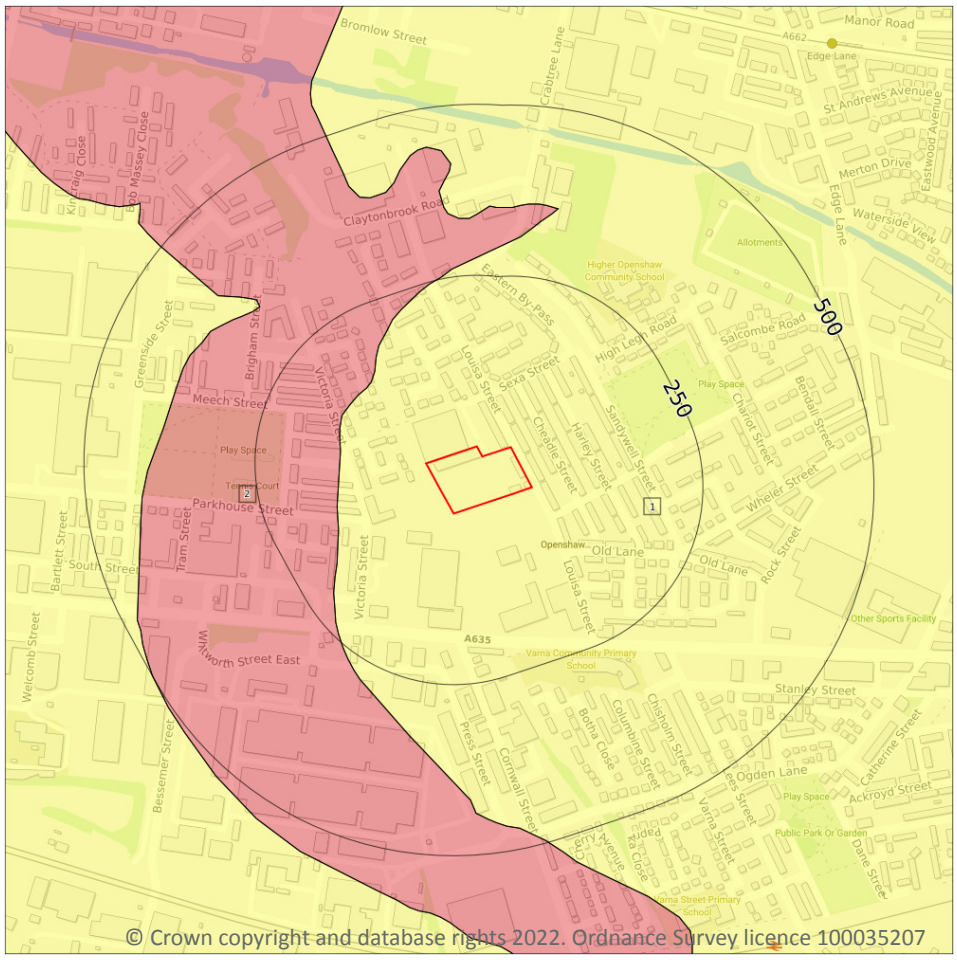
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	2

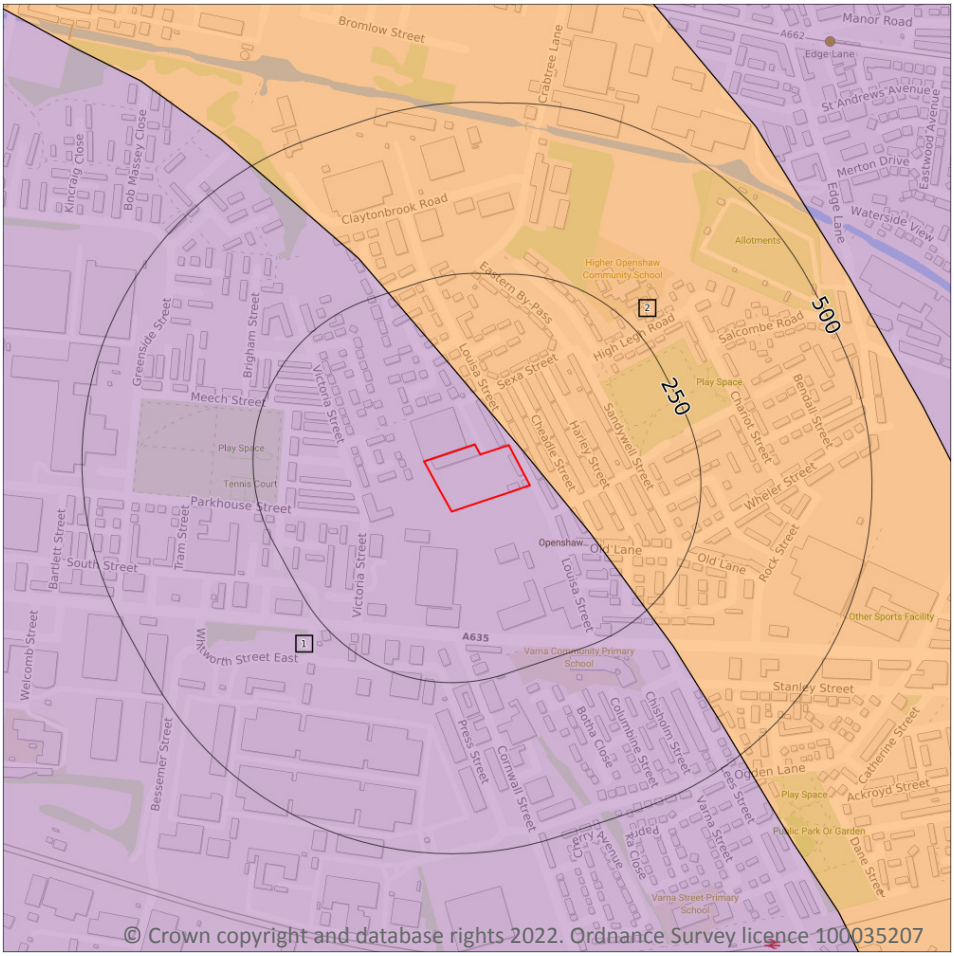
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 62**

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**
2	126m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	2

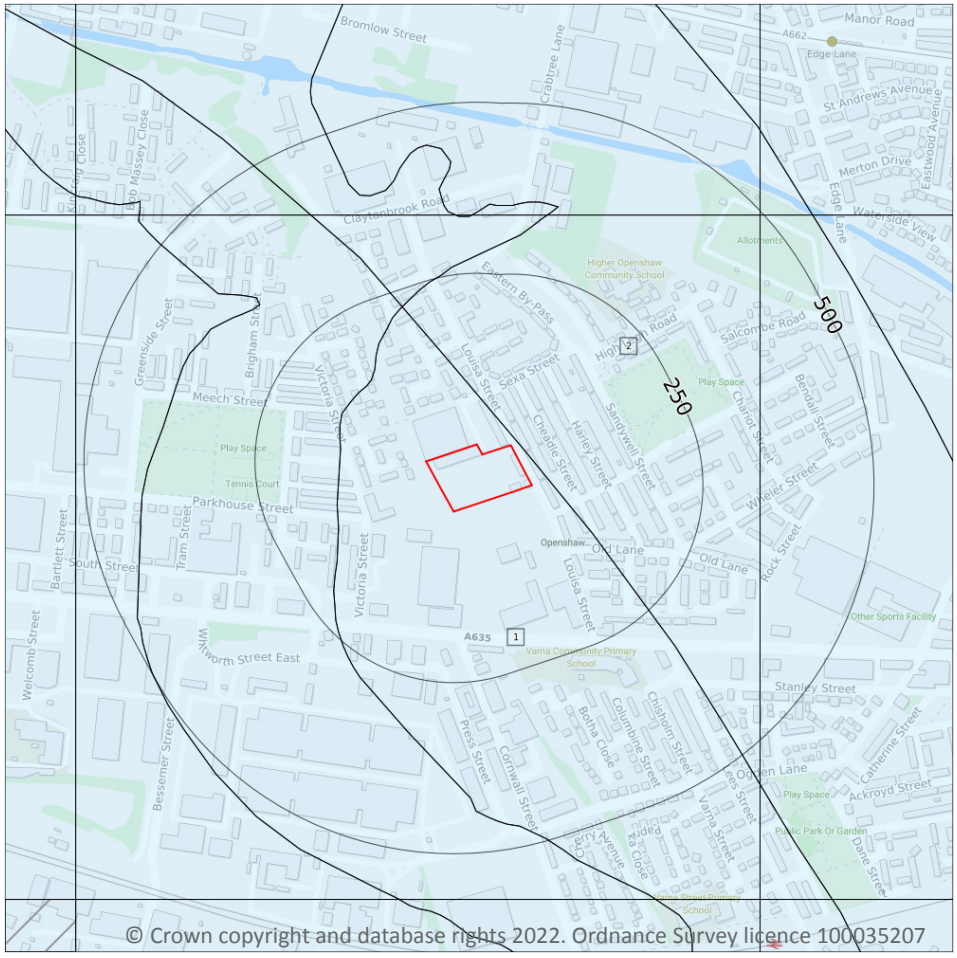
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 64**

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	10m NE	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

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 66**

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: Principal Flow mechanism: Well connected fractures**
2	10m NE	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

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	**0**

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

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

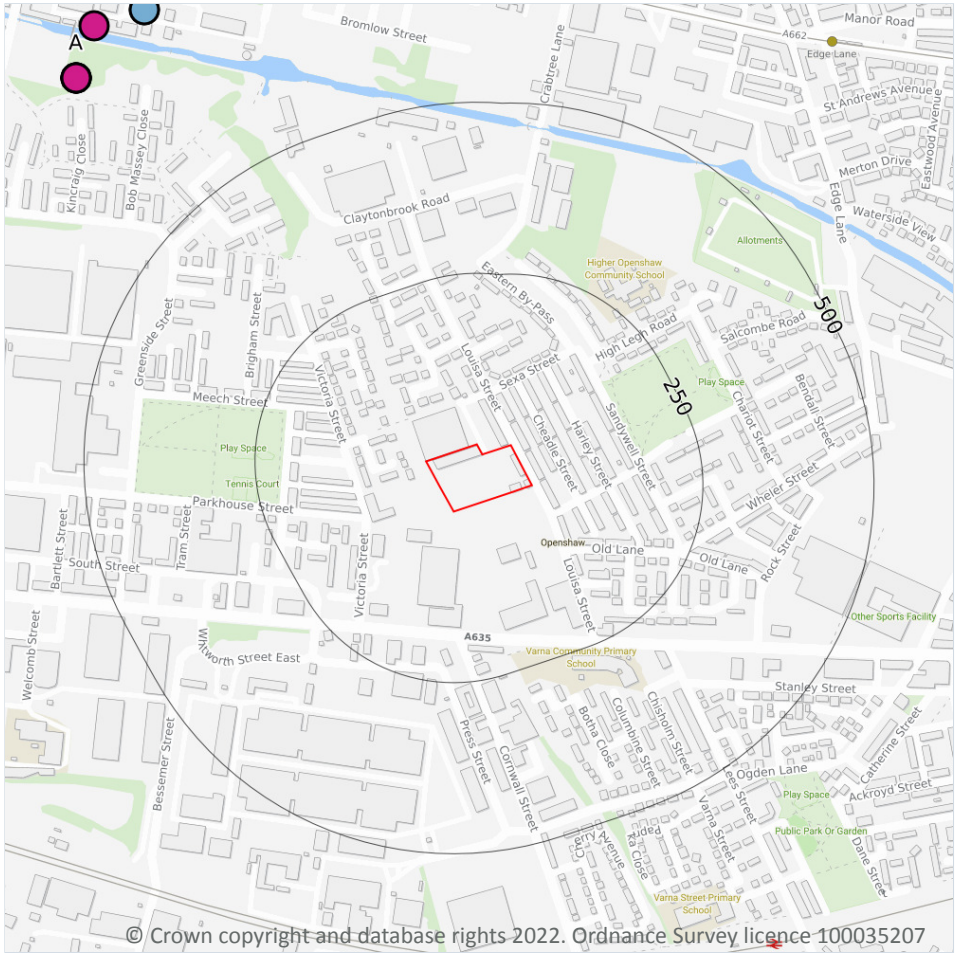
5.5 Groundwater vulnerability- local information

Records on site	**0**

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

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- 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	28

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 68**

ID	Location	Details	
A	758m NW	Status: Historical Licence No: 2569006036 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER" Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
A	758m NW	Status: Historical Licence No: 2569006036 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER" Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
A	758m NW	Status: Historical Licence No: 2569006036 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
A	758m NW	Status: Historical Licence No: 2569006036 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -

ID	Location	Details	
A	758m NW	Status: Historical Licence No: 2569006036 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m^3): 372772 Max Daily Volume (m^3): 3600.5 Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
A	758m NW	Status: Historical Licence No: 2569006036 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 388000 Northing: 398200	Annual Volume (m^3): 372772 Max Daily Volume (m^3): 3600.5 Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
1	800m NW	Status: Active Licence No: 2569006036 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE ON PREMISES AT CLAYTON, MANCHESTER Data Type: Point Name: Evonik Chemicals Ltd Easting: 388027 Northing: 398277	Annual Volume (m^3): 372,772 Max Daily Volume (m^3): 3,600.50 Original Application No: NPS/WR/035265 Original Start Date: 21/05/1985 Expiry Date: - Issue No: 104 Version Start Date: 19/04/2021 Version End Date: -
-	862m SW	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	
-	862m SW	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: NPS/WR/030760A Original Start Date: 19/06/2014 Expiry Date: 31/03/2027 Issue No: 2 Version Start Date: 21/12/2018 Version End Date: -
-	918m NW	Status: Historical Licence No: NW/069/0006/005 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m^3): 266113 Max Daily Volume (m^3): 1000 Original Application No: - Original Start Date: 14/11/2012 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: 14/11/2012 Version End Date: -
-	918m NW	Status: Historical Licence No: NW/069/0006/005 Details: Horticultural Watering Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m^3): 266113 Max Daily Volume (m^3): 1000 Original Application No: - Original Start Date: 14/11/2012 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: 14/11/2012 Version End Date: -
-	918m NW	Status: Historical Licence No: NW/069/0006/005 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m^3): 266113 Max Daily Volume (m^3): 1000 Original Application No: - Original Start Date: 14/11/2012 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: 14/11/2012 Version End Date: -
-	918m NW	Status: Active Licence No: NW/069/0006/005/R01 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m^3): 221,650 Max Daily Volume (m^3): 1,000 Original Application No: NPS/WR/024168 Original Start Date: 01/04/2018 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2018 Version End Date: -

ID	Location	Details	
-	918m NW	Status: Active Licence No: NW/069/0006/005/R01 Details: Spray Irrigation - Direct Direct Source: Ground Water - North West Region Point: BOREHOLE AT OPENSHAW, WEST ASHTON Data Type: Point Name: MANCHESTER CITY FOOTBALL CLUB LIMITED Easting: 387681 Northing: 398032	Annual Volume (m^3): 221,650 Max Daily Volume (m^3): 1,000 Original Application No: NPS/WR/024168 Original Start Date: 01/04/2018 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2018 Version End Date: -
-	933m NW	Status: Historical Licence No: 2569006026 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, CLAYTON, MANCHESTER" Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC Easting: 387700 Northing: 398100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/07/2000 Version End Date: -
-	933m NW	Status: Historical Licence No: 2569006026 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, CLAYTON, MANCHESTER" Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC Easting: 387700 Northing: 398100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/07/2000 Version End Date: -
-	933m NW	Status: Historical Licence No: 2569006026 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, CLAYTON, MANCHESTER Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC Easting: 387700 Northing: 398100	Annual Volume (m^3): 633962 Max Daily Volume (m^3): 2837 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/07/2000 Version End Date: -

ID	Location	Details	
-	933m NW	Status: Historical Licence No: 2569006026 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, CLAYTON, MANCHESTER Data Type: Point Name: CIBA SPECIALTY CHEMICALS PLC Easting: 387700 Northing: 398100	Annual Volume (m^3): 633962 Max Daily Volume (m^3): 2837 Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 101 Version Start Date: 25/07/2000 Version End Date: -
-	975m NW	Status: Historical Licence No: 2569006037 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLES (2) ON PREMISES AT CROFT ST, CLAYTON, MANCHESTER" Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 387900 Northing: 398400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
-	975m NW	Status: Historical Licence No: 2569006037 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLES (2) ON PREMISES AT CROFT ST, CLAYTON, MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 387900 Northing: 398400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -
-	975m NW	Status: Historical Licence No: 2569006037 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLES X 2 ON PREMISES AT CROFT STREET CLAYTON MANCHESTER Data Type: Point Name: AIR PRODUCTS CHEMICALS LTD Easting: 387900 Northing: 398400	Annual Volume (m^3): 111832 Max Daily Volume (m^3): 654.624 Original Application No: - Original Start Date: 21/05/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1996 Version End Date: -

ID	Location	Details	
-	983m NW	Status: Active Licence No: 2569006037 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE 2 ON PREMISES AT CROFT STREET, CLAYTON, MANCHESTER Data Type: Point Name: Evonik Chemicals Ltd Easting: 387859 Northing: 398375	Annual Volume (m^3): 111,831.60 Max Daily Volume (m^3): 654.62 Original Application No: NPS/WR/035267 Original Start Date: 21/05/1985 Expiry Date: - Issue No: 104 Version Start Date: 19/04/2021 Version End Date: -
-	985m NW	Status: Active Licence No: 2569006037 Details: Non-Evaporative Cooling Direct Source: Ground Water - North West Region Point: BOREHOLE 1 ON PREMISES AT CROFT STREET, CLAYTON, MANCHESTER Data Type: Point Name: Evonik Chemicals Ltd Easting: 387860 Northing: 398379	Annual Volume (m^3): 111,831.60 Max Daily Volume (m^3): 654.62 Original Application No: NPS/WR/035267 Original Start Date: 21/05/1985 Expiry Date: - Issue No: 104 Version Start Date: 19/04/2021 Version End Date: -
-	1585m S	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: -
-	1894m N	Status: Historical Licence No: 2569006021 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT CLAYTON MILL BRIDGE, MANCHESTER Data Type: Point Name: MANCHESTER ABATTOIR Easting: 389100 Northing: 399500	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 22/05/1998 Version End Date: -

ID	Location	Details	
-	1931m SW	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: -
-	1931m SW	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: -
-	1933m SW	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: -

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

5.7 Surface water abstractions

Records within 2000m	**8**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 68**

ID	Location	Details	
B	778m NW	Status: Historical Licence No: 2569006995 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "ASHTON CANAL, MANCHESTER" Data Type: Point Name: BRITISH WATERWAYS Easting: 388100 Northing: 398300	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
B	778m NW	Status: Historical Licence No: 2569006995 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: ASHTON CANAL, MANCHESTER Data Type: Point Name: Canal and River Trust Easting: 388100 Northing: 398300	Annual Volume (m^3): 68,190 Max Daily Volume (m^3): 68,190 Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
-	1041m NW	Status: Historical Licence No: 2569006997 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "ASHTON CANAL, MANCHESTER [CLAYTON ANALINE]" Data Type: Point Name: BRITISH WATERWAYS Easting: 387800 Northing: 398400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
-	1041m NW	Status: Historical Licence No: 2569006997 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: ASHTON CANAL, MANCHESTER [CLAYTON ANALINE] Data Type: Point Name: BRITISH WATERWAYS BOARD Easting: 387800 Northing: 398400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -

ID	Location	Details	
-	1041m NW	Status: Active Licence No: 2569006997 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: ASHTON CANAL MANCHESTER CLAYTON ANALINE Data Type: Point Name: Canal and River Trust Easting: 387800 Northing: 398400	Annual Volume (m^3): 3,500,420 Max Daily Volume (m^3): 3,500,420 Original Application No: 1470 Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
-	1187m NW	Status: Historical Licence No: 2569006996 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: ASHTON CANAL, MANCHESTER [VITACOM] Data Type: Point Name: BRITISH WATERWAYS Easting: 387600 Northing: 398400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1969 Version End Date: -
-	1883m E	Status: Historical Licence No: 2569006039 Details: Spray Irrigation - Direct Direct Source: "Surface, Non-Tidal - North West Region" Point: "UPPER GORTON RESERVOIR, AUDENSHAW, MANCHESTER" Data Type: Point Name: FAIRFIELD GOLF AND SAILING CLUB Easting: 390450 Northing: 397000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/11/1996 Expiry Date: - Issue No: 100 Version Start Date: 20/11/1996 Version End Date: -
-	1883m E	Status: Historical Licence No: 2569006039 Details: Spray Irrigation - Direct Direct Source: Surface, Non-Tidal - North West Region Point: UPPER GORTON RESERVOIR, AUDENSHAW, MANCHESTER Data Type: Point Name: FAIRFIELD GOLF AND SAILING CLUB Easting: 390450 Northing: 397000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/11/1996 Expiry Date: - Issue No: 100 Version Start Date: 20/11/1996 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	0

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

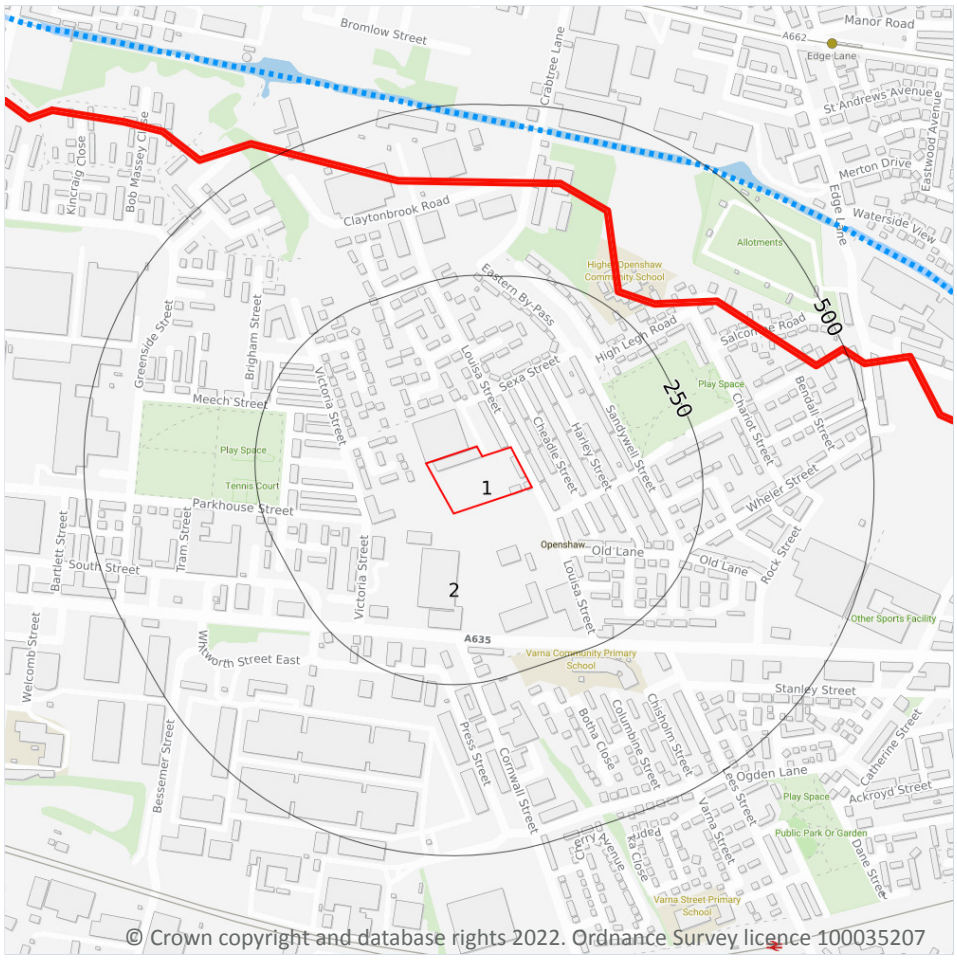
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	0

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

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	0

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

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

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

Features are displayed on the Hydrology map on **page 79**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
2	**On site**	**River**	**Irwell / Manchester Ship Canal (Irk to confluence with Upper Mers**	**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 79**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	4835m W	River	Irwell / Manchester Ship Canal (Irk to confluence with Upper Mers	GB112069061452	Moderate	Fail	Moderate	2019

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 79**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	**On site**	**Manchester and East Cheshire Permo-Triassic Sandstone Aquifers**	**GB41201G101100**	**Poor**	**Poor**	**Poor**	**2019**

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 the sea

Records within 50m	0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; 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). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

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

7.2 Historical Flood Events

Records within 250m	0

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

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

7.3 Flood Defences

Records within 250m	0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

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

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

7.5 Flood Storage Areas

Records within 250m	0

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

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

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0

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

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

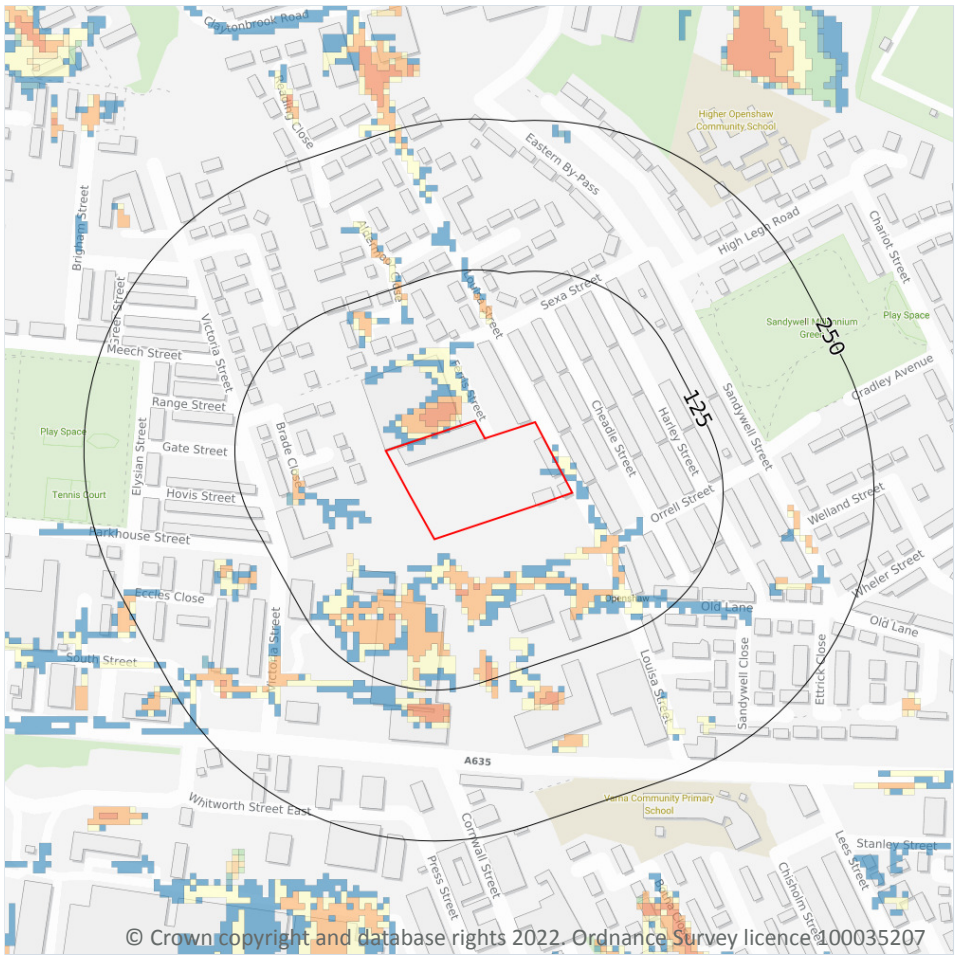
7.7 Flood Zone 3

Records within 50m	0

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

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

8 Surface water flooding



8.1 Surface water flooding

Highest risk on site	**1 in 100 year, 0.1m - 0.3m**
Highest risk within 50m	**1 in 30 year, 0.3m - 1.0m**

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 85**

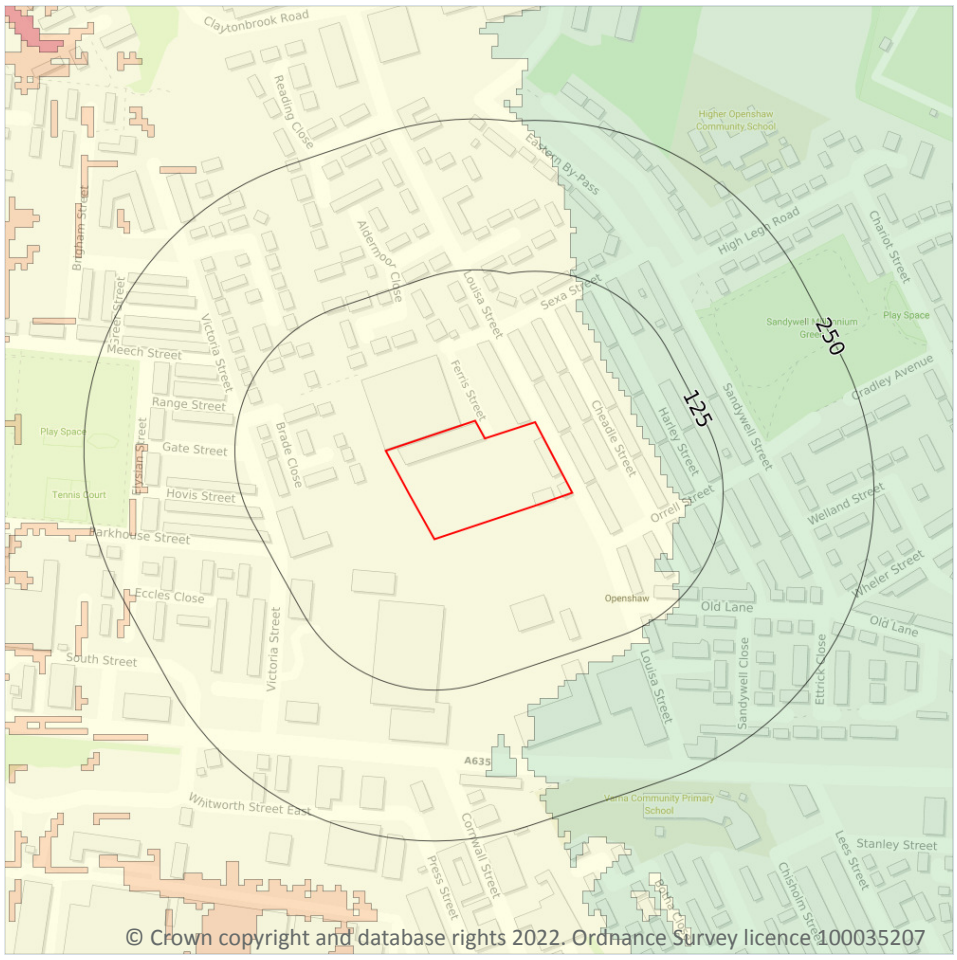
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

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

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

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

9.1 Groundwater flooding

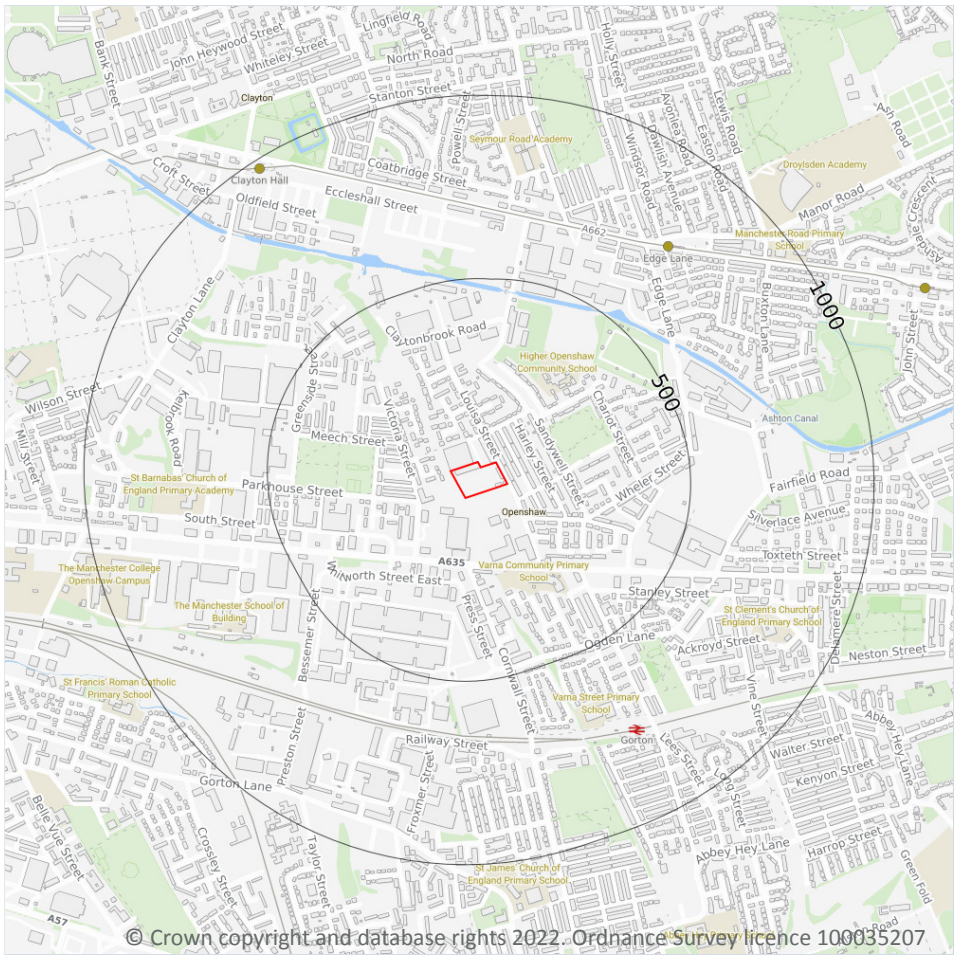
Highest risk on site	**Moderate**
Highest risk within 50m	**Moderate**

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 87**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



© Crown copyright and database rights 2022. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Green Belt

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	1

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.

Features are displayed on the Environmental designations map on **page 88**

ID	Location	Name	Data source
-	1443m N	Clayton Vale	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	0

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

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	2

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

Features are displayed on the Environmental designations map on **page 88**

ID	Location	Name	Local Authority name
-	1321m N	Merseyside and Greater Manchester	Manchester
-	1786m N	Merseyside and Greater Manchester	Tameside

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

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

This data is sourced from Natural England.

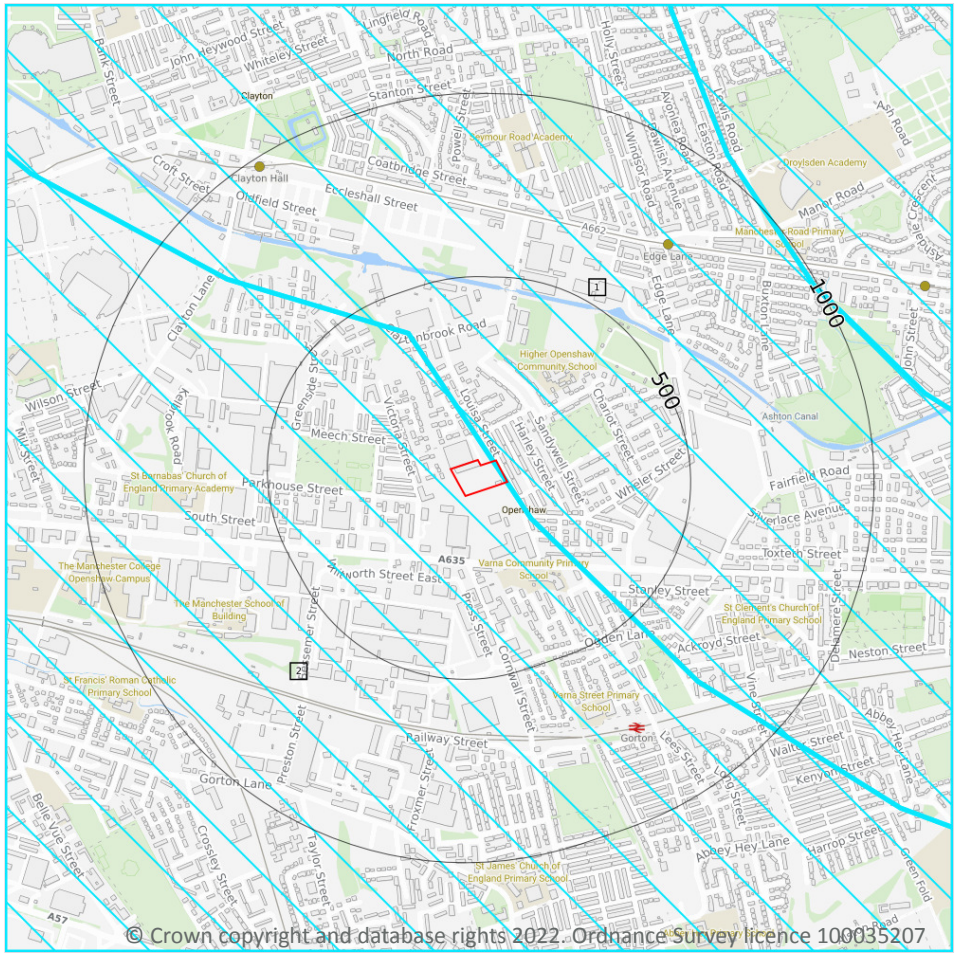
10.16 Nitrate Vulnerable Zones

Records within 2000m	0

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

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

SSSI Impact Zones and Units



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	2

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 93**

ID	Location	Type of developments requiring consultation
1	On site	**Infrastructure - Airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). 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.**
2	On site	**Infrastructure - Airports, helipads and other aviation proposals. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). 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

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	0

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.

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.

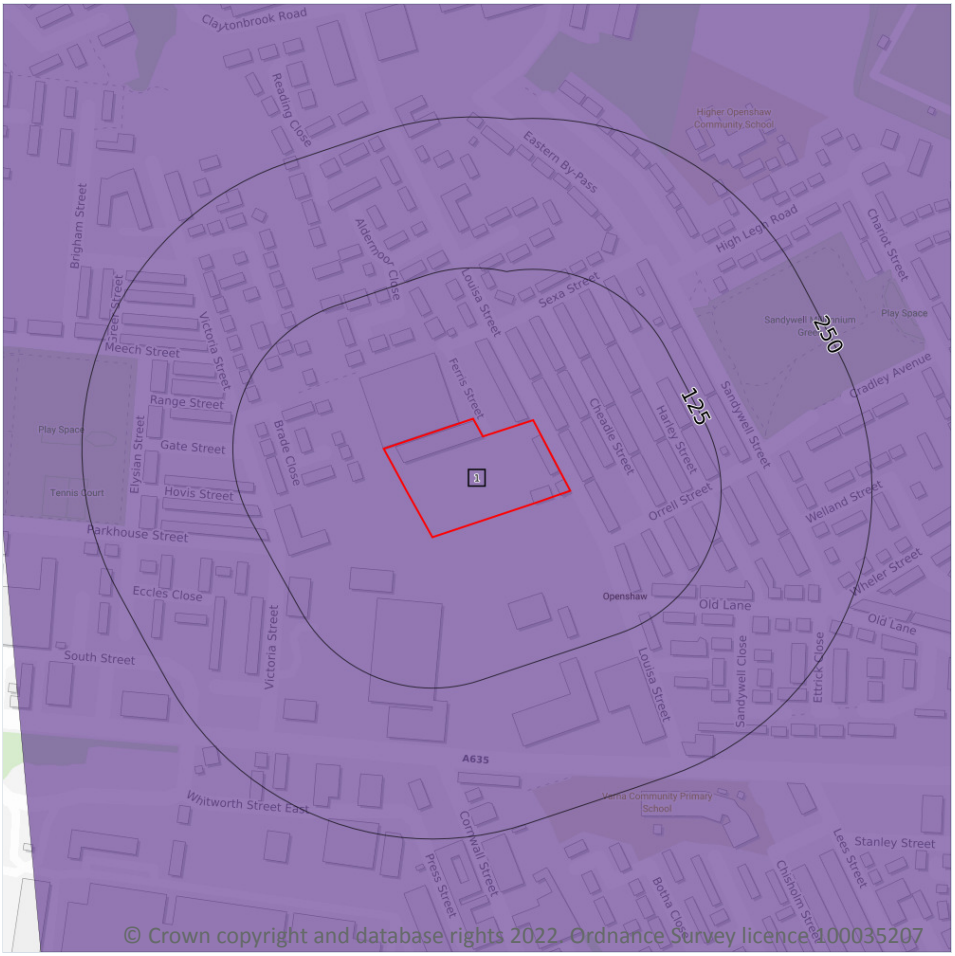
11.7 Registered Parks and Gardens

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 97**

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	0

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

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	1

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.

Features are displayed on the Habitat designations map on **page 99**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	244m NE	HLD_refs: EAHLD16526	Low	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

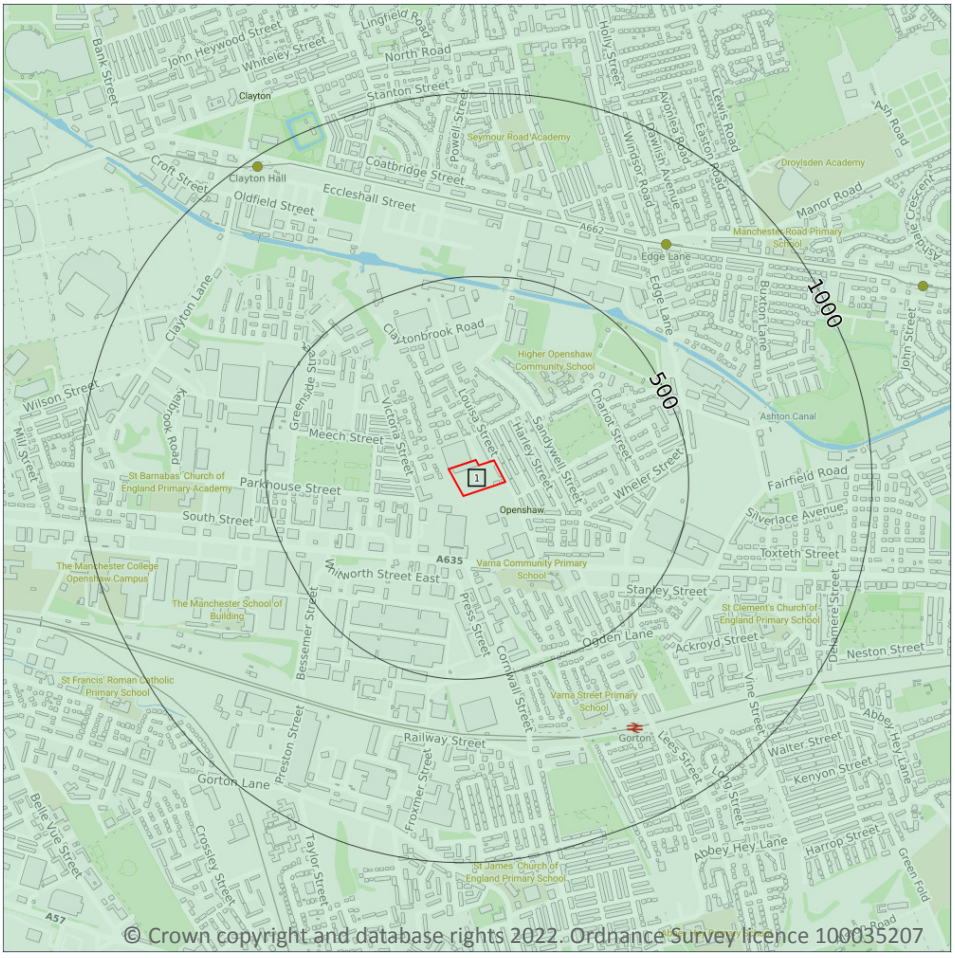
13.4 Limestone Pavement Orders

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



14.1 10k Availability

Records within 500m	1

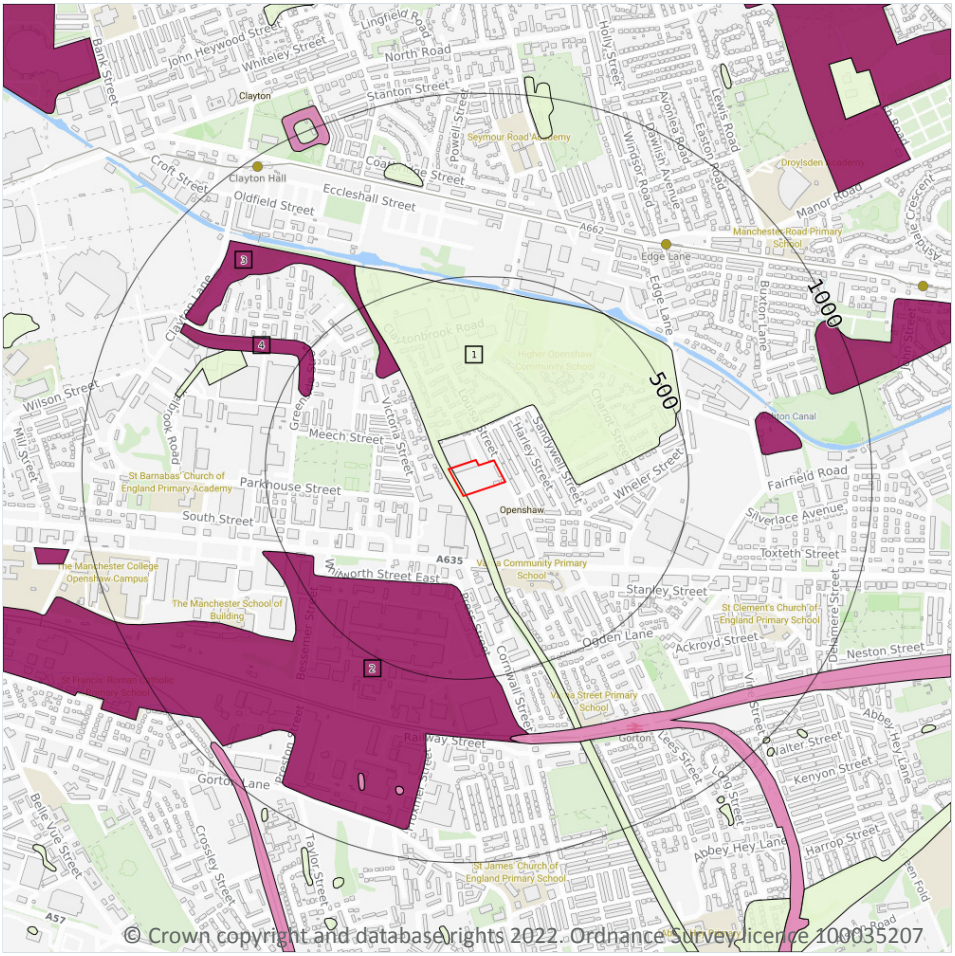
An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 101**

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



14.2 Artificial and made ground (10k)

Records within 500m **4**

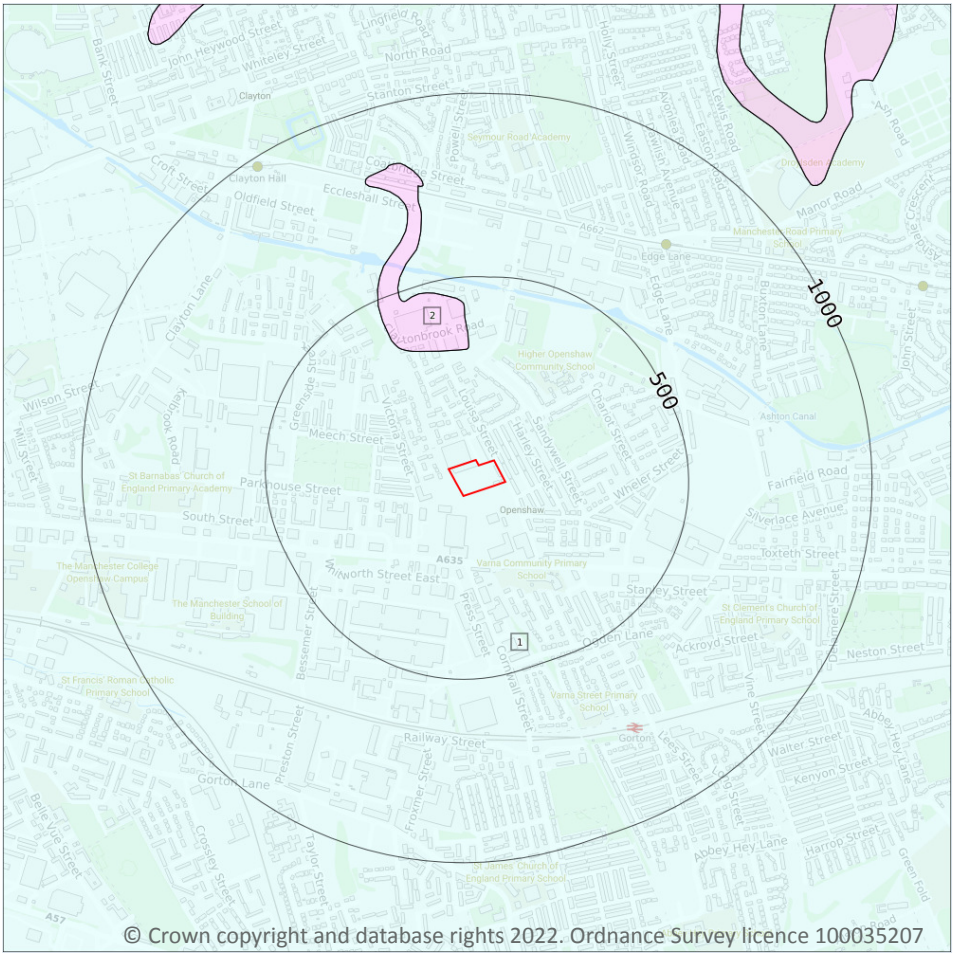
Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 102**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**WMGR-ARTDP**	**Infilled Ground**	**Artificial Deposit**
2	243m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	302m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	429m NW	MGR-ARTDP	Made Ground (Undivided)	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 **2**

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 104**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**TILLD-DMTN**	**Till, Devensian - Diamicton**	**Diamicton**
2	303m N	GFDUD-XSV	Glaciofluvial Deposits, Devensian - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.

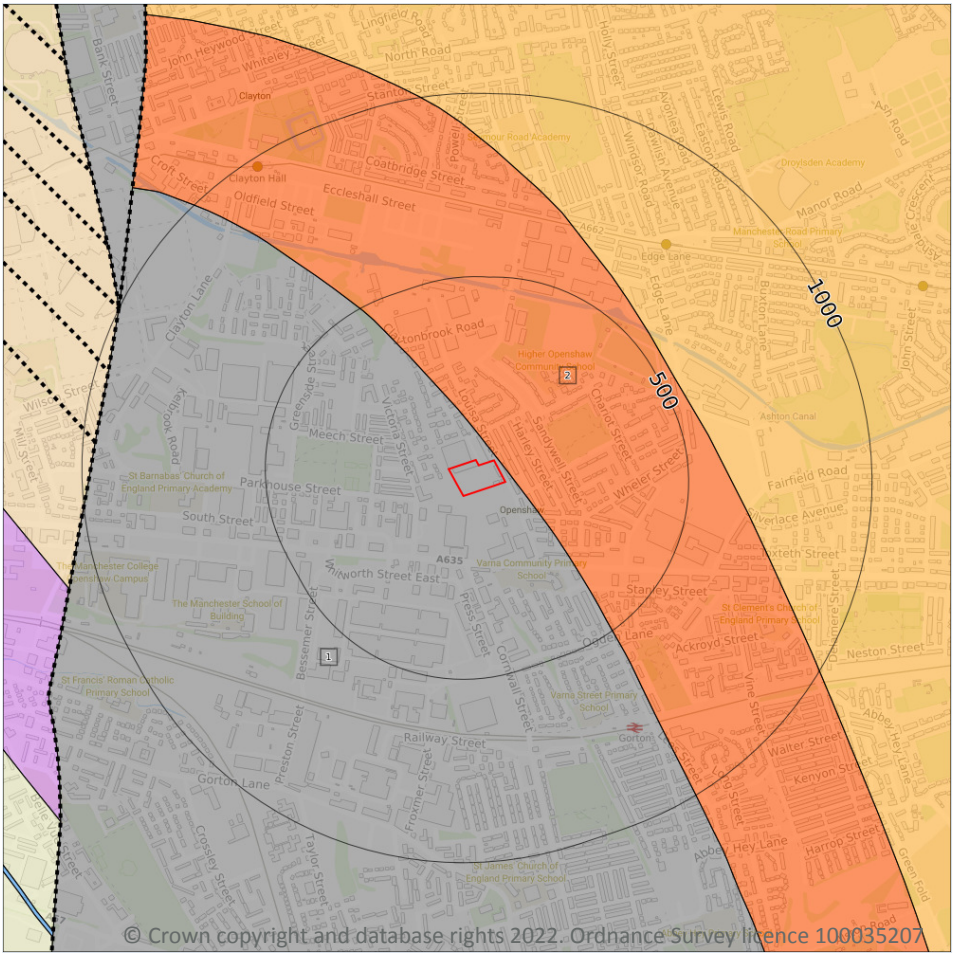
14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m **2**

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 106**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**CPB-SDST**	**Chester Pebble Beds Formation - Sandstone**	**Early Triassic Epoch**
2	11m NE	MM-MDST	Manchester Marls Formation - Mudstone	Late Permian Epoch [Obsolete name]

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



© Crown copyright and database rights 2022. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

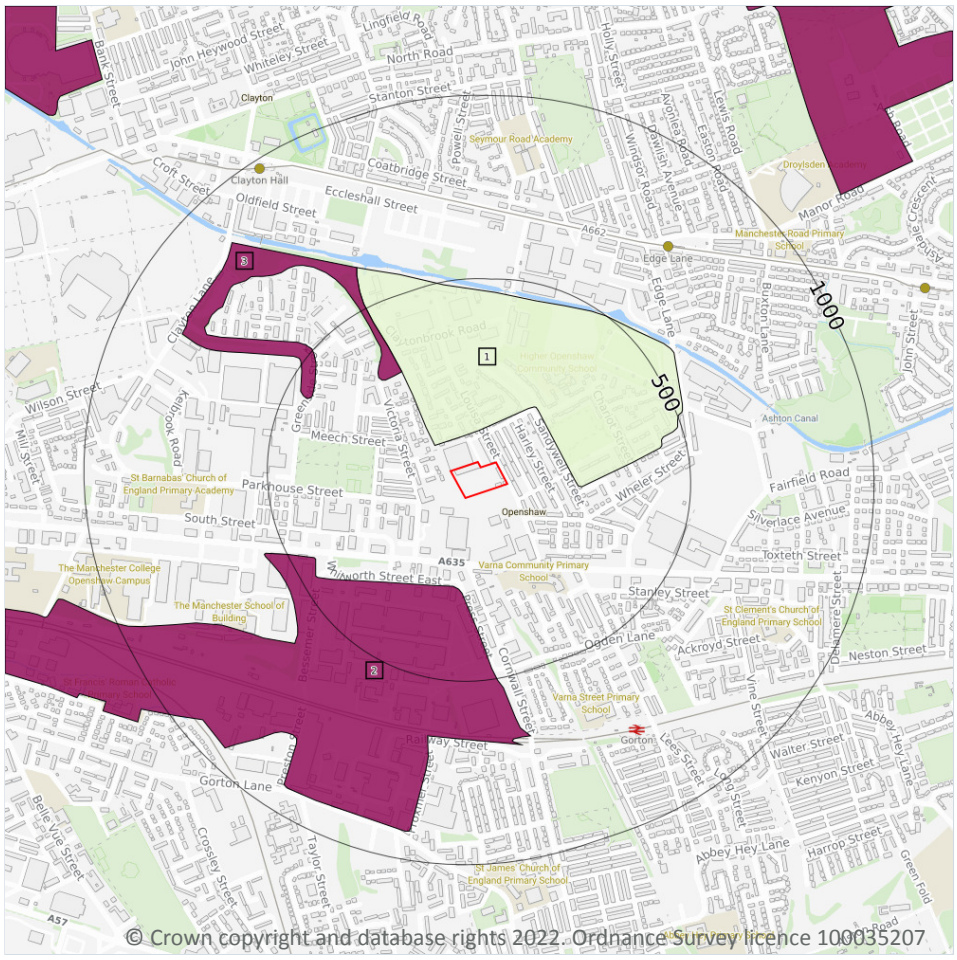
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 108**

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 **3**

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.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 109**

ID	Location	LEX Code	Description	Rock description
1	80m N	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
2	243m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	302m NW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

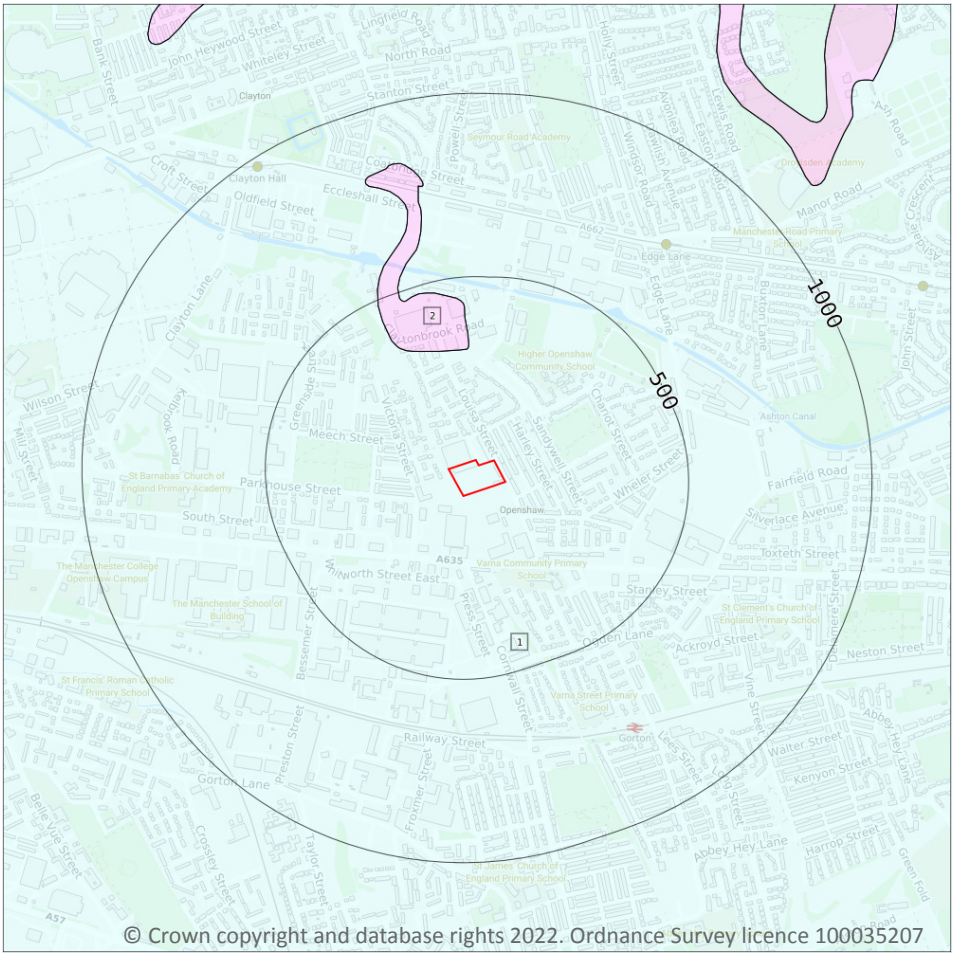
15.3 Artificial ground permeability (50k)

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 **2**

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 111**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**TILLD-DMTN**	**TILL, DEVENSIAN**	**DIAMICTON**
2	303m N	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**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.

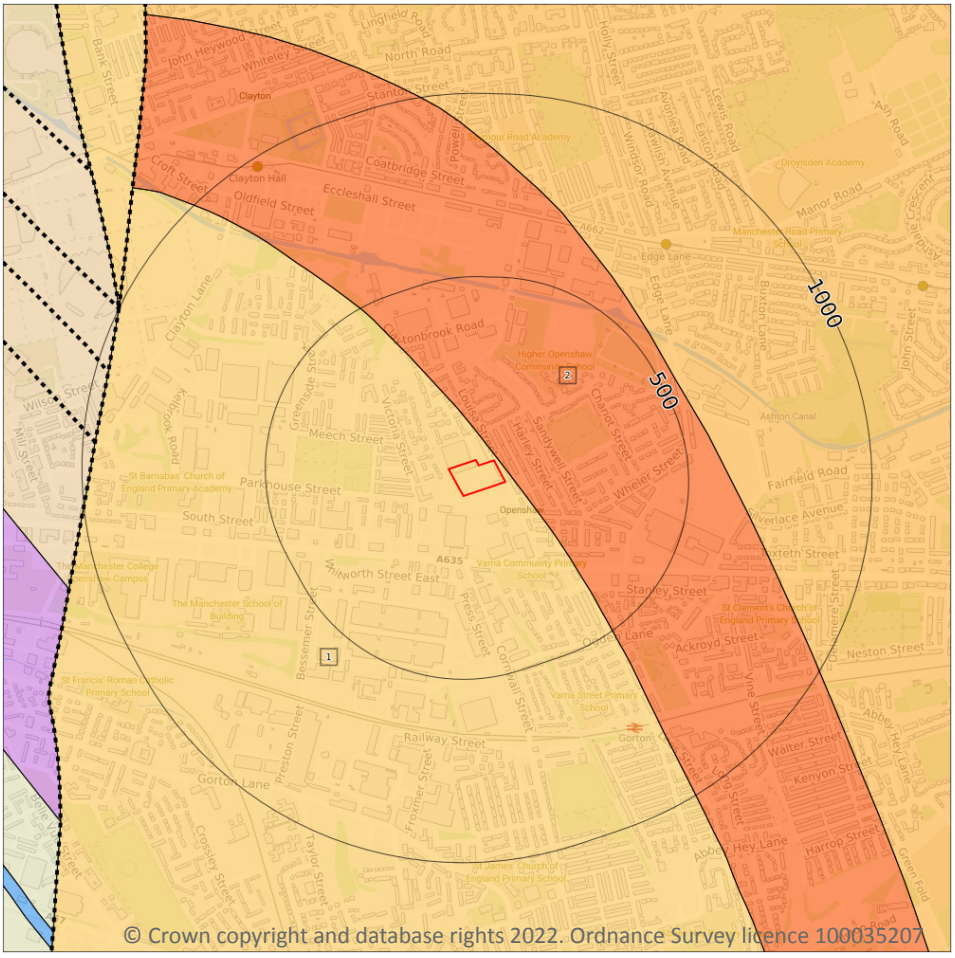
15.7 Landslip permeability (50k)

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 **2**

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 113**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**CHES-SDST**	**CHESTER FORMATION - SANDSTONE**	**OLENEKIAN**
2	11m NE	MM-MDST	MANCHESTER MARLS FORMATION - MUDSTONE	-

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	**Mixed**	**High**	**Moderate**
11m SE	Fracture	Low	Low

This data is sourced from the British Geological Survey.

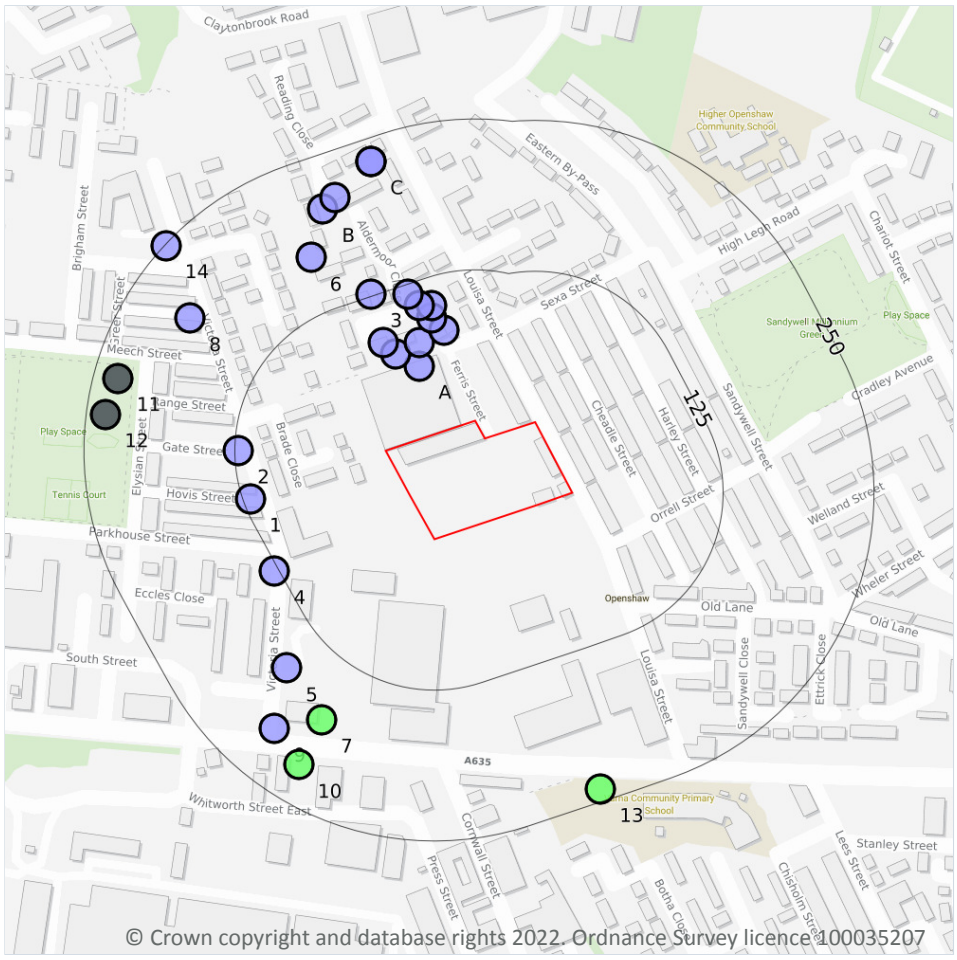
15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

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.

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 **27**

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 115**

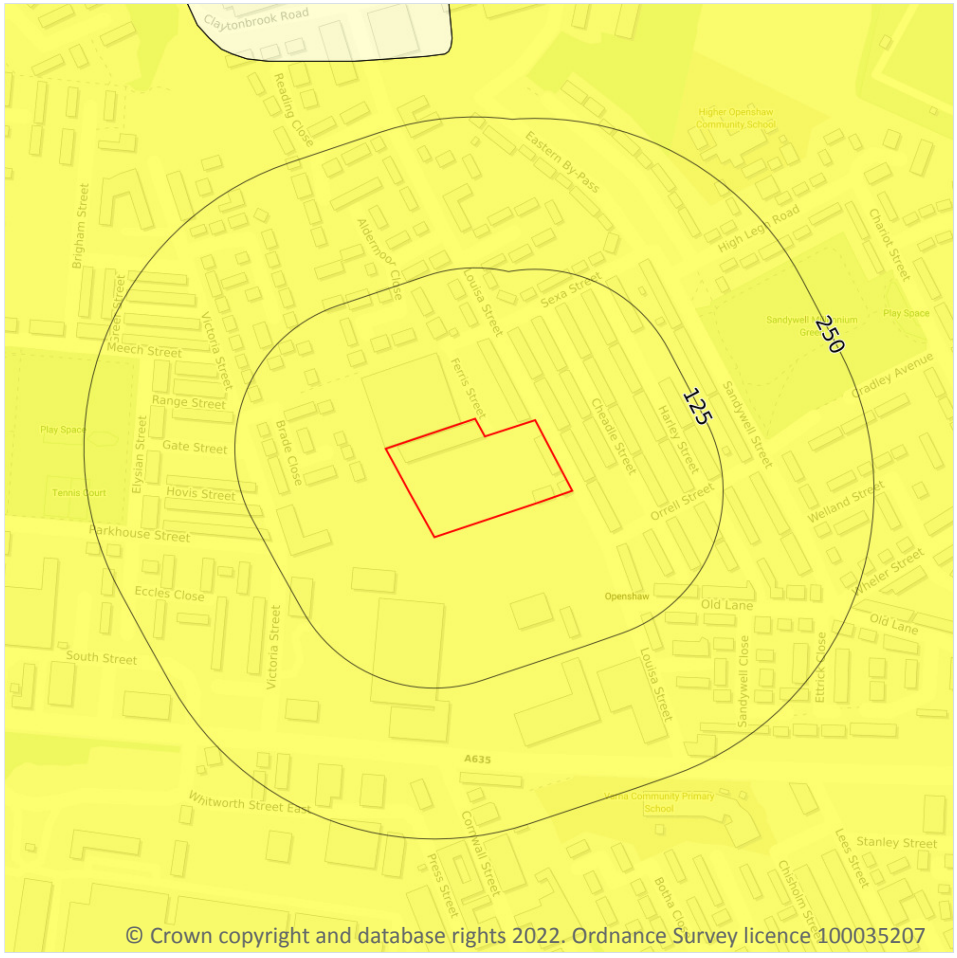
ID	Location	Grid reference	Name	Length	Confidential	Web link
A	58m N	388540 397710	MANCHESTER 10	9.29	N	937541
A	73m N	388520 397720	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP B	2.0	N	13468730

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	76m N	388540 397730	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP A	0.6	N	13468729
A	80m N	388560 397740	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER 11	7.45	N	13468728
A	86m N	388510 397730	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP E	2.5	N	13468733
A	92m N	388550 397750	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP D	1.65	N	13468732
A	102m N	388550 397760	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP C	1.5	N	13468731
A	105m N	388540 397760	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP L	-2.0	N	13468743
A	118m N	388530 397770	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP K	-2.0	N	13468742
1	119m W	388400 397600	MANCHESTER 9	5.48	N	937540
2	122m W	388390 397640	VICTORIA STREET OPENSHAW 3	5.0	N	937315
3	127m N	388500 397770	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER 9	9.35	N	13468727
4	129m SW	388420 397540	VICTORIA STREET OPENSHAW 4	5.5	N	937316
5	162m SW	388430 397460	VICTORIA STREET OPENSHAW 2	6.0	N	937312
6	172m N	388450 397800	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER 7	7.15	N	13468725
7	176m SW	388459 397417	MANCHESTER CORP. VICTORIA STREET	11.58	N	936445
8	196m NW	388350 397750	VICTORIA STREET OPENSHAW 2	5.0	N	937314
9	205m SW	388420 397410	VICTORIA STREET OPENSHAW 5	5.0	N	937317
B	206m N	388460 397840	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP H	-2.0	N	13468737
B	213m N	388470 397850	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER 6	7.25	N	13468724
10	218m SW	388440 397380	MANCHESTER 11	20.72	N	937542
11	230m W	388290 397700	OPENSHAW PARK MANCHESTER TP 3	-	Y	N/A
C	231m N	388500 397880	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP G	2.5	N	13468735

ID	Location	Grid reference	Name	Length	Confidential	Web link
C	231m N	388500 397880	LAWRENCE SCOTT WORKS, LOUISA STREET, MANCHESTER TP J	-2.0	N	13468740
12	234m W	388280 397670	OPENSHAW PARK MANCHESTER TP 5	-	Y	N/A
13	240m S	388690 397360	MANCHESTER 13	24.38	N	937544
14	249m NW	388330 397810	VICTORIA STREET OPENSHAW 1	6.0	N	937311

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

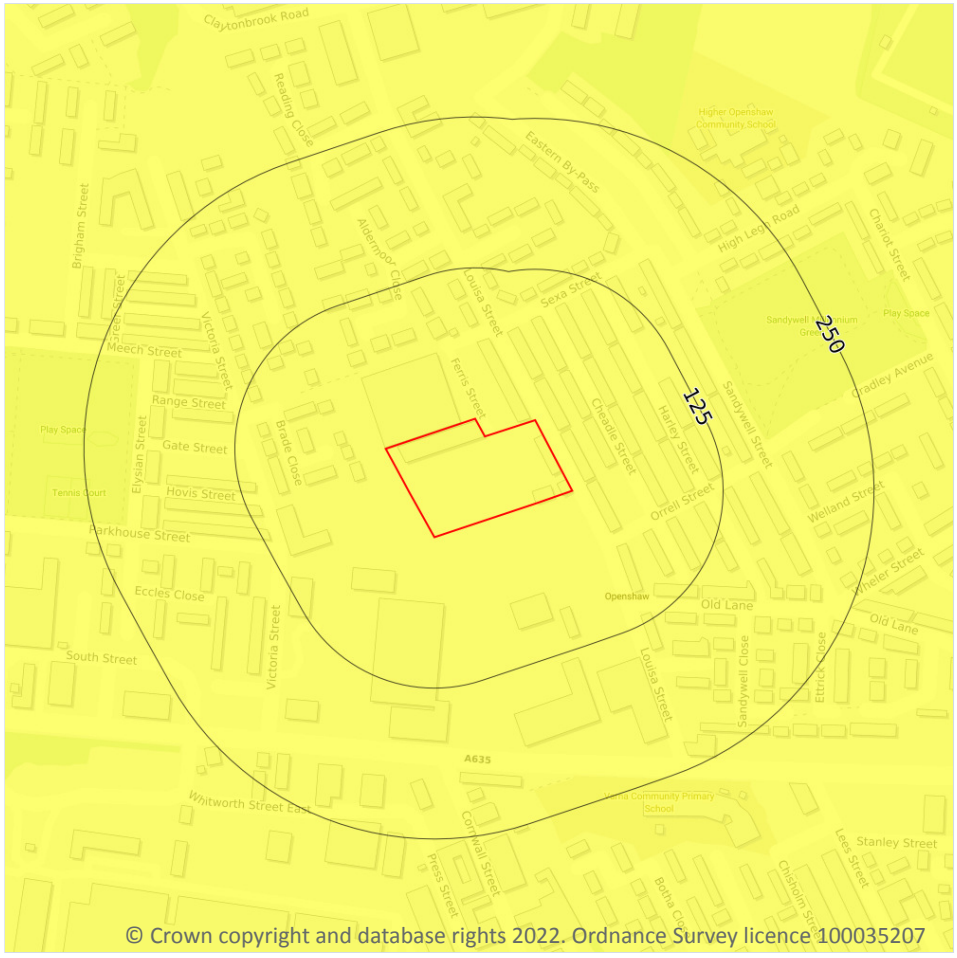
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 118**

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



© Crown copyright and database rights 2022. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	1

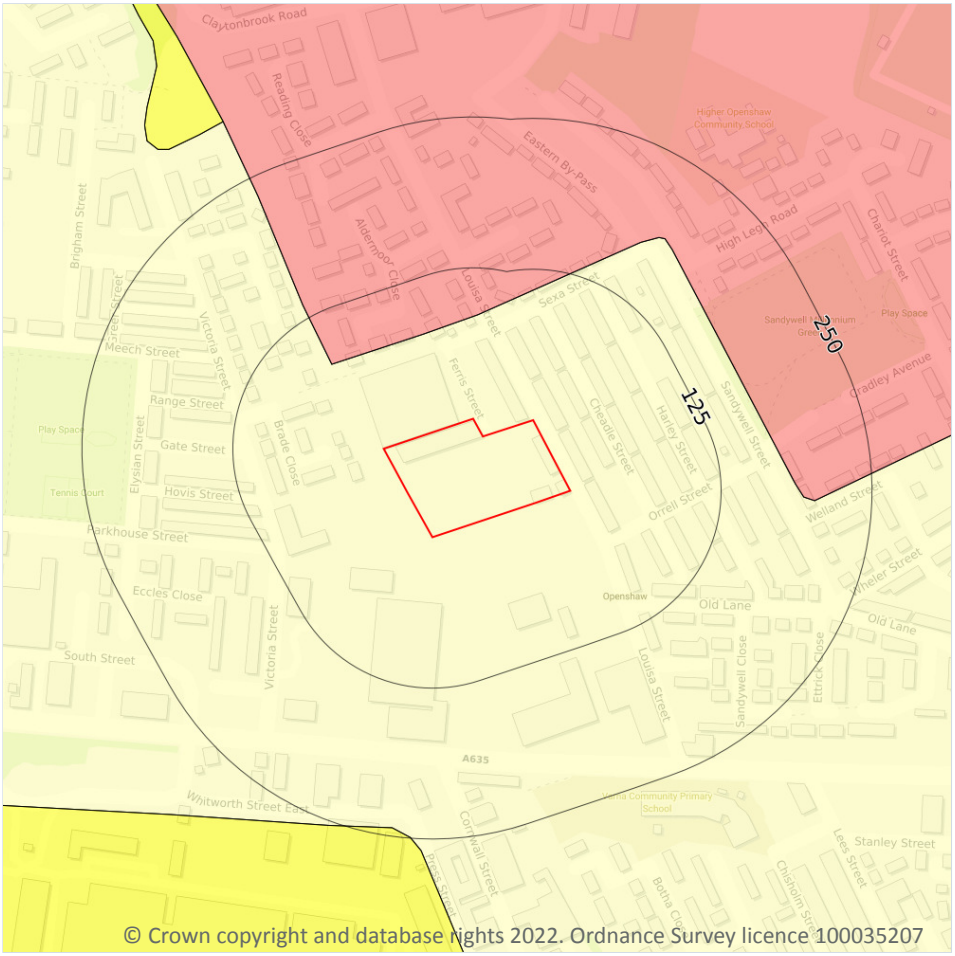
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 119**

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

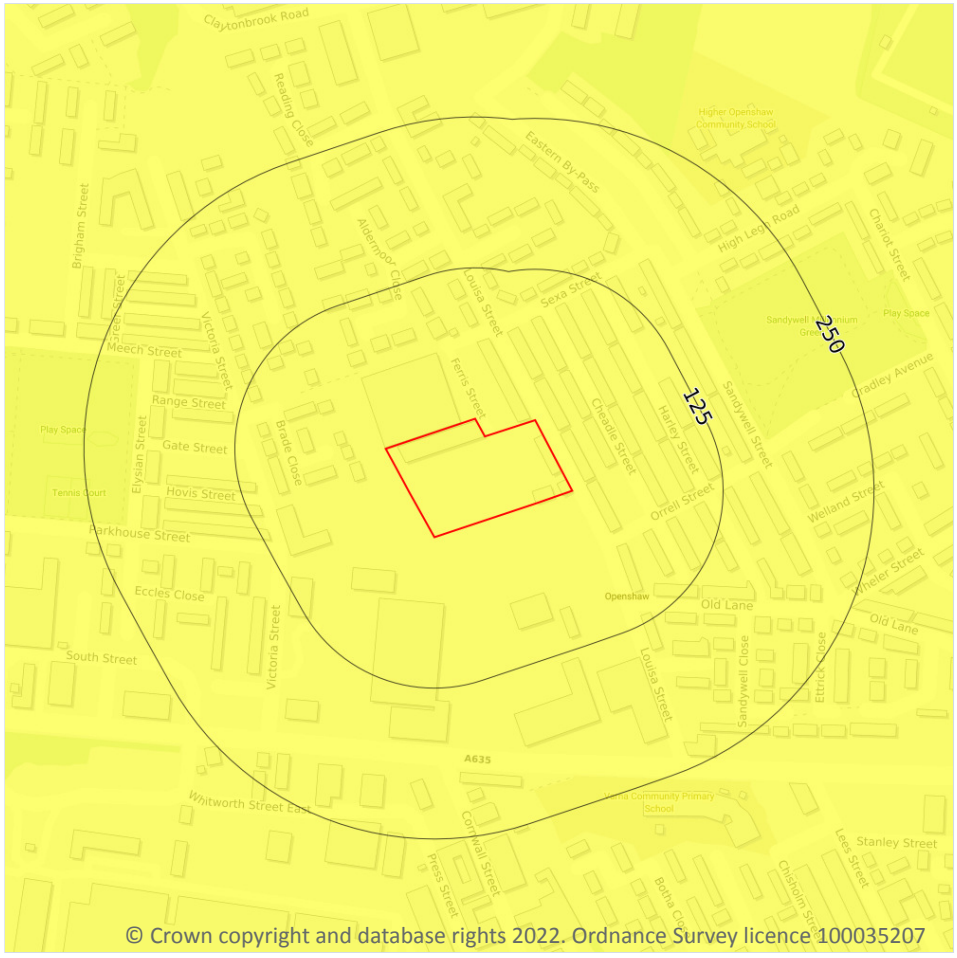
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 120**

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

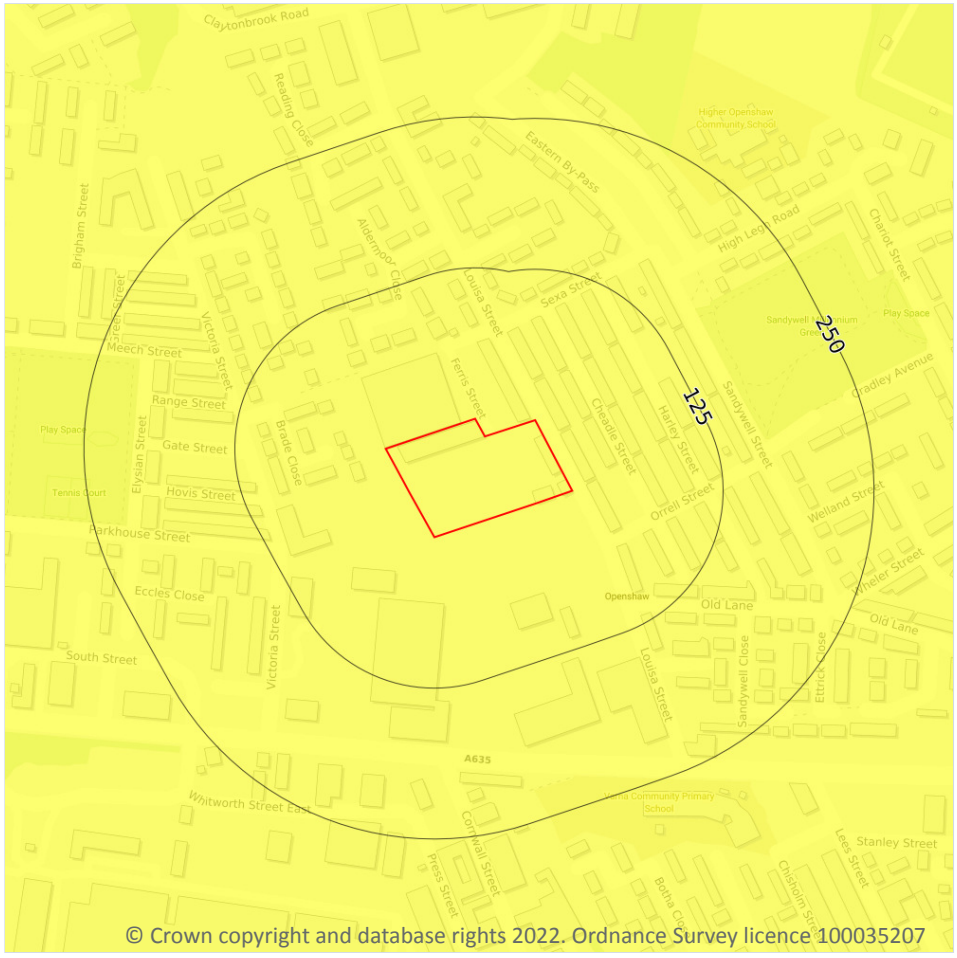
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 121**

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

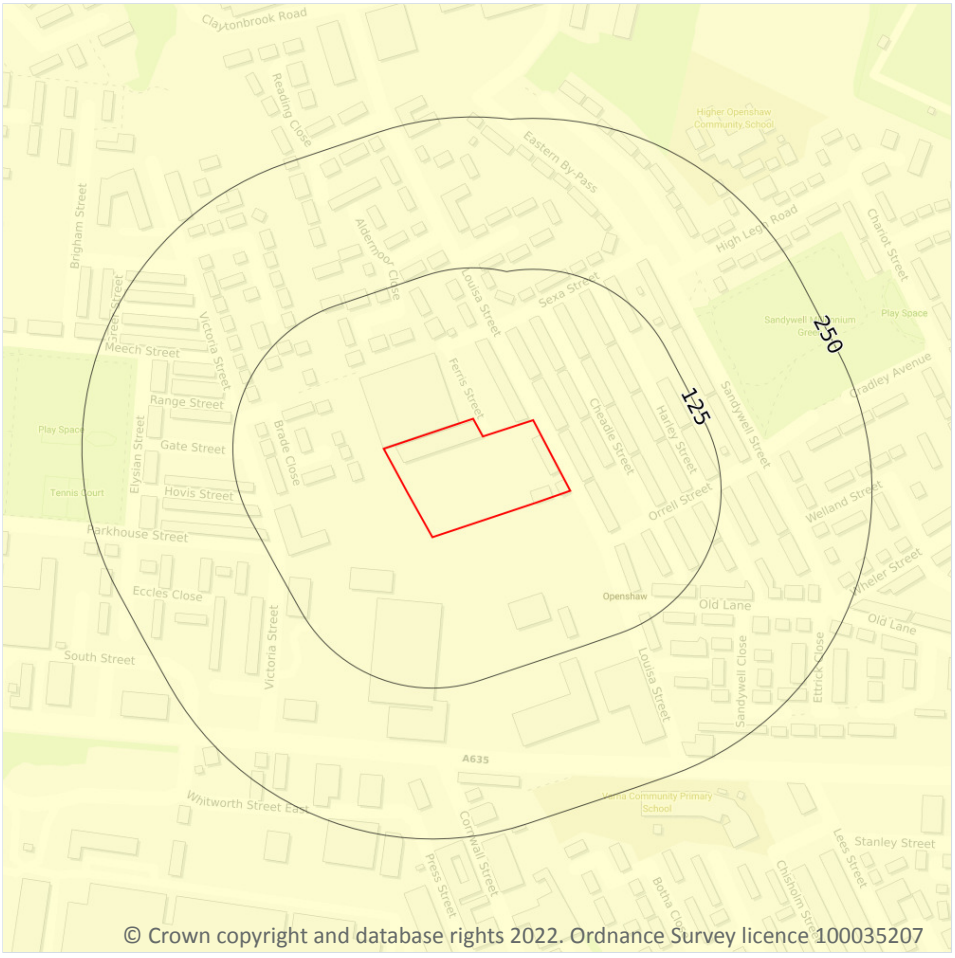
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 122**

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

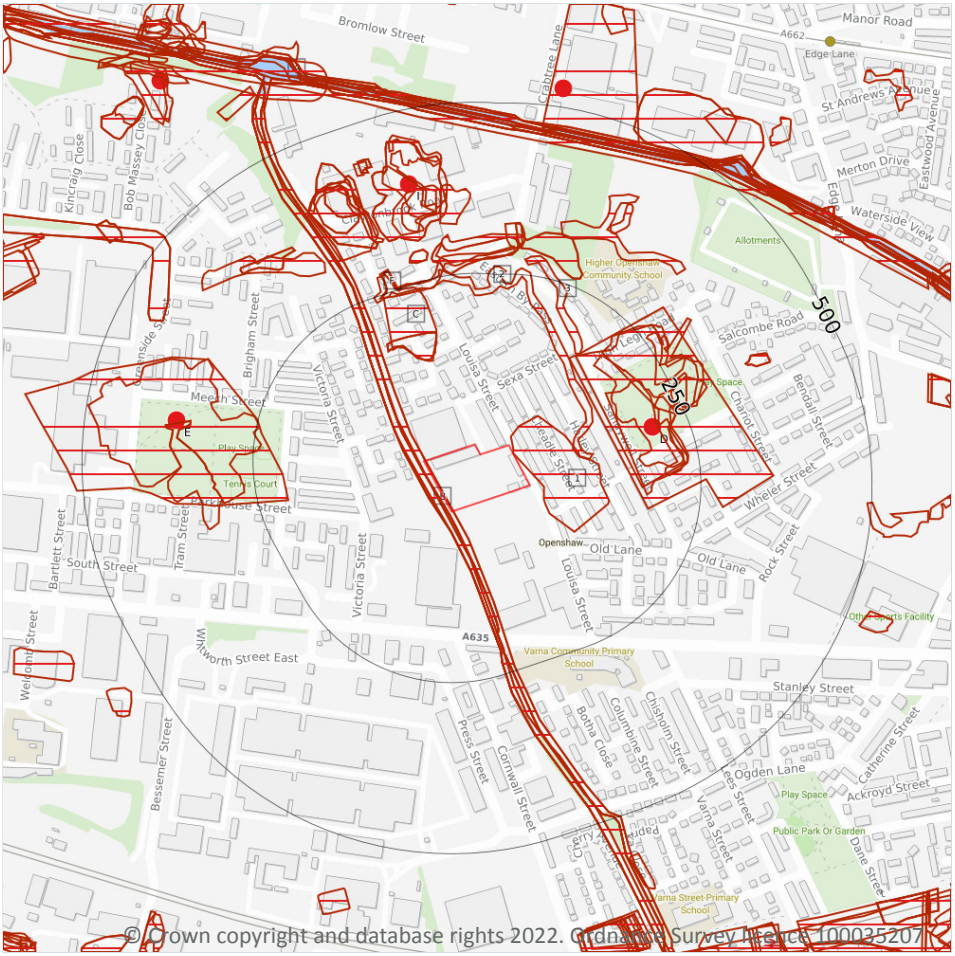
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 123**

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	3

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 125**

ID	Location	Details	Description
D	197m NE	Name: Wayne Street Brick Field Address: Openshaw, MANCHESTER, Lancashire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
E	367m W	Name: Openshaw Brick Works Address: Openshaw, MANCHESTER, Lancashire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
I	392m N	Name: Clayton Gardens Sand Pit Address: Clayton, MANCHESTER, Lancashire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m	24

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 125**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Refuse Pit**	**1890**	**1:10560**
A	**On site**	**Canal**	**1968**	**1:10560**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Canal**	**1956**	**1:10560**
B	5m SW	Canal	1938	1:10560
B	5m SW	Canal	1934	1:10560
B	5m SW	Canal	1915	1:10560
B	5m SW	Canal	1905	1:10560
B	5m SW	Canal	1890	1:10560
2	80m NE	Unspecified Ground Workings	1905	1:10560
C	136m N	Unspecified Pit	1890	1:10560
D	137m NE	Brick Field	1923	1:10560
C	138m N	Unspecified Pit	1923	1:10560
C	138m N	Unspecified Pit	1905	1:10560
D	145m NE	Disused Brick Field	1915	1:10560
D	153m E	Brick Field	1905	1:10560
D	159m NE	Pond	1934	1:10560
3	166m NE	Unspecified Ground Workings	1923	1:10560
D	192m NE	Unspecified Pit	1923	1:10560
E	206m W	Brick Works	1890	1:10560
D	213m NE	Unspecified Ground Workings	1934	1:10560
D	231m NE	Pond	1934	1:10560
F	237m N	Unspecified Ground Workings	1923	1:10560
E	239m W	Unspecified Pit	1890	1:10560
D	242m NE	Unspecified Heap	1956	1:10560

This is 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 is 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

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

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

18.11 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

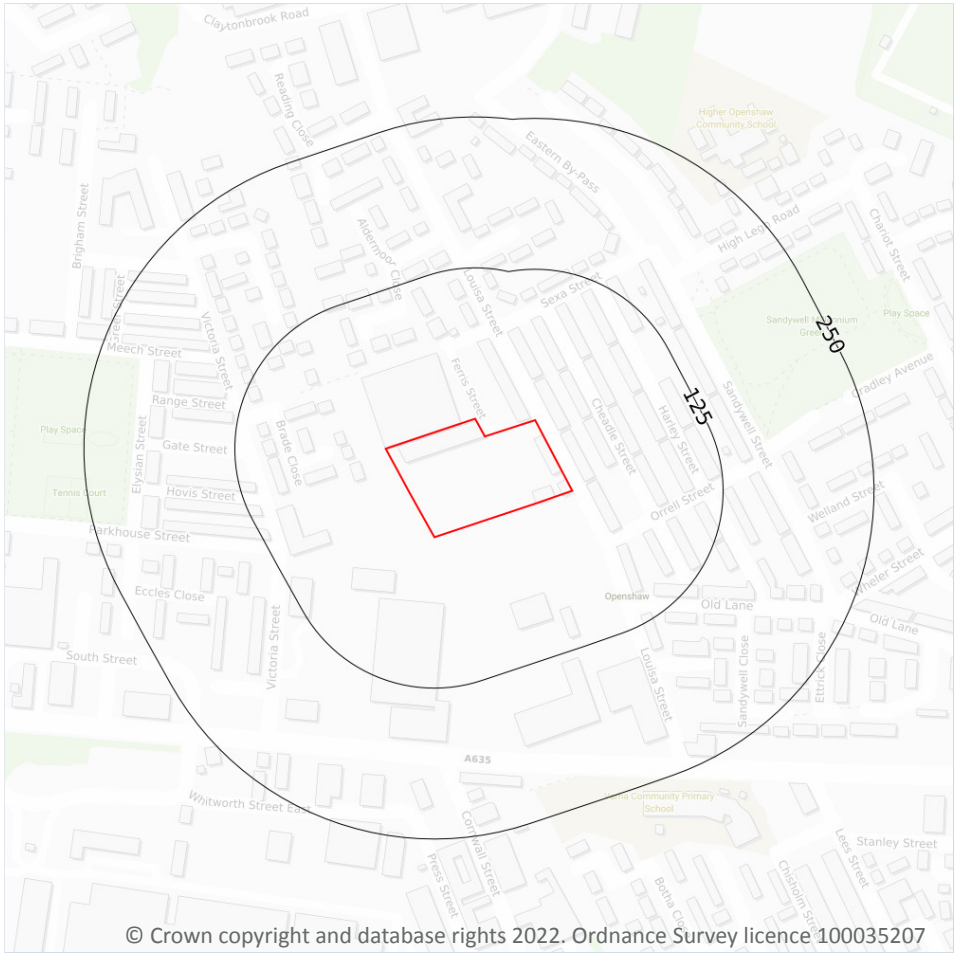
18.13 Clay mining

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



© Crown copyright and database rights 2022. Ordnance Survey licence 100035207

Site Outline

Search buffers in metres (m)

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

19.1 Radon

Records on site	1

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

Features are displayed on the Radon map on **page 130**

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 km^2. 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 km^2; 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**	**200 - 300 mg/kg**	**120 - 240 mg/kg**	**1.8 - 2.2 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
10m NE	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
12m W	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 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	10

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 km^2).

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	**21**	**3.7**	**84**	**58**	**0.3**	**76**	**30**	**27**	**6**
On site	**23**	**4**	**81**	**56**	**0.3**	**74**	**30**	**27**	**5**
On site	**26**	**4.6**	**69**	**47**	**0.3**	**73**	**19**	**27**	**9**
On site	**27**	**4.7**	**63**	**43**	**0.3**	**74**	**18**	**27**	**6**

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)
12m W	37	6.5	59	41	0.3	74	25	28	7
30m SW	31	5.4	59	41	0.3	72	28	26	6
33m E	18	3.2	61	42	0.3	76	35	27	5
34m SE	21	3.7	62	43	0.3	77	36	27	5
35m N	25	4.4	57	39	0.3	72	18	26	5
36m NE	19	3.3	79	54	0.3	74	29	26	6

This data is sourced from the British Geological Survey.

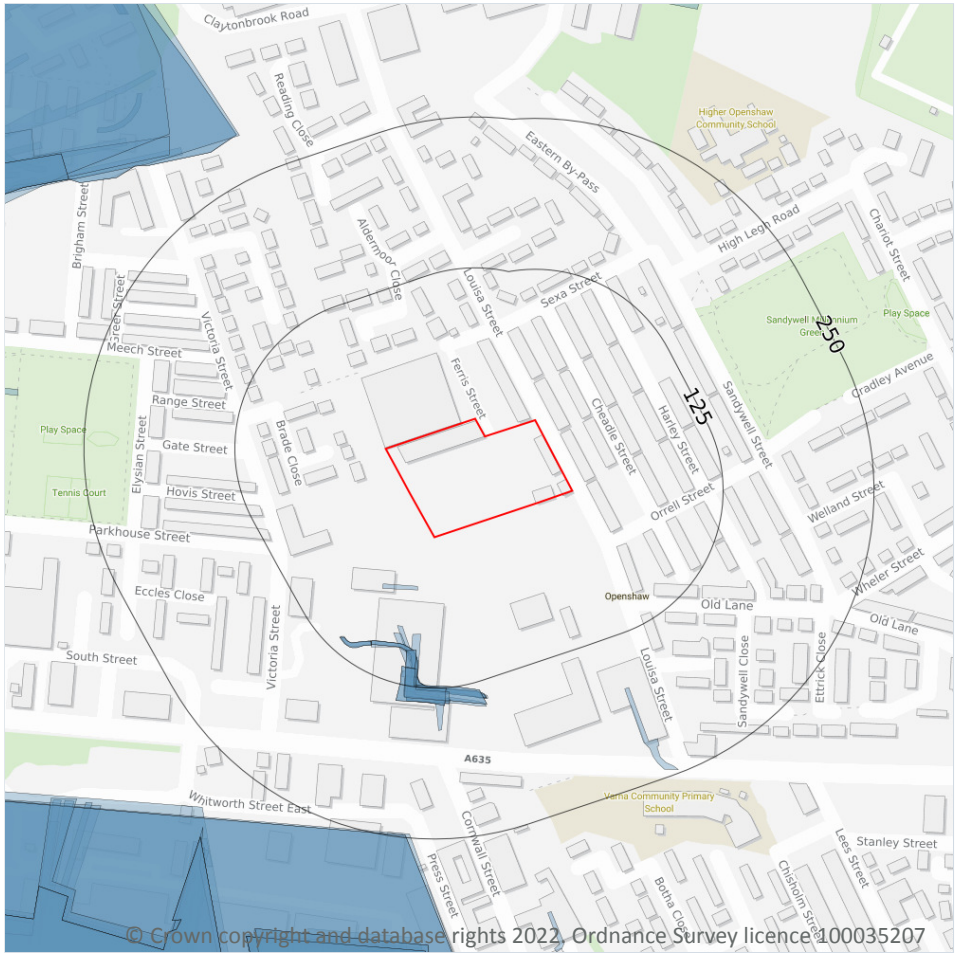
20.3 BGS Measured Urban Soil Chemistry

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 km^2.

This data is sourced from the British Geological Survey.

21 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 1 Worksites
- 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	19

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 133**

Location	Land Use	Year of mapping	Mapping scale
43m S	Railway Sidings	1933	2500
78m S	Railway Sidings	1949	1250
81m S	Railway Sidings	1933	2500
92m S	Railway Sidings	1978	1250
93m S	Railway Sidings	1980	1250
95m S	Railway Sidings	1938	10560
95m S	Railway Sidings	1934	10560
100m SW	Railway Sidings	1978	1250
101m SW	Railway Sidings	1980	1250
110m S	Railway Sidings	1893	2500
110m S	Railway Sidings	1905	10560
110m S	Railway Sidings	1923	10560
110m S	Railway Sidings	1915	10560
117m S	Railway Sidings	1908	2500
117m S	Railway Sidings	1922	2500
169m S	Tramway Sidings	1893	2500
247m S	Railway Sidings	1890	10560

Location	Land Use	Year of mapping	Mapping scale
248m S	Railway Sidings	1905	10560
248m S	Railway Sidings	1923	10560

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/.



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series
Map date: **1893**
Scale: 1:2,500
Printed at: 1:2,500

N
W E
S

Surveyed 1893
Revised N/A
Edition 1893
Copyright N/A
Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1908**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1922**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

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

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1933**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1873
Revised 1933
Edition N/A
Copyright N/A
Levelled 1927

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



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

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

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

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

Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1949**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1950**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

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

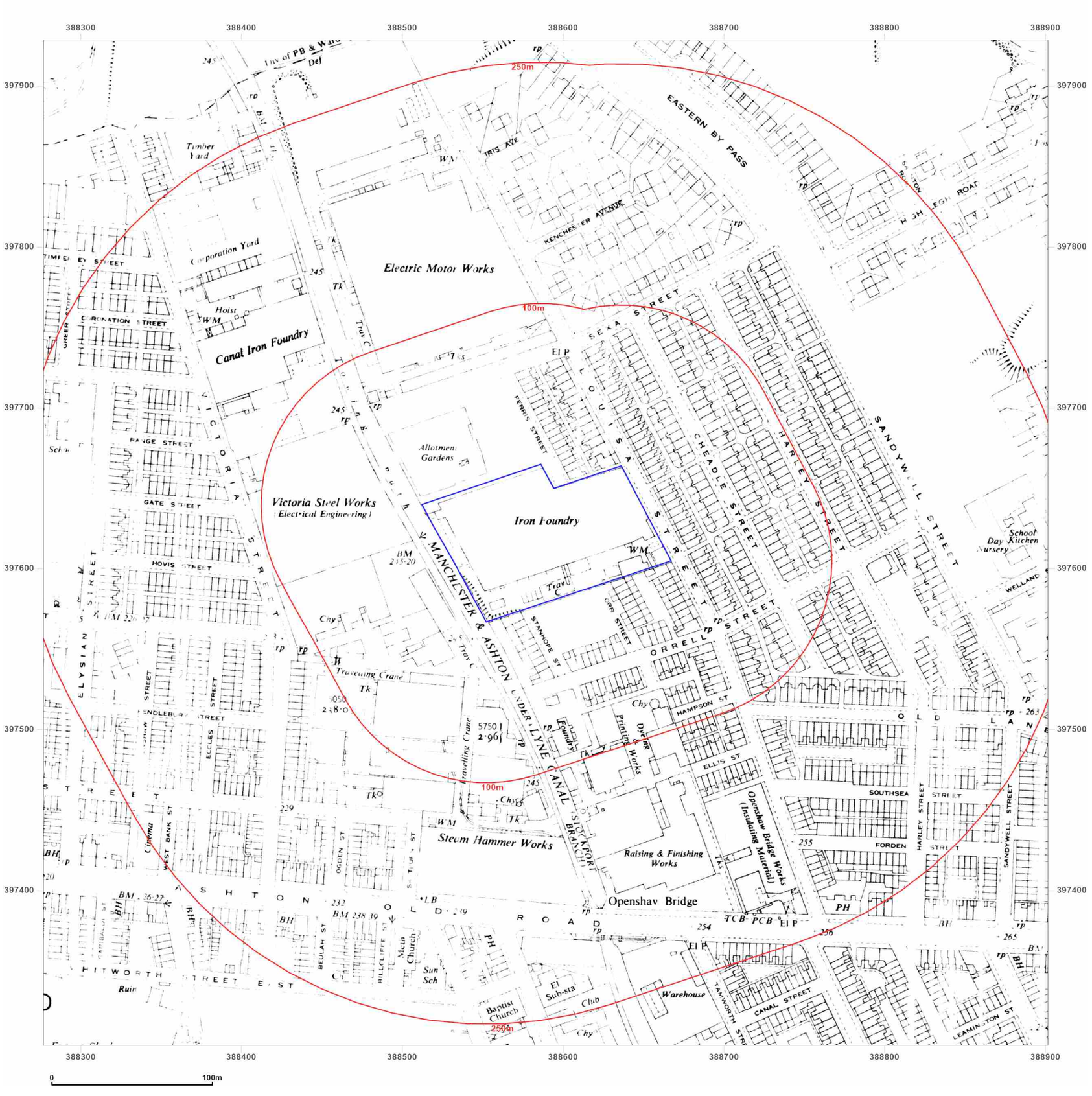
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1951**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1949
Revised N/A
Edition 1951
Copyright N/A
Levelled 1929

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1968**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1967	Surveyed 1949
Revised 1967	Revised 1967
Edition N/A	Edition N/A
Copyright 1968	Copyright 1968
Levelled 1964	Levelled 1964

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1974-1979**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed N/A Revised N/A Edition N/A Copyright 1979 Levelled 1964	
Surveyed N/A Revised N/A Edition N/A Copyright 1974 Levelled N/A	Surveyed 1949 Revised 1975 Edition N/A Copyright 1978 Levelled 1964

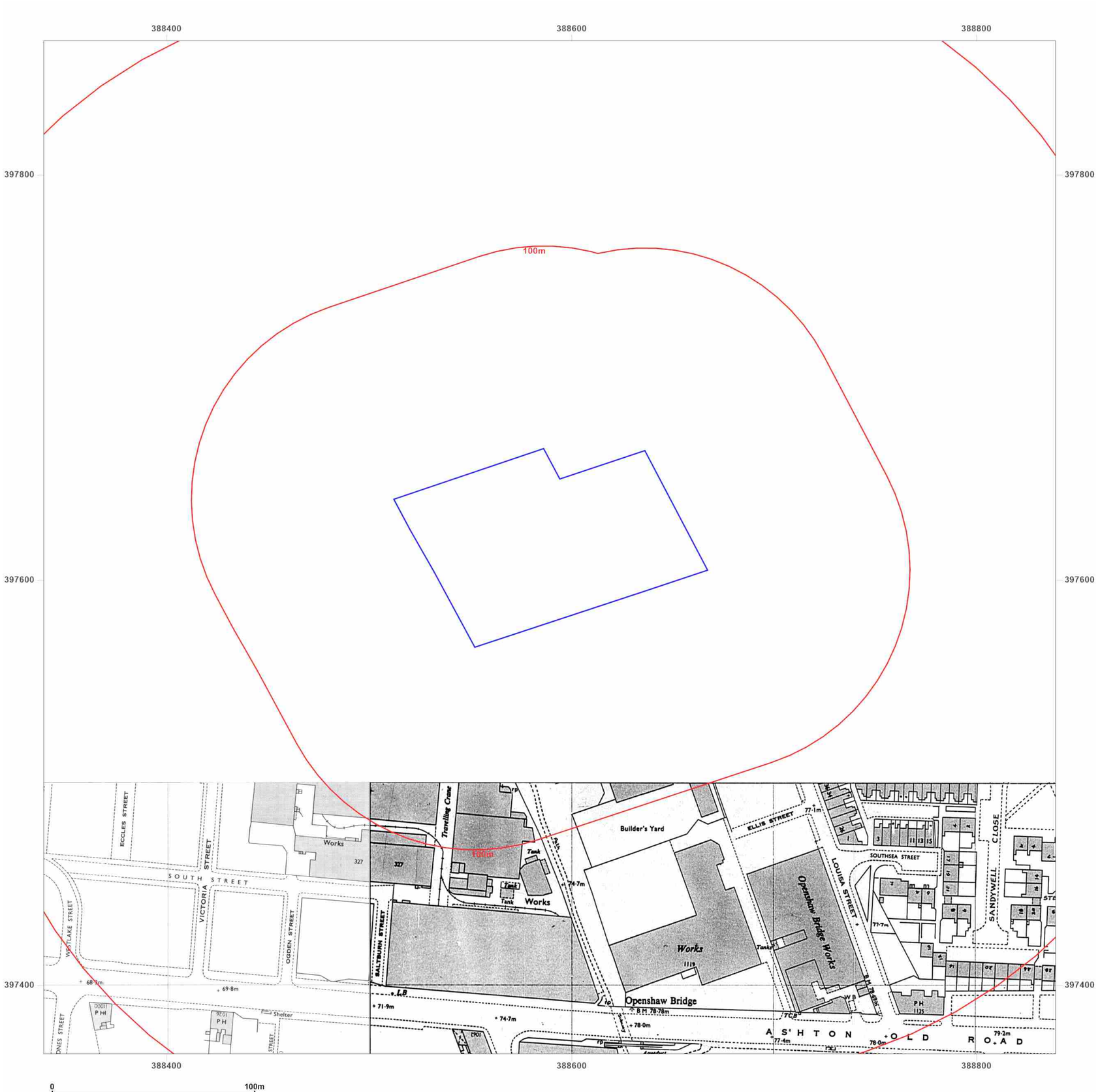
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1978-1980**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1949	Surveyed 1964
Revised 1975	Revised 1980
Edition N/A	Edition N/A
Copyright 1978	Copyright 1980
Levelled 1964	Levelled 1964

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

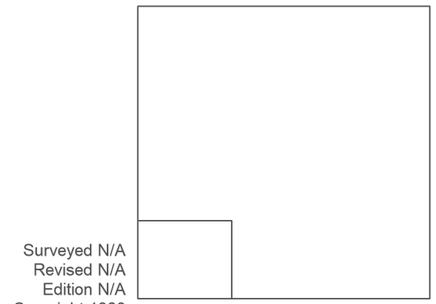
Map Name: National Grid

Map date: **1980**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1980
Levelled 1964

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1980-1985**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

	~~Surveyed 1964~~ Revised 1985 Edition N/A Copyright 1985 Levelled 1964
Surveyed 1964 Revised 1980 Edition N/A Copyright 1980 Levelled 1964	Surveyed N/A Revised N/A Edition N/A Copyright 1980 Levelled 1964

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1986-1991**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1964 Revised 1986 Edition N/A Copyright 1986 Levelled 1964		~~Surveyed 1964~~ Revised 1991 Edition N/A Copyright 1991 Levelled 1964
Surveyed 1964 Revised 1991 Edition N/A Copyright 1991 Levelled 1964		Surveyed 1964 Revised 1991 Edition N/A Copyright 1991 Levelled 1964

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1988-1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1949 Revised 1968 Edition N/A Copyright 1988 Levelled 1964		Surveyed N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A
Surveyed 1964 Revised 1991 Edition N/A Copyright 1991 Levelled 1964		Surveyed N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1992-1995**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1992 Revised 1992 Edition N/A Copyright 1992 Levelled N/A		
Surveyed 1992 Revised 1992 Edition N/A Copyright 1992 Levelled N/A		Surveyed N/A Revised N/A Edition N/A Copyright 1995 Levelled N/A

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1994-1995**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1995 Revised 1995 Edition N/A Copyright 1995 Levelled N/A	
Surveyed 1994 Revised 1994 Edition N/A Copyright 1994 Levelled N/A	Surveyed 1995 Revised 1995 Edition N/A Copyright 1995 Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

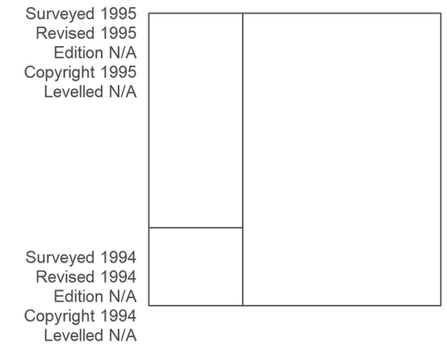
Map Name: National Grid

Map date: **1994-1995**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

N
W E
S

2003

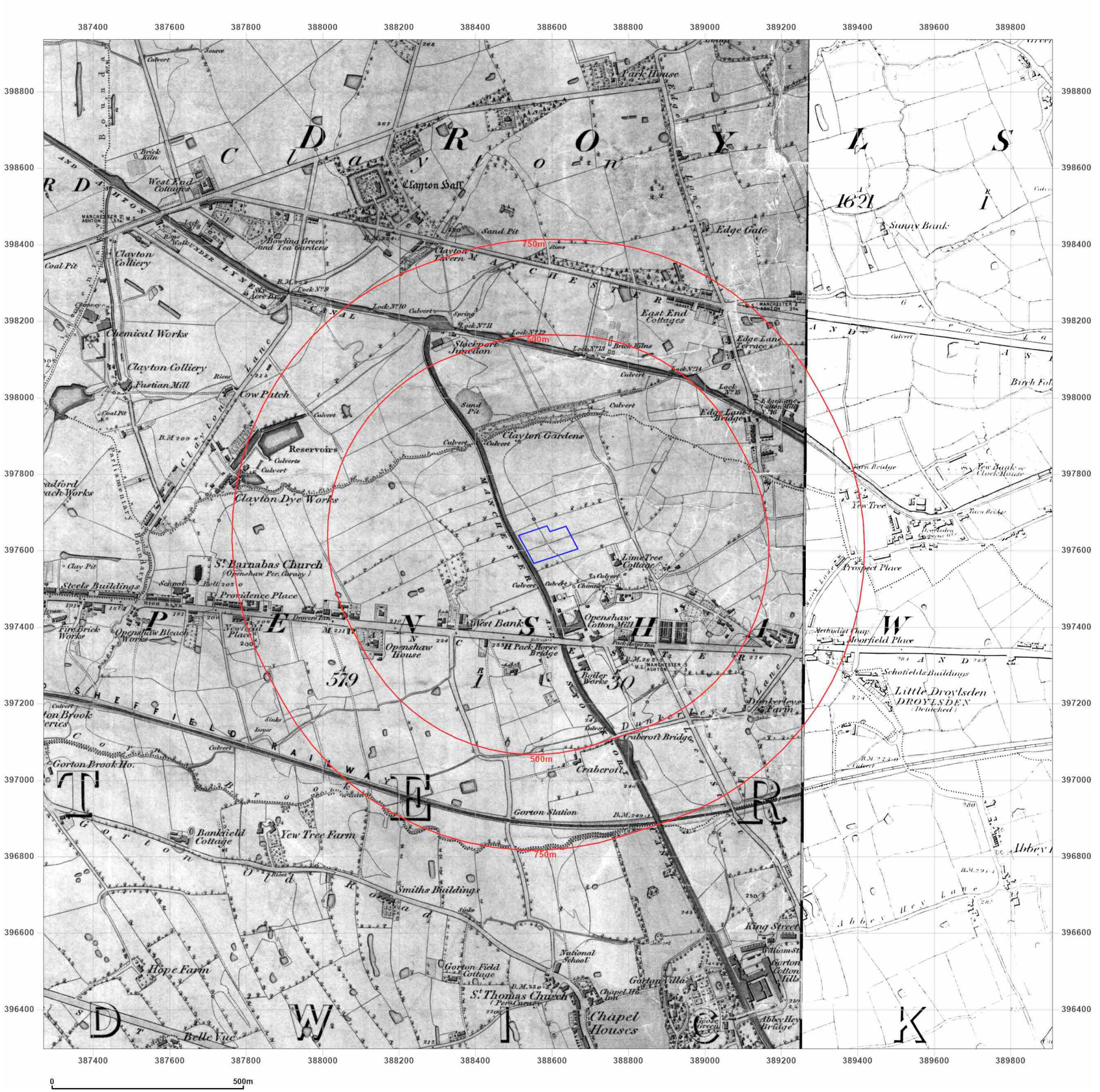
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1848**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1845
Revised N/A
Edition 1848
Copyright N/A
Levelled N/A

Surveyed 1845
Revised N/A
Edition 1848
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1890-1892**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

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

Surveyed 1892
Revised 1892
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1890
Revised 1890
Edition 1890
Copyright N/A
Levelled N/A

Surveyed 1892
Revised 1892
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1905-1906**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1844 Revised 1906 Edition 1906 Copyright N/A Levelled N/A	Surveyed 1844 Revised 1906 Edition N/A Copyright N/A Levelled N/A
Surveyed 1844 Revised 1905 Edition 1905 Copyright N/A Levelled N/A	Surveyed 1844 Revised 1906 Edition N/A Copyright N/A Levelled N/A

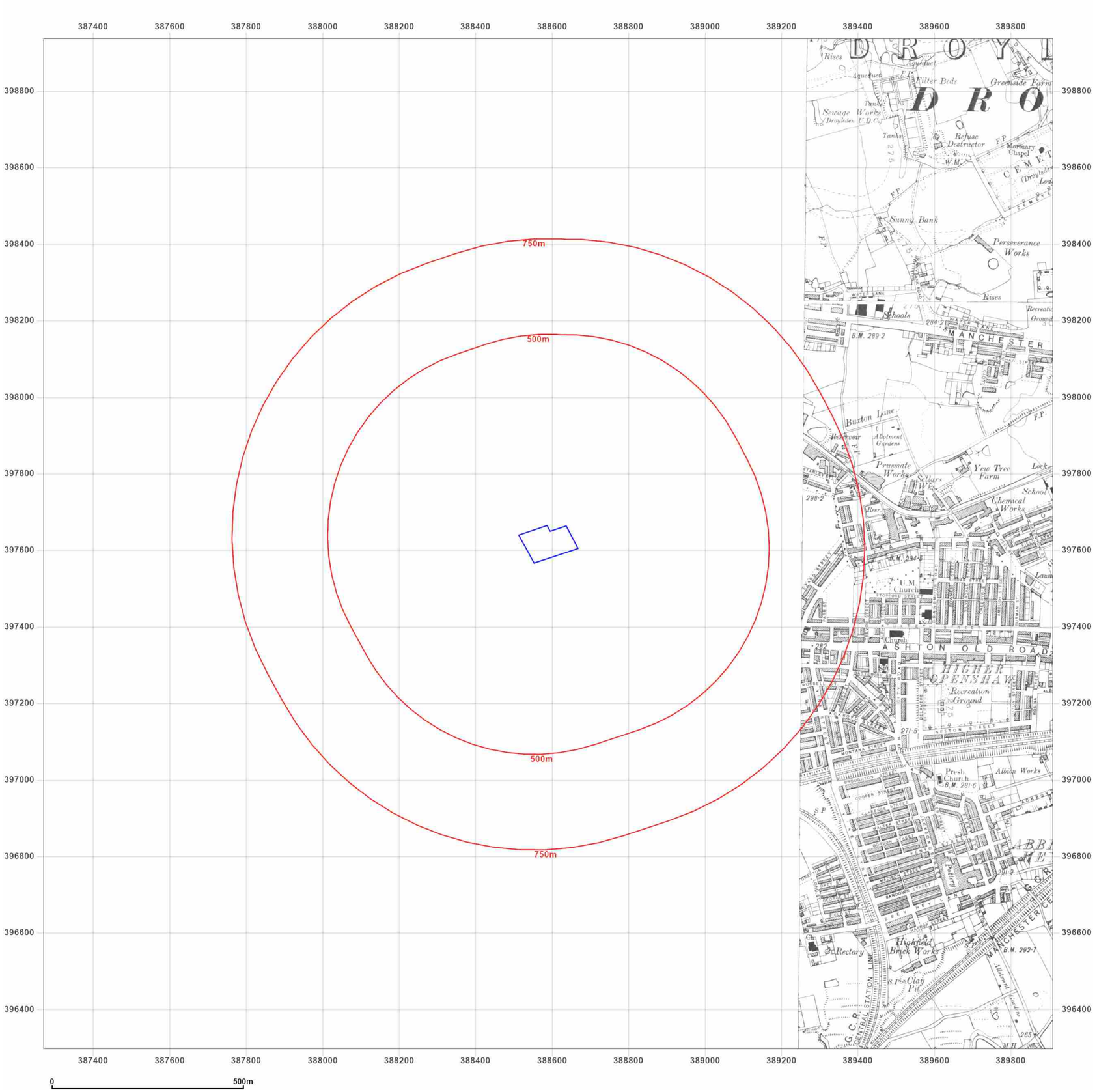
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1916-1918**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1844
Revised 1916
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1918
Edition N/A
Copyright N/A
Levelled N/A

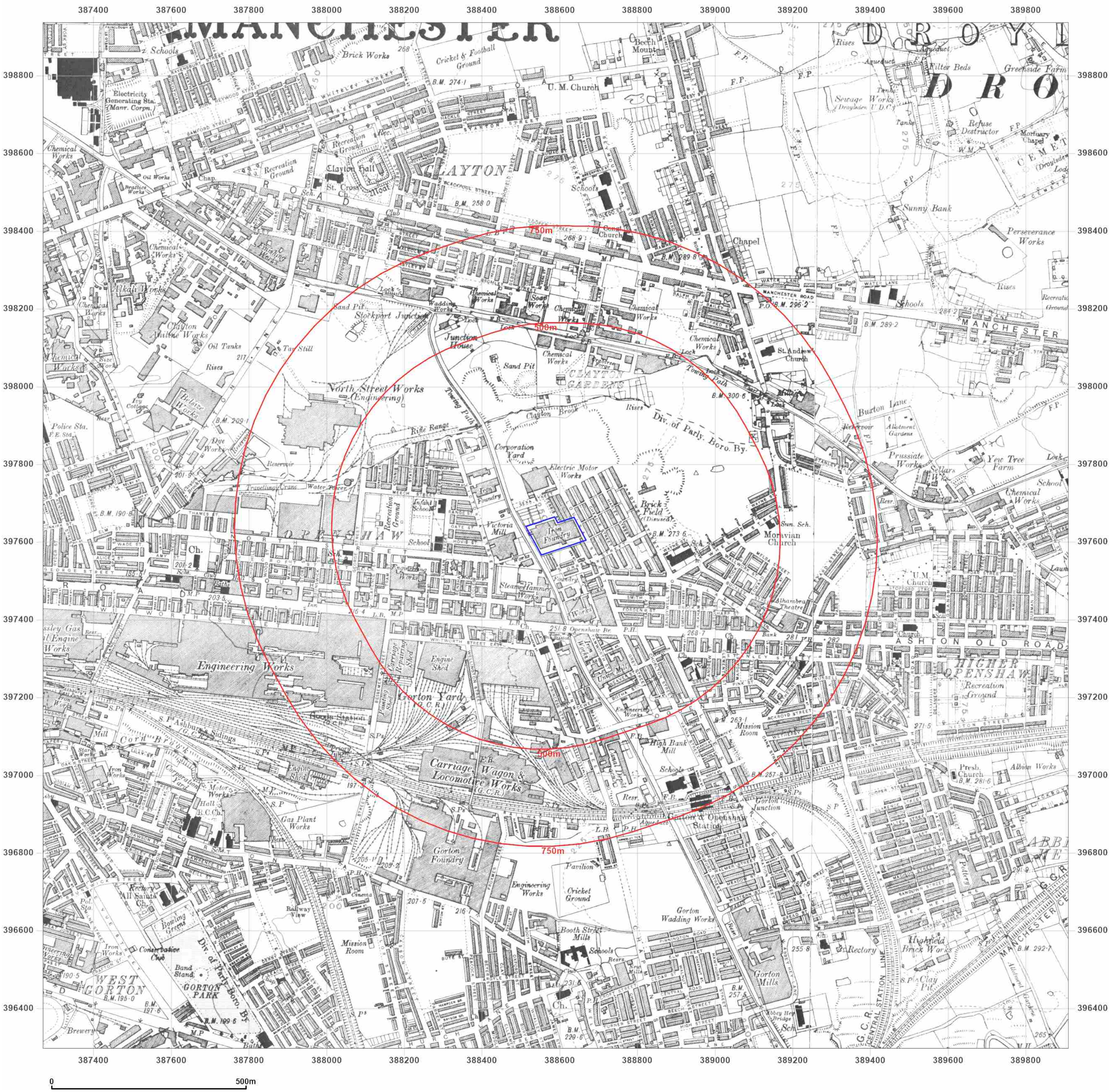
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

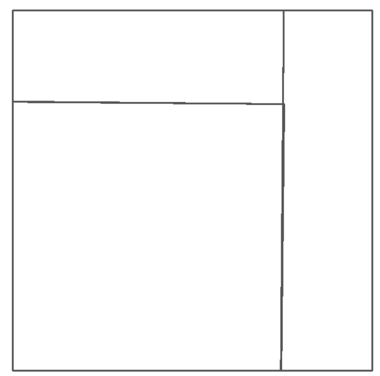
Map date: **1923**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1844
Revised 1921
Edition 1923
Copyright N/A
Levelled 1906



Surveyed 1844
Revised 1923
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1915
Edition 1923
Copyright N/A
Levelled 1915

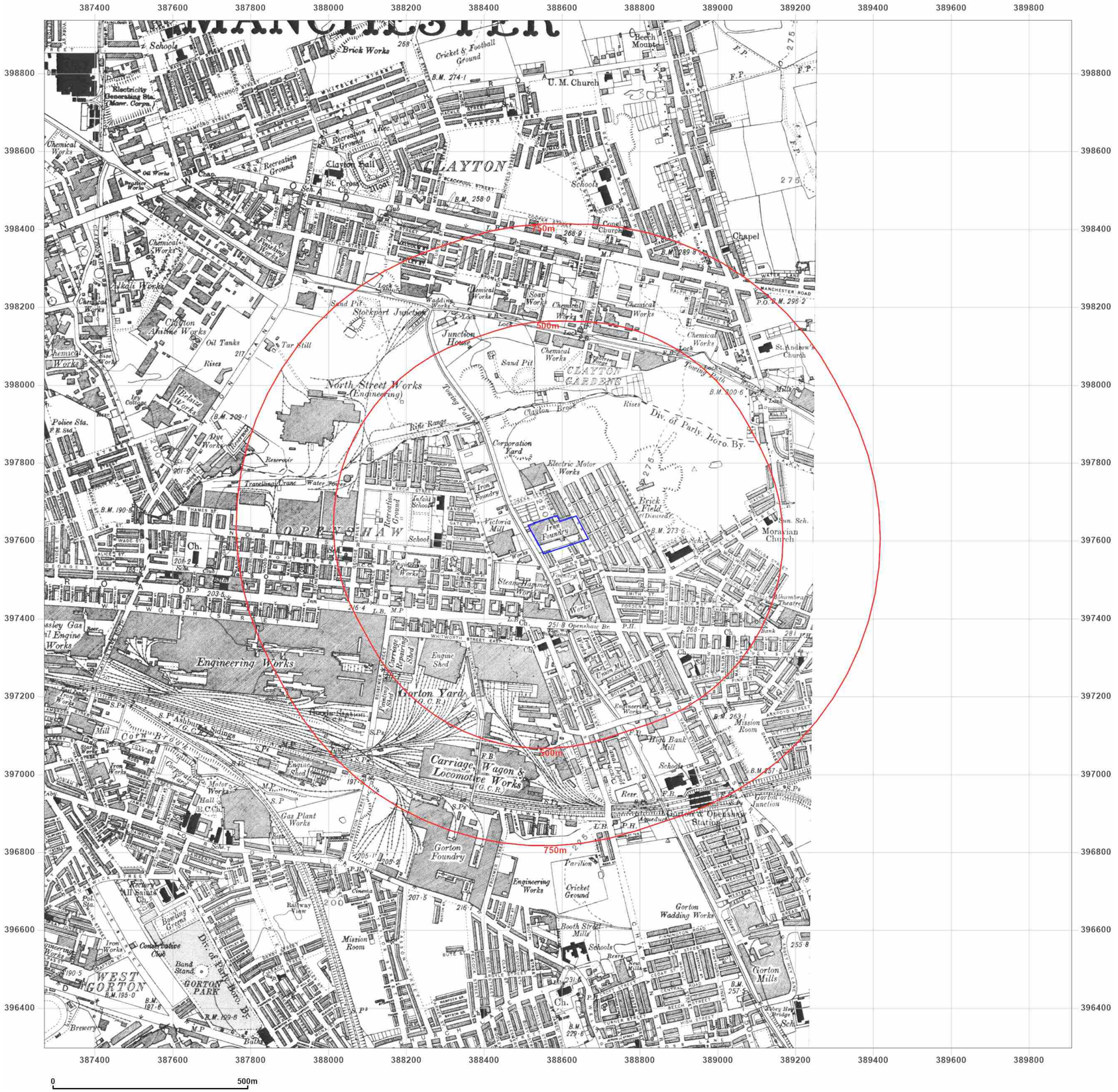
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

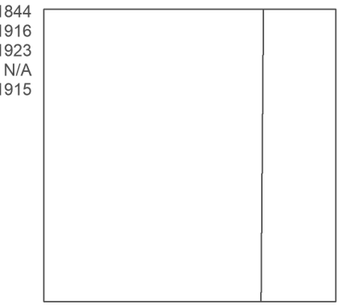
Map date: **1923**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1844
Revised 1916
Edition 1923
Copyright N/A
Levelled 1915



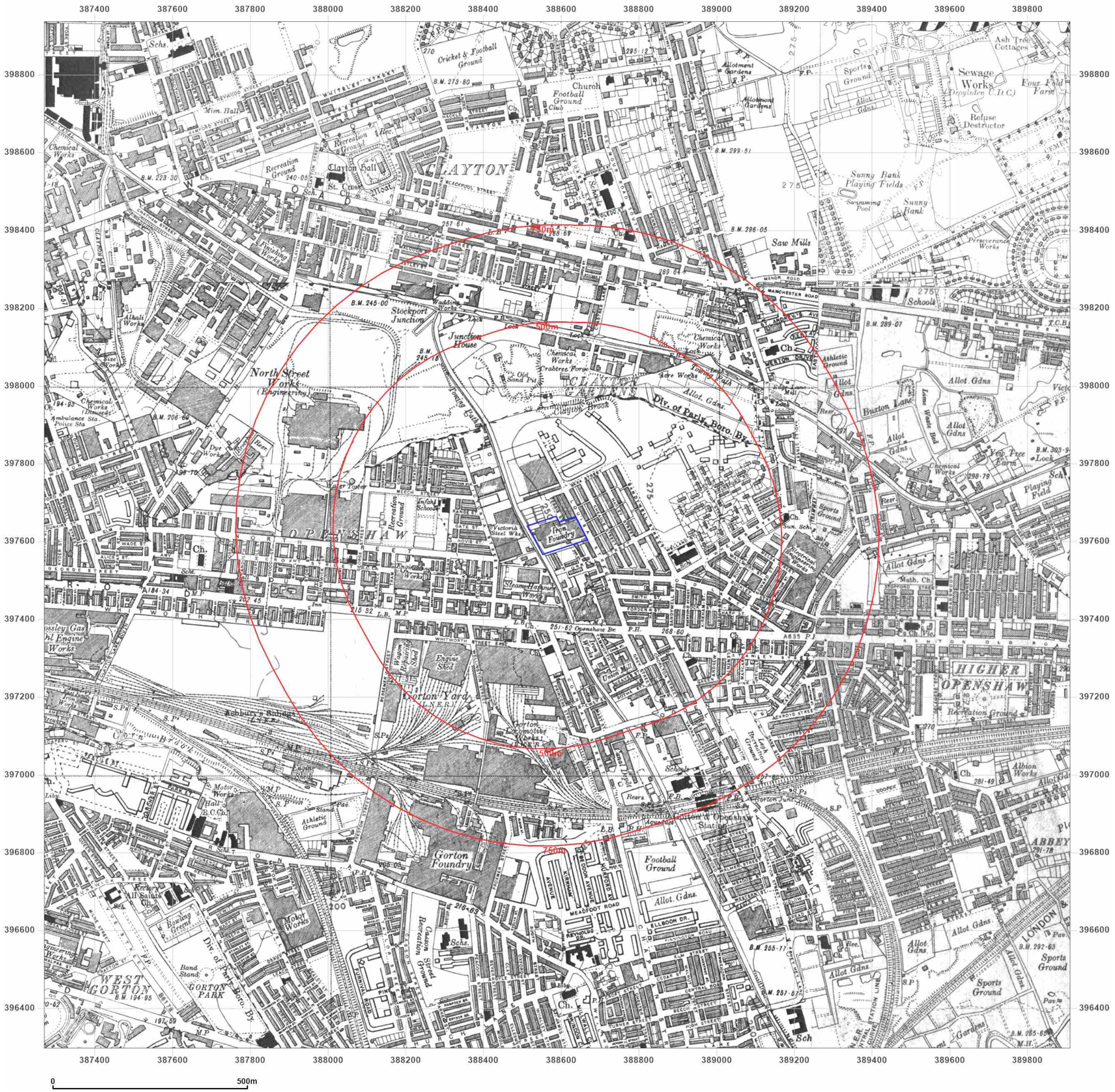
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1933-1938**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1844
Revised 1933
Edition 1933
Copyright N/A
Levelled 1927

Surveyed 1844
Revised 1933
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1938
Edition 1938
Copyright N/A
Levelled 1927

Surveyed 1844
Revised 1934
Edition N/A
Copyright N/A
Levelled N/A

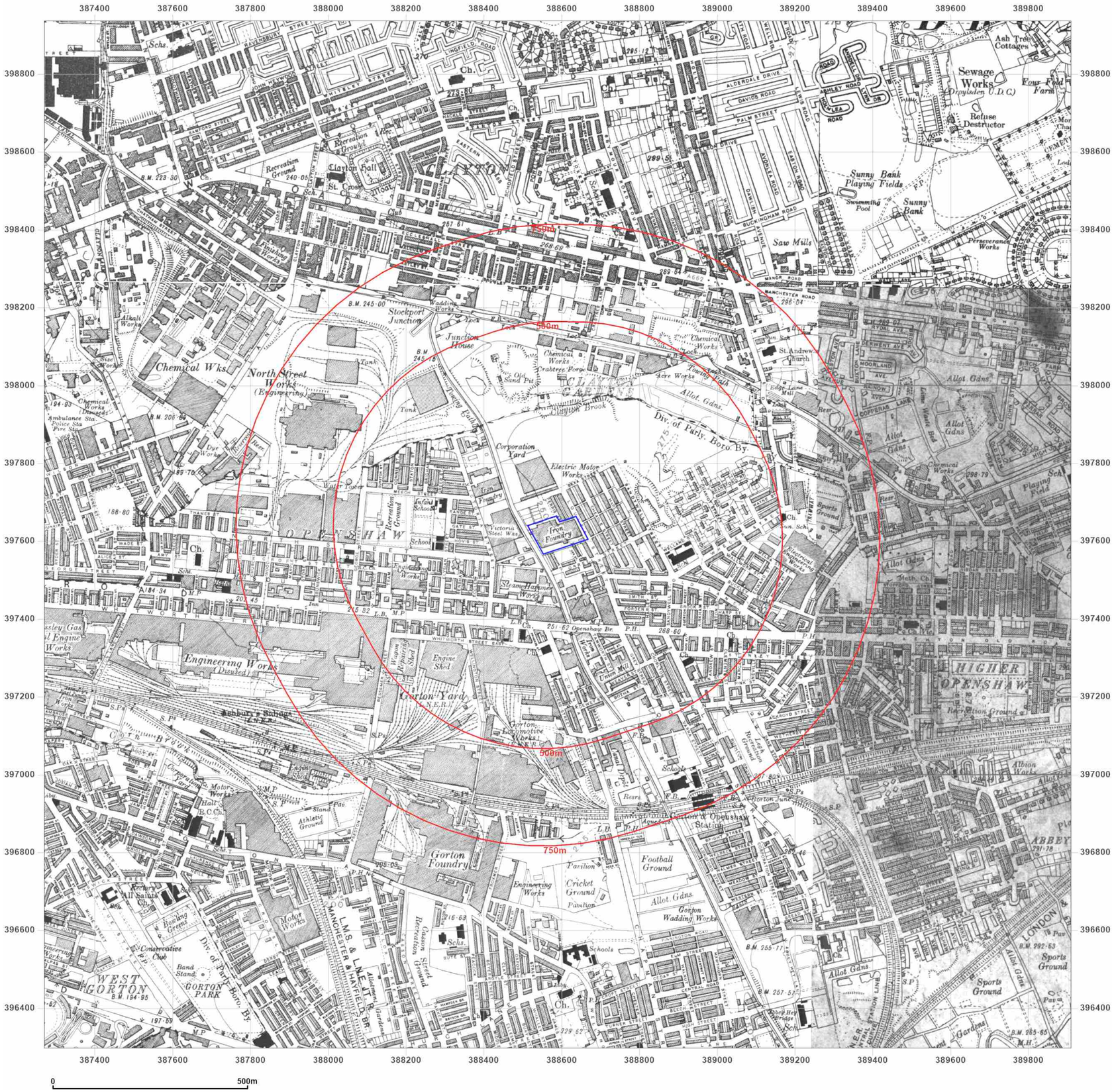
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1934-1938**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1844
Revised 1938
Edition 1938
Copyright N/A
Levelled 1927

Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled 1929

Surveyed 1844
Revised 1934
Edition 1934
Copyright N/A
Levelled 1927

Surveyed 1844
Revised 1934
Edition N/A
Copyright N/A
Levelled N/A

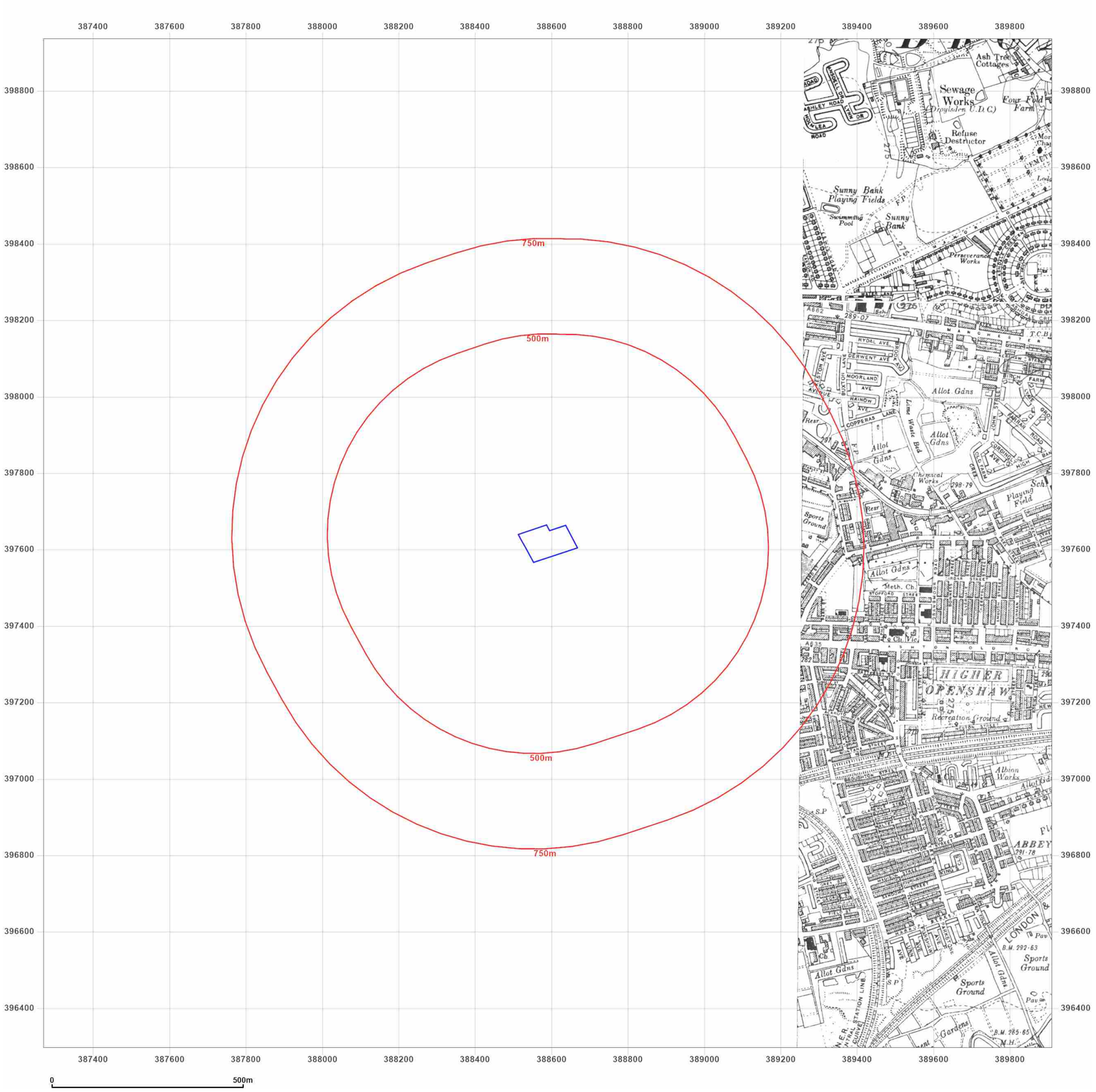
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

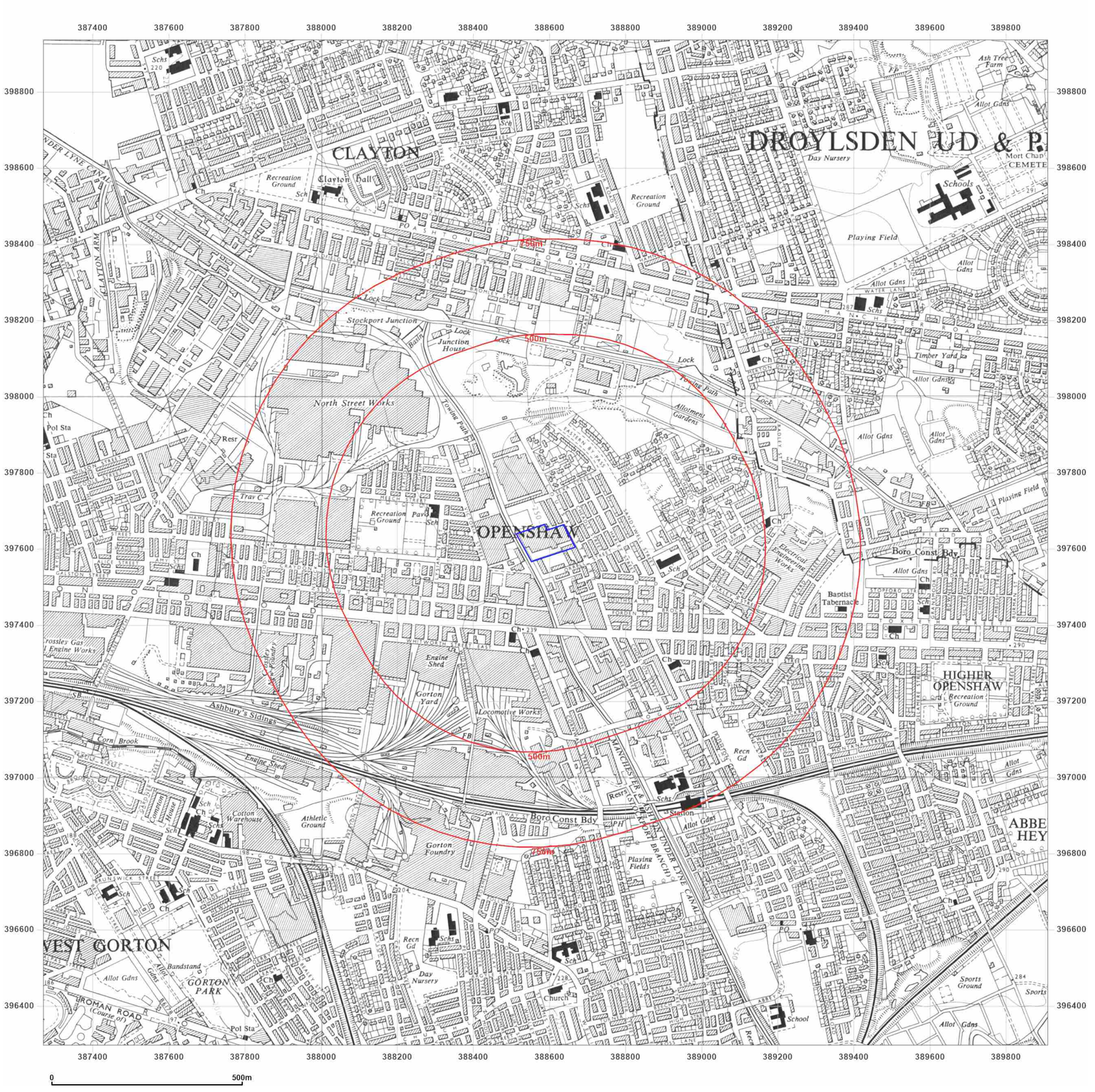
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: Provisional

Map date: **1956**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1956
Revised 1956
Edition N/A
Copyright 1956
Levelled N/A

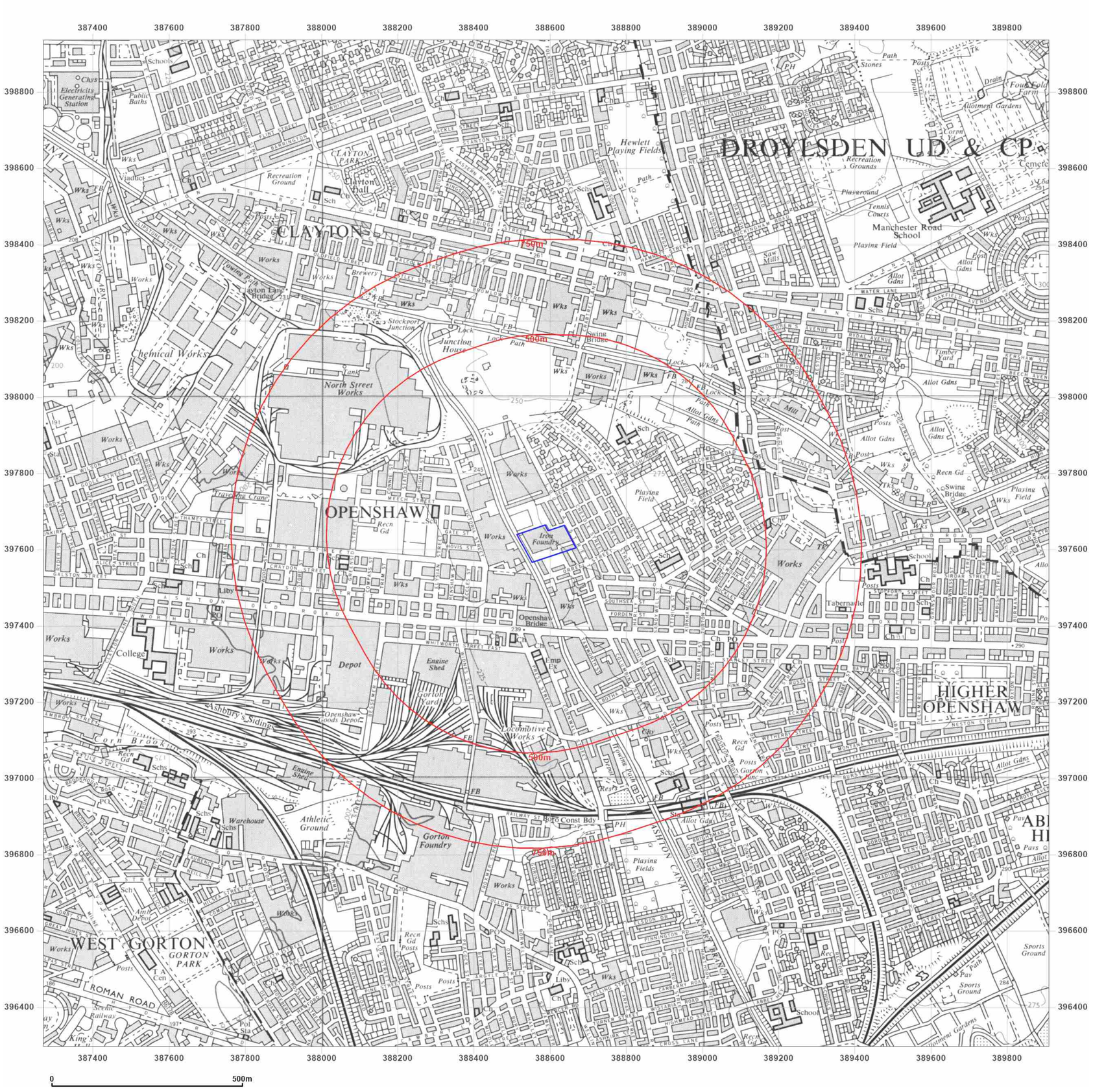
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: Provisional

Map date: **1968**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1968
Revised 1968
Edition N/A
Copyright 1968
Levelled N/A

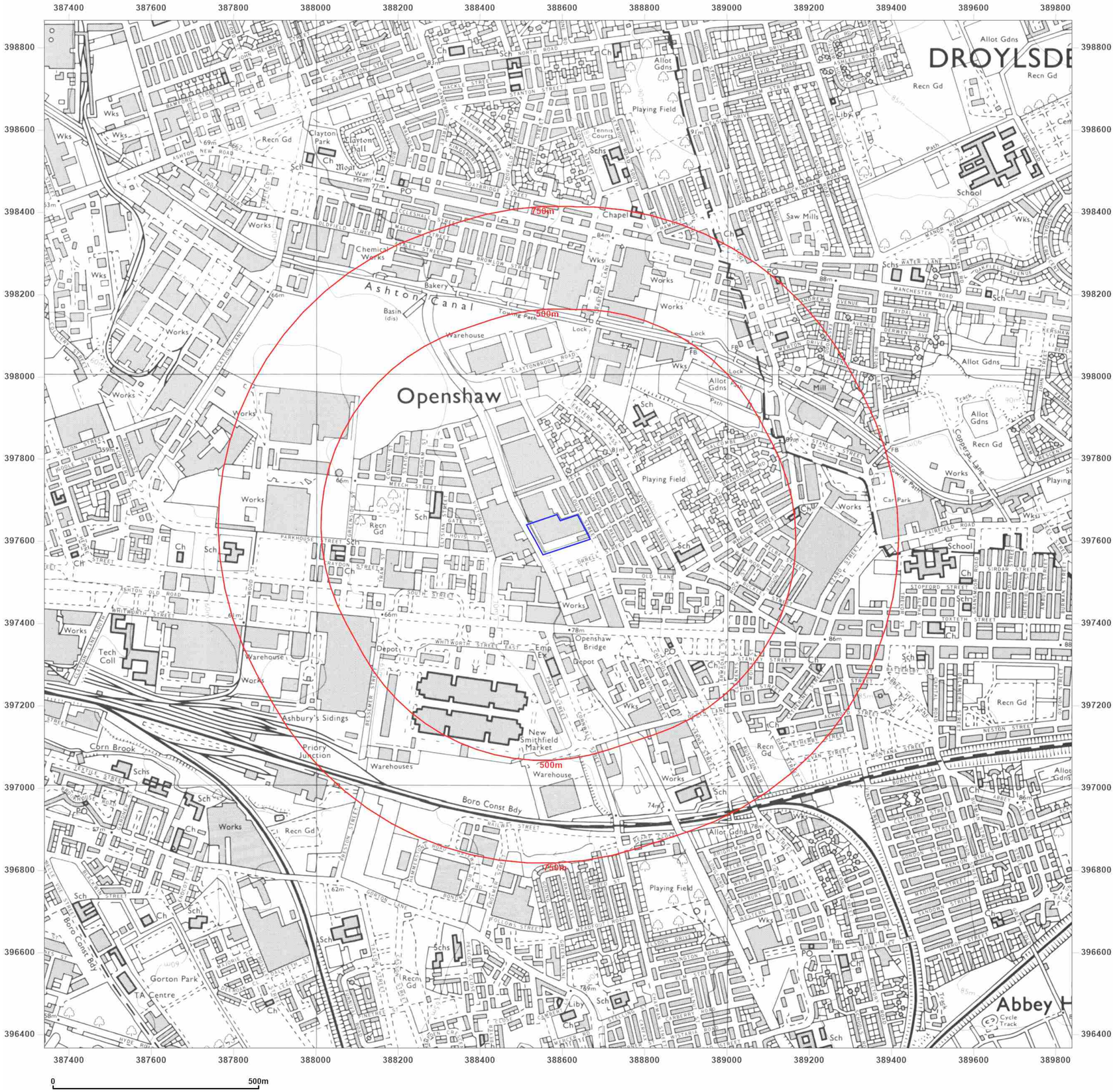
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1981**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1976
Revised 1980
Edition N/A
Copyright 1981
Levelled 1976

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1985**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1985
Revised 1985
Edition N/A
Copyright 1985
Levelled 1981

Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **1991**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

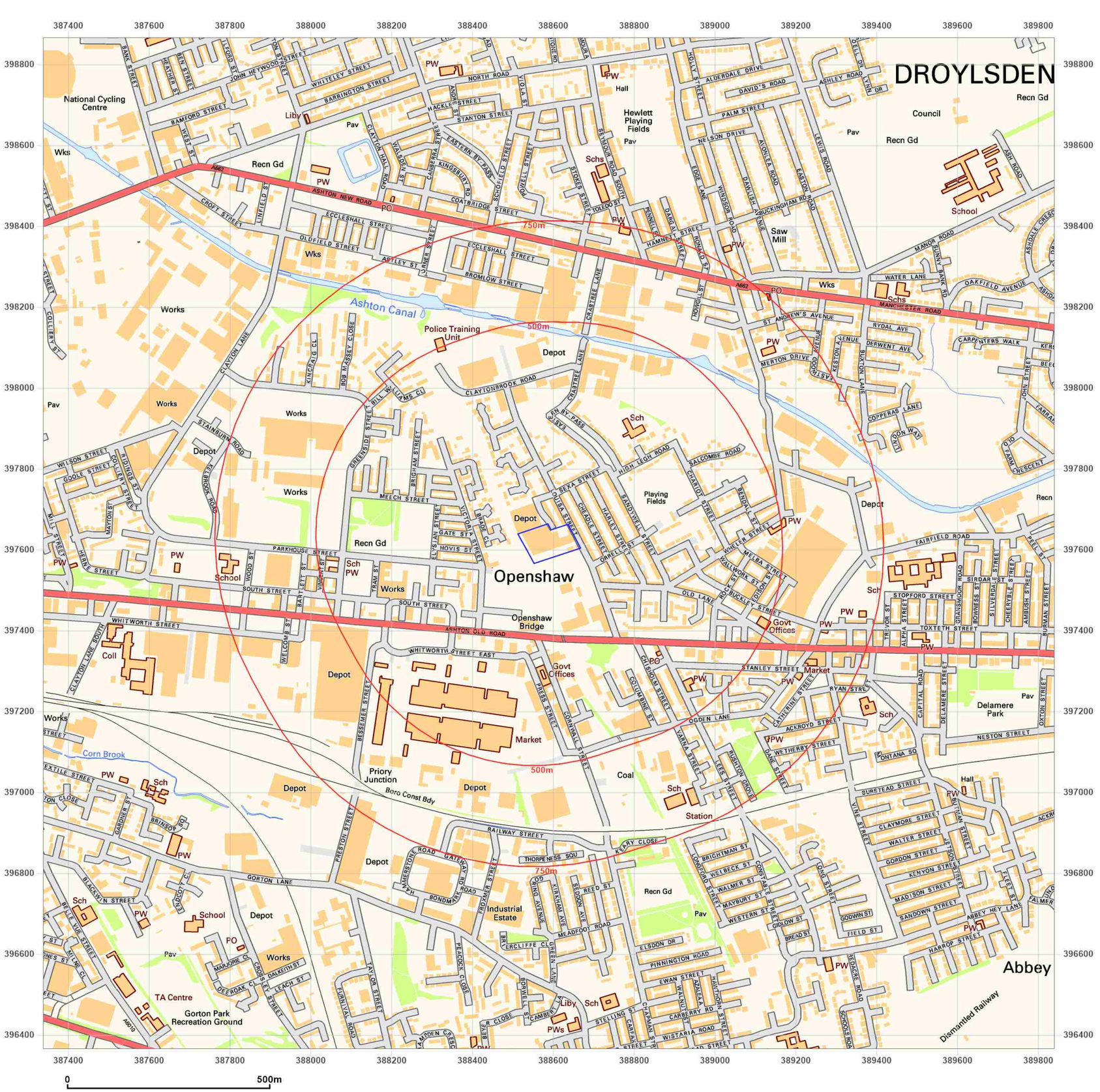
Surveyed 1985
Revised 1991
Edition N/A
Copyright 1991
Levelled 1981

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

2001

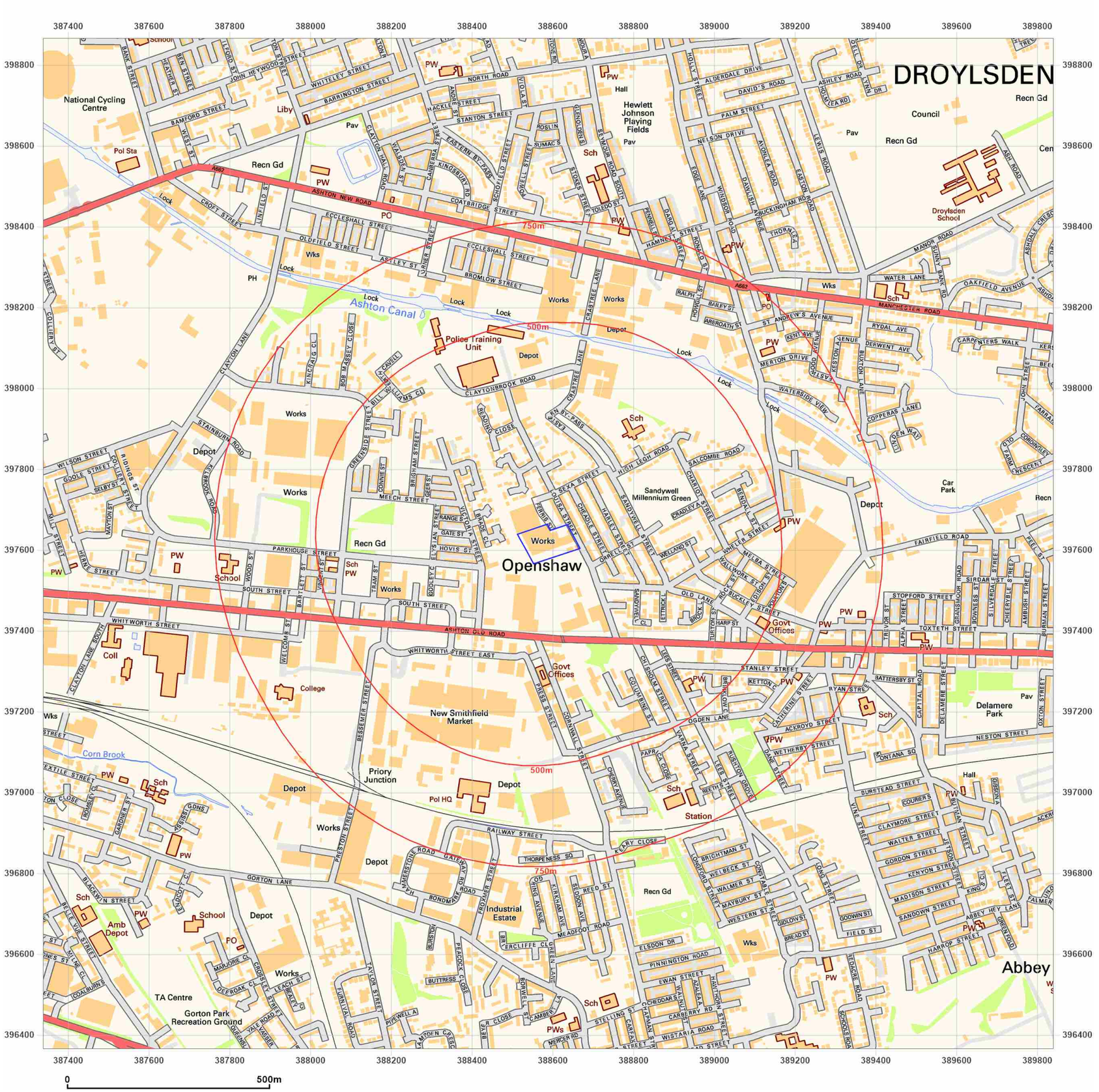
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N W E S

2010

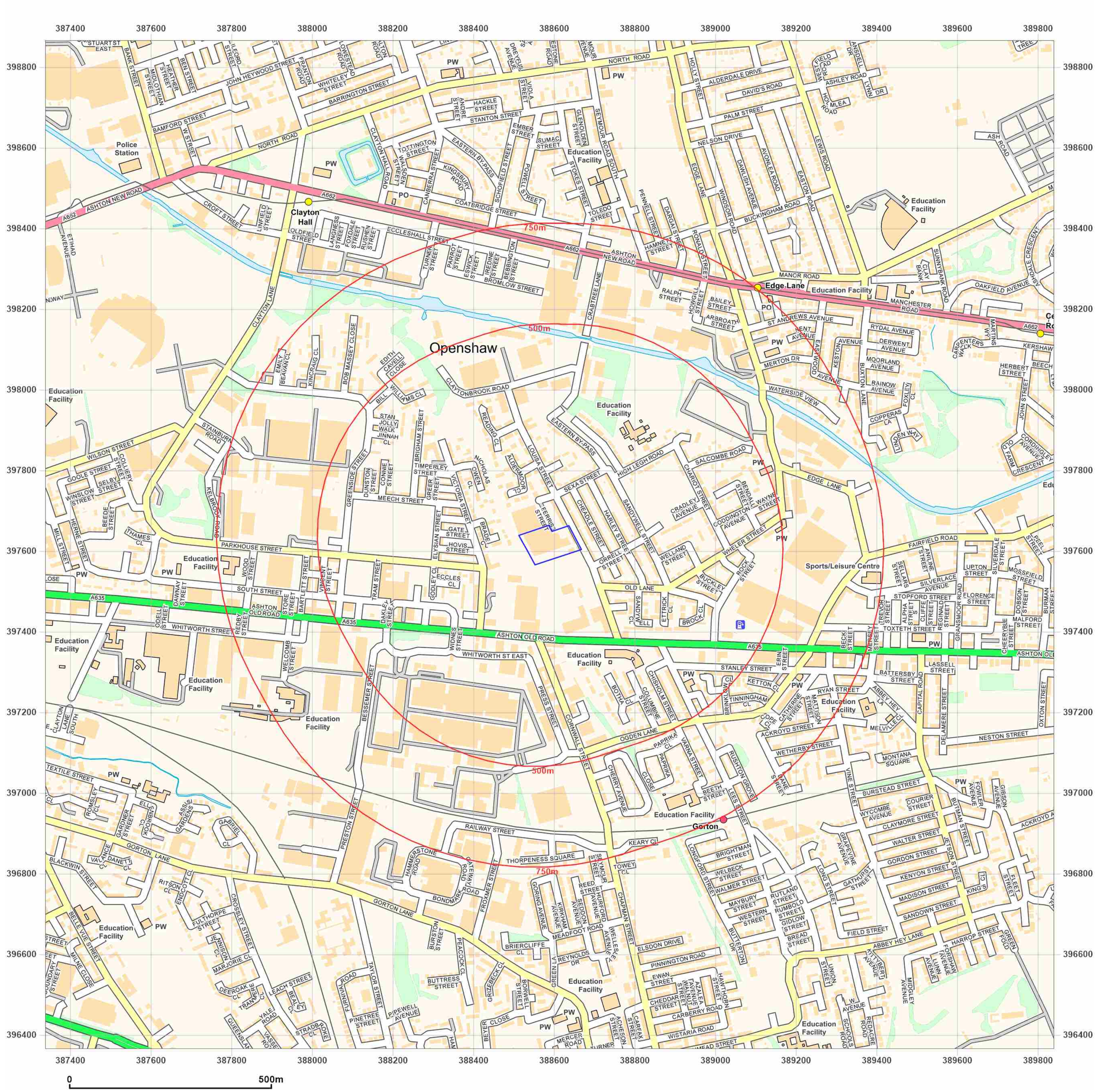
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Site Details:

LOUISA STREET,
MANCHESTER, M11 1AD

Client Ref: A4755
Report Ref: GS-8674874
Grid Ref: 388589, 397616

Map Name: National Grid

Map date: **2022**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

2022

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 14 April 2022

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

APPENDIX 2

SITE PHOTOGRAPHS

Earth Environmental & Geotechnical Ltd

Tel: 0161 975 6088
Email: info@earthenvironmental.co.uk
Web: www.earthenvironmental.co.uk

SITE PHOTOGRAPHS

EARTH ENVIRONMENTAL & GEOTECHNICAL

Job No.: A4755/22

Site: Louisa Street, Openshaw

Plate 1 Viewing north showing site access via Louisa Street.



Viewing northwest showing abandoned vehicles located on the site.



Date: 22nd April 2022

Date: 22nd April 2022

Plate 3 Viewing west showing manhole located on site along with temporary fencing crossing the centre of the site.



Plate 4 Viewing west showing a genera site overview including small areas of vegetation.



Date: 22nd April 2022

Date: 22nd April 2022

Earth Environmental & Geotechnical Ltd

Tel: 0161 975 6088
Email: info@earthenvironmental.co.uk
Web: www.earthenvironmental.co.uk

SITE PHOTOGRAPHS

EARTH ENVIRONMENTAL & GEOTECHNICAL

Job No.: A4755/22

Site: Louisa Street, Openshaw

Plate 5 Viewing east showing small car garage located on site.



Date: 22nd April 2022

Plate 6 Viewing northwest showing buildings located along the northern site boundary.



Date: 22nd April 2022

Plate 7 Viewing east showing low hanging water pipe across one site entrance.



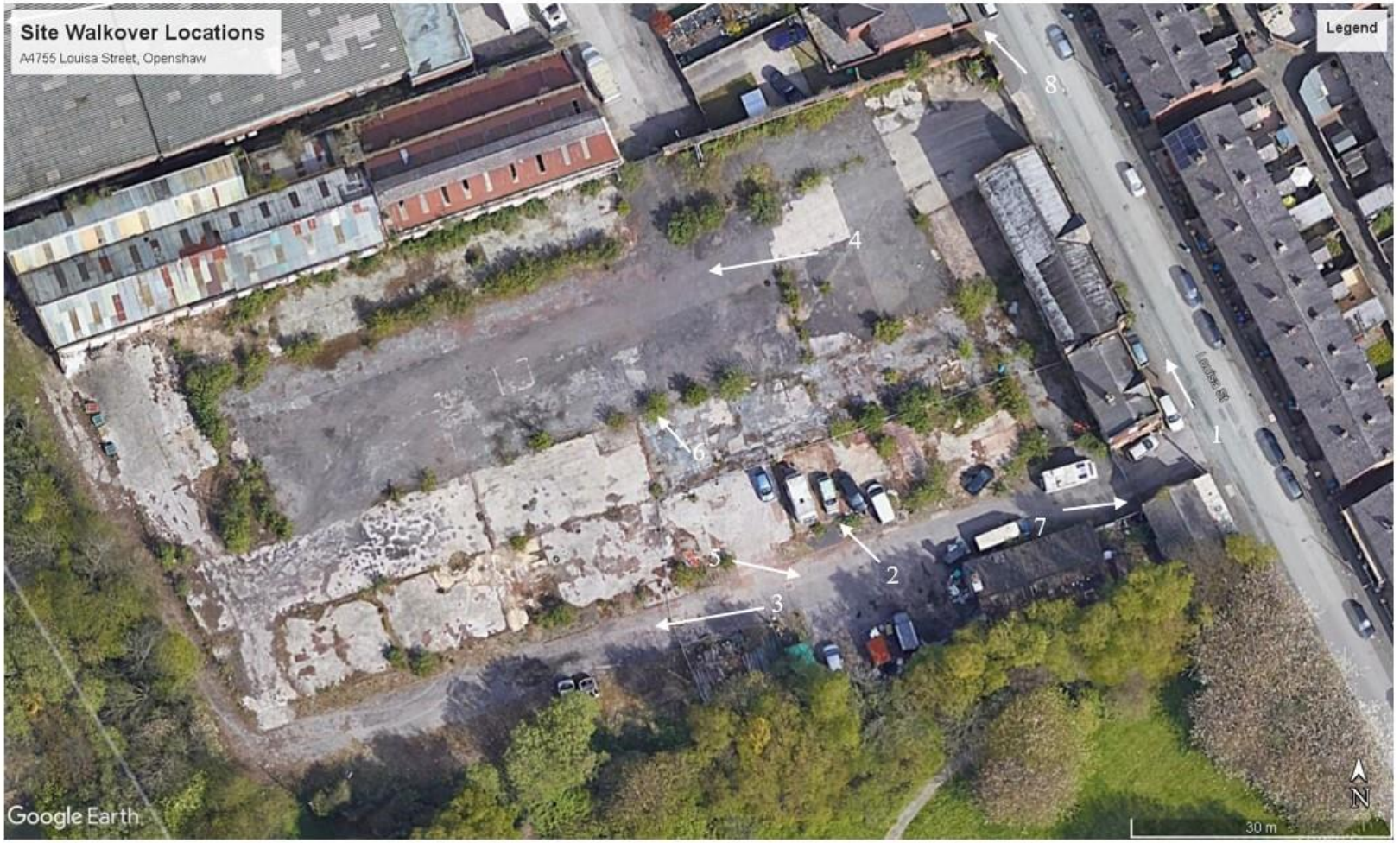
Date: 22nd April 2022

Plate 8 Viewing northwest showing residential properties within the vicinity of the site.



Date: 22nd April 2022

Figure 15: Site Walkover Photo Locations



APPENDIX 3

SITE WALKOVER NOTES

EARTH ENVIRONMENTAL & GEOTECHNICAL

WALK OVER SURVEY REPORT

Site: Louisa Street, Openshaw **Date:** 22nd April 2022

Job No: A4755/22 **Undertaken By:** Bethany Garratty

Purpose of Site Walkover:
1) Provide further information for the Desk Study Report;
2) Identify potential contamination sources, pathways and receptors;
3) Identify geotechnical features and potential geohazards;
4) Determine locations for exploratory boreholes.

Desk Study features checked during site visit	Feature and Information required	Present	Description / Comments
Site Setting	Description required for: Town/Country/Suburb Setting Industrial/Residential/Retail Usage Current Site use (if undertaking security and access to the site)		Suburban city setting. Surrounding areas are predominantly residential including a small car garage. The site is currently occupied by a small car garage although most of the site is vacant.
Evidence of Past Activities	Are there: Any relevant street names in area? Features or relics which indicate past history?	Yes/~~No~~ ~~Yes~~/No	The site is located to the west of Louisa Street.
Geographic Setting	Description required for: Low lying flood plain/dry valley/rolling hills etc.		The site is located within a flat lying area.
Ground Conditions	Is there any evidence of: Mining, Mine entries Subsidence Landslip/slope erosion Former investigation works	 ~~Yes~~/No ~~Yes~~/No ~~Yes~~/No ~~Yes~~/No	

Desk Study features checked during site visit	**Feature and Information required**	**Present**	**Description / Comments**
Topography	Description required for: Are there apparent differences between site and surrounding area? (If yes describe the presence of retaining walls, and slopes). Is there evidence of Made Ground / Fill on site?	~~Yes~~/No Yes/~~No~~	The site lies flat throughout. Hardstanding is present across the site.
Site Boundaries and Neighbours	Description required for: Type of boundary demarcation (if any) on each side of site, usage of adjacent land and name of industrial/commercial occupiers. Note any adjacent features such as water course and other potentially environmentally sensitive uses (residential, school, infirmary, SSSI etc)		The site is demarcated by a mixture of boundaries including buildings to the north and east, a brick wall to the south and vegetation to the west. The site is predominantly surrounded by residential properties.
Vegetation	Are there any vegetation/trees on or close to site (if yes describe locations, type, maturity, etc) Is there any evidence of poor health / distress?	Yes/~~No~~ ~~Yes~~/No	Small amounts are vegetation are present within the site generally in small areas within the centre of the site. N/A
Ground Surface	Are there areas of hardstanding and estimate the split between hard and soft cover? (If yes describe locations, types, and conditions). Is there any evidence of any spillages or staining?	Yes/~~No~~ ~~Yes~~/No	Generally, all the site is covered by hardstanding material (e.g., concrete and tarmac.) Nonvisible on the site walkover.

Desk Study features checked during site visit	Feature and Information required	Present	Description / Comments
Site Drainage	Are there any drain covers / soakaways (if yes describe locations)	Yes/~~No~~	Drain covers are present throughout the site particularly along the southern boundary.
	Are there any outfalls/water courses on site (note the condition of water courses in open water courses. discolouration, odour, eutrophication, oily sheen, gas bubbling water, clear or cloudy)	~~Yes~~/No	N/A
	Where a watercourse runs alongside or crosses a site are there any differences in visible water quality upstream and downstream of the site?	~~Yes~~/No	
Electrical Equipment	Are there any electricity sub stations on or adjacent to the site? Are there any electrical transformers, capacitors, pylons etc on site?	~~Yes~~/No	An electricity substation is situated in the northeast corner of the site; however, it is not known if it is currently active.
Buildings	Is there any evidence of asbestos construction materials e.g., roofing, insulation materials.	Yes/~~No~~	Asbestos may be present in onsite buildings.
	Do any buildings have basements?	~~Yes~~/No	None observed on site walkover.
	Do any buildings have a boiler room (if yes, describe fuel type and storage arrangements)?	~~Yes~~/No	

Desk Study features checked during site visit	**Feature and Information required**	**Present**	**Description / Comments**
Landfilling	Is there any evidence of gas protection measures (gas membrane, gravel-filled trenches, venting pipes, etc)?	~~Yes~~/No	N/A
Process Air Emissions	Point Source: Are there any stacks / vents / cooling towers / abatement equipment?	~~Yes~~/No	N/A
	Fugitive Source: is there any stockpiled material / windblown dust / vapour process?	~~Yes~~/No	N/A
Storage of fuels & Chemicals	Are there any drums / containers (if yes, describe quantity, full /empty, stored on hard standing / soft landscaping, bunding)?	~~Yes~~/No	N/A
	Are there any above ground fuel tanks (if yes, describe locations, volumes, how many, bunding, used / disused, condition?)	~~Yes~~/No	N/A
	Is there any evidence of underground fuel tanks (fuel pumps, covers, vent pipes, how many and how large, fill point, used / disused, and condition)?	~~Yes~~/No	N/A
Accidents	In the event of a large spillage would runoff affect any vulnerable watercourse/culverts?	~~Yes~~/No	
	Are emergency procedures / equipment in place?	~~Yes~~/No	

Desk Study features checked during site visit	Feature and Information required	Present	Description / Comments
Waste	Are there any waste skips present on site? Are waste storage facilities adequate? Is there any litter/fly tipped material?	~~Yes~~/No ~~Yes~~/No Yes/~~No~~	N/A Significant amounts of litter are present on site including abandoned cars and car parts.
Atmospheric	Are there any fumes, odours originating from site or affecting site from neighbouring sites?	~~Yes~~/No	N/A
Access / Further Investigations	If a Phase 2 Investigation is likely to be required, describe any access problems including headroom where relevant, services, overhead cables, restricted access areas, confined spaces, trafficked areas, etc that are likely to affect investigation scope/techniques. Identify possible site office and storage locations. Identify possible water supply		Tight residential access roads are not ideal to transport large, heavy machinery to the site. There are also various manholes located on the site which may indicated a water supply. A water pipe also runs low across the site entrance which may restrict access for large machinery. On hardstanding anywhere on site. Water supply from a suspected water pipe located at the site entrance.
Site Environs	Are there any local features that could have a harmful influence e.g., landfill, industrial processes, railway land? Are there any sensitive water features/courses near to the site?	~~Yes~~/No ~~Yes~~/No	N/A
Local Knowledge / Anecdotal Evidence			N/A
Site Dimensions	Describe shape of Site in plan and measure dimensions.		The maximum dimensions of the proposed site are 65.4m north to south and 120.95m east to west. The site occupies an area of approximately 0.93Ha.

APPENDIX 4

REPORT LIMITATIONS

LIMITATIONS

This contract was completed by Earth Environmental & Geotechnical Ltd on the basis of a defined programme and scope of works and terms and conditions agreed with the client. This report was compiled with all reasonable skill, and care, bearing in mind the project objectives, the agreed scope of works, the prevailing site conditions, the budget, and staff resources allocated to the project.

Other than that, expressly contained in the above paragraph, Earth Environmental & Geotechnical Ltd provides no other representation or warranty whether express or implied, is made in relation to the services. Unless otherwise agreed this report has been prepared exclusively for the use and reliance of the client in accordance with generally accepted consulting practices and for the intended purposes as stated in the agreement under which this work was completed. This report may not be relied upon, or transferred to, by any other party without the written agreement of a Director of Earth Environmental & Geotechnical Ltd.

If a third party relies on this report, it does so wholly at its own and sole risk and Earth Environmental & Geotechnical Ltd disclaims any liability to such parties.

It is Earth Environmental & Geotechnical Ltd understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was an important factor in determining the scope and level of the services. Should the purpose for which the report is used, or the proposed use of the site change, this report will no longer be valid and any further use of, or reliance upon the report in those circumstances by the client without Earth Environmental & Geotechnical Ltd review and advice shall be at the client's sole and own risk.

The report was written in 2022 and should be read considering any subsequent changes in legislation, statutory requirements, and industry best practices. Ground conditions can also change over time and further investigations, or assessment should be made if there is any significant delay in acting on the findings of this report. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of Earth Environmental & Geotechnical Ltd. In the absence of such written advice of Earth Environmental & Geotechnical Ltd, reliance on the report in the future shall be at the client's own and sole risk. Should Earth Environmental & Geotechnical Ltd be requested to review the report in the future, Earth Environmental & Geotechnical Ltd shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between Earth Environmental & Geotechnical Ltd and the client.

The observations and conclusions described in this report are based solely upon the services that were provided pursuant to the agreement between the client and Earth Environmental & Geotechnical Ltd. Earth Environmental & Geotechnical Ltd has not performed any observations, investigations, studies or testing not specifically set out or mentioned within this report.

Earth Environmental & Geotechnical Ltd is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, Earth Environmental & Geotechnical Ltd did not seek to evaluate the presence on or off the site of electromagnetic fields, lead paint, radon gas or other radioactive materials.

The services are based upon Earth Environmental & Geotechnical Ltd observations of existing physical conditions at the site gained from a walkover survey of the site together with Earth Environmental & Geotechnical Ltd interpretation of information including documentation, obtained from third parties and from the client on the history and usage of the site. The findings and recommendations contained in this report are based in part upon information provided by third parties, and whilst Earth Environmental & Geotechnical Ltd have no reason to doubt the accuracy and that it has been provided in full of those it was requested from, the items relied on have not been verified.

No responsibility can be accepted for errors within third party items presented in this report. Further Earth Environmental & Geotechnical Ltd was not authorised and did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the services. Earth Environmental & Geotechnical Ltd is not liable for any inaccurate information, misrepresentation of data or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to Earth Environmental & Geotechnical Ltd and including the doing of any independent investigation of the information provided to Earth Environmental & Geotechnical Ltd save as otherwise provided in the terms of the contract between the client and Earth Environmental & Geotechnical Ltd.

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. Ground conditions can also be variable and as investigation excavations only allow examination of the ground at discrete locations. The potential exists for ground conditions to be encountered which are different to those considered in this report. The extent of the limited area depends on the soil and groundwater conditions, together with the position of any current structures and underground facilities and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters [as stipulated in the contract between the client and Earth Environmental & Geotechnical Ltd based on an understanding of the available operational and historical information, and it should not be inferred that other chemical species are not present.

The groundwater conditions entered on the exploratory hole records are those observed at the time of investigation. The normal speed of investigation usually does not permit the recording of an equilibrium water level for any one water strike. Moreover, groundwater levels are subject to seasonal variation or changes in local drainage conditions and higher groundwater levels may occur at other times of the year than were recorded during this investigation.

Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan but is (are) used to present the general relative locations of features on, and surrounding, the site.