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GEO-ENVIRONMENTAL ENGINEERING EXCELLENCE

CADWORKS UK

Cadworks UK, Woodhill Street, Bury

Phase I Geo-Environmental Assessment Report

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PROJECT QUALITY CONTROL DATA SHEET

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DRAWINGS

Drawing Number	Rev	Title
C5979/01	-	Site Location Plan
C5979/02	-	Site Features Plan

APPENDICES

Appendix	Title
Photographs	Site Walkover Photographs
Appendix A	BSL Methodology and Guidance
Appendix B	Historical Maps
Appendix C	Geo-Environmental Data Report
Appendix D	Mining Search Report
Appendix E	UXO Screening Map

1.0 INTRODUCTION

1.1 Context

This report describes a desk-based Phase I Geo-Environmental Assessment Report carried out by Brownfield Solutions Limited (BSL) for Cadworks UK as instructed by Edgeplan on behalf of Cadworks UK on a site off Woodhill Street, Bury and has been completed in general accordance with the following guidance:

-
- Environment Agency guidance - Land Contamination: Risk Management (LCRM).
 - BS 10175:2011+A2:2017 Investigation of Potentially Contaminated Sites.
 - BS5930: 2015+A1:2020 Code of Practice for Ground Investigations.
 - BS EN 1997-1:2004+A1:2013 Eurocode 7. Geotechnical design. General rules plus UK National Annex.
 - BS EN 1997-2:2007 Eurocode 7 Geotechnical design. Ground investigation and testing plus UK National Annex.
 - NHBC Standards. Chapter 4.1: Land Quality - Managing Ground Conditions.
-

Definitions of terms and acronyms used within this report is presented in Section 7.0.

1.2 Proposed Development

BSL understand that proposed development is for a change of end use from commercial to residential, with the redevelopment of the existing ground floor commercial office space into a residential dwelling. BSL understand no external changes will be made, though no proposed development plan has been provided.

1.3 Objectives and Scope

The objectives of this assessment were to determine the environmental setting and ground conditions of the site, highlighting potential areas of concern that may govern the redevelopment.

The scope of works comprises a Phase I Assessment and site walk-over, with a review of the site, surroundings, historical uses and environmental setting in order to develop a preliminary Conceptual Site Model (CSM).

This report is intended to meet the requirements of a Preliminary Investigation as defined in BS10175:2011+A2:2017 and has been produced in general accordance with the recommendations for a Tier 1 Preliminary Risk Assessment as described in LCRM guidance.

1.4 Limitations

This Phase 1 Geo-Environmental Assessment Report has been prepared in accordance with the relevant legislative framework, guidance and risk assessment methodology as outlined in Appendix A.

The findings and opinions conveyed via this assessment are based on information obtained from a number of sources as detailed within this report, BSL have assumed this information is correct and reliable. Nevertheless, BSL cannot and does not guarantee the authenticity or reliability of the information it has relied upon.

BSL have used reasonable skill, care and diligence in the production of this report. There may be other conditions prevailing on the site which are outside the scope of work and have not been highlighted by

this assessment and therefore have not been taken into account by this report. Responsibility cannot be accepted for such site conditions not revealed by the assessment.

This report has been prepared for the sole use and reliance of the Client, Cadworks UK. No other third party may rely upon or reproduce the contents of this report without the written permission of Brownfield Solutions Ltd (BSL); a charge may be levied against such approval. If any unauthorised third party comes into possession of this report, then they rely on it at their own risk and BSL do not owe them any Duty of Care. This report may not be relied upon by the client or submitted to a third party for their reliance for the purposes of valuation, mortgage, insurance and regulatory approval, until all invoices have been settled in full.

Any recommendations made in this report should be confirmed with the Regulatory Authorities prior to implementation to ensure compliance.

This assessment has been based on the proposed planning layouts provided. Any subsequent change to the planning layout may have an impact on the validity of recommendations made within this report. Furthermore, new information, changed practices or new legislation may necessitate revised interpretation of the report after the date of its submission.

The site plans enclosed in this report should not be scaled off. Any site boundary line depicted on plans does not imply legal ownership of land.

Notwithstanding site observations concerning the presence or otherwise of archaeological issues, asbestos-containing materials (ACM) or invasive weeds (e.g. Japanese knotweed), this report does not constitute a formal survey of these potential issues and specialist advice should be sought.

2.0 THE SITE

2.1 Location

The site is located at the existing Cadworks UK site, off Woodhill Street, Bury, BL8 1AT, centred on National Grid Reference 379698, 411556 as shown on the Site Location Plan, Drawing No. C5979/01.

2.2 Site Description

A site reconnaissance survey was carried out at the site on 19th December 2024. The main site features and potential issues identified during this survey are detailed below and are shown on the Site Features Plan, Drawing No. C5979/02. A selection of photographs from the site walkover are presented to the rear of this report.

Feature	Description
Site Area	0.02 hectares.
Site Access	Access to the site is gained off Woodhill Street to the south.
Current Land Use and Site Features	The site comprises an existing commercial office space.
Potential Sources of Gross Contamination	No potential sources of gross contamination were identified during the site walkover.
Vegetation / Ecology	No vegetation is present onsite, however, semi-mature and mature trees are noted in close proximity to the northern site boundary.
Topography	The site is entirely flat.
Site Boundaries	The site is bound by the bricked walls of the existing building on all four sides.
Surrounding Area	The site is surrounded by Cadworks UK commercial units to the north-east, associated hardstanding tarmacadam car parking to the east, a small area of soft landscaping and hardstanding driveway to the south and soft landscaping to the west and north. The wider site area comprises a mixture of residential developments to the south and commercial units to the north, east and west.

3.0 GEO-ENVIRONMENTAL SETTING

3.1 Historical Setting

A review of the available historical Ordnance Survey Maps and satellite imagery has been conducted, with the pertinent issues that may have affected the site, or its environs, summarised below. The Historical Maps are presented in Appendix B. A review of the historical industrial data within the geo-environmental data report has also been undertaken below, the report is presented in Appendix C.

Notable features on site, and potentially contaminative or geotechnically relevant features within 100m of the site boundary have been presented. Any features that have potentially been infilled will be considered up to 250m from the site boundary.

Feature	Distance (m) & Direction	Years Present	Description
Wood Hill Mill (cotton) / Works	Onsite Abutting site to north, east and west.	1849 – 1960 1849 – 1960	The earliest mapping dated 1849 shows the site to be part of the wider Wood Hill Mill, indicated to be for the production of cotton. A gasometer is recorded 50m north of the site associated with the mill on 1849 mapping only. The site remained the same until it was re-labelled as an unknown works in 1958, though no alterations to the buildings are noted. The works last appeared on mapping in 1974 and had been redeveloped by mapping dated 1981.
Warehouse / Woodhill Works / Alfred Works	Onsite	1981 - Present	By the time of the 1981 mapping, the mill/works buildings had been re-developed / partially demolished into a series of warehouses and the Alfred Works (offsite). No further alterations have occurred up to the time of reporting.
Reservoir	75m NW	1849 - 1890	A reservoir associated with the Wood Hill Mill is labelled on the earliest mapping of 1849 and remains until mapping dated 1890, and is not present on the next available mapping of 1910, therefore is assumed to have been infilled between these dates.
Electrical Substation	80m W	1981 – Present	An electrical substation first appeared on mapping dated 1981, though it should be noted that an unlabelled building had previously existed in this location since mapping dated 1930. The substation is still present at the time of reporting.
Reservoirs / Ponds	80m SW 110m SW 150m WSW	1890 - Present	A cluster of reservoirs were first noted to the south-west on mapping dated 1890. The features were re-labelled as ponds in 1958 and are all still present at the time of reporting. It is unclear if the reservoir 150m WSW remains until present day, the structure remains on 1992 mapping.
Pond	120m SE	1910 - 1939	A pond first appears to the south-east on mapping dated 1910. The feature remains until mapping dated 1939, and is not present on the next available mapping of 1959, therefore is assumed to have been infilled between these dates. By 1969, the location was subject to a new residential development area.
Reservoirs / pond	180m S 185m S	1890 - 1979	Two reservoirs first appear to the south on mapping dated 1890, though the features were only labelled as such from 1910. The easternmost of the two reservoirs was re-labelled as a pond in 1959. Both features remained until mapping dated 1979, and is not present on the next available mapping of 1982, therefore is assumed to have been infilled between these dates. By 2001 the location was subject to a new commercial development.

In summary, the map evidence indicates that the site has remained as various industrial uses from the earliest mapping of 1849 up until the present day.

Historical land use in the surrounding area has been a mixture of industrial and residential.

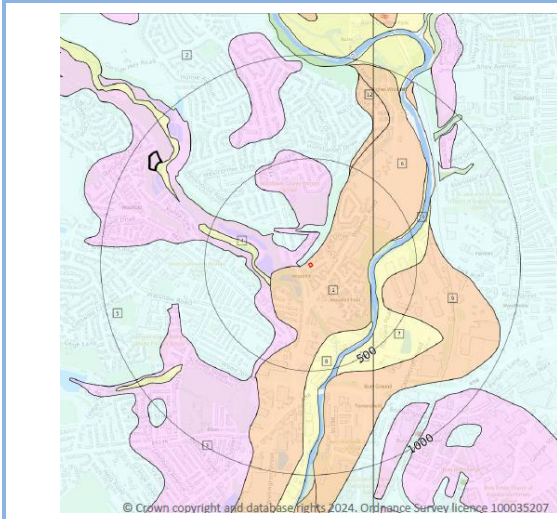
3.2 Published Geology

The following publications of the British Geological Survey (BGS) were examined in respect of the geology underlying the site:

- British Geological Survey (BGS) 1:50,000 Scale Geological Map Sheet 85, Manchester. Solid and Drift Edition.
- BGS Geology of Britain Map Viewer.
- BGS GeoIndex Onshore.
- BGS 1:10,000 Scale Geological Map 71.
- Mining Remediation Authority Interactive Map.
- BGS Geology Memoir of Map Sheet 85, Manchester.
- Consultants Coal Mining Report
- Geo-Environmental Data Report.

Extracts of the 1:10,000 geological mapping from the Geo-Environmental Data Report are presented below for reference:

BGS 1:10 000 Superficial Geology



BGS 1:10 000 Solid Geology



Made Ground

BGS mapping does not display any made ground deposits on site, however based on the historical mapping and the development that has taken place, made ground deposits are likely to be present onsite, though not of significant thicknesses.

The site is surrounded by a variety of artificial deposits as close as 33m to the south-west, with a voided worked area shown to be present 71m to the south-west.

Superficial Deposits

The site is indicated to be underlain by River Terrace Deposits. This stratum typically comprises sand and gravel.

Glacial Till deposits are indicated to be present just 14m to the north-west of site. This stratum typically comprises a mixture of clay, silt, sand, and gravel, suspended in an unconsolidated matrix.

Solid Geology

The deeper solid geology is indicated to be part of the Pennine Lower Coal Measures formation which typically comprises mudstone, siltstone, sandstone, and coal.

No faults are shown on or within an influencing distance of the site.

The site is also in an area where coal seams are abundant. A Coal Mining Risk Assessment (CMRA) may be required to assess seam locations, depths, thickness and associated potential risks in detail.

3.3 BGS Exploratory Hole Records

There are no BGS exploratory hole records within a relevant distance of the site (assumed as an approximate 50m radius).

3.4 Mining and Mineral Extraction

Coal Mining

The online Mining Remediation Authority Interactive Map layers have been reviewed and the details are summarised in the table below:

Relevant Interactive Map Data	Issue at Subject Site?
Mining Remediation Authority Reporting Area	Yes – Entire Site
High Risk Development Area	Yes – Entire Site

As the site lies within the Mining Remediation Authority Reporting Area, a mining search has been undertaken as the site could be affected by past or current coal mining.

The mining searches are presented in Appendix D, the main findings of which are presented below.

Highlighted Evidence	Issue	Details
Past Underground Mining	Yes	The property is in a surface area that could be affected by underground mining in 1 seam of coal at 27m depth, last worked in 1900. Any movement in the ground due to coal mining activity should have stopped.
Present Underground Mining	No	
Future Underground Mining	No	The property is not in an area where the Mining Remediation has plans to grant a licence, or a licence has been granted to remove coal using underground methods. The property is not in an area likely to be affected from any planned future underground coal mining. However, reserves of coal exist in the local area which could be worked at some time in the future. No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.
Mine Entries	No	There are no known coal mine entries within, or within 100 metres of, the boundary of the property. There may however be mine entries/additional mine entries in the local area which the Mining Remediation Authority has no knowledge of.
Past, present and future opencast coal mining	No	
Coal mining subsidence	No	
Mine gas	No	
Withdrawal of support	No	

Highlighted Evidence	Issue	Details
Information from the Cheshire Brine Subsidence Compensation Board	No	

The closest outcrop affecting site, taking into account the effect of faulting, it's the Arley Seam, indicated to outcrop 420m to the north of the site. Based on an approximate inferred rate of dip of 3.1 degrees in the area (taken from the consultant's coal mining report), this would place the coal seam at a depth of 22.7m bgl. The depth of recorded working is noted as 27m, inferring a superficial cover of approximately 4.3m.

The Arley Seam has a typical extraction thickness of 0.90m to 1.30m. In the worst case scenario of 1.30m, and based on the 10T criterion, a competent cover of solid bedrock would need to be 13.00m in thickness to prevent the upward migration of any mining related workings/broken ground/voids to prevent unacceptable subsidence at the surface.

Therefore, the 10T criterion is met onsite, and the risk from coal mining related subsidence is deemed low.

3.5 Hydrogeology

Based on the inferred geology, a summary of the Environment Agency aquifer designations is presented in the table below:

Stratum	Coverage	Aquifer Designation
Superficial River Terrace Deposits	Full Site	Secondary (A) Aquifer. These are 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.
Bedrock	Full Site	Secondary (A) Aquifer. These are 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.

A summary of the pertinent hydrogeological features within the Geo-Environmental Data Report are provided below:

Feature	Distance (m) & Direction	Details
Nearest Active Groundwater Abstraction	-	None within 2000m.
Nearest Active Potable Groundwater Abstraction	-	None within 2000m.
Source Protection Zones	-	None within 500m.

3.6 Hydrology

A summary of the pertinent hydrological aspects within the Geo-Environmental Data Report are provided below:

Feature	Distance (m) & Direction	Details
Nearest Watercourse	19m NW	Unnamed Inland River, labelled as a Canal Feeder, with a flow from east to west.
Nearest Surface Water Abstraction	-	None within 2000m.

Feature	Distance (m) & Direction	Details
Closest Active Licenced Discharge Consent	206m	Sewage discharges within Sewer Storm Overflow owned by the Water Company and received into Woodhill Brook. Permit No. 01BRY0012, issued 25/06/2018.

Information obtained from the Environment Agency (EA) Risk of Flooding from Rivers and the Sea (RoFRaS) database indicates that the risk of flooding across the site is very low (less than 1 in 1000).

The British Geological Survey indicate there is a potential for groundwater flooding at the subject site, with a moderate risk rating.

No further consideration of flood risk is undertaken in this report. Specialist flood risk advice should be sought with regards to drainage and flooding.

3.7 Landfill and Waste Management Sites

There are no active landfill sites recorded within 500m.

One historical landfill is recorded by the Local Authority 206m to the west, detailed as a refuse tip on the 1995 mapping.

Three historical landfills are recorded by the Environmental Agency, the closing being 140m to the north.

There are no current waste management sites recorded within 250m of the site.

3.8 Environmental Regulatory Data

A summary of the relevant environmental aspects, both on site and within 250m of the site contained in the Geo-Environmental Data Report, are presented in the table below:

Entry	On-site	0 – 50m	50 – 250m	Details
Recent Industrial Land Uses	0	3	13	The closest entry is related to the adjacent Cadworks UK site, for textiles, fabrics, silk, and machinery.
Current or Recent Fuel Stations	0	0	1	Euro Garages fuel station, 95m to the north-west of site.
Licensed Industrial Activities (Part A(1))	0	0	0	
Licensed Pollutant Release (Part A(2)/B)	0	0	2	Closest permit relates to unloading of Petrol into storage at service stations, Part B permit.
Radioactive Substances	0	0	0	
Pollution Incidents (EA/NRW)	0	0	5	The closest record was in 2001 and was 99m to the south, it is recorded as contaminated water with a Category 3 impact (minor) to water and no impact to land or air.

In regard to the entries identified above, based on the uses listed, alongside distances and ages, none are considered to be of significant relevance to be carried forward to the preliminary CSM and have not been considered further.

3.9 Radon

Information from the environmental database report indicates the majority of the property is in an area where <1% of properties are above the Action Level for radon, with the south-westernmost corner indicated to lie in an area where 1-3% of properties are above the Action Level for radon, therefore no

radon protective measures are required in accordance with BRE Report 211 'Radon – Guidance on protective measures for new dwellings'.

3.10 UXO Risk

In accordance with CIRIA Report C681, BSL have reviewed non-specialist UXO data for the site using the online Zetica Bomb Risk Mapping data.

There is no indication of former military use from the Phase I Assessment. The map indicates the site to be in an area where the bomb risk is low. A copy of the map is presented in Appendix E.

As the site is at low risk, no further consideration of UXO is required at this stage. Should new evidence indicate that UXO may be an issue, it would be prudent to seek appropriate specialist advice.

3.11 Other Potential Development Constraints

A formal survey of asbestos within structures is not covered in this report. It should be noted that an asbestos refurbishment survey will be required prior to any work on structures. If asbestos is present in soils, these will need to be dealt with in accordance with the Control of Asbestos Regulations (CAR) 2012 and CARSOILS™.

No invasive species have been noted during the walkover, however it would be prudent to undertake a specialist survey prior to any works on site.

4.0 PHASE 1 SUMMARY AND RISK ASSESSMENT

4.1 Introduction

The risk posed by any contaminants in soil or groundwater will depend on the nature and level of the source, the probability of exposure occurring, the potential pollution pathway and the likely effects on the receptors.

A contaminant is defined as a substance that has the potential to cause harm, a risk is considered to exist if such a substance is present at sufficient concentrations to cause harm and if a pathway is present through which a receptor could be exposed to the contaminant.

The following sections discuss the identified potential on-site and off-site sources, and any pollution that could impact receptors via the pathways associated with the proposed development. Pollution linkages are assessed which may represent a risk to human health and/or controlled water receptors from the information gained from the Phase I Assessment searches. The assessment has been carried out on a qualitative basis and aims to produce a complete and comprehensive Preliminary Conceptual Site Model.

Three potential impacts exist for any given site and all three need to be considered in the qualitative risk assessment, these are:

-
- On-site impacts.
 - The site impacting its surroundings.
 - Off-site sources impacting the subject site.
-

4.2 Potential Contaminative Sources

On-Site

From the information obtained, the following sources have been identified which may affect the redevelopment of the site for residential end use:

-
- Made ground associated with the former mill/works and current Cadworks UK commercial development.
 - Solid Geology – Coal Measures
-

Off-Site

The following off-site sources have been identified which may affect the redevelopment of the site:

-
- Cotton Mill / Works abutting the site.
 - Reservoir (closest 75m NW).
 - Electricity substation (80m W).
-

The three reservoirs noted to the south-west of the site that remain present at the time of the reporting do not deem to pose any risk to site over and above that already presented from a closer source. The features have never been infilled and are therefore considered low risk and no further consideration will be deemed necessary.

Associated Contaminants

The contaminants commonly associated with the potential sources of contamination identified are tabulated below:

Contaminative Sources	Department of the Environment Industry Profile or Other Source	Commonly Associated Contaminants
On Site		
Made Ground	AGS Guides BS8485 and BS8576 Textile and Dye Manufacturing	Heavy metals, polycyclic aromatic hydrocarbons (PAHs), asbestos, inorganics, solvents, ground gases (carbon dioxide and methane).
Solid Geology – Coal Measures	CIRIA C665	Carbon dioxide, methane, carbon monoxide and hydrogen sulphide.
Off Site		
Cotton Mill / Works	Textile and Dye Manufacturing	Metals, inorganics, solvents, pesticides
Reservoirs	CIRIA C665	Carbon dioxide, methane, carbon monoxide and hydrogen sulphide.
Electrical Substation	Electrical works	Poly Chlorinated Biphenyls (PCBs), oils

4.3 Pathways

A pathway is defined as a medium by which a contaminant comes into contact with, or otherwise impacts a receptor.

At this stage, the potential contaminants identified above are considered to present potential risks to site end users and controlled waters through the following pathways:

Potential Pathways	
Pathways in respect to Human Health	• Ingestion of contaminated soils. • Dermal contact with contamination. • Inhalation of dusts. • Inhalation of gases or vapours in indoor air.
Pathways in respect to Controlled Waters – Surface water	• Surface run-off • Drainage discharge. • Base flow from groundwater.
Pathways in respect to Controlled Waters – Groundwater	• Leaching of mobile contamination into groundwater via the unsaturated zone. • Migration of perched groundwater in any permeable soils or along existing or proposed service runs. • Migration into the saturated zone and flow through the aquifers underlying the site.
Pathways in respect to Property/structures/water pipes	• Migration of ground gases (methane) into confined spaces (explosion and damage to property).

4.4 Receptors

The identified receptors are listed below:

- Residential end users (human health).
- Structures/Property
- Nearest watercourse. Inland River 19m NW (Controlled waters).
- Superficial Aquifer. River Terrace Deposits – Secondary A Aquifer (Controlled waters).
- Bedrock Aquifer. Pennine Lower Coal Measures – Secondary A Aquifer (Controlled waters).

Under current UK health and safety legislation, employers are required to carry out their own appropriate site-specific risk assessments and mitigation to protect employees. It has been assumed that any future construction works onsite will be undertaken in compliance with these requirements. Therefore, construction workers have not been specifically considered as part of this assessment.

4.5 Preliminary Conceptual Site Model (CSM)

The information obtained in the previous sections has been used to compile a Preliminary CSM. The identified potential contaminants and receptors have been assessed in the table below as to whether a plausible source-pathway-receptor pollutant linkage for the proposed end use of the site exists. The risk classification has been estimated in accordance with information in the BSL Guidance and Methodology in Appendix A.

The Preliminary CSM's are presented in the tables overleaf, any assessed risk above moderate will possibly require further action:

Human Health						
Potential Source	Potential Pathway	Potential Receptor	Likelihood	Severity	Level of Risk	Justification
On site Made ground Metals, PAHs, asbestos	Root uptake, ingestion, direct contact, inhalation of dusts	End-users	Unlikely	Medium	Low	Whilst a wide variety of contaminants are potentially present from the varied historical industrial use, the site is currently surfaced entirely in hardstanding, and will remain so, with no change to the current development, which will break the pathway to site end users. The risk is considered to be low. A Refurbishment Asbestos survey should be undertaken.
On site Made ground Ground Gas (carbon dioxide and methane)	Migration into confined spaces, inhalation and asphyxiation/explosion	End-users / property / structures	Unlikely	Severe	Moderate / Low	The entirety of the site is comprised of building footprint and has remained so since the earliest historical mapping. It is therefore unlikely that any significant thicknesses of made ground, nor any material leading to the generation of ground gases, will be present within the site boundary. The risk is therefore moderate to low.
On site Natural Geology - Coal Measures Ground Gas	Migration into confined spaces, inhalation and asphyxiation/explosion	End-users / property / structures	Unlikely	Severe	Moderate / Low	Coal measures and historic mining beneath the site could present a risk to future site users from asphyxiation if significant volumes migrate to the site. The Pennine Lower Coal Measures exhibit low to moderate permeability, with localised variations. Coal seams and mudstones typically restrict gas migration, however, sandstone layers and fractures can facilitate movement. Given the last recorded workings are 1900 and the depth of rock cover, the likelihood is unlikely. However, with the exact nature of the geology beneath the site unknown, the potential for any migration of gases cannot be ruled out entirely. The risk is assessed as being moderate to low and further assessment is required.
Off site Infilled pond Ground Gas (carbon dioxide and methane)	Migration into confined spaces	End-users/ Buildings	Unlikely	Severe	Moderate / Low	The closest potentially infilled pond feature was noted to have been infilled over 130 years ago. A significant amount of time has therefore passed for any potential ground gases to have degassed to the surface. Furthermore, the distance between the pond feature and the site, coupled with the indicated Devensian Till deposits just to the north of the site, make the migration of any potential ground gases to site unlikely. The other pond features shown on historical mapping have since been redeveloped into residential and commercial developments, during which time suitable remediation is likely to have taken place. The risk is assessed as being moderate to low and further assessment is required.
Off site Electricity Substation PCBs	Ingestion, direct contact, inhalation of dusts	End-users	Unlikely	Mild	Very low	Whilst the age of the substation does not pre-date the ban on PCBs, the distance between site and the feature is high and the mobility of this contaminant is low, and any volumes present are likely to be small. Furthermore, the site is currently surfaced entirely in hardstanding, and will remain so, with no change to the

Human Health						
Potential Source	Potential Pathway	Potential Receptor	Likelihood	Severity	Level of Risk	Justification
						current development, which will break the pathway to site end users. The risk is considered to be very low.

Controlled Waters						
Potential Source	Potential Pathway	Potential Receptor	Likelihood	Severity	Level of Risk	Justification
Made Ground PAHs, Metals	Overland flow, / migration through saturated zone	Inland River River 19m away (Surface waters)	Unlikely	Medium	Low	It is considered contaminants associated with the made ground and other past industrial uses are unlikely to impact the River. This is due to the low permeability of the Devensian Till indicated to be present to the north of the site, between the site and the river, which will inhibit lateral migration, along with the combined presence of hardstanding surfacing. Therefore, a low risk is posed to the river from the made ground.
	Leaching through unsaturated zone / Migration through saturated zone	Secondary A Aquifer (Groundwater)	Unlikely	Medium	Low	The site is currently surfaced in hardstanding and will remain so, with a new surface water drainage system installed which will further reduce the risk to controlled waters. By virtue of the development taking place, this should contribute to an overall "betterment" of groundwater quality.
	Migration through saturated zone	Secondary A Aquifer (Groundwater)	Unlikely	Medium	Low	There are no groundwater abstraction licences or Source Protection Zones near the site. As stated above, the site is currently surfaced in hardstanding and will remain so, with a new surface water drainage system installed which will further reduce the risk to controlled waters.

Human Health Risk – Soils Contamination Summary

Based on the preliminary CSM and the current use of the site, the overall risk from land contamination at the site is considered to be **low** for a redeveloped site. Based on the proposed alteration of the end use from commercial to residential, and with no alterations to the current development, of which the entire site is surfaced in hardstanding building footprint and will remain so, no further investigation is deemed necessary to the risk to human health from soils contamination.

Human Health Risk – Ground Gas Summary

A potential on-site gas source has been identified associated with the historic industrial land uses and the natural solid geology. Off site potential sources include historic reservoirs and ponds. Potentially viable linkages are considered to exist and the preliminary CSM considers these sources to be of **low to moderate** risk.

Based on the proposed development containing no changes to the existing structure which comprises the entirety of the site, it would be disproportionate to carry out traditional ground gas monitoring and potentially suggest retrofitting gas protection measures. Therefore, it would be more practical to carry out either, or both, monitoring of the existing sub-floor void and internal monitoring of the ground floor.

Controlled Waters Risk - Summary

Based on the preliminary CSM, BSL believes the overall risk to controlled waters at the site is **low**.

5.0 PRELIMINARY GEOTECHNICAL ASSESSMENT

5.1 Hazard Identification

A preliminary geotechnical hazard identification exercise has been undertaken in general accordance with the Highways England document CD 622, 'Managing geotechnical risk'. Potential geotechnical hazards based on the expected ground conditions are listed below:

-
- Made ground of unknown nature; if placed in a non-engineered manner may cause excessive settlement of foundations, highways and infrastructure.
 - Presence of obstruction in the ground from historical developments (e.g. relict foundations) causing difficulties with excavations or penetrative works (e.g. piling).
 - Attack of buried concrete by aggressive ground conditions; the site may contain unknown made ground and potentially sulphate bearing soils. The coal measures are known to be high in naturally occurring sulphates or potentially pyritic.
 - Running sands or loose fill materials leading to difficulty with excavation due to trench collapse.
 - Shallow groundwater/groundwater rise causing resulting in difficulties with excavations due to trench collapse.
 - Mining subsidence; the site is in an area of former shallow coal mine workings.
-

However, none of the above apply to the specific site conditions, as no proposed structural development is due to take place, with the only development being a change of end-use and internal re-design work.

Whilst the site lies within a Mining Remediation Authority reporting area, based on the available information and proposed lack of development, with just a change of end-use, the risk from mining induced instability is considered to be low and needs no further consideration.

5.2 Foundation and Geotechnical Design

The proposed development will comprise a conversion of the existing ground floor of a commercial building into a residential dwelling. A suitably qualified structural engineer should be consulted to confirm the existing buildings are structurally sound and, if deemed a requirement by the structural engineer, the type/extent of existing foundations should be confirmed via the excavation of foundation assessment pits.

5.3 Recommendations

Based on the assessed level of risk, no further action is required.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Geo-Environmental Summary

The site has had several previous uses including cotton mill, works and warehouse, however, based on the proposed lack of structural change, and with the existing site covered entirely in hardstanding, the overall risk to human health from on site soils contamination is considered to be low.

The risk from off-site sources of contamination is considered to be low.

The risk from permanent ground gases is considered to be moderate / low and further monitoring is recommended.

Radon is not considered to pose a risk.

The overall risk to controlled waters is considered to be low.

6.2 Geotechnical Summary

Intrusive investigations will not be required as there is no proposed change to the existing structure.

Whilst the site lies within a Mining Remediation Authority reporting area, based on the available information and proposed lack of development, with just a change of end-use, the risk from mining induced instability is considered to be low and needs no further consideration.

6.3 Further Work

To confirm the risks to the identified receptors and confirm the ground conditions in respect to the identified geotechnical and geo-environmental risks, an appropriate intrusive investigation will need to be undertaken. The following further works are recommended, although this list is not exhaustive and should be read in conjunction with any planning conditions that are applicable to the site:

-
- Topographical survey / utility mapping.
 - Refurbishment Asbestos survey.
 - Gas monitoring and assessment.
-

7.0 ABBREVIATIONS AND DEFINITIONS

GLOSSARY	
Term / Abbreviation	Definition
AST	Above Ground Storage Tank.
B(a)P	Benzo (a) Pyrene.
BGS	British Geological Survey.
BRE	Building Research Establishment.
BS	British Standard.
BSL	Brownfield Solutions Ltd.
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes.
CBR	California Bearing Ratio (used in pavement/highways design).
CAR 2012	Control of Asbestos Regulations (2012).
CBCB	Cheshire Brine Compensation Board.
CBCD	Cheshire Brine Compensation District.
CBR	California Bearing Ratio.
CIEH	Chartered Institute of Environmental Health.
CIRIA	Construction Industry Research Association.
CL:AIRE	Contaminated Land: Applications in Real Environments.
CLEA	Contaminated Land Exposure Assessment.
CLO	Contaminated Land Officer.
COMAH	Control of Major Accident Hazards.
Contamination	Presence of a substance which is in, on or under land, and which has the potential to cause significant harm or to cause significant pollution of controlled water. There is no assumption in this definition that harm results from the presence of the contamination. Naturally enhanced concentrations of harmful substances can fall within this definition of contamination. Contamination may relate to soils, surface water, groundwater or ground gas.
Controlled Waters	Inland freshwater (any lake, pond or watercourse above the freshwater limit), water contained in underground strata and any coastal water between the limit of highest tide or the freshwater line to the three-mile limit of territorial waters.
CPT	Cone Penetration Test.
CSM	Conceptual Site Model. A schematic hypothesis of the nature and sources of contamination, potential migration pathways (including description of the ground and groundwater) and potential receptors, developed on the basis of the information from the preliminary investigation and refined during subsequent phases of investigation and which is an essential part of the risk assessment process. The conceptual site model is initially derived from the information obtained by the preliminary investigation (i.e. the Phase I Phase I Assessment). This conceptual model is used to focus subsequent investigations, where these are considered to be necessary, in order to meet the objectives of the investigations and the risk assessment. The results of intrusive investigations can provide additional data that can be used to further refine the conceptual site model.
DCP	Dynamic Cone Penetrometer.
DNAPL	Dense Non-Aqueous Phase Liquid.
DoWCoP	Definition of Waste Code of Practice.
DWS	Drinking Water Standard.
EA	Environment Agency.
EHO	Environmental health Officer.
EQS	Environmental Quality Standard.
GAC	Generic Assessment Criteria.

GLOSSARY	
Term / Abbreviation	Definition
GDR	Geotechnical Design Report.
GFR	Geotechnical Feedback Report.
GIR	Ground Investigation Report.
GSV	Gas Screening Value.
Harm	Adverse effect on the health of living organisms, or other interference with ecological systems of which they form part, and, in the case of human health, including property/structures and water supply pipelines.
Hazard	Inherently dangerous quality of a substance, procedure or event.
HDPE	High Density Polyethylene.
HSV	Hand Shear Vane.
K	Modulus of Subgrade Reaction.
LCRM	Land Contamination: Risk Management (EA guidance).
LNAPL	Light Non-Aqueous Phase Liquid (petrol, diesel, kerosene).
LOD	Limit of Detection (for particular method adopted).
MMP	Materials Management Plan.
Mv	Modulus of Volume of Compressibility.
ND	Not Detected.
NHBC	National House Building Council.
NR	Not Recorded.
OS	Ordnance Survey.
PAH	Polycyclic Aromatic Hydrocarbon.
Pathway	Mechanism or route by which a contaminant comes into contact with, or otherwise affects, a receptor.
PCB	Poly-Chlorinated Biphenyl.
PCSM	Preliminary Conceptual Site Model.
pH	Scale used to specify how acidic or basic a water-based solution is.
PHC	Petroleum Hydrocarbons.
PID	Photo Ionisation Detector.
PNEC	Predicted No-Effect Concentration.
Precision	Level of agreement within a series of measurements of a parameter.
PSD	Particle Size Distribution.
PVC	Polyvinyl Chloride.
Receptor	Human health, living organisms, ecological systems, controlled waters (surface waters and groundwater within aquifers), atmosphere, structures and utilities that could potentially be adversely affected by contaminant(s).
Risk	Probability of the occurrence, magnitude and consequences of an unwanted adverse effect on a receptor.
Risk Assessment	Process of establishing, to the extent possible, the existence, nature and significance of risk.
Sampling	Methods and techniques used to obtain a representative sample of the material under investigation.
SOM	Soil Organic Matter.
Source	Location from which contamination is, or was, derived. This could possibly be the location of the highest soil, groundwater or gas concentration of the contaminant(s).
SPT	Standard Penetration Test.
SVOCs	Semi Volatile Organic Compounds.
TOC	Total Organic Carbon.
TPH CWG	Total Petroleum Hydrocarbon (Criteria Working Group).

GLOSSARY	
Term / Abbreviation	Definition
TVOCs	Total volatile organic compounds.
UCS	Unconfined Compressive Strength.
Uncertainty	Parameter, associated with the result of a measurement that characterises the dispersion of the values that could reasonably be attributed to the measurement.
UST	Underground Storage Tank.
UXO	Unexploded Ordnance.
VCCs	Vibro Concrete Columns.
VSCs	Vibro Stone Columns
VOCs	Volatile Organic Compounds.
WAC	Waste Assessment Criteria.
WFD (in waste context)	Waste Framework Directive.
WFD (in water context)	Water Framework Directive.
Units	Definition
°	Degrees
Φ	Phi angle (in degrees)
g/l	Grams per Litre
Km	Kilometres
kPa	Kilo Pascal (Equivalent to kN/m ²)
KN/m ² /mm	Kilo Newton per metered squared per millimeter
kN/m ²	Kilo Newtons per metre squared
kPa	Kilo Pascal (Equivalent to kN/m ²)
l/hr	Litres per hour
MJ/kg	Mega joule per kilogram
MN	Mega Newton
M ² /MN	Mega Newton per metre squared
M	Metres
m bgl	Metres Below Ground Level
m OD	Metres Ordnance Datum (sea level)
µg/l	Micrograms per Litre (parts per billion)
µm	Micrometre
mb	Millibars (atmospheric pressure)
mg/kg	Milligrams per kilogram (parts per million)
mg/m ³	Milligram per metre cubed
mm	Millimetre
ppb	Parts Per Billion
Ppm	Parts Per Million

8.0 REFERENCES

References used in the production of this report are listed below; note not all of the below are relevant to the subject site and may not have been utilised.

Association of Ground Investigation Specialists. 'Description Of Anthropogenic Materials– A Practitioners' Guide'. 2018.

BS 8576 'Guidance on investigations for ground gas – Permanent gases and Volatile Organic Compounds (VOCs)'. 2013.

BS 5930+A1:2020: 'Code of Practice for Site Investigations'. 2020.

BS 10175:2011+A2:2017 'Investigation of Potentially Contaminated sites - code of practice'. 2017.

BRE Report BR211, Scivyer, C. 'Radon – Guidance on protective measures for new buildings' 2023 Edition.

CIRIA Special Publication SP32, PSA Civil Engineering Technical Guide 34, 'Construction over abandoned mine workings'. 1984.

CIRIA C574 'Engineering in Chalk'. 2002.

CIRIA C665 'Assessing Risks Posed by Hazardous Ground Gases to Buildings'. 2007.

CIRIA C681 'Unexploded Ordnance (UXO) A guide for the construction industry'. 2009.

CIRIA C753 'The SuDS Manual'. 2015.

CIRIA C758 'Abandoned Mine Workings Manual'. 2019.

CL:AIRE RB17 'A Pragmatic Approach to Ground Gas Risk Assessment'. 2012.

CL:AIRE TB19 'Managing Risks and Liabilities associated with Per and Polyfluoroalkyl Substances (PFASs)'. 2019.

CL:AIRE TB22 'An overview of the uses of PFAS to assist with identification of sites of concern'. 2023.

Department of the Environment. 'Industry Profiles' - 48 separate publications available from The Stationery Office, London. 1995.

DEFRA and the Environment Agency, CLR Report No 11 'Model Procedures for the Management of Contaminated Land'. 2004. [Withdrawn 2019.]

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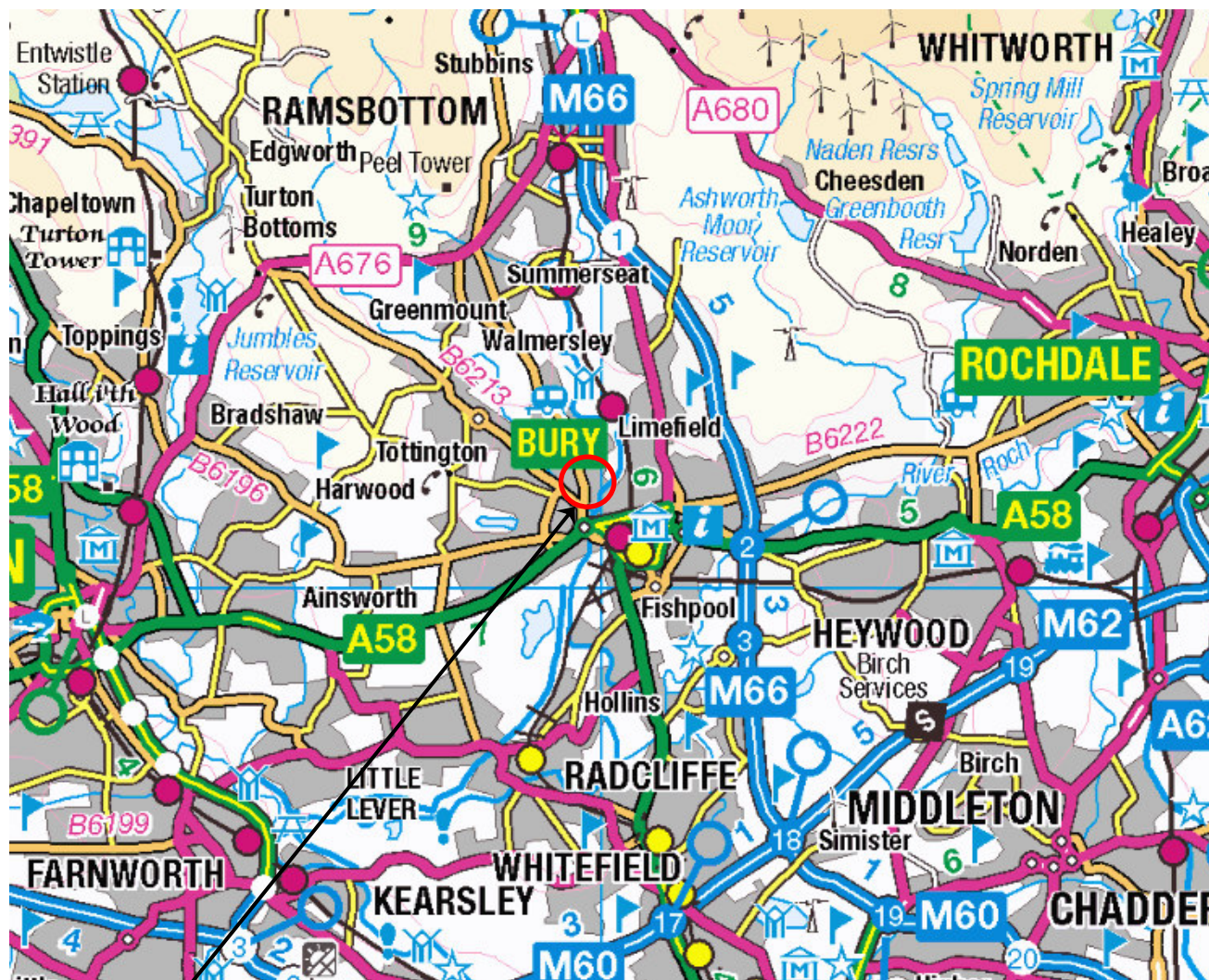
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NHBC Standards. Chapter 4.1: Land Quality - Managing Ground Conditions.

NHBC. 'Hazardous Ground Gas - An essential guide for housebuilders'. May 2023.

Water Framework Directive, 2000.

DRAWINGS



SITE LOCATION

NEAREST POSTCODE: BL8 1AT

SITE ENTRANCE WHAT3WORDS:
///TWICE.PIES.CURVY



REV	DATE	DESCRIPTION	BY	CKD
 BROWNFIELD SOLUTIONS LTD GEO-ENVIRONMENTAL ENGINEERING EXCELLENCE				
CLIENT				
CADWORKS UK				
PROJECT TITLE				
CADWORKS UK, WOODHILL STREET, BURY				
DRAWING TITLE				
SITE LOCATION PLAN				
DRAWING No.		REVISION	SCALE	DATE
C5979/01		-	NTS	18/12/24
DRAWN BY			CHECKED BY	
SD			JM	



VEHICULAR SITE ACCESS

PEDESTRIAN
SITE ACCESS

KEY

APPROXIMATE SITE BOUNDARY

- NOTES
- 1. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCING WORKS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT & ENGINEER FOR VERIFICATION. FIGURED DIMENSIONS ONLY ARE TO BE TAKEN FROM THIS DRAWING.
 - 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS REPORTS. THIS DRAWING IS COPYRIGHT OF BSL.
 - 3. DRAWING NOT FOR CONSTRUCTION PURPOSES.

REV	DATE	DESCRIPTION	BY	CKD



CLIENT
CADWORKS UK

PROJECT TITLE
CADWORKS UK, WOODHILL STREET, BURY

DRAWING TITLE
SITE FEATURES PLAN

DRAWING No. C5979/02	REVISION -	SCALE NTS	DATE 21/12/24
DRAWN BY JM		CHECKED BY NS	

PHOTOGRAPHS



Photograph 1: Site Entrance



Photograph 2: Rear of site



Photograph 3: Side of site



Photograph 4: Side of site

APPENDIX A

BSL Methodology and Guidance



BSL Phase I Geo-Environmental Assessment Reports - Methodology and Guidance

Background

This Appendix provides information on the approaches, methods and guidance used by Brownfield Solutions Ltd in the preparation of this report.

The term 'geo-environmental' is used to describe aspects relating to ground-related environmental issues (such as potential soils and groundwater contamination). The term 'geotechnical' is used to describe aspects relating to the physical nature of the site (such as foundation requirements). It should be noted that this is an integrated investigation and these two main aspects are related, unless otherwise specified within the report.

Phase I reports are written in general accordance with the description of a Preliminary Investigation as defined in BS10175:2011+A2:2017 and are also produced in general accordance with the recommendations for a Tier 1 Preliminary Risk Assessment as described in LCRM guidance.

The first stage of the investigation and assessment of a site is the Preliminary Investigation/Tier 1 Preliminary Risk Assessment, often referred to as a Phase 1 Desk Study, comprising a desk study and walk-over survey and collation of desk-based searches, which culminates in the Preliminary Risk Assessment and the development of a preliminary/initial **Conceptual Site Model (CSM)**. From this are identified any potential geotechnical and geo-environmental hazards and the qualitative degree of risk associated with them. In the case of the geotechnical hazard identification, this is referred to as the **Ground Model**.

From the geo-environmental perspective, the hazard Identification process uses professional judgement to evaluate all the hazards in terms of possible contaminant linkages (of source-pathway-receptor). Possible contaminant linkages are potentially unacceptable risks in terms of the current contaminated land regime legal framework and require either remediation or further assessment. These are normally addressed via intrusive ground investigation and generic risk assessment as part of Phase II investigations and reports.

The second stage is the Ground Investigation, Generic Risk Assessment and Geotechnical Interpretation. This represents the further assessment mentioned above. The Ground Investigation comprises field work and laboratory testing based on the findings of the Preliminary Risk Assessment, to reduce uncertainty in the geotechnical and geo-environmental hazard identification. This may include an exploratory, a detailed or/and supplementary Investigations as described in BS 10175:2011+A2:2017. Phase II Assessments are produced in general accordance with the recommendations for a Tier 2 Generic Quantitative Risk Assessment as described in LCRM guidance and are also intended to fulfil the requirements of a Ground Investigation Report (GIR) as detailed in BS EN 1997-2:2007.

Contaminated Land - Legislative Background

Land contamination can be addressed in several ways, e.g. during planning, under Part 2A, following an incident, during an investigation into environmental damages, or during the application of an environmental permit, or its surrender.

For the planning process the key test is **as a minimum the site cannot be determined as contaminated land**, e.g. there is not significant harm, significant possibility of significant harm to human health or that there is not significant harm to, or the significant possibility that the pollution of controlled waters will occur.

Environmental liabilities and risks have been evaluated in terms of a source -pathway - target relationship in accordance with the approach set out in:

-  The 1995 Environment Act.
-  The Contaminated Land Statutory Guidance, DEFRA – April 2012.
-  The Contaminated Land (England) Regulations 2006.
-  The Contaminated Land (England) Amendment Regulations 2012.
-  Water Resources Act.
-  Water Framework Directive.
-  Environmental Damage Regulations.
-  Environment Agency (EA) - Land Contamination Risk Management (LCRM) 2019.

Contaminated land is defined within the legislative framework as land which is in such condition by reason of substances in, on or under the land that:

- 1) Significant harm is being caused or there is a significant possibility of such harm being caused.
- 2) Significant pollution of controlled waters is being or is likely to be caused.

The potential for harm is based on the presence of three factors:

Source - substances that are potential contaminants or pollutants that may cause harm.

Pathway - a potential route by which contaminants can move from the source to the receptor, and the impact of that migration on the source e.g., attenuation.

Receptor - a receptor that may be harmed, for example the water environment, humans and water, considering the sensitivity of the receptor.

Where a source, pathway and target are all present a pollutant linkage exists and there is potential for harm to be caused.



Where any one of the “pollution linkages” between the above is absent there is deemed to be no risk.

The presence of a source does not automatically imply that a contamination problem exists, since contamination must be defined in terms of pollutant linkages and unacceptable risk of harm. The nature and importance of both pathways and receptors are site specific and will vary according to the intended end use of the site, its characteristics and its surroundings.

The key principle which supports the S-P-R approach is ‘suitable for use’ criteria. This requires remedial action only where contamination is considered to pose unacceptable actual or potential risks to health or the environment and, taking into account the proposed use of the site.

Relevant Guidance Documents

This report has been prepared in accordance with the list of guidance below, however the list is not exhaustive:

- DETR: Circular 02/2000: Environmental Protection Act 1990: Part IIA: Contaminated land. 2012.
- Environment Agency technical advice to third parties on Pollution of Controlled Waters for Part IIA of the EPA1990, May 2002.
- BS 10175:2011+A2:2017.
- Environment Agency (EA) - Land Contamination Risk Management (LCRM). 2019.
- Groundwater Protection <https://www.gov.uk/government/collections/groundwater-protection>
- UK Technical Advisory Group (UKTAG) - - Water Framework Directive
- Incidents and their classification: the Common Incident Classification Scheme (CICS) – Used by the Environment Agency to classify pollution incidents.

Relevant Legislative Documents

The following is a non-exhaustive list of legislative framework documents that has been considered in the production of this report:

- The Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance (2012).
- The Environment Protection Act (1990).
- The Water Resources Act (1991).
- The Environment Act (1995).
- The Contaminated Land (England) Act (2000).
- The Pollution Prevention and Control (England and Wales) Regulations (2000).
- The Landfill Regulations (England and Wales) Regulations (2002).
- The Landfill (England and Wales) (Amendment) Regulations (2004).
- Contaminated Land (England) Regulations (2012).
- The Environmental Damage (Prevention and Remediation) Regulations (2009).
- Environmental Permitting Regulations (England and Wales) Regulations (2010).
- The Water Environment (Water Framework Directive) (England and Wales) Regulations (2017).
- Health and Safety at Work Act.
- National Planning Policy Framework (NPPF) – latest version.

Contaminated Land Risk Assessment Approach

Contaminated Land Risk Assessment is a technique that identifies and considers the associated risk, determines whether the risks are significant and whether action needs to be taken. The four main stages of risk assessment are:



LCRM outlines the framework to be followed for risk assessment in the UK. The framework is designed to be consistent with UK legislation and policies including planning. The starting point of the risk assessment is to identify the context of the problem and the objectives of the process. Under LCRM, three tiers of risk assessment exist – Stage/Tier Preliminary Risk Assessment, Stage 2 Generic Quantitative Assessment and Stage 3 Detailed Quantitative Assessment.

Further information can be found at the below site:

<https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>

Formulating and developing a conceptual model for the site is an important requirement of risk assessment, this supports the identification and assessment of pollutant linkages. Development of the conceptual model forms the main part of preliminary risk assessment, and the model is subsequently refined or revised as more information and understanding is obtained through the risk assessment process.

Risk is a combination of the likelihood of an event occurring and the magnitude of its consequences. Therefore, both the likelihood and the consequences of an event must be taken into account when assessing risk.

The risk assessment process needs to take into account the degree of confidence required in decisions. Identification of uncertainties is an essential step in risk assessment.

The likelihood of an event is classified on a four-point system using the following terms and definitions from CIRIA C552, with reference to Incidents and their classification: the Common Incident Classification Scheme (CICS), Environmental Protection Act 1990: Part 2A – Contaminated Land Statutory Guidance 2012 and other guidance as appropriate which will be detailed within the main body of the report if applied.

The likelihood of a given receptor being impacted is related to a number of factors, e.g. the geology which could inhibit contaminant migration. For example, a site with a significant thickness of clay between it and a receptor may reduce migration of contamination via the subsurface, which will reduce the likelihood of a given receptor being impacted. The geology or drainage for example could offer a preferential pathway e.g. mines shafts/faults increasing the likelihood and potential magnitude of an impact. The depth of contamination will also affect the exposure pathway, for example petroleum hydrocarbons at depth are unlikely to reach a receptor via dermal contact but could via vapour pathways which will influence the likelihood of an impact being felt e.g. if there are no buildings on site.

The terms and definitions used for the assessment of the likelihood are provided below:

High likelihood: There is a pollution linkage and an event 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.

Examples - Extensive areas with concentrations above saturation limits for mobile contamination e.g. petroleum hydrocarbons within the water table.

Likely: There is a pollution linkage and all the elements are present and in the right place, which means it is probable that an event will occur. Circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term.

Examples – Localised areas of contaminants with concentrations above saturation limits for mobile contamination e.g. localised petroleum hydrocarbons within the water table; shallow contamination above relevant human health generic assessment criteria is present with little or no hardstanding,

Low likelihood: There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain even over a longer period such event would take place, and is less likely in the short term.

Examples - A thickness/distance of low permeability deposits preventing contaminant migration to a receptor is present; a site is mostly covered hard standing preventing exposure to soil contamination.

Unlikely: There is a pollution linkage but circumstances are such that it is improbable the event would occur even in the long term.

Examples – A site is underlain by a substantial thickness of low permeability clays, between the source and potential receptors which will inhibit significantly, but not completely rule out migration to sensitive receptors.

The severity is also classified using a system based on CIRIA C552, with reference to Incidents and their classification: the Common Incident Classification Scheme (CICS), Environmental Protection Act 1990: Part 2A – Contaminated Land Statutory Guidance 2012 and other guidance as appropriate which will be detailed within the main body of the report, if applied. The terms and definitions are:

Severe: Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. A short-term risk to a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);

Examples – High concentrations of contaminant on surface of recreation area, major spillage of contaminants from site into controlled waters, explosion causing building to collapse.

Medium: Chronic damage to human health ('significant harm' as defined in DETR 2000). Pollution of sensitive water resources. A significant change in a particular ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Draft Circular on Contaminated Land', DETR 2000);

Examples - Concentrations of contaminants exceed the generic assessment criteria, leaching of contaminants from a site to a Principal or Secondary Aquifer, death of species within a designated nature reserve.

Mild: Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Draft Circular on Contaminated Land', DETR 2000). Damage to sensitive buildings, structures, services or the environment.

Examples - Pollution of non-classified groundwater or damage to buildings rendering it unsafe to occupy.

Minor: harm, not necessarily significant harm, which may result in financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by use of personal protective clothing etc). Easily repairable effects of damage to buildings, structures and services.

Examples - Presence of contaminants at such concentrations PPE is required during site work, loss of plants in landscaping scheme or discolouration of concrete.

Once the likelihood and severity have been determined, a risk category can be assigned using the table below.

		Consequences			
		Severe	Medium	Mild	Minor
Probability	Highly likely	Very high	High	Moderate	Moderate/low
	Likely	High	Moderate	Moderate/low	Low
	Low likelihood	Moderate	Moderate/low	Low	Very low
	Unlikely	Moderate/low	Low	Very Low	Very low
	Negligible	Negligible Risk / No Linkage			

Definitions of the risk categories obtained from the above table are as follows together with an assessment of the further work that might be required:

Very high: There is a high probability that severe harm could arise to a designated receptor from an identified hazard or there is evidence that severe harm is currently happening. This risk, if realised, could result in substantial liability. Urgent investigation and remediation are likely to be required.

High: Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation is required and remedial works may be necessary in the short term and are likely over the longer term.

Moderate: It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it would be more likely to be relatively mild. Investigation is normally required to clarify the risk and determine the liability. Some remedial works may be required in the longer term.

Low: It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.

Very Low: There is a low possibility that harm could arise to a receptor. In the event of such harm being realised, it is not likely to be severe.

Some linkages may be identified which constitutes a theoretical connection between a source and a receptor, but professional judgement shows them not to be possible for some reason. These are labelled ‘negligible risk’ and ‘no linkage’ in the summary table, which give rise to an overall **negligible** risk category and no further action is required.

Ground Gas Risk Assessment

BS8485:2015+A1:2019, BS 8576:2013, CL:AIRE RB17, and NHBC ‘Hazardous Ground Gas - An essential guide for housebuilders’ 2023, are the current guidance which gives up-to-date advice on all aspects of permanent ground gas risk. BS8576 alongside CIRIA C682 also provides guidance on assessment of hydrocarbon vapour intrusion.

The CL:AIRE publication ‘Good Practice for Coal Mine Gas Emissions’ 2021 provides guidance on the assessment of risks from mine gas sources.

The above all outline good practice in investigation, the collection of relevant data and monitoring programmes in a risk-based approach to ground gas contamination. The aim of the guidance is for a consistent approach to decision making, particularly relating to the scope of protective design measures on a site-specific basis.

Legislative Framework

BS8485:2015+A1:2019, BS 8576:2013 and CIRIA C665 provides technical guidance, however they also recognise the context into which the guidance has to be employed. Government policy is based upon a “suitable for use approach”, which is relevant to both the current and proposed future use of land. When considering the current use of land, Part IIA of the Environment Protection Act 1990 provides the regulatory regime. The presence of hazardous ground gases could provide the “source” in a “pollutant linkage” which could lead the regulator to determine that considerable harm or there is a significant possibility of such harm being caused. Under such circumstances, the regulator would determine the land to be “contaminated land” under the provisions of the Act, setting out the process of remediation as described in the DETR Circular 02/2000 *Statutory guidance on contaminated land*.

Generation Potential of Sources

BS 8576:2013 Figure 6 provides a basis for assessing the generation potential from sources identified as part of the Phase I Assessment. These are summarised below:

Generation Potential	Typical Sources
Very Low	- Natural carbonate soil and strata, e.g. chalk and limestone. - Natural soil strata with a low degradable organic content, e.g. alluvium, peat. - In-filled pond less than 15 m diameter, in-filled before 1930s to 1940s. - Made ground with low degradable organic content (e.g. up to 5% organic material such as pieces of wood, pieces of paper, rags, etc. with a high proportion of ash and no food or other easily degradable waste). - Mine workings shallow or shaft (where there is clear evidence that they are flooded). - Inert landfill sites.
Low	- Natural soil strata with a high degradable organic content (DOC). - Made ground with total organic carbon (TOC) up to 6% (e.g. dock silt, no food or other easily degradable waste). - Foundry sand (includes phenolic binders, rags and wood that decay, albeit at low rates). - Landfill 1945 to mid 1960s (see also Moderate below).
Moderate	- Sewage sludge. - Mine workings – unflooded, more than 50 years since last worked (gas is liberated from coal when mine workings are excavated; this continues for up to about 50 years). - Landfill 1945 to mid 1960s (this could also be “low” or, if disturbed, “high”).
High	- Landfill mid 1960s to early 1990s. - Mine workings – unflooded – less than 50 years since last worked.
Very High	- Municipal landfill sites. - Landfill early 1990s onward.

Frequency and Duration of Monitoring

BS8576 notes to determine where and how to monitor ground gases requires consideration of credible pathways of possible exposure of the receptors, taking into account what is known about the geology and hydrogeology, building construction and services layout, foreseeable events such as flooding, changes in groundwater level, climate change, extreme weather conditions, the closure of mines, and possible changes to the gas regime caused by future development.

The monitoring period for a specific site should cover the “worst case” scenario. A “worst case” scenario will typically occur during falling atmospheric pressure and, in particular, weather conditions such as rainfall, frost and dry weather.

The benefits of additional information and whether it is likely to change the scope of gas protection should be considered, as are the consequences of failing to characterise adequately pollutant linkages. Investigations concerned with ground gas are required to provide monitoring data sufficient to allow prediction of worst case conditions enabling the confident assessment of risk and subsequent design of appropriate gas protection schemes. Monitoring programmes should not be an academic exercise in data collection. CL:AIRE publication TB17 “Ground Gas Monitoring and ‘Worst-Case’ Conditions” provides further guidance.

Below are matrices that will aid in determining an appropriate number of gas monitoring visits and the length of monitoring period.

Typical/idealised periods of monitoring

		Generation of Potential Source				
		Very Low	Low	Moderate	High	Very High
Sensitivity of Development	Low (Commercial)	1 month	2 months	3 months	6 months	12 months
	Moderate (Apartments)	2 months	3 months	6 months	12 months	24 months
	High (Low rise Residential)	3 months	6 months	6 months	12 months	24 months

Typical/idealised frequency of monitoring/Number of Visits Required

		Gas Generation of Potential Source				
		Very Low	Low	Moderate	High	Very High
Sensitivity of Development	Low (Commercial)	4	6	6	12	12
	Moderate (Apartments)	6	6	9	12	24
	High (Low rise Residential)	6	9	12	24	24

Notes

- 1 Generation potential of sources based on descriptions within BS 8576:2013.
- 2 At least two sets of readings should be at low and falling atmospheric pressure (but not restricted to periods below <1000 mb) known as worst case conditions. Historical data can be used as part of the data set (Table 5.5b).

RB17 Approach

CL:AIRE RB17 (Card et al 2012) is a pragmatic approach to ground gas risk assessment and was developed because gas concentration, pressure and flow rate measured in a well headspace may not be representative of the conditions in the surrounding formation.

In these low-risk situations, the approach is to use the conceptual site model and the estimation of the likely gas generation from a source to identify where or if gas monitoring is required to better define the risks.

Under this approach, for sites with natural soils only with no credible methane source, then no action is required (no monitoring or gas protection measures) as this represents Characteristic Situation 1 (CS1).

Radon

Advice on radon protection in England is provided by the UK Health Security Agency, <https://www.ukradon.org/information/ukmaps> and by the BRE (BR 211 (Scivyer 2023)).

Areas of the country can be categorised according to the percentage of existing homes where radon is present above the Action Level:

-  0-1% lower probability.
-  1-3% and 3-10% intermediate probability.
-  >10% higher probability.

Basic radon protection measures are required in new buildings and extensions in areas of England and Wales where 3-10% of properties exceed the Action Level and full radon protection measures where >10% exceed the Action Level.

Unexploded Ordnance (UXO) Guidance

Clients have a legal duty under the CDM 2015 Regulations to provide designers and contractors with project-specific health and safety information needed to identify hazards and risks. This includes the possibility of unexploded ordnance (UXO) being encountered on the site. Further details are given in CIRIA report C681.

BSL carry out non-specialist UXO screening exercises by considering any evidence of UK defence activities on or near the site evident from gathered desk study information and the unexploded aerial delivered bomb (UXB) online risk maps produced by Zetica. Other data sources are available, but as a first stage screening exercise the freely available online Zetica maps have been used. The level of risk stated is that determined by Zetica, a company experienced and considered competent in the assessment of UXO.

Geotechnical Guidance

A preliminary risk assessment of geotechnical hazards is carried out at the desk study stage and confirmed (or amended) at the ground investigation stage. The desk-based stage may include the requirements for a Coal Mining Risk Assessment (CMRA) which specifically assesses the risks from mining induced instability and related issues in high risk development areas: <https://www.gov.uk/guidance/planning-applications-coal-mining-risk-assessments>

APPENDIX B

Historical Maps

Site Details:

WOODHILL STREET, BURY, BL8
1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: 1056 Scale Town Plan

Map date: 1849

Scale: 1:1,056

Printed at: 1:1,056



Surveyed 1847
Revised N/A
Edition 1849
Copyright N/A
Levelled N/A

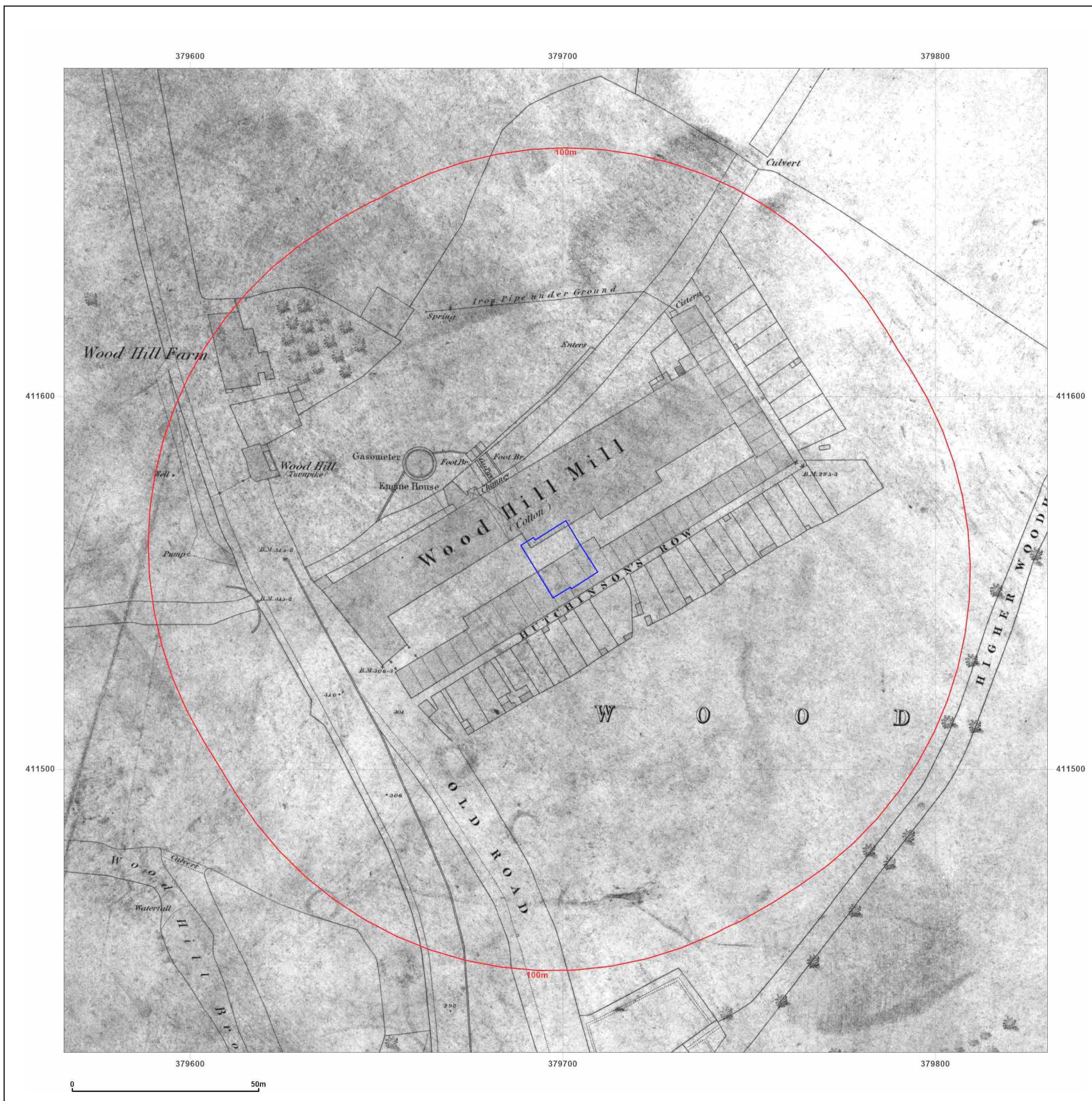


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Site Details:

WOODHILL STREET, BURY, BL8
1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: County Series

Map date: 1890

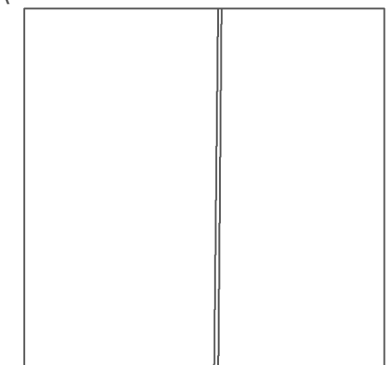
Scale: 1:2,500

Printed at: 1:2,500



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

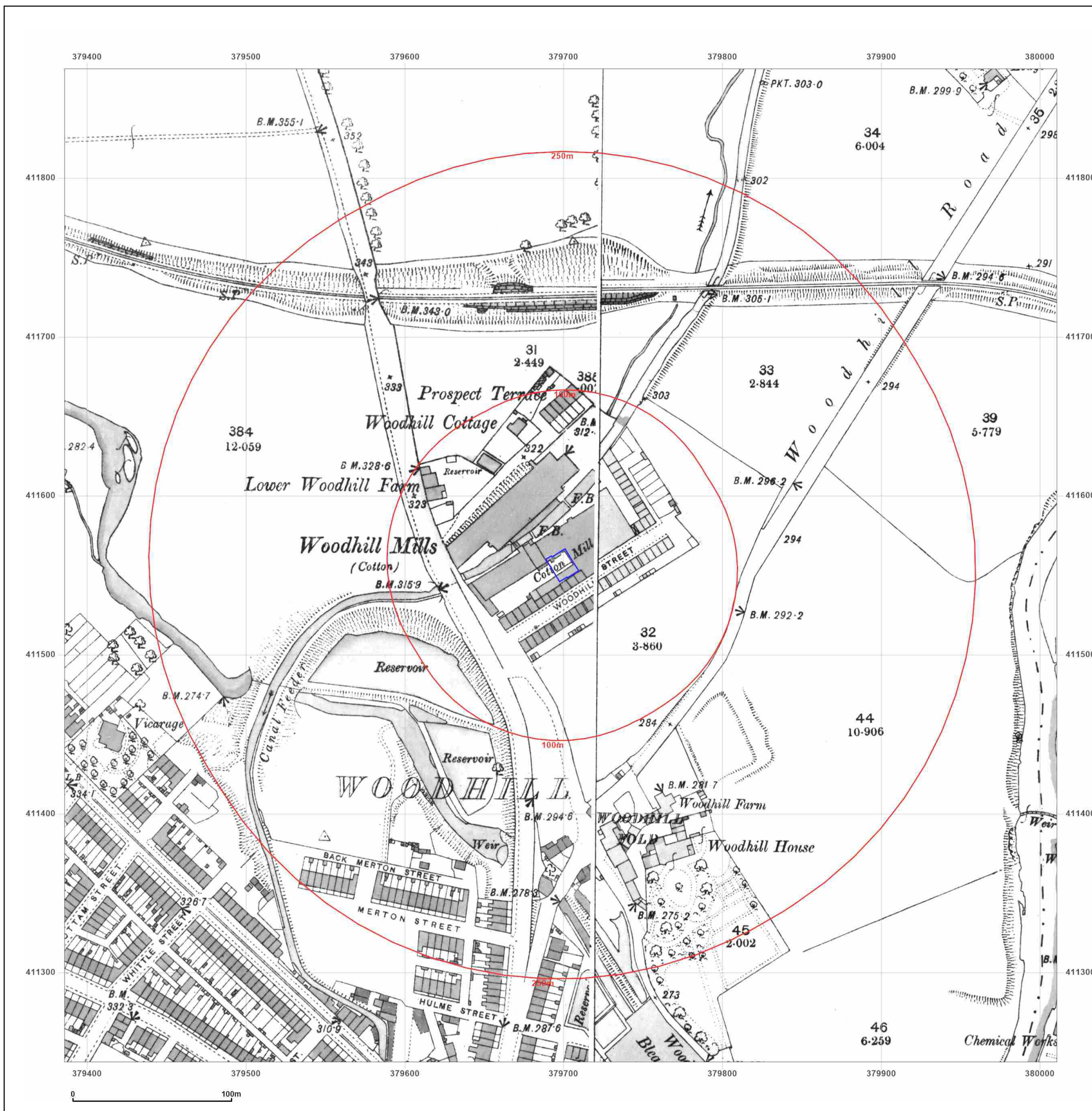


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1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: County Series Town Plan

Map date: 1891

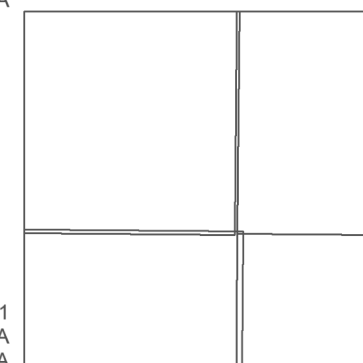
Scale: 1:500

Printed at: 1:1,000



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

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

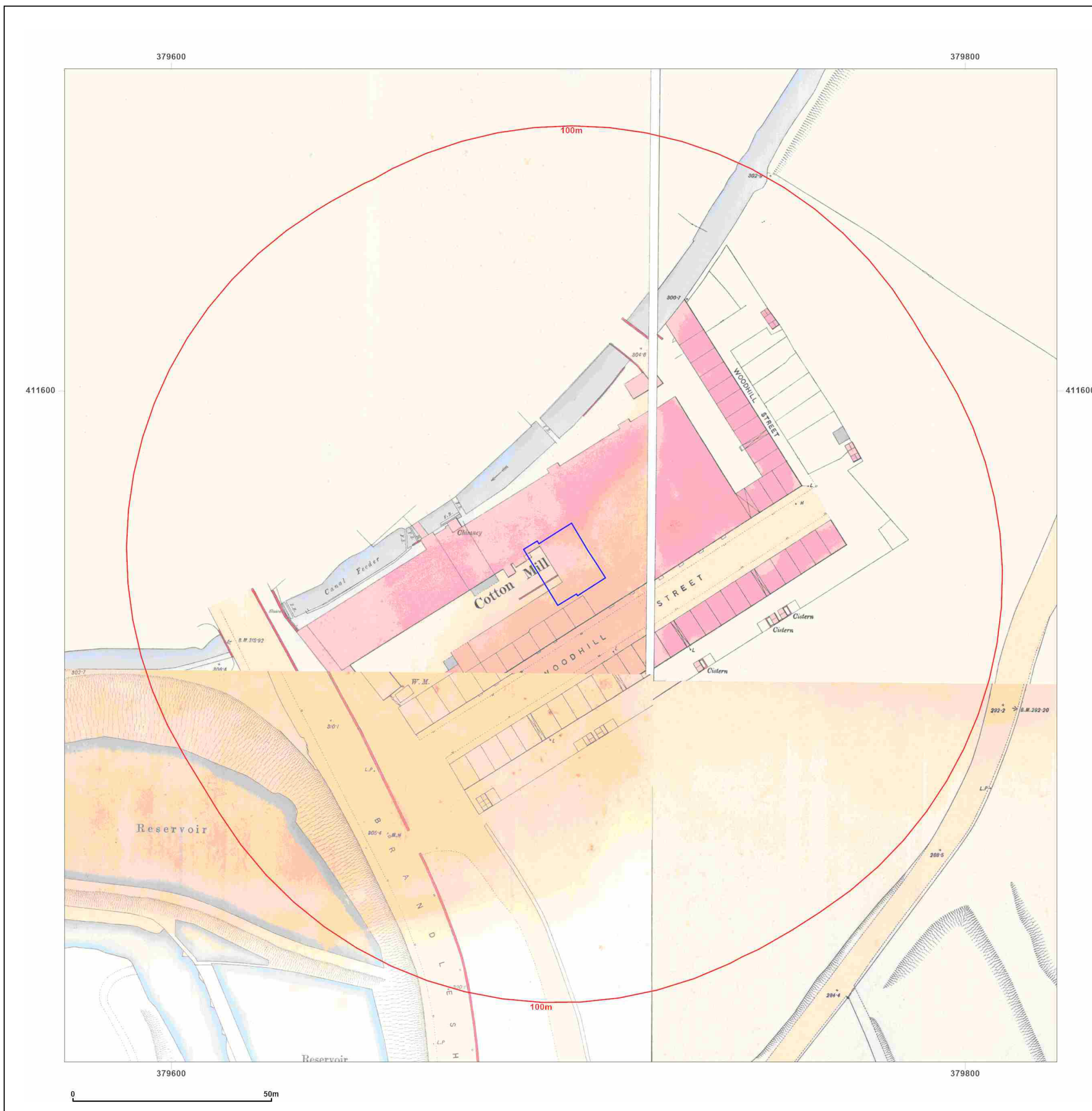


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1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: County Series

Map date: 1910

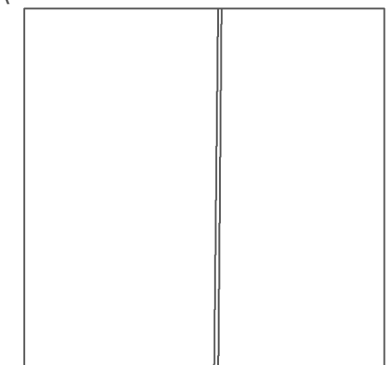
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Printed at: 1:2,500



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Edition N/A
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Revised 1910
Edition N/A
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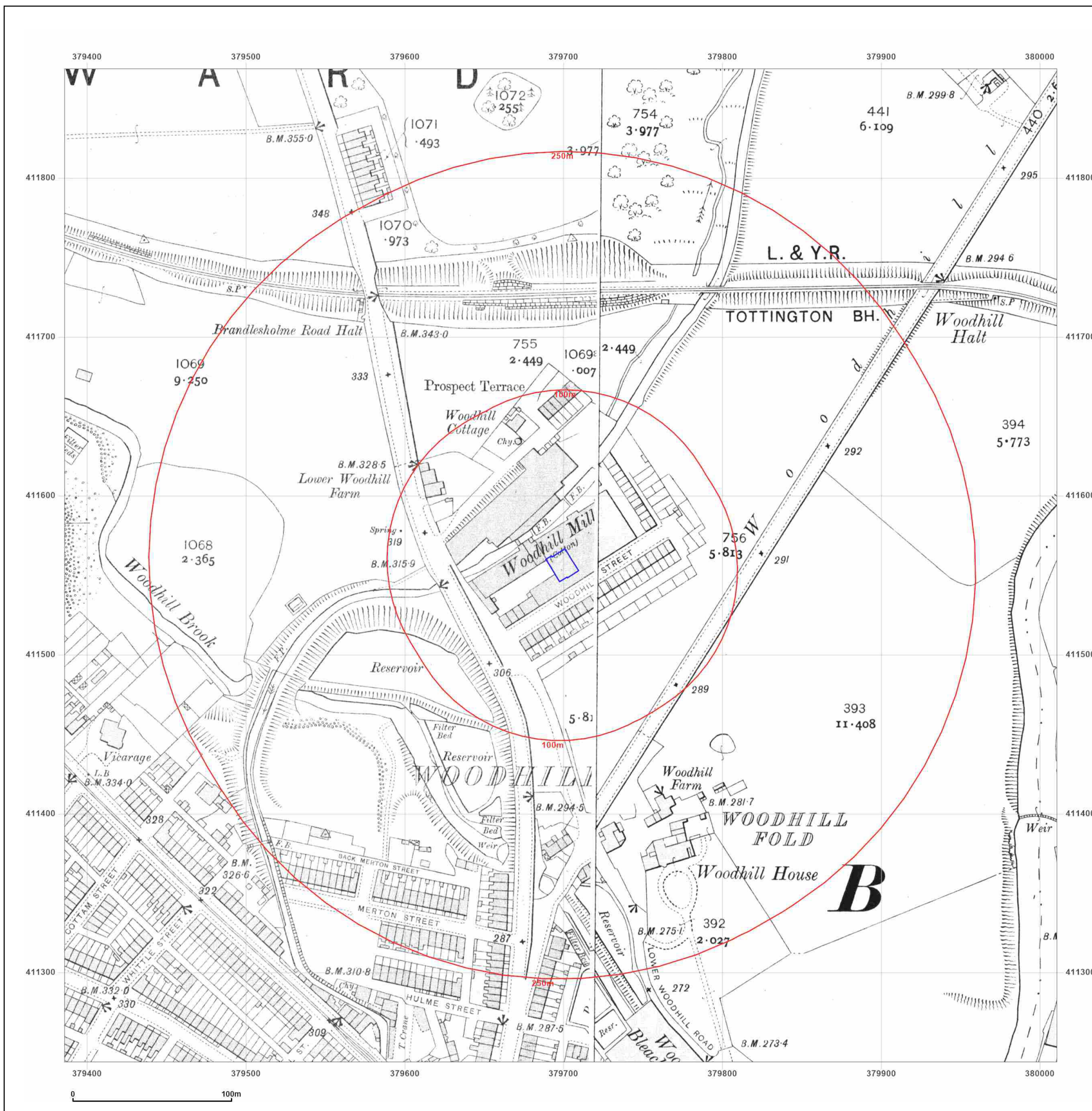


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1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: County Series

Map date: 1930

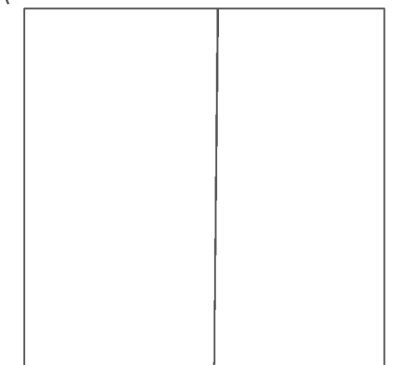
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Printed at: 1:2,500



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Edition N/A
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Edition N/A
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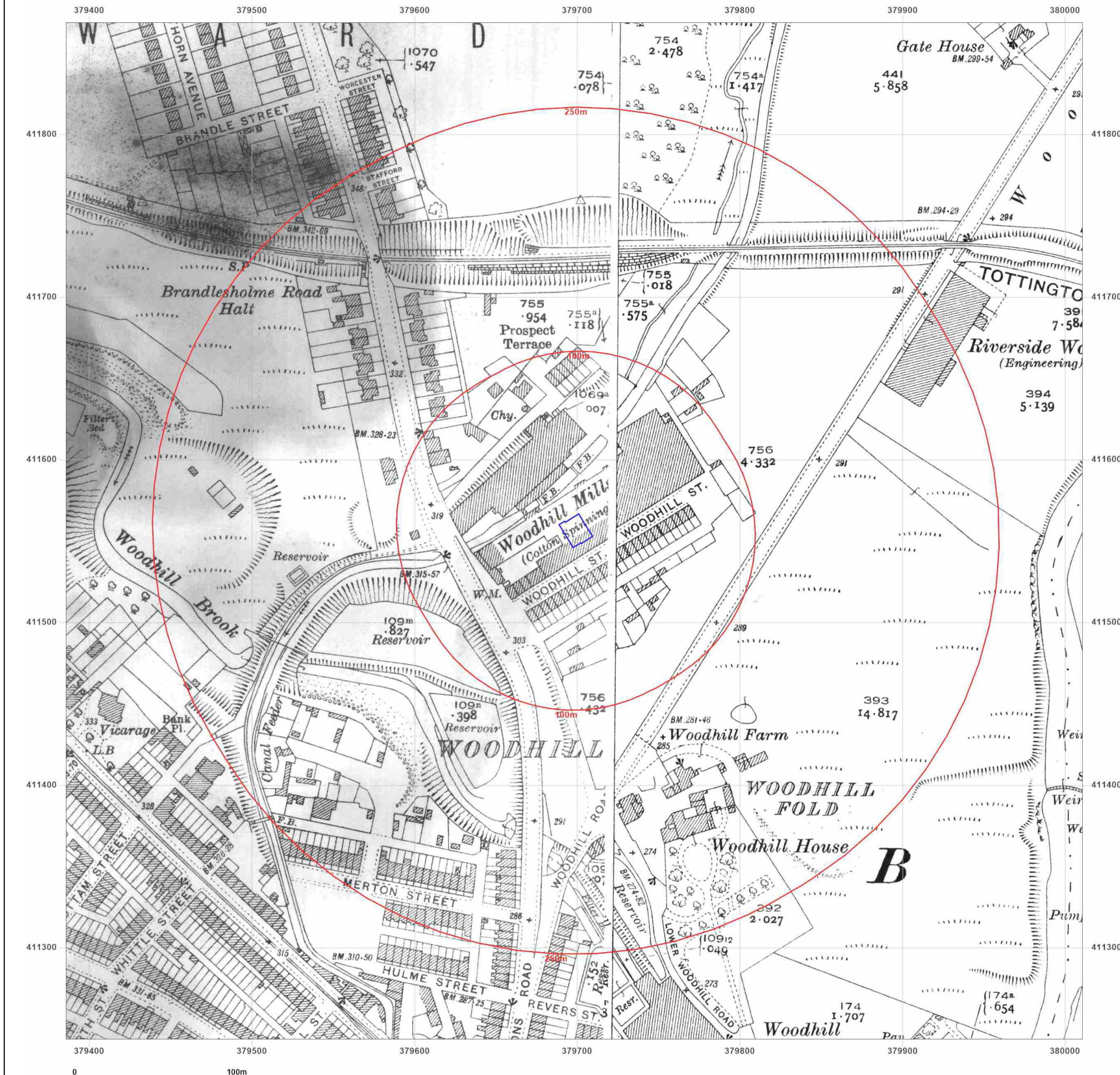


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Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
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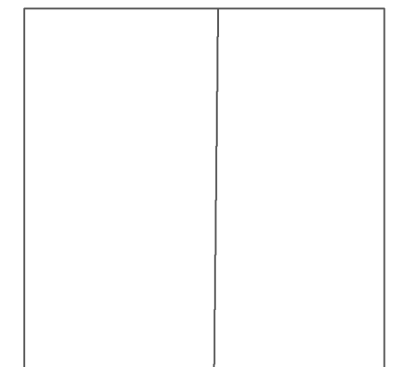
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Printed at: 1:2,500



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Edition N/A
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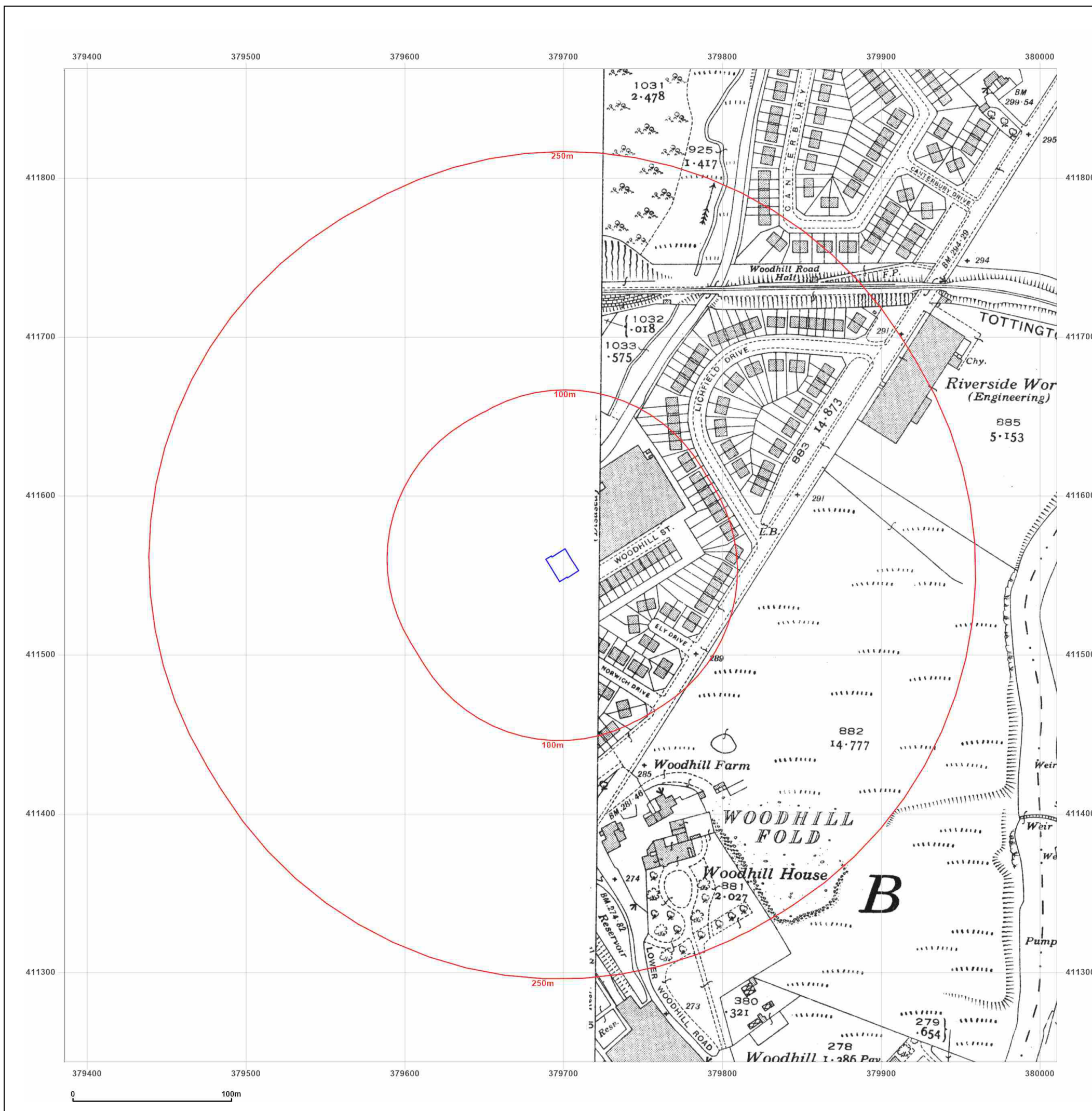


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1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1958-1959

Scale: 1:1,250

Printed at: 1:2,000



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Edition N/A
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Client Ref: C5979-5976-SD
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Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1960

Scale: 1:2,500

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Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1979-1981

Scale: 1:1,250

Printed at: 1:2,000



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Revised 1979
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Copyright 1959
Levelled 1957

Surveyed N/A
Revised 1979
Edition N/A
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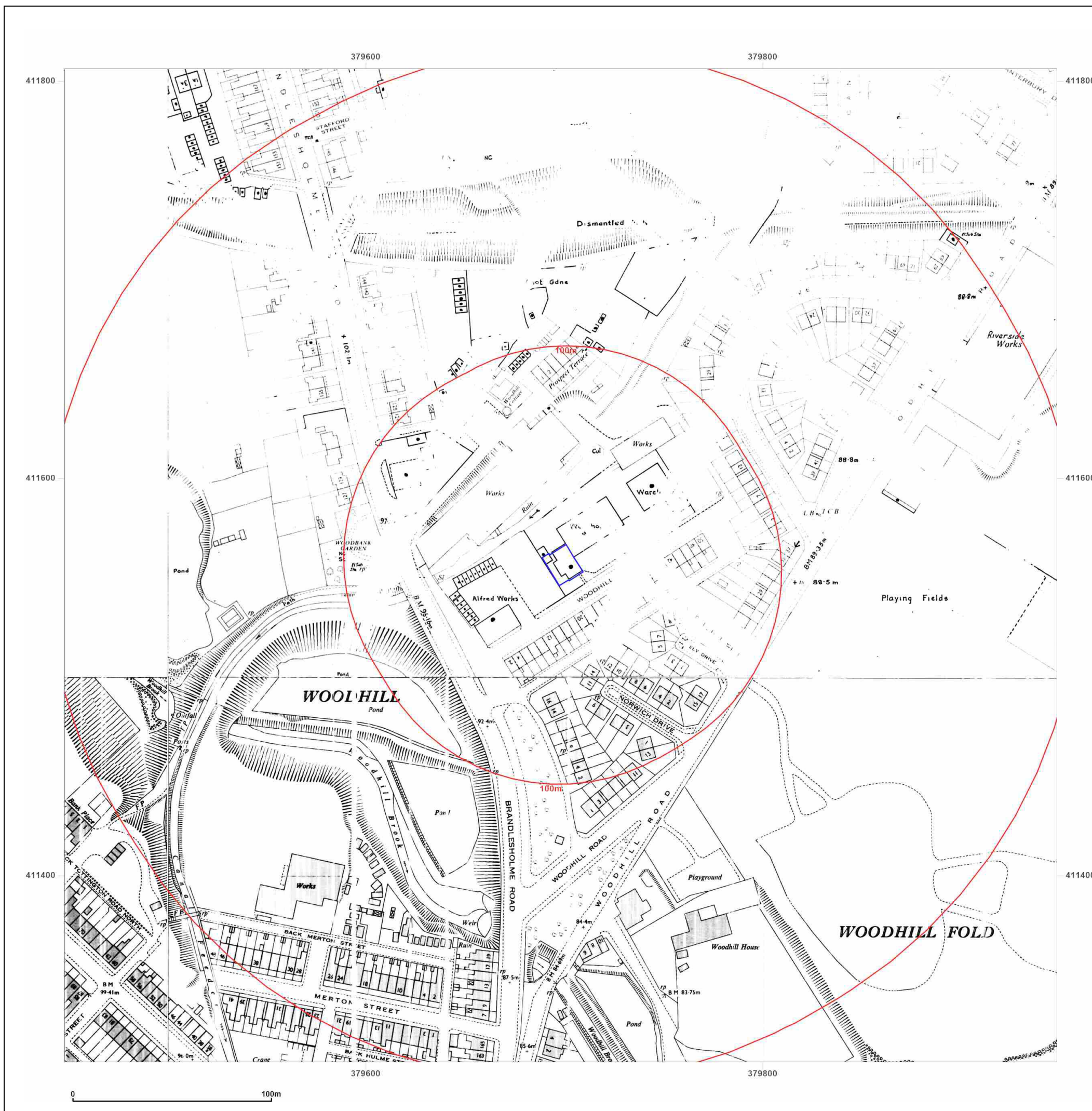


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Client Ref: C5979-5976-SD
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Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1982-1985

Scale: 1:1,250

Printed at: 1:2,000



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Levelled 1962

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1985
Levelled 1963

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1982
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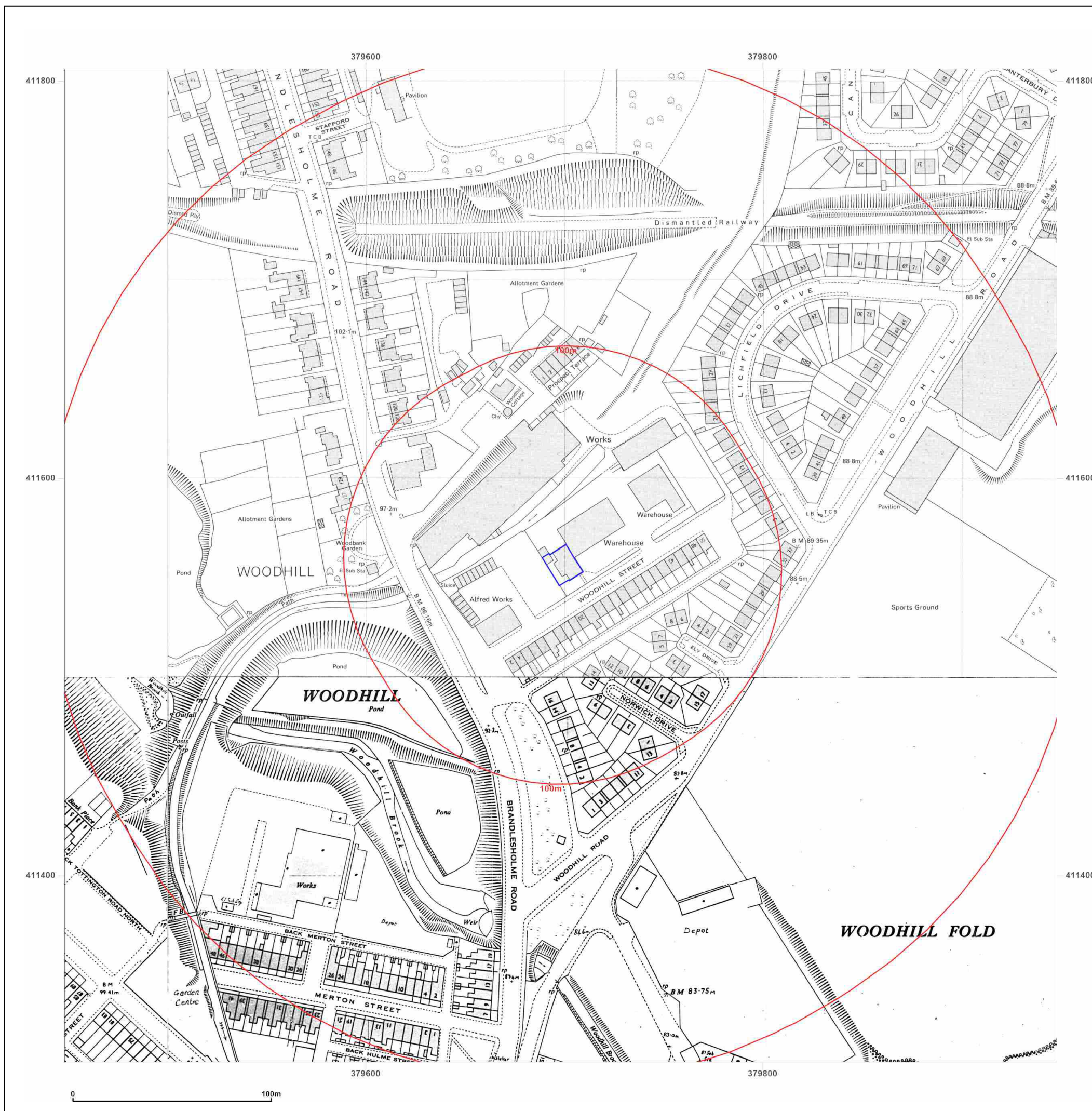


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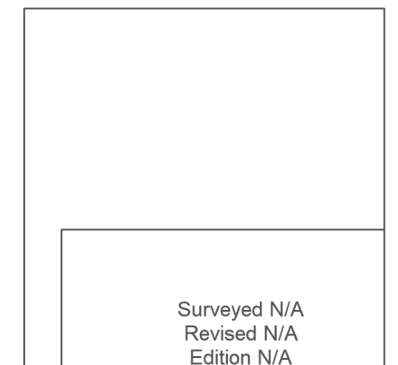
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Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1987

Scale: 1:1,250

Printed at: 1:2,000



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Revised N/A
Edition N/A
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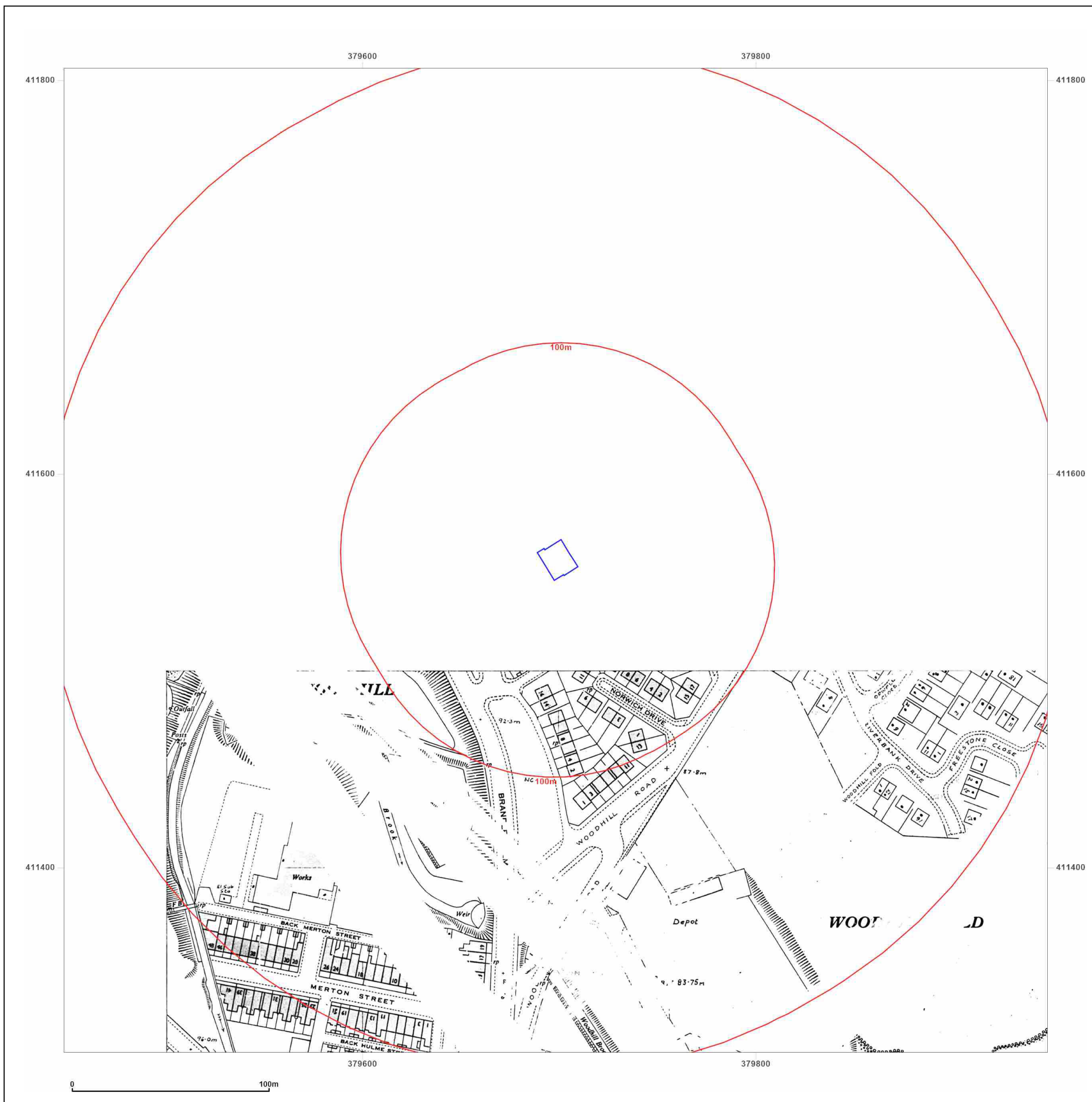


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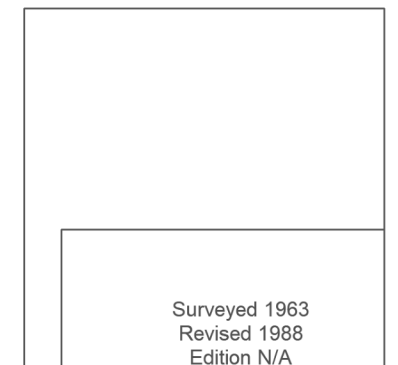
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Map date: 1988

Scale: 1:1,250

Printed at: 1:2,000



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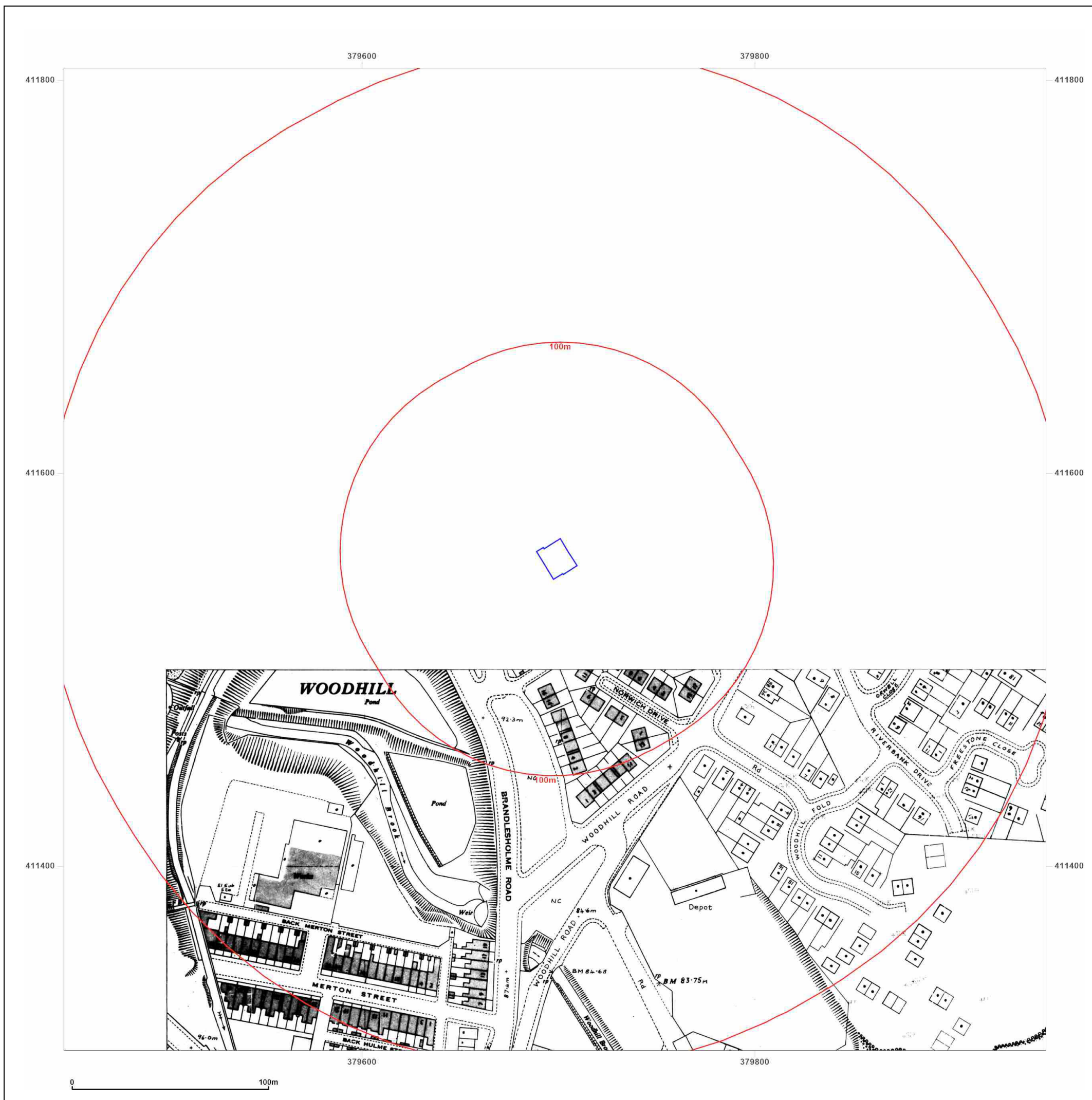


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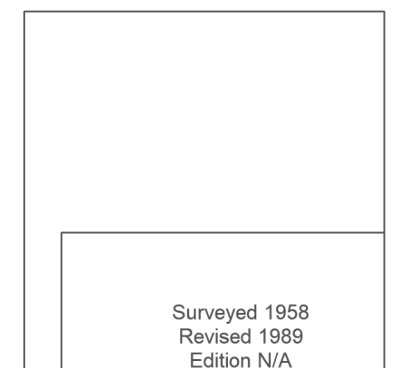
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Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1989

Scale: 1:1,250

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1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1986-1989

Scale: 1:1,250

Printed at: 1:2,000



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Surveyed 1987
Revised 1987
Edition N/A
Copyright 1987
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Surveyed 1963
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Revised N/A
Edition N/A
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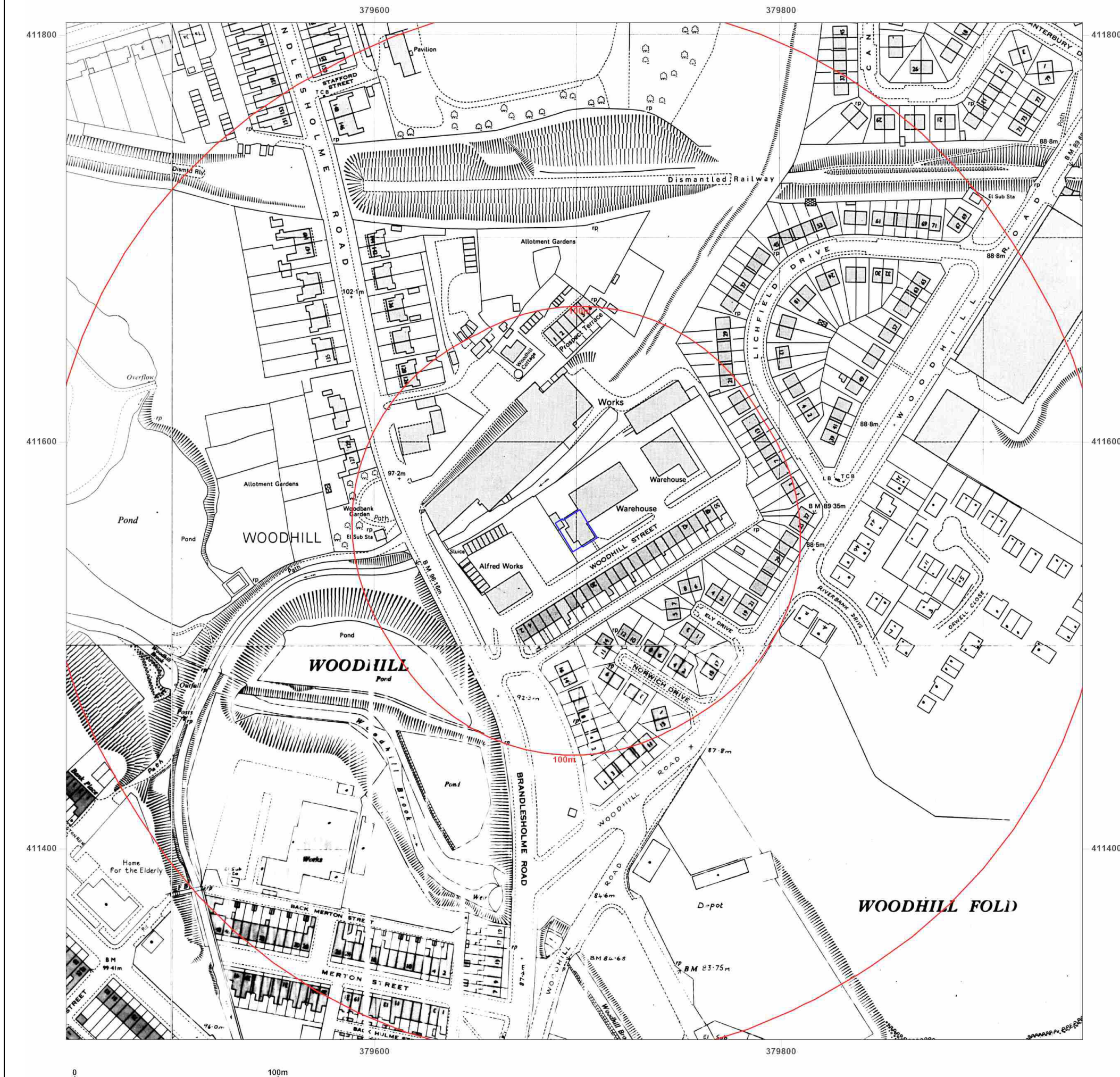


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1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1987-1992

Scale: 1:1,250

Printed at: 1:2,000



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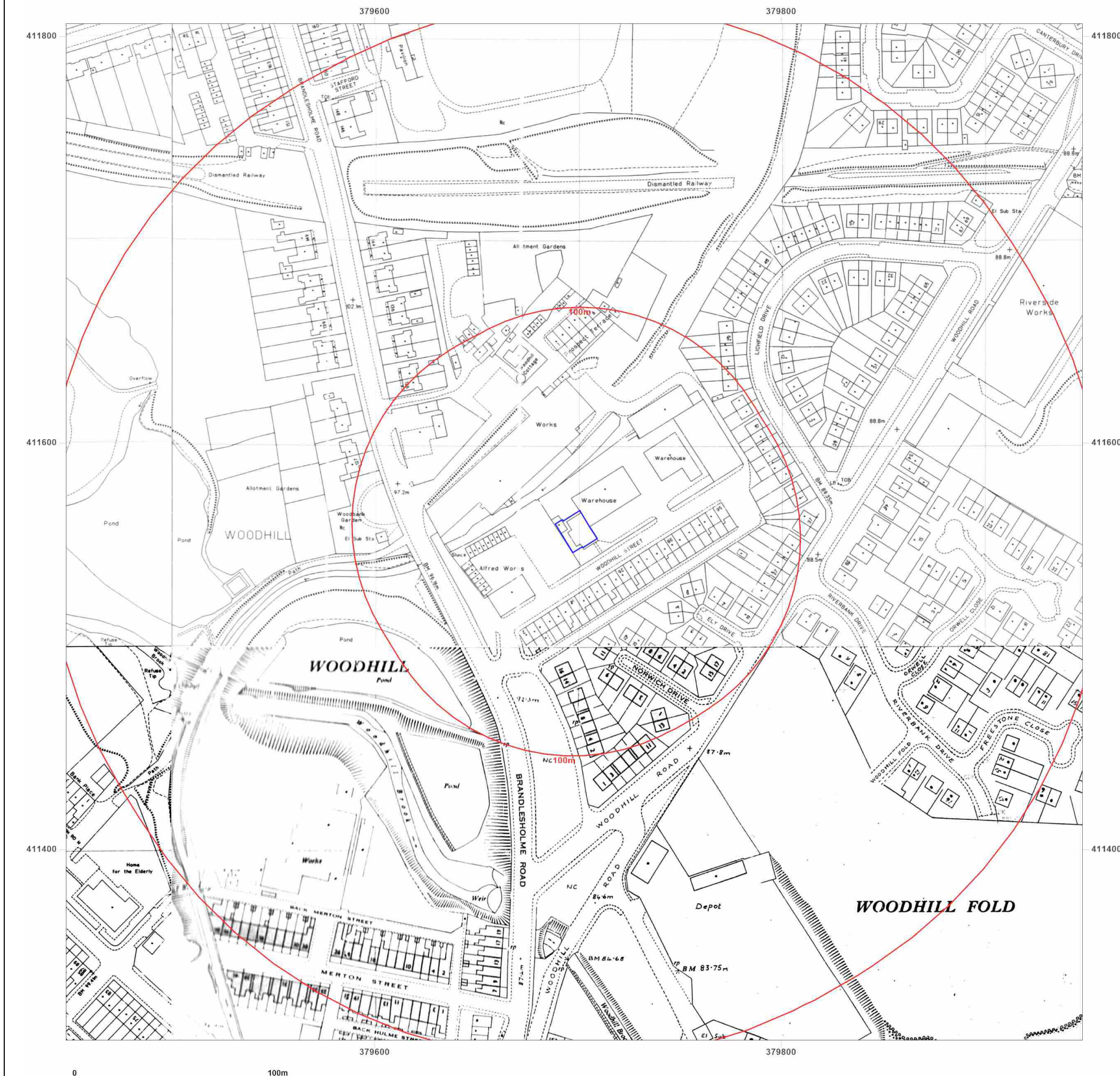


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1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1992-1995

Scale: 1:1,250

Printed at: 1:2,000



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1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



2003

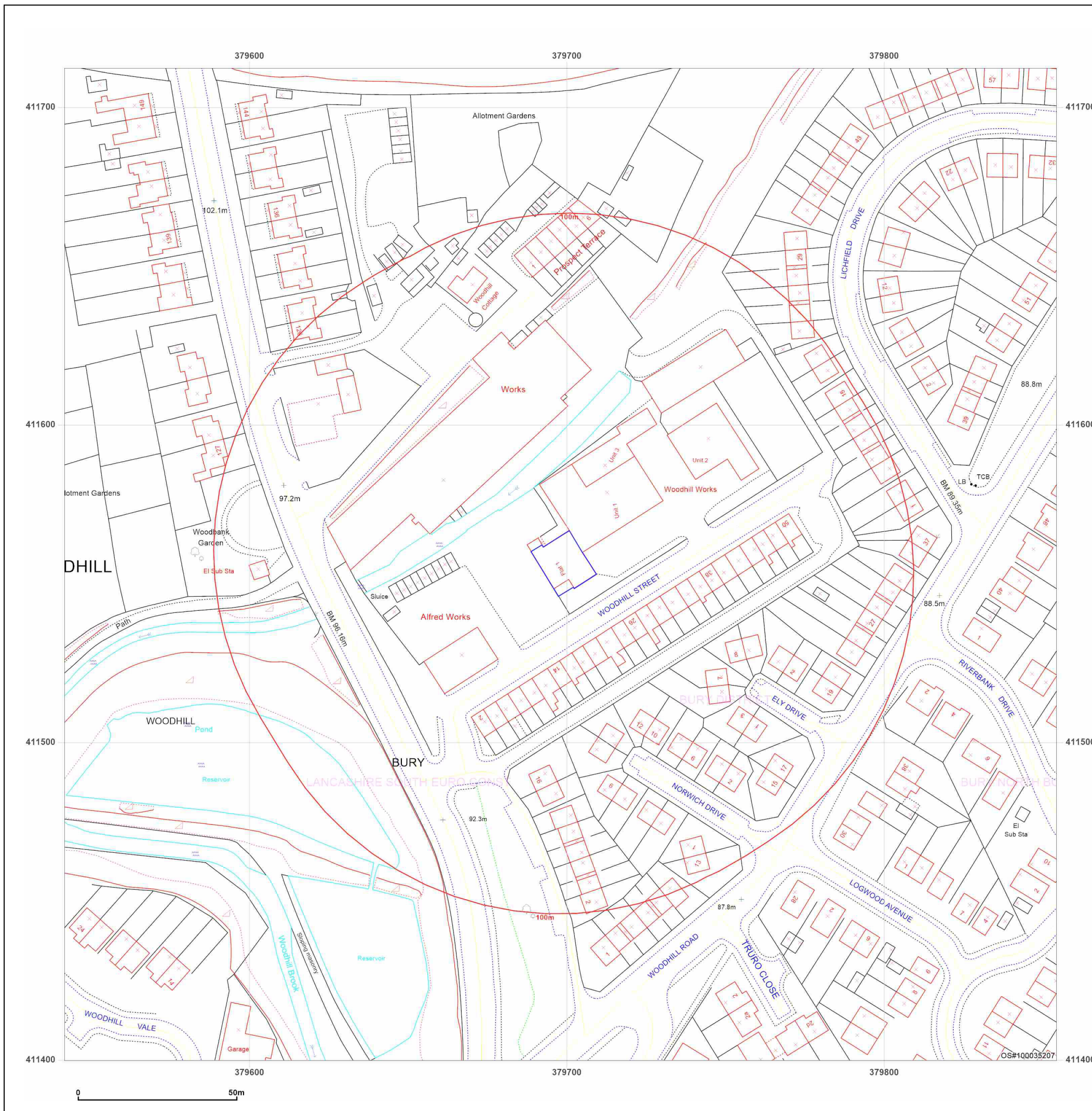


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Site Details:

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Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: County Series
Map date: 1850-1851
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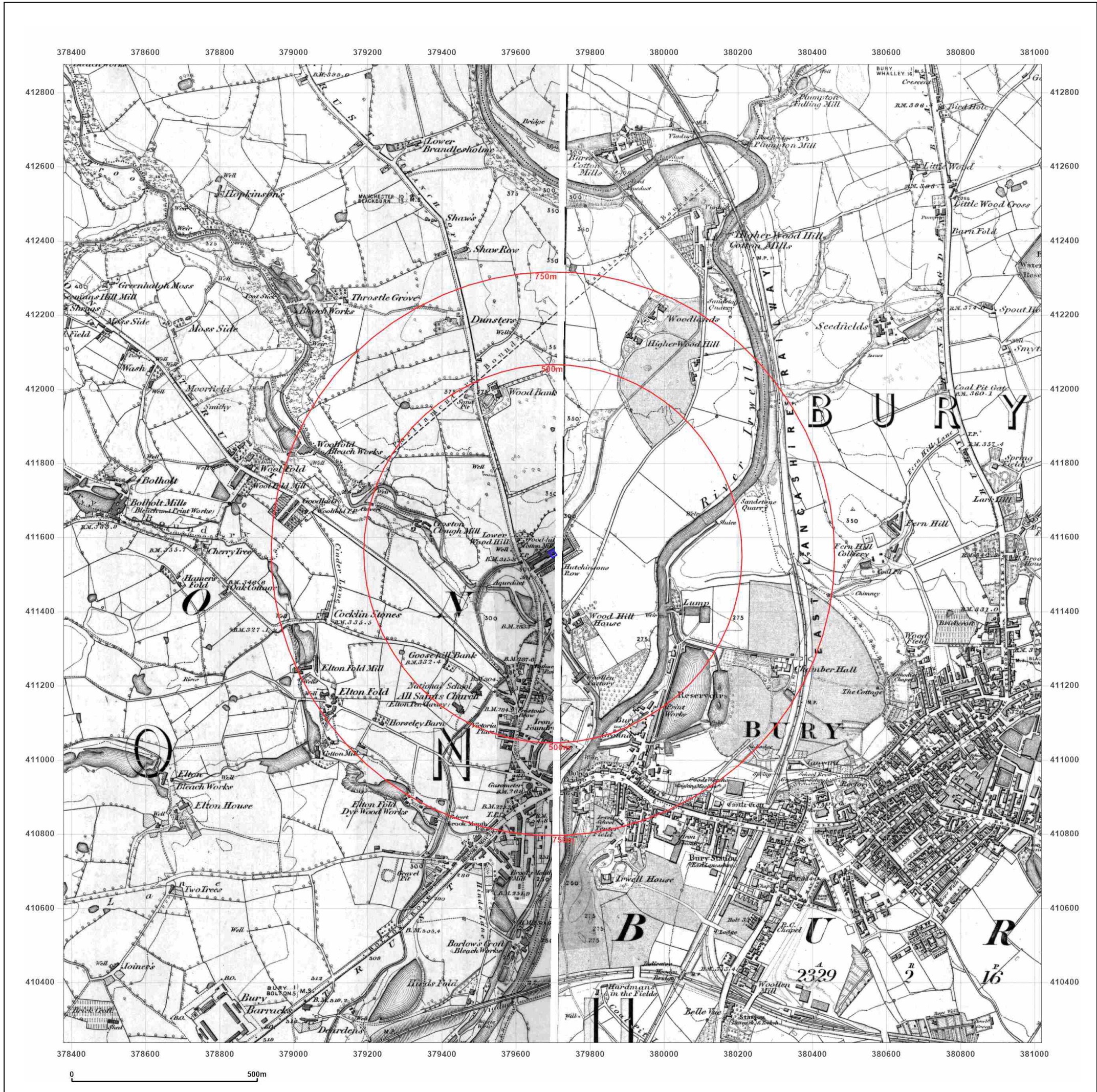


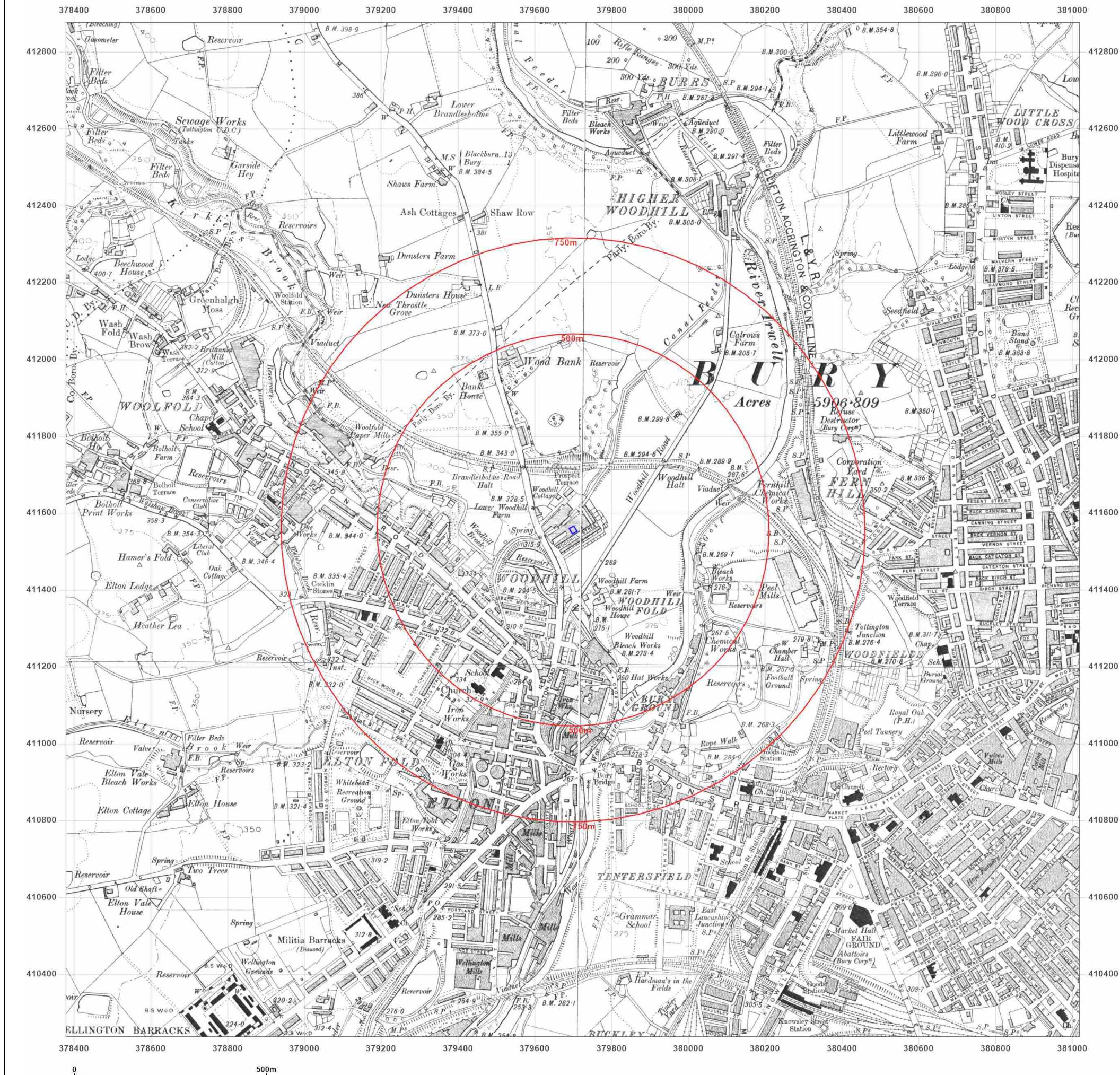
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Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: County Series

Map date: 1908-1909

Scale: 1:10,560

Printed at: 1:10,560



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Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1844
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Edition N/A
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Site Details:

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1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: County Series

Map date: 1927-1928

Scale: 1:10,560

Printed at: 1:10,560



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Revised 1928
Edition N/A
Copyright N/A
Levelled N/A

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

Surveyed 1844
Revised 1928
Edition N/A
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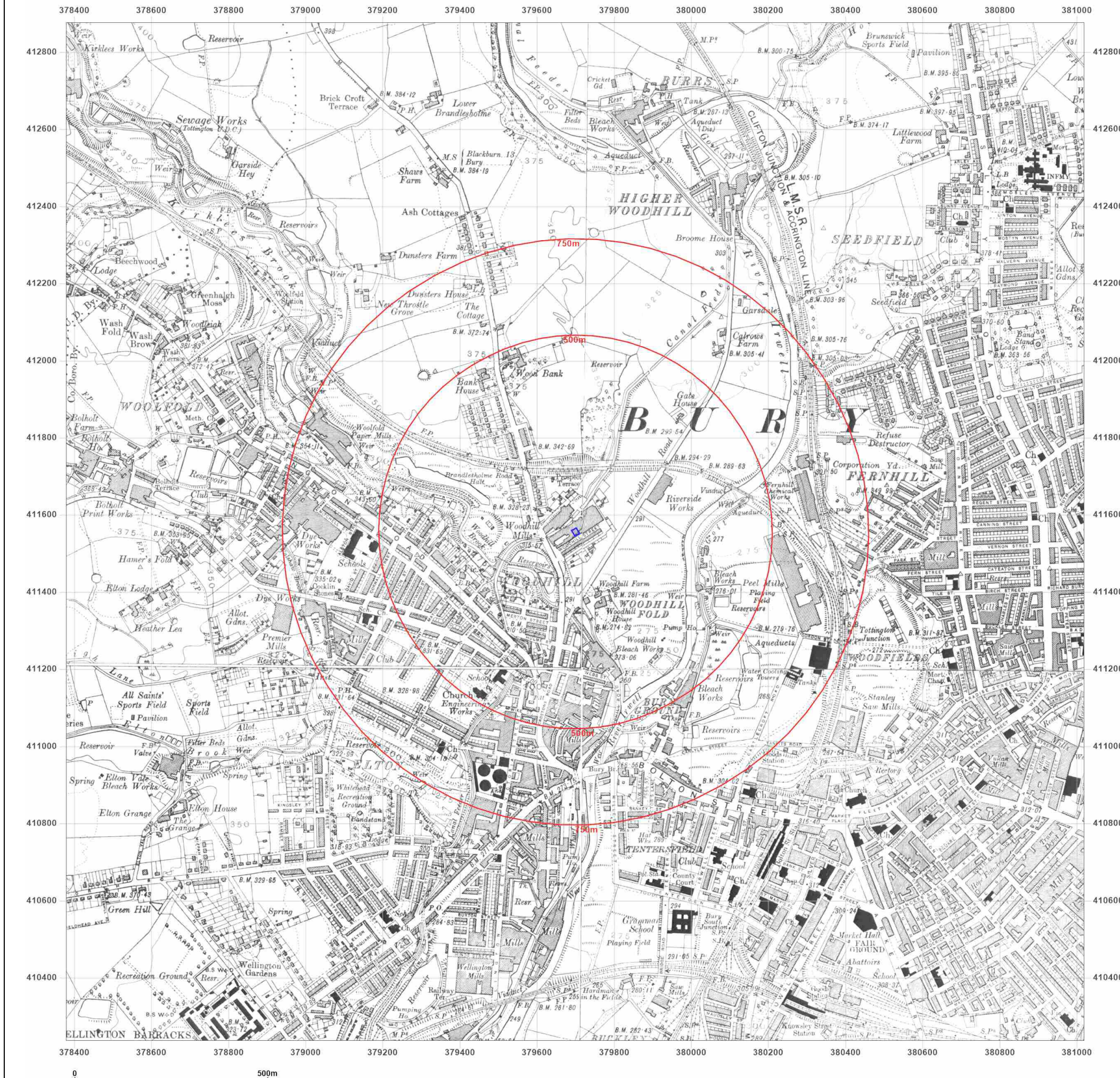


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Site Details:

WOODHILL STREET, BURY, BL8
1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1844
Revised 1938
Edition N/A
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Surveyed 1848
Revised 1938
Edition N/A
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Surveyed 1844
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Surveyed 1844
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Site Details:

WOODHILL STREET, BURY, BL8 1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: Provisional
Map date: 1956
Scale: 1:10,560
Printed at: 1:10,560



Surveyed 1949
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Site Details:

WOODHILL STREET, BURY, BL8 1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: Provisional
Map date: 1967-1969
Scale: 1:10,560
Printed at: 1:10,560

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Site Details:

WOODHILL STREET, BURY, BL8
1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 1980-1983

Scale: 1:10,000

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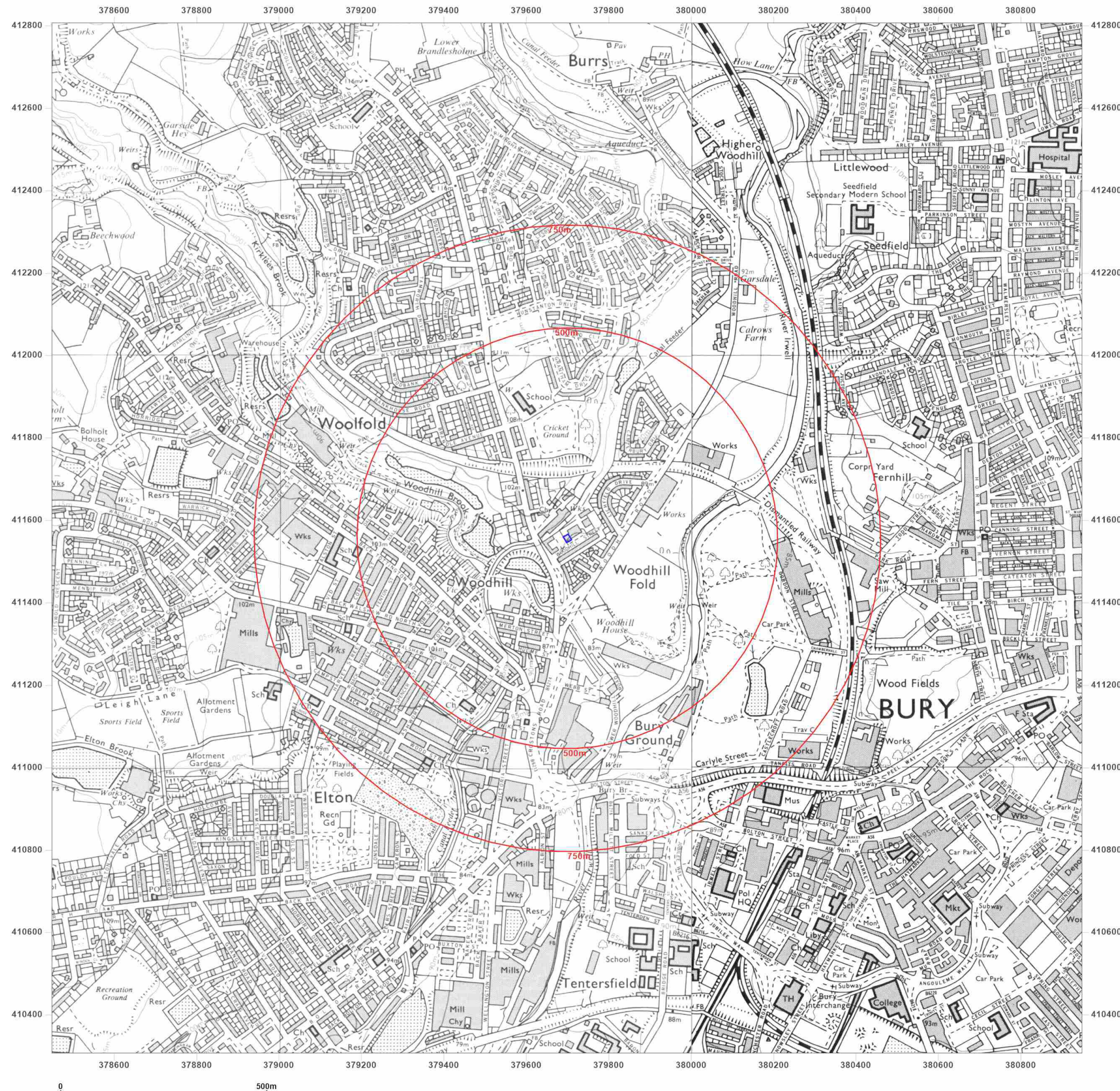


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Site Details:

WOODHILL STREET, BURY, BL8
1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



2001



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Site Details:

WOODHILL STREET, BURY, BL8
1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010

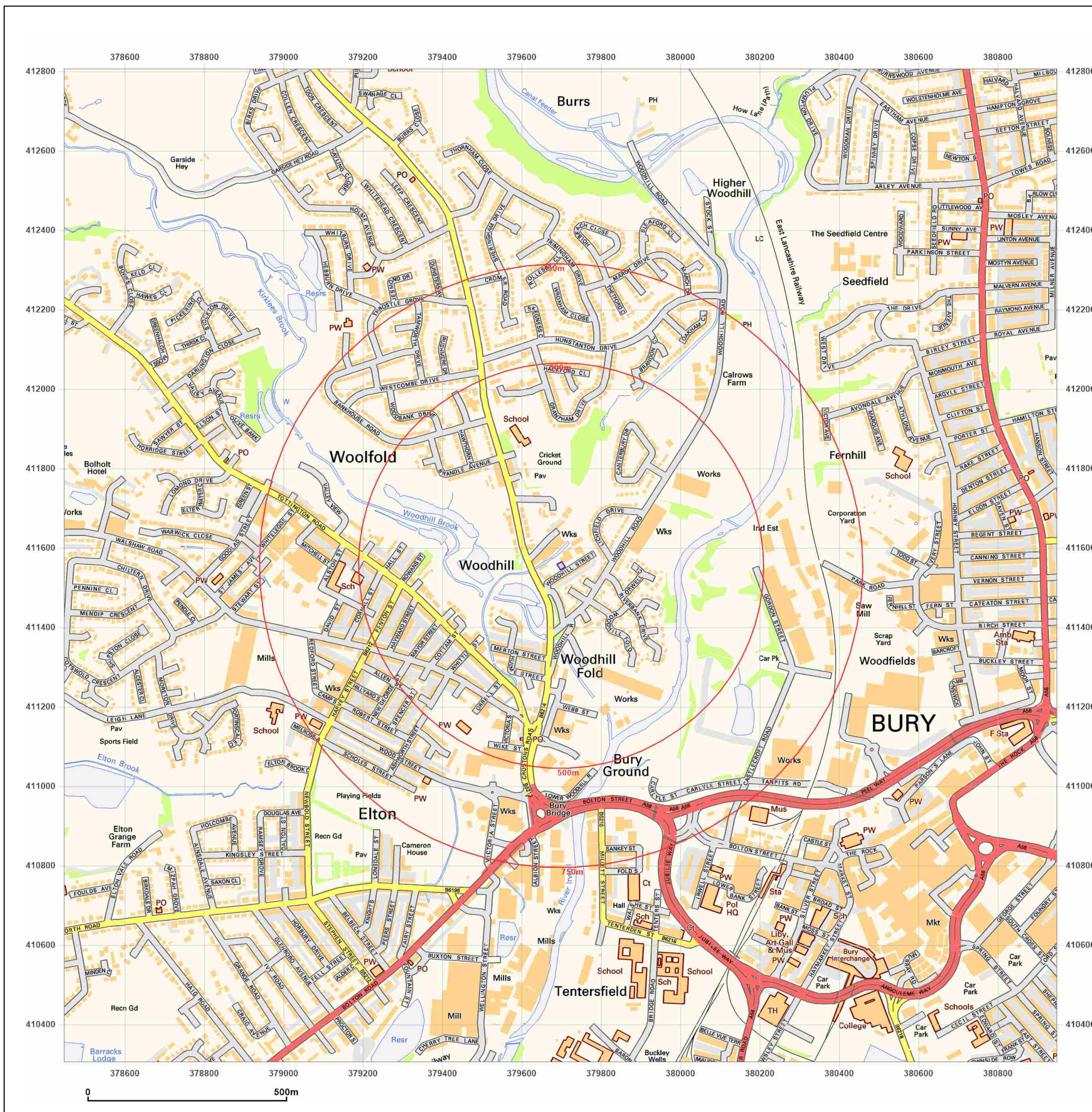


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Site Details:

WOODHILL STREET, BURY, BL8
1AT

Client Ref: C5979-5976-SD
Report Ref: GS-9XR-18U-AXK-SRF
Grid Ref: 379698, 411556

Map Name: National Grid

Map date: 2024

Scale: 1:10,000

Printed at: 1:10,000



2024

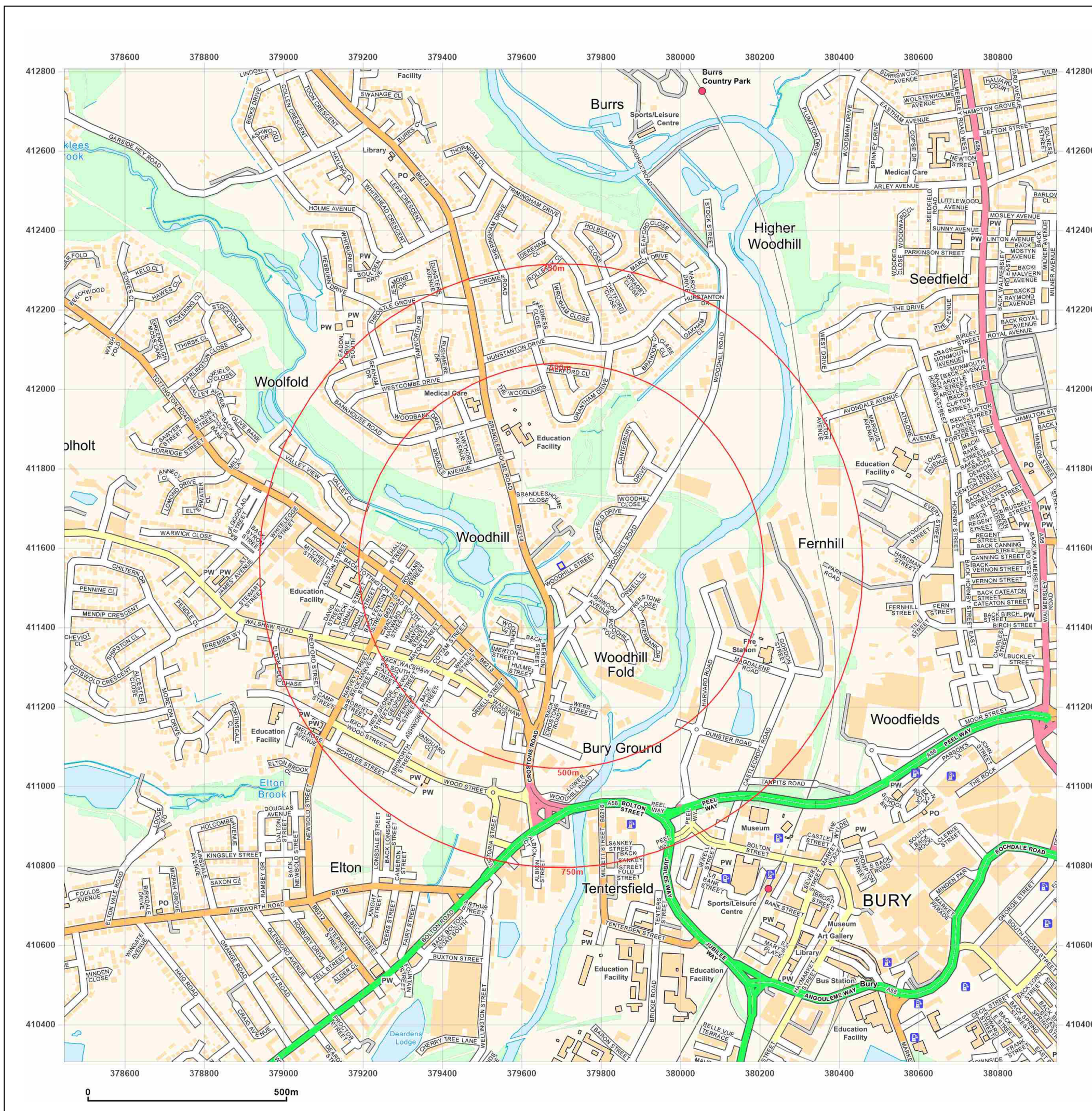


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Production date: 17 December 2024

Map legend available at:
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APPENDIX C

Geo-Environmental Data Report

WOODHILL STREET, BURY, BL8 1AT

Order Details

Date: 17/12/2024
Your ref: C5979-5976-SD
Our Ref: GS-UMT-GDN-A9N-F9R

Site Details

Location: 379698 411556
Area: 0.02 ha
Authority: [Bury Metropolitan Borough Council](#) ↗



Summary of findings

[p. 2 >](#)

Aerial image

[p. 9 >](#)

OS MasterMap site plan

[p.14 >](#)

[Insight User Guide](#) ↗

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	4	0	29	68	-
19 >	1.2 >	Historical tanks >	0	1	2	9	-
20 >	1.3 >	Historical energy features >	0	0	9	5	-
21	1.4	Historical petrol stations	0	0	0	0	-
21 >	1.5 >	Historical garages >	0	0	0	1	-
22	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
23 >	2.1 >	Historical industrial land uses >	7	0	41	90	-
29 >	2.2 >	Historical tanks >	0	1	2	15	-
30 >	2.3 >	Historical energy features >	0	0	18	6	-
31	2.4	Historical petrol stations	0	0	0	0	-
31 >	2.5 >	Historical garages >	0	0	0	2	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
32	3.1	Active or recent landfill	0	0	0	0	-
32	3.2	Historical landfill (BGS records)	0	0	0	0	-
33 >	3.3 >	Historical landfill (LA/mapping records) >	0	0	1	0	-
33 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	3	0	-
34 >	3.5 >	Historical waste sites >	0	0	0	1	-
34	3.6	Licensed waste sites	0	0	0	0	-
34 >	3.7 >	Waste exemptions >	0	0	4	8	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
36 >	4.1 >	Recent industrial land uses >	0	3	13	-	-
38 >	4.2 >	Current or recent petrol stations >	0	0	1	0	-
38	4.3	Electricity cables	0	0	0	0	-
38	4.4	Gas pipelines	0	0	0	0	-
38	4.5	Sites determined as Contaminated Land	0	0	0	0	-



38 >	4.6 >	Control of Major Accident Hazards (COMAH) >	0	0	0	1	-
39	4.7	Regulated explosive sites	0	0	0	0	-
39 >	4.8 >	Hazardous substance storage/usage >	0	0	0	1	-
39	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
40 >	4.10 >	Licensed industrial activities (Part A(1)) >	0	0	0	1	-
40 >	4.11 >	Licensed pollutant release (Part A(2)/B) >	0	0	2	0	-
41	4.12	Radioactive Substance Authorisations	0	0	0	0	-
41 >	4.13 >	Licensed Discharges to controlled waters >	0	0	5	4	-
42	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
42	4.15	Pollutant release to public sewer	0	0	0	0	-
43	4.16	List 1 Dangerous Substances	0	0	0	0	-
43	4.17	List 2 Dangerous Substances	0	0	0	0	-
43 >	4.18 >	Pollution Incidents (EA/NRW) >	0	0	5	3	-
44	4.19	Pollution inventory substances	0	0	0	0	-
44	4.20	Pollution inventory waste transfers	0	0	0	0	-
45	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
46 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
48 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
50 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
51	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
51	5.5	Groundwater vulnerability- local information	None (within 0m)				
52 >	5.6 >	Groundwater abstractions >	0	0	0	0	7
54 >	5.7 >	Surface water abstractions >	0	0	4	1	15
59	5.8	Potable abstractions	0	0	0	0	0
59	5.9	Source Protection Zones	0	0	0	0	-
60	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
61 >	6.1 >	Water Network (OS MasterMap) >	0	1	11	-	-



63 >	6.2 >	Surface water features >	0	1	7	-	-
63 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
63 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
64 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
65	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
65	7.2	Historical Flood Events	0	0	0	-	-
65	7.3	Flood Defences	0	0	0	-	-
66	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
66	7.5	Flood Storage Areas	0	0	0	-	-
67	7.6	Flood Zone 2	None (within 50m)				
67	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
68 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
70 >	9.1 >	Groundwater flooding >	Moderate (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
71	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
72	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
72	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
72	10.4	Special Protection Areas (SPA)	0	0	0	0	0
72	10.5	National Nature Reserves (NNR)	0	0	0	0	0
73 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	5
73	10.7	Designated Ancient Woodland	0	0	0	0	0
73	10.8	Biosphere Reserves	0	0	0	0	0
74	10.9	Forest Parks	0	0	0	0	0
74	10.10	Marine Conservation Zones	0	0	0	0	0
74 >	10.11 >	Green Belt >	0	0	0	1	1
74	10.12	Proposed Ramsar sites	0	0	0	0	0



75	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
75	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
75	10.15	Nitrate Sensitive Areas	0	0	0	0	0
75	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
76 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
77	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
78	11.1	World Heritage Sites	0	0	0	-	-
78	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
78	11.3	National Parks	0	0	0	-	-
78	11.4	Listed Buildings	0	0	0	-	-
79	11.5	Conservation Areas	0	0	0	-	-
79	11.6	Scheduled Ancient Monuments	0	0	0	-	-
79	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
80 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
81	12.2	Open Access Land	0	0	0	-	-
81	12.3	Tree Felling Licences	0	0	0	-	-
81	12.4	Environmental Stewardship Schemes	0	0	0	-	-
81	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
82 >	13.1 >	Priority Habitat Inventory >	0	0	17	-	-
83	13.2	Habitat Networks	0	0	0	-	-
83 >	13.3 >	Open Mosaic Habitat >	0	0	1	-	-
84	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
85 >	14.1 >	10k Availability >	Identified (within 500m)				
86 >	14.2 >	Artificial and made ground (10k) >	0	1	4	5	-
88 >	14.3 >	Superficial geology (10k) >	1	2	2	7	-



89	14.4	Landslip (10k)	0	0	0	0	-
90 >	14.5 >	Bedrock geology (10k) >	1	1	4	9	-
91 >	14.6 >	Bedrock faults and other linear features (10k) >	0	0	2	8	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
93 >	15.1 >	50k Availability >	Identified (within 500m)				
94 >	15.2 >	Artificial and made ground (50k) >	0	0	0	1	-
95	15.3	Artificial ground permeability (50k)	0	0	-	-	-
96 >	15.4 >	Superficial geology (50k) >	1	2	1	6	-
97 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
97	15.6	Landslip (50k)	0	0	0	0	-
98	15.7	Landslip permeability (50k)	None (within 50m)				
99 >	15.8 >	Bedrock geology (50k) >	1	1	4	3	-
100 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
100 >	15.10 >	Bedrock faults and other linear features (50k) >	0	0	2	5	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
102 >	16.1 >	BGS Boreholes >	0	0	7	-	-
Page	Section	Natural ground subsidence >					
104 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
105 >	17.2 >	Running sands >	Very low (within 50m)				
106 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
107 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
108 >	17.5 >	Landslides >	Very low (within 50m)				
109 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
111 >	18.1 >	BritPits >	0	0	0	1	-
112 >	18.2 >	Surface ground workings >	0	4	53	-	-
114 >	18.3 >	Underground workings >	0	0	0	0	3
115	18.4	Underground mining extents	0	0	0	0	-
115	18.5	Historical Mineral Planning Areas	0	0	0	0	-

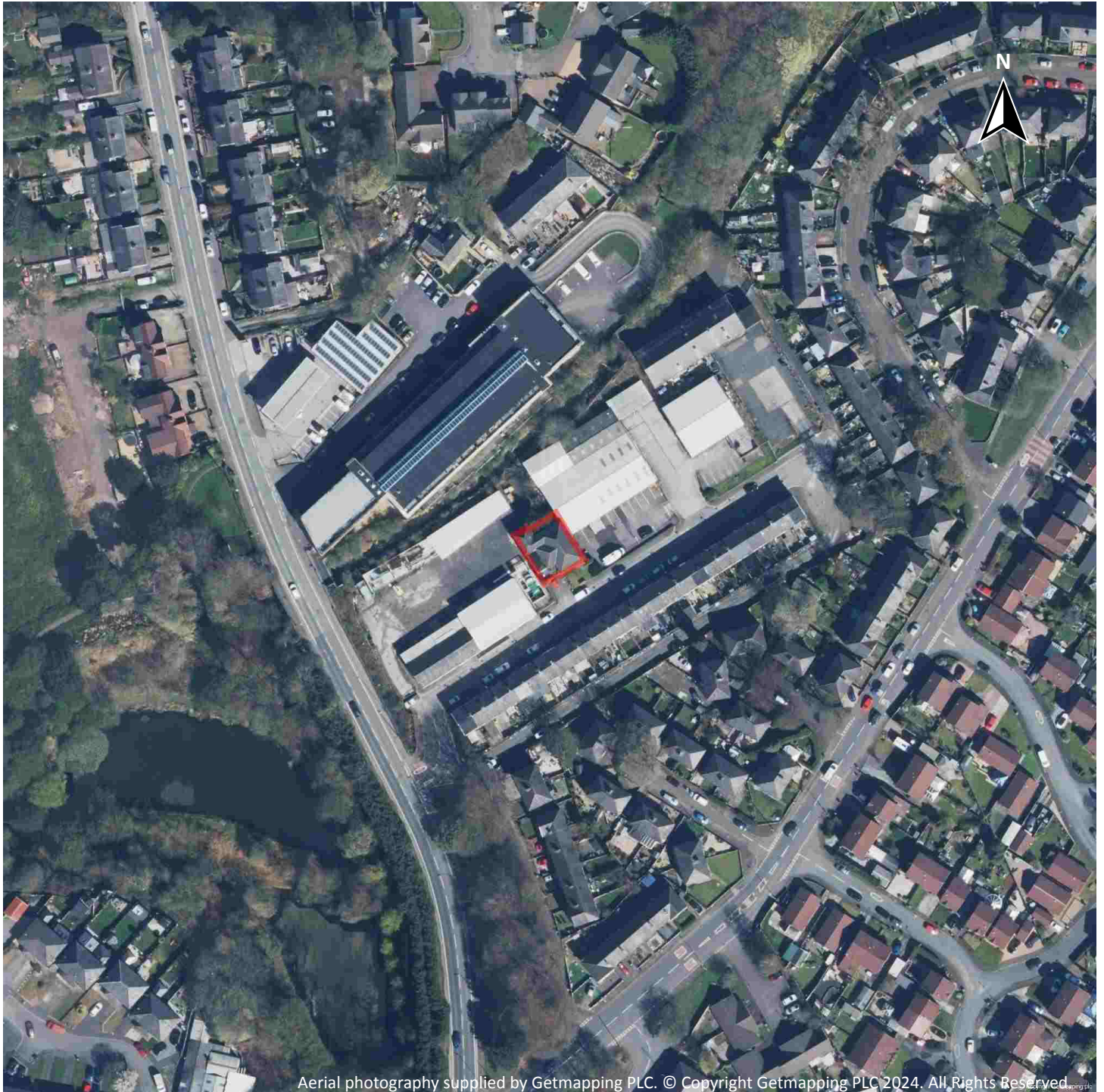


115	18.6	Non-coal mining	0	0	0	0	0
115	18.7	JPB mining areas	None (within 0m)				
115	18.8	The Coal Authority non-coal mining	0	0	0	0	-
116	18.9	Researched mining	0	0	0	0	-
116	18.10	Mining record office plans	0	0	0	0	-
116	18.11	BGS mine plans	0	0	0	0	-
116 >	18.12 >	Coal mining >	Identified (within 0m)				
117	18.13	Brine areas	None (within 0m)				
117	18.14	Gypsum areas	None (within 0m)				
117	18.15	Tin mining	None (within 0m)				
117	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
118	19.1	Natural cavities	0	0	0	0	-
118	19.2	Mining cavities	0	0	0	0	0
118	19.3	Reported recent incidents	0	0	0	0	-
118	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
120 >	20.1 >	Radon >	Between 1% and 3% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
122 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	3	-	-	-
122	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
123	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
124	22.1	Underground railways (London)	0	0	0	-	-
124	22.2	Underground railways (Non-London)	0	0	0	-	-
125	22.3	Railway tunnels	0	0	0	-	-
125 >	22.4 >	Historical railway and tunnel features >	0	0	2	-	-
125	22.5	Royal Mail tunnels	0	0	0	-	-
125 >	22.6 >	Historical railways >	0	0	1	-	-



126	22.7	Railways	0	0	0	-	-
126	22.8	Crossrail 2	0	0	0	0	-
126	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 07/04/2023

Site Area: 0.02ha



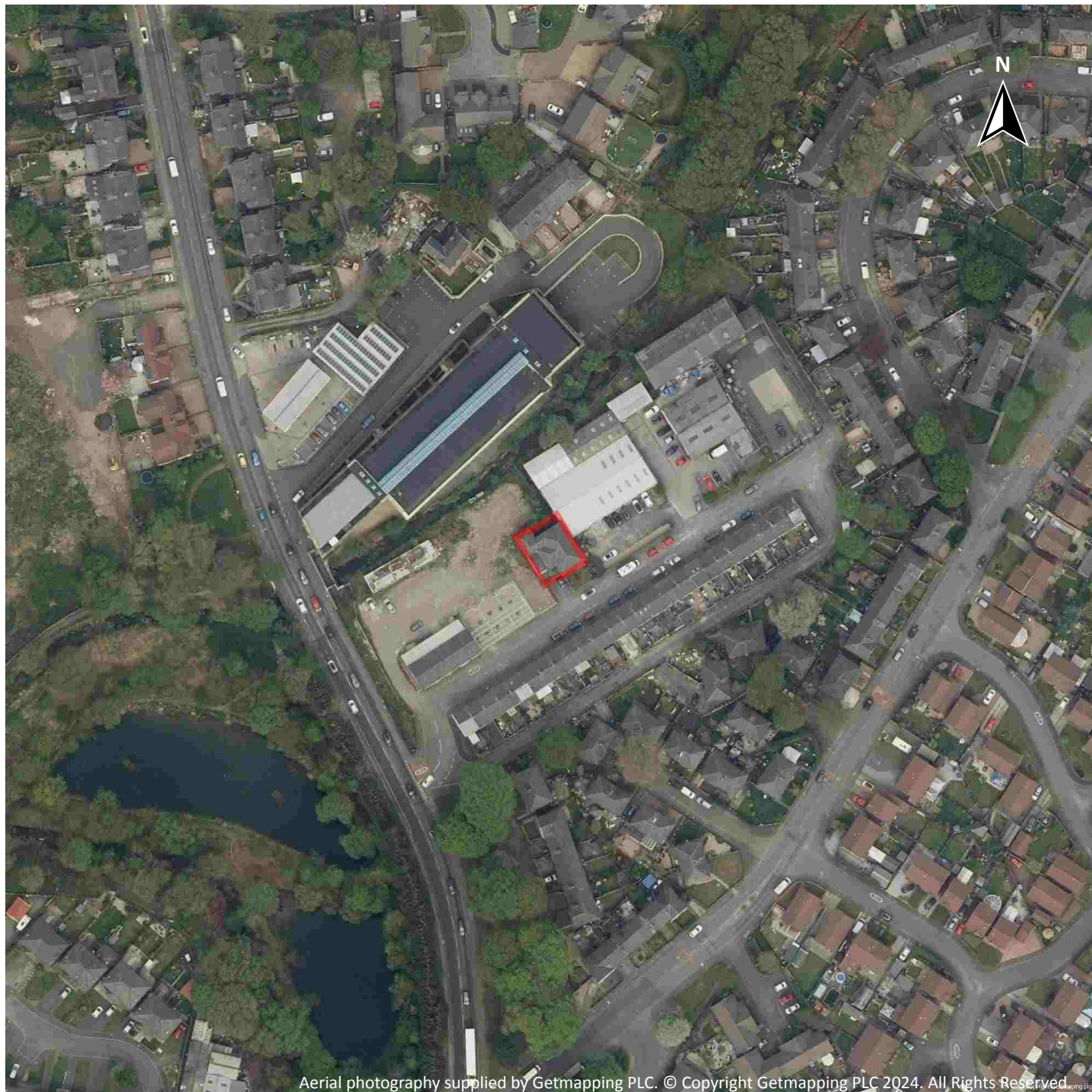
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info@groundsure.com ↗

01273 257 755

Date: 17 December 2024

Recent site history - 2019 aerial photograph



Capture Date: 23/05/2019

Site Area: 0.02ha



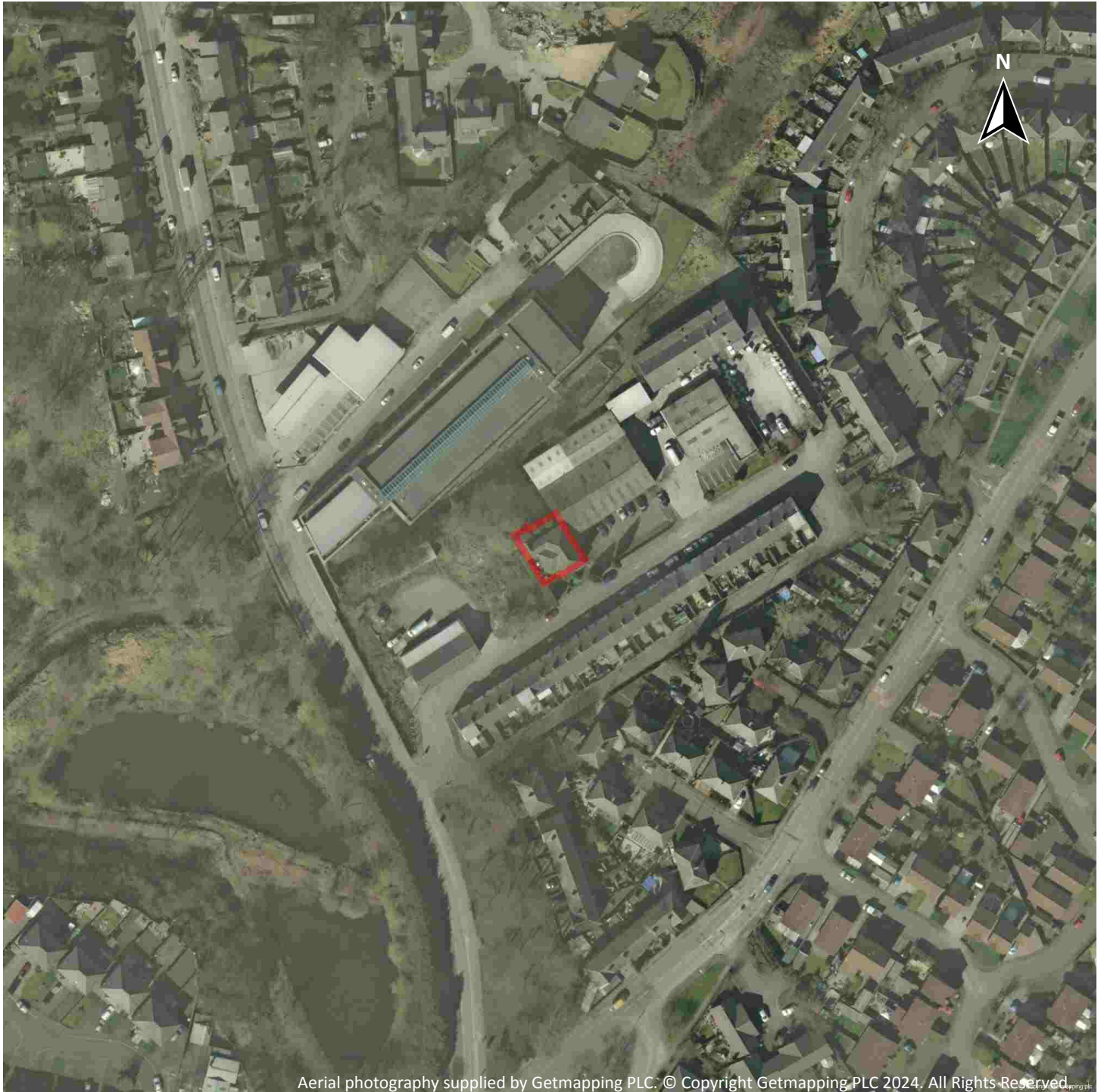
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01273 257 755

Date: 17 December 2024

Recent site history - 2011 aerial photograph



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Capture Date: 02/05/2011

Site Area: 0.02ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 17 December 2024

Recent site history - 2001 aerial photograph



Capture Date: 07/05/2001

Site Area: 0.02ha



Contact us with any questions at:

info@groundsure.com

01273 257 755

Date: 17 December 2024

Recent site history - 2000 aerial photograph



Capture Date: 27/06/2000

Site Area: 0.02ha



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info@groundsure.com ↗

01273 257 755

Date: 17 December 2024

OS MasterMap site plan



Site Area: 0.02ha



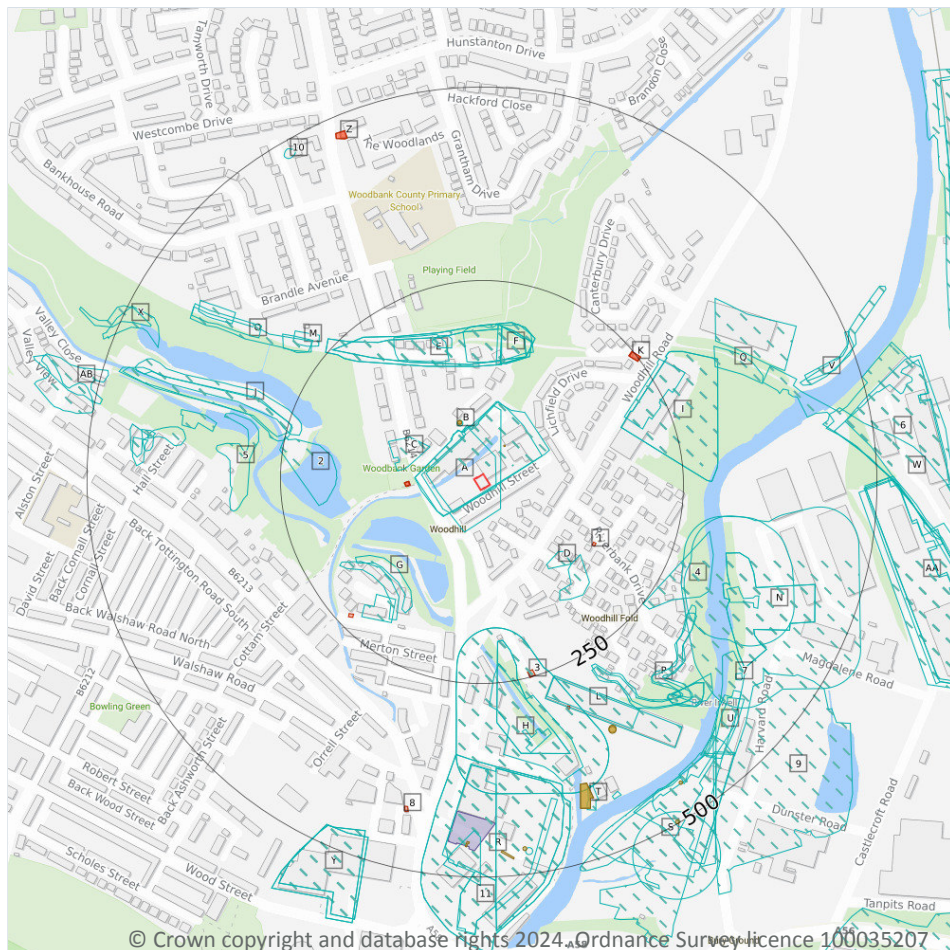
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01273 257 755

Date: 17 December 2024

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

101

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

Features are displayed on the Past land use map on [page 15](#) >

ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Mills	1928	707390



ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Works	1969 - 1980	709485
A	On site	Unspecified Mills	1938 - 1956	737898
A	On site	Unspecified Mills	1891	779590
B	69m N	Chimney	1969 - 1980	721005
C	71m NW	Cotton Mill	1850	654739
D	124m SE	Unspecified Pit	1891	675626
E	139m N	Cuttings	1909 - 1928	738513
E	139m N	Cuttings	1891	779638
F	142m N	Cuttings	1938	748557
E	143m N	Cuttings	1974	755857
E	143m N	Cuttings	1980	769335
F	144m N	Cuttings	1956	805597
F	145m N	Cuttings	1928	755463
F	145m N	Cuttings	1908	792985
D	147m SE	Unspecified Heap	1891	688637
G	147m SW	Refuse Heap	1956	784301
E	153m N	Cuttings	1956	779212
G	164m SW	Refuse Heap	1928	741500
E	168m N	Unspecified Pit	1938	675627
2	177m W	Unspecified Pit	1928 - 1938	730587
H	179m S	Bleach and Dye works	1891	665936
H	179m S	Unspecified Commercial/Industrial	1938	727608
G	179m SW	Unspecified Works	1969 - 1980	722984
I	185m E	Unspecified Works	1956	743135
I	185m E	Unspecified Works	1969 - 1980	805453
I	195m NE	Unspecified Works	1928 - 1938	729066
H	196m S	Bleach Works	1908	708620
H	196m S	Bleach Works	1928	737850



ID	Location	Land use	Dates present	Group ID
H	226m S	Unspecified Commercial/Industrial	1956 - 1974	778626
J	232m W	Refuse Heap	1956	736116
J	244m W	Sand Pit	1938	674116
J	246m W	Refuse Heap	1928	707395
4	251m SE	Unspecified Heap	1956	688428
L	258m S	Unspecified Works	1969 - 1974	707206
L	260m S	Unspecified Works	1980	741662
M	264m NW	Cuttings	1956	792241
N	264m E	Bleach Works	1938	799748
O	267m NW	Cuttings	1909	748155
P	268m SE	Refuse Heap	1969	725313
M	270m NW	Cuttings	1928	764700
P	272m SE	Refuse Heap	1974 - 1980	716143
N	273m E	Bleach Works	1908 - 1928	713029
5	282m W	Refuse Heap	1909	656159
H	315m S	Unspecified Factory	1851	705187
N	318m E	Unspecified Commercial/Industrial	1967	670578
N	318m E	Bleach Works	1956	722497
Q	329m NE	Unspecified Ground Workings	1983	660076
O	333m NW	Cuttings	1891	777355
N	334m SE	Bleach Works	1891	770775
J	340m W	Unspecified Mill	1850	673538
R	343m S	Unspecified Commercial/Industrial	1974 - 1980	735185
R	343m S	Unspecified Mills	1956 - 1969	797421
Q	346m NE	Unspecified Works	1983	683153
R	354m S	Unspecified Mills	1927 - 1938	759402
R	355m S	Iron Works	1908	655394
P	356m SE	Unspecified Ground Workings	1908	660988



ID	Location	Land use	Dates present	Group ID
P	356m SE	Unspecified Heap	1891	766145
P	356m SE	Unspecified Heap	1938	771879
P	360m SE	Unspecified Heap	1956	801445
R	360m S	Unspecified Commercial/Industrial	1908	792539
O	371m NW	Cuttings	1956	710281
S	373m SE	Print Works	1851	663590
J	376m W	Refuse Heap	1909	656158
6	377m E	Railway Sidings	1938	804329
7	401m SE	Pump House	1928 - 1938	782095
U	407m SE	Chemical Works	1908	804206
T	407m S	Unspecified Tanks	1956	666677
R	408m S	Disused Canal	1928 - 1938	799362
U	412m SE	Chemical Works	1891	752047
J	416m W	Unspecified Pit	1956	790918
V	422m E	Unspecified Ground Workings	1956	801563
J	423m W	Unspecified Pit	1928	724101
J	424m W	Cuttings	1909	653291
9	426m SE	Bleach Works	1956	785308
T	427m SE	Unspecified Tanks	1956	666678
S	428m SE	Unspecified Commercial/Industrial	1969 - 1980	741552
V	431m E	Unspecified Ground Workings	1967 - 1983	777228
R	440m S	Iron Foundry	1850	705135
S	440m SE	Hat Works	1908	685571
W	441m E	Railway Sidings	1891	719105
X	442m NW	Unspecified Pit	1891 - 1909	756525
S	449m SE	Bleach Works	1928 - 1938	762961
W	450m E	Railway Sidings	1908 - 1928	712998
S	457m SE	Unspecified Commercial/Industrial	1956	734919



ID	Location	Land use	Dates present	Group ID
X	462m NW	Unspecified Ground Workings	1938	660984
Y	465m S	Iron Works	1908	655402
Y	465m S	Engineering Works	1927 - 1938	759444
R	466m S	Unspecified Tank	1969	697574
W	466m E	Railway Sidings	1956 - 1967	747615
Y	472m S	Unspecified Works	1969 - 1980	741357
Y	472m S	Engineering Works	1956	752925
AA	477m E	Unspecified Mills	1928	716771
10	478m NW	Sand Pit	1850	674115
S	479m SE	Unspecified Tanks	1938	784150
AA	483m E	Unspecified Mills	1938 - 1956	778486
AA	484m E	Unspecified Mill	1967	736798
AA	486m E	Unspecified Mills	1983	737717
AB	491m W	Refuse Heap	1956 - 1969	717150
11	492m S	Unspecified Mills	1908	786822
AB	500m W	Refuse Heap	1909	709746

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

12

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

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
A	45m NE	Unspecified Tank	1958	90577
B	71m N	Unspecified Tank	1987	99588



ID	Location	Land use	Dates present	Group ID
B	71m N	Unspecified Tank	1981	105265
L	347m SE	Unspecified Tank	1988 - 1989	92822
L	349m SE	Unspecified Tank	1992	101933
T	401m S	Tanks	1910	82661
T	401m S	Settling Tanks	1930 - 1937	91625
R	454m S	Tanks	1891	82664
S	455m SE	Unspecified Tank	1891	98435
R	464m S	Unspecified Tank	1891	90575
R	467m S	Tanks	1930 - 1937	103812
S	495m SE	Unspecified Tank	1891	96777

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	14
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Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
C	83m W	Electricity Substation	1987 - 1992	62406
C	83m W	Electricity Substation	1983	54901
C	84m W	Electricity Substation	1981	53189
1	153m SE	Electricity Substation	1992	48884
G	229m SW	Electricity Substation	1982 - 1992	63297
3	241m S	Electricity Substation	1982 - 1987	55291
K	242m NE	Electricity Substation	1987 - 1992	50342
K	242m NE	Electricity Substation	1981	55252



ID	Location	Land use	Dates present	Group ID
K	242m NE	Electricity Substation	1983	56542
L	301m S	Electricity Substation	1989 - 1992	52561
8	420m S	Electricity Substation	1982	47346
Z	468m N	Electricity Substation	1977	53886
Z	468m N	Electricity Substation	1992	60442
Z	469m N	Electricity Substation	1986	51782

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

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

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
R	416m S	Garage	1989 - 1992	21576

This data is sourced from Ordnance Survey / Groundsure.



1.6 Historical military land

Records within 500m

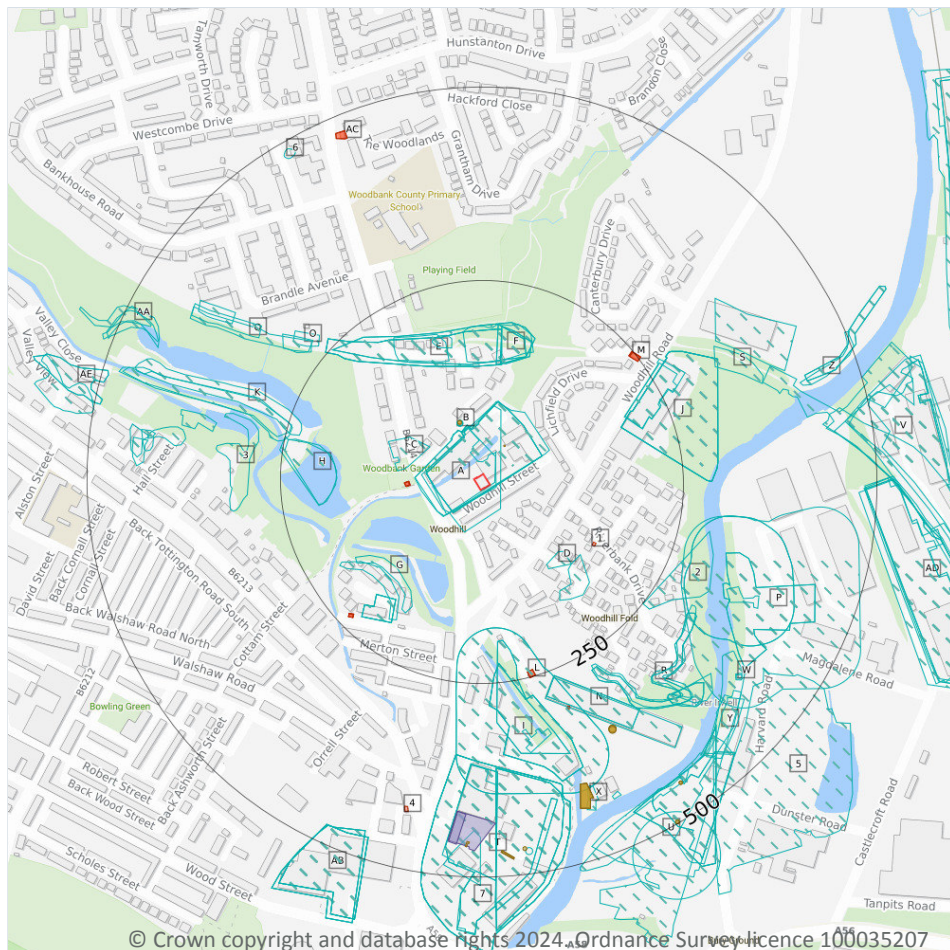
0

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

138

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 23](#) >

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Mills	1938	737898
A	On site	Unspecified Mills	1928	707390
A	On site	Unspecified Mills	1891	779590



ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Works	1980	709485
A	On site	Unspecified Works	1969	709485
A	On site	Unspecified Works	1974	709485
A	On site	Unspecified Mills	1956	737898
B	69m N	Chimney	1980	721005
B	69m N	Chimney	1969	721005
B	69m N	Chimney	1974	721005
C	71m NW	Cotton Mill	1850	654739
D	124m SE	Unspecified Pit	1891	675626
E	139m N	Cuttings	1928	738513
E	139m N	Cuttings	1909	738513
E	139m N	Cuttings	1891	779638
F	142m N	Cuttings	1938	748557
F	142m N	Cuttings	1891	779638
E	143m N	Cuttings	1980	769335
E	143m N	Cuttings	1974	755857
F	144m N	Cuttings	1956	805597
F	145m N	Cuttings	1928	755463
F	145m N	Cuttings	1908	792985
D	147m SE	Unspecified Heap	1891	688637
G	147m SW	Refuse Heap	1956	784301
E	153m N	Cuttings	1956	779212
G	164m SW	Refuse Heap	1928	741500
E	168m N	Unspecified Pit	1938	675627
H	177m W	Unspecified Pit	1938	730587
H	178m W	Unspecified Pit	1928	730587
I	179m S	Unspecified Commercial/Industrial	1938	727608
I	179m S	Bleach and Dye works	1891	665936



ID	Location	Land Use	Date	Group ID
G	179m SW	Unspecified Works	1980	722984
G	179m SW	Unspecified Works	1969	722984
G	179m SW	Unspecified Works	1974	722984
J	185m E	Unspecified Works	1980	805453
J	185m E	Unspecified Works	1969	805453
J	185m E	Unspecified Works	1974	805453
J	185m E	Unspecified Works	1956	743135
J	195m NE	Unspecified Works	1928	729066
J	196m NE	Unspecified Works	1938	729066
I	196m S	Bleach Works	1928	737850
I	196m S	Bleach Works	1908	708620
I	226m S	Unspecified Commercial/Industrial	1969	778626
I	226m S	Unspecified Commercial/Industrial	1974	778626
I	226m S	Unspecified Commercial/Industrial	1956	778626
K	232m W	Refuse Heap	1956	736116
K	244m W	Sand Pit	1938	674116
K	246m W	Refuse Heap	1928	707395
2	251m SE	Unspecified Heap	1956	688428
N	258m S	Unspecified Works	1969	707206
N	258m S	Unspecified Works	1974	707206
N	260m S	Unspecified Works	1980	741662
O	264m NW	Cuttings	1956	792241
P	264m E	Bleach Works	1938	799748
Q	267m NW	Cuttings	1909	748155
R	268m SE	Refuse Heap	1969	725313
O	270m NW	Cuttings	1928	764700
R	272m SE	Refuse Heap	1980	716143
R	272m SE	Refuse Heap	1974	716143



ID	Location	Land Use	Date	Group ID
P	273m E	Bleach Works	1928	713029
P	273m E	Bleach Works	1908	713029
3	282m W	Refuse Heap	1909	656159
I	315m S	Unspecified Factory	1851	705187
P	318m E	Bleach Works	1956	722497
P	318m E	Unspecified Commercial/Industrial	1967	670578
S	329m NE	Unspecified Ground Workings	1983	660076
Q	333m NW	Cuttings	1891	777355
P	334m SE	Bleach Works	1891	770775
K	340m W	Unspecified Mill	1850	673538
T	343m S	Unspecified Commercial/Industrial	1980	735185
T	343m S	Unspecified Mills	1969	797421
T	343m S	Unspecified Commercial/Industrial	1974	735185
T	343m S	Unspecified Mills	1956	797421
S	346m NE	Unspecified Works	1983	683153
T	354m S	Unspecified Mills	1938	759402
T	354m S	Unspecified Mills	1927	759402
T	355m S	Iron Works	1908	655394
R	356m SE	Unspecified Ground Workings	1908	660988
R	356m SE	Unspecified Heap	1938	771879
R	356m SE	Unspecified Heap	1891	766145
R	360m SE	Unspecified Heap	1956	801445
T	360m S	Unspecified Mills	1938	759402
T	360m S	Unspecified Mills	1928	759402
T	360m S	Unspecified Commercial/Industrial	1908	792539
Q	371m NW	Cuttings	1956	710281
U	373m SE	Print Works	1851	663590
K	376m W	Refuse Heap	1909	656158



ID	Location	Land Use	Date	Group ID
V	377m E	Railway Sidings	1938	804329
W	401m SE	Pump House	1938	782095
W	402m SE	Pump House	1928	782095
Y	407m SE	Chemical Works	1908	804206
X	407m S	Unspecified Tanks	1956	666677
T	408m S	Disused Canal	1938	799362
T	408m S	Disused Canal	1928	799362
Y	412m SE	Chemical Works	1891	752047
K	416m W	Unspecified Pit	1956	790918
Z	422m E	Unspecified Ground Workings	1956	801563
K	423m W	Unspecified Pit	1928	724101
K	424m W	Cuttings	1909	653291
5	426m SE	Bleach Works	1956	785308
X	427m SE	Unspecified Tanks	1956	666678
U	428m SE	Unspecified Commercial/Industrial	1980	741552
U	428m SE	Unspecified Commercial/Industrial	1969	741552
U	428m SE	Unspecified Commercial/Industrial	1974	741552
Z	431m E	Unspecified Ground Workings	1983	777228
Z	431m E	Unspecified Ground Workings	1967	777228
T	440m S	Iron Foundry	1850	705135
U	440m SE	Hat Works	1908	685571
V	441m E	Railway Sidings	1891	719105
AA	442m NW	Unspecified Pit	1891	756525
AA	445m NW	Unspecified Pit	1909	756525
U	449m SE	Bleach Works	1938	762961
U	449m SE	Bleach Works	1928	762961
V	450m E	Railway Sidings	1928	712998
U	457m SE	Unspecified Commercial/Industrial	1956	734919



ID	Location	Land Use	Date	Group ID
AA	462m NW	Unspecified Ground Workings	1938	660984
AB	465m S	Engineering Works	1938	759444
AB	465m S	Engineering Works	1927	759444
AB	465m S	Iron Works	1908	655402
T	466m S	Unspecified Tank	1969	697574
V	466m E	Railway Sidings	1967	747615
V	470m E	Railway Sidings	1956	747615
AB	472m S	Unspecified Works	1980	741357
AB	472m S	Unspecified Works	1969	741357
AB	472m S	Unspecified Works	1974	741357
AB	472m S	Engineering Works	1956	752925
AD	477m E	Unspecified Mills	1928	716771
6	478m NW	Sand Pit	1850	674115
U	479m SE	Unspecified Tanks	1938	784150
AD	483m E	Unspecified Mills	1956	778486
AD	484m E	Unspecified Mill	1967	736798
AD	484m E	Unspecified Mills	1938	778486
AD	486m E	Unspecified Mills	1983	737717
AE	491m W	Refuse Heap	1969	717150
AE	491m W	Refuse Heap	1956	717150
7	492m S	Unspecified Mills	1908	786822
AE	500m W	Refuse Heap	1909	709746
V	500m E	Railway Sidings	1908	712998

This data is sourced from Ordnance Survey / Groundsure.



2.2 Historical tanks

Records within 500m

18

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 23 >](#)

ID	Location	Land Use	Date	Group ID
A	45m NE	Unspecified Tank	1958	90577
B	71m N	Unspecified Tank	1981	105265
B	71m N	Unspecified Tank	1987	99588
N	347m SE	Unspecified Tank	1989	92822
N	347m SE	Unspecified Tank	1988	92822
N	349m SE	Unspecified Tank	1992	101933
X	401m S	Tanks	1910	82661
X	401m S	Settling Tanks	1930	91625
X	401m S	Settling Tanks	1937	91625
T	454m S	Tanks	1891	82664
U	455m SE	Unspecified Tank	1891	98435
U	455m SE	Unspecified Tank	1891	98435
T	464m S	Unspecified Tank	1891	90575
T	467m S	Tanks	1930	103812
T	467m S	Tanks	1937	103812
T	467m S	Tanks	1930	103812
U	495m SE	Unspecified Tank	1891	96777
U	495m SE	Unspecified Tank	1891	96777

This data is sourced from Ordnance Survey / Groundsure.



2.3 Historical energy features

Records within 500m

24

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 23 >](#)

ID	Location	Land Use	Date	Group ID
C	83m W	Electricity Substation	1992	62406
C	83m W	Electricity Substation	1983	54901
C	84m W	Electricity Substation	1981	53189
C	84m W	Electricity Substation	1987	62406
1	153m SE	Electricity Substation	1992	48884
G	229m SW	Electricity Substation	1982	63297
G	229m SW	Electricity Substation	1987	63297
G	229m SW	Electricity Substation	1987	63297
G	229m SW	Electricity Substation	1988	63297
G	230m SW	Electricity Substation	1989	63297
G	230m SW	Electricity Substation	1992	63297
L	241m S	Electricity Substation	1982	55291
L	241m S	Electricity Substation	1987	55291
L	241m S	Electricity Substation	1987	55291
M	242m NE	Electricity Substation	1981	55252
M	242m NE	Electricity Substation	1987	50342
M	242m NE	Electricity Substation	1983	56542
M	243m NE	Electricity Substation	1992	50342
N	301m S	Electricity Substation	1989	52561
N	301m S	Electricity Substation	1992	52561
4	420m S	Electricity Substation	1982	47346
AC	468m N	Electricity Substation	1977	53886
AC	468m N	Electricity Substation	1992	60442



ID	Location	Land Use	Date	Group ID
AC	469m N	Electricity Substation	1986	51782

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

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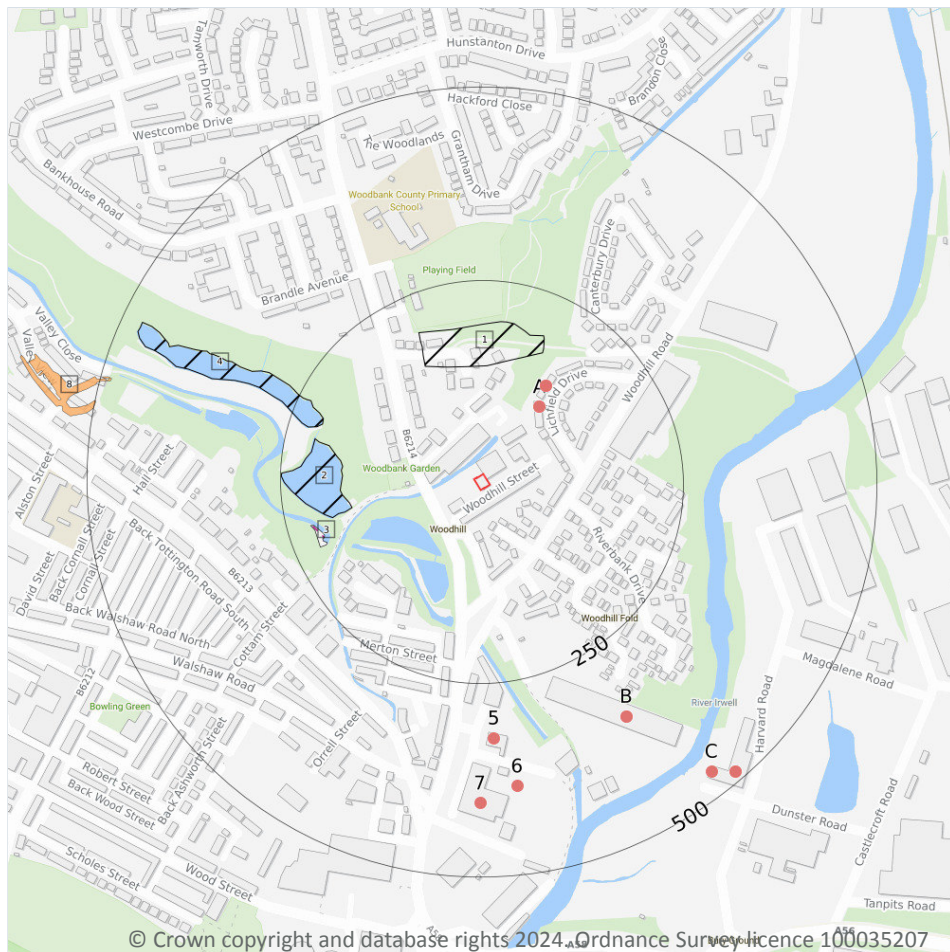
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 23](#) >

ID	Location	Land Use	Date	Group ID
T	416m S	Garage	1989	21576
T	416m S	Garage	1992	21576

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- Historical landfill (LA/OS)
- Historical waste sites
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m

1

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

Features are displayed on the Waste and landfill map on [page 32 >](#)

ID	Location	Site address	Source	Data type
3	206m W	Refuse Tip	1995 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 32 >](#)

ID	Location	Details		
1	140m N	Site Address: Land South of Cricket Ground, Woolfold, Bury Licence Holder Address: -	Waste Licence: - Site Reference: WML/0451 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded - Last Recorded: -
2	162m W	Site Address: Woolfold Paper Mills, Tottington, Bury Licence Holder Address: -	Waste Licence: Yes Site Reference: C005b, RD/LIC/080/77,0226 Waste Type: Inert, Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 06/11/1979 Licence Surrender: -	Operator: - Licence Holder: Olive's Paper Mill Company Limited First Recorded 31/12/1950 Last Recorded: 02/04/1986



ID	Location	Details		
4	208m W	Site Address: Woolfold paper Mills, Tottington Road, Bury Licence Holder Address: -	Waste Licence: Yes Site Reference: 0226, RD/LIC/080/77 Waste Type: Inert, Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 06/11/1979 Licence Surrender: -	Operator: - Licence Holder: Olive's Paper Mill Company Limited First Recorded 31/12/1950 Last Recorded: 02/04/1986

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

3.5 Historical waste sites

Records within 500m	1
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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 32 >](#)

ID	Location	Address	Further Details	Date
8	486m W	Site Address: N/A	Type of Site: Ground Workings and Refuse Heap Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1891

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

3.6 Licensed waste sites

Records within 500m	0
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

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

3.7 Waste exemptions

Records within 500m	12
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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 32 >](#)

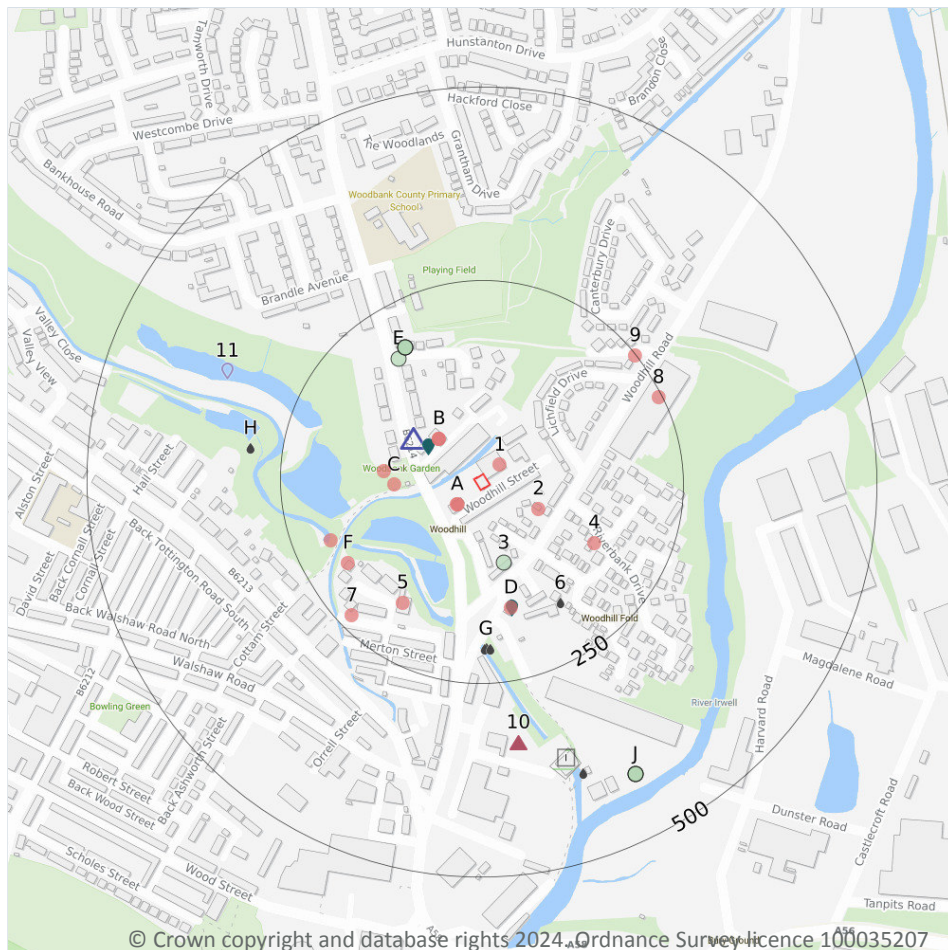


ID	Location	Site	Reference	Category	Sub-Category	Description
A	113m NE	29, Lichfield Drive, Bury, BL8 1bj	WEX216820	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
A	113m NE	29, Lichfield Drive, Bury, BL8 1bj	WEX216820	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	139m NE	29 Lichfield Drive Bury Bury BL8 1bj	EPR/NF0702FA /A001	Treating waste exemption	Non-agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	139m NE	29 Lichfield Drive Bury Bury BL8 1bj	EPR/NF0702FA /A001	Using waste exemption	Non-agricultural waste only	Burning of waste as a fuel in a small appliance
5	322m S	Veolia, Webb Street, Bury, BL8 1af	WEX320602	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	347m SE	Unit 3 Irwell Works Lower Woodhill Road Bury Lancashire BL8 1aa	EPR/LF0000UZ /A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place
B	347m SE	Unit 3 Irwell Works Lower Woodhill Road Bury Lancashire BL8 1aa	EPR/LF0000UZ /A001	Treating waste exemption	Non-agricultural waste only	Preparatory treatments (baling, sorting, shredding etc)
6	386m S	Veolia, Webb Street, Bury, BL8 1af	WEX185408	Storing waste exemption	Not on a farm	Storage of waste in a secure place
7	405m S	Webb Street, Bury, BL8 1af	WEX247201	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	468m SE	Dgs Ltd., Lgc Standards, Chamberhall Business Park, Bury., BL9 0ap	WEX125635	Using waste exemption	Not on a farm	Use of waste in construction
C	488m SE	Proposed Mkm Builders Merchants, Land Off Harvard Way, Bury, BL9 0ap	WEX294825	Treating waste exemption	Not on a farm	Screening and blending of waste
C	488m SE	Proposed Mkm Builders Merchants, Land Off Harvard Way, Bury, BL9 0ap	WEX294825	Using waste exemption	Not on a farm	Use of waste in construction

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- ▲ Current or recent petrol stations
- Control of Major Accident Hazards
- ▲ Hazardous substance storage/usage
- 📍 Part A(1) industrial activities
- 📍 Licensed pollutant release (Part A(2)/B)
- 📍 Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

16

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 36](#) >

ID	Location	Company	Address	Activity	Category
1	24m NE	Cadworks UK	Unit 1 Woodhill Works, Woodhill Street, Bury, Greater Manchester, BL8 1AT	Textiles, Fabrics, Silk and Machinery	Industrial Products
A	35m SW	C K Plastics Ltd	Alfred Works, Woodhill Street, Bury, Greater Manchester, BL8 1AT	Construction Completion Services	Construction Services
A	36m SW	Naphtha Plastics Ltd	Alfred Works, Woodhill Street, Bury, Greater Manchester, BL8 1AT	Rubber, Silicones and Plastics	Industrial Products



ID	Location	Company	Address	Activity	Category
B	69m NW	B P Car Wash	124, Brandlesholme Road, Bury, Greater Manchester, BL8 1AU	Vehicle Cleaning Services	Personal, Consumer and Other Services
B	69m NW	BP Service Station	124, Brandlesholme Road, Bury, Greater Manchester, BL8 1AU	Petrol and Fuel Stations	Road and Rail
2	70m SE	S Brown	2, Ely Drive, Bury, Greater Manchester, BL8 1BH	Industrial Repairs and Servicing	Repair and Servicing
C	104m W	Electricity Sub Station	Greater Manchester, BL8	Electrical Features	Infrastructure and Facilities
C	117m W	Mast (Telecommunication)	Greater Manchester, BL8	Telecommunications Features	Infrastructure and Facilities
4	154m SE	Electricity Sub Station	Greater Manchester, BL8	Electrical Features	Infrastructure and Facilities
D	157m S	Cheetham Hill Construction Ltd	Lower Woodhill Road, Bury, Greater Manchester, BL8 1AR	Civil Engineers	Engineering Services
5	177m SW	Apollo Autobodies Ltd	Merton Street, Bury, Greater Manchester, BL8 1AW	Vehicle Repair, Testing and Servicing	Repair and Servicing
F	195m SW	Bury Blinds Direct	29, Woodhill Vale, Bury, Greater Manchester, BL8 1AH	Curtains and Blinds	Consumer Products
F	201m W	Outfall	Greater Manchester, BL8	Waste Storage, Processing and Disposal	Infrastructure and Facilities
7	232m SW	Electricity Sub Station	Greater Manchester, BL8	Electrical Features	Infrastructure and Facilities
8	245m NE	Works	Greater Manchester, BL8	Unspecified Works Or Factories	Industrial Features
9	249m NE	Electricity Sub Station	Greater Manchester, BL8	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.



4.2 Current or recent petrol stations

Records within 500m**1**

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on [page 36](#) >

ID	Location	Company	Address	LPG	Status
B	95m NW	EG ON THE MOVE	24, Brandlesholme Road, Bury, Greater Manchester, BL8 1AU	No	Open

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m**0**

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m**1**

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.

Features are displayed on the Current industrial land use map on [page 36](#) >



ID	Location	Company	Address	Operational status	Tier
I	352m S	T W Tyson	T W Tyson, Calor House, Webb Street, Bury, BL8 1AF	Historical NIHHS Site	-

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0
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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	1
----------------------------	----------

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.

Features are displayed on the Current industrial land use map on [page 36](#) >

ID	Location	Details	
10	330m S	Application reference number: 85/16852 Application status: Approved Application date: 06/03/1985 Address: T W Tyson, Webb Street, Bury, Lancashire, England, BL8 1AF	Details: Change of use; depot to wholesale and retail sales of engineers supplies; storage of liquefied petroleum gas Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

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

1

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

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Details	
11	348m NW	Operator: ACTIVECRAFT LTD Installation Name: - Process: PAPER, PULP & BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: BJ6674 Original Permit Number: BJ6674	EPR Reference: - Issue Date: 17/06/2002 Effective Date: 17/06/2002 Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS

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

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

Records within 500m

2

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

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Address	Details	
B	73m NW	BP Prospect, 124-126 Brandlesholme Road, Bury, BL8 1AU	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
D	157m S	Cheetham Hill Construction, Crostons Road, BL8 1AR	Process: Use of Bulk Cement Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.



4.12 Radioactive Substance Authorisations

Records within 500m

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

9

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

Features are displayed on the Current industrial land use map on [page 36](#) >

ID	Location	Address	Details	
6	178m SE	RESIDENTIALDEVELOPMEN T,WOODHILLROAD,BURY,G REATERMANCHESTER	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: 016991164 Permit Version: 1 Receiving Water: RIVER IRWELL	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: - Effective Date: 01/11/1994 Revocation Date: 01/11/1994
G	205m S	WOODHILLROADCSO092JP, WOODHILLROAD,BURY,LA NCASHIRE,BL81AR	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0012 Permit Version: 3 Receiving Water: WOODHILL BROOK	Status: VARIED UNDER EPR 2010 Issue date: 05/02/2016 Effective Date: 05/02/2016 Revocation Date: 24/06/2018
G	206m S	WOODHILLROADCSO092JP, WOODHILLROAD,BURY,LA NCASHIRE,BL81AR	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0012 Permit Version: 4 Receiving Water: WOODHILL BROOK	Status: VARIED UNDER EPR 2010 Issue date: 25/06/2018 Effective Date: 25/06/2018 Revocation Date: -
G	206m S	WOODHILLROADCSO092JP, WOODHILLROAD,BURY,LA NCASHIRE,BL81AR	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0012 Permit Version: 2 Receiving Water: WOODHILL BROOK	Status: VARIED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 04/02/2016
G	206m S	WOODHILLROADCSO092JP, WOODHILLROAD,BURY,LA NCASHIRE,BL81AR	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0012 Permit Version: 1 Receiving Water: WOODHILL BROOK	Status: VARIED UNDER EPR 2010 Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010



ID	Location	Address	Details	
H	291m W	WOOLFOLDPAPERMILL,WOOLFOLD,BURY,GREATERNANCHESTER	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016990073 Permit Version: 2 Receiving Water: KIRKLEES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/05/1981 Revocation Date: 19/06/1989
H	291m W	WOOLFOLDPAPERMILL,WOOLFOLD,BURY,GREATERNANCHESTER	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 016990073 Permit Version: 1 Receiving Water: KIRKLEES BROOK	Status: REVOKED - UNSPECIFIED Issue date: - Effective Date: 01/01/1980 Revocation Date: 30/04/1981
I	389m S	LOWERWOODHILLRD,BURY,LANCASHIRE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0013 Permit Version: 2 Receiving Water: WOODHILL BROOK	Status: SURRENDERED UNDER EPR 2010 Issue date: 03/09/2010 Effective Date: 03/09/2010 Revocation Date: 14/07/2014
I	389m S	LOWERWOODHILLRD,BURY,LANCASHIRE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01BRY0013 Permit Version: 1 Receiving Water: WOODHILL BROOK	Status: VARIED UNDER EPR 2010 Issue date: - Effective Date: 01/01/1995 Revocation Date: 02/09/2010

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

8

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

Features are displayed on the Current industrial land use map on [page 36 >](#)

ID	Location	Details	
3	99m S	Incident Date: 31/03/2001 Incident Identification: 1256 Pollutant: Contaminated Water Pollutant Description: Other Contaminated Water	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
E	184m NW	Incident Date: 20/03/2001 Incident Identification: 569 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)
E	191m NW	Incident Date: 07/05/2002 Incident Identification: 77045 Pollutant: Inert Materials and Wastes:Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes:Soils and Clay	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Location	Details	
E	191m NW	Incident Date: 07/05/2002 Incident Identification: 77045 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)
E	191m NW	Incident Date: 07/05/2002 Incident Identification: 77045 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
J	418m SE	Incident Date: 29/04/2002 Incident Identification: 75468 Pollutant: Inert Materials and Wastes:Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes:Soils and Clay	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
J	418m SE	Incident Date: 29/04/2002 Incident Identification: 75468 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
J	418m SE	Incident Date: 29/04/2002 Incident Identification: 75468 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

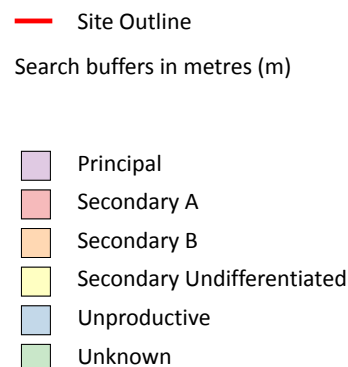
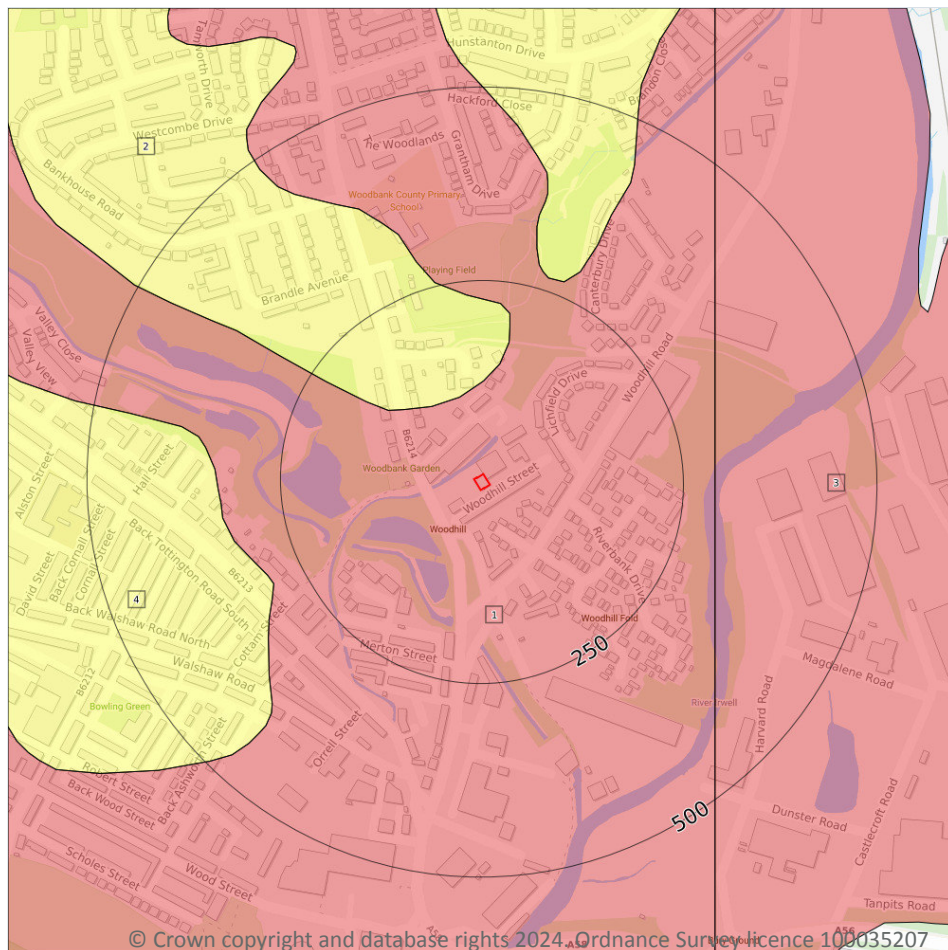
0

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



5.1 Superficial aquifer

Records within 500m

4

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 46 >](#)

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	104m N	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

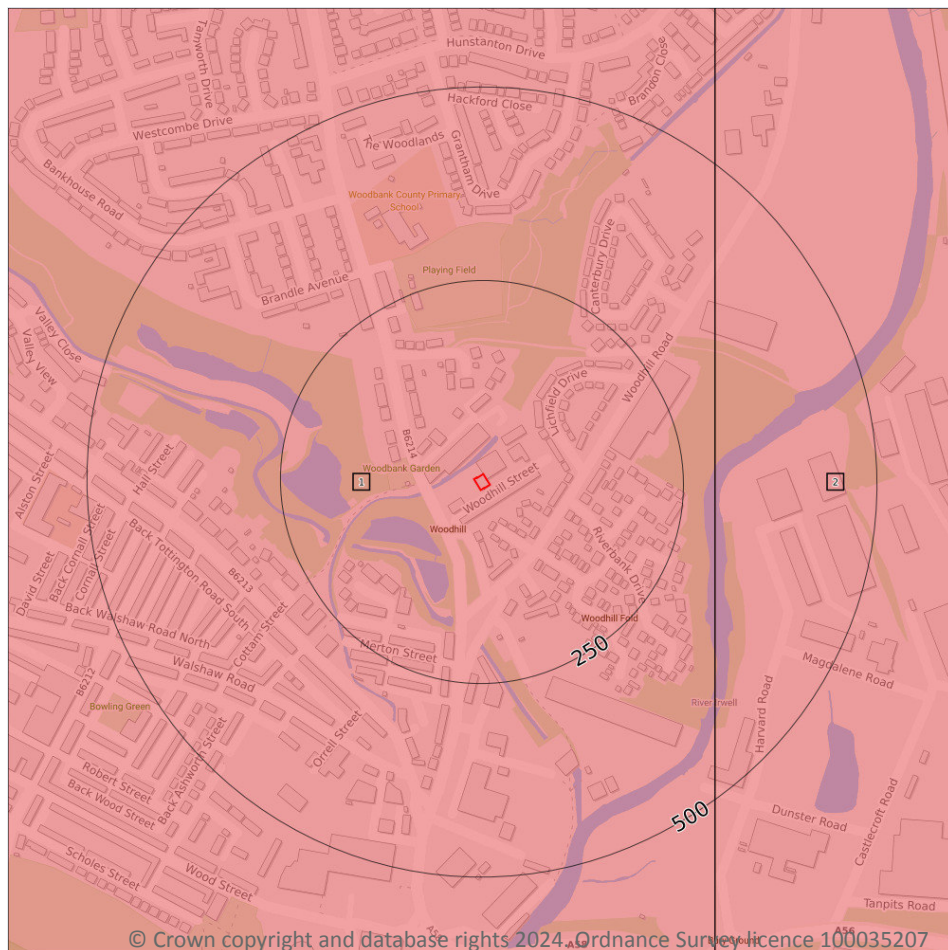


ID	Location	Designation	Description
3	291m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	292m SW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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



Bedrock aquifer



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

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 48](#) >

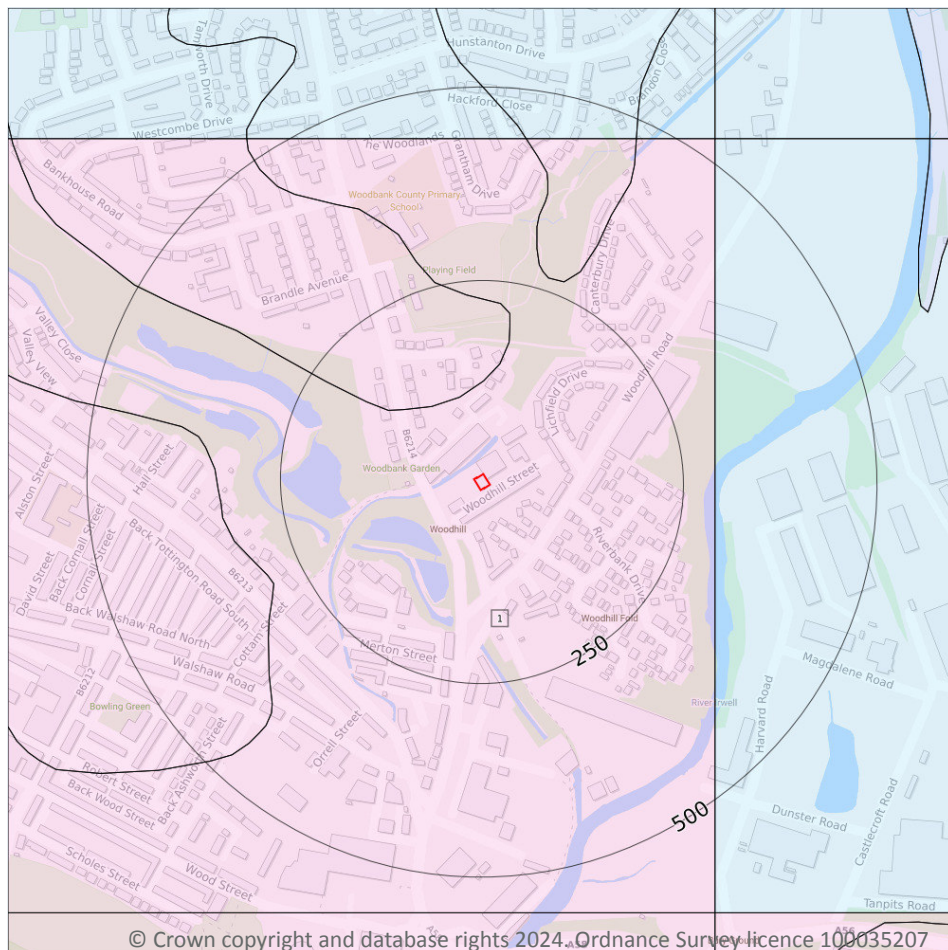
ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	291m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers



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



Groundwater vulnerability



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

1

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

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

Features are displayed on the Groundwater vulnerability map on [page 50 >](#)



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: <40% Dilution value: >550mm/year	Vulnerability: Medium 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.

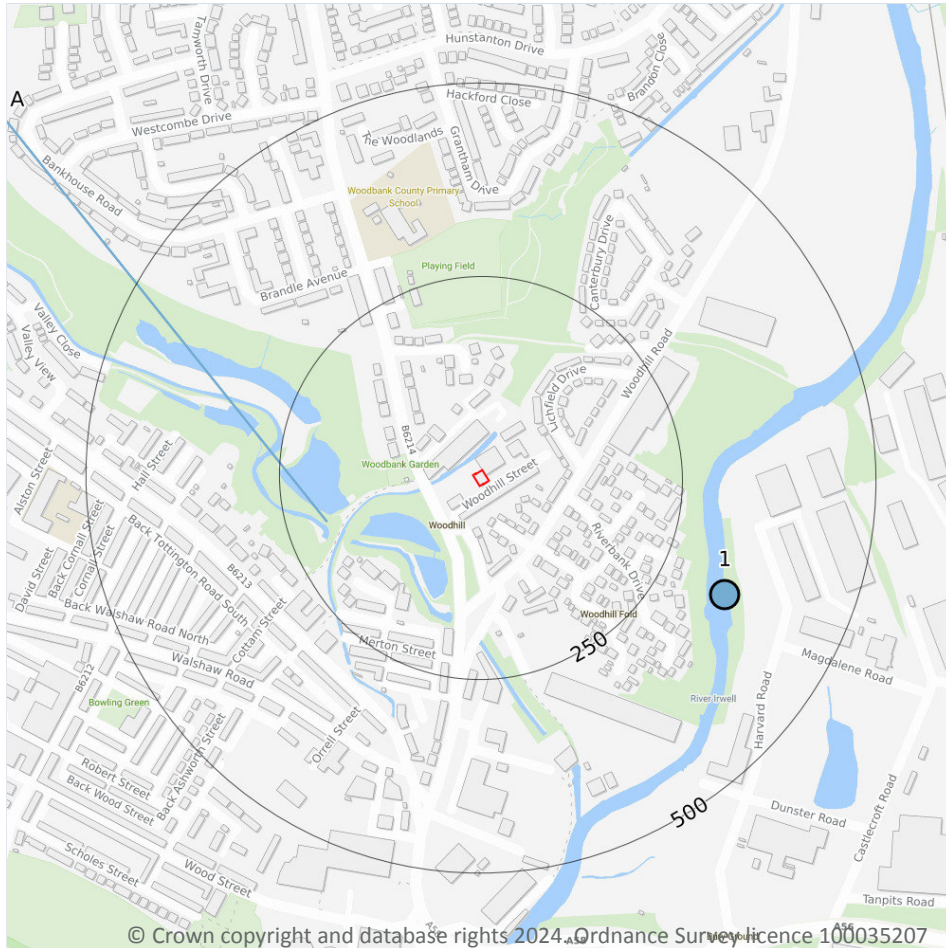
5.5 Groundwater vulnerability- local information

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
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

7

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 52 >](#)



ID	Location	Details	
-	817m NW	Status: Historical Licence No: 2569001017 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES,OLIVES PAPERMILLS, BURY" Data Type: Point Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 379000 Northing: 412000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
-	817m NW	Status: Historical Licence No: 2569001017 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES,OLIVES PAPERMILLS, BURY Data Type: Point Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 379000 Northing: 412000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
-	817m NW	Status: Historical Licence No: 2569001017 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, OLIVES PAPERMILLS, BURY Data Type: Point Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 379000 Northing: 412000	Annual Volume (m ³): 154564 Max Daily Volume (m ³): 1591.1 Original Application No: - Original Start Date: 15/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
-	1527m W	Status: Historical Licence No: 2569001057 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT BOLHOLT FARM, WALSHAW, BURY" Data Type: Point Name: HEYS Easting: 378200 Northing: 411900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1966 Version End Date: -



ID	Location	Details	
-	1527m W	Status: Historical Licence No: 2569001057 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT BOLHOLT FARM, WALSHAW, BURY Data Type: Point Name: HEYS Easting: 378200 Northing: 411900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 10/02/1966 Version End Date: -
-	1584m N	Status: Historical Licence No: 2569001123 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT IRWELL VIEW FARM, WALMESLEY,BURY, LANCASHIRE" Data Type: Point Name: FITTON Easting: 380100 Northing: 413100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 19/01/1966 Version End Date: -
-	1584m N	Status: Historical Licence No: 2569001123 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT IRWELL VIEW FARM, WALMESLEY,BURY, LANCASHIRE Data Type: Point Name: FITTON Easting: 380100 Northing: 413100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 19/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 19/01/1966 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

20

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 52 >](#)



ID	Location	Details	
A	198m W	Status: Historical Licence No: 2569001170 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: KIRKLEES BRK AT WOOLFOLD, BURY93 Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 378700 Northing: 412500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
A	198m W	Status: Historical Licence No: 2569001170 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "KIRKLEES BRK AT WOOLFOLD, BURY \$93" Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 378700 Northing: 412500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
A	198m W	Status: Historical Licence No: 2569001170 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: KIRKLEES BRK AT WOOLFOLD, BURY \$93 Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 378700 Northing: 412500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
A	198m W	Status: Historical Licence No: 2569001170 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: KIRKLEES BRK AT WOOLFOLD, BURY Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 378700 Northing: 412500	Annual Volume (m ³): 850102 Max Daily Volume (m ³): 3182.2 Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
1	338m SE	Status: Historical Licence No: NW/069/0001/007 Details: Hydroelectric Power Generation Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT CHAMBER HALL WEIR Data Type: Point Name: Bury Council Easting: 380014 Northing: 411406	Annual Volume (m ³): 90000000 Max Daily Volume (m ³): 340416 Original Application No: - Original Start Date: 10/06/2016 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 10/06/2016 Version End Date: -



ID	Location	Details	
-	768m NW	Status: Historical Licence No: 2569001170 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY KIRKLESS BROOK AND SURFACE DRAINAGE Data Type: Point Name: ACTIVECRAFT LTD PAPERMAKERS Easting: 379000 Northing: 411900	Annual Volume (m ³): 850102 Max Daily Volume (m ³): 3182.2 Original Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date: -
-	850m S	Status: Historical Licence No: 2569001285 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RMC NORTHERNT BURY CANAL WHARF Data Type: Point Name: CEMEX UK MATERIALS LTD Easting: 379706 Northing: 410696	Annual Volume (m ³): 5500 Max Daily Volume (m ³): 21 Original Application No: - Original Start Date: 23/03/2005 Expiry Date: 31/03/2015 Issue No: 2 Version Start Date: 01/04/2008 Version End Date: -
-	850m S	Status: Historical Licence No: 2569001285R01 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RMC NORTHERNT BURY CANAL WHARF Data Type: Point Name: CEMEX UK MATERIALS LTD Easting: 379706 Northing: 410696	Annual Volume (m ³): 5500 Max Daily Volume (m ³): 21 Original Application No: - Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 2 Version Start Date: 21/12/2018 Version End Date: -
-	1050m SW	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY [10 Data Type: Point Name: THE ELTON COP DYEING CO LTD Easting: 378800 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date: -



ID	Location	Details	
-	1224m SW	Status: Historical Licence No: 2569001155 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS) Data Type: Point Name: CURTAIN STYLING LTD Easting: 378600 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date: -
-	1224m SW	Status: Historical Licence No: 2569001155 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS) Data Type: Point Name: CURTAIN STYLING LTD Easting: 378600 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date: -
-	1224m SW	Status: Historical Licence No: 2569001155 Details: General use relating to Secondary Category (Medium Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS " Data Type: Point Name: CURTAIN STYLING LTD Easting: 378600 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date: -
-	1224m SW	Status: Historical Licence No: 2569001155 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS " Data Type: Point Name: CURTAIN STYLING LTD Easting: 378600 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date: -



ID	Location	Details	
-	1314m SW	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY 88 Data Type: Point Name: THE ELTON COP DYEING CO LTD Easting: 378500 Northing: 411000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date: -
-	1360m SW	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY *27 Data Type: Point Name: THE ELTON COP DYEING CO LTD Easting: 378500 Northing: 410900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date: -
-	1503m N	Status: Historical Licence No: NW/069/0001/016 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT ELTON RESERVOIR Data Type: Point Name: Canal and River Trust Easting: 379677 Northing: 413070	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/NA/001138 Original Start Date: 31/03/2021 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 31/03/2021 Version End Date: -
-	1687m NE	Status: Historical Licence No: 2569001289 Details: Lake & Pond Throughflow Direct Source: Surface, Non-Tidal - North West Region Point: TRIBUTARY OF THE RIVER IRWELL, AT CLARENCE PARK LIDO Data Type: Point Name: BURY METROPOLITAN BOROUGH COUNCIL Easting: 381211 Northing: 412322	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 22/12/2008 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 22/12/2008 Version End Date: -
-	1687m NE	Status: Historical Licence No: 2569001289R01 Details: Lake & Pond Throughflow Direct Source: Surface, Non-Tidal - North West Region Point: TRIBUTARY OF THE RIVER IRWELL, AT CLARENCE PARK LIDO Data Type: Point Name: BURY METROPOLITAN BOROUGH COUNCIL Easting: 381211 Northing: 412322	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: NPS/WR/017227 Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/04/2015 Version End Date: -



ID	Location	Details	
-	1714m S	Status: Historical Licence No: 2569001056 Details: Dust suppression Direct Source: "Surface, Non-Tidal - North West Region" Point: "THE RIVER IRWELL AT HINDS LANE, BURY" Data Type: Point Name: J B SKIPS & SERVICES LTD Easting: 379450 Northing: 409850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1997 Version End Date: -
-	1714m S	Status: Historical Licence No: 2569001056 Details: Dust suppression Direct Source: Surface, Non-Tidal - North West Region Point: THE RIVER IRWELL AT HINDS LANE, BURY Data Type: Point Name: J B SKIPS & SERVICES LTD Easting: 379450 Northing: 409850	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1997 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	0
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Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

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

5.9 Source Protection Zones

Records within 500m	0
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Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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



5.10 Source Protection Zones (confined aquifer)

Records within 500m

0

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

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



6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

12

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

Features are displayed on the Hydrology map on [page 61](#) >

ID	Location	Type of water feature	Ground level	Permanence	Name
3	19m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
4	52m N	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
C	131m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kirklees Brook
B	180m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kirklees Brook
B	190m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kirklees Brook
6	191m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	191m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kirklees Brook
B	193m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kirklees Brook
D	199m W	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	203m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kirklees Brook
8	203m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	203m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kirklees Brook

This data is sourced from the Ordnance Survey.



6.2 Surface water features

Records within 250m

8

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.

Features are displayed on the Hydrology map on [page 61 >](#)

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 61 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Irwell (Rossendale STW to Roch)	GB112069064620	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 61 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
11	286m E	River	Irwell (Rossendale STW to Roch)	GB112069064620 ↗	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 61](#) >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Northern Manchester Carboniferous Aquifers	GB41202G101800 ↗	Poor	Poor	Good	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



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site

Negligible

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 68](#) >

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



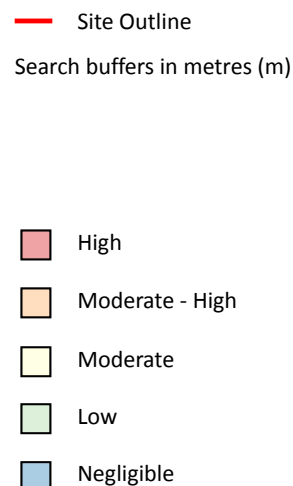
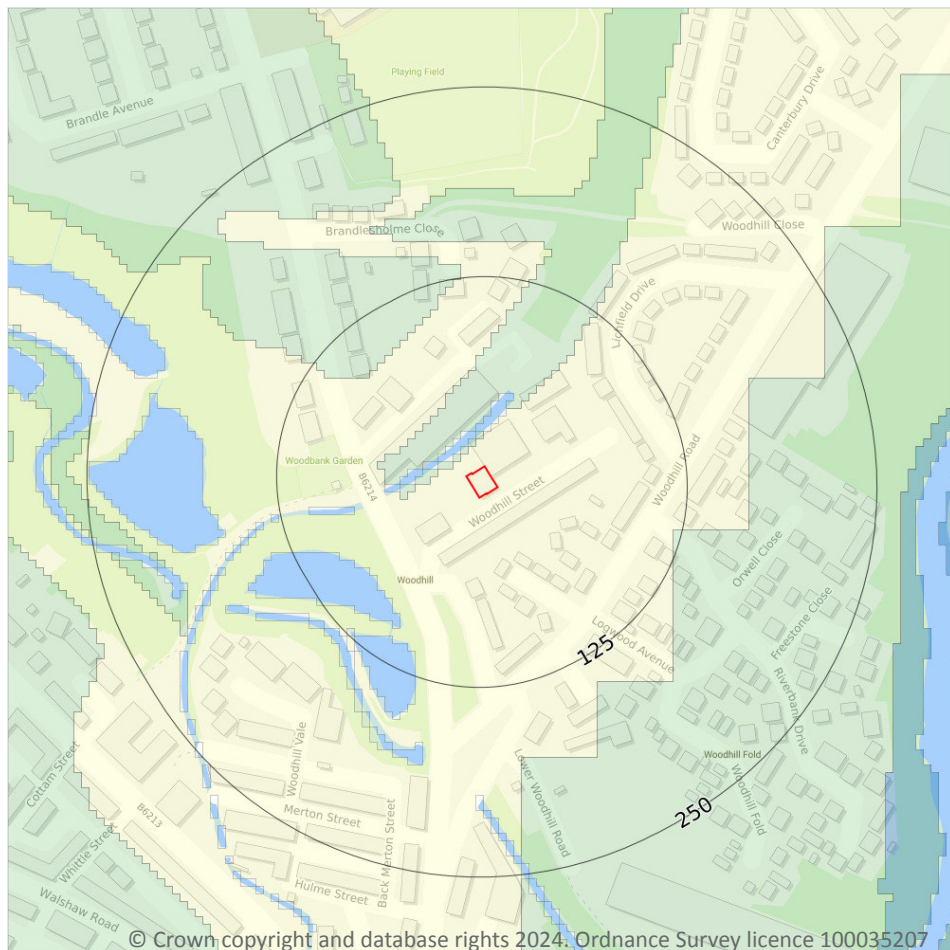
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Negligible
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



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 70 >](#)

This data is sourced from Ambiantal Risk Analytics.



10 Environmental designations



- 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

5

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 71 >](#)

ID	Location	Name	Data source
2	1076m NW	Kirklees Valley	Natural England
4	1226m NW	Kirklees Valley	Natural England
5	1316m NW	Kirklees Valley	Natural England
6	1493m NW	Kirklees Valley	Natural England
-	1544m NE	Chesham Woods	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 71 >](#)

ID	Location	Name	Local Authority name
1	315m NE	Merseyside and Greater Manchester Green Belt	Bury
3	1111m W	Merseyside and Greater Manchester Green Belt	Bury

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

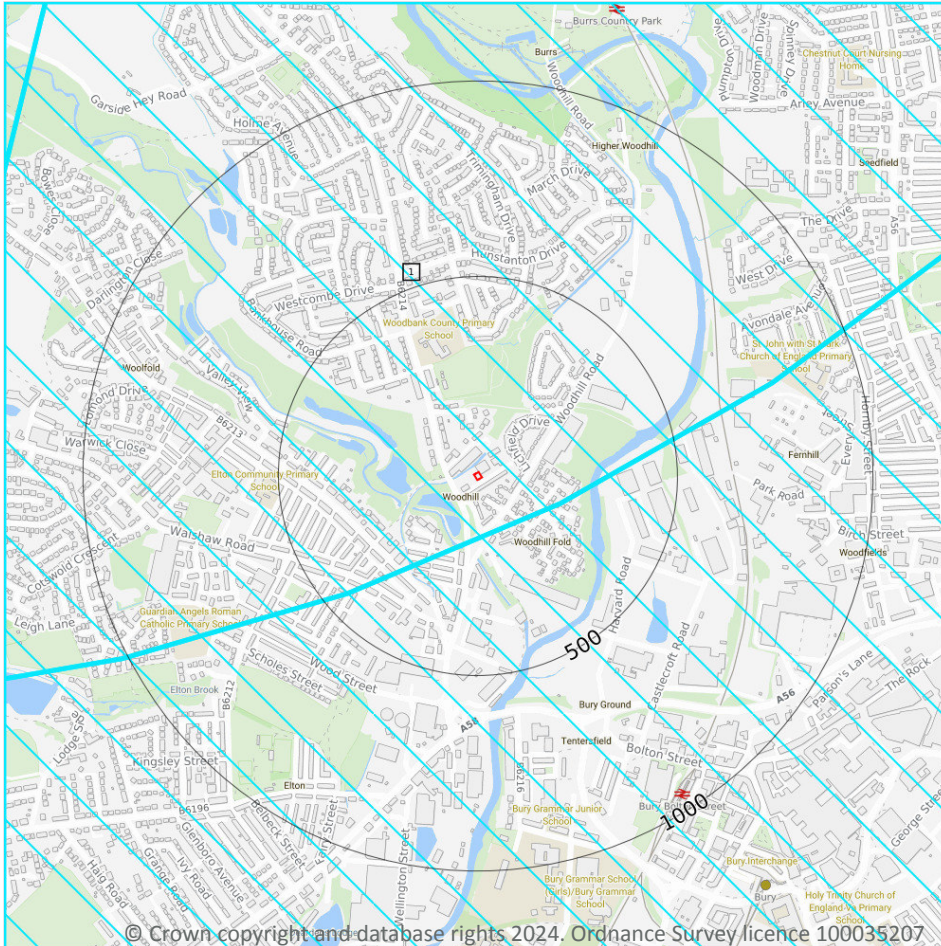
Records within 2000m**0**

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

1

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

Features are displayed on the SSSI Impact Zones and Units map on [page 76 >](#)



ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Air pollution - 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

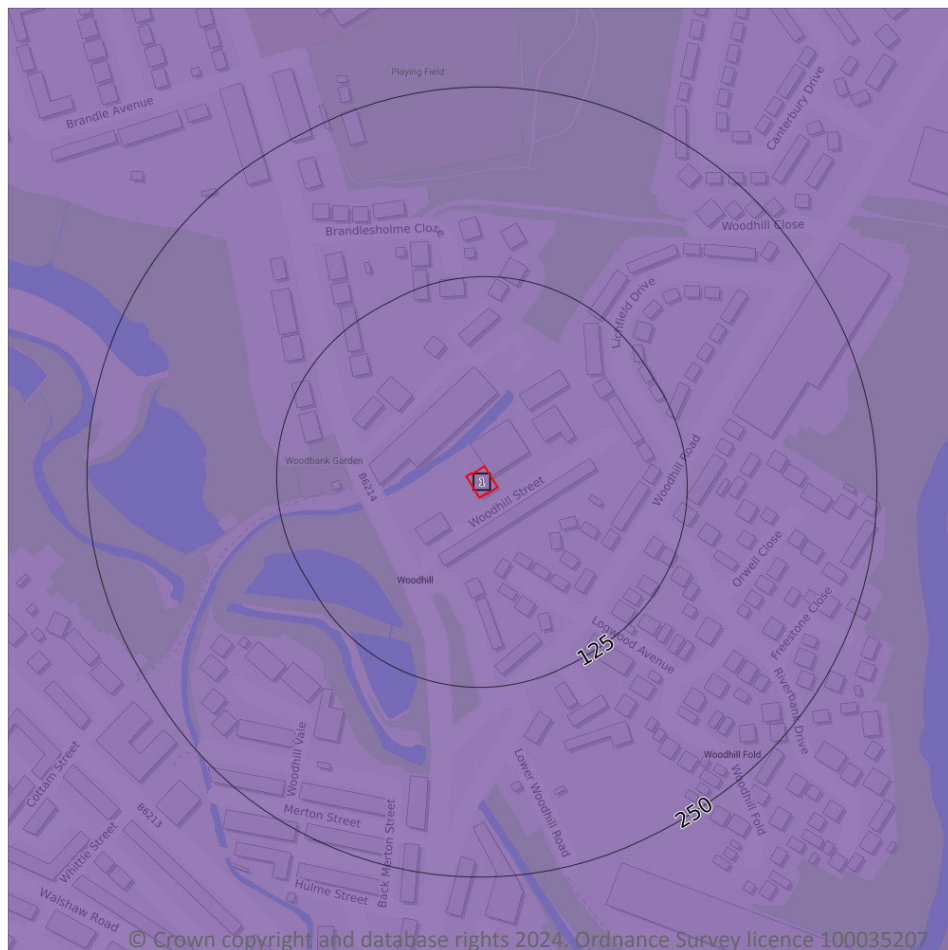
0

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 80](#) >

ID	Location	Classification	Description
1	On site	Urban	Non-agricultural/no quality assigned

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

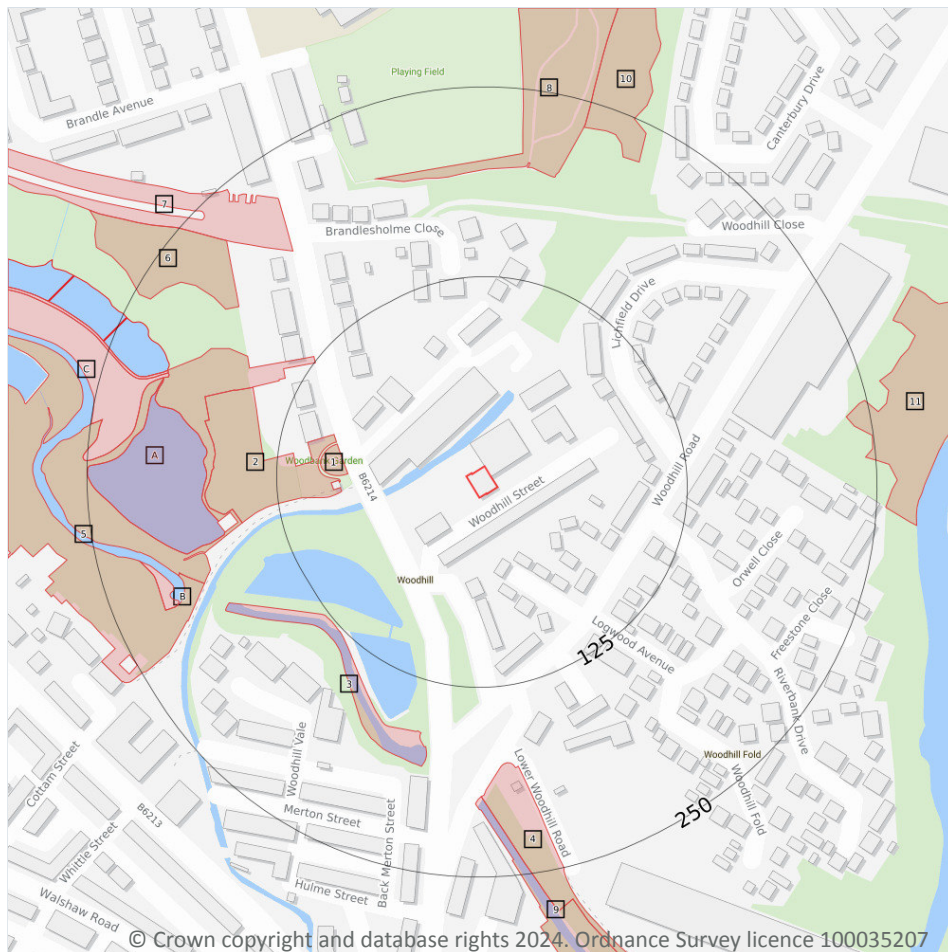
Records within 250m

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

17

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

Features are displayed on the Habitat designations map on [page 82 >](#)

ID	Location	Main Habitat	Other habitats
1	78m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	83m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	124m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	127m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



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info@groundsure.com

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Date: 17 December 2024

ID	Location	Main Habitat	Other habitats
A	163m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	176m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
5	186m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	187m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	187m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	192m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	197m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	202m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
B	206m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
C	207m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
C	208m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	223m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	234m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

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 82](#) >



ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
C	209m W	HLD_refs: EAHLD15758	Low	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography	-

This data is sourced from Natural England.

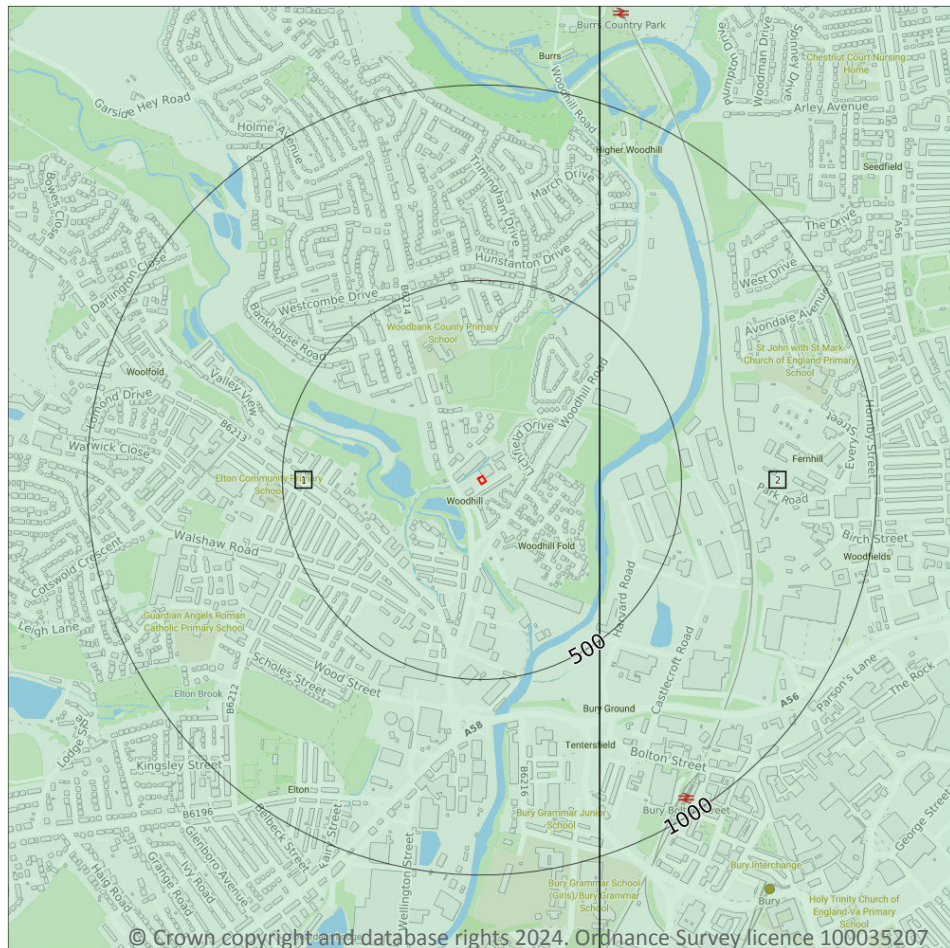
13.4 Limestone Pavement Orders

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



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

2

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 85](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	SD71SE
2	291m E	Full	Full	Full	Full	SD81SW

This data is sourced from the British Geological Survey.



Contact us with any questions at:

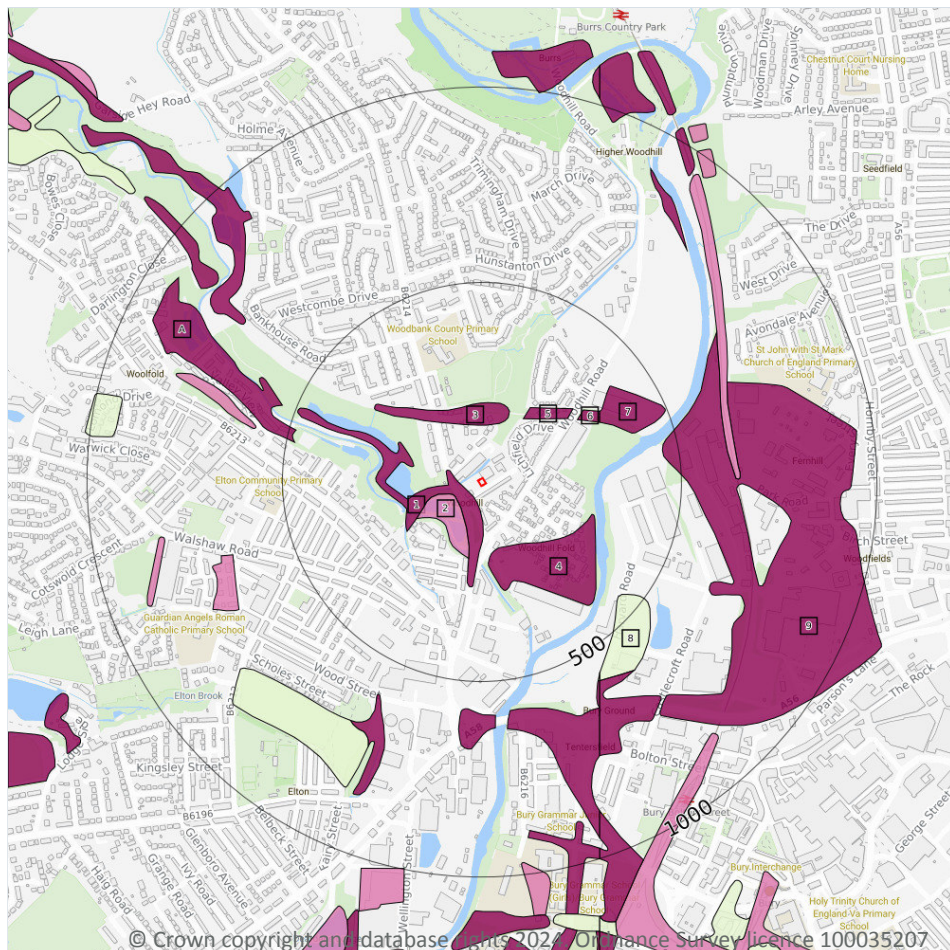
info@groundsure.com ↗

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Date: 17 December 2024

85

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



— Site Outline
Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

10

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 86 >](#)

ID	Location	LEX Code	Description	Rock description
1	33m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	71m SW	WGR-VOID	Worked Ground (Undivided)	Void
3	135m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	164m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

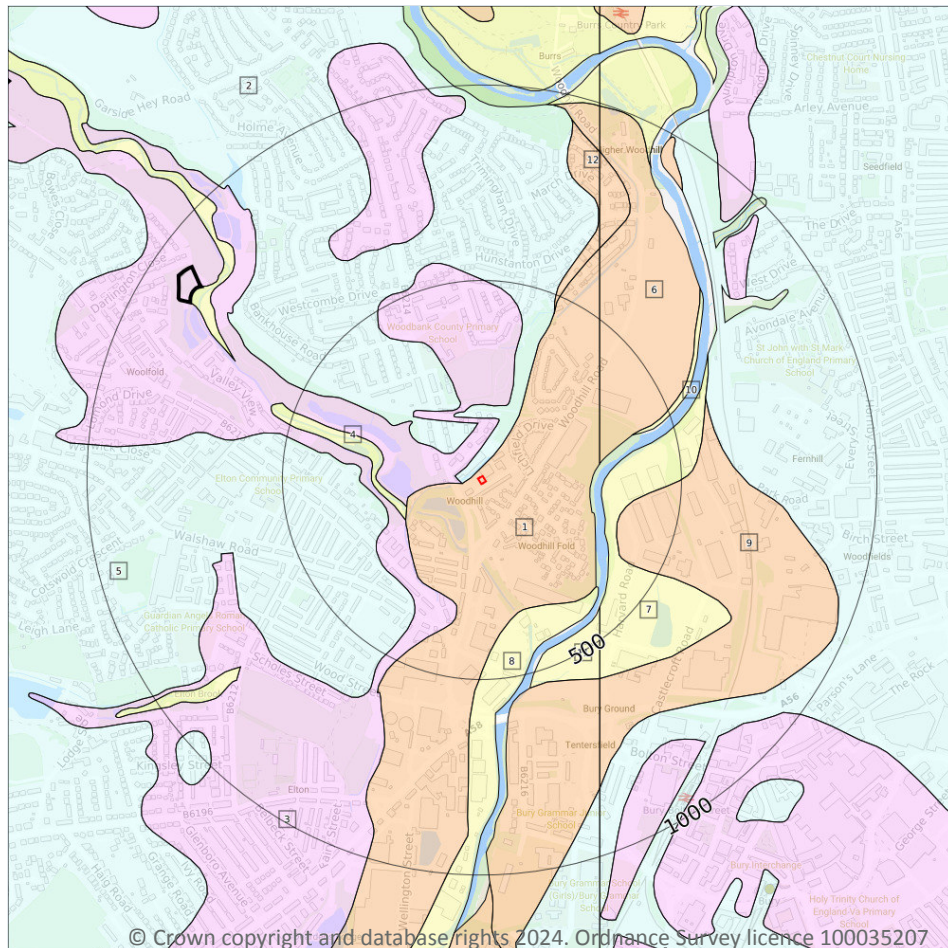


ID	Location	LEX Code	Description	Rock description
5	184m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	284m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
7	330m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
8	446m SE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
9	459m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
A	479m W	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

12

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 88](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	RTD1-XSV	River Terrace Deposits, 1 - Sand And Gravel	Sand And Gravel
2	14m NW	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
3	42m NW	GFDUD-XSV	Glaciofluvial Deposits, Devensian - Sand And Gravel	Sand And Gravel
4	196m W	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel



ID	Location	LEX Code	Description	Rock description
5	247m W	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
6	294m E	RTD1-XSV	River Terrace Deposits, 1 - Sand And Gravel	Sand And Gravel
7	297m E	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
8	339m S	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
9	352m E	RTD2-XSV	River Terrace Deposits, 2 - Sand And Gravel	Sand And Gravel
10	393m E	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
11	434m SE	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
12	457m NE	RTD2-XSV	River Terrace Deposits, 2 - Sand And Gravel	Sand And Gravel

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

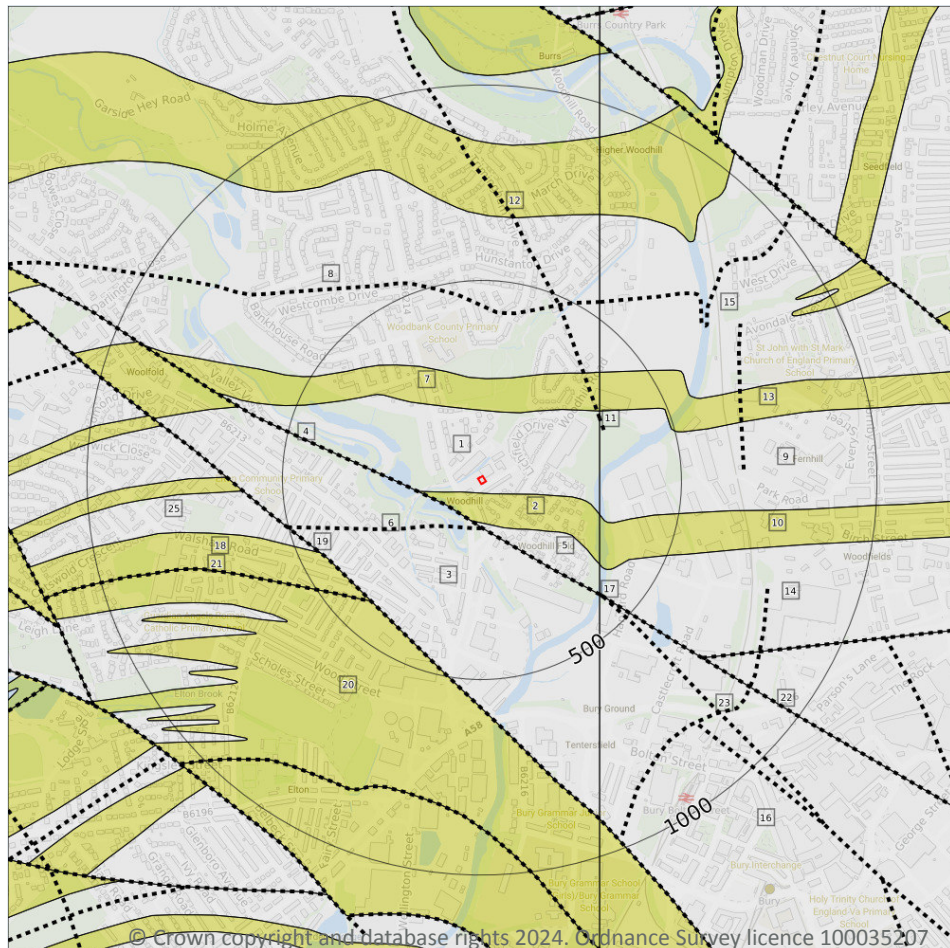
0

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

15

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 90](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
2	23m S	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
3	93m SW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age



ID	Location	LEX Code	Description	Rock age
5	97m S	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
7	167m N	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
8	249m N	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
9	291m E	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
10	303m E	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
13	342m NE	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
14	360m SE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
15	400m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
16	410m SE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
18	411m SW	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
20	411m SW	CAR-SDST	Cannel Rock (south Lancashire) - Sandstone	Langsettian Sub-age
25	446m SW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

10

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 90](#) >

ID	Location	Category	Description
4	93m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
6	113m S	ROCK	Coal seam, inferred
11	329m E	LANDFORM	Buried channel or valley margin
12	333m NE	LANDFORM	Buried channel or valley margin

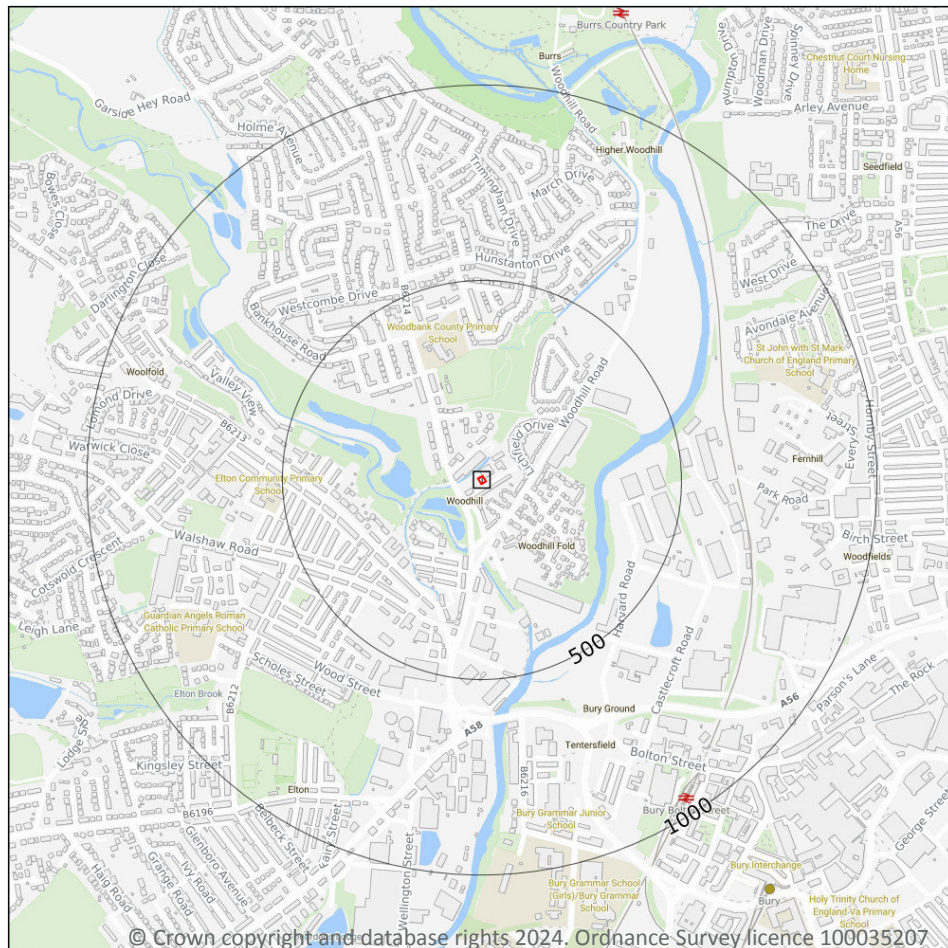


ID	Location	Category	Description
17	410m SE	FAULT	Normal fault, inferred; crossmarks on downthrow side
19	411m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
21	411m SW	ROCK	Coal seam, inferred coincident with bedrock geology boundary
22	415m SE	FAULT	Normal fault, inferred; crossmarks on downthrow side
23	419m SE	ROCK	Coal seam, inferred
24	420m N	ROCK	Coal seam, inferred

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

□ Geological map tile

15.1 50k Availability

Records within 500m

1

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

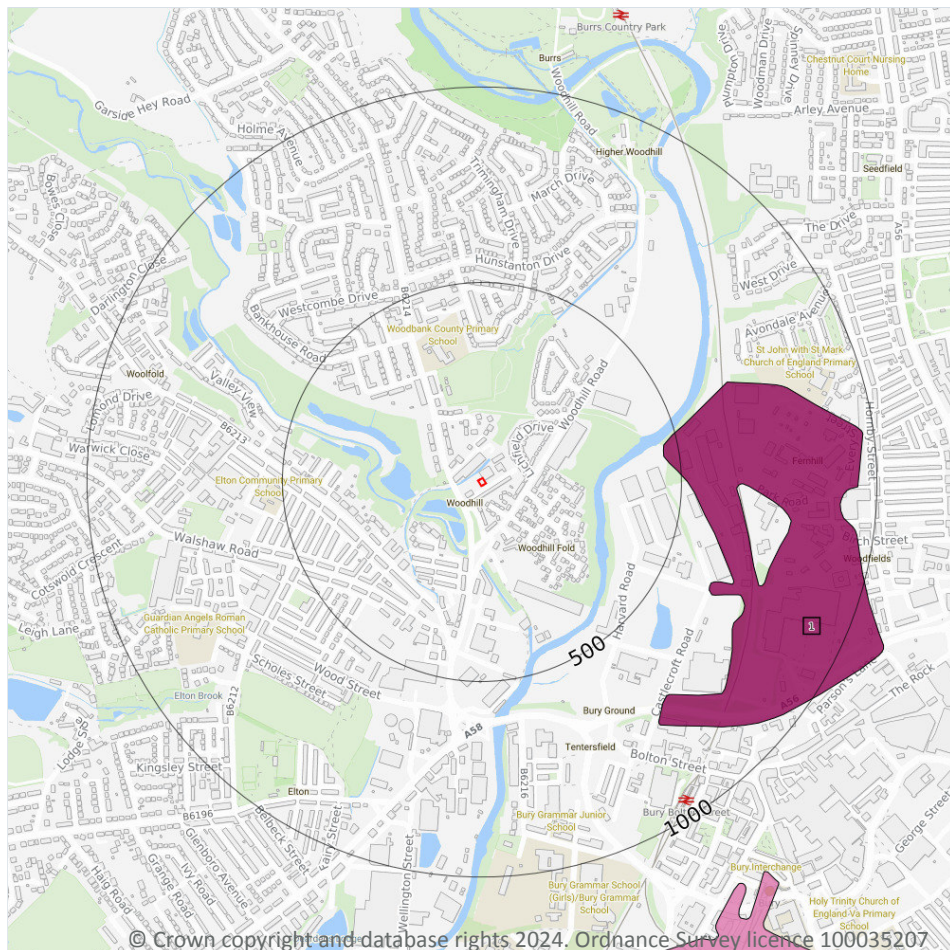
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 93](#) >

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



— Site Outline
Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m

1

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 94](#) >

ID	Location	LEX Code	Description	Rock description
1	460m E	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

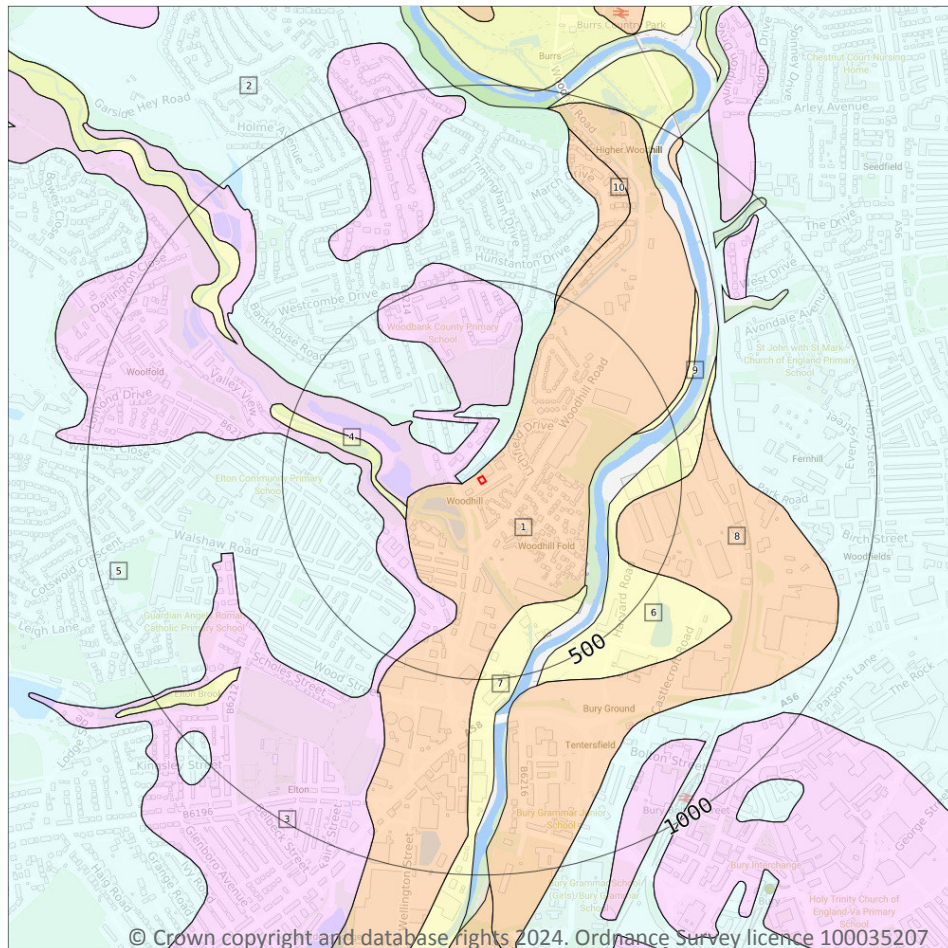
0

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

10

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 96](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	RTD1-XSV	RIVER TERRACE DEPOSITS, 1	SAND AND GRAVEL
2	12m NW	TILLD-DMTN	TILL, DEVENSAN	DIAMICTON
3	42m NW	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSAN	SAND AND GRAVEL
4	195m W	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL



ID	Location	LEX Code	Description	Rock description
5	263m W	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
6	321m E	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
7	331m S	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
8	351m E	RTD2-XSV	RIVER TERRACE DEPOSITS, 2	SAND AND GRAVEL
9	393m E	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
10	457m NE	RTD2-XSV	RIVER TERRACE DEPOSITS, 2	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

3

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Very High	High
12m NW	Mixed	High	Low
42m NW	Intergranular	Very High	High

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



15.7 Landslip permeability (50k)

Records within 50m

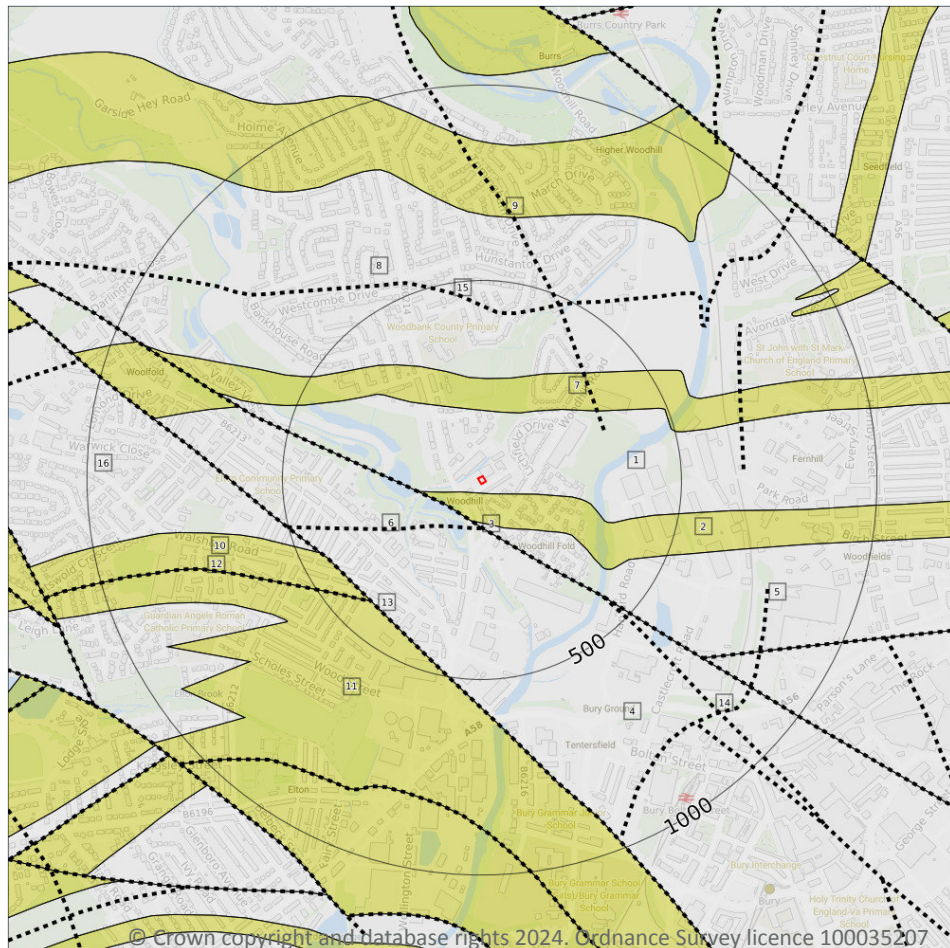
0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

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

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

15.8 Bedrock geology (50k)

Records within 500m

9

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 99](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
2	23m S	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN



ID	Location	LEX Code	Description	Rock age
4	93m SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
5	97m S	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
7	167m N	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
8	249m N	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
10	411m SW	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
11	411m SW	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
16	445m SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

2

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low
23m S	Fracture	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

7

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 99 >](#)

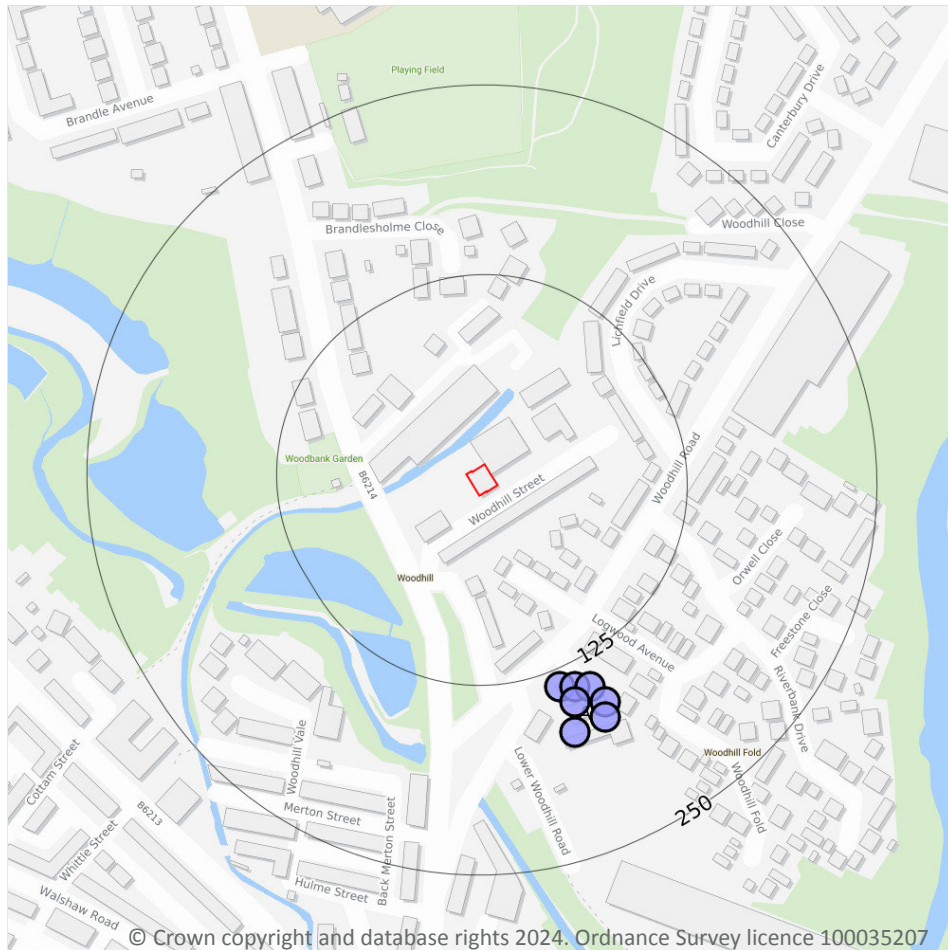


ID	Location	Category	Description
3	93m SW	FAULT	Fault, inferred
6	113m S	ROCK	Coal seam, inferred
9	329m E	LANDFORM	Approximate margin of buried (superficial deposit-filled) channel or valley
12	411m SW	ROCK	Coal seam, inferred
13	411m SW	FAULT	Fault, inferred
14	419m SE	ROCK	Coal seam, inferred
15	420m N	ROCK	Coal seam, inferred

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

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

16.1 BGS Boreholes

Records within 250m

7

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 102](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	137m S	379750 411420	WOODHILL ROAD BURY TP5	3.5	N	22885 ↗
A	141m SE	379760 411420	WOODHILL ROAD BURY TP6	3.0	N	22886 ↗
A	145m SE	379770 411420	WOODHILL ROAD BURY BH1	3.5	N	22880 ↗

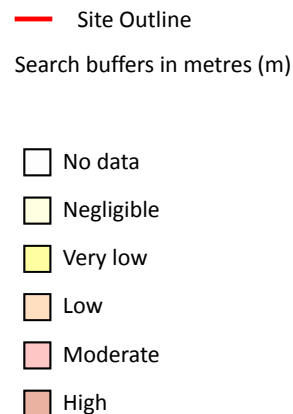
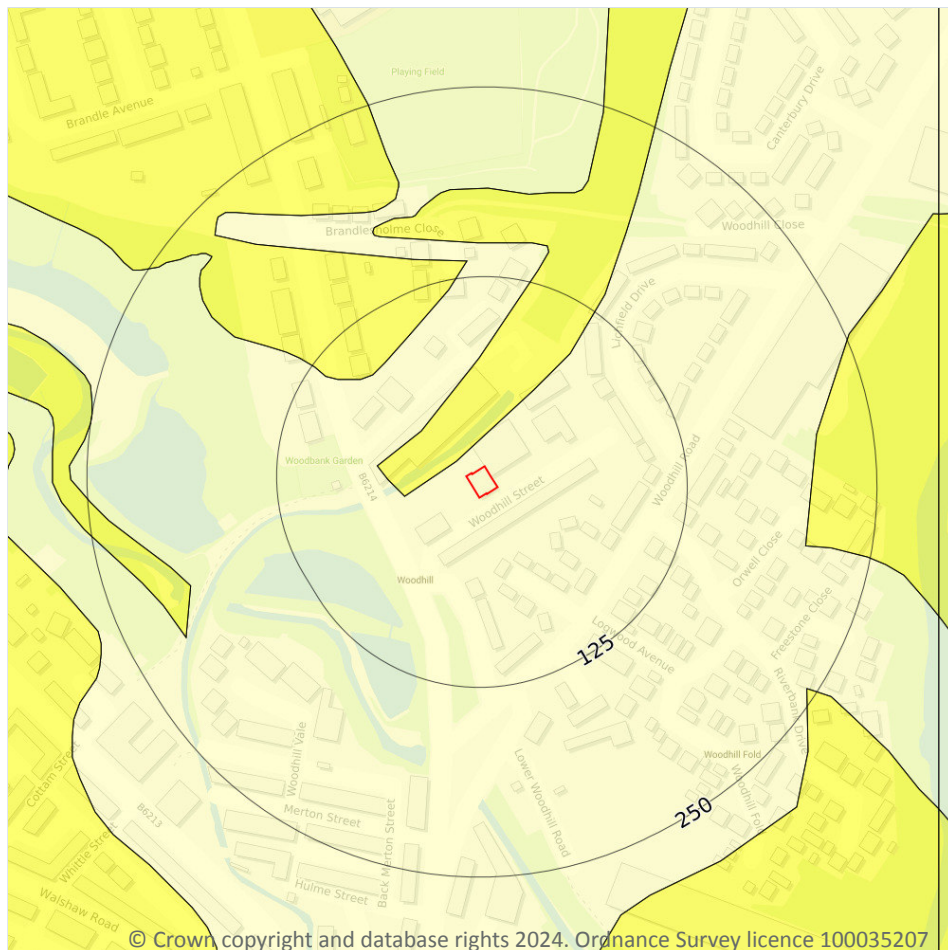


ID	Location	Grid reference	Name	Length	Confidential	Web link
A	150m SE	379760 411410	WOODHILL ROAD BURY TP3	3.4	N	22883 ↗
A	159m SE	379780 411410	WOODHILL ROAD BURY TP4	2.4	N	22884 ↗
A	168m SE	379780 411400	WOODHILL ROAD BURY TP2	3.0	N	22882 ↗
A	168m S	379760 411390	WOODHILL ROAD BURY TP1	3.1	N	22881 ↗

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

2

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).

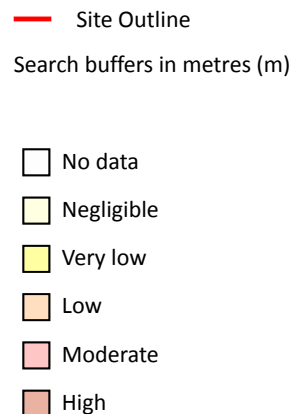
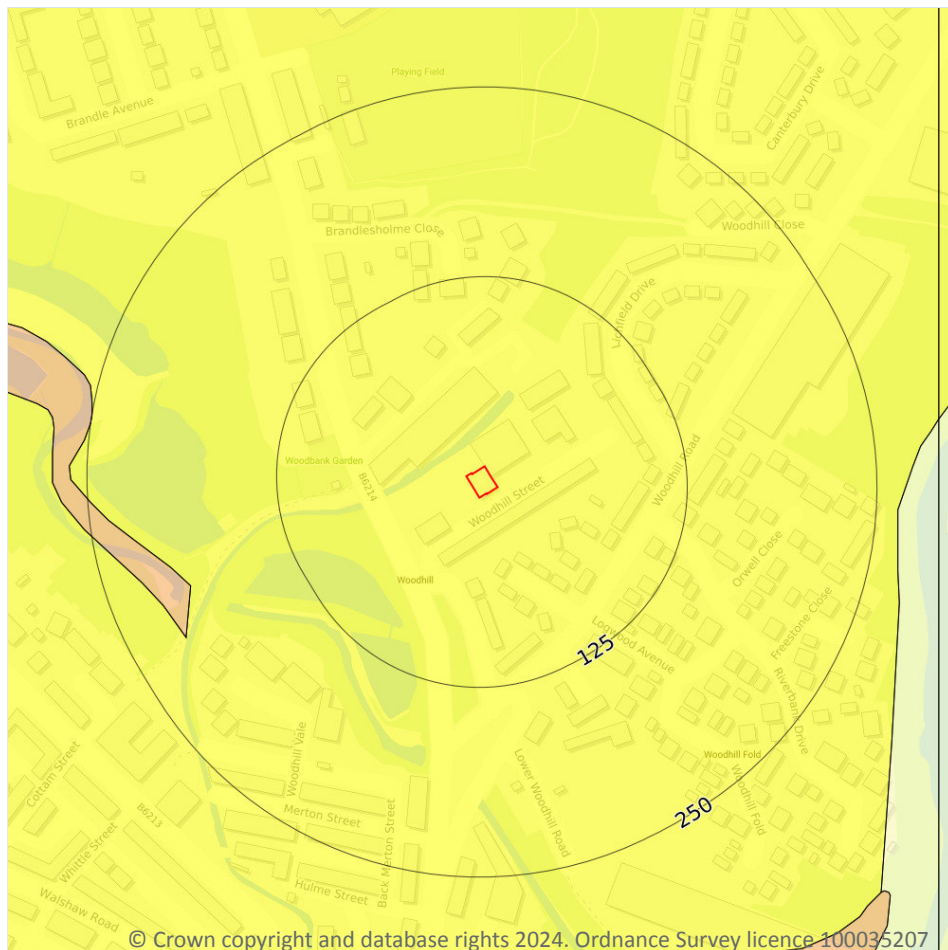
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 104](#) >

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
12m NW	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

1

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

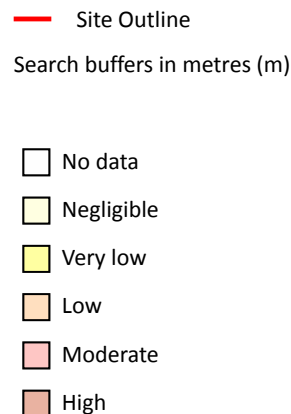
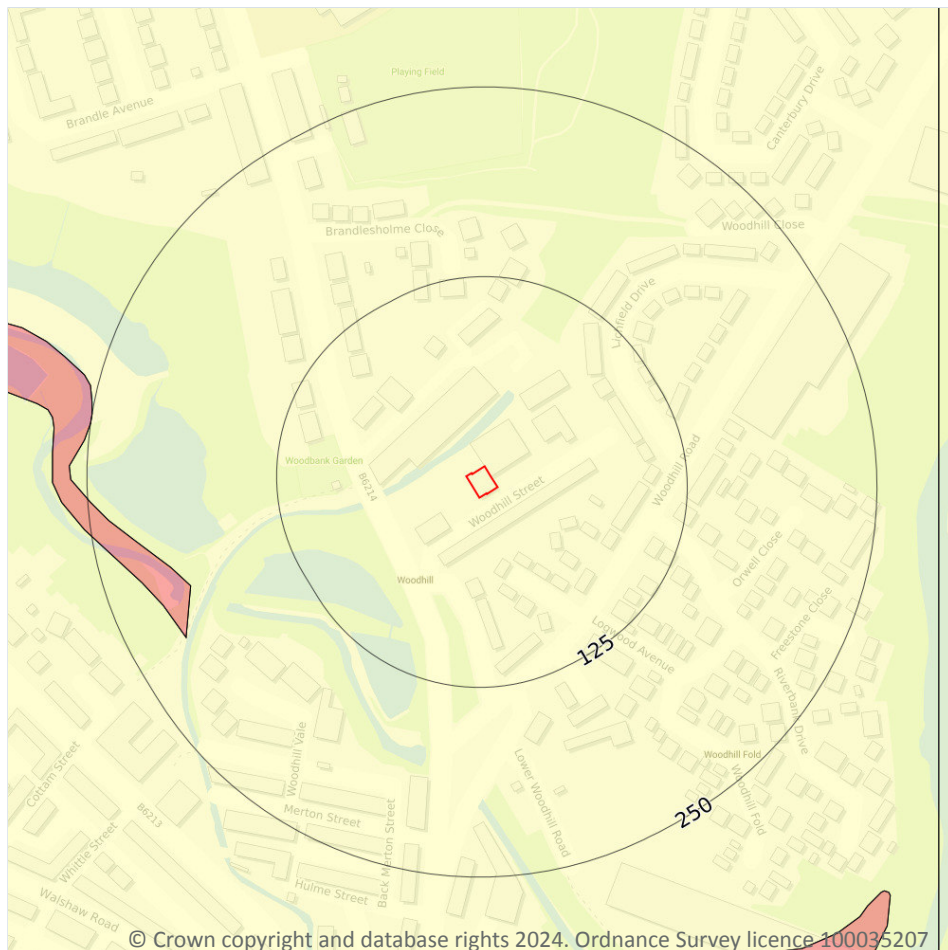
Features are displayed on the Natural ground subsidence - Running sands map on [page 105 >](#)

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



17.3 Compressible deposits

Records within 50m

1

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

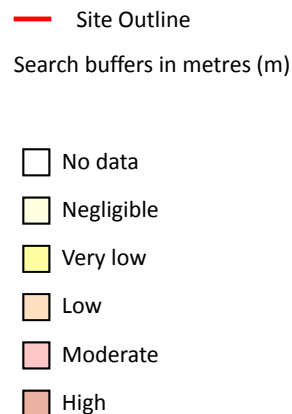
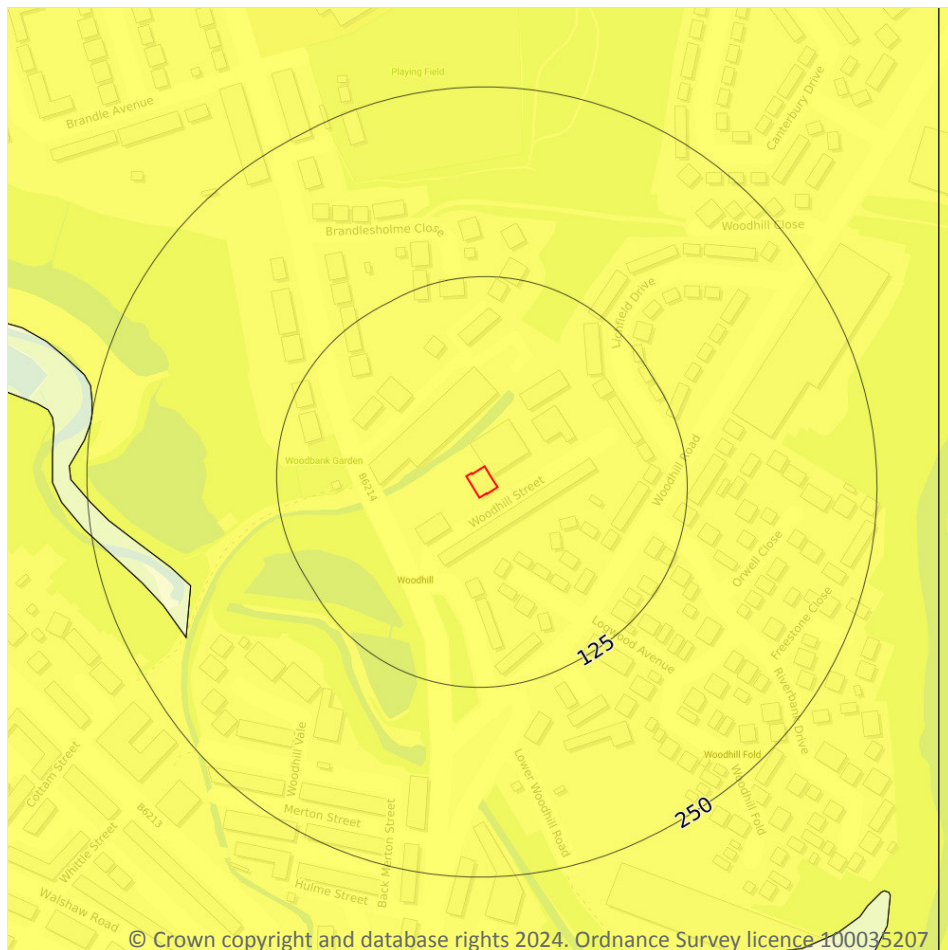
Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 106](#) >

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



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.

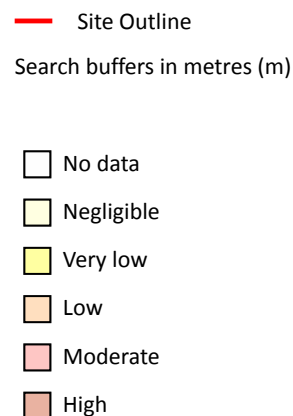
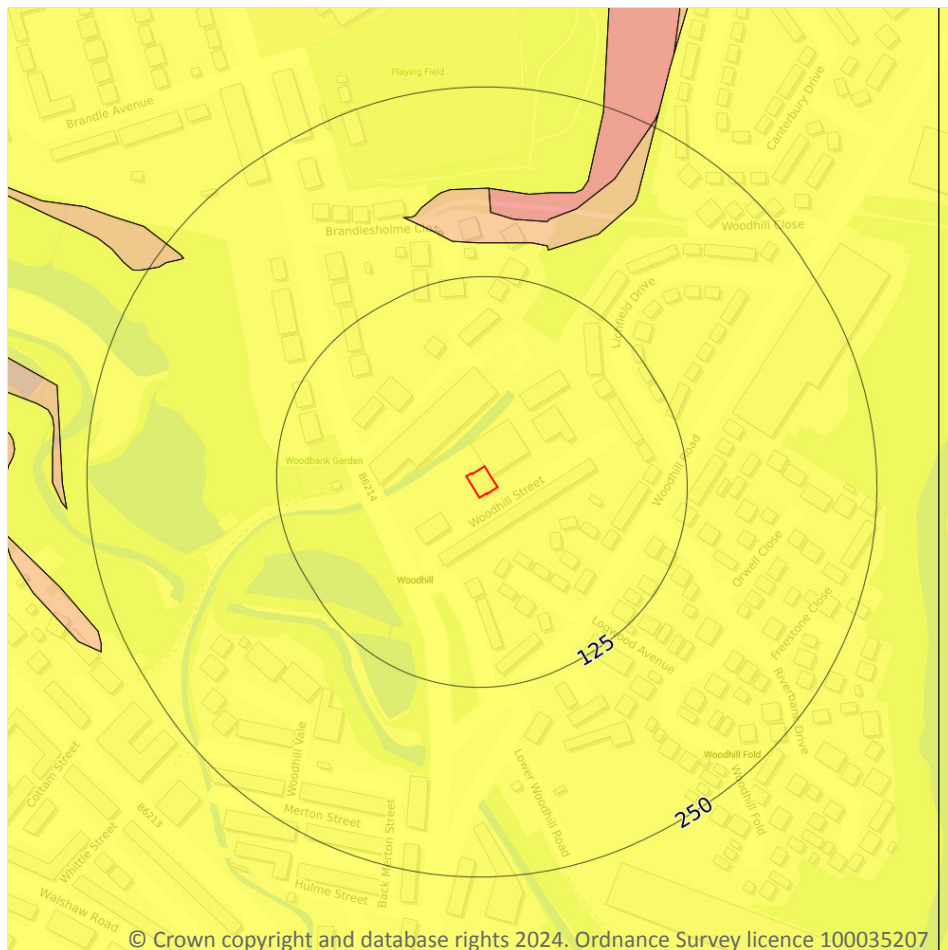
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 107 >](#)

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m

1

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

Features are displayed on the Natural ground subsidence - Landslides map on [page 108](#) >

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 109](#) >

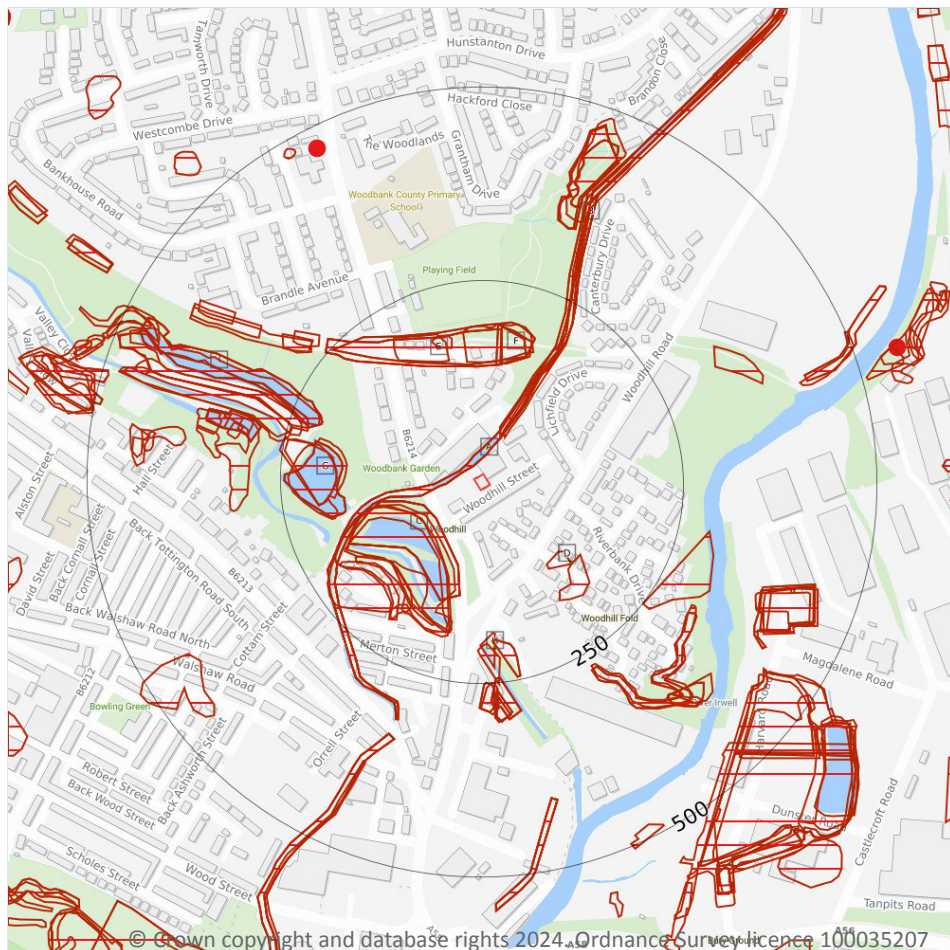
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



This data is sourced from the British Geological Survey.



18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- ▢ Surface ground workings
- ▢ Underground workings
- ▢ Underground mining extents
- ▢ Historical mineral planning areas
- ▢ TCA non-coal mining
- 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 BritPits

Records within 500m

1

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 and ground workings map on [page 111](#) >



ID	Location	Details	Description
V	472m NW	Name: Woodbank Sand Pit Address: BURY, Lancashire Commodity: Sand 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.

18.2 Surface ground workings

Records within 250m	57
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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 and ground workings map on [page 111](#) >

ID	Location	Land Use	Year of mapping	Mapping scale
A	15m NW	Canal Feeder	1980	1:10000
A	15m NW	Canal Feeder	1969	1:10560
A	15m NW	Canal Feeder	1974	1:10000
A	15m NW	Canal Feeder	1956	1:10560
B	54m N	Canal Feeder	1928	1:10560
B	54m N	Canal Feeder	1908	1:10560
B	55m NE	Canal Feeder	1891	1:10560
C	68m SW	Reservoirs	1980	1:10000
C	68m SW	Reservoirs	1969	1:10560
C	68m SW	Reservoirs	1974	1:10000
C	68m SW	Reservoirs	1956	1:10560
C	77m SW	Reservoirs	1891	1:10560
C	84m SW	Reservoirs	1909	1:10560
C	84m SW	Reservoirs	1938	1:10560
C	92m SW	Reservoirs	1928	1:10560
D	124m SE	Unspecified Pit	1891	1:10560
C	132m SW	Pond	1850	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
E	139m N	Cuttings	1928	1:10560
E	139m N	Cuttings	1909	1:10560
E	139m N	Cuttings	1891	1:10560
F	142m N	Cuttings	1938	1:10560
F	142m N	Cuttings	1891	1:10560
E	143m N	Cuttings	1980	1:10000
E	143m N	Cuttings	1974	1:10000
F	144m N	Cuttings	1956	1:10560
F	145m N	Cuttings	1928	1:10560
F	145m N	Cuttings	1908	1:10560
D	147m SE	Unspecified Heap	1891	1:10560
C	147m SW	Refuse Heap	1956	1:10560
E	153m N	Cuttings	1956	1:10560
C	164m SW	Refuse Heap	1928	1:10560
G	165m W	Pond	1956	1:10560
E	168m N	Unspecified Pit	1938	1:10560
G	169m W	Pond	1980	1:10000
G	169m W	Pond	1969	1:10560
G	169m W	Pond	1974	1:10000
G	177m W	Unspecified Pit	1938	1:10560
G	178m W	Unspecified Pit	1928	1:10560
H	185m S	Ponds	1909	1:10560
H	194m S	Pond	1969	1:10560
H	194m S	Pond	1974	1:10000
H	198m S	Ponds	1891	1:10560
I	209m W	Pond	1980	1:10000
I	209m W	Pond	1969	1:10560
I	209m W	Pond	1974	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
I	212m W	Water Body	1956	1:10560
I	224m W	Pond	1938	1:10560
I	224m W	Pond	1928	1:10560
I	232m W	Refuse Heap	1956	1:10560
H	244m S	Ponds	1969	1:10560
H	244m S	Ponds	1974	1:10000
H	244m S	Ponds	1956	1:10560
I	244m W	Sand Pit	1938	1:10560
I	246m W	Refuse Heap	1928	1:10560
H	249m S	Pond	1928	1:10560
H	249m S	Pond	1909	1:10560
H	250m S	Pond	1891	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m

3

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

Features are displayed on the Mining and ground workings map on [page 111](#) >

ID	Location	Land Use	Year of mapping	Mapping scale
-	942m S	Tunnel	1938	1:10560
-	942m S	Tunnel	1927	1:10560
-	942m S	Tunnel	1908	1:10560

This is data is sourced from Ordnance Survey/Groundsure.



18.4 Underground mining extents

Records within 500m

0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from 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 JPB mining areas

Records on site

0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m

0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the



Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m

0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m

0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m

0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 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.



18.13 Brine areas

Records on site	0
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The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

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

18.14 Gypsum areas

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

This data is sourced from British Gypsum.

18.15 Tin mining

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 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 Ground cavities and sinkholes

19.1 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.

19.2 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.

19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

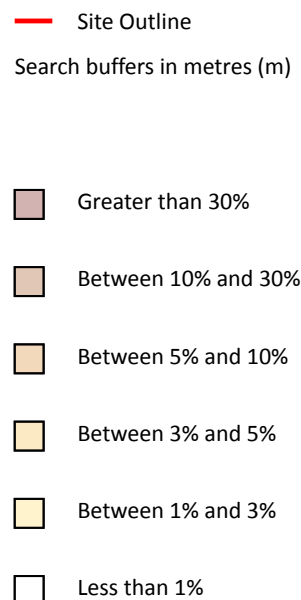
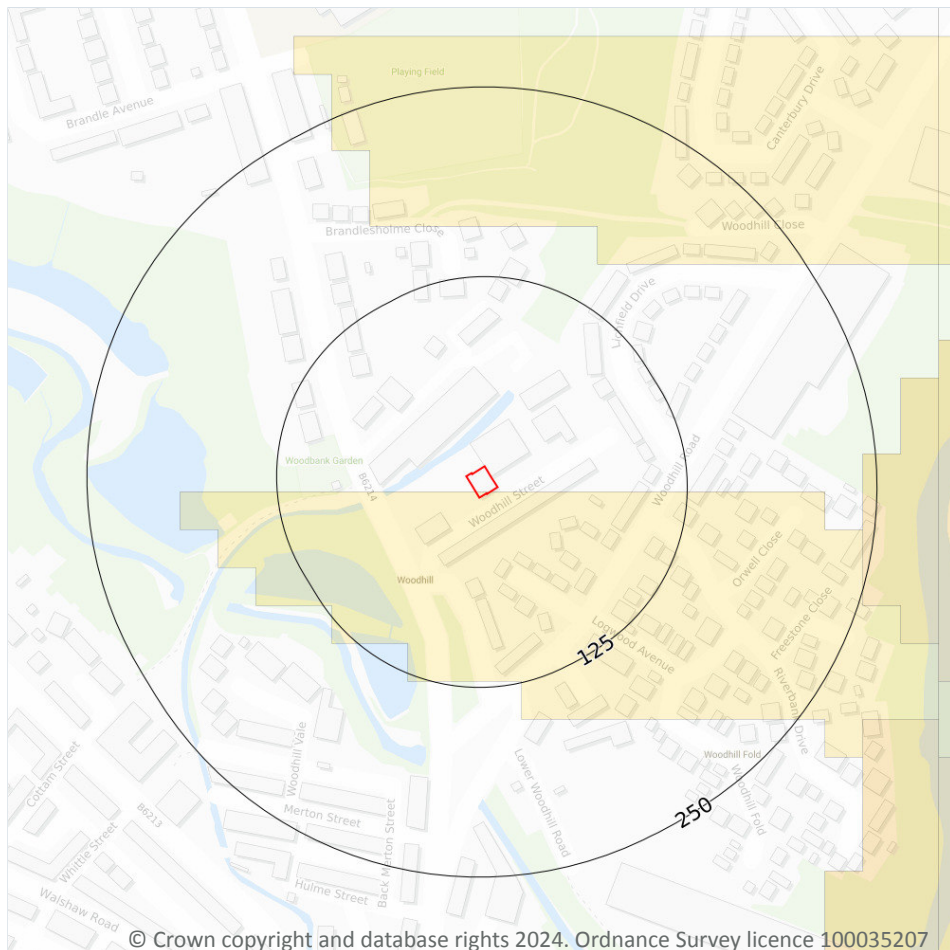
Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

2

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 120 >](#)

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 1% and 3%	None



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

This data is sourced from the British Geological Survey and UK Health Security Agency.



21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

4

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
22m N	15 - 25 mg/kg	No data	200 - 300 mg/kg	120 - 240 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
28m S	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
46m S	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.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.



21.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.



22 Railway infrastructure and projects



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

22.1 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.

22.2 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.

22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m

2

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 124 >](#)

Location	Land Use	Year of mapping	Mapping scale
115m N	Railway	1910	-
115m N	Railway	1893	-

This data is sourced from Ordnance Survey/Groundsure.

22.5 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.

22.6 Historical railways

Records within 250m

1

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

Features are displayed on the Railway infrastructure and projects map on [page 124 >](#)



Location	Description
163m N	Abandoned

This data is sourced from OpenStreetMap.

22.7 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.

22.8 Crossrail 2

Records within 500m	0
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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.

22.9 HS2

Records within 500m	0
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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: www.groundsure.com/terms-and-conditions-april-2023/ ↗.



APPENDIX D

Mining Search Report



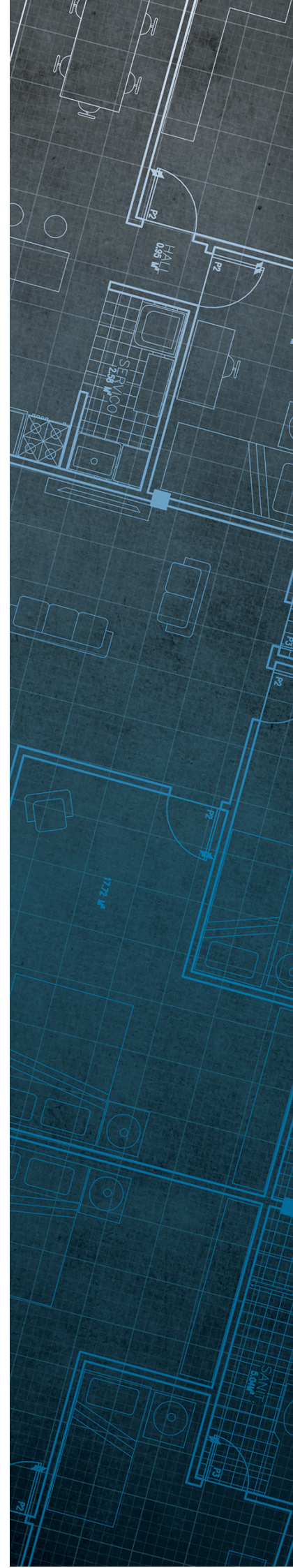
The Coal
Authority

Consultants Coal Mining Report

Woodhill Street, Bury
Greater Manchester
BL8 1AT

Date of enquiry:	17 December 2024
Date enquiry received:	17 December 2024
Issue date:	17 December 2024

Our reference:	51003469598001
Your reference:	GS-JW7-LPF-SH5-I54



Consultants

Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

GROUNDSURE LIMITED

Enquiry address

Woodhill Street, Bury
Greater Manchester
BL8 1AT

How to contact us

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Nottinghamshire
NG18 4RG

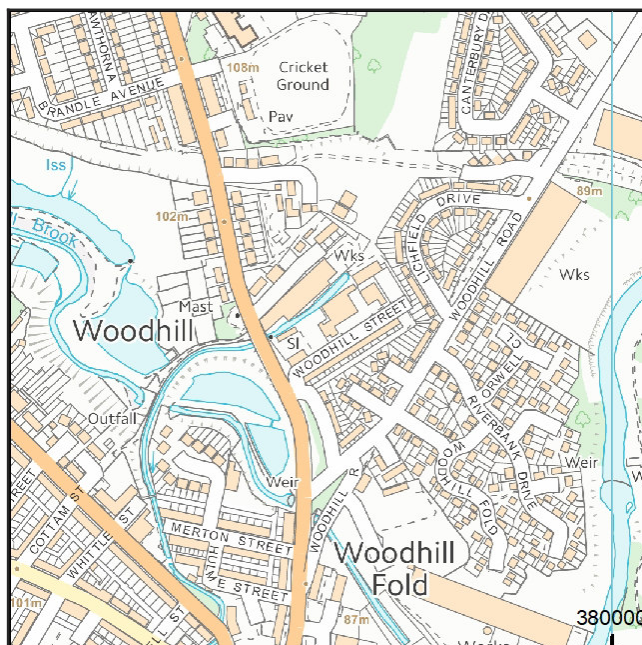
www.groundstability.com

 @coalauthority

 /company/the-coal-authority

 /thecoalauthority

 /thecoalauthority



Approximate position of property



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Section 1 – Mining activity and geology

Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
unnamed	ARLEY	Coal	6DMG	27	Beneath Property	3.1	South-East	130	1900

Probable unrecorded shallow workings

None.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

None recorded within 100 metres of the enquiry boundary.

Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

16820		
-------	--	--

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

No outcrops recorded.

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

Opencast mines

None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

Distance to site investigation (m)	Direction
2.0	South-West
1.3	South-West
0.6	South-West

See Section 4 for further information.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining

None recorded.

Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

Court orders

None recorded.

Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

Site investigations

The site is within an area of previous interest. It is close to where the Coal Authority has received information relating to past site investigations.

The site requires further investigation and may influence how you approach your risk assessment.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at groundstability@coal.gov.uk.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk**.

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

Mine water treatment schemes

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices

Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land

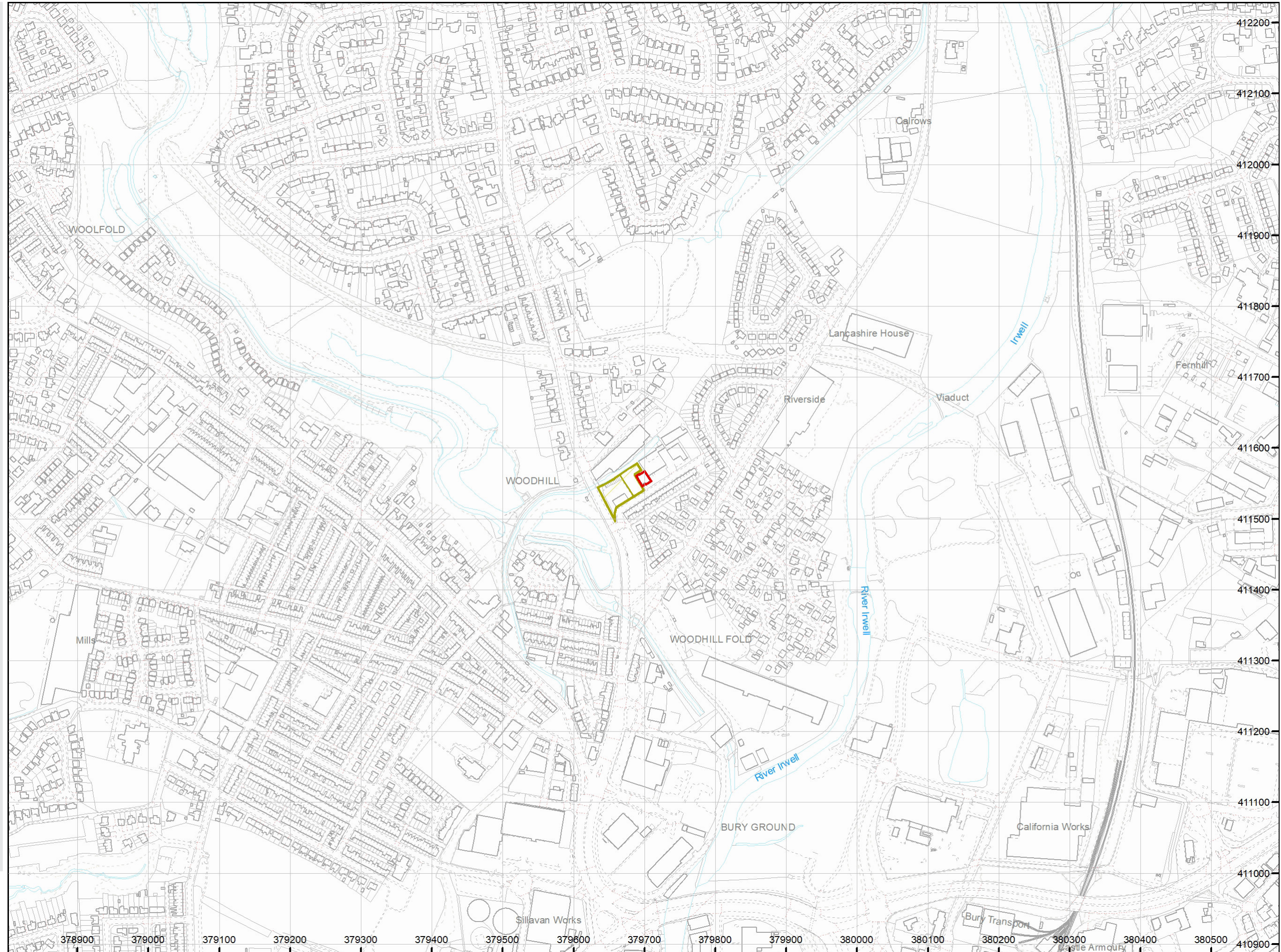
Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

Approximate position of the enquiry boundary shown 

Site investigations 



How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)
www.groundstability.com

APPENDIX E

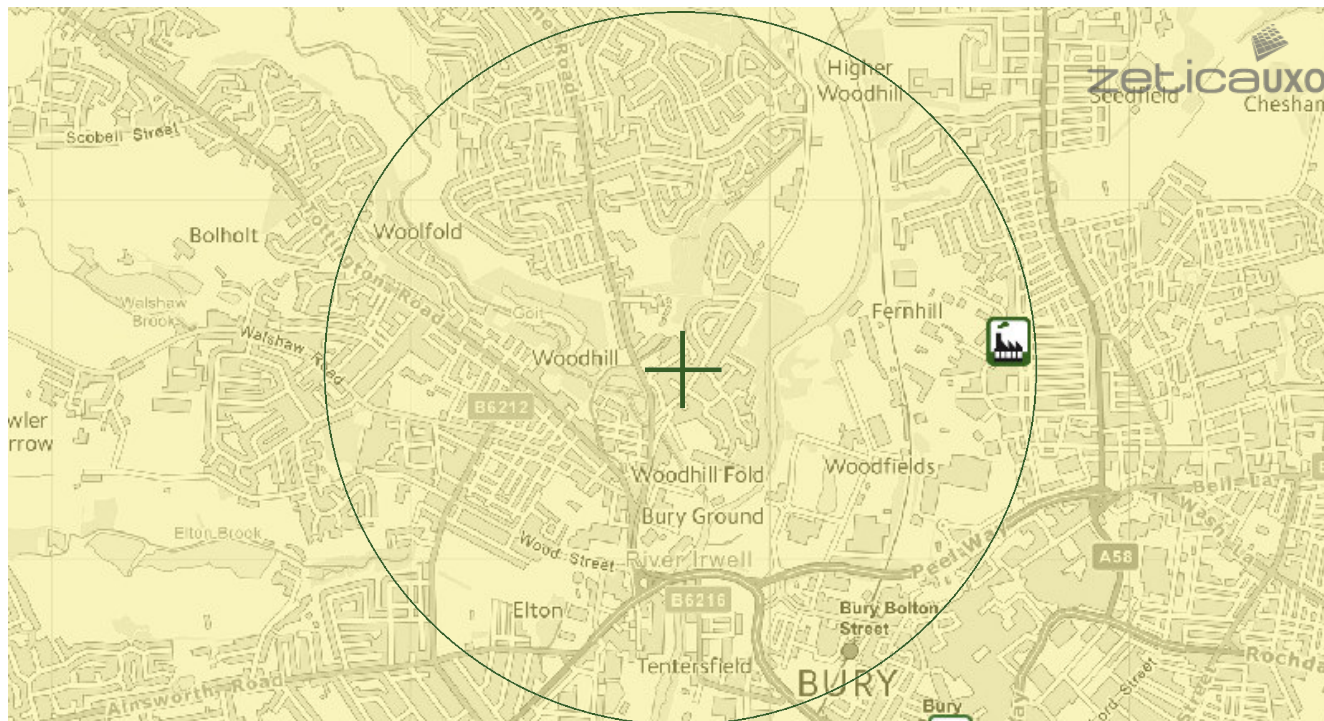
UXO Screening Map

UNEXPLODED BOMB RISK MAP



SITE LOCATION

Location: BL8 1AT,
Map Centre: 379721,411536



This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.

- Military**
- Industry**
- UXO find**
- Other**
- Transport**
- Docks**
- Luftwaffe targets**
- Utilities**
- Bombing decoy**
- Airfields**

How to use your Unexploded Bomb (UXB) risk map?

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density. Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then [additional detailed research](#) is recommended.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirm that there is a low potential for UXO to be present on your site, then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

If you are unsure whether other sources of UXO may be present, you can request one of our [pre-desk study assessments \(PDSA\)](#) by emailing a site boundary and location to pdsa@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

tel: [+44 \(0\) 1993 886682](tel:+441993886682) email: uxo@zetica.com web: www.zeticauxo.com

The information in this UXB risk map is derived from a range of sources and should be used with the [accompanying notes on our website](#).

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