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PHASE 1 ENVIRONMENTAL DESK STUDY & COAL MINING RISK ASSESSMENT REPORT

job number	C6063/26/E/9391	date	15.05.2026
site address	Smithies Moor Rise, Birstall, Batley, West Yorkshire, WF17 8AX		
written by	S. Hale	checked by	R. Palmer
issued by	S. Hale		



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Report on a Phase One Desk Study & Coal Mining Risk Assessment

Location: **Smithies Moor Rise**
Birstall, Batley, West Yorkshire, WF17 8AX

For: **Zafran Javed**

Report No. **C6063/26/E/9391**

Report date: **May 2026**

For and on behalf of **Rogers Geotechnical Services Ltd**

Steven Hale BSc FGS
Geo-environmental Engineer

Rob Palmer MSc FGS ACIEH
Engineering Director

1. Introduction

The site comprises an existing commercial unit with associated yard area located on Smithies Moor Rise. The site is approximately 0.19 hectares in size and its National Grid reference is centred around 422602 425594.

It is understood that the development proposals currently comprise roof alterations and a small extension to the existing storage unit in the north-western corner. In order to assist with this decision-making process, and any planning and construction aspects of the development, a phase one environmental desk study has been commissioned and is the subject of this report.

This report may be regarded as a Preliminary Risk Assessment in accordance with the Environment Agency's guidance document Model Procedures for the Management of Land Contamination (CLR 11, 2004). This Phase 1 Desk Study has been undertaken with due regard to current contaminated land guidance issued by the Royal Institution of Chartered Surveyors (RICS) together with BS 10175:2011+A2:2017, "Investigation of Potentially Contaminated Land - Code of Practice" and relevant sections of BS 5930: 2015+A1:2020, "Code of Practice for Ground Investigations".

As a part of this desk study the following data has been considered.

- | | |
|--|--------------|
| • Site Plan | - Appendix 1 |
| • Historical maps | - Appendix 2 |
| • Groundsure Reports | - Appendix 3 |
| • Photographs | - Appendix 4 |
| • Coal Mining Risk Assessment (GeoInvestigate) | - Appendix 5 |

The data obtained from the above-mentioned sources has been summarised below¹ in the following sections.

¹ This report is a summary only and reference must be made in full to the information provided in the Groundsure Report.

1.1 Site Walkover and Description

In accordance with issued guidance, a site walkover was conducted on the 30th April 2026 and the following observations were made:

General site description/current site use

The site is currently occupied by a used car sales office and comprises of a single commercial unit with associated parking areas.

Site boundaries/access

The site is accessible via a gate off of Smithies Moor Rise.

Topography

The site lies flat.

Surface cover of site

Hardstanding covers the surface of the site.

Visible evidence of contamination/ contaminative sources

At the time of the walkover no obvious sources of contamination were observed.

Presence of vegetation and wildlife

Vegetation on site was comprised of occasional weed species present to some perimeter locations. No obvious signs of fauna were observed.

Services

The status of underground services is unknown. No overhead cables noted during the visit. Live services are anticipated to be present.

Site neighbours

Residential dwellings are present to the south and west of the site, with commercial units present to the north and east.

In order to ensure that the site is fully characterised and to comply with the Environment Act 1995², a Phase One Desk Study has been commissioned by Zafraan Javed. The desk study is intended to assess the environmental impact of historical, current and future factors on the development. This report will present the data obtained and provide a conceptual ground model and preliminary risk assessment as well as discussing the scope of any intrusive investigation that may be required. This report does not consider ecological impacts (e.g. bats) or botanical risks (e.g. Japanese Knotweed).

²S57 of the Environment Act 1995 inserted the contaminated land regime into the Environmental Protection Act 1990 (Part 2A). The regime 'provides a risk-based approach to the identification and remediation of land where contamination poses an unacceptable risk to human health or the environment' See <http://www.environment-agency.gov.uk/research/planning/40405.aspx>. This places a duty on local authorities to inspect their areas for contaminated land and require its remediation using the 'suitable for use' approach. Much of this duty is discharged via the planning regime under the Town and Country Planning Act 1990 as historical land contamination is a 'material planning consideration.' The local authorities are required to secure the removal of unacceptable risks via remediation of the land, to therefore ensure the site is suitable for its new use. This is fulfilled via completion of a Phase One Environmental Desk Study, Phase Two Intrusive Investigation, Phase Three Remediation Strategy and Phase Four Validation Report. Therefore, as a minimum, once a site has been developed it should not be capable of being designated as 'contaminated land' under Part 2A of the Environmental Protection Act 1990, as inserted by the Environment Act 1995 (see also PPS 23 Planning and Pollution Control Section 8)

2. Site History

2.1 Historical Land Use

In order to determine the history of the site, previous editions of Historical Maps and Ordnance Survey Plans were inspected. The Historical Maps are presented in Appendix 2. Excerpts of overhead imagery are presented in the Groundsure Report in Appendix 3.

Table 1 below presents a summary of the history of the site and the immediate surrounding area.

Table 1: Historical Land Use ³		
HISTORICAL MAPPING SUMMARY		
Map Dates and Source	On site	Within 250m
1854	The site appears to be undeveloped at this time.	Smithies Beck – 30m N Birstall Gas Works – 240m NW Coal Pits – 150m NW Sandstone Quarry – 210m E
1892 – 1894	The site appears unchanged and is still undeveloped.	The Coal Pits located 150m NW and the Sandstone Quarry located 210m E are no longer present. Providence Mill – 20m N Wensleydale Mills – 50m NE Print Works – 130m E Tramway – 130m NE Smithies Mills – 140m NW Railway – 200m NE
1905 – 1908	The site remains unchanged.	Sewage Works – 190m NW
1922 – 1938	The site remains unchanged.	The surrounding land use remains largely unchanged.
1948 – 1956	The site remains unchanged.	The Print Works located 130m E are now labelled as a 'Warehouse'. The Tramway located 130m NE has been dismantled and replaced with a road. The Sewage Works located 190m NW are now labelled as 'Old Sewage Works'. Lea Mill – 45m E Wensleydale Garages – 190m N & 230m N Garage – 220m N Allotment Gardens – 240m NE
1966 – 1968	The site remains unchanged.	The Wensleydale Mills are now split in half, with an Engineering Works occupying the other half. The Old Sewage Works located 190m NW is now labelled as a 'Concrete Works'. The Railway located 200m NE is now labelled as 'Disused'. Garage – 95m NE
1974 – 1977	A structure is now present on the eastern end of the site that appears to represent the existing commercial building that was present during the walkover.	The Gas Works located 240m NW has been partially demolished, the gas holder is still present to site.
1981 – 1988	The main structure present to the site is labelled as a 'Works'. Two smaller structures are present to the western end of the site.	The Engineering Works located 50m NE has been demolished. The Lea Mill has been expanded to within 10m E of the site and relabelled as a 'Works'. Works – 95m E Depot – 120m NE
1989 – 2025	The site remains unchanged.	The surrounding land use remains largely unchanged.

NB. All distances given are approximate only from closest boundary.

The available aerial photography shows no changes on site between 1999 and 2021.

³ See Appendix 2

3. Review and Summary of Published Data

The following summarises the published data obtained for the site.

3.1 Published Geology and Geological Hazards

The appropriate map sheets, the geology viewer and the Groundsure Report have been examined the table below outlines the following geological data is present for the site:

Table 2: Summary of Geological Data for the Site			
BGS MAPPING DATA			
Strata Type	Strata Name ⁴	Parent Name	Description ⁵
Artificial Geology	Made Ground	Artificially Modified Ground	Made Ground is an area where the pre-existing (natural or artificial) land surface is raised by artificial deposits.
Superficial Geology	-	-	None recorded beneath the site.
Solid Geology	Birstall Rock	Pennine Lower Coal Measures Formation	The Birstall Rock is a fine-grained, thickly bedded, cross bedded sandstone with common pebbles of ironstone, coal sandstone and mudstone, and common streaks of shaly coal.
	Pennine Lower Coal Measures Formation	Pennine Coal Measures Group	Interbedded grey mudstone, siltstone and pale grey sandstone, commonly with mudstones containing marine fossils in the lower part, and more numerous and thicker coal seams in the upper part.
MADE GROUND & INFILLED GROUNDWORKINGS			
Description	Location	Comments	
Records of Artificial Deposits, Groundworkings and infilled features	27m N, 28m NE, 33m NE & 39m NE	Refuse Heaps (1932-1955)	
	122m SE-128m SE	Reservoirs (1932-1955)	
	150m NW	Coal Pits (1854)	
	210m E	Sandstone Quarry (1854)	
	240m NE	Allotment Gardens (1948-1956)	
GEOLOGICAL FEATURES			
Type	Location	Features	Comments
Mining Activity	On site	Coal mining	The study site is located within a coal mining area. A coal mining risk assessment has been undertaken independently of this report, but has been reassessed in this report.
	Within 250m	Non-coal Mining	Evidence of sandstone quarrying in the local area means some localised, small-scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered.
Faults	On site	Fault	Normal fault, displacement unknown.
Landslip Deposits	No data	No data	No data.

⁴ Sources: British Geological Survey (NERC) Map Sheets 77; Huddersfield; Solid and Drift Edition, and GeoIndex Onshore Viewer [online resource from www.bgs.ac.uk]

⁵ Sources: British Geological Survey (NERC) Lexicon of Named Rock Units [online resource from www.bgs.ac.uk]

MINERAL FEATURES			
Seam Name	Seam thickness	Outcrop distance from site	Anticipated depth below site
Flockton Thin Coal (FN)	0.3 – 0.8m	55m S	Not anticipated to underlie the site.
BGS BOREHOLE DATA			
Reference ⁶	Location	Strata Description	Depth
SE22NW624	30m E	Topsoil	0.30m
		Clay & Stones	4.88m
		Interbedded shale and stone	50.29m
		Coal	50.90m (0.6m thickness)
		Stone	71.93m
		Coal	72.85m
		Interbedded shale and stone	118.87m
		Coal	119.18m
		Shale	128.63m
		Coal	128.93m
		Interbedded shale and stone	146.00m
NATURAL GROUND SUBSIDENCE & HAZARDS ⁷			
Type		Risk Rating	
Potential for shrinking or swelling clay ground stability		Very low.	
Potential for running sand ground stability		Very low.	
Potential for compressible ground stability		Very low.	
Potential for collapsible ground stability hazards		Very low.	
Potential for landslide ground stability		Low.	
Potential for ground dissolution stability		Negligible.	

3.2 Mining, Quarrying and Natural Cavities

3.2.1 Coal Mining

The Groundsure Report states that the site is within an area that may be affected by coal mining. A separate Coal Mining Risk Assessment has been completed by Geo Investigate (Ref: G24349) in December 2024. This report concluded that further investigation is needed to investigate historical coal mining legacy. However, a reassessment of the CMRA has been undertaken in section 4 below.

⁶ <https://mapapps2.bgs.ac.uk/geoindex/home.html>

⁷ See Groundsure report

3.2.2 Non-Coal Mining

Localised small-scale mining of sandstone may have occurred in the past or may be currently worked at significant depth. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered.

3.3 Radon Risk

The Groundsure Report highlights that at the purchase of the data set the risk from Radon Gas is outlined as the table below based on information from UK Health Security Agency (UKHSA) UK Radon.

Table 3: Summary of Geological Data for the Site

RADON RISK ⁸	
Radon Risk	The property is in a Radon Affected Area where between 3% and 5% of properties are at or above the action level. Basic radon ⁹ protective measures are necessary in the construction of new dwellings or extensions.

3.4 Hydrogeology

Table 4: Summary of Hydrogeological Data

ENVIRONMENT AGENCY AQUIFER DESIGNATION ¹⁰		
Strata	Designation	Description
Superficial Geology	-	None recorded beneath the site.
Solid Geology 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.
GROUNDWATER SENSITIVITY AND VULNERABILITY ¹¹		
Description	Location	Details
Groundwater Vulnerability	On Site	Bedrock aquifer: High vulnerability.
Source Protection Zone	Within 250m	None recorded within 250m.
Abstraction Licences	88m N	Direct source: Groundwater.
Soil Leaching Potential	On Site	Leaching class: High.

⁸ See Groundsure Report. Radon data is subject to periodic review and is only applicable from date of purchase of data. Further information regarding radon risk is present in the online Radon interactive map [online resource <https://www.ukradon.org/radonmaps/>]

⁹ In outline, 'basic' radon protective measures involve the fitting of a gas tight ground barrier to protect against radon ingress. This should cover the whole building foot print and be lapped to the damp proof course in the walls and sealed around service penetrations. In addition, the membrane should also act as a damp-proof barrier. 'Full' radon protective measures requires the radon-proof ground barrier, together with a sump in the foundation, ready to take a fan if high levels of radon are detected after occupancy.

¹⁰ See Groundsure report

¹¹ See Groundsure report

3.5 Hydrology

Table 5: Summary of Hydrological Data

CONTROLLED WATERS¹²		
Description	Location	Details
Surface Water Features	Within 250m	4 surface water records present within 250m. Smithies Beck present 30m N of the site.
Records of Licensed Discharge Consents	88m N	Effluent Type: Trade discharges – Process effluent, not water company.
	133m NW	Effluent Type: Sewage discharges – Sewer storm overflow, water company.
	210m NW	Effluent Type: Trade discharges – Process effluent, not water company.
ENVIRONMENT AGENCY FLOOD RISK¹³		
Description	Location	Details
Zone 2	On site	Zone 2 – Fluvial/Tidal Models
Zone 3	24m	Zone 3 – Fluvial/Tidal Models
Flood Defences	Within 250m	None recorded within 250m.
Groundwater Flooding Area	On site	Negligible potential for groundwater flooding to occur.

3.6 Waste Management

Table 6: Summary of Published Regulated Waste Management Facilities

ENVIRONMENT AGENCY, LOCAL AUTHORITY, BGS & HISTORIC LANDFILLS		
Waste Type	Location	Comments
Active Landfill	Within 250m	None recorded within 250m
Historic Landfill	116m N	Refuse Tip (1966)
	204m N	Birstall Holder Station – Waste Type: Inert, commercial environmental permitting.
Historic waste sites	35m NE	Type of Site: Breaker's Yard.
	217m NE	Type of Site: Ground Workings and Refuse Heap.
Licensed waste sites	Within 250m	None recorded within 250m
Waste Exemptions	73m E	Using waste exemption.
	82m SE	Using waste exemption.
	139m N	Treating waste exemption.
	167m NW	Using waste exemption.

¹² See Groundsure report

¹³ See Groundsure report

3.7 Regulated Industries and Industrial Land Uses

Table 7: Summary of Industrial Land Uses and Contaminative Sources

HISTORICAL			
Land Use	Location	Classification	
Coal Pits	150m NW	Mining and Quarrying	
Sandstone Quarry	210m E		
Historical Construction	On Site	Historical Construction	
Allotment Gardens	240m NE		
Garages	190m N, 220m N & 230m N	Road vehicle fuelling, service and repair: garages and filling stations.	
Works	On site, 10m E & 95m E	Personal Industrial and consumer products	
Providence Mill	20m N		
Lea Mill	45m E		
Wensleydale Mill	50m NE		
Depot	120m NE		
Print Works/Warehouse	130m E		
Smithies Mill	140m NW		
Sewage Works/Concrete Works	190m NW		
Birstall Gas Works	240m NW		
Tramway	130m NE	Infrastructure	
Railway	200m NE		
CURRENT			
Land Use	Location	Classification	
Works	On site & 103m E	Personal Industrial and consumer products	
Electricity Sub station	7m S, 28m E & 195m N	Infrastructure	
TANKS (Buried and Above Ground)			
Land Use	Location	Classification	
Underground Storage Tanks	Within 250m	None recorded	
Overground Storage Tanks	110m E	Roofed Storage Tank.	
POLLUTION INCIDENTS ¹⁴			
Description	Receptor	Location	Date
Pollutant Not Identified	Water: Category 3 (Minor) Land: Category 4 (None) Air: Category 4 (None)	150m NW	Oct 2002
Oils and Fuels	Water: Category 4 (None) Land: Category 4 (None) Air: Category 4 (None)	164m NE	Nov 2003
General Biodegradable Materials and Wastes	Water: Category 3 (Minor) Land: Category 4 (None) Air: Category 4 (None)	176m NW	Feb 2002
Inert Materials and Wastes	Water: Category 3 (Minor) Land: Category 4 (None) Air: Category 4 (None)	197m NW	July 2003

¹⁴ See Groundsure report

Inert Materials and Wastes	Water: Category 3 (Minor) Land: Category 4 (None) Air: Category 4 (None)	206m NW	May 2002
REGULATED INDUSTRIES			
Description	Location	Details	
Records of Part A(2) and Part B Activities and Enforcements	48m E	Process: Non-ferrous Metal Foundry. Status: Historical. Permit Type: Part B.	
	104m N	Process: Waste Oil Burner 0.4 MW. Status: Historical. Permit Type: Part B.	
	124m E	Process: Timber Manufacture. Status: Current. Permit Type: Part B.	
	174m S	Process: Waste Oil Burner 0.4 MW. Status: New Legislation Applies. Permit Type: Part B.	
	217m NW	Process: Use of Bulk Cement. Status: Historical. Permit Type: Part B.	
HAZARDOUS OR CONTROLLED SUBSTANCES			
Description	Location	Details	
Control of Major Accident Hazard (COMAH) Sites	Within 250m	None recorded within 250m.	
Regulated Explosive Sites	Within 250m	None recorded within 250m.	
Hazardous Substance Storage/Usage	Within 250m	None recorded within 250m.	

3.8 Unexploded Ordnance Risk

Table 8: Unexploded Ordnance Risk

Location	Risk Rating
On Site	the Zetica ¹⁵ online maps indicate that the site is at low risk from UXO.

3.9 Sensitive Land Use

Table 9: Summary of Sensitive Land Uses

REGISTERED SENSITIVE LAND USES ¹⁶		
Description	Location	Details
Designated Ancient Woodland	Within 250m	None recorded within 250m.
Green Belt	128m S	South and West Yorkshire Green Belt – Kirklees.
Nitrate Vulnerable Zones	Within 250m	None recorded within 250m.
World Heritage Site	Within 250m	None recorded within 250m.

¹⁵ Pre-desk study assessment [online resource from www.zeticauxo.com].

¹⁶ See Groundsure Report

4. Preliminary Conceptual Site Model and Risk Assessment

4.1 Anticipated Ground Conditions

The site is located in an area where made ground may be present. Superficial deposits are unlikely to be present. Bedrock is likely to comprise of sandstone of the Birstall Rock before transitioning into the undifferentiated strata of the Pennine Lower Coal Measures Formation.

4.2 Coal Mining Risk Assessment

A separate Coal Mining Risk Assessment has been completed by GeoInvestigate (Ref: G24349) in December 2024. This report concluded that further investigation is needed to investigate historical coal mining legacy.

With reference to Table 3 above, BGS borehole record SE22NW624 is associated with a borehole that was drilled immediately east of the site boundary. No evidence of shallow coal nor workings were identified within that borehole record. However, it is noted that a geological fault cross-cuts the existing building, meaning that the geology may differ between the eastern and western section of the site ownership. As such, the borehole referred to above is on the opposite side of the fault to the proposed development area.

Notwithstanding this, the geological fault appears to have caused nominal displacement. Indeed, in relation to the solid geology within the site boundary, both sides are positioned on outcrop of the Birstall Rock. As such, it is considered that the BGS borehole record represents comparable ground conditions on either side of the fault. It would appear that this is something that the GeoInvestigate report fails to recognise:

BGS log SE22NW/624 on the downthrown eastern side of the fault presented in Appendix E, records superficial deposits / bedrock depth of 4.88m, with an unnamed coal at 50.90m. In Geoinvestigate's opinion, if underground mine workings occur in this coal on the east side of the building extension, it lies too deep to impact surface ground stability.

However, no borehole information is available on the upthrown west side of the fault beneath the west side of the building extension. Notwithstanding, as the geology mapping indicates the bedrock on this side is Birstall Rock then according to the geology column the 1BM or 2BM Coal horizons and underground workings in them (if present) may lie within very shallow or shallow depth below the new extension. This however is speculation.

Owing to uncertainty about the coal mining geology under the new building extension and the possible presence of shallow mine workings, it is Geoinvestigates opinion that limited further intrusive drilling investigation is required beneath the new building extension to further enable the mine working hazard to be assessed beneath this end of the building.

Given the likely comparable ground conditions on either side of the fault, it is reasonable to suggest that the rock profile identified within SE22NW624 shall also be present below the proposed development area. To that affect, it is anticipated that there will be no coal seams present within 30m of the surface. Indeed, the borehole record only identified a 0.6m thick coal seam at a depth of 50m, anticipated to represent the Middle Main Coal, thereby suggesting that the 1st and 2nd Brown Metal Coal seams are impersistent and/or absent beneath the site. Indeed, said seams if present would be expected at a depth of around 10m. In view of the above, it is considered that the 'Moderate' risk assigned by the GeoInvestigate report should be reclassified to 'Low', thus no intrusive works are required.

4.3 Contamination Assessment

In order for a conceptual site model and preliminary risk assessment to be completed the historical maps and Groundsure data requires analysis to identify any past or present activities on the site and in the area that may have the potential to cause contamination on the site. Guidance has been issued by the Environment Agency, NHBC and Chartered Institute of Environmental Health.¹⁷¹⁸ Within this document, annex 3 provides examples of important contaminants that are associated with individual uses of land. This data assists in the formulation of any chemical testing regime.

The table below combines all identified potential current and historical aspects of the site and lists those that we consider potentially contaminative according to the guidance are given below:

Table 10: Potentially Contaminative Sources			
Land Use	Location	Contamination Risk and Profile	Monitoring Profile
Historical construction	Whole site	Made ground from demolitions of previous structures, immediately around the site over the documented history. This may include brick, concrete, timber, asbestos and metals. Historically road construction used ash as a sub-base material.	Ground gas may be generated from made ground.

4.4 Preliminary Qualitative Risk Assessment

The potential of contamination hazards on the land has been identified and the risks associated with them are assessed in the following preliminary risk assessment in accordance with industry practice and the 'suitable for use' approach. This has been conducted using the source-pathway-receptor approach. This method dictates that there must be a risk contaminant produced at a 'source' in sufficient concentration to cause harm and there must be a 'pathway' for the contaminant to reach an identifiable 'receptor' for the linkage to be proved and a contamination hazard to be considered present. Not all substances are contaminants and not all contaminants are considered to be a risk. Indeed, DEFRA and The Environment Agency state that **'a contaminant is a substance which has the potential to cause harm, while a risk itself is considered to exist if such a substance is present in sufficient concentration to cause harm and a pathway exists for a receptor to be exposed to the substance.'**

R&D Publication 66: 2008 states that the groups at risk of harm (receptors) can be identified by the following categorisation:

1. Humans: site personnel, end users, visitors and adjacent land users.
2. The water environment – receptors: groundwater, surface water, coastal waters and artificial drainage.
3. Ecosystems: plants and animals.
4. Construction/building materials/services

In order to complete a conceptual site model and therefore a preliminary risk assessment, an appraisal of the sources of contamination, potential and actual, on and in the area of the site has therefore been completed with reference to this pollution linkage.¹⁹

¹⁷ Guidance for the Safe Development of Housing on Land Affected by Contamination, R&D Publication 66: 2008 Volume 1 and 2.

¹⁹ This assessment has been based on the information as to the proposed development that has been provided by the client. If the plans should change, the assessment should be re-evaluated.

4.4.1 Conceptual Ground Model & Preliminary Qualitative Risk Assessment

It is understood that the development proposals currently comprise roof alterations and a small extension to the existing storage unit. In view of the sensitivity of the end users it is considered that the soil screening values (SSVs) for a commercial end use should be employed.

The preliminary risk assessment has been evaluated with reference to the following ratings and definitions:

- | | |
|-------------------|---|
| N/A - | A source-pathway-receptor linkage is not considered to exist and therefore a risk assessment is not required. |
| Low - | A pollution linkage is unlikely and/or the likelihood of harm occurring is low and of minor consequence. |
| Moderate - | The linkage exists but further data is required to confirm that the contaminant has reached the receptor and the levels of contaminant are harmful. |
| High - | The linkage exists and the available data indicates that significant harm may be caused and remedial action could be necessary. |

Table 11: Conceptual Site Model and Preliminary Qualitative Risk Assessment

CONCEPTUAL SITE MODEL			PRELIMINARY RISK ASSESSMENT	
Pathways	Receptor	Linkage	Risk Rating	Action Required
Direct contact/dermal absorption/soil ingestion	Operative	Yes – Made ground likely to be present on site. Operatives are likely to come in contact with the soil.	Moderate	Precautionary measures should be put in place for site operatives.
	End User	No – site is to be entirely capped by hard-standing.	N/A	
	Neighbours	No – site is to be entirely capped by hard-standing.	N/A	
Inhalation of Dust/Vapours	Operative	Yes – Made ground likely to be present on site. Operatives are likely to come in contact with the soil.	Moderate	Precautionary measures should be put in place for site operatives.
	End User	No – site is to be entirely capped by hard-standing.	N/A	
	Neighbours	No – site is to be entirely capped by hard-standing.	N/A	
Ingestion of fruit/vegetables and/or waters	Operative	No – no edible plants or contained water sources in the area of the proposed new works.	N/A	Precautionary measures should be put in place for site operatives.
	End User	No – There are no soft landscaped areas proposed as part of the development.	N/A	
	Neighbours	No – site is to be entirely capped by hard-standing.	N/A	
Migration of hazardous gases via permeable strata	Operative	Yes – Made ground likely to be present on site.	Low to Moderate	Monitoring recommended if made ground is deleterious or organic in nature.
	End User		Low to Moderate	
	Neighbours	Yes – Made ground likely to be present on site that forms part of a wider site area. There are no immediately adjoining structures.	Low	

Migration of mine gas via permeable strata	Operative	No – shallow workings not anticipated.	N/A	
	End User			
Spillage/loss/run off direct to receiving water	Water Environment	No – site is to be entirely capped by hard-standing. Existing source-pathway-receptor model to be retained.	N/A	
Migration via permeable unsaturated strata	Water Environment	No – site is to be entirely capped by hard-standing. Existing source-pathway-receptor model to be retained.	N/A	
Run off via drainage/sewers etc	Water Environment	No – site is to be entirely capped by hard-standing. Existing source-pathway-receptor model to be retained.	N/A	
Direct contact with contaminated soils	Plants	No – There are no soft landscaped areas proposed as part of the development.	N/A	No further action required.
Uptake via root system			N/A	
Direct contact with contaminated soils/	Building Materials	Yes – Made ground likely to be present on site which may contain aggressive ground conditions. Foundation and service installation materials may be affected by the site soil.	Low to Moderate	Further testing recommended.
Direct contact with contaminated groundwater				
Exposure to Radon	Operative	Yes – site currently indicated to be present in a risk radon affected area ²⁰ .	Moderate	Between 3% and 5% of properties are affected. The publication BR211 states that basic protection measures are necessary.
	End User			

²⁰ Radon interactive map [online resource <https://www.ukradon.org/radonmaps/>] It should be appreciated that radon maps are subject to change and are updated regularly.

Notes:

1. The above data and table is a qualitative assessment of the probable risks identified at this site, based on the information made available to us from the client, third party professional data and walkover survey.
2. Should any additional or new data come to light, the risk assessment should be revisited and any necessary changes made to any recommendations resulting from this study.
3. Where further testing is recommended as part of the risk assessment, this is in order to provide a quantitative assessment of any contamination issues. It should at all times be considered that uncertainties may remain, and therefore any testing regime and ground investigation philosophy should be ready to accommodate any necessary alterations should any data come to light or it become evident that it has not been previously considered.

5. Intrusive Investigation

5.1 Site Investigation Philosophy

The information from the Phase 1 Desk Study shows there are potential sources of contamination on the site and in the surrounding area. However, the development is of low sensitivity and will comprise entirely of hard-standing and building footprint. As such, the risk to end users and neighbours is generally low to nominal.

Site operatives undertaking works within areas identified as potentially contaminated should remain vigilant for evidence of contaminated soils, made ground, buried waste, staining, unusual odours, or other unexpected ground conditions. Appropriate personal protective equipment (PPE) should be worn in accordance with the site-specific risk assessment and method statements, and suitable hygiene measures should be maintained, including washing hands before eating, drinking or smoking. Where unexpected contamination or potentially hazardous materials are encountered, works should cease locally and the material should not be disturbed unnecessarily. The Site Manager or appointed competent person should be notified immediately, and further assessment and/or testing should be undertaken where necessary before works recommence. Any contaminated materials encountered should be managed, stored and disposed of in accordance with the relevant legislation, waste classification requirements and project-specific procedures.

5.2 Geotechnical Assessment

An assessment of the geological strata and geotechnical parameter should be undertaken for the site to ascertain appropriate foundations. However, it is not anticipated that any additional work is required to assess the mining legacy beneath the site.

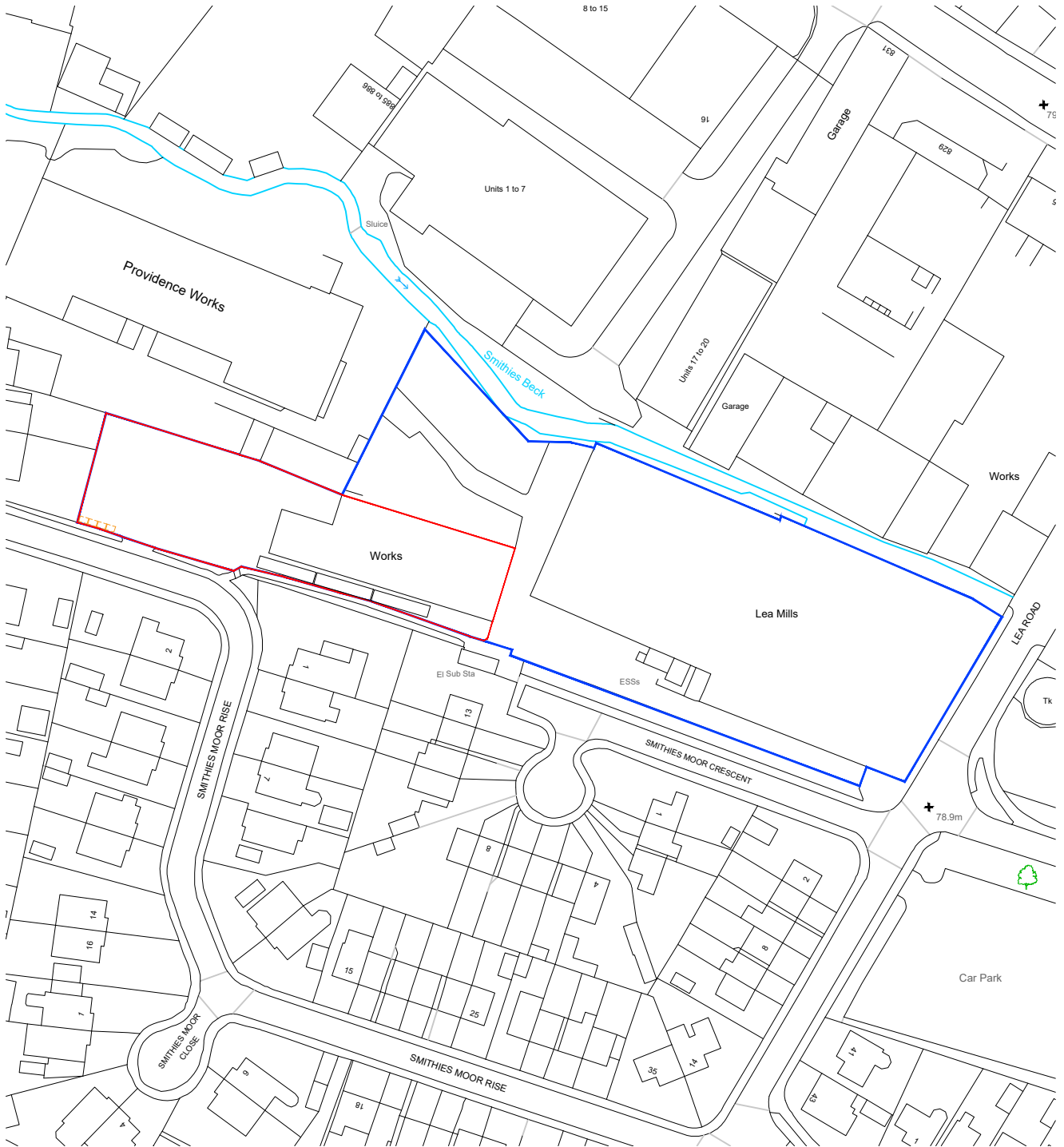
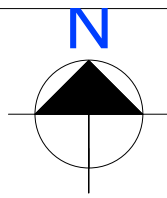
As soon as is practicable, and prior to the above, this Phase 1 report should be forwarded to the relevant authorities, in order to ensure they have sufficient time to review and discuss any issues.

6. References

- British Standards Institution (2015), BS5930 2015 + A1:2020: *Code of practice for site investigations*, B.S.I., London.
- British Standards Institution (2007), Amendment No 1 to BS5930: *Code of practice for ground investigations*, B.S.I., London.
- British Standards Institution (2011) +A2:2017, BS 10175: *Investigation of potentially contaminated sites – Code of Practice*, British Standards Institute.
- British Standards Institution (2013), BS 8576 Guidance on Investigations for Ground Gas – Permanent Gases and Volatile Organic Compounds.
- Department for Environment, Food and Rural Affairs and the Environment Agency, DEFRA R&D Publications, Environment Agency, Bristol.
- CLR 2, 1994, *Guidance on preliminary site inspection of contaminated land*, Volume 1.
- CLR 4, 1994, *Sampling Strategies for contaminated land*.
- R&D Publication 66: 2008 Guidance for the Safe Development of Housing on Land Affected by Contamination.
- CIRIA Report C665 (2007), Assessing risks posed by ground gasses in buildings.
- The Environment Agency: Groundwater source protection.

Appendix 1

Site Plans



Location Plan

Rev - : yyyy-mm-dd : Initial : Revision Notes

NOTE: Do not scale drawing. Work to figured dimensions. This drawing has been prepared for planning purposes only and is to be read in conjunction with all other relevant specialists' drawings, details and specifications. All works are to be carried out in accordance with the latest edition of the Building Regulations, and any amendments, together with all relevant British Standards and codes of practice. All dimensions unless noted otherwise are in millimetres. All dimensions and levels are to be checked by the contractor on site prior to order, fabrication or commencement of work on site. Contractor to check and satisfy himself of the positions of all existing statutory authorities' mains services on and around site. All materials and proprietary items are to be fixed / installed / applied in strict accordance with the respective manufacturers' recommendations. At all stages of work, the contractor will be responsible for and must ensure the overall stability of all buildings, structures and excavations etc. is maintained. During the construction works all existing live drainage is to be adequately protected and normal flows maintained.

Issue Purpose : Full Planning Application

Client	N/A	Drawn	N/A
Project	Roof alterations to existing storage unit with infill extension and boundary treatment	Date	17-07-2023
		Scale	1:1250 @ A4
Address	Industrial Unit on Smithies Moor Rise, Batley, WF17 8AX		

Title Location Plan

Drawing Number 24-003 - PL - 01

Proposed Development Area

BGS Map Sheet 1:50000

Legend

⊙ BGS Borehole

Smithies Moor Ln

Smithies Moor Rise

Smithies Moor Rise

⊙ BGS SE22NW624

Ealand Rd

Smithies Moor Cres

Google Earth



60 m

Appendix 2

Historical Maps

Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: County Series

Map date: 1894

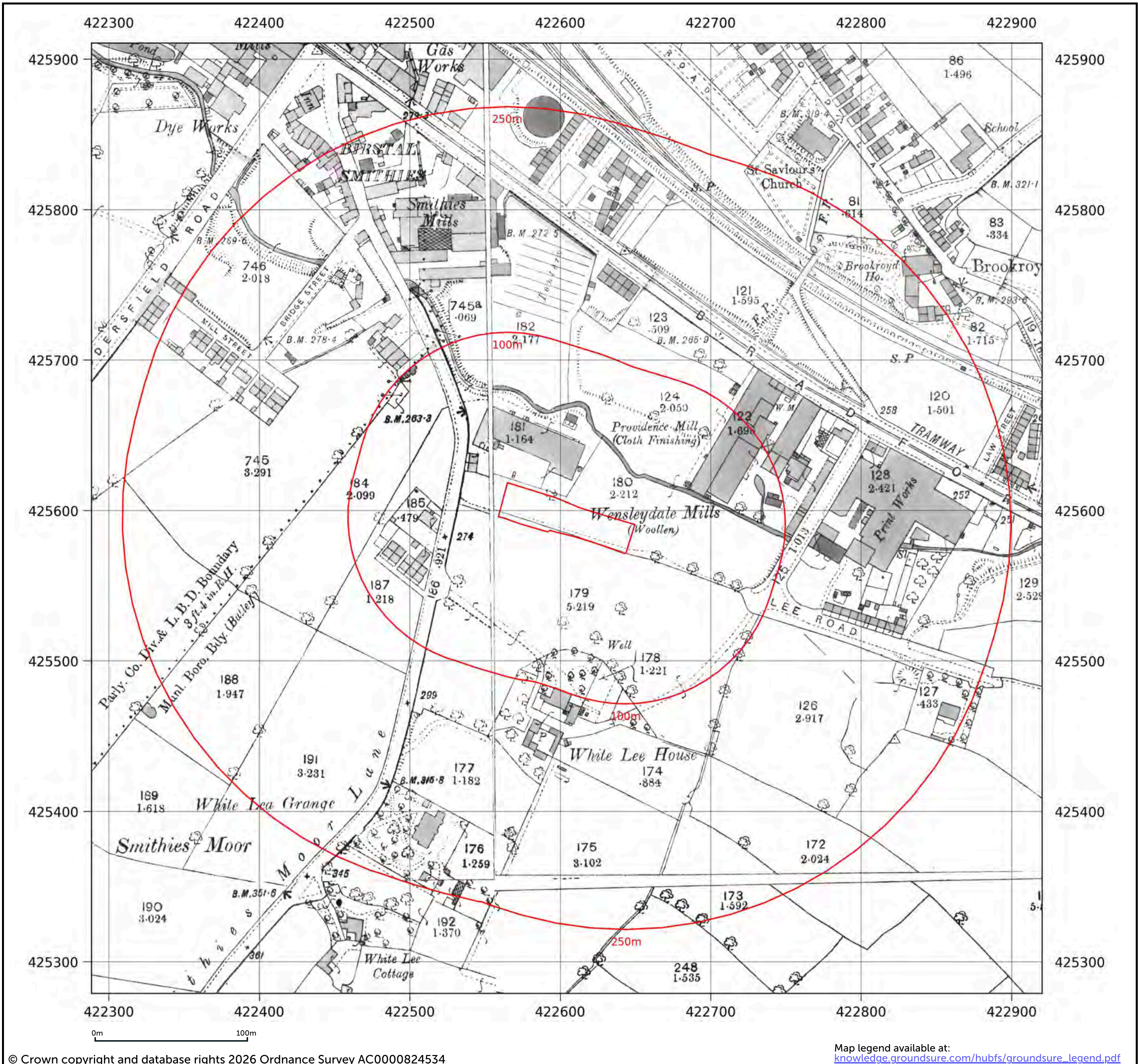
Scale: 1:2,500

Printed at: 1:2,500



Date: 1894 Surveyed: 1894 Revised: 1894	Date: 1894 Surveyed: 1894 Revised: 1894
Date: 1894 Surveyed: 1894 Revised: 1894	Date: 1894 Surveyed: 1894 Revised: 1894

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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: County Series

Map date: 1907-1908

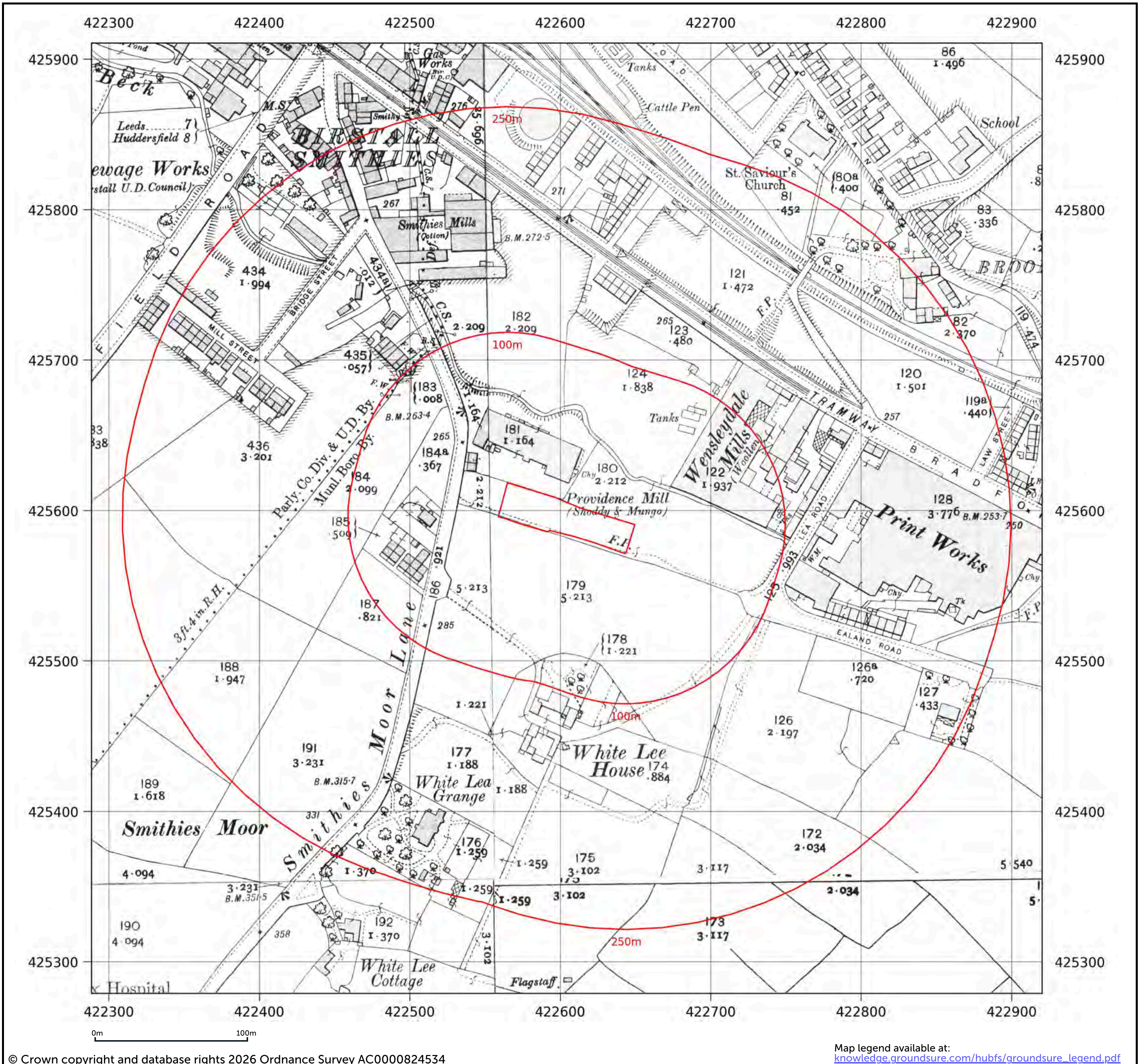
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Printed at: 1:2,500



Date: 1908 Surveyed: 1908 Revised: 1908	Date: 1908 Surveyed: 1908 Revised: 1908
Date: 1907 Surveyed: 1907 Revised: 1907	Date: 1907 Surveyed: 1907 Revised: 1907

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Site details: UNIT ON SMITHIES MOOR
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KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: County Series

Map date: 1922

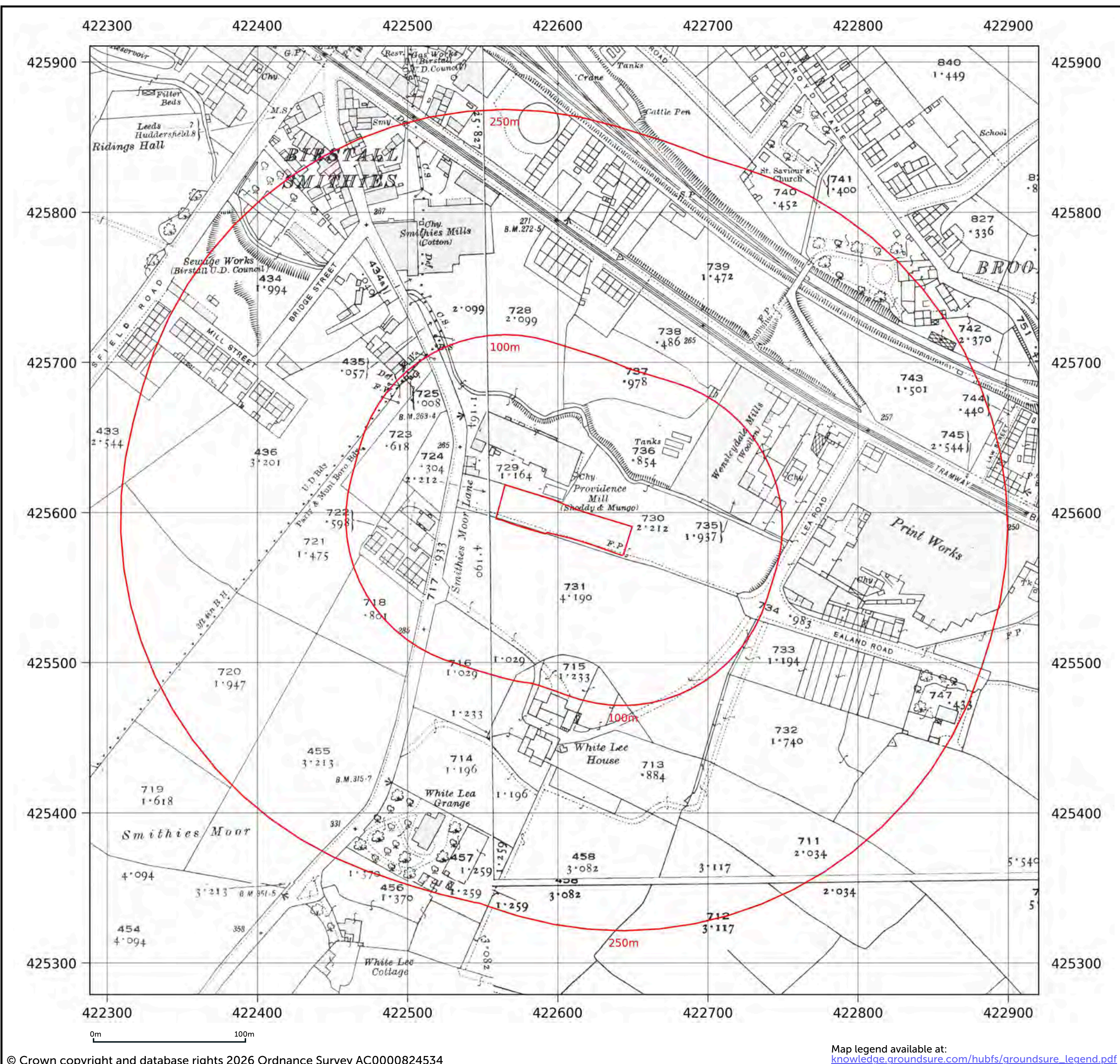
Scale: 1:2,500

Printed at: 1:2,500



Date: 1922 Surveyed: 1922 Revised: 1922	Date: 1922 Surveyed: 1922 Revised: 1922
Date: 1922 Surveyed: 1922 Revised: 1922	Date: 1922 Surveyed: 1922 Revised: 1922

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Site details: UNIT ON SMITHIES MOOR
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KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: County Series

Map date: 1933

Scale: 1:2,500

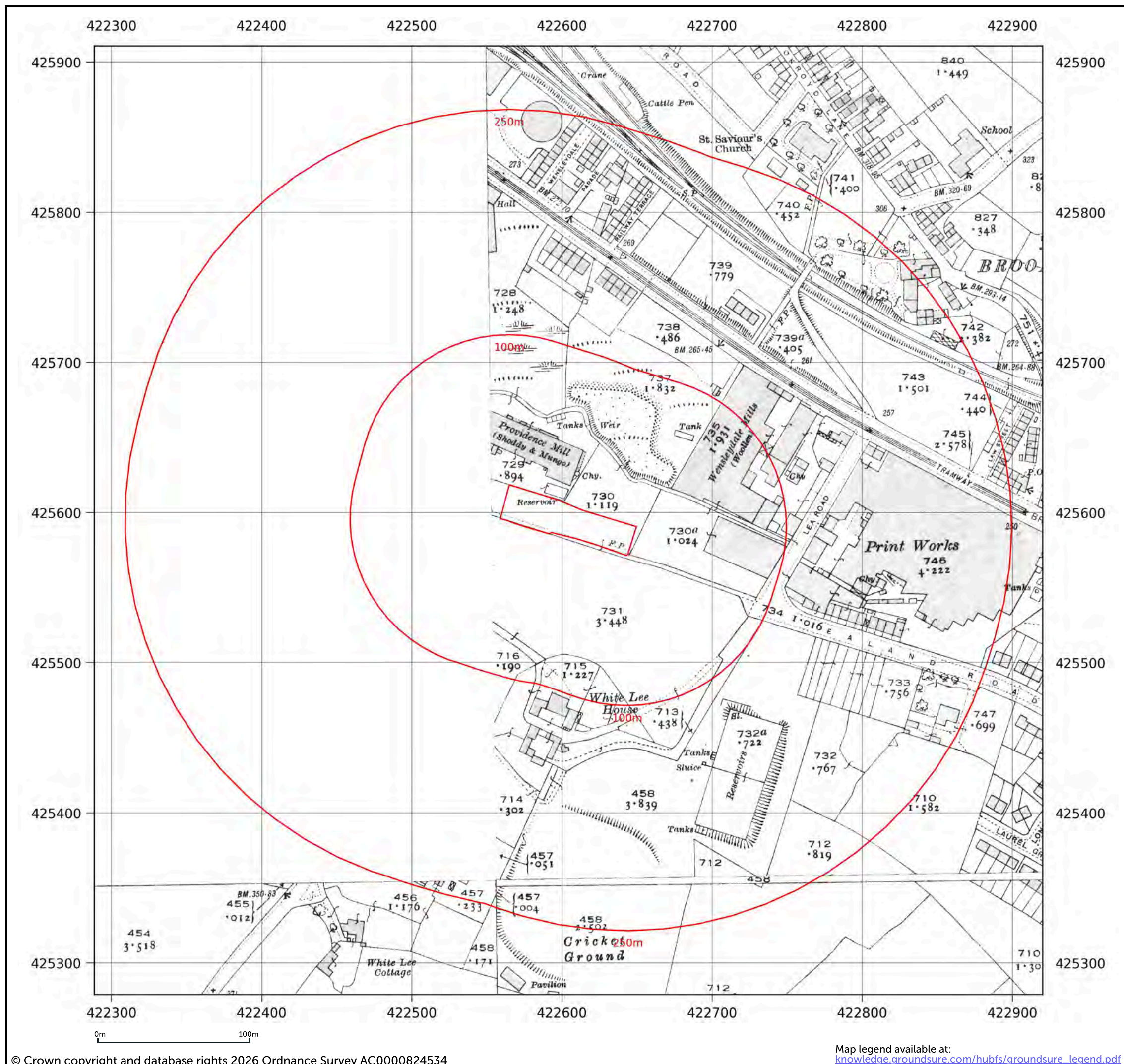
Printed at: 1:2,500



Date: 1933
Surveyed: 1933
Revised: 1933

Date: 1933
Surveyed: 1933
Revised: 1933

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Site details:

UNIT ON SMITHIES MOOR
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KIRKLEES, WF17 8AX

Client ref:

C/6063/26/E/9391 - PO-
3827

Report ref:

GS-3DG-DJN-2LH-N4L

Grid ref:

422602.49, 425594.78

Production date:

12 May 2026

Map name:

County Series

Map date:

1938

Scale:

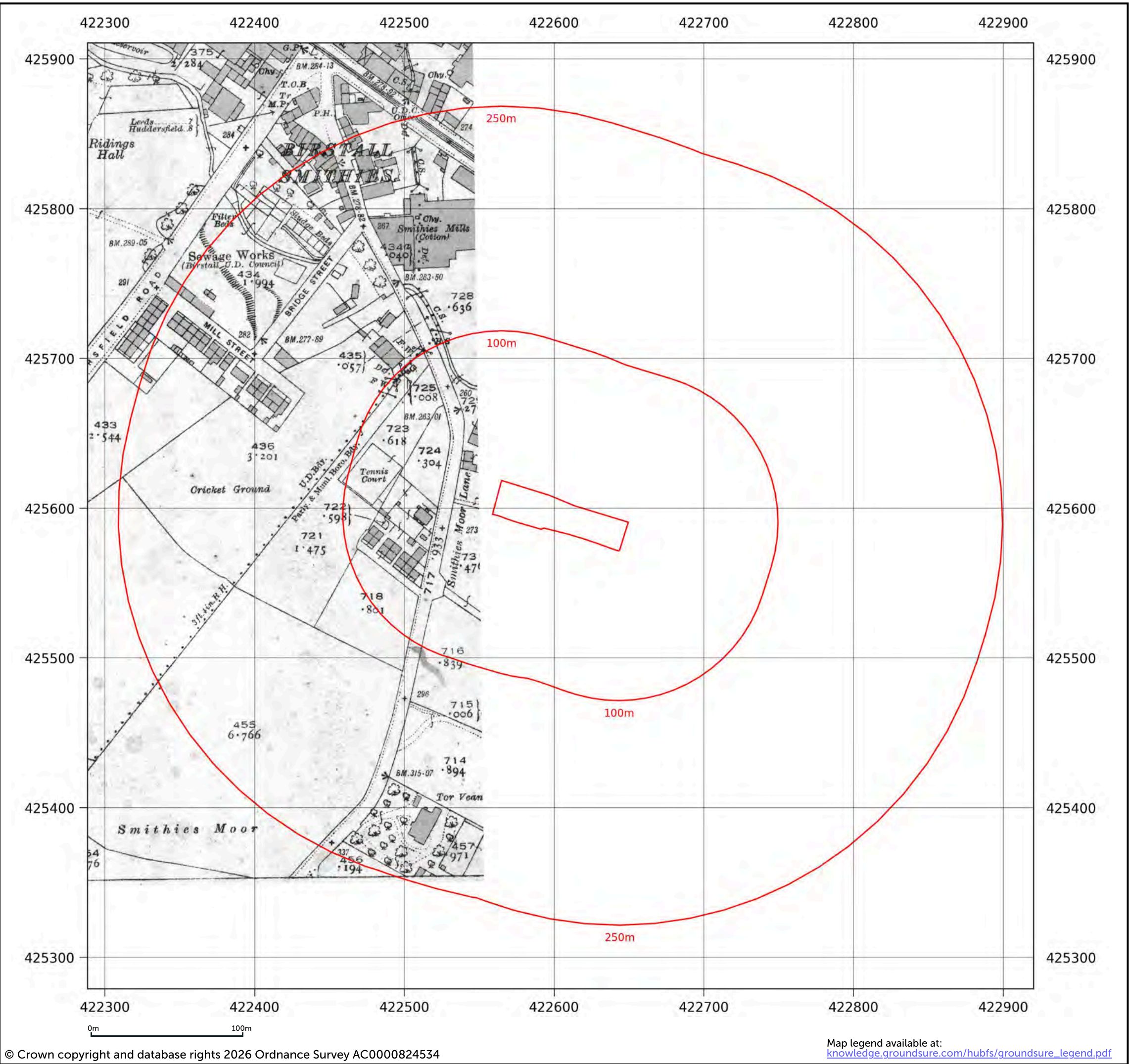
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Printed at:

1:2,500

Date: 1938
Surveyed: 1938
Revised: 1938

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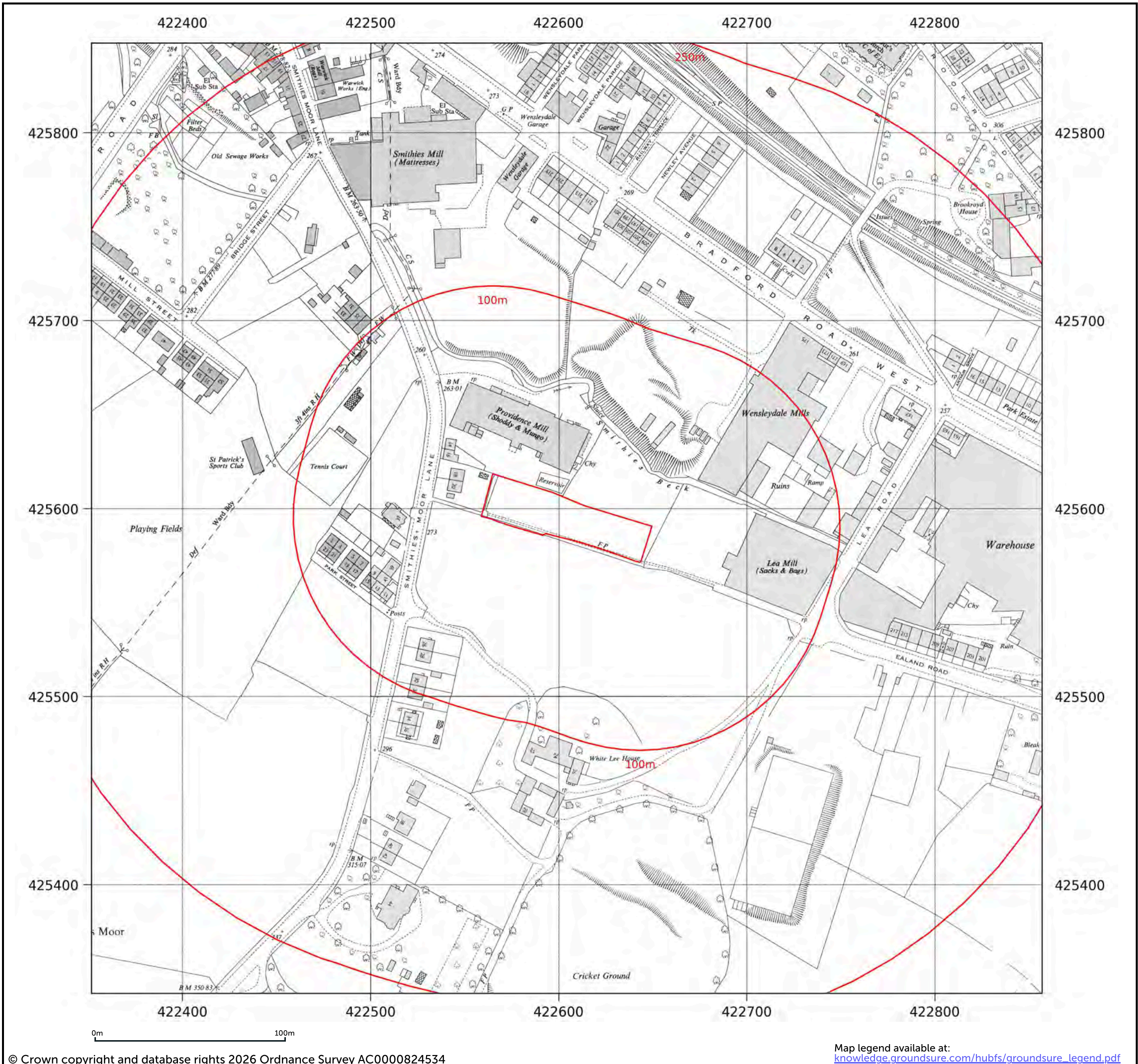
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Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	National Grid
Map date:	1955
Scale:	1:1,250
Printed at:	1:2,000



Date: 1955 Surveyed: 1955 Revised: 1955 Levelled: 1931	Date: 1955 Surveyed: 1955 Revised: 1955 Levelled: 1931
Date: 1955 Surveyed: 1955 Revised: 1955 Levelled: 1931	Date: 1955 Surveyed: 1955 Revised: 1955 Levelled: 1931

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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: National Grid

Map date: 1956

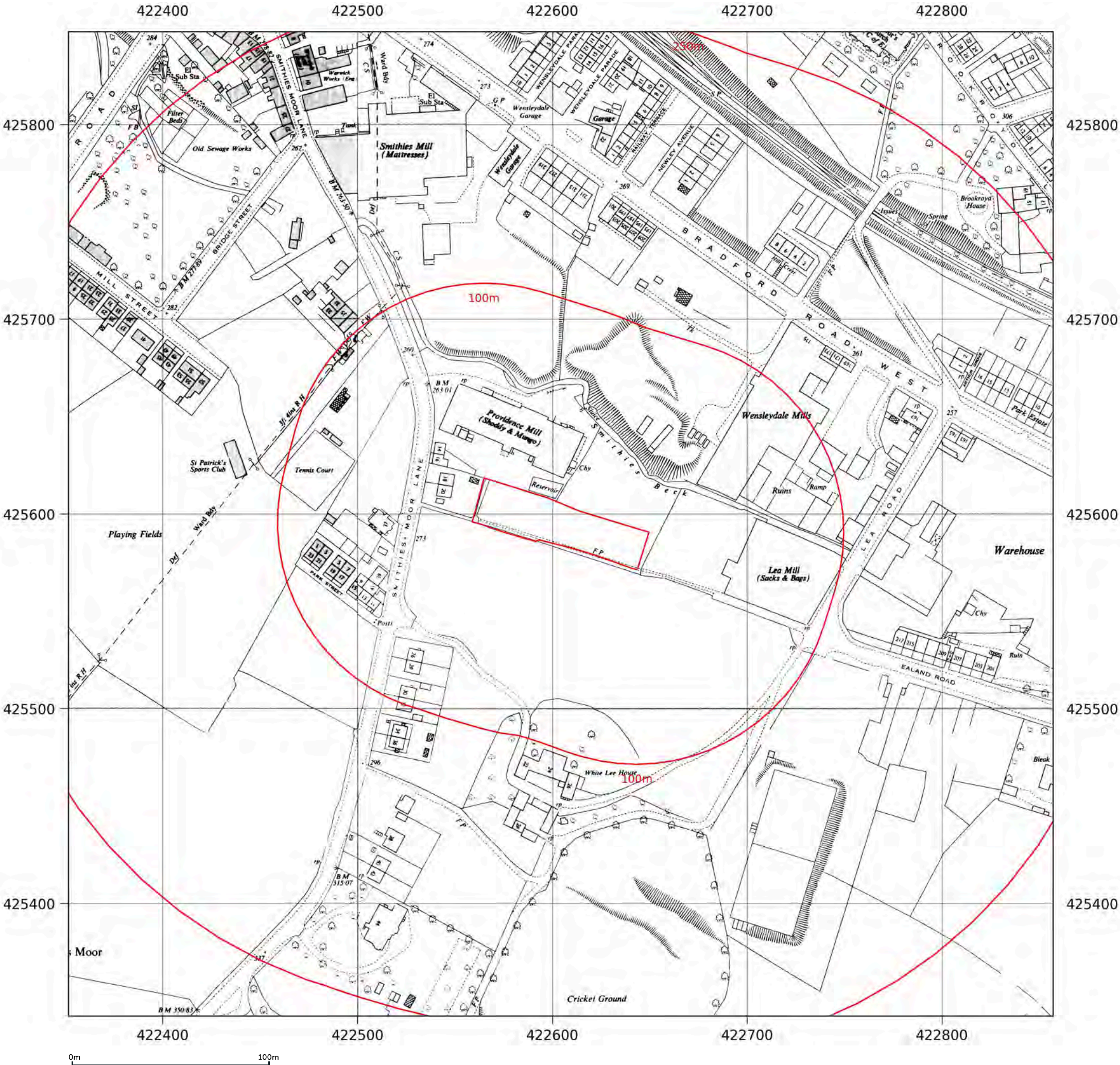
Scale: 1:1,250

Printed at: 1:2,000



Date: 1956	Date: 1956
Date: 1956	Date: 1956

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Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: National Grid

Map date: 1956

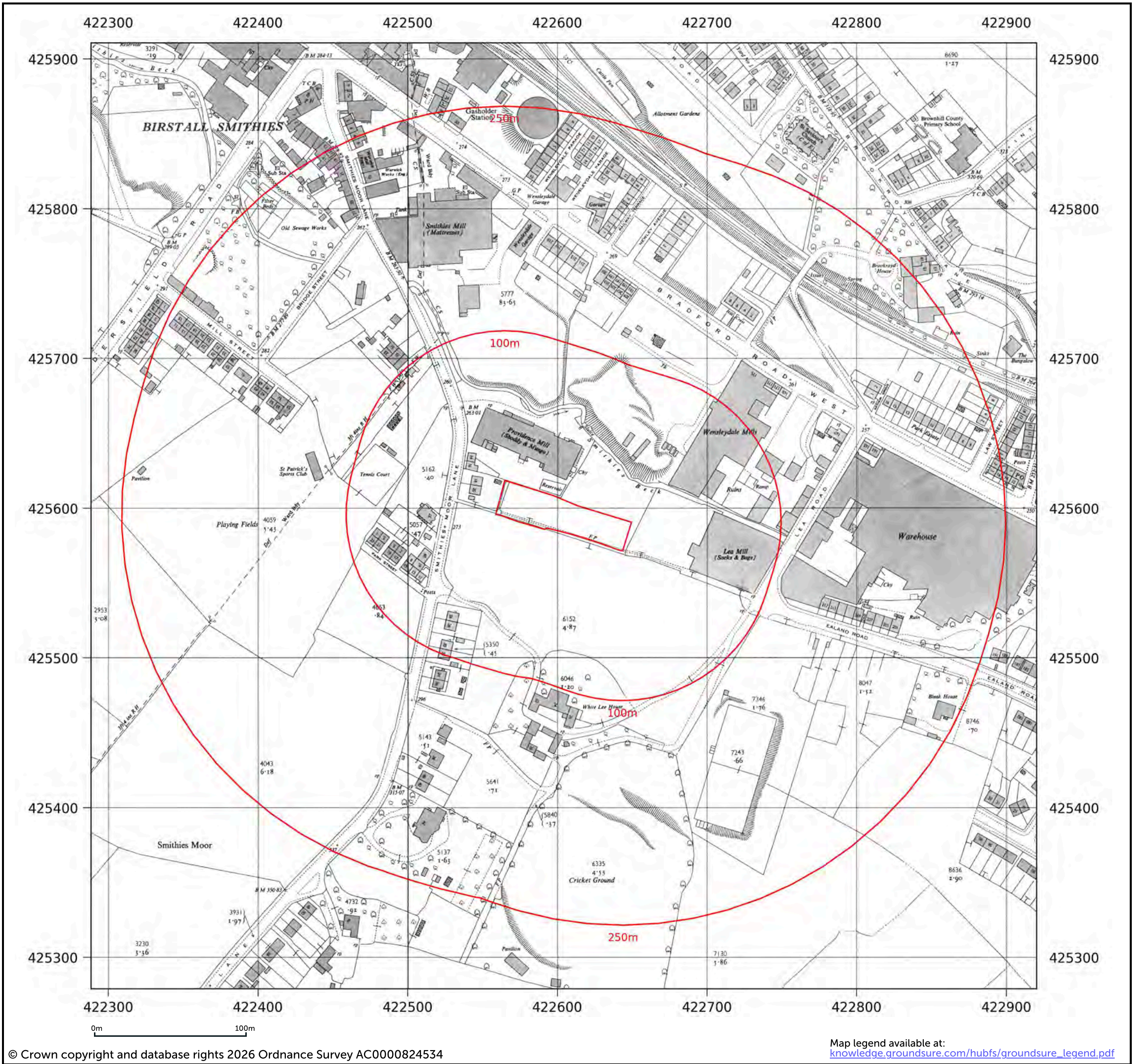
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Printed at: 1:2,500



Date: 1956
Surveyed: 1955
Revised: 1955
Edition: 1956
Levelled: 1931

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Site details: UNIT ON SMITHIES MOOR
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KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: National Grid

Map date: 1966

Scale: 1:1,250

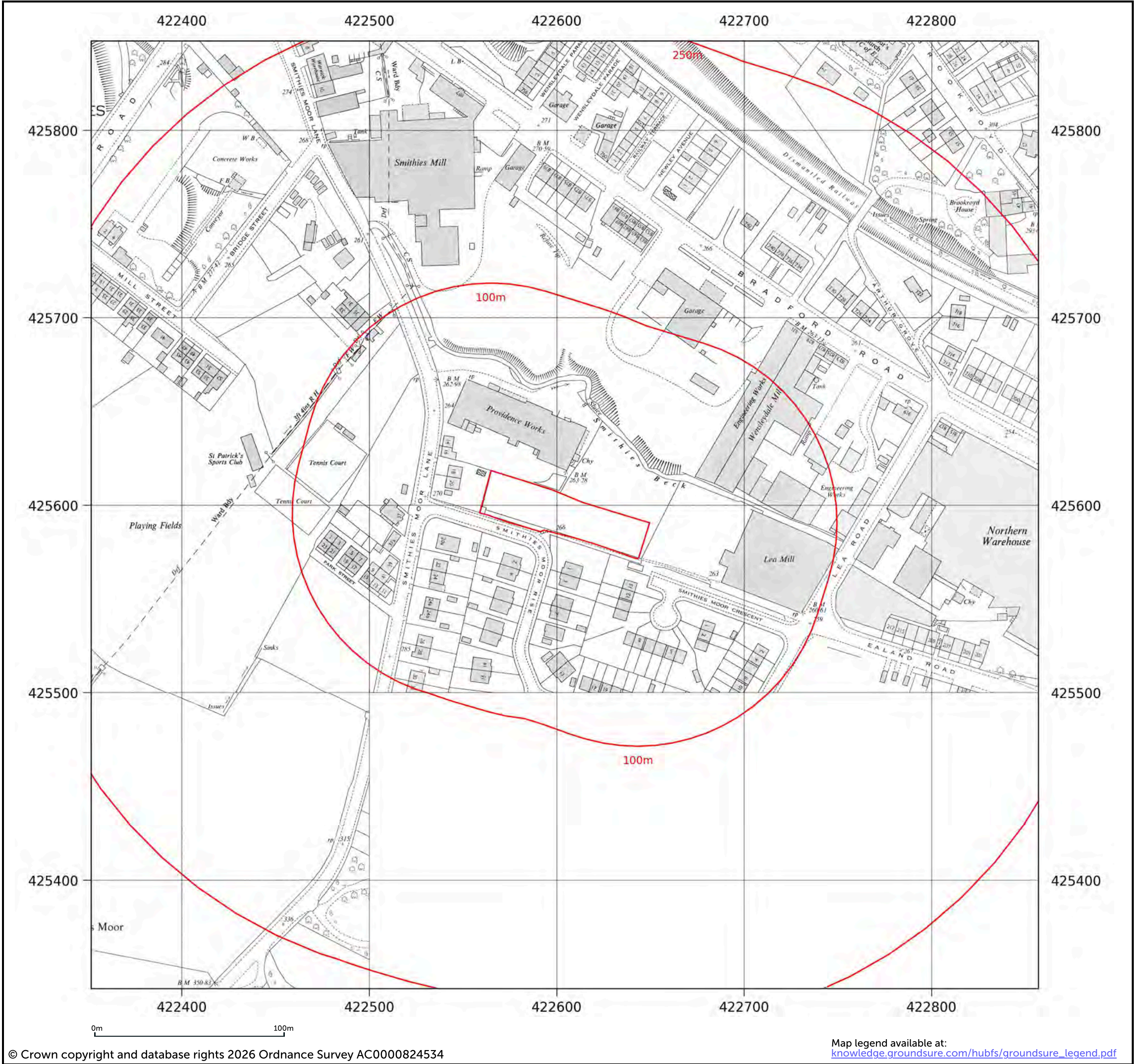
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Date: 1966	Date: 1966
Surveyed: 1966	Surveyed: 1955
Revised: 1966	Revised: 1966
Copyright: 1966	Copyright: 1966
Levelled: 1962	Levelled: 1962

Date: 1966
Surveyed: 1955
Revised: 1966
Copyright: 1966
Levelled: 1962

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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: National Grid

Map date: 1968

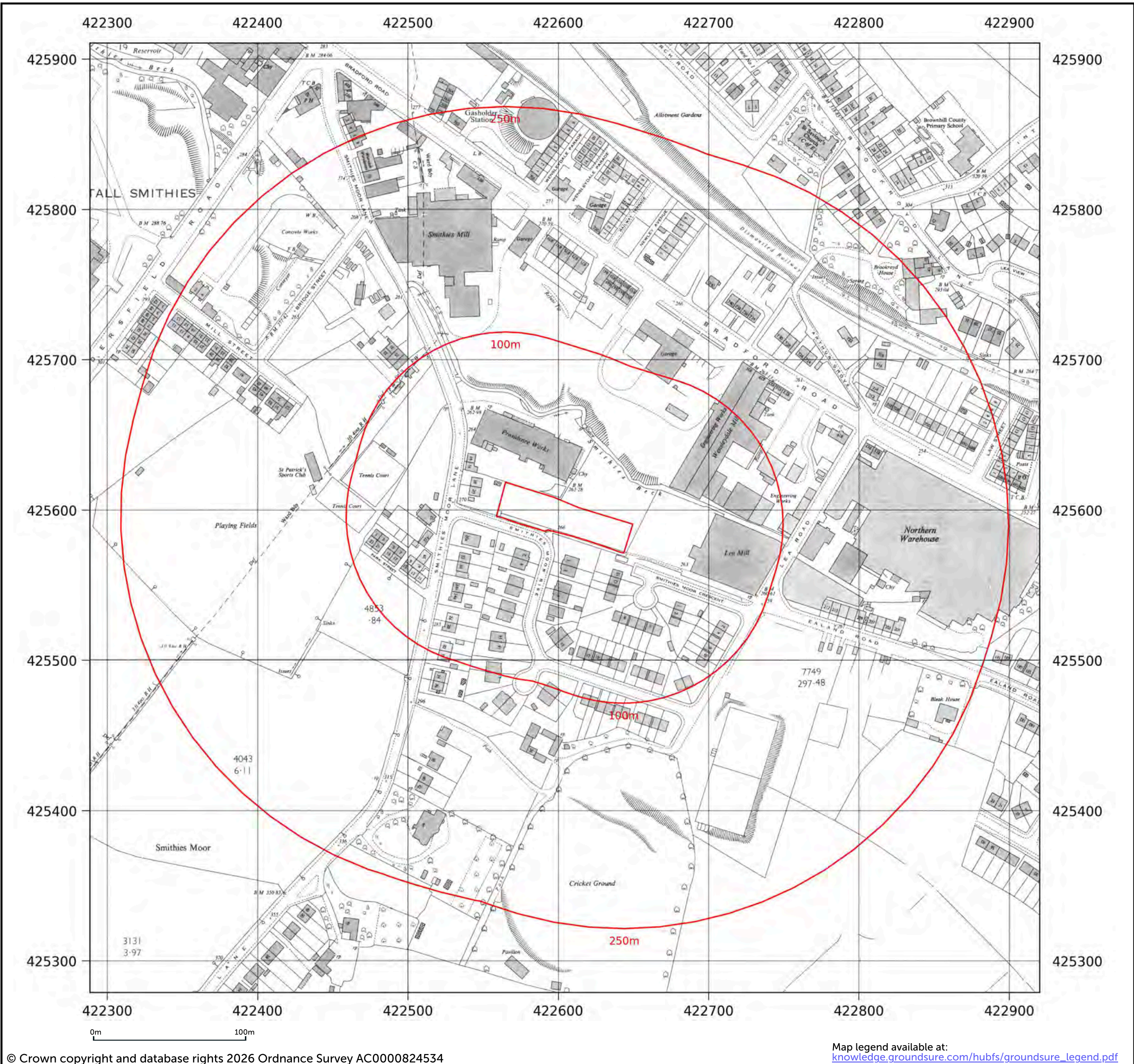
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Printed at: 1:2,500



Date: 1968
Surveyed: 1966
Revised: 1968
Copyright: 1968
Levelled: 1962

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Site details:	UNIT ON SMITHIES MOOR RISE, BIRSTALL, BATLEY, KIRKLEES, WF17 8AX
Client ref:	C/6063/26/E/9391 - PO- 3827
Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

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Map date:	1974-1977
Scale:	1:1,250
Printed at:	1:2,000



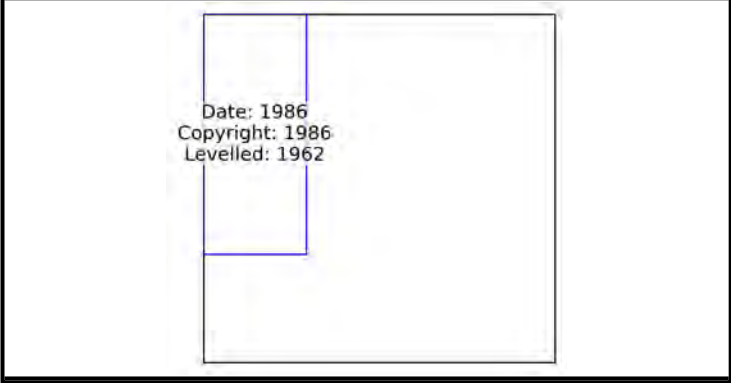
Date: 1974 Surveyed: 1955 Revised: 1973 Copyright: 1974 Levelled: 1962	Date: 1977
Date: 1974	Date: 1974 Surveyed: 1955 Revised: 1973 Copyright: 1974 Levelled: 1962

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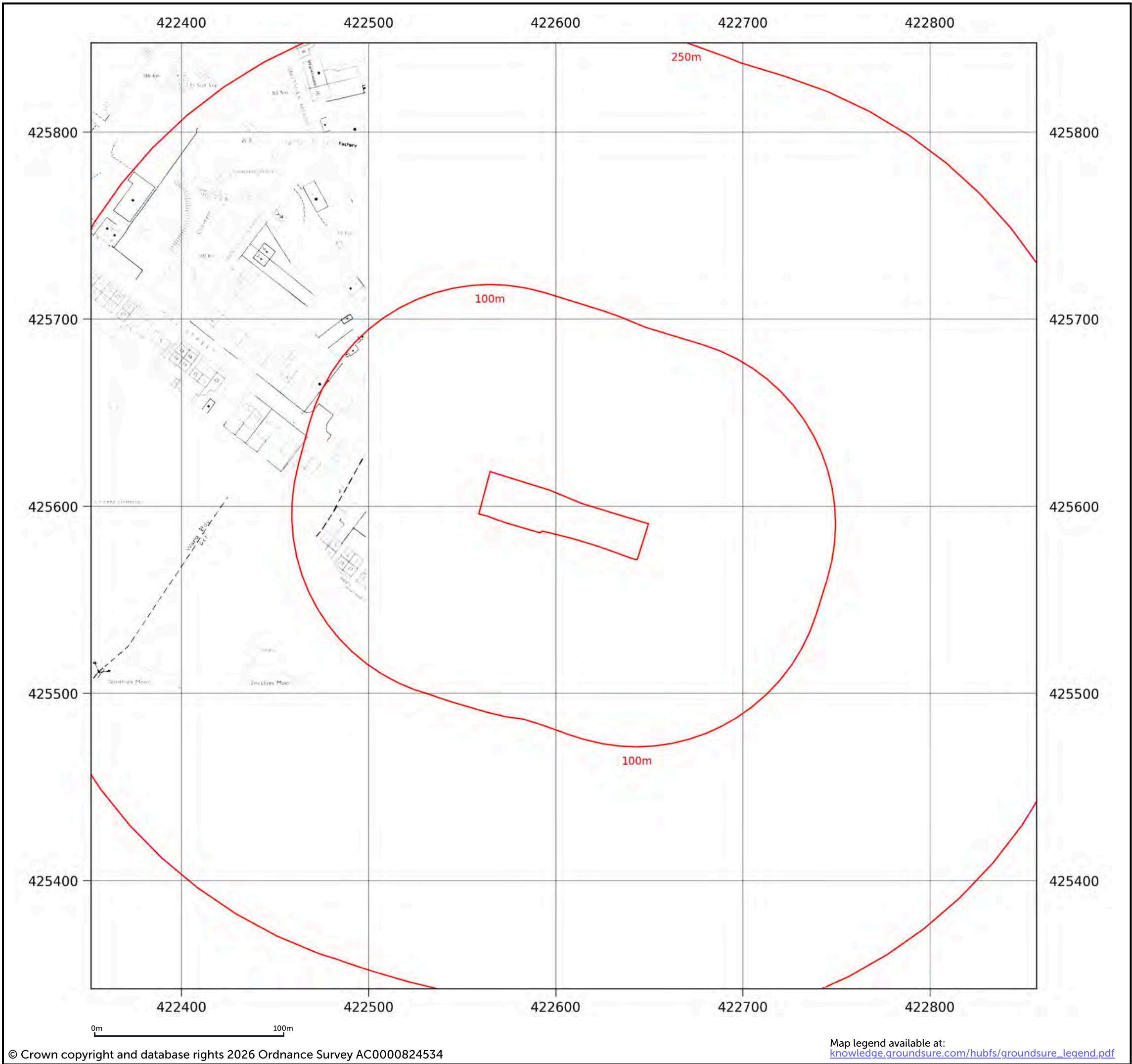


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Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	National Grid
Map date:	1986
Scale:	1:1,250
Printed at:	1:2,000



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Site details: UNIT ON SMITHIES MOOR
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KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: National Grid

Map date: 1985-1988

Scale: 1:1,250

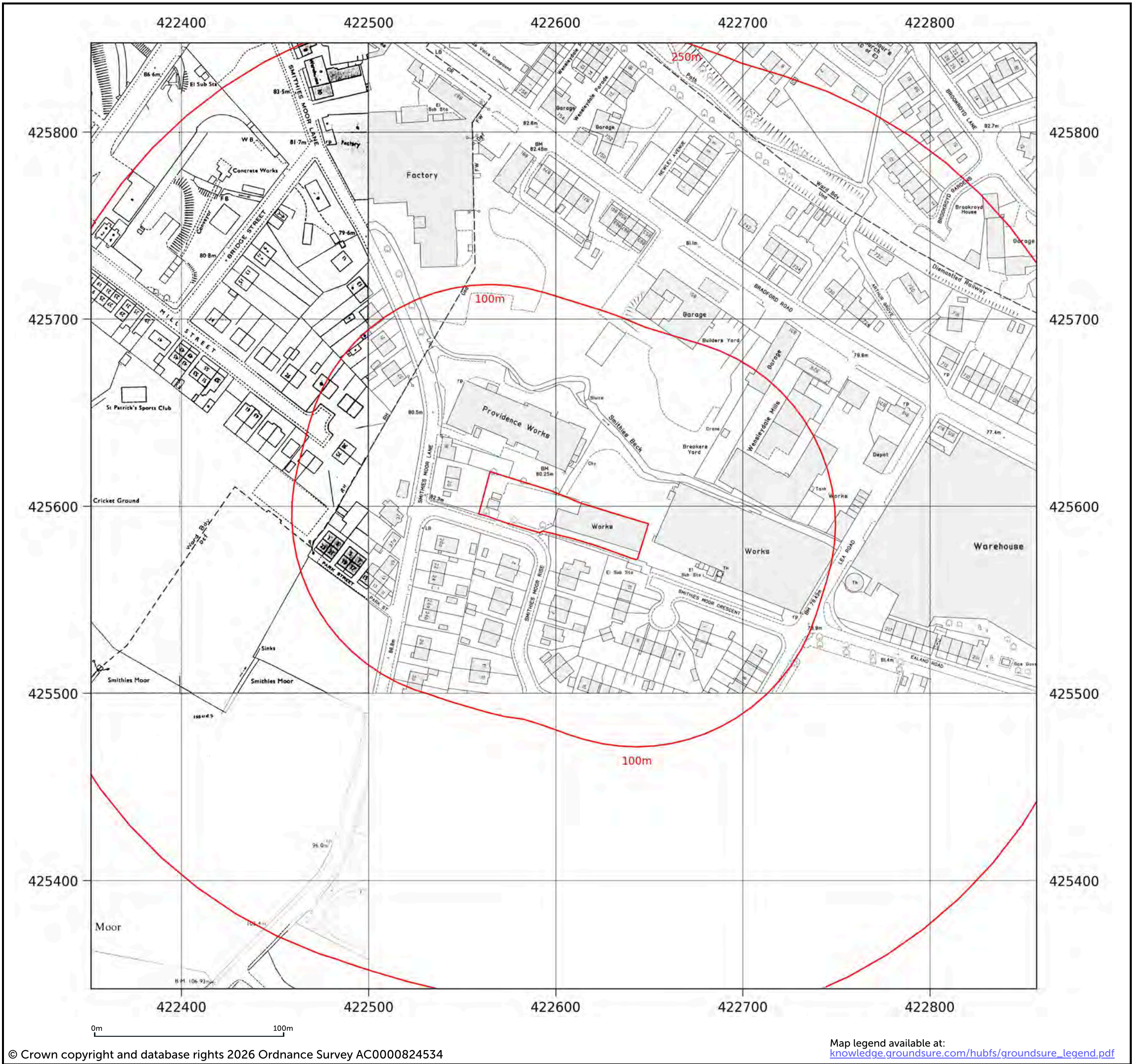
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Date: 1986	Date: 1985
Surveyed: 1962	Surveyed: 1955
Revised: 1986	Revised: 1984
Copyright: 1986	Copyright: 1985
Levelled: 1962	Levelled: 1962

Date: 1988
Surveyed: 1962
Revised: 1988
Copyright: 1988
Levelled: 1962

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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: National Grid

Map date: 1989-1993

Scale: 1:1,250

Printed at: 1:2,000



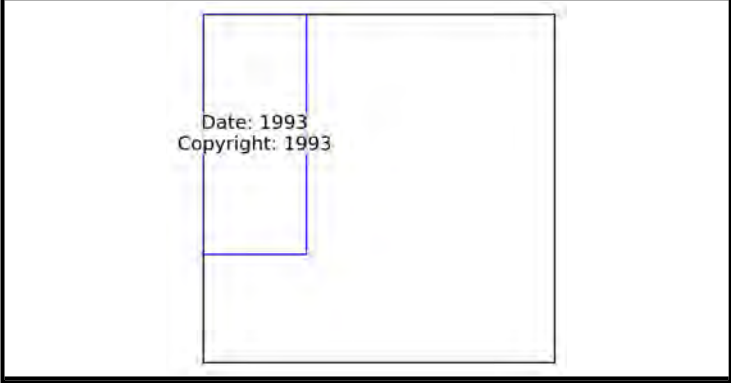
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Date: 1993 Copyright: 1993	Date: 1993 Copyright: 1993

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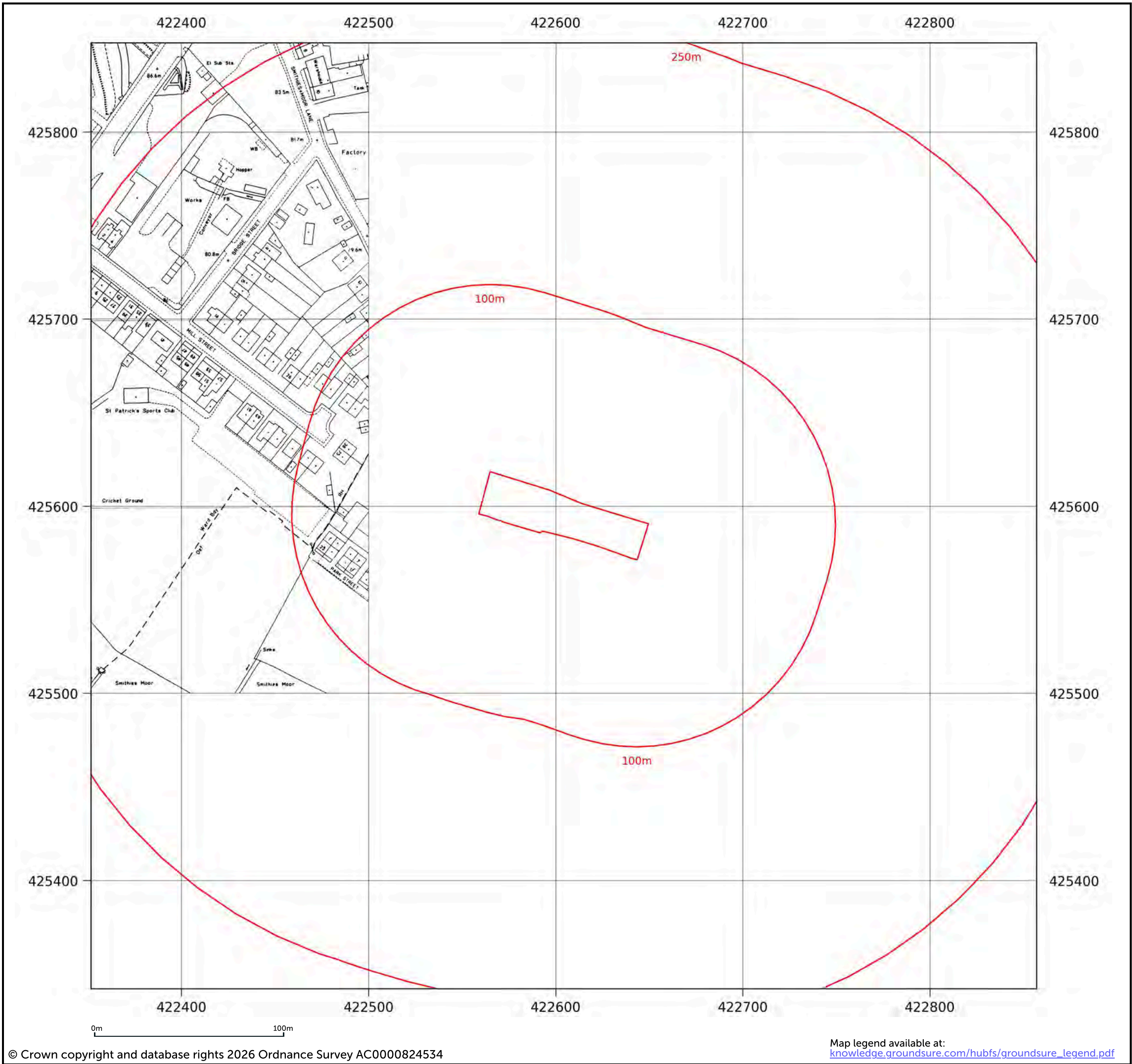


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Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	National Grid
Map date:	1993
Scale:	1:1,250
Printed at:	1:2,000



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Site details:

UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref:

C/6063/26/E/9391 - PO-
3827

Report ref:

GS-3DG-DJN-2LH-N4L

Grid ref:

422602.49, 425594.78

Production date:

12 May 2026

Map name:

National Grid

Map date:

1989-1994

Scale:

1:1,250

Printed at:

1:2,000

Date: 1989
Surveyed: 1962
Revised: 1989
Copyright: 1989
Levelled: 1962

Date: 1994
Surveyed: 1994
Revised: 1994
Copyright: 1994

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Site details:

UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref:

C/6063/26/E/9391 - PO-
3827

Report ref:

GS-3DG-DJN-2LH-N4L

Grid ref:

422602.49, 425594.78

Production date:

12 May 2026

Map name:

National Grid

Map date:

1990-1994

Scale:

1:1,250

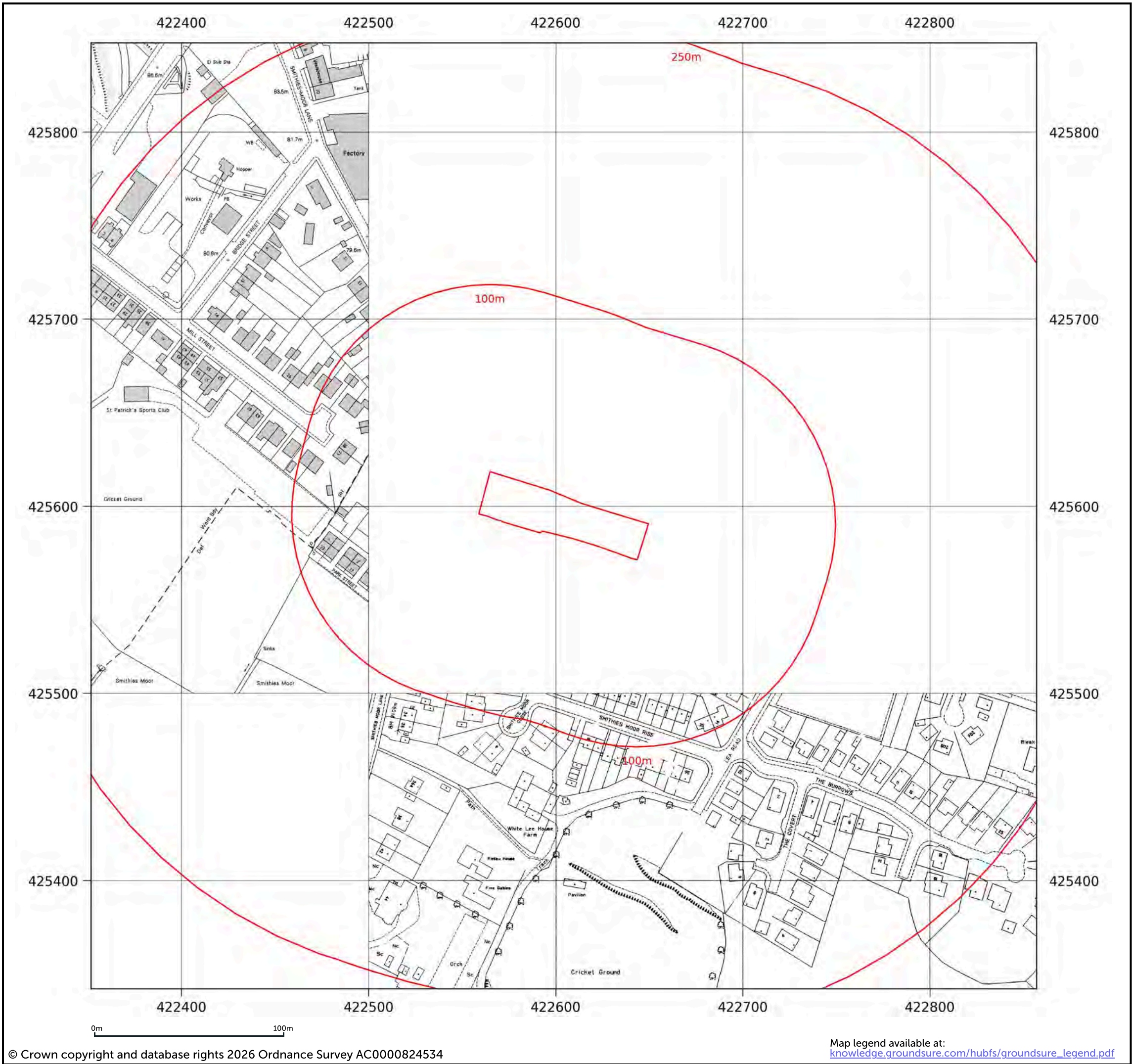
Printed at:

1:2,000

Date: 1990
Surveyed: 1989
Revised: 1989
Copyright: 1990

Date: 1994
Copyright: 1994

Contact us with any questions at:
info@groundsure.com
01273 257 755



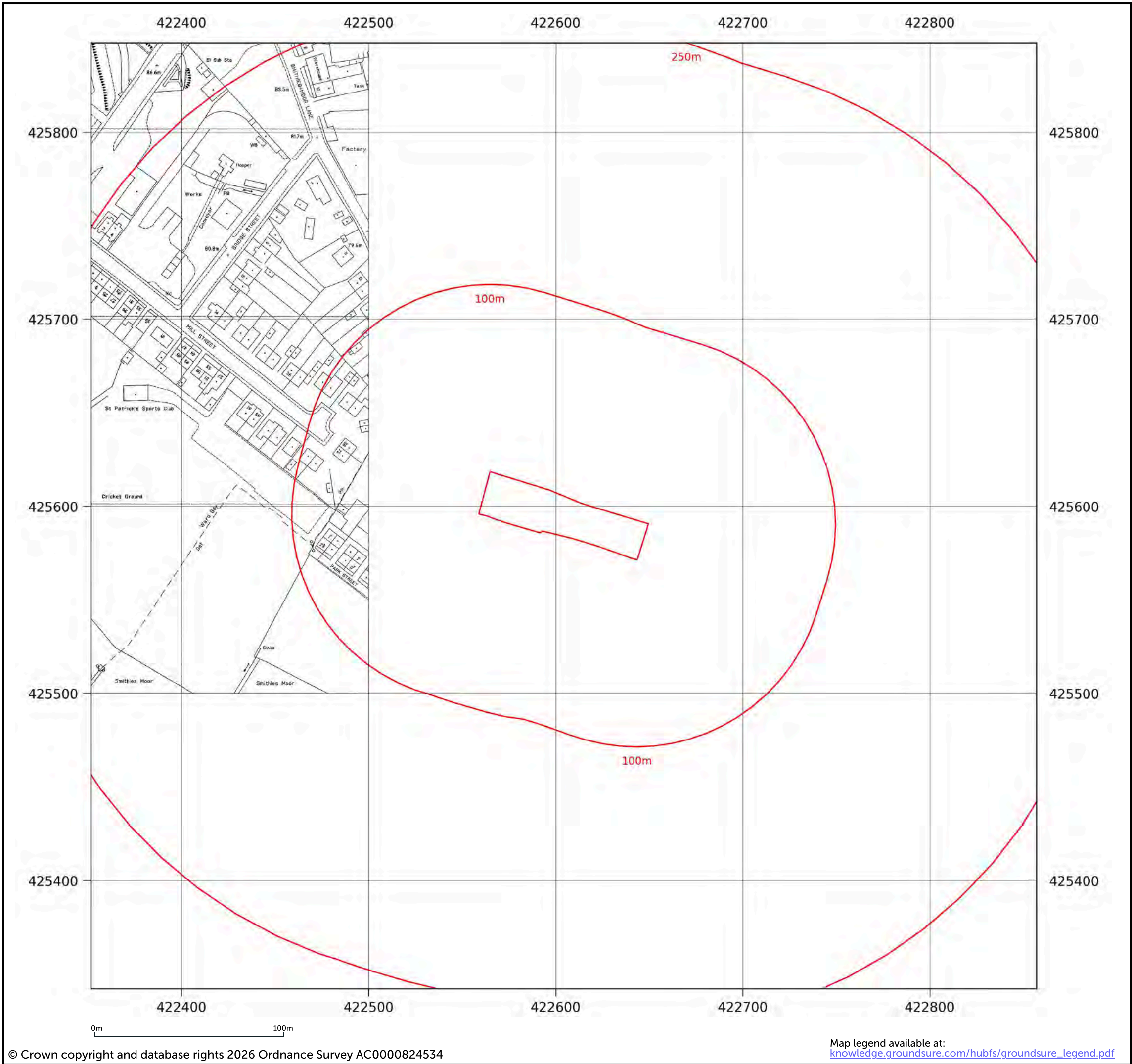
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Client ref:	C/6063/26/E/9391 - PO- 3827
Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	National Grid
Map date:	1995
Scale:	1:1,250
Printed at:	1:2,000



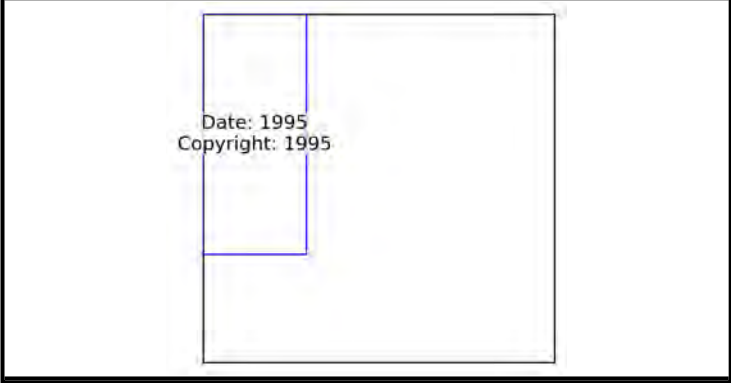
Date: 1995
Surveyed: 1995
Revised: 1995
Copyright: 1995

Contact us with any questions at:
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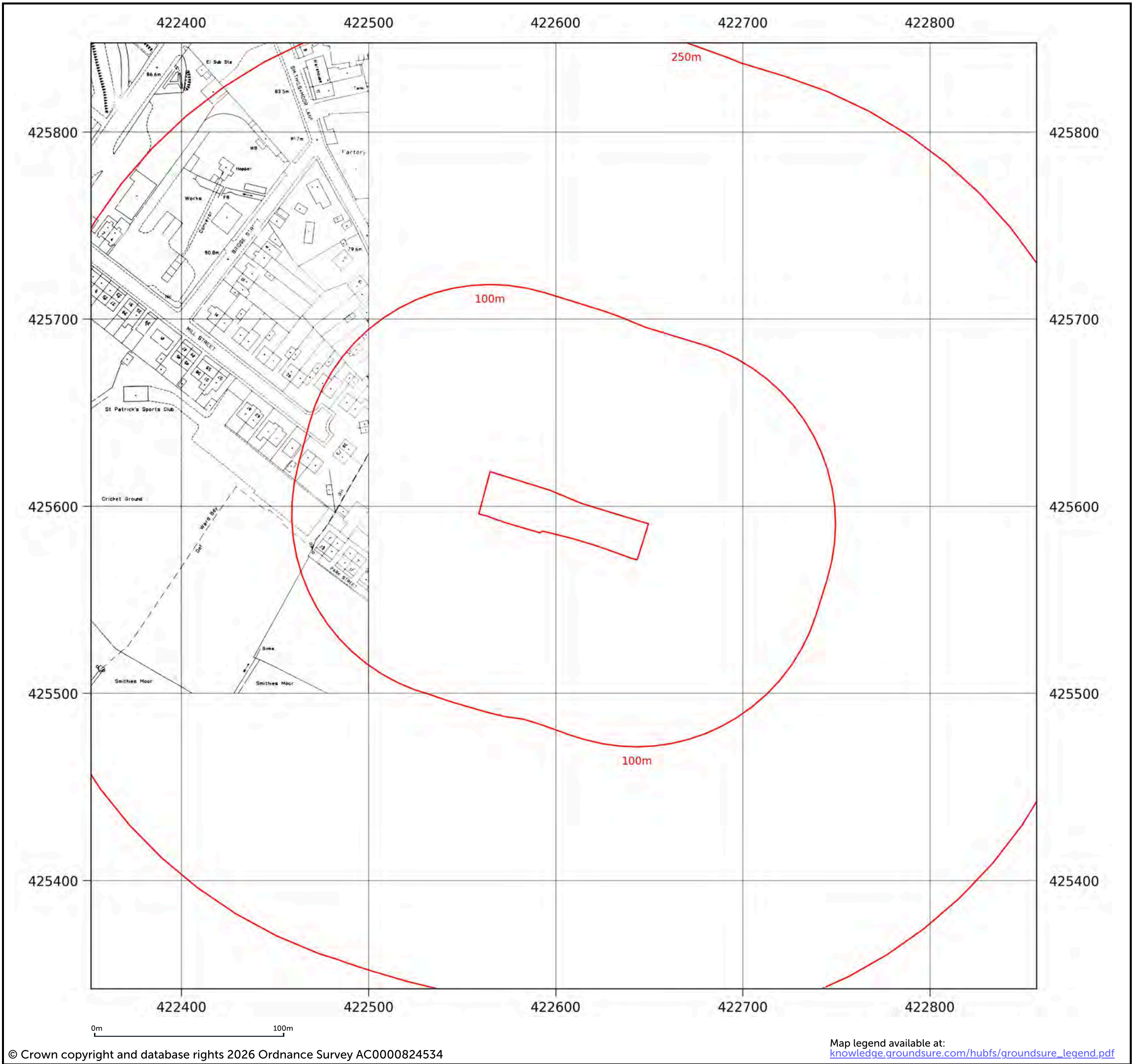


Site details:	UNIT ON SMITHIES MOOR RISE, BIRSTALL, BATLEY, KIRKLEES, WF17 8AX
Client ref:	C/6063/26/E/9391 - PO- 3827
Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	National Grid
Map date:	1995
Scale:	1:1,250
Printed at:	1:2,000



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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



Date: 2003

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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: County Series

Map date: 1854

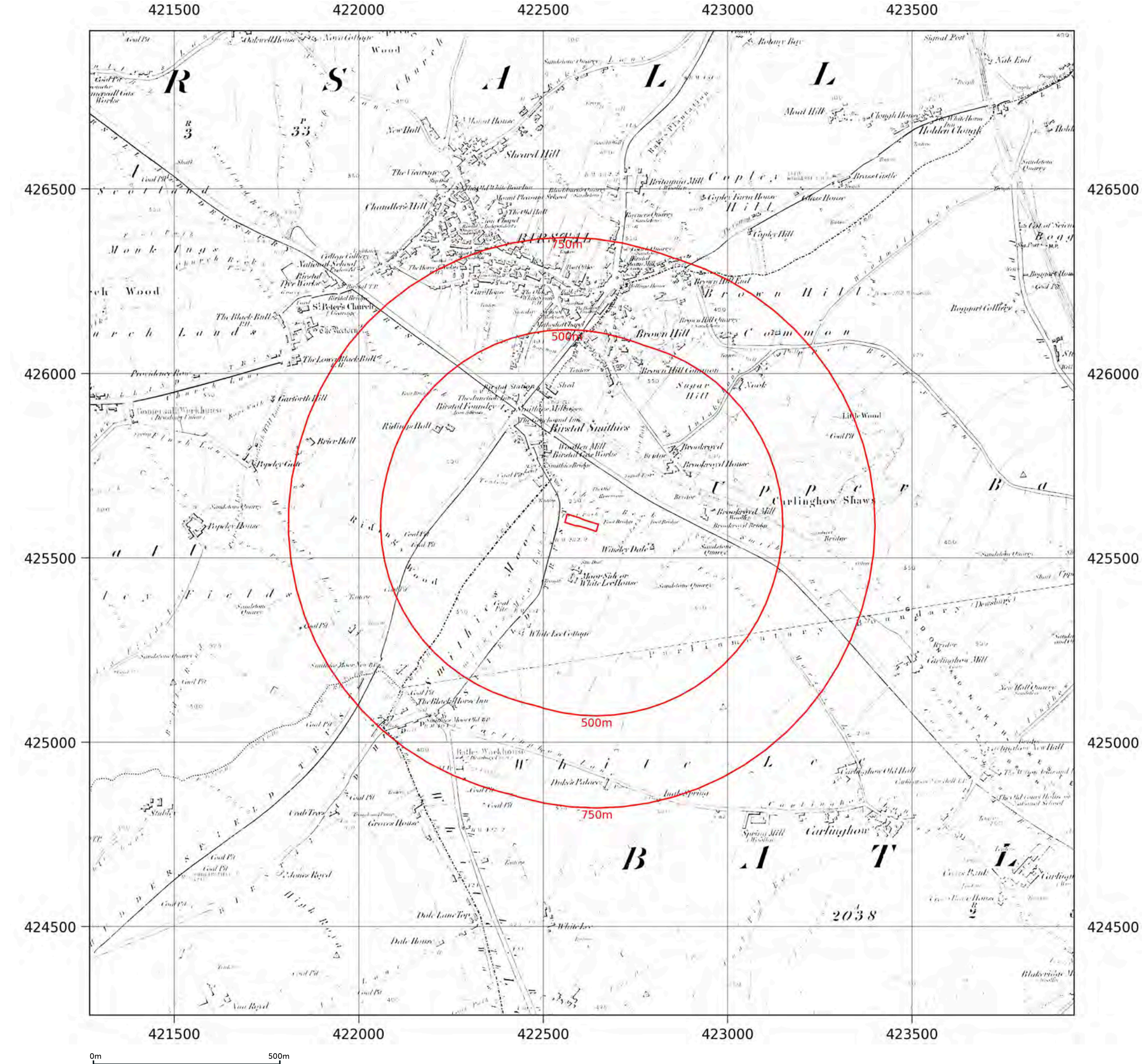
Scale: 1:10,560

Printed at: 1:10,560



Date: 1854
Surveyed: 1847
Edition: 1854

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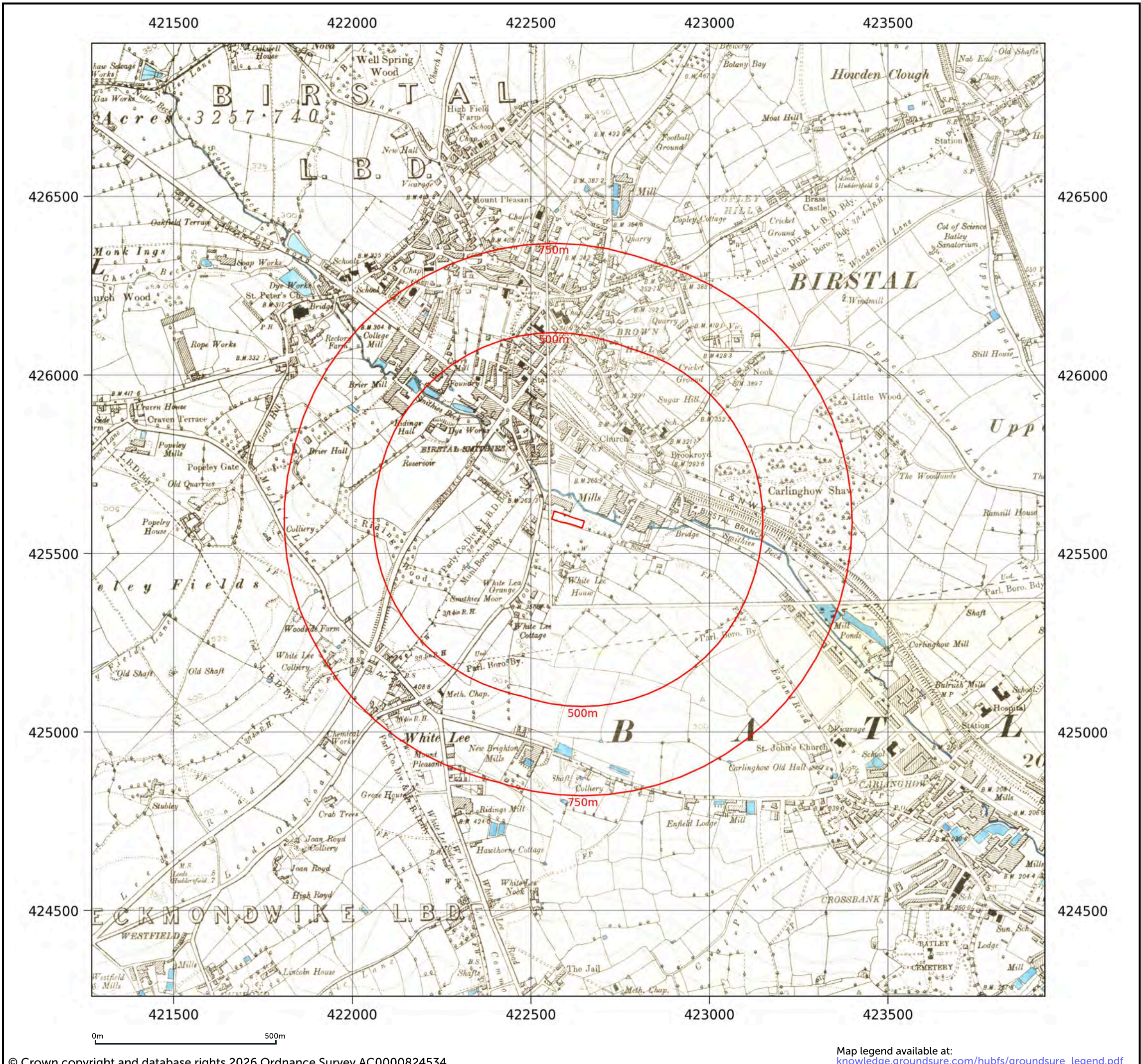
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Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	County Series
Map date:	1892
Scale:	1:10,560
Printed at:	1:10,560



Date: 1892 Surveyed: 1892 Revised: 1892	Date: 1892 Surveyed: 1892 Revised: 1892
Date: 1892 Surveyed: 1892 Revised: 1892	Date: 1892 Surveyed: 1892 Revised: 1892

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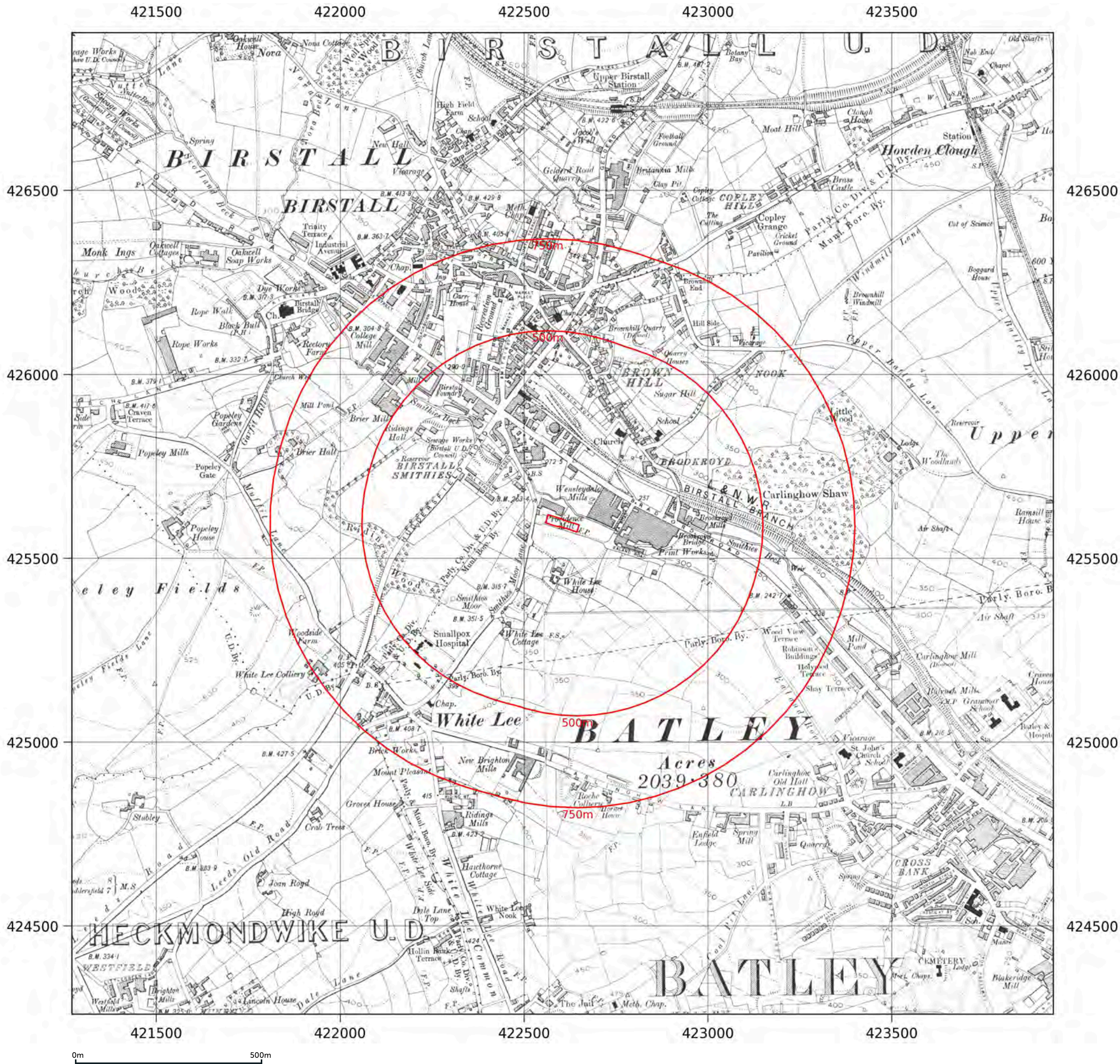
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Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	County Series
Map date:	1905-1906
Scale:	1:10,560
Printed at:	1:10,560



Date: 1905 Surveyed: 1889 Revised: 1905	Date: 1906 Surveyed: 1889 Revised: 1906
Date: 1905 Surveyed: 1889 Revised: 1905	Date: 1905 Surveyed: 1889 Revised: 1905

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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: County Series

Map date: 1931-1932

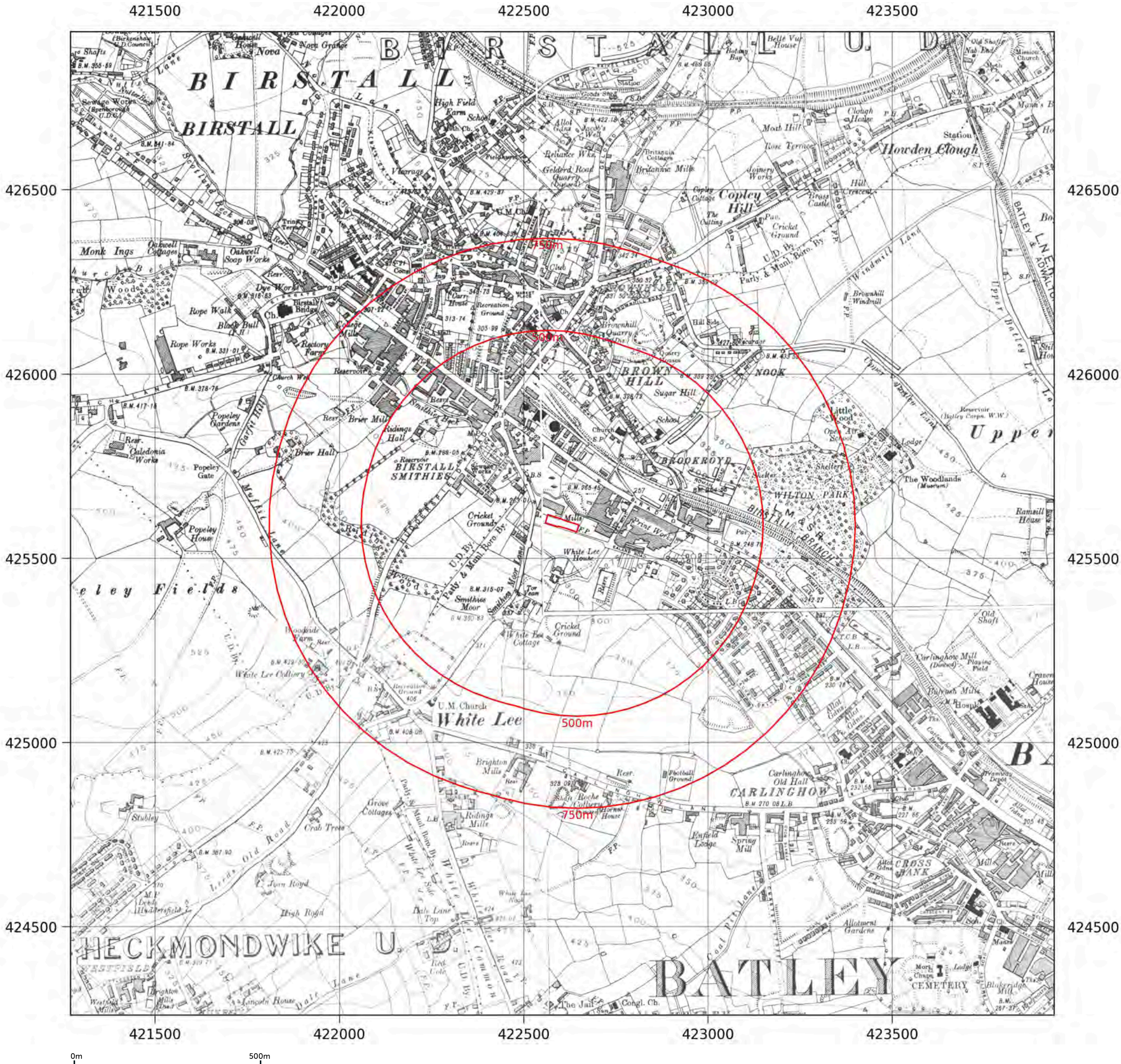
Scale: 1:10,560

Printed at: 1:10,560



Date: 1932 Surveyed: 1850 Revised: 1932	Date: 1932 Surveyed: 1850 Revised: 1932
Date: 1931 Surveyed: 1851 Revised: 1931	Date: 1931 Surveyed: 1851 Revised: 1931

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Site details:

Client ref:

Report ref:

Grid ref:

Production date:

UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

C/6063/26/E/9391 - PO-
3827

GS-3DG-DJN-2LH-N4L

422602.49, 425594.78

12 May 2026

Map name:

Map date:

Scale:

Printed at:

County Series

1931-1932

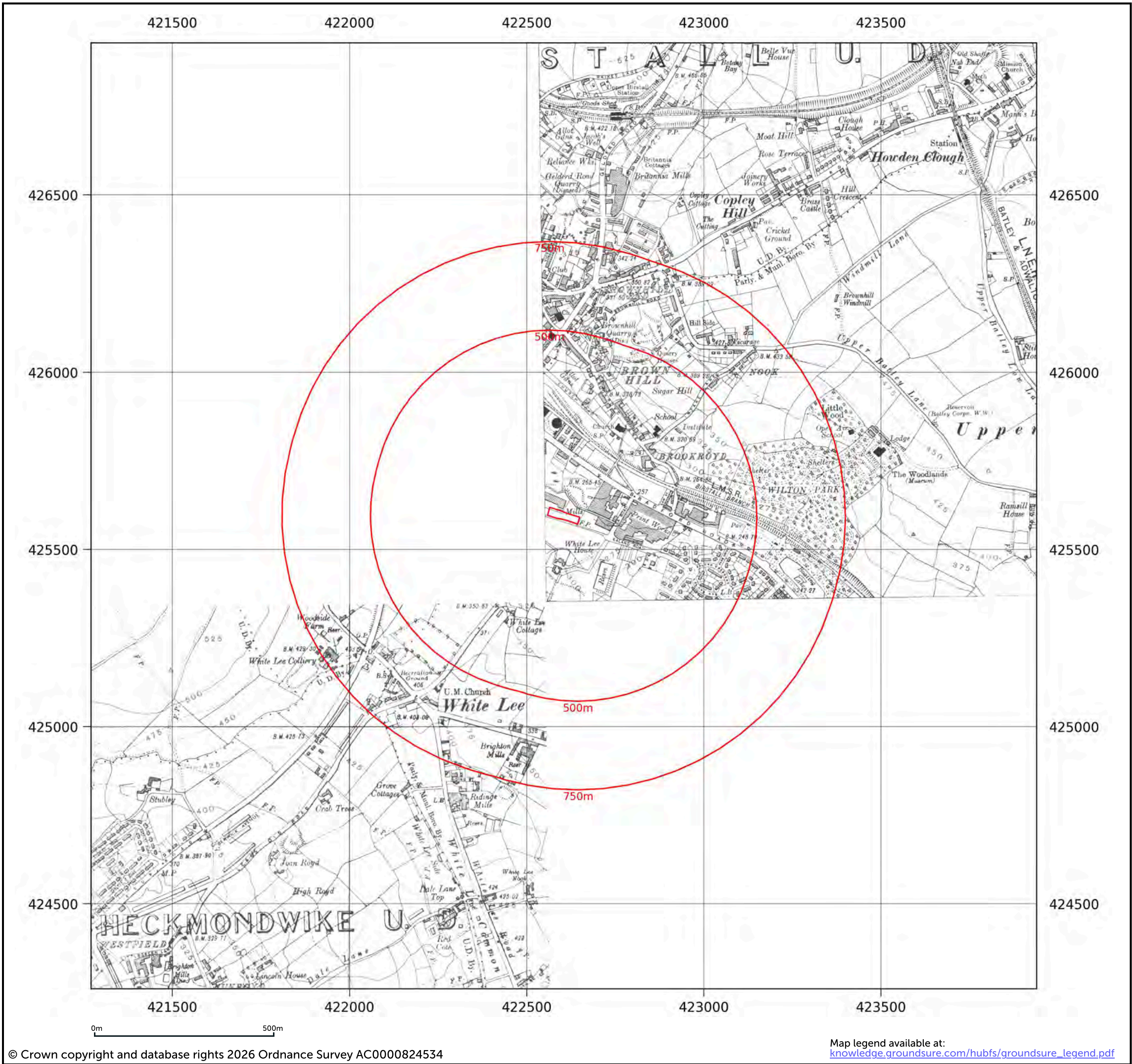
1:10,560

1:10,560

Date: 1932
Surveyed: 1850
Revised: 1932

Date: 1931
Surveyed: 1851
Revised: 1931

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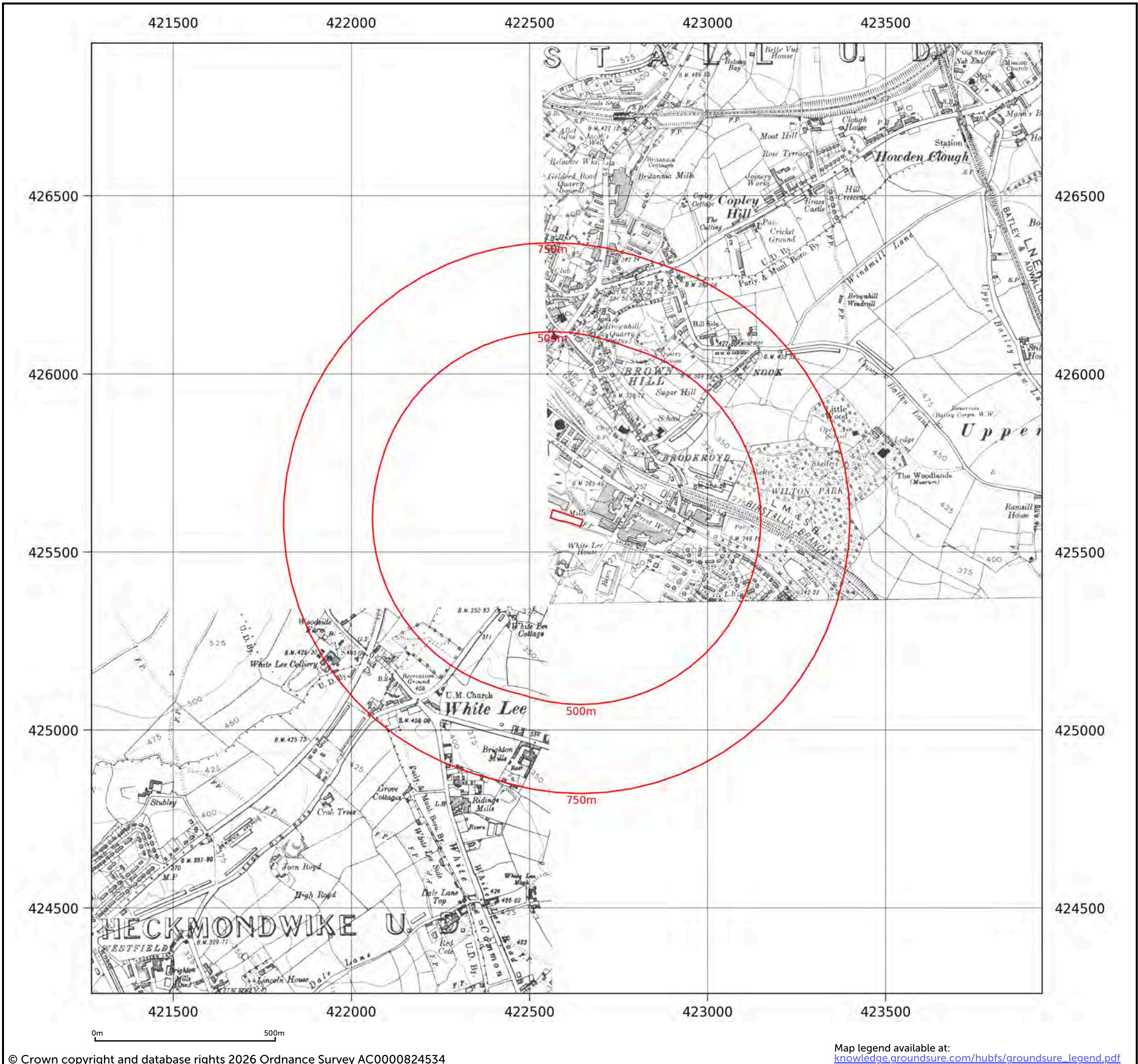
Site details:	UNIT ON SMITHIES MOOR RISE, BIRSTALL, BATLEY, KIRKLEES, WF17 8AX
Client ref:	C/6063/26/E/9391 - PO- 3827
Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	County Series
Map date:	1931-1932
Scale:	1:10,560
Printed at:	1:10,560



	Date: 1932 Surveyed: 1850 Revised: 1932
Date: 1931 Surveyed: 1851 Revised: 1931	

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RISE, BIRSTALL, BATLEY,
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Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: County Series

Map date: 1938

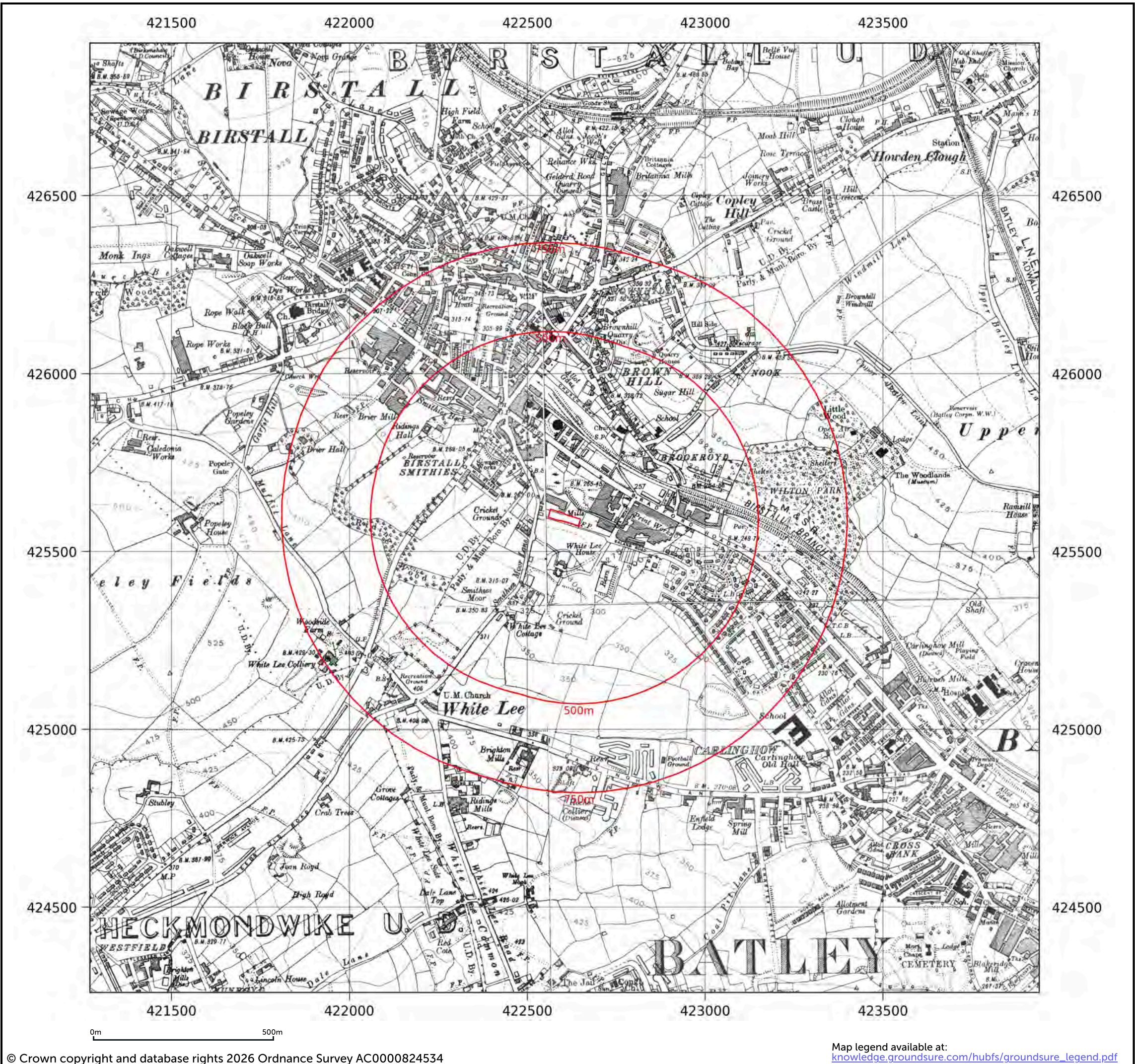
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Printed at: 1:10,560



Date: 1938 Surveyed: 1850 Revised: 1938	Date: 1938 Surveyed: 1850 Revised: 1938 Edition: 1938 Levelled: 1932
Date: 1938 Surveyed: 1851 Revised: 1938 Levelled: 1931	Date: 1938 Surveyed: 1851 Revised: 1938 Levelled: 1931

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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: County Series

Map date: 1948

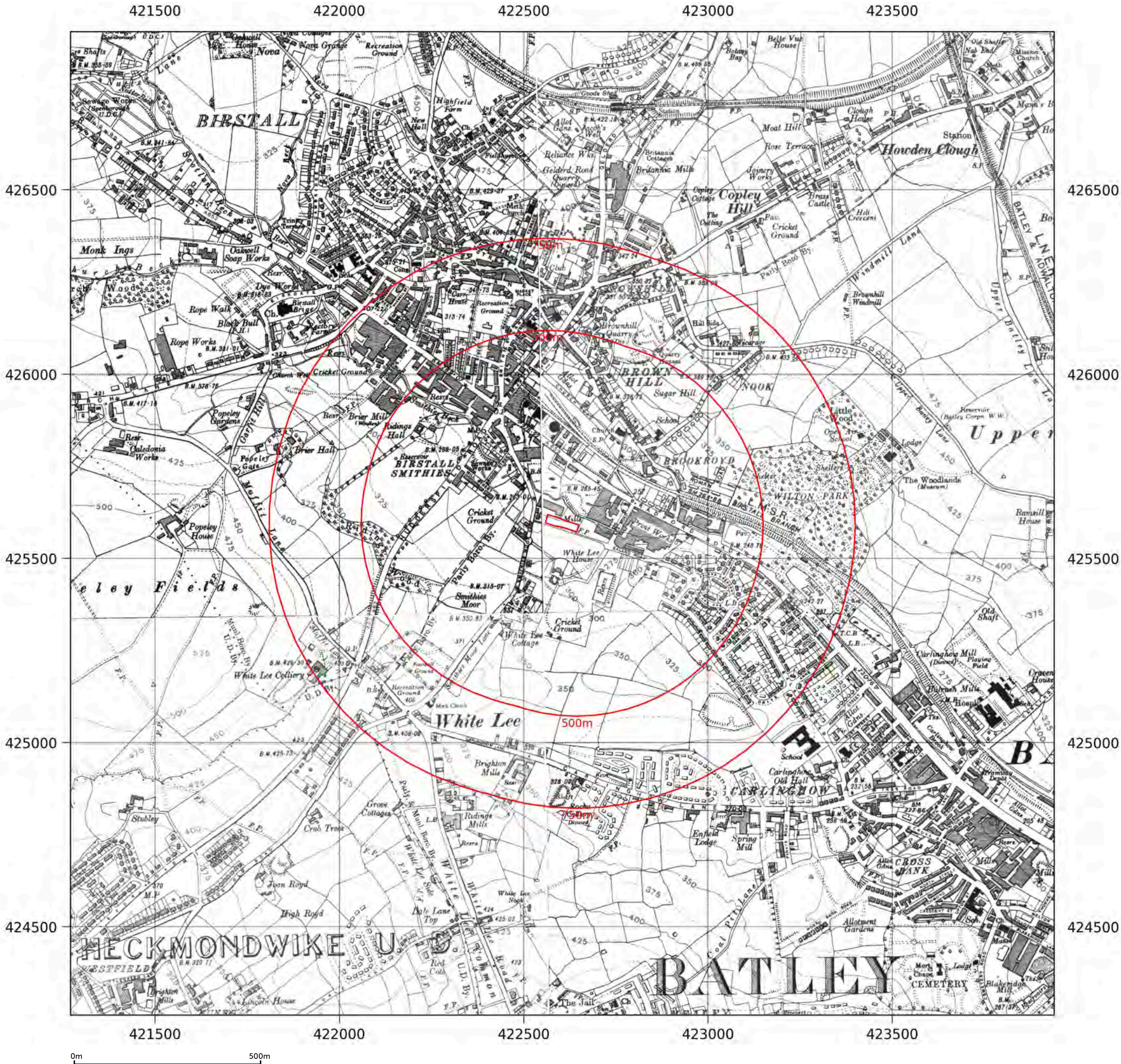
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Printed at: 1:10,560



Date: 1948 Surveyed: 1850 Revised: 1948 Levelled: 1931	Date: 1948 Surveyed: 1850 Revised: 1948
Date: 1948 Surveyed: 1851 Revised: 1948	Date: 1948 Surveyed: 1851 Revised: 1948 Levelled: 1931

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Site details:

UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref:

C/6063/26/E/9391 - PO-
3827

Report ref:

GS-3DG-DJN-2LH-N4L

Grid ref:

422602.49, 425594.78

Production date:

12 May 2026

Map name:

County Series

Map date:

1948

Scale:

1:10,560

Printed at:

1:10,560

Date: 1948
Surveyed: 1850
Revised: 1948

Date: 1948
Surveyed: 1851
Revised: 1948

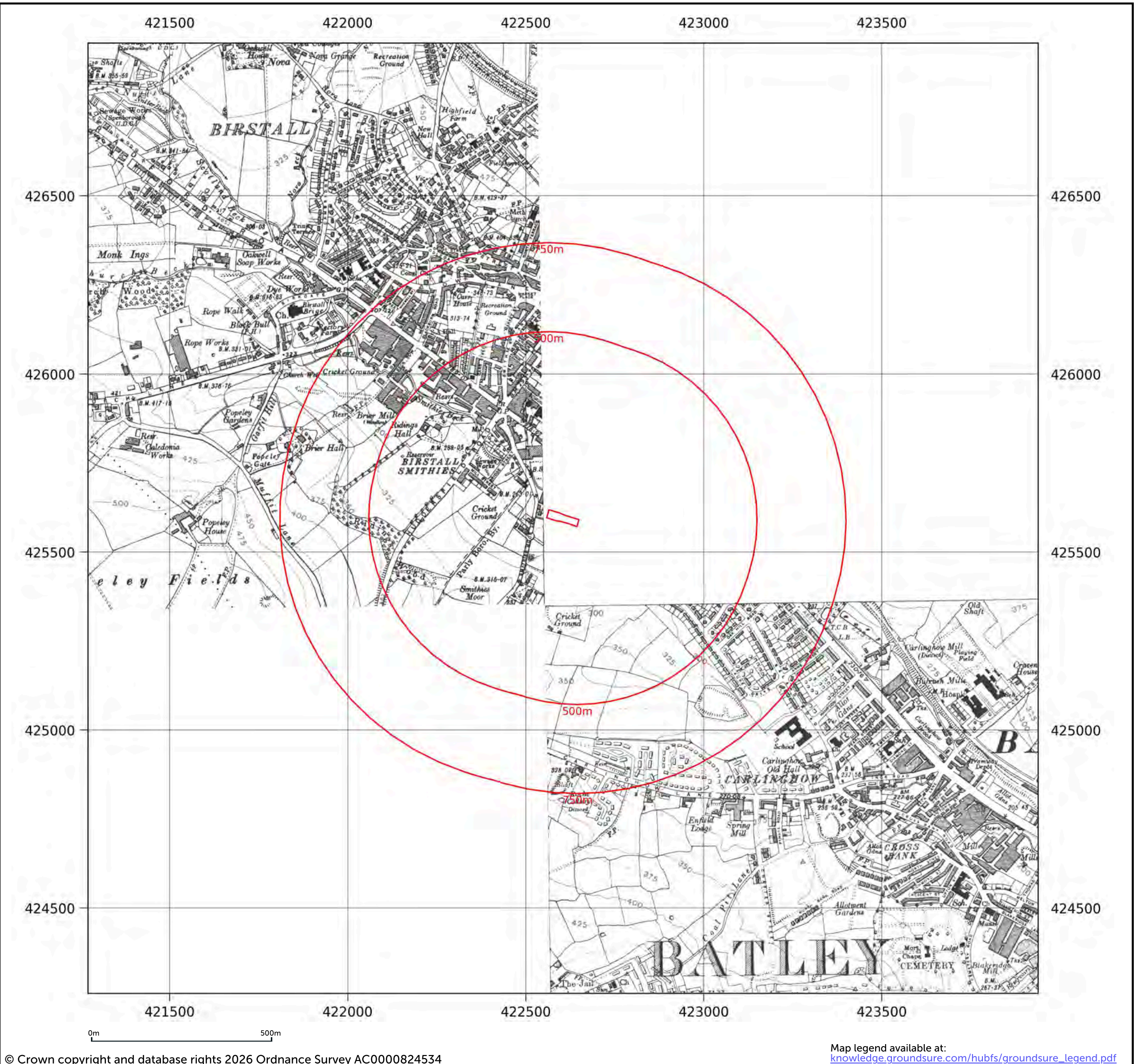
W

E

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S

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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
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Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: Provisional

Map date: 1955

Scale: 1:10,560

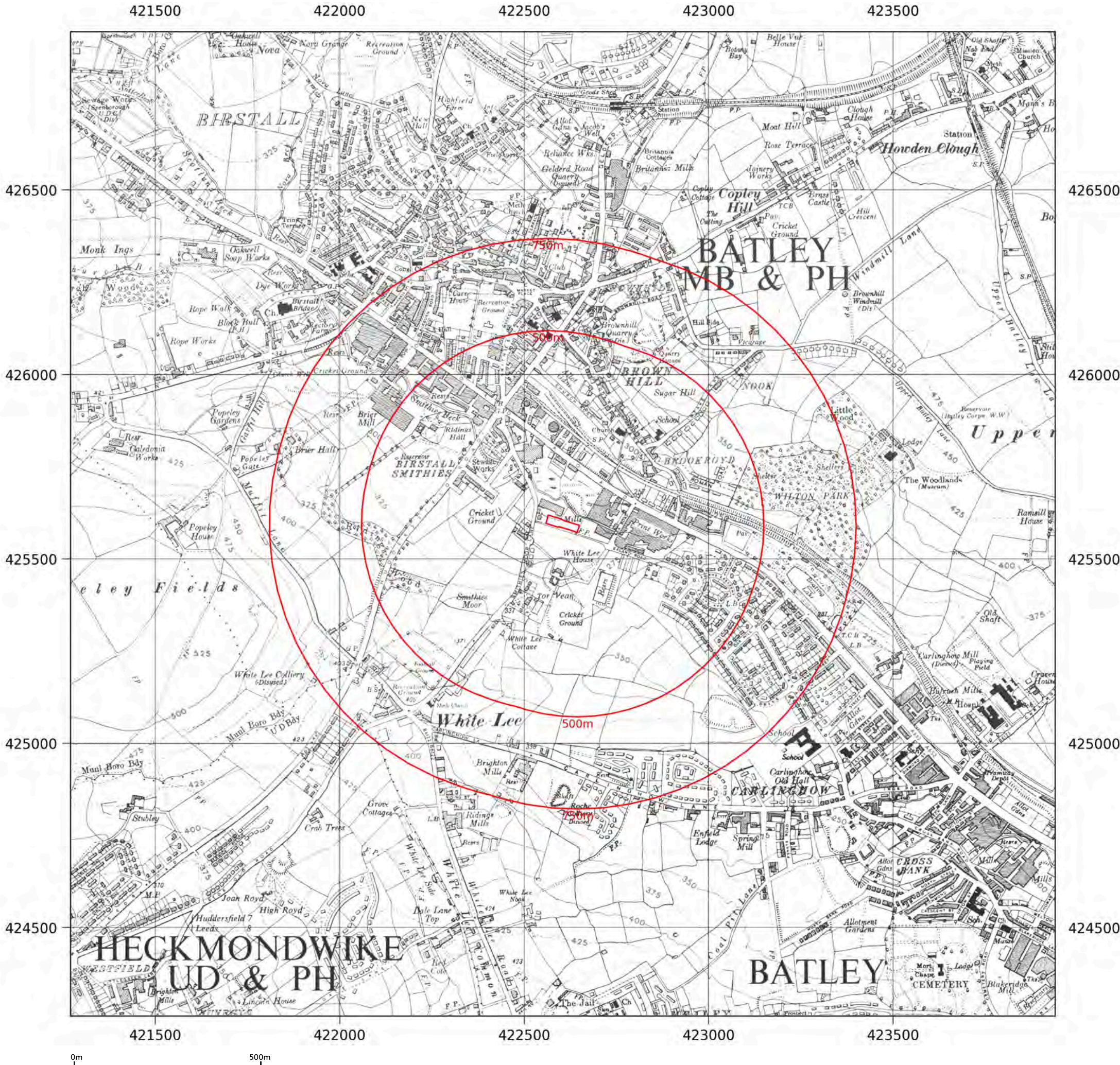
Printed at: 1:10,560



Date: 1955
Surveyed: 1951
Revised: 1951
Copyright: 1955

Date: 1955
Surveyed: 1951
Revised: 1955

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Site details: UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref: C/6063/26/E/9391 - PO-
3827

Report ref: GS-3DG-DJN-2LH-N4L

Grid ref: 422602.49, 425594.78

Production date: 12 May 2026

Map name: Provisional

Map date: 1966-1967

Scale: 1:10,560

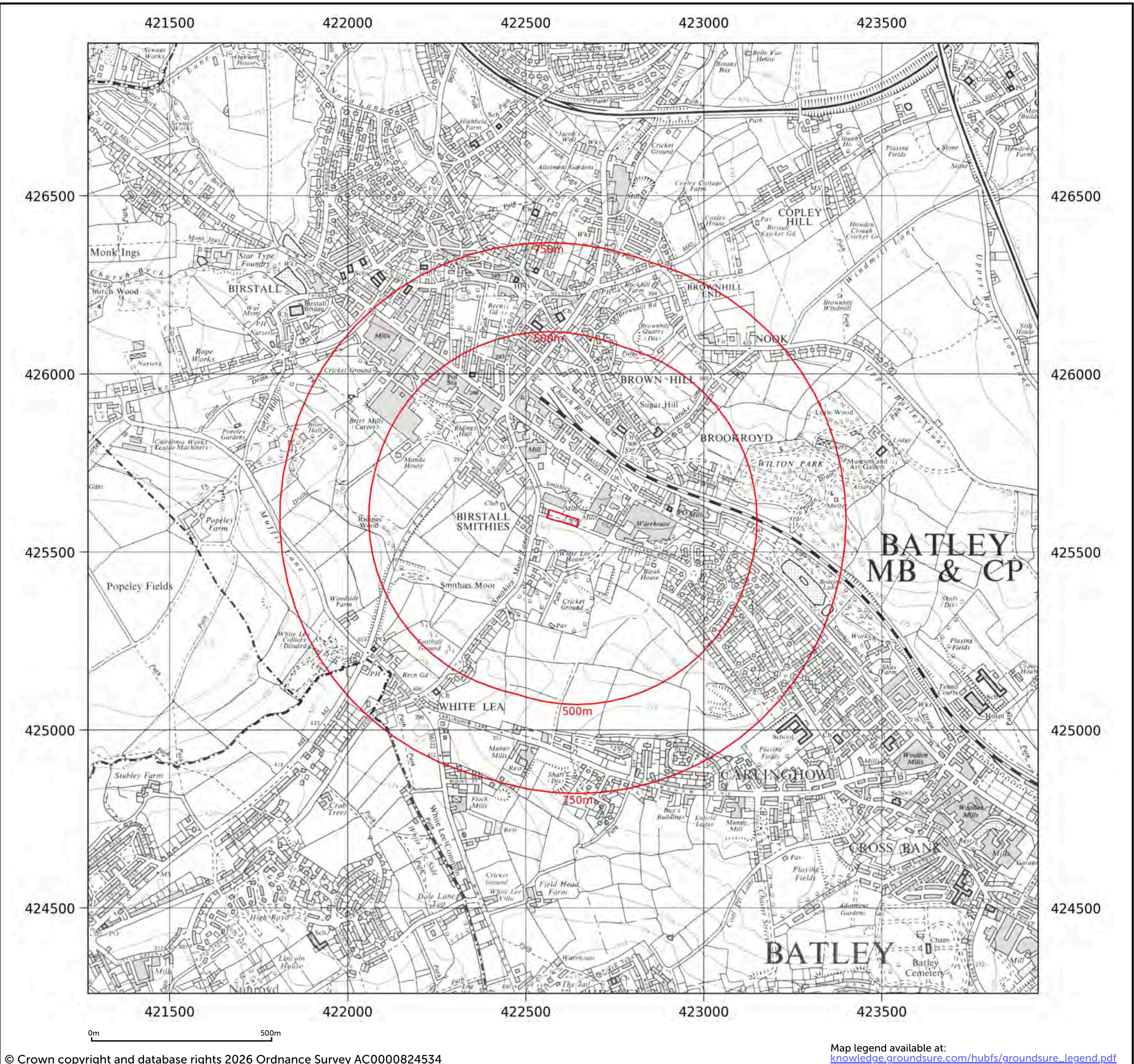
Printed at: 1:10,560



Date: 1966
Surveyed: 1966
Revised: 1966

Date: 1967
Surveyed: 1967
Revised: 1967

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Client ref:	C/6063/26/E/9391 - PO- 3827
Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

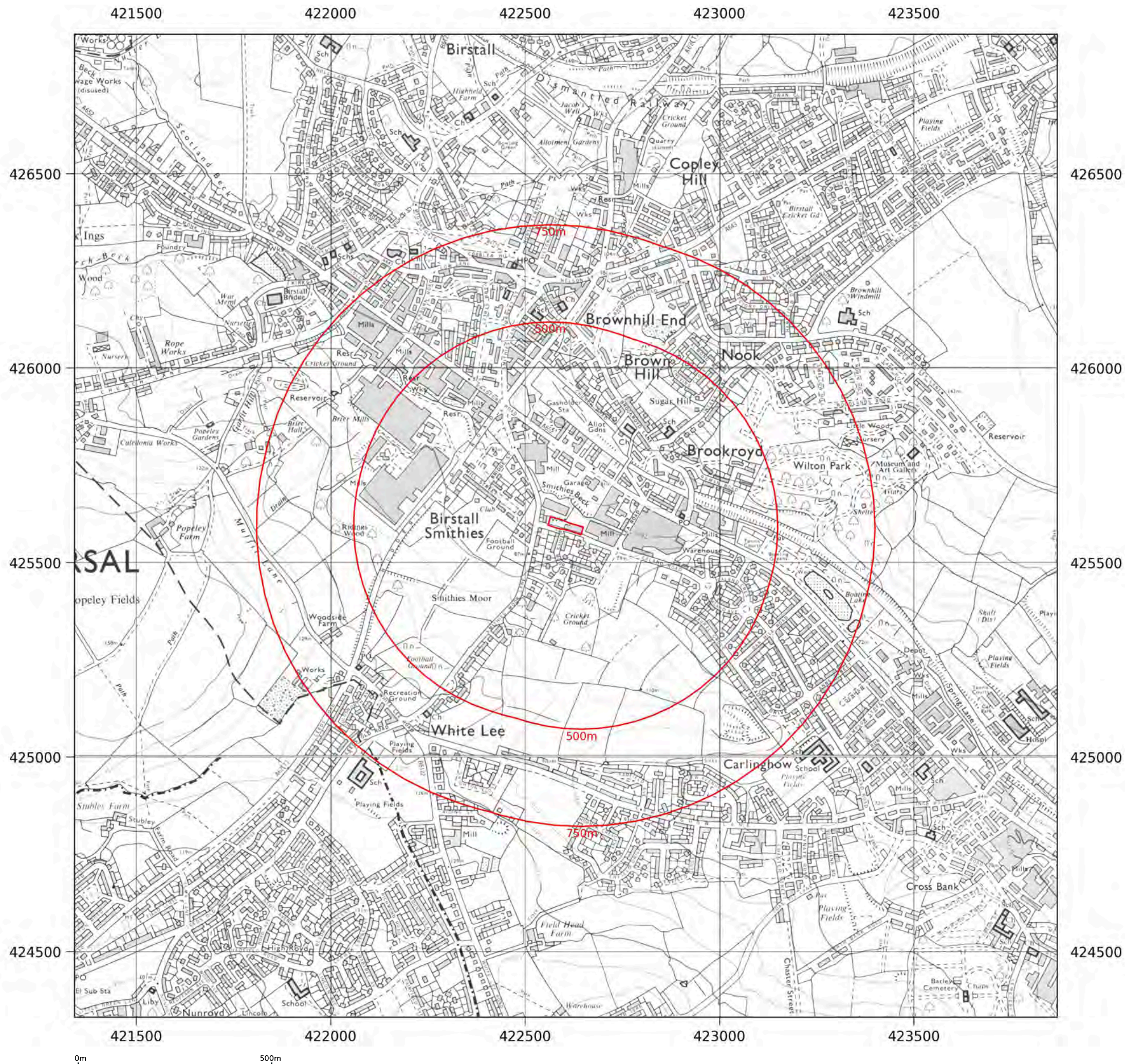
Map name:	National Grid
Map date:	1974
Scale:	1:10,000
Printed at:	1:10,000



Date: 1974
Surveyed: 1973
Revised: 1974

Date: 1974
Surveyed: 1974
Revised: 1974

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Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf





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Client ref:	C/6063/26/E/9391 - PO- 3827
Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

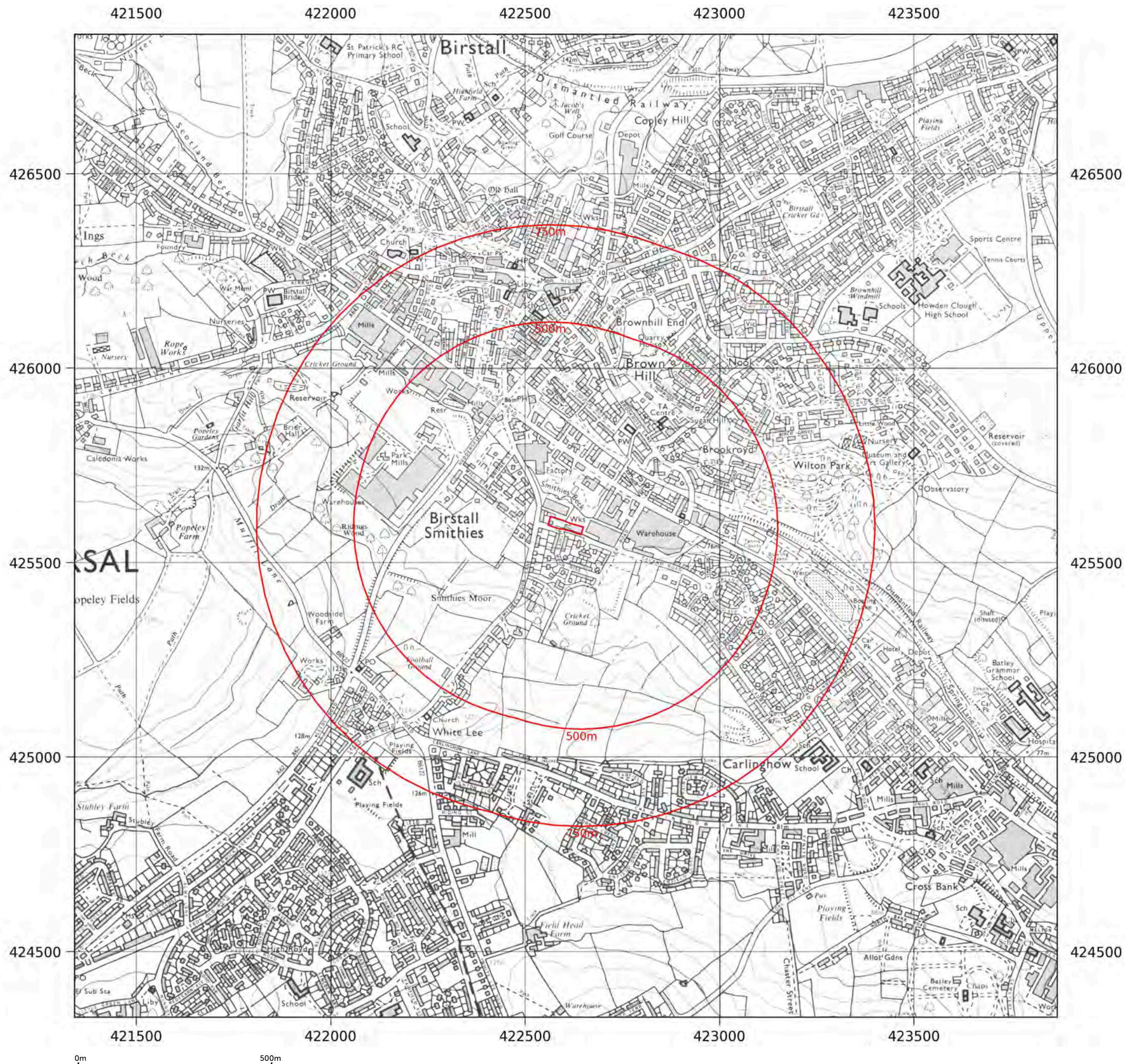
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Map date:	1981-1985
Scale:	1:10,000
Printed at:	1:10,000



Date: 1985
Surveyed: 1985
Revised: 1985

Date: 1981
Surveyed: 1977
Revised: 1981

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Site details:UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref:C/6063/26/E/9391 - PO-
3827

Report ref:GS-3DG-DJN-2LH-N4L

Grid ref:422602.49, 425594.78

Production date:12 May 2026

Map name:National Grid

Map date:1994

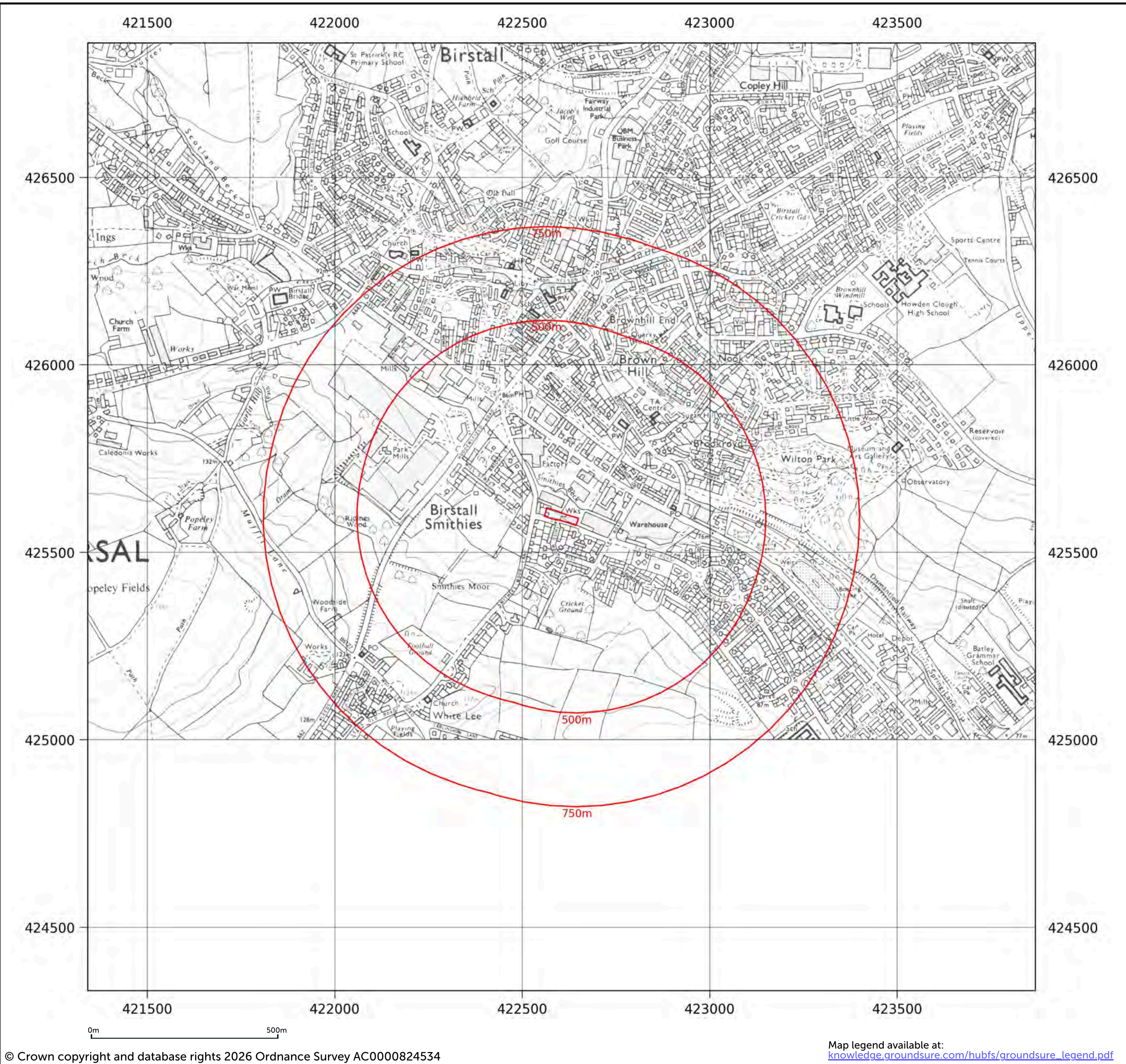
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Printed at:1:10,000



Date: 1994
Surveyed: 1985
Revised: 1994

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Site details:

UNIT ON SMITHIES MOOR
RISE, BIRSTALL, BATLEY,
KIRKLEES, WF17 8AX

Client ref:

C/6063/26/E/9391 - PO-
3827

Report ref:

GS-3DG-DJN-2LH-N4L

Grid ref:

422602.49, 425594.78

Production date:

12 May 2026

Map name:

National Grid

Map date:

2001

Scale:

1:10,000

Printed at:

1:10,000

Date: 2001

Date: 2001

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Site details:	UNIT ON SMITHIES MOOR RISE, BIRSTALL, BATLEY, KIRKLEES, WF17 8AX
Client ref:	C/6063/26/E/9391 - PO- 3827
Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	National Grid
Map date:	2010
Scale:	1:10,000
Printed at:	1:10,000



Date: 2010
Date: 2010

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Site details:	UNIT ON SMITHIES MOOR RISE, BIRSTALL, BATLEY, KIRKLEES, WF17 8AX
Client ref:	C/6063/26/E/9391 - PO- 3827
Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	National Grid
Map date:	2015
Scale:	1:10,000
Printed at:	1:10,000



Date: 2015
Date: 2015

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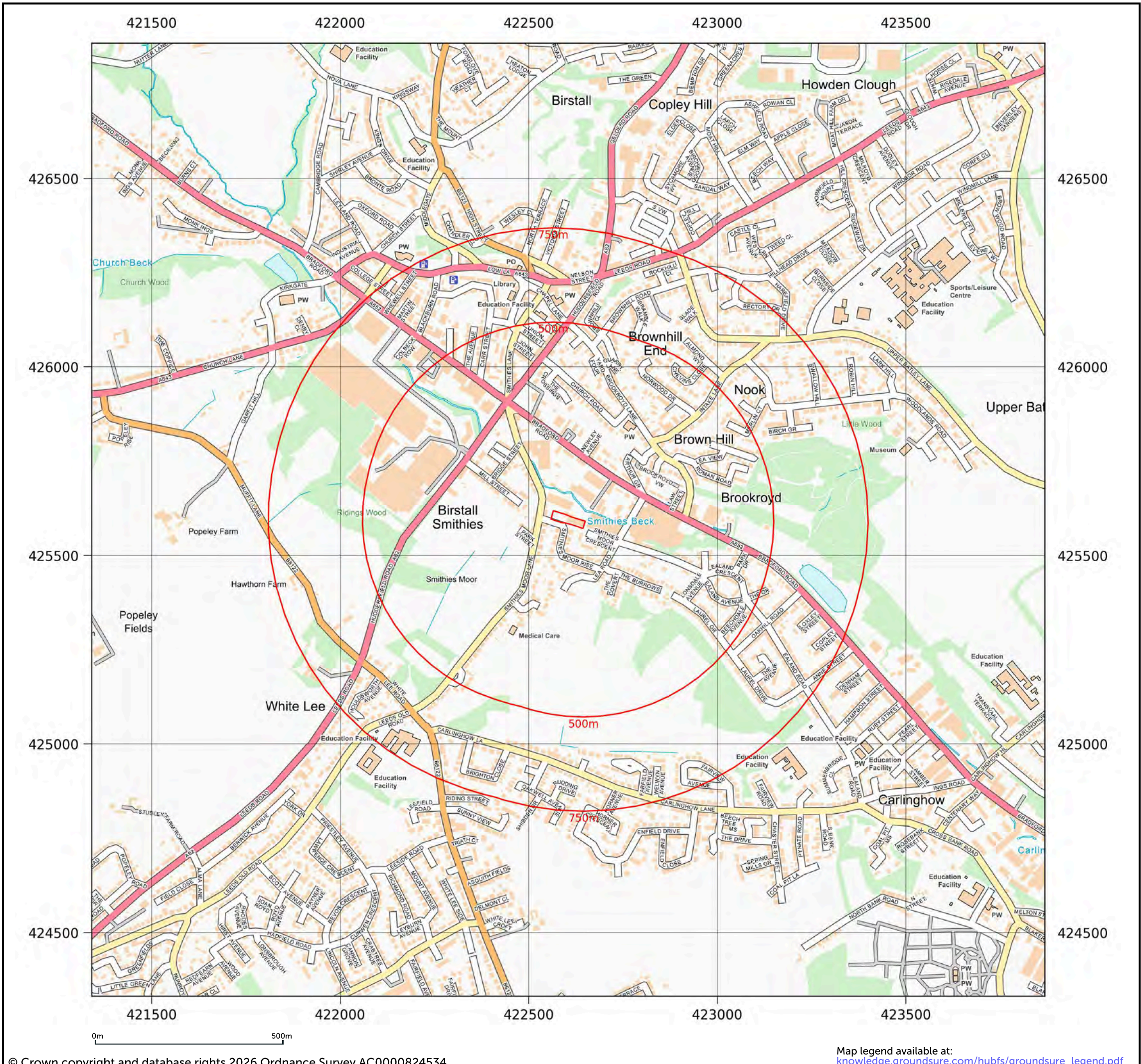
Site details:	UNIT ON SMITHIES MOOR RISE, BIRSTALL, BATLEY, KIRKLEES, WF17 8AX
Client ref:	C/6063/26/E/9391 - PO- 3827
Report ref:	GS-3DG-DJN-2LH-N4L
Grid ref:	422602.49, 425594.78
Production date:	12 May 2026

Map name:	National Grid
Map date:	2025
Scale:	1:10,000
Printed at:	1:10,000



Date: 2025
Date: 2025

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Appendix 3

Groundsure Reports

UNIT ON SMITHIES MOOR RISE, BIRSTALL, BATLEY, KIRKLEES, WF17 8AX**Order Details**

Date: 12/05/2026
Your ref: C/6063/26/E/9391 - PO-3827
Our Ref: GS-NDA-UG2-9Y1-MDP

Site Details

Location: 422602 425594
Area: 0.19 ha
Authority: [Kirklees Council](#) ↗

Site plan**Quick Links**

Summary of findings [p. 2](#) >
OS MasterMap site plan [p.13](#) >
Aerial image [p. 9](#) >

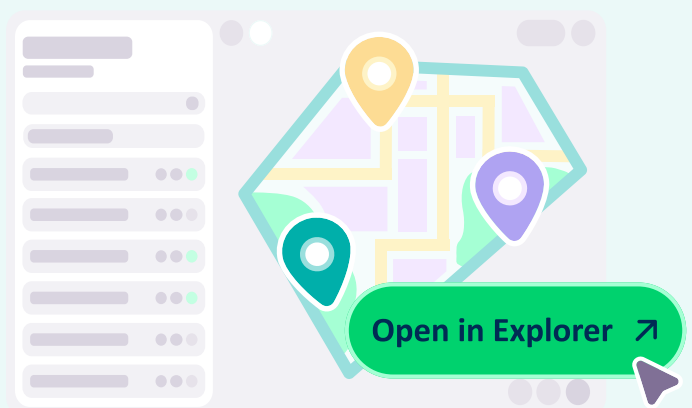
[Insight User Guide](#) ↗

Open this site in Explorer!

Access the data now in our interactive workspace.

- Map and interpret 130+ datasets across 170 years
- Generate insights and visuals quickly
- Revisit and collaborate with your team

Access to Groundsure Explorer requires an Insights account.
12 months access begins at purchase.



Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	9	8	44	47	-
19 >	1.2 >	Historical tanks >	0	3	26	34	-
21 >	1.3 >	Historical energy features >	0	2	17	24	-
23	1.4	Historical petrol stations	0	0	0	0	-
23 >	1.5 >	Historical garages >	0	0	17	2	-
24	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
25 >	2.1 >	Historical industrial land uses >	10	10	61	64	-
31 >	2.2 >	Historical tanks >	0	3	30	58	-
34 >	2.3 >	Historical energy features >	0	2	21	42	-
37	2.4	Historical petrol stations	0	0	0	0	-
37 >	2.5 >	Historical garages >	0	0	22	3	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
39	3.1	Active or recent landfill	0	0	0	0	-
39	3.2	Historical landfill (BGS records)	0	0	0	0	-
40 >	3.3 >	Historical landfill (LA/mapping records) >	0	0	1	0	-
40 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	1	0	-
40 >	3.5 >	Historical waste sites >	0	1	1	2	-
41	3.6	Licensed waste sites	0	0	0	0	-
41 >	3.7 >	Waste exemptions >	0	0	5	30	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
45 >	4.1 >	Recent industrial land uses >	1	3	17	-	-
47 >	4.2 >	National Geographic Database (NGD) - Current or recent tanks >	0	0	1	-	-
47 >	4.3 >	Current or recent petrol stations >	0	0	2	1	-
48	4.4	Electricity cables	0	0	0	0	-
48	4.5	Gas pipelines	0	0	0	0	-



48	4.6	Sites determined as Contaminated Land	0	0	0	0	-
48 >	4.7 >	Control of Major Accident Hazards (COMAH) >	0	0	0	1	-
49	4.8	Regulated explosive sites	0	0	0	0	-
49 >	4.9 >	Hazardous substance storage/usage >	0	0	0	3	-
50	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
50	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
50 >	4.12 >	Licensed pollutant release (Part A(2)/B) >	0	1	4	3	-
51	4.13	Radioactive Substance Authorisations	0	0	0	0	-
51 >	4.14 >	Licensed Discharges to controlled waters >	0	0	5	4	-
53	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
53	4.16	Pollutant release to public sewer	0	0	0	0	-
53	4.17	List 1 Dangerous Substances	0	0	0	0	-
54 >	4.18 >	List 2 Dangerous Substances >	0	1	0	0	-
54 >	4.19 >	Pollution Incidents (EA/NRW) >	0	0	5	12	-
56	4.20	Pollution inventory substances	0	0	0	0	-
56	4.21	Pollution inventory waste transfers	0	0	0	0	-
56	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
57	5.1	Superficial aquifer	None (within 500m)				
58 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
59 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
60	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
60	5.5	Groundwater vulnerability- local information	None (within 0m)				
61 >	5.6 >	Groundwater abstractions >	0	0	2	4	0
63 >	5.7 >	Surface water abstractions >	0	0	0	0	3
64	5.8	Potable abstractions	0	0	0	0	0
64	5.9	Source Protection Zones	0	0	0	0	-
64	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m



65 >	6.1 >	Water Network (OS NGD) >	0	2	14	-	-
67 >	6.2 >	Surface water features >	0	1	3	-	-
67 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
68 >	6.4 >	WFD Surface water bodies >	0	1	0	-	-
68 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
69 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
70	7.2	Historical Flood Events	0	0	0	-	-
70	7.3	Flood Defences	0	0	0	-	-
70 >	7.4 >	Areas Benefiting from Flood Defences >	0	0	3	-	-
71	7.5	Flood Storage Areas	0	0	0	-	-
72 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
73 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
74 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
76 >	9.1 >	Groundwater flooding >	Negligible (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
77	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
78	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
78	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
78	10.4	Special Protection Areas (SPA)	0	0	0	0	0
78	10.5	National Nature Reserves (NNR)	0	0	0	0	0
79 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	1
79 >	10.7 >	Designated Ancient Woodland >	0	0	0	1	12
80	10.8	Biosphere Reserves	0	0	0	0	0
80	10.9	Forest Parks	0	0	0	0	0
80	10.10	Marine Conservation Zones	0	0	0	0	0
80 >	10.11 >	Green Belt >	0	0	1	1	1



81	10.12	Proposed Ramsar sites	0	0	0	0	0
81	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
81	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
81	10.15	Nitrate Sensitive Areas	0	0	0	0	0
82 >	10.16 >	Nitrate Vulnerable Zones >	0	0	0	0	2
83 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
84	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
85	11.1	World Heritage Sites	0	0	0	-	-
85	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
85	11.3	National Parks	0	0	0	-	-
85	11.4	Listed Buildings	0	0	0	-	-
86	11.5	Conservation Areas	0	0	0	-	-
86	11.6	Scheduled Ancient Monuments	0	0	0	-	-
86	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
87 >	12.1 >	Agricultural Land Classification >	Grade 4 (within 250m)				
88	12.2	Open Access Land	0	0	0	-	-
88	12.3	Tree Felling Licences	0	0	0	-	-
88	12.4	Environmental Stewardship Schemes	0	0	0	-	-
89	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
90 >	13.1 >	Priority Habitat Inventory >	0	0	1	-	-
91	13.2	Habitat Networks	0	0	0	-	-
91	13.3	Open Mosaic Habitat	0	0	0	-	-
91	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
92 >	14.1 >	10k Availability >	Identified (within 500m)				
93 >	14.2 >	Artificial and made ground (10k) >	1	0	5	6	-



95	14.3	Superficial geology (10k)	0	0	0	0	-
95	14.4	Landslip (10k)	0	0	0	0	-
96 >	14.5 >	Bedrock geology (10k) >	3	2	10	13	-
98 >	14.6 >	Bedrock faults and other linear features (10k) >	1	0	6	13	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
100 >	15.1 >	50k Availability >	Identified (within 500m)				
101 >	15.2 >	Artificial and made ground (50k) >	1	0	0	1	-
102 >	15.3 >	Artificial ground permeability (50k) >	1	0	-	-	-
103	15.4	Superficial geology (50k)	0	0	0	0	-
103	15.5	Superficial permeability (50k)	None (within 50m)				
103	15.6	Landslip (50k)	0	0	0	0	-
103	15.7	Landslip permeability (50k)	None (within 50m)				
104 >	15.8 >	Bedrock geology (50k) >	3	2	10	11	-
106 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
106 >	15.10 >	Bedrock faults and other linear features (50k) >	1	0	7	16	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
108 >	16.1 >	BGS Boreholes >	0	4	4	-	-
Page	Section	Natural ground subsidence >					
110 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
111 >	17.2 >	Running sands >	Very low (within 50m)				
113 >	17.3 >	Compressible deposits >	Very low (within 50m)				
115 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
116 >	17.5 >	Landslides >	Low (within 50m)				
118 >	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
120 >	18.1 >	BritPits >	0	0	2	3	-
122 >	18.2 >	Surface ground workings >	0	5	23	-	-
123 >	18.3 >	Underground workings >	0	0	0	0	15
124	18.4	Underground mining extents	0	0	0	0	-



124	18.5	Historical Mineral Planning Areas	0	0	0	0	-
124	18.6	Non-coal mining	0	0	0	0	0
125	18.7	JPB mining areas	None (within 0m)				
125	18.8	The Coal Authority non-coal mining	0	0	0	0	-
125 >	18.9 >	Researched mining >	0	0	0	1	-
125	18.10	Mining record office plans	0	0	0	0	-
126	18.11	BGS mine plans	0	0	0	0	-
126 >	18.12 >	Coal mining >	Identified (within 0m)				
126	18.13	Brine areas	None (within 0m)				
126	18.14	Gypsum areas	None (within 0m)				
126	18.15	Tin mining	None (within 0m)				
127	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
128	19.1	Natural cavities	0	0	0	0	-
128	19.2	Mining cavities	0	0	0	0	0
128	19.3	Reported recent incidents	0	0	0	0	-
128	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
130 >	20.1 >	Radon >	Between 3% and 5% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
132 >	21.1 >	BGS Estimated Background Soil Chemistry >	3	2	-	-	-
132	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
133	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
134	22.1	Underground railways (London)	0	0	0	-	-
134	22.2	Underground railways (Non-London)	0	0	0	-	-
135	22.3	Railway tunnels	0	0	0	-	-
135 >	22.4 >	Historical railway and tunnel features >	0	0	20	-	-
136	22.5	Royal Mail tunnels	0	0	0	-	-

136 >	22.6 >	Historical railways >	0	0	2	-	-
136	22.7	Railways	0	0	0	-	-
137	22.8	Crossrail 2	0	0	0	0	-
137	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 30/05/2021

Site Area: 0.19ha



Recent site history - 2018 aerial photograph



Capture Date: 02/07/2018

Site Area: 0.19ha



Recent site history - 2012 aerial photograph



Capture Date: 26/03/2012

Site Area: 0.19ha



Recent site history - 1999 aerial photograph



Capture Date: 10/07/1999

Site Area: 0.19ha



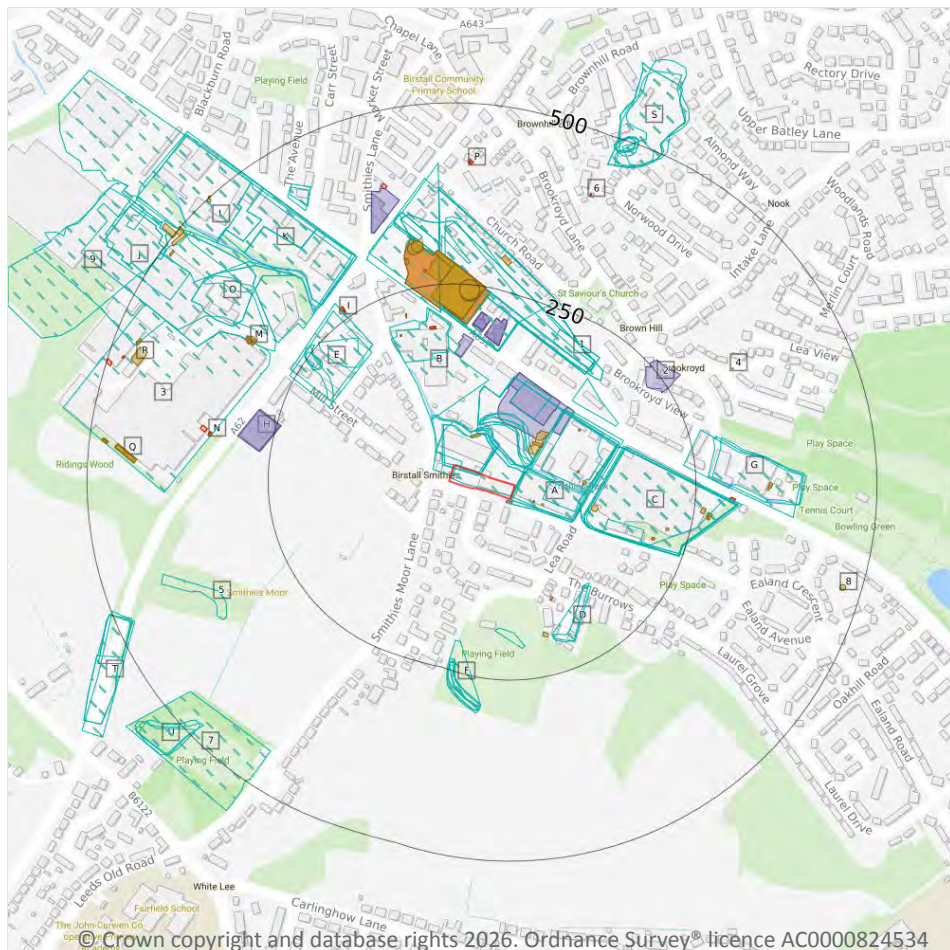
OS MasterMap site plan



Site Area: 0.19ha



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

108

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

Features are displayed on the Past land use map on [page 14](#) >

ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Mill	1974	1448660



ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Mills	1932	1508227
A	On site	Unspecified Mills	1938	1537130
A	On site	Unspecified Mills	1932	1541347
A	On site	Unspecified Mill	1906	1542463
A	On site	Unspecified Works	1974	1552422
A	On site	Unspecified Works	1985 - 1994	1564479
A	On site	Unspecified Mill	1966	1570309
A	On site	Unspecified Mills	1948	1577652
A	2m SE	Unspecified Mills	1938	1567725
A	26m N	Unspecified Mill	1906	1497491
A	27m N	Refuse Heap	1955	1573023
A	28m NE	Refuse Heap	1948	1550487
A	30m NE	Unspecified Mills	1955 - 1966	1503446
A	33m NE	Refuse Heap	1932	1506120
A	39m NE	Refuse Heap	1938	1527755
A	42m NE	Unspecified Mills	1892	1492051
B	70m NW	Unspecified Mill	1974 - 1994	1546038
C	92m E	Print Works	1966 - 1974	1507484
C	92m E	Print Works	1955	1572495
C	92m E	Unspecified Warehouse	1985 - 1994	1576626
A	94m N	Garage	1974	1448988
C	103m E	Print Works	1932	1530363
C	104m E	Print Works	1906	1554217
C	104m E	Print Works	1948	1490901
C	104m E	Print Works	1932	1552938
C	107m E	Print Works	1938	1492414
A	141m NE	Unspecified Pit	1938	1452168
B	149m N	Unspecified Mill	1966	1563600



ID	Location	Land use	Dates present	Group ID
D	157m SE	Unspecified Ground Workings	1974	1440656
D	159m SE	Unspecified Pit	1985	1452425
B	168m N	Railway Sidings	1906 - 1932	1490207
B	168m N	Unspecified Commercial/Industrial	1932 - 1948	1525417
B	168m N	Railway Sidings	1948	1542302
B	168m N	Unspecified Commercial/Industrial	1906	1577496
B	169m N	Unspecified Commercial/Industrial	1955	1564883
D	179m S	Unspecified Heap	1955	1468052
B	184m NE	Railway Sidings	1955	1535412
B	184m NE	Railway Sidings	1966	1548681
E	185m NW	Sewage Works	1938 - 1948	1514347
E	188m NW	Unspecified Ground Workings	1938 - 1948	1487298
E	188m NW	Unspecified Pit	1892	1452167
E	189m NW	Sewage Works	1955	1549084
1	190m NE	Cuttings	1892	1433591
B	190m NE	Railway Sidings	1892	1574573
B	191m NE	Railway Sidings	1938	1538103
B	194m N	Unspecified Industrial/Commercial	1938	1447274
B	198m N	Gas Holder Station	1974	1470102
F	208m S	Unspecified Pit	1955	1452426
B	223m N	Unspecified Tank	1906 - 1948	1511085
B	226m N	Unspecified Tank	1932	1541041
B	226m N	Unspecified Tank	1966 - 1985	1516958
B	226m N	Unspecified Tank	1955	1557487
E	226m NW	Unspecified Ground Workings	1905	1534227
B	227m N	Unspecified Tank	1892	1561923
E	228m NW	Unspecified Ground Workings	1892	1519426
F	234m S	Unspecified Ground Workings	1948	1516463



ID	Location	Land use	Dates present	Group ID
G	235m E	Unspecified Industrial/Commercial	1932 - 1938	1571868
F	237m S	Unspecified Ground Workings	1938	1558609
F	239m S	Unspecified Ground Workings	1948	1492894
F	242m S	Unspecified Ground Workings	1931	1484707
G	267m E	Unspecified Mill	1906	1448345
G	273m E	Unspecified Mills	1966 - 1974	1551695
J	280m NW	Unspecified Mills	1966 - 1974	1543946
K	286m NW	Unspecified Foundry	1905	1449111
K	286m NW	Unspecified Mills	1994	1482829
K	286m NW	Unspecified Mills	1985	1534381
L	286m NW	Unspecified Works	1955	1511402
B	287m N	Railway Sidings	1892	1493457
B	287m N	Railway Sidings	1938 - 1948	1496996
B	287m N	Railway Sidings	1905	1547628
3	290m NW	Unspecified Mills	1974 - 1994	1531502
J	293m NW	Unspecified Works	1974	1543896
B	296m N	Unspecified Tank	1938 - 1948	1502910
B	296m N	Unspecified Tank	1892 - 1905	1559600
B	299m N	Unspecified Tank	1955	1526748
B	311m N	Railway Station	1892 - 1905	1486997
O	341m NW	Sewage Works	1905	1470633
O	341m NW	Dye Works	1892	1475083
5	350m SW	Refuse Heap	1955	1435140
K	366m NW	Unspecified Works	1985	1488775
O	368m NW	Unspecified Ground Workings	1892 - 1905	1579952
K	406m NW	Unspecified Foundry	1892	1449110
K	410m NW	Police Station	1966	1481015
L	424m NW	Unspecified Mills	1985 - 1994	1582208



ID	Location	Land use	Dates present	Group ID
7	446m SW	Hospital	1905	1475134
L	447m NW	Unspecified Mill	1892 - 1905	1534812
J	450m NW	Unspecified Mill	1955	1559706
S	461m N	Unspecified Disused Quarry	1932	1509488
S	461m N	Unspecified Disused Quarry	1948 - 1955	1545997
S	462m N	Unspecified Disused Quarry	1906	1547301
S	466m N	Unspecified Quarry	1892	1579593
S	471m N	Unspecified Quarry	1974	1578787
T	475m SW	Cuttings	1966 - 1994	1501216
T	478m SW	Cuttings	1955	1502312
U	478m SW	Refuse Heap	1931	1536101
T	478m SW	Cuttings	1948	1516638
T	478m SW	Cuttings	1892 - 1931	1527479
T	478m SW	Cuttings	1938	1568647
S	479m N	Unspecified Heap	1938	1510987
U	480m SW	Refuse Heap	1948	1545838
S	482m N	Unspecified Heap	1955	1501530
S	483m N	Unspecified Heap	1932	1495951
S	483m N	Unspecified Heap	1966	1552388
9	484m NW	Unspecified Mill	1892 - 1905	1572800
U	492m SW	Refuse Heap	1938	1555663
J	494m NW	Wooden Mill	1948	1447168
J	494m NW	Unspecified Mill	1938	1542564

This data is sourced from Ordnance Survey® / Groundsure.



1.2 Historical tanks

Records within 500m

63

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

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
A	43m N	Tanks	1933	235344
A	43m E	Unspecified Tank	1985	241331
A	49m N	Tanks	1908 - 1922	247870
A	62m NE	Unspecified Tank	1933	241334
A	88m E	Unspecified Tank	1985	241330
A	94m E	Tanks	1908	235342
A	110m E	Unspecified Tank	1985	241332
A	116m NE	Unspecified Tank	1966	244682
A	116m NE	Unspecified Tank	1968	245485
D	146m SE	Tanks	1933	235343
D	189m S	Tanks	1933	235347
B	192m N	Unspecified Tank	1968	250718
B	192m N	Unspecified Tank	1956	262431
B	192m N	Unspecified Tank	1966	249580
B	192m N	Unspecified Tank	1955	251290
B	195m N	Gas Works	1894	236980
B	201m N	Gas Holder Station	1955	244501
B	201m N	Gasholder Station	1956	245750
B	202m N	Gasholder Station	1968	254070
B	202m N	Gas Holder Station	1966	245646
B	213m N	Unspecified Tank	1990 - 1995	259255



ID	Location	Land use	Dates present	Group ID
C	217m E	Unspecified Tank	1908	241335
B	217m N	Gas Works	1894	236981
B	227m N	Unspecified Tank	1933	241338
B	227m N	Gasometer	1894 - 1922	255826
B	229m N	Gasholder	1966	253614
B	229m N	Gasholder	1955	260209
B	229m N	Gasometer	1956	249710
B	229m N	Gasometer	1968	250577
G	259m E	Unspecified Tank	1922	241336
G	268m E	Unspecified Tank	1985	241333
G	268m E	Tanks	1933	235346
B	270m N	Gasometer	1908 - 1922	251624
G	270m E	Tanks	1933	235345
G	270m E	Unspecified Tank	1922	241337
B	285m N	Tanks	1955	259207
B	285m N	Tanks	1956	247580
B	285m N	Tanks	1908 - 1922	258159
B	295m N	Gasometer	1894 - 1922	253858
B	295m N	Unspecified Tank	1938 - 1955	258615
B	298m N	Unspecified Tank	1956	248527
M	321m NW	Tanks	1990 - 1995	252105
M	322m NW	Unspecified Tank	1986 - 1989	252520
M	327m NW	Unspecified Tank	1986 - 1989	247271
M	332m NW	Unspecified Tank	1986 - 1989	248093
4	340m NE	Unspecified Tank	1968	241339
G	349m E	Tanks	1922 - 1933	251266
G	350m E	Tanks	1908	257771
Q	432m W	Unspecified Tank	1995	260637



ID	Location	Land use	Dates present	Group ID
Q	433m W	Unspecified Tank	1986 - 1990	258967
Q	433m W	Unspecified Tank	1974	250555
R	451m W	Tanks	1990 - 1995	244403
R	463m W	Unspecified Tank	1974	238685
8	470m E	Unspecified Tank	1995	241340
Q	474m W	Unspecified Tank	1995	251007
Q	474m W	Unspecified Tank	1990	253078
Q	474m W	Unspecified Tank	1986 - 1989	252627
J	485m NW	Unspecified Tank	1955 - 1956	258718
J	487m NW	Tanks	1938	251420
J	493m NW	Tanks	1908	259605
L	495m NW	Unspecified Tank	1922	238687
J	498m NW	Tanks	1938	234214
L	500m NW	Unspecified Tank	1974	245279

This data is sourced from Ordnance Survey® / Groundsure.

1.3 Historical energy features

Records within 500m

43

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

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
A	3m S	Electricity Substation	1985	143258
A	31m E	Electricity Substation	1985	143257
B	189m N	Electricity Substation	1985	147186
B	190m N	Electricity Substation	1955	157195



ID	Location	Land use	Dates present	Group ID
B	190m N	Electricity Substation	1956	152127
B	195m N	Gas Works	1894	144898
B	195m N	Urban District Council Gas Works	1908 - 1922	149770
B	201m N	Gas Holder Station	1955	149215
B	201m N	Gasholder Station	1956	159688
B	202m N	Gasholder Station	1968	157073
B	202m N	Gas Holder Station	1966	159306
C	202m E	Gas Governor	1985	144729
B	217m N	Gas Works	1894	144896
B	217m N	Urban District Council Gas Works	1908 - 1922	146720
B	227m N	Gasometer	1894 - 1922	149058
B	229m N	Gasholder	1966	150214
B	229m N	Gasholder	1955	160349
B	229m N	Gasometer	1956	156799
B	229m N	Gasometer	1968	161530
I	258m NW	Electricity Substation	1974	148425
I	259m NW	Electricity Substation	1989	146581
I	259m NW	Electricity Substation	1986	148570
I	259m NW	Electricity Substation	1986	148753
I	259m NW	Electricity Substation	1989	151571
I	261m NW	Electricity Substation	1956	158091
I	262m NW	Electricity Substation	1990	151736
I	262m NW	Electricity Substation	1955	160822
I	262m NW	Electricity Substation	1995	155075
B	270m N	Gasometer	1908 - 1922	153137
B	295m N	Gasometer	1894 - 1922	152874
G	297m E	Electricity Substation	1985	153279
G	297m E	Electricity Substation	1955 - 1956	159028



ID	Location	Land use	Dates present	Group ID
N	333m W	Electricity Substation	1974	154331
N	334m W	Electricity Substation	1995	154093
N	334m W	Electricity Substation	1990	162356
N	334m W	Electricity Substation	1986 - 1989	148215
N	342m W	Electricity Substation	1986 - 1995	145432
B	393m N	Electricity Substation	1967 - 1996	154387
6	414m N	Electricity Substation	1985	143145
P	416m N	Electricity Substation	1967 - 1972	145747
P	419m N	Electricity Substation	1981	143260
R	478m W	Electricity Substation	1974 - 1986	148953
R	492m W	Electricity Substation	1990 - 1995	154137

This data is sourced from Ordnance Survey® / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey® / Groundsure.

1.5 Historical garages

Records within 500m

19

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

Features are displayed on the Past land use map on [page 14 >](#)



ID	Location	Land use	Dates present	Group ID
A	70m NE	Garage	1966	48400
A	91m NE	Garage	1968 - 1985	47921
A	91m NE	Garage	1985	49919
B	150m N	Garage	1955 - 1968	48646
B	176m N	Garage	1966	48881
B	176m N	Garage	1985	46608
B	176m N	Garage	1955	46883
B	176m N	Garage	1968	46305
B	176m N	Garage	1956	46417
B	188m N	Garage	1968	48317
B	188m N	Garage	1956	50889
B	190m N	Garage	1985	46986
B	190m N	Garage	1966	50907
B	190m N	Garage	1955	49882
2	227m NE	Garage	1985	46061
H	244m W	Garage	1974	46910
H	246m W	Garage	1986	48624
B	338m N	Garage	1974	47697
B	338m N	Garage	1986	51473

This data is sourced from Ordnance Survey® / Groundsure.

1.6 Historical military land

Records within 500m

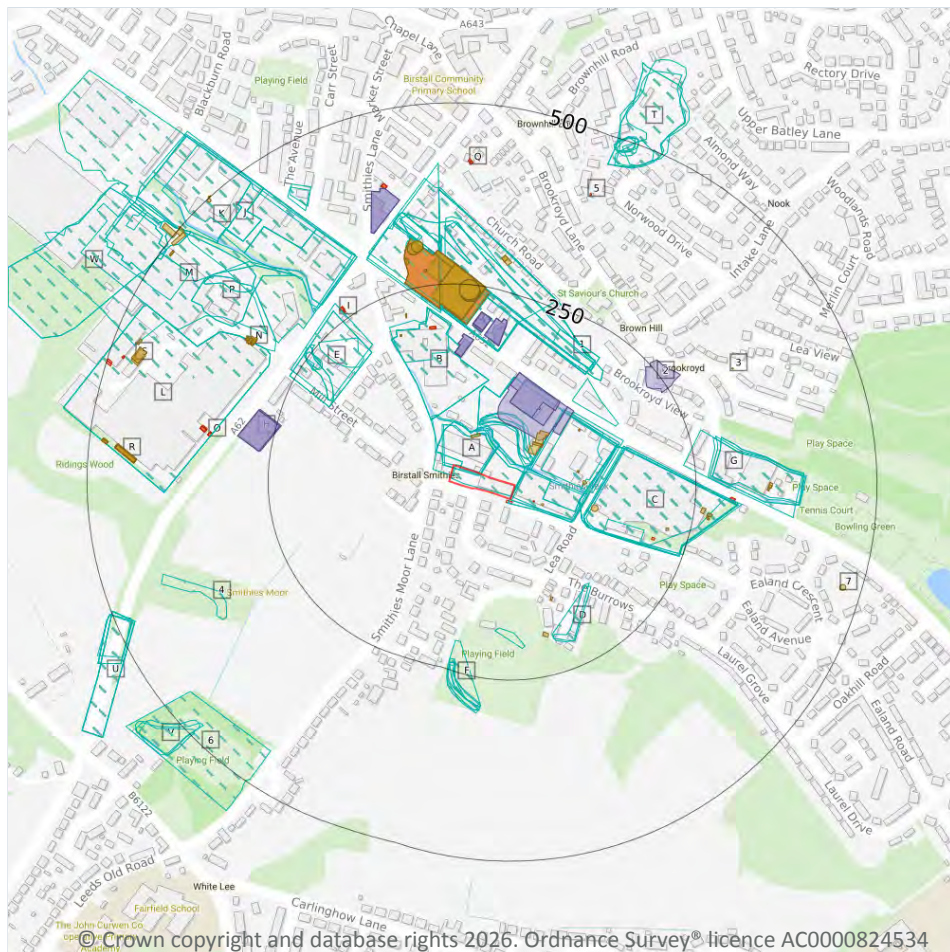
0

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

145

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 25 >](#)

ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Mills	1938	1537130
A	On site	Unspecified Mills	1932	1508227
A	On site	Unspecified Mills	1948	1577652



ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Mill	1906	1542463
A	On site	Unspecified Works	1994	1564479
A	On site	Unspecified Mill	1974	1448660
A	On site	Unspecified Works	1974	1552422
A	On site	Unspecified Works	1985	1564479
A	On site	Unspecified Mill	1966	1570309
A	On site	Unspecified Mills	1932	1541347
A	2m SE	Unspecified Mills	1938	1567725
A	26m N	Unspecified Mill	1906	1497491
A	27m N	Refuse Heap	1955	1573023
A	28m NE	Refuse Heap	1948	1550487
A	30m NE	Unspecified Mills	1966	1503446
A	30m NE	Unspecified Mills	1955	1503446
A	33m NE	Refuse Heap	1932	1506120
A	39m NE	Refuse Heap	1938	1527755
A	40m N	Refuse Heap	1932	1506120
A	42m NE	Unspecified Mills	1892	1492051
B	70m NW	Unspecified Mill	1994	1546038
B	70m NW	Unspecified Mill	1974	1546038
B	70m NW	Unspecified Mill	1985	1546038
C	92m E	Unspecified Warehouse	1994	1576626
C	92m E	Print Works	1974	1507484
C	92m E	Unspecified Warehouse	1985	1576626
C	92m E	Print Works	1966	1507484
C	92m E	Print Works	1955	1572495
A	94m N	Garage	1974	1448988
C	103m E	Print Works	1932	1530363
C	104m E	Print Works	1906	1554217



ID	Location	Land Use	Date	Group ID
C	104m E	Print Works	1948	1490901
C	104m E	Print Works	1932	1552938
C	107m E	Print Works	1938	1492414
A	141m NE	Unspecified Pit	1938	1452168
B	149m N	Unspecified Mill	1966	1563600
D	157m SE	Unspecified Ground Workings	1974	1440656
D	159m SE	Unspecified Pit	1985	1452425
B	168m N	Railway Sidings	1948	1542302
B	168m N	Unspecified Commercial/Industrial	1948	1525417
B	168m N	Unspecified Commercial/Industrial	1906	1577496
B	168m N	Railway Sidings	1906	1490207
B	168m N	Unspecified Commercial/Industrial	1932	1525417
B	168m N	Railway Sidings	1932	1490207
B	169m N	Unspecified Commercial/Industrial	1955	1564883
D	179m S	Unspecified Heap	1955	1468052
B	184m NE	Railway Sidings	1966	1548681
B	184m NE	Railway Sidings	1955	1535412
E	185m NW	Sewage Works	1948	1514347
E	185m NW	Sewage Works	1938	1514347
E	188m NW	Unspecified Ground Workings	1948	1487298
E	188m NW	Unspecified Ground Workings	1938	1487298
E	188m NW	Unspecified Pit	1892	1452167
E	189m NW	Sewage Works	1955	1549084
1	190m NE	Cuttings	1892	1433591
B	190m NE	Railway Sidings	1892	1574573
B	191m NE	Railway Sidings	1932	1490207
B	191m NE	Railway Sidings	1938	1538103
B	194m N	Unspecified Industrial/Commercial	1938	1447274



ID	Location	Land Use	Date	Group ID
B	195m N	Unspecified Commercial/Industrial	1932	1525417
B	198m N	Gas Holder Station	1974	1470102
F	208m S	Unspecified Pit	1955	1452426
B	211m N	Unspecified Commercial/Industrial	1938	1525417
B	214m N	Unspecified Commercial/Industrial	1948	1525417
B	223m N	Unspecified Tank	1948	1511085
B	223m N	Unspecified Tank	1906	1511085
B	223m N	Unspecified Tank	1932	1511085
B	223m N	Unspecified Tank	1938	1511085
B	226m N	Unspecified Tank	1932	1541041
B	226m N	Unspecified Tank	1974	1516958
B	226m N	Unspecified Tank	1985	1516958
B	226m N	Unspecified Tank	1966	1516958
B	226m N	Unspecified Tank	1955	1557487
E	226m NW	Unspecified Ground Workings	1905	1534227
B	227m N	Unspecified Tank	1892	1561923
E	228m NW	Unspecified Ground Workings	1892	1519426
F	234m S	Unspecified Ground Workings	1948	1516463
G	235m E	Unspecified Industrial/Commercial	1932	1571868
F	237m S	Unspecified Ground Workings	1938	1558609
F	239m S	Unspecified Ground Workings	1948	1492894
F	242m S	Unspecified Ground Workings	1931	1484707
G	267m E	Unspecified Mill	1906	1448345
G	270m E	Unspecified Industrial/Commercial	1938	1571868
G	273m E	Unspecified Mills	1974	1551695
G	273m E	Unspecified Mills	1966	1551695
J	280m NW	Unspecified Mills	1974	1543946
J	286m NW	Unspecified Foundry	1905	1449111



ID	Location	Land Use	Date	Group ID
J	286m NW	Unspecified Mills	1994	1482829
J	286m NW	Unspecified Mills	1985	1534381
K	286m NW	Unspecified Works	1955	1511402
B	287m N	Railway Sidings	1892	1493457
B	287m N	Railway Sidings	1948	1496996
B	287m N	Railway Sidings	1938	1496996
B	287m N	Railway Sidings	1905	1547628
L	290m NW	Unspecified Mills	1994	1531502
L	290m NW	Unspecified Mills	1974	1531502
L	290m NW	Unspecified Mills	1985	1531502
M	293m NW	Unspecified Works	1974	1543896
B	296m N	Unspecified Tank	1892	1559600
B	296m N	Unspecified Tank	1948	1502910
B	296m N	Unspecified Tank	1938	1502910
B	296m N	Unspecified Tank	1905	1559600
B	299m N	Unspecified Tank	1955	1526748
B	311m N	Railway Station	1905	1486997
B	314m N	Railway Station	1892	1486997
M	315m NW	Unspecified Mills	1966	1543946
P	341m NW	Dye Works	1892	1475083
P	341m NW	Sewage Works	1905	1470633
4	350m SW	Refuse Heap	1955	1435140
J	366m NW	Unspecified Works	1985	1488775
P	368m NW	Unspecified Ground Workings	1892	1579952
P	368m NW	Unspecified Ground Workings	1905	1579952
J	406m NW	Unspecified Foundry	1892	1449110
J	410m NW	Police Station	1966	1481015
K	424m NW	Unspecified Mills	1994	1582208



ID	Location	Land Use	Date	Group ID
K	424m NW	Unspecified Mills	1985	1582208
6	446m SW	Hospital	1905	1475134
K	447m NW	Unspecified Mill	1892	1534812
K	447m NW	Unspecified Mill	1905	1534812
M	450m NW	Unspecified Mill	1955	1559706
T	461m N	Unspecified Disused Quarry	1948	1545997
T	461m N	Unspecified Disused Quarry	1932	1509488
T	462m N	Unspecified Disused Quarry	1906	1547301
T	466m N	Unspecified Quarry	1892	1579593
T	471m N	Unspecified Quarry	1974	1578787
U	475m SW	Cuttings	1994	1501216
U	475m SW	Cuttings	1974	1501216
U	475m SW	Cuttings	1985	1501216
U	475m SW	Cuttings	1966	1501216
U	478m SW	Cuttings	1955	1502312
V	478m SW	Refuse Heap	1931	1536101
U	478m SW	Cuttings	1892	1527479
U	478m SW	Cuttings	1948	1516638
U	478m SW	Cuttings	1938	1568647
U	478m SW	Cuttings	1905	1527479
T	479m N	Unspecified Heap	1938	1510987
V	480m SW	Refuse Heap	1948	1545838
T	482m N	Unspecified Heap	1955	1501530
T	483m N	Unspecified Heap	1932	1495951
T	483m N	Unspecified Heap	1966	1552388
W	484m NW	Unspecified Mill	1892	1572800
W	484m NW	Unspecified Mill	1905	1572800
V	492m SW	Refuse Heap	1938	1555663



ID	Location	Land Use	Date	Group ID
M	494m NW	Wooden Mill	1948	1447168
M	494m NW	Unspecified Mill	1938	1542564

This data is sourced from Ordnance Survey® / Groundsure.

2.2 Historical tanks

Records within 500m	91
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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 25 >](#)

ID	Location	Land Use	Date	Group ID
A	43m N	Tanks	1933	235344
A	43m E	Unspecified Tank	1985	241331
A	49m N	Tanks	1922	247870
A	62m NE	Unspecified Tank	1933	241334
A	65m NE	Tanks	1908	247870
A	88m E	Unspecified Tank	1985	241330
A	94m E	Tanks	1908	235342
A	110m E	Unspecified Tank	1985	241332
A	116m NE	Unspecified Tank	1966	244682
A	116m NE	Unspecified Tank	1968	245485
D	146m SE	Tanks	1933	235343
D	189m S	Tanks	1933	235347
B	192m N	Unspecified Tank	1956	262431
B	192m N	Unspecified Tank	1968	250718
B	192m N	Unspecified Tank	1966	249580
B	192m N	Unspecified Tank	1955	251290
B	195m N	Gas Works	1894	236980
B	201m N	Gas Holder Station	1955	244501



ID	Location	Land Use	Date	Group ID
B	201m N	Gasholder Station	1956	245750
B	202m N	Gasholder Station	1968	254070
B	202m N	Gas Holder Station	1966	245646
B	213m N	Unspecified Tank	1990	259255
B	214m N	Unspecified Tank	1995	259255
C	217m E	Unspecified Tank	1908	241335
B	217m N	Gas Works	1894	236981
B	227m N	Gasometer	1894	255826
B	227m N	Gasometer	1908	255826
B	227m N	Gasometer	1922	255826
B	227m N	Unspecified Tank	1933	241338
B	229m N	Gasholder	1966	253614
B	229m N	Gasholder	1955	260209
B	229m N	Gasometer	1956	249710
B	229m N	Gasometer	1968	250577
G	259m E	Unspecified Tank	1922	241336
G	268m E	Unspecified Tank	1985	241333
G	268m E	Tanks	1933	235346
B	270m N	Gasometer	1908	251624
B	270m N	Gasometer	1922	251624
G	270m E	Unspecified Tank	1922	241337
G	270m E	Tanks	1933	235345
B	285m N	Tanks	1955	259207
B	285m N	Tanks	1956	247580
B	285m N	Tanks	1908	258159
B	289m N	Tanks	1922	258159
B	295m N	Gasometer	1894	253858
B	295m N	Gasometer	1908	253858



ID	Location	Land Use	Date	Group ID
B	295m N	Gasometer	1922	253858
B	295m N	Unspecified Tank	1938	258615
B	298m N	Unspecified Tank	1955	258615
B	298m N	Unspecified Tank	1956	248527
N	321m NW	Tanks	1990	252105
N	322m NW	Unspecified Tank	1986	252520
N	322m NW	Unspecified Tank	1986	252520
N	322m NW	Unspecified Tank	1989	252520
N	322m NW	Unspecified Tank	1989	252520
N	322m NW	Tanks	1995	252105
N	327m NW	Unspecified Tank	1986	247271
N	327m NW	Unspecified Tank	1986	247271
N	327m NW	Unspecified Tank	1989	247271
N	327m NW	Unspecified Tank	1989	247271
N	332m NW	Unspecified Tank	1986	248093
N	332m NW	Unspecified Tank	1986	248093
N	332m NW	Unspecified Tank	1989	248093
N	332m NW	Unspecified Tank	1989	248093
3	340m NE	Unspecified Tank	1968	241339
G	349m E	Tanks	1922	251266
G	349m E	Tanks	1933	251266
G	350m E	Tanks	1908	257771
R	432m W	Unspecified Tank	1995	260637
R	433m W	Unspecified Tank	1990	258967
R	433m W	Unspecified Tank	1986	258967
R	433m W	Unspecified Tank	1989	258967
R	433m W	Unspecified Tank	1989	258967
R	433m W	Unspecified Tank	1974	250555



ID	Location	Land Use	Date	Group ID
S	451m W	Tanks	1990	244403
S	451m W	Tanks	1995	244403
S	463m W	Unspecified Tank	1974	238685
7	470m E	Unspecified Tank	1995	241340
R	474m W	Unspecified Tank	1995	251007
R	474m W	Unspecified Tank	1990	253078
R	474m W	Unspecified Tank	1986	252627
R	474m W	Unspecified Tank	1986	252627
R	474m W	Unspecified Tank	1989	252627
R	474m W	Unspecified Tank	1989	252627
M	485m NW	Unspecified Tank	1956	258718
M	486m NW	Unspecified Tank	1955	258718
M	487m NW	Tanks	1938	251420
M	493m NW	Tanks	1908	259605
K	495m NW	Unspecified Tank	1922	238687
M	498m NW	Tanks	1938	234214
K	500m NW	Unspecified Tank	1974	245279

This data is sourced from Ordnance Survey® / Groundsure.

2.3 Historical energy features

Records within 500m

65

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 25 >](#)

ID	Location	Land Use	Date	Group ID
A	3m S	Electricity Substation	1985	143258
A	31m E	Electricity Substation	1985	143257
B	189m N	Electricity Substation	1985	147186



ID	Location	Land Use	Date	Group ID
B	190m N	Electricity Substation	1955	157195
B	190m N	Electricity Substation	1956	152127
B	195m N	Gas Works	1894	144898
B	195m N	Urban District Council Gas Works	1908	149770
B	195m N	Urban District Council Gas Works	1922	149770
B	201m N	Gas Holder Station	1955	149215
B	201m N	Gasholder Station	1956	159688
B	202m N	Gasholder Station	1968	157073
B	202m N	Gas Holder Station	1966	159306
C	202m E	Gas Governor	1985	144729
B	217m N	Gas Works	1894	144896
B	217m N	Urban District Council Gas Works	1908	146720
B	217m N	Urban District Council Gas Works	1922	146720
B	227m N	Gasometer	1894	149058
B	227m N	Gasometer	1908	149058
B	227m N	Gasometer	1922	149058
B	229m N	Gasholder	1966	150214
B	229m N	Gasholder	1955	160349
B	229m N	Gasometer	1956	156799
B	229m N	Gasometer	1968	161530
I	258m NW	Electricity Substation	1974	148425
I	259m NW	Electricity Substation	1986	148753
I	259m NW	Electricity Substation	1986	148570
I	259m NW	Electricity Substation	1989	146581
I	259m NW	Electricity Substation	1989	151571
I	261m NW	Electricity Substation	1956	158091
I	262m NW	Electricity Substation	1990	151736
I	262m NW	Electricity Substation	1955	160822



ID	Location	Land Use	Date	Group ID
I	262m NW	Electricity Substation	1995	155075
B	270m N	Gasometer	1908	153137
B	270m N	Gasometer	1922	153137
B	295m N	Gasometer	1894	152874
B	295m N	Gasometer	1908	152874
B	295m N	Gasometer	1922	152874
G	297m E	Electricity Substation	1985	153279
G	297m E	Electricity Substation	1955	159028
G	298m E	Electricity Substation	1956	159028
O	333m W	Electricity Substation	1974	154331
O	334m W	Electricity Substation	1995	154093
O	334m W	Electricity Substation	1990	162356
O	334m W	Electricity Substation	1986	148215
O	334m W	Electricity Substation	1986	148215
O	334m W	Electricity Substation	1989	148215
O	334m W	Electricity Substation	1989	148215
O	342m W	Electricity Substation	1990	145432
O	342m W	Electricity Substation	1995	145432
O	343m W	Electricity Substation	1986	145432
O	343m W	Electricity Substation	1986	145432
O	343m W	Electricity Substation	1989	145432
O	343m W	Electricity Substation	1989	145432
B	393m N	Electricity Substation	1996	154387
B	393m N	Electricity Substation	1984	154387
B	393m N	Electricity Substation	1967	154387
B	393m N	Electricity Substation	1972	154387
5	414m N	Electricity Substation	1985	143145
Q	416m N	Electricity Substation	1967	145747



ID	Location	Land Use	Date	Group ID
Q	416m N	Electricity Substation	1972	145747
Q	419m N	Electricity Substation	1981	143260
S	478m W	Electricity Substation	1974	148953
S	478m W	Electricity Substation	1986	148953
S	492m W	Electricity Substation	1990	154137
S	492m W	Electricity Substation	1995	154137

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	25
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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 25 >](#)

ID	Location	Land Use	Date	Group ID
A	70m NE	Garage	1966	48400
A	91m NE	Garage	1968	47921
A	91m NE	Garage	1985	49919
A	96m N	Garage	1985	47921
B	150m N	Garage	1966	48646
B	150m N	Garage	1955	48646
B	150m N	Garage	1956	48646

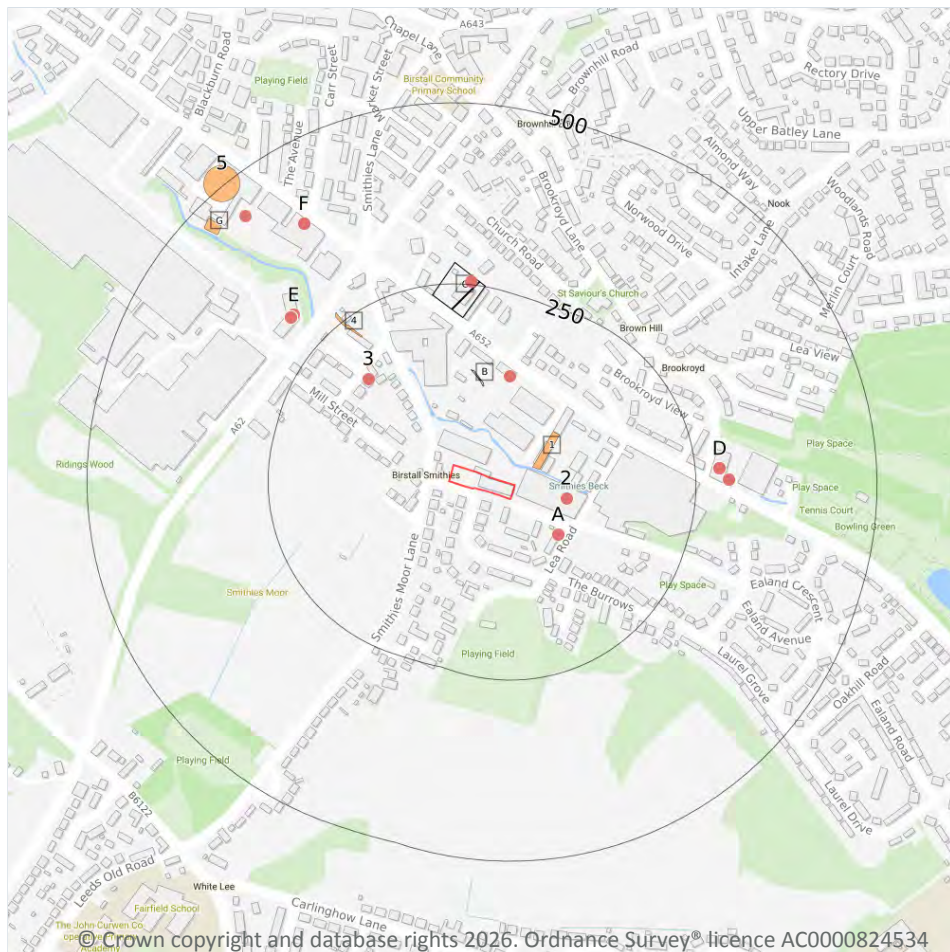


ID	Location	Land Use	Date	Group ID
B	150m N	Garage	1968	48646
B	176m N	Garage	1966	48881
B	176m N	Garage	1985	46608
B	176m N	Garage	1955	46883
B	176m N	Garage	1956	46417
B	176m N	Garage	1968	46305
B	188m N	Garage	1956	50889
B	188m N	Garage	1968	48317
B	190m N	Garage	1985	46986
B	190m N	Garage	1966	50907
B	190m N	Garage	1955	49882
2	227m NE	Garage	1985	46061
H	244m W	Garage	1974	46910
H	246m W	Garage	1986	48624
H	246m W	Garage	1986	48624
B	338m N	Garage	1974	47697
B	338m N	Garage	1986	51473
B	338m N	Garage	1986	51473

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 39](#) >

ID	Location	Site address	Source	Data type
B	116m N	Refuse Tip	1966 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

1

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

Features are displayed on the Waste and landfill map on [page 39](#) >

ID	Location	Details		
C	204m N	Site Address: Birstall Holder Station, Bradford Road, Birstall Licence Holder Address: New York Road, Leeds	Waste Licence: Yes Site Reference: 4700/0080 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 24/08/1977 Licence Surrender: 30/04/1994	Operator: - Licence Holder: North East Gas First Recorded 01/01/1974 Last Recorded: 05/04/1979

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

3.5 Historical waste sites

Records within 500m

4

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 39](#) >



ID	Location	Address	Further Details	Date
1	35m NE	Site Address: N/A	Type of Site: Breaker's Yard Planning application reference: N/A Description: N/A Data source: Historic Mapping Data Type: Polygon	1985
4	217m NW	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	1956
G	455m NW	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	1956
5	478m NW	Site Address: Excelsior Works Yard, Bradford Road, Birstall, Batley, West Yorkshire, WF17 9JX	Type of Site: Vehicle Dismantling (Conversion) Planning application reference: 2013/62/93381/E Description: Scheme comprises change of use from industry to car dismantling, tyre retail and storage. Data source: Historic Planning Application Data Type: Point	-

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

3.6 Licensed waste sites

Records within 500m	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	35
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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 39](#) >

ID	Location	Site	Reference	Category	Sub-Category	Description
2	73m E	-	WEX477134	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance



ID	Location	Site	Reference	Category	Sub-Category	Description
A	82m SE	Somnior Beds Ltd, Unit 1, Lea Mills, Lea Road, Batley, Wf17 8bb	WEX226303	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
A	82m SE	Somnior Beds Ltd, Unit 1, Lea Mills, Lea Road, Batley, Wf17 8bb	WEX351770	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
B	139m N	Unit 4 Wilton Industrial Court 851 Bradford Road Batley West Yorkshire Wf17 8nn	EPR/NF0934RW/A001	Treating waste exemption	Non-agricultural waste only	Sorting mixed waste
3	167m NW	Stg Construction Site, Bridge Street, Birstall, Wf17 9au	WEX139899	Using waste exemption	Not on a farm	Use of waste in construction
C	254m N	-	WEX453321	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	283m E	Brookroyd Mills Batley West Yorkshire Wf17 8nd	EPR/EE5845GB/A001	Treating waste exemption	Non-agricultural waste only	Cleaning, washing, spraying or coating relevant waste
D	283m E	Brookroyd Mills Batley West Yorkshire Wf17 8nd	EPR/EE5845GB/A001	Treating waste exemption	Non-agricultural waste only	Recovery of textiles
D	283m E	Brookroyd Mills Batley West Yorkshire Wf17 8nd	EPR/EE5845GB/A001	Treating waste exemption	Non-agricultural waste only	Preparatory treatments (baling, sorting, shredding etc)
D	283m E	Brookroyd Mills Batley West Yorkshire Wf17 8nd	EPR/EE5845GB/A001	Treating waste exemption	Non-agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
D	283m E	Brookroyd Mills Batley West Yorkshire Wf17 8nd	EPR/EE5845GB/A001	Treating waste exemption	Non-agricultural waste only	Sorting mixed waste
D	283m E	Brookroyd Mills Batley West Yorkshire Wf17 8nd	EPR/EE5845GB/A001	Treating waste exemption	Non-agricultural waste only	Manual treatment of waste



ID	Location	Site	Reference	Category	Sub-Category	Description
D	283m E	Brookroyd Mills Batley West Yorkshire Wf17 8nd	EPR/EE5845G B/A001	Treating waste exemption	Non- agricultura l waste only	Recovery of scrap metal
D	296m E	Brookroyd Mills Bradford Road Batley West Yorkshire Wf17 8nd	EPR/HE5248M M/A001	Treating waste exemption	Non- agricultura l waste only	Sorting mixed waste
D	296m E	Brookroyd Mills Bradford Road Batley West Yorkshire Wf17 8nd	EPR/HE5248M M/A001	Treating waste exemption	Non- agricultura l waste only	Recovery of scrap metal
D	296m E	Brookroyd Mills Bradford Road Batley West Yorkshire Wf17 8nd	EPR/HE5248M M/A001	Storing waste exemption	Agricultura l waste only	Storage of waste in a secure place
E	302m NW	For Ppg Architectural Coatings Emea Birstall West Yorks Wf179xa	EPR/CE5680ZK /A001	Storing waste exemption	Non- agricultura l waste only	Storage of waste in a secure place
E	302m NW	For Ppg Architectural Coatings Emea Birstall West Yorks Wf179xa	EPR/CE5680ZK /A001	Treating waste exemption	Non- agricultura l waste only	Preparatory treatments (baling, sorting, shredding etc)
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX245225	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX245225	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX220044	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX220044	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX071167	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX071167	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX101355	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX101355	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)

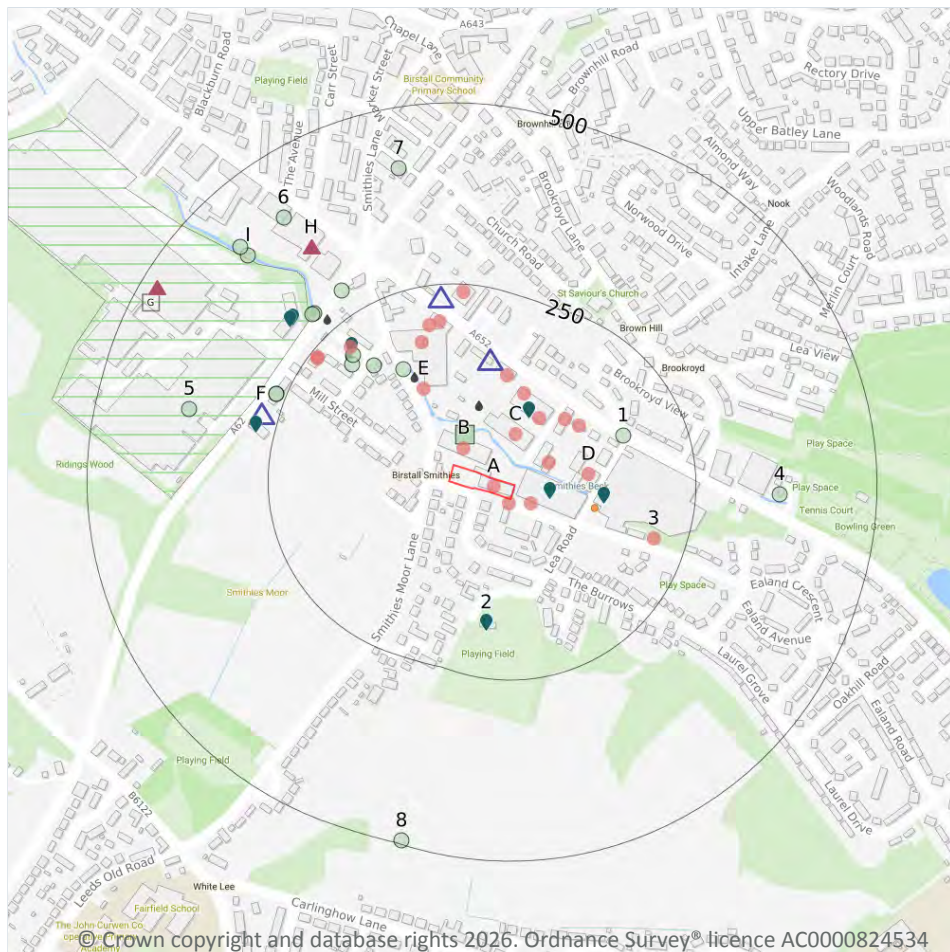


ID	Location	Site	Reference	Category	Sub-Category	Description
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX278056	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX347740	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX347740	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX407080	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX475166	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	303m NW	Huddersfield Road, Batley, Wf17 9xa	WEX475166	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
F	392m NW	Unit 7, Excelsior Mills, Bradford Road, Birstall, Batley, Wf17 9jx	WEX356090	Storing waste exemption	Not on a farm	Storage of waste in secure containers
F	392m NW	Unit 7, Excelsior Mills, Bradford Road, Birstall, Batley, Wf17 9jx	WEX356090	Storing waste exemption	Not on a farm	Storage of waste in a secure place
G	447m NW	Rear Yard Excelsior Works Bradford Rd Batley West Yorkshire Wf177ag	EPR/RF0739FE /A001	Using waste exemption	Non-agricultural waste only	Use of depolluted end-of-life vehicles for vehicle parts

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
- NGD current or recent tanks
- △ Current or recent petrol stations
- Control of Major Accident Hazards
- ▲ Hazardous substance storage/usage
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

21

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 45 >](#)

ID	Location	Company	Address	Activity	Category
A	On site	Works	West Yorkshire, WF17	Unspecified Works Or Factories	Industrial Features
A	7m S	Electricity Sub Station	West Yorkshire, WF17	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
B	27m N	Status 1 Automotive Ltd	Unit 2 Providence Works, Smithies Moor Lane, Birstall, Batley, West Yorkshire, WF17 9AR	New Vehicles	Motoring
A	28m E	Electricity Sub Station	West Yorkshire, WF17	Electrical Features	Infrastructure and Facilities
A	56m NE	Elite Accident Repair Centre Ltd	Unit 3 Wensleydale Mills 827, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NN	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	68m N	etyres	Wilton Industrial Court 851, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NN	Vehicle Parts and Accessories	Motoring
C	99m N	Hydro Base	Unit 12a Wilton Industrial Court 851, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NN	Horticultural Equipment	Industrial Products
D	103m E	Works	West Yorkshire, WF17	Unspecified Works Or Factories	Industrial Features
E	113m N	Smithies Mill Industrial Estate	West Yorkshire, WF17	Business Parks and Industrial Estates	Industrial Features
C	115m NE	M J Motors	831, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NN	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	121m NE	Elliot's Hand Car Wash & Valeting Centre	Hand Car Wash Wensleydale Mills 827, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NN	Vehicle Cleaning Services	Personal, Consumer and Other Services
C	124m N	Wilco Motosave	Wilco Motosave Wilton Industrial Court 851, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NN	Vehicle Repair, Testing and Servicing	Repair and Servicing
C	140m N	Yorkshire Rose Engineering	865, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NN	Mechanical Engineers	Engineering Services
E	175m N	Hepworth & Wilson Ltd	Unit 1 Smithies Mill, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NS	Plate Makers, Print Finishers and Type Setters	IT, Advertising, Marketing and Media Services
E	195m N	Electricity Sub Station	West Yorkshire, WF17	Electrical Features	Infrastructure and Facilities
E	199m N	Beckside Motors Birstall Ltd	Store Millside House 887, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NN	Secondhand Vehicles	Motoring



ID	Location	Company	Address	Activity	Category
3	205m E	Gas Governor Station	West Yorkshire, WF17	Gas Features	Infrastructure and Facilities
E	217m NW	Hopper	West Yorkshire, WF17	Hoppers and Silos	Farming
E	239m NW	Birstall Motor Village	Unit 1a, Huddersfield Road, Birstall, Batley, West Yorkshire, WF17 9AY	Secondhand Vehicles	Motoring
E	239m N	The Motor Family	758-760, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NL	Secondhand Vehicles	Motoring
E	239m NW	Kwik-Fit (GB) Limited	Huddersfield Road, Birstall, Batley, West Yorkshire, WF17 9AY	Vehicle Repair, Testing and Servicing	Repair and Servicing

This data is sourced from Ordnance Survey®.

4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m	1
----------------------------	----------

Current or recent tanks identified from the Ordnance Survey® NGD.

Features are displayed on the Current industrial land use map on [page 45 >](#)

ID	Location	Tank description	Activity	Date first identified
D	110m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	01/03/1993

This data is sourced from Ordnance Survey®.

4.3 Current or recent petrol stations

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

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on [page 45 >](#)

ID	Location	Company	Address	LPG	Status
C	154m N	OBSOLETE	851, Bradford Road, Birstall, Batley, West Yorkshire, WF17 8NW	Not Applicable	Obsolete
E	232m N	UK	Bradford Road, Birstall, Batley, West Yorkshire, WF17 9PH	Not Applicable	Obsolete
F	275m W	TEXACO	Huddersfield Road, Birstall, Batley, West Yorkshire, WF17 9AY	Yes	Open



This data is sourced from Experian.

4.4 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 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.

4.7 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 45 >](#)

ID	Location	Company	Address	Operational status	Tier
G	277m NW	PPG Architectural Coatings UK Limited	PPG Architectural Coatings UK Limited, Batley, Huddersfield Road, Batley, West Yorkshire, WF17 9XA	Current COMAH Site	COMAH Lower Tier Operator

This data is sourced from the Health and Safety Executive.



4.8 Regulated explosive sites

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m

3

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 45 >](#)

ID	Location	Details	
H	359m NW	Application reference number: 2011/91873 Application status: Historical Consent Application date: 12/07/2011 Address: PPG Architectural Coatings, Huddersfield Road, Birstall, Batley, WF17 9XA	Details: Variation of Hazardous Substance Consent (2009/52/92999/E0) in order to allow the storage of highly flammable substances at an alternative location within the site Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
H	359m NW	Application reference number: 2011/91873 Application status: Approved Application date: 12/07/2011 Address: PPG Architectural Coatings UK Limited, Huddersfield Road, Birstall, Batley, West Yorkshire, England, WF17 9XA	Details: Variation of Hazardous Substance Consent (2009/52/92999/E0) in order to allow the storage of highly flammable substances at an alternative location within the site Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified
G	477m NW	Application reference number: 2006/91600 Application status: Historical Consent Application date: 20/04/2006 Address: SigmaKalon UK Ltd T/A PPG, Huddersfield Road, Birstall, Batley, WF17 9XA	Details: Storage and processing of hazardous substances. Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.



4.10 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.

4.11 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

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

Records within 500m

8

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 45 >](#)

ID	Location	Address	Details	
A	48m E	Cousin And Johnson, Lea Rd, Bradford Rd West, Batley, WF17 8BB	Process: Non-ferrous Metal Foundry Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
C	104m N	Motorsave Ltd, 851 Bradford Rd, Birstall, Batley, WF17 8NW	Process: Waste Oil Burner 0.4 MW Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
D	124m E	Sampson Product Ltd, 813 Bradford Road, Batley, WF17 8NE	Process: Timber Manufacture Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified



ID	Location	Address	Details	
2	174m S	TW Mercedes, Lea Road, Batley, WF17 8BB	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
E	217m NW	Rmc Northern, Smithies Moor Lane, Birstall, Batley, WF17 9AT	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
F	279m W	Adamsons, Smithies Service Station, Huddersfield Road, Birstall, Batley, WF17 9AY	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
E	303m NW	Kalon Decorative Products, Huddersfield Rd, Birstall, WF17 9XA	Process: Printing Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
E	303m NW	PPG Architectural Coatings UK Ltd, Huddersfield Road, Birstall, Batley, WF17 9XA	Process: Coating Processes Status: Current 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.

4.13 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.

4.14 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 45](#) >



ID	Location	Address	Details	
B	88m N	KALON GROUP LIMITED, PARK MILLS, HUDDERSFIELD ROAD, BIRSTALL, WEST YORKSHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: WRA7382 Permit Version: 2 Receiving Water: BIRSTALL BECK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 03/08/1999 Effective Date: 03/08/1999 Revocation Date: 17/09/2009
B	88m N	KALON GROUP LIMITED, PARK MILLS, HUDDERSFIELD ROAD, BIRSTALL, WEST YORKSHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: WRA7382 Permit Version: 1 Receiving Water: BIRSTALL BECK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 12/01/1998 Effective Date: 12/01/1998 Revocation Date: 02/08/1999
E	133m NW	SMITHIES MOOR LANE, BIRSTALL CSO, SMITHIES MOOR LANE (ADJ FACTORY), BIRSTALL, BATLEY, WEST YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA8672 Permit Version: 2 Receiving Water: SMITHIES BECK	Status: SURRENDERED UNDER EPR 2010 Issue date: 03/03/2010 Effective Date: 03/03/2010 Revocation Date: 28/06/2024
E	133m NW	SMITHIES MOOR LANE, BIRSTALL CSO, SMITHIES MOOR LANE (ADJ FACTORY), BIRSTALL, BATLEY, WEST YORKSHIRE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WRA8672 Permit Version: 1 Receiving Water: SMITHIES BECK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 11/03/2005 Effective Date: 01/04/2005 Revocation Date: 02/03/2010
E	210m NW	RMC LTD BIRSTALL CONCRETE BATCHING, PLANT SMITHIES MOOR LANE BATLEY, WF17 9AR	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: 1173 Permit Version: 1 Receiving Water: BATLEY BECK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 01/06/1960 Effective Date: 01/06/1960 Revocation Date: 07/02/1992
E	267m NW	YWS UNKNOWN SITE	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: S/B/34 Permit Version: 1 Receiving Water: RIVER CALDER	Status: TRANSFERRED FROM R(PP)A 1951-1961 Issue date: 31/05/1963 Effective Date: 31/05/1963 Revocation Date: 10/06/1993
E	286m NW	BIRSTALL CSO, BRADFORD ROAD, OPPOSITE THE COOPERS ARMS, BATLEY, WEST YORKSHIRE, WF17 9PR	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WA6377 Permit Version: 3 Receiving Water: SMITHIES BECK	Status: VARIED UNDER EPR 2010 Issue date: 20/11/2017 Effective Date: 20/11/2017 Revocation Date: -



ID	Location	Address	Details	
E	288m NW	BIRSTALL CSO, BRADFORD ROAD, OPPOSITE THE COOPERS ARMS, BATLEY, WEST YORKSHIRE, WF17 9PR	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WA6377 Permit Version: 2 Receiving Water: SMITHIES BECK	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 16/03/2005 Effective Date: 31/03/2005 Revocation Date: 19/11/2017
E	288m NW	BIRSTALL CSO, BRADFORD ROAD, OPPOSITE THE COOPERS ARMS, BATLEY, WEST YORKSHIRE, WF17 9PR	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: WA6377 Permit Version: 1 Receiving Water: SMITHIES BECK	Status: TRANSFERRED FROM WATER ACT 1989 Issue date: 11/06/1991 Effective Date: 11/06/1991 Revocation Date: 30/03/2005

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

4.15 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.

4.16 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.

4.17 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.



4.18 List 2 Dangerous Substances

Records within 500m

1

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.

Features are displayed on the Current industrial land use map on [page 45 >](#)

ID	Location	Name	Status	Receiving Water	Authorised Substances
B	44m N	Roundhay Metal Finishers	Not Active	Unknown	Chromium, Lead

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

4.19 Pollution Incidents (EA/NRW)

Records within 500m

17

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 45 >](#)

ID	Location	Details	
E	150m NW	Incident Date: 09/10/2002 Incident Identification: 113753 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
1	164m NE	Incident Date: 20/11/2003 Incident Identification: 202567 Pollutant: Oils and Fuel Pollutant Description: Petrol	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
E	176m NW	Incident Date: 07/02/2002 Incident Identification: 57005 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
E	197m NW	Incident Date: 31/07/2003 Incident Identification: 178119 Pollutant: Inert Materials and Wastes Pollutant Description: Mineral Materials and Wastes	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
E	206m NW	Incident Date: 03/05/2002 Incident Identification: 76379 Pollutant: Inert Materials and Wastes Pollutant Description: Mineral Materials and Wastes	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)



ID	Location	Details	
F	264m W	Incident Date: 25/06/2001 Incident Identification: 11225 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
F	264m W	Incident Date: 25/06/2001 Incident Identification: 11225 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
E	285m NW	Incident Date: 28/11/2022 Incident Identification: 2115639 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
E	285m NW	Incident Date: 09/12/2022 Incident Identification: 2117503 Pollutant: Organic Chemicals/Products Pollutant Description: Paints and Varnishes	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
E	287m NW	Incident Date: 25/06/2001 Incident Identification: 11329 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
4	366m E	Incident Date: 19/06/2001 Incident Identification: 10213 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
5	373m W	Incident Date: 24/09/2003 Incident Identification: 192113 Pollutant: Organic Chemicals/Products Pollutant Description: Paints and Varnishes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
I	406m NW	Incident Date: 28/04/2023 Incident Identification: 2146757 Pollutant: Contaminated Water Pollutant Description: Suspended Solids	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
6	415m NW	Incident Date: 12/12/2002 Incident Identification: 125835 Pollutant: Oils and Fuel Pollutant Description: Petrol	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
7	417m N	Incident Date: 17/08/2001 Incident Identification: 24893 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 2 (Significant)



ID	Location	Details	
I	422m NW	Incident Date: 07/04/2003 Incident Identification: 149198 Pollutant: Organic Chemicals/Products Pollutant Description: Paints and Varnishes	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
8	495m S	Incident Date: 05/09/2003 Incident Identification: 187855 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	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.

4.20 Pollution inventory substances

Records within 500m	0
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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.

4.21 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.

4.22 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

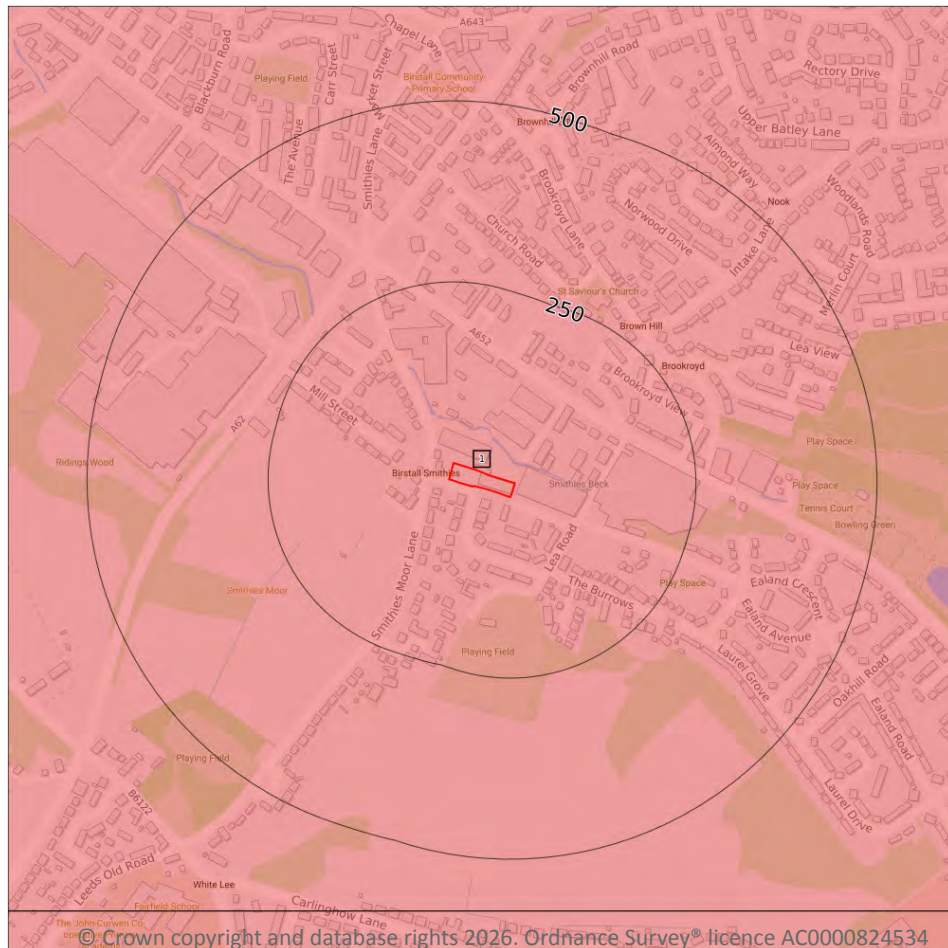
0

Aquifer status of groundwater held within superficial geology.

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



Bedrock aquifer



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

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

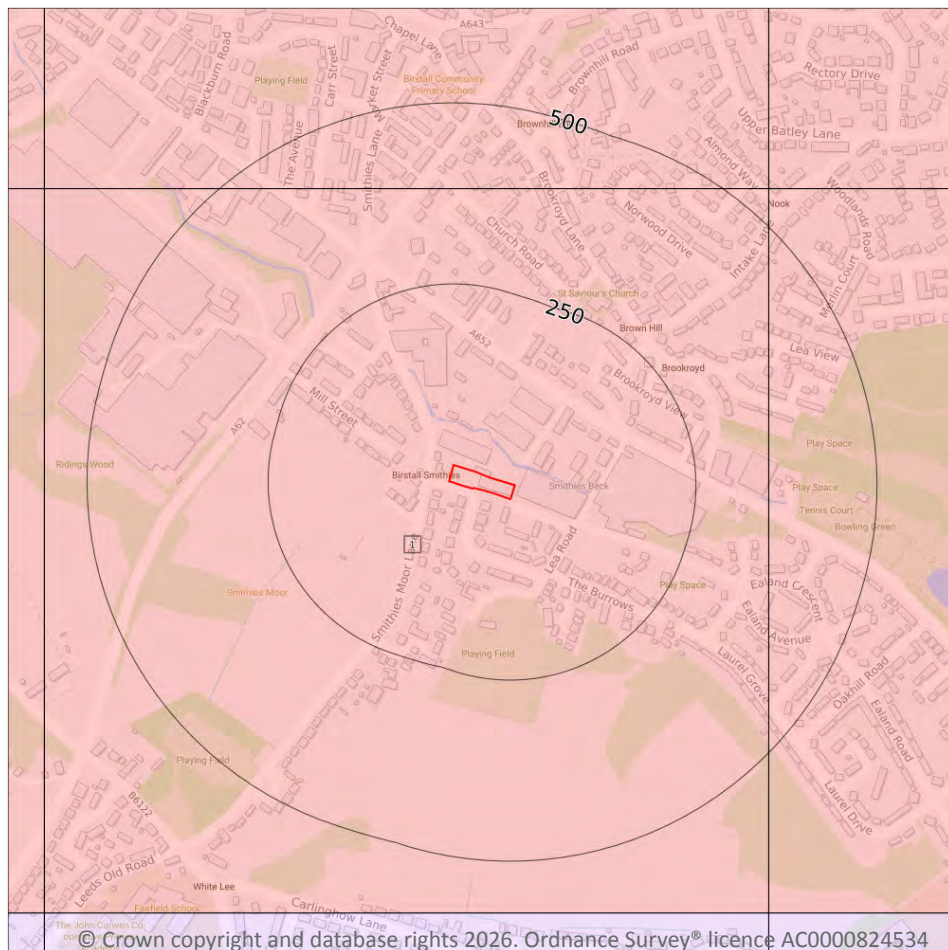
Features are displayed on the Bedrock aquifer map on [page 58](#) >

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

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



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 59](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: 300- 550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High 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

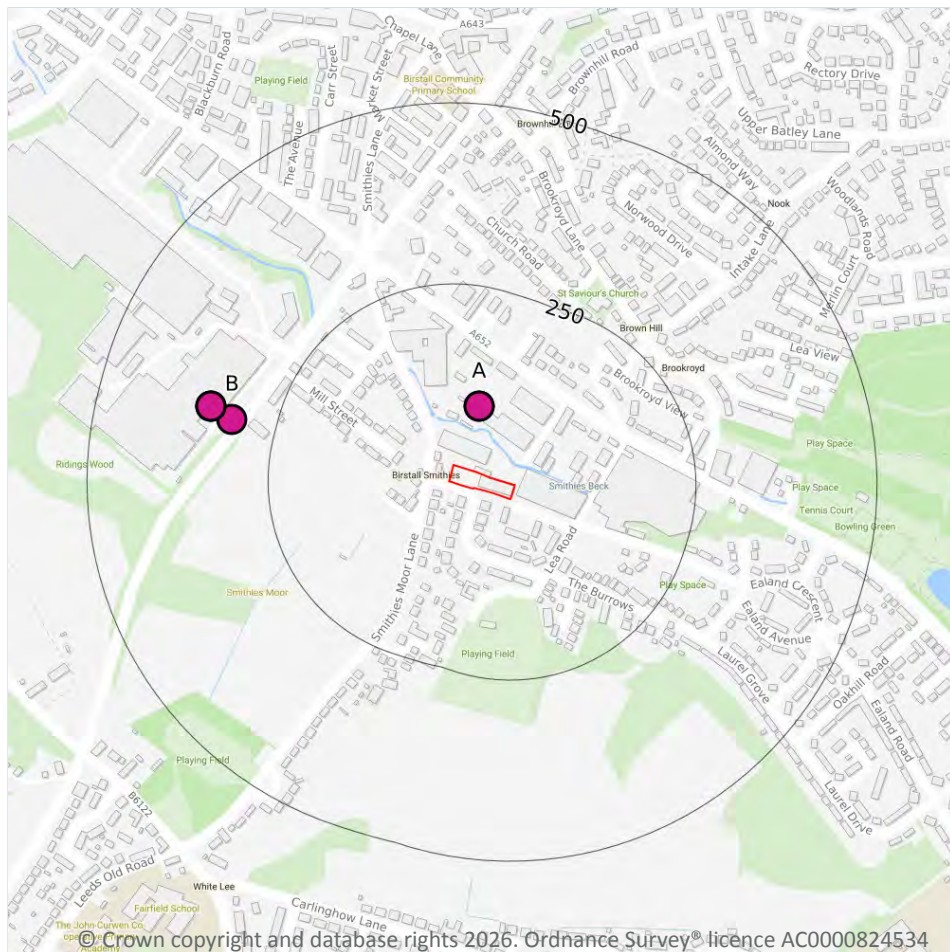
Records on site

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
Point features
- 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

6

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 61](#) >



ID	Location	Details	
A	88m N	Status: Historical Licence No: 2/27/13/027 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: WELL Data Type: Point Name: ROUNDHAY METAL FINISHERS (LEEDS) LTD Easting: 422600 Northing: 425700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 14/12/1965 Version End Date: -
A	88m N	Status: Historical Licence No: 2/27/13/027 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: WELL - COAL MEASURES - BIRSTALL Data Type: Point Name: MOSS METAL FINISHING LIMITED Easting: 422600 Northing: 425700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/12/1965 Expiry Date: - Issue No: 101 Version Start Date: 18/04/2002 Version End Date: -
B	312m W	Status: Active Licence No: NE/027/0013/033 Details: Process Water Direct Source: GROUNDWATERS Point: UNDERGROUND STRATA COMPRISING OF THE COAL MEASURES, BIRSTALL Data Type: Point Name: PPG Architectural Coatings UK Ltd Easting: 422259 Northing: 425682	Annual Volume (m ³): 109500 Max Daily Volume (m ³): 300 Original Application No: NPS/WR/040133 Original Start Date: 22/07/2024 Expiry Date: 31/03/2039 Issue No: 1 Version Start Date: 22/07/2024 Version End Date: -
B	345m W	Status: Historical Licence No: 2/27/13/190 Details: General use relating to Secondary Category (High Loss) Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: KALON GROUP LIMITED Easting: 422230 Northing: 425700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 30/04/1997 Expiry Date: 31/12/2006 Issue No: 100 Version Start Date: 30/04/1997 Version End Date: -



ID	Location	Details	
B	345m W	Status: Historical Licence No: 2/27/13/190 Details: General use relating to Secondary Category (High Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - BATLEY Data Type: Point Name: SIGMAKALON UK LTD Easting: 422230 Northing: 425700	Annual Volume (m ³): 50000 Max Daily Volume (m ³): 240 Original Application No: - Original Start Date: 30/04/1997 Expiry Date: 31/12/2006 Issue No: 103 Version Start Date: 13/03/2006 Version End Date: -
B	345m W	Status: Historical Licence No: 2/27/13/220 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - BATLEY Data Type: Point Name: SIGMAKALON UK LTD Easting: 422230 Northing: 425700	Annual Volume (m ³): 50000 Max Daily Volume (m ³): 240 Original Application No: - Original Start Date: 01/01/2007 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 01/01/2007 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m

3

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 61](#) >

ID	Location	Details	
-	1705m N	Status: Historical Licence No: 2/27/13/153 Details: General use relating to Secondary Category (Low Loss) Direct Source: SURFACE WATER Point: NOVA BECK Data Type: Point Name: KIRKLEES METROPOLITAN COUNCIL Easting: 421980 Northing: 427220	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 26/04/1982 Expiry Date: - Issue No: 100 Version Start Date: 26/04/1982 Version End Date: -



ID	Location	Details	
-	1705m N	Status: Historical Licence No: 2/27/13/153 Details: Make-Up or Top Up Water Direct Source: SURFACE WATER Point: NOVA BECK Data Type: Point Name: KIRKLEES METROPOLITAN COUNCIL Easting: 421980 Northing: 427220	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 26/04/1982 Expiry Date: - Issue No: 100 Version Start Date: 26/04/1982 Version End Date: -
-	1705m N	Status: Historical Licence No: 2/27/13/153 Details: Make-Up Or Top Up Water Direct Source: SURFACE WATER Point: NOVA BECK Data Type: Point Name: KIRKLEES METROPOLITAN COUNCIL Easting: 421980 Northing: 427220	Annual Volume (m ³): 9500 Max Daily Volume (m ³): 36 Original Application No: - Original Start Date: 26/04/1982 Expiry Date: - Issue No: 100 Version Start Date: 26/04/1982 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	0
-----------------------------	----------

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

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

5.9 Source Protection Zones

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

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

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

5.10 Source Protection Zones (confined aquifer)

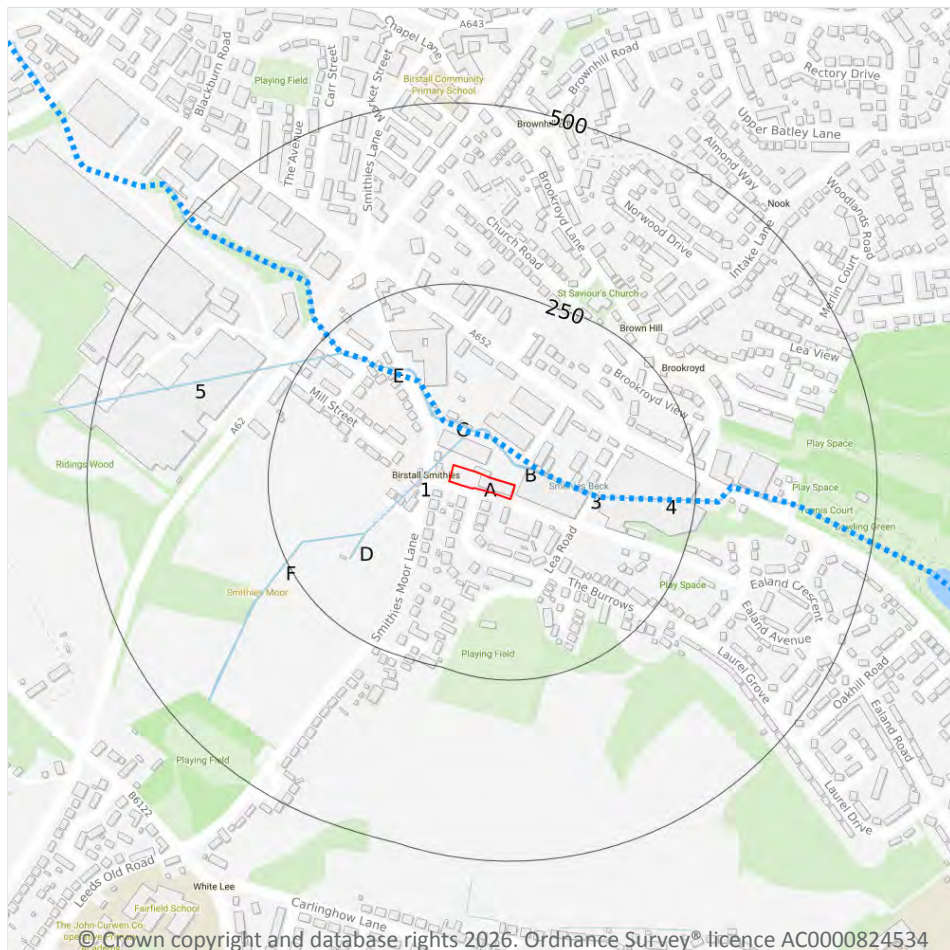
Records within 500m	0
----------------------------	----------

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

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



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS NGD)
- 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 NGD)

Records within 250m

16

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 65 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
1	18m 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
B	27m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Smithies Beck
C	54m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Smithies Beck
C	69m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Smithies Beck
C	71m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Smithies Beck
3	101m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Smithies Beck
4	103m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Smithies Beck
D	137m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	137m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	147m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Smithies Beck
E	174m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Smithies Beck
E	180m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Smithies Beck
E	190m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Smithies Beck
5	218m 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
E	218m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Smithies Beck
F	219m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey®.

6.2 Surface water features

Records within 250m	4
----------------------------	----------

Covering rivers, streams and lakes (some overlap with OS NGD 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 65 >](#)

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 65 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River	Batley Beck from Source to River Calder	GB104027062670	Calder Lower	Aire and Calder

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 65 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
2	36m NE	River	Batley Beck from Source to River Calder	GB104027062670 ↗	No longer applicable	Does not require assessment	Moderate	2022

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.

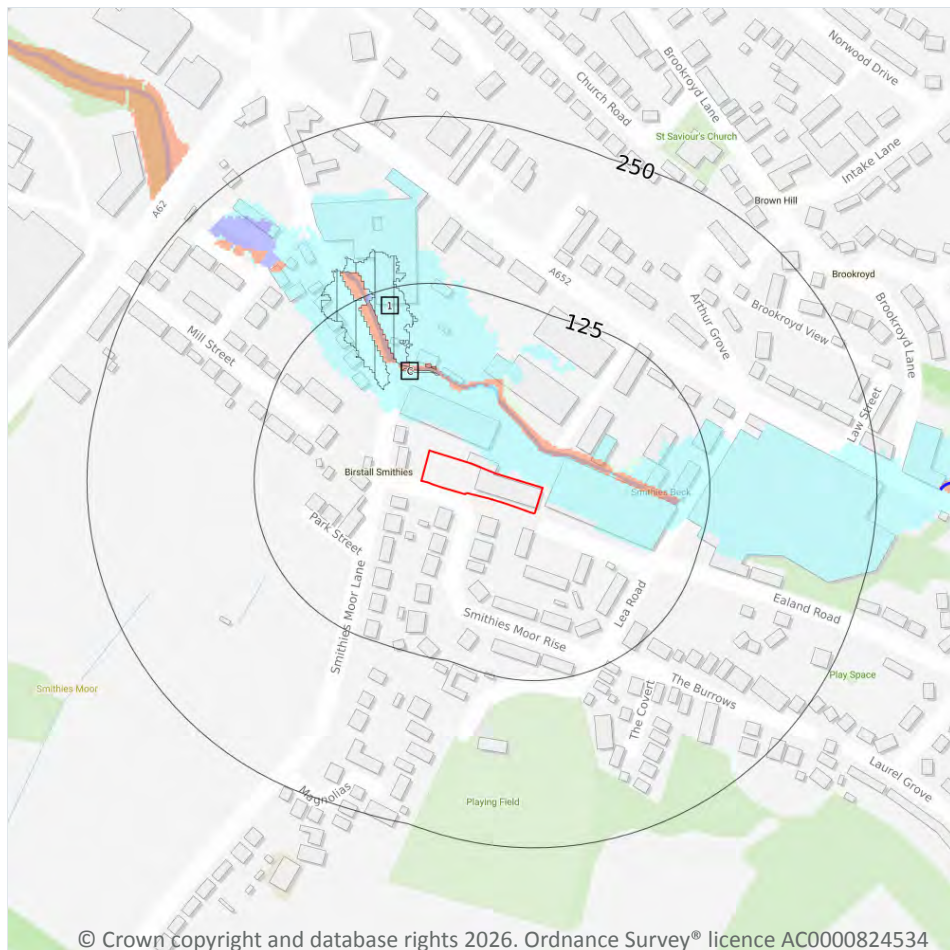
Features are displayed on the Hydrology map on [page 65 >](#)

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Aire & Calder Carb Limestone / Millstone Grit / Coal Measures.	GB40402G700400 ↗	Poor	Poor	Good	2019

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



7 River and coastal flooding



- Site Outline
- Search buffers in metres (m)
- River and coastal flooding:
- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m

3

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).

Features are displayed on the River and coastal flooding map on [page 69](#) >



Distance	Flood risk category
On site	Low
0 - 50m	High

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	3
----------------------------	----------

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.

Features are displayed on the River and coastal flooding map on [page 69 >](#)

ID	Location	
C	57m N	Area benefiting from flood defences
1	57m NW	Area benefiting from flood defences
C	61m N	Area benefiting from flood defences

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

7.5 Flood Storage Areas

Records within 250m

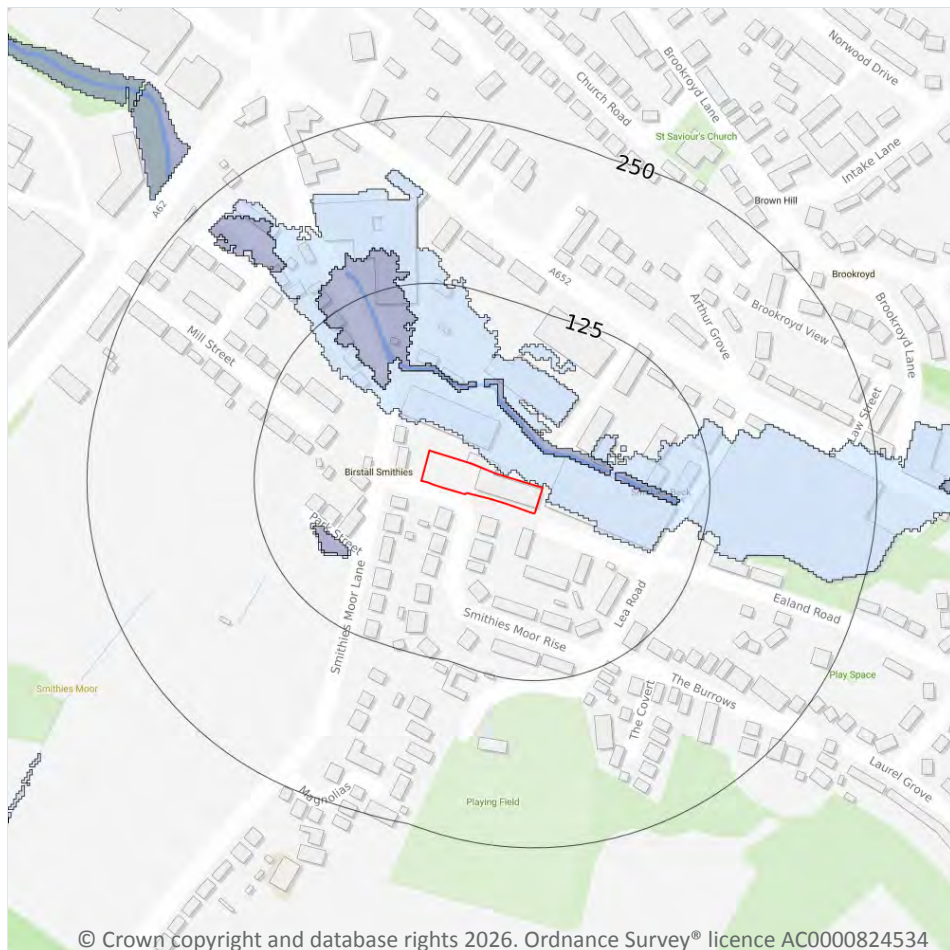
0

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



- Site Outline
- Search buffers in metres (m)
- Flood zone 2
- Flood zone 3

7.6 Flood Zone 2

Records within 50m

1

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.

Features are displayed on the River and coastal flooding map on [page 69](#) >

Location	Type
On site	Zone 2 - (Fluvial /Tidal Models)

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

7.7 Flood Zone 3

Records within 50m

1

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.

Features are displayed on the River and coastal flooding map on [page 69](#) >

Location	Type
24m N	Zone 3 - (Fluvial /Tidal Models)

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



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

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

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

9.1 Groundwater flooding

Highest risk on site

Negligible

Highest risk within 50m

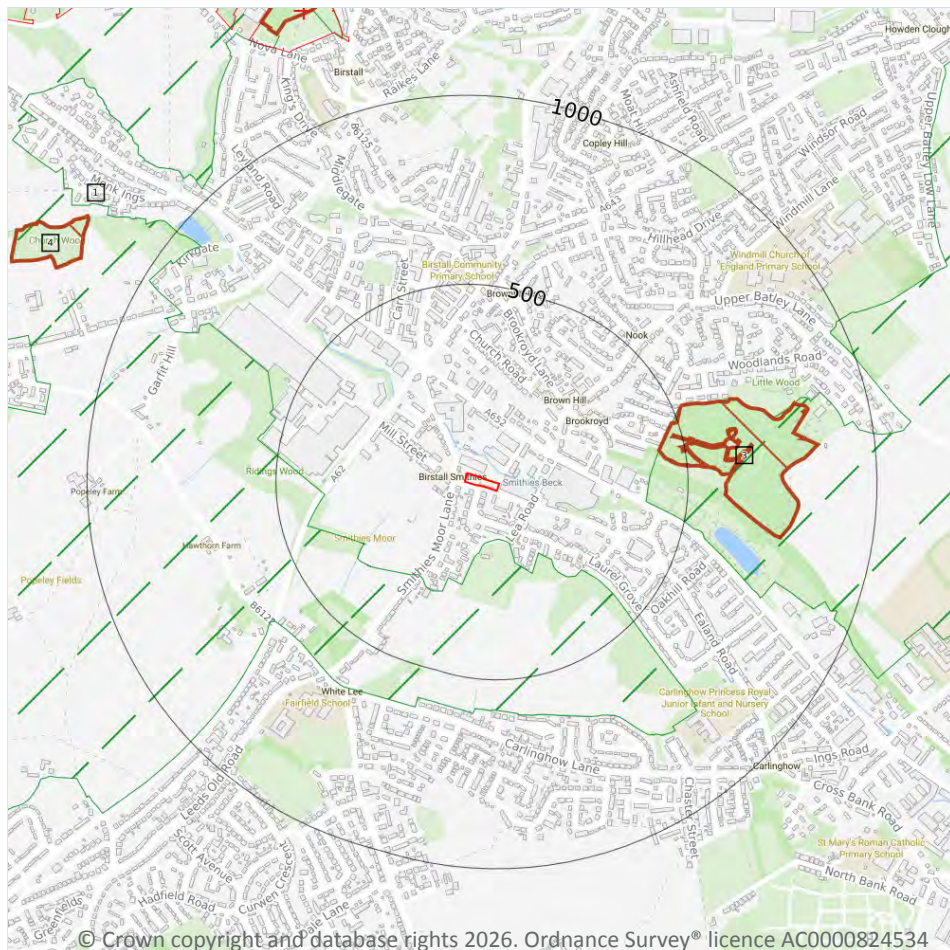
Negligible

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 76 >](#)

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- + Local Nature Reserves (LNR)
- / Designated Ancient Woodland
- - - Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

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

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



10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m

1

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

Features are displayed on the Environmental designations map on [page 77 >](#)

ID	Location	Name	Data source
5	1185m N	Oakwell Park	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m

13

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.

Features are displayed on the Environmental designations map on [page 77 >](#)

ID	Location	Name	Woodland Type
3	432m E	Carlinghow Shaw	Ancient Replanted Woodland
4	1170m NW	Church Wood	Ancient & Semi-Natural Woodland
6	1267m NW	Well Spring Wood	Ancient Replanted Woodland
-	1369m NW	Hey Wood	Ancient & Semi-Natural Woodland
-	1406m N	Asker Wood	Ancient Replanted Woodland
-	1455m W	Hey Wood	Ancient & Semi-Natural Woodland
-	1501m N	Asker Wood	Ancient & Semi-Natural Woodland
-	1523m N	Asker Wood	Ancient & Semi-Natural Woodland
-	1809m E	Cliff Wood	Ancient & Semi-Natural Woodland
-	1822m E	Cliff Wood	Ancient & Semi-Natural Woodland
-	1822m E	Unknown	Ancient & Semi-Natural Woodland
-	1836m NE	Birkby Brow Wood	Ancient Replanted Woodland



ID	Location	Name	Woodland Type
-	1884m NE	Birkby Brow Wood	Ancient Replanted Woodland

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

3

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

Features are displayed on the Environmental designations map on [page 77 >](#)

ID	Location	Name	Local Authority name
1	128m S	South and West Yorkshire Green Belt	Kirklees
2	392m E	South and West Yorkshire Green Belt	Kirklees



ID	Location	Name	Local Authority name
-	1752m E	South and West Yorkshire Green Belt	Leeds

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 fall 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

2

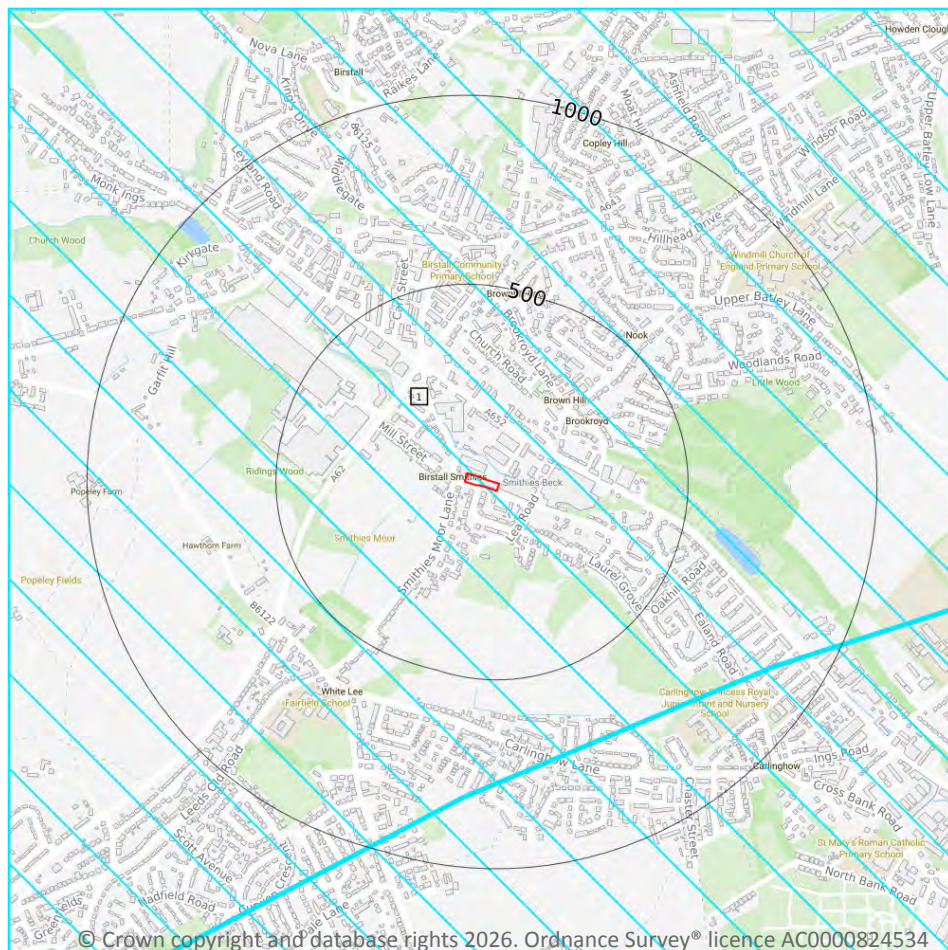
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
864m SW	Spen Beck from Source to River Calder NVZ	Surface Water	271	Existing
1948m W	Spen Beck from Source to River Calder NVZ	Surface Water	271	Existing

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 83](#) >

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0000000000000&notes=&location=417554,424273%20(IRZ%20polygon%20centre)

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

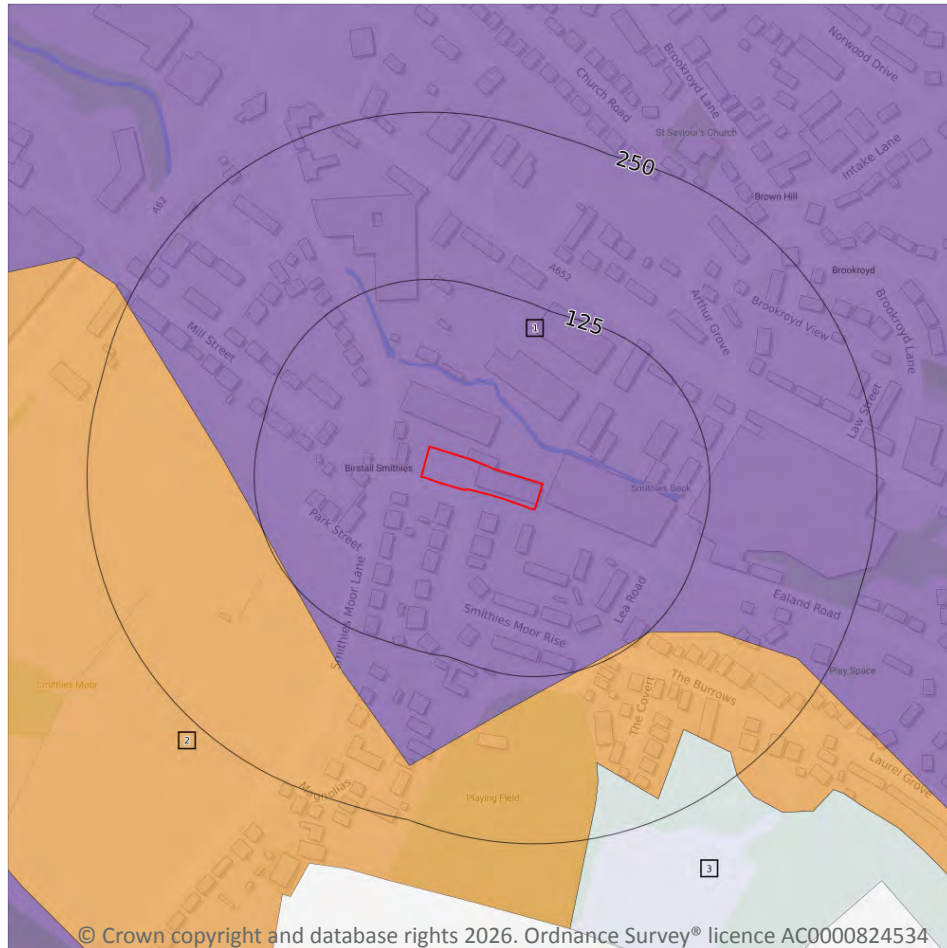
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Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, 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

3

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 87](#) >

ID	Location	Classification	Description
1	On site	Urban	Non-agricultural/no quality assigned
2	122m SE	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

ID	Location	Classification	Description
3	195m S	Grade 4	Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0
----------------------------	----------

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

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

12.3 Tree Felling Licences

Records within 250m	0
----------------------------	----------

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0
----------------------------	----------

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

This data is sourced from Natural England.



12.5 Countryside Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.



13 Habitat designations



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

13.1 Priority Habitat Inventory

Records within 250m

1

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

Features are displayed on the Habitat designations map on [page 90](#) >

ID	Location	Main Habitat	Other habitats
1	126m SW	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)

This data is sourced from Natural England.



13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

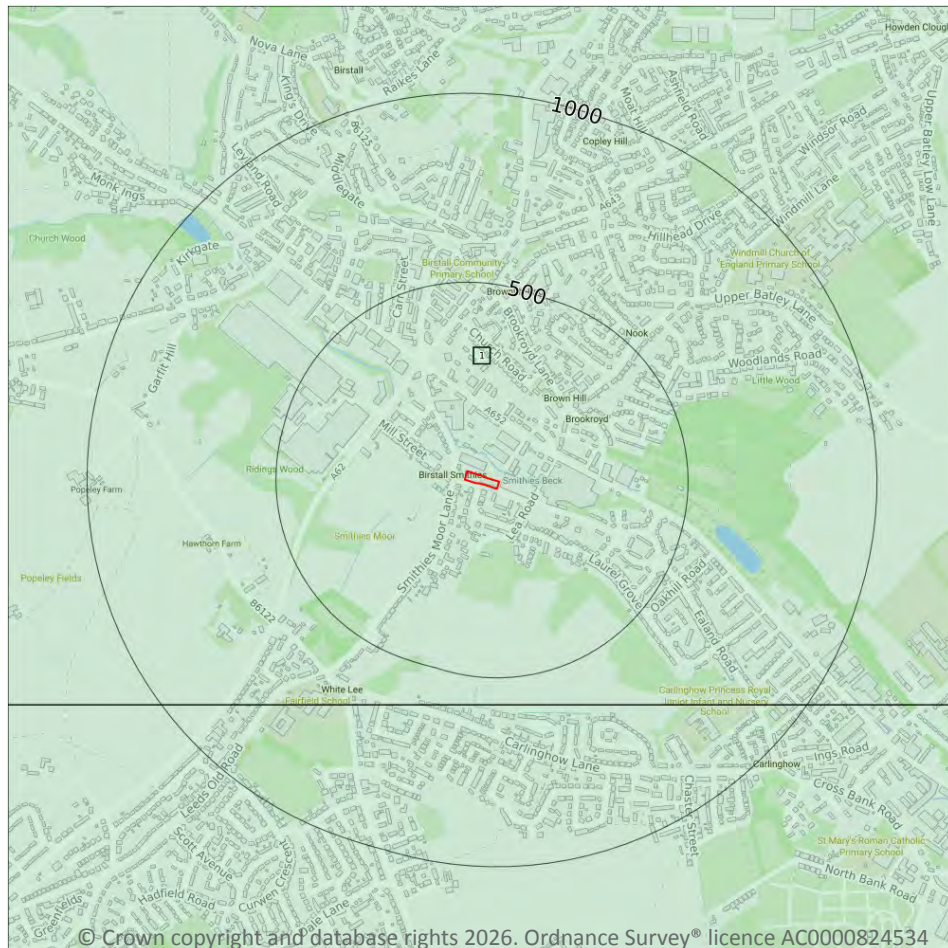
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Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

1

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

Features are displayed on the Geology 1:10,000 scale - Availability map on [page 92](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SE22NW

This data is sourced from the British Geological Survey.



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



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

14.2 Artificial and made ground (10k)

Records within 500m

12

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 93](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
A	136m S	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
A	148m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
2	165m N	WGR-VOID	Worked Ground (Undivided)	Void



ID	Location	LEX Code	Description	Rock description
A	219m S	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
3	233m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
4	277m NW	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
5	306m W	WGR-VOID	Worked Ground (Undivided)	Void
6	354m W	WGR-VOID	Worked Ground (Undivided)	Void
7	398m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
8	442m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial deposit
9	470m N	WMGR-ARTDP	Infilled Ground	Artificial deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

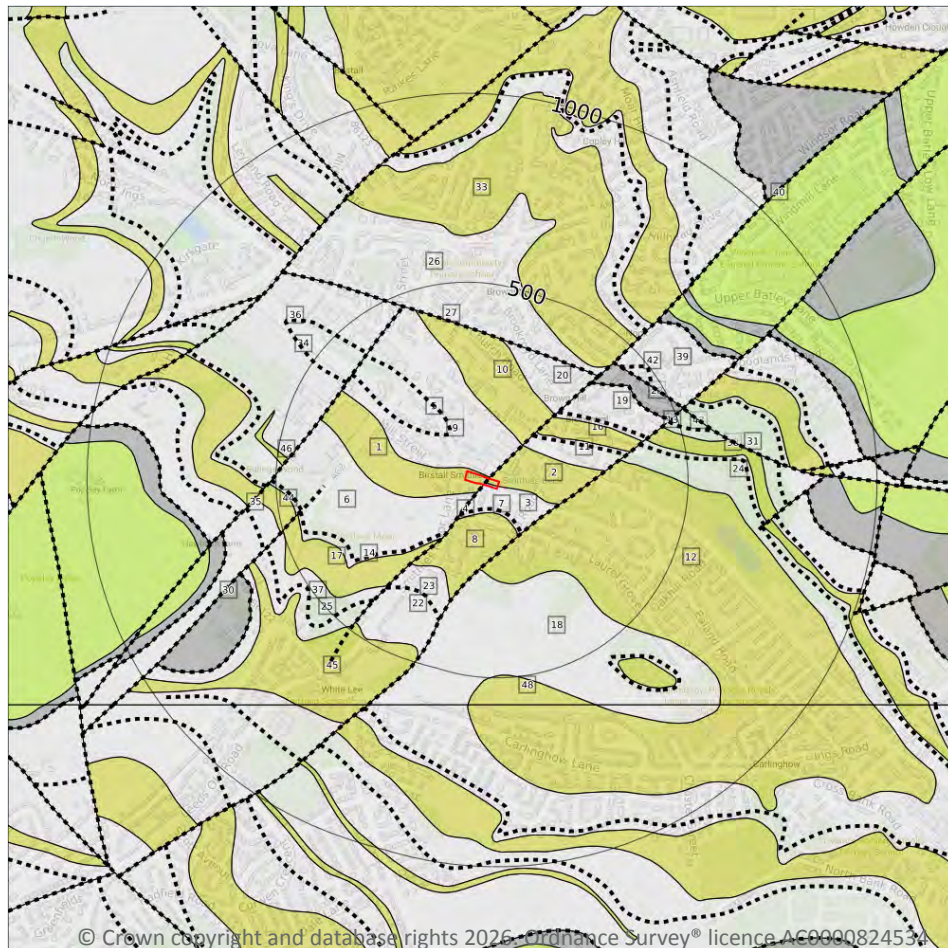
0

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

28

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 96](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
2	On site	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
3	On site	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian



ID	Location	LEX Code	Description	Rock age
5	4m N	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
6	24m S	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
8	64m S	ER-SDST	Emley Rock-Sandstone	Westphalian
10	115m NE	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
11	115m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
12	132m SE	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
16	165m NE	ER-SDST	Emley Rock-Sandstone	Westphalian
17	167m S	ER-SDST	Emley Rock-Sandstone	Westphalian
18	219m S	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
19	223m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
20	230m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
22	242m S	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
24	325m E	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
25	347m SW	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
26	356m N	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
28	357m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
33	389m NE	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
34	395m NW	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
38	404m E	ER-SDST	Emley Rock-Sandstone	Westphalian
39	437m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian
43	455m E	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, Siltstone And Sandstone	Westphalian



ID	Location	LEX Code	Description	Rock age
44	457m W	ER-SDST	Emley Rock-Sandstone	Westphalian
45	459m S	PLCM-SDST	Pennine Lower Coal Measures Formation-Sandstone	Westphalian
46	471m W	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
48	494m S	BRSR-SDST	Birstall Rock-Sandstone	Westphalian

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m	20
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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 96 >](#)

ID	Location	Category	Description
4	On site	FAULT	Fault, inferred, displacement unknown
7	55m S	ROCK	Coal seam, inferred
9	109m NW	ROCK	Coal seam, inferred
13	132m SE	FAULT	Fault, inferred, displacement unknown
14	149m S	ROCK	Coal seam, inferred
15	152m NE	ROCK	Coal seam, inferred
21	241m NE	ROCK	Coal seam, inferred
23	320m S	ROCK	Coal seam, inferred
27	356m N	FAULT	Fault, inferred, displacement unknown
29	357m NE	ROCK	Coal seam, inferred
30	373m W	FAULT	Fault, inferred, displacement unknown
31	384m NE	FAULT	Fault, inferred, displacement unknown
32	385m E	ROCK	Coal seam, inferred
35	395m NW	FAULT	Fault, inferred, displacement unknown
36	395m NW	ROCK	Coal seam, inferred
37	400m SW	ROCK	Coal seam, inferred



ID	Location	Category	Description
40	437m NE	FAULT	Fault, inferred, displacement unknown
41	440m W	ROCK	Coal seam, inferred
42	442m NE	ROCK	Coal seam, inferred
47	476m E	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.

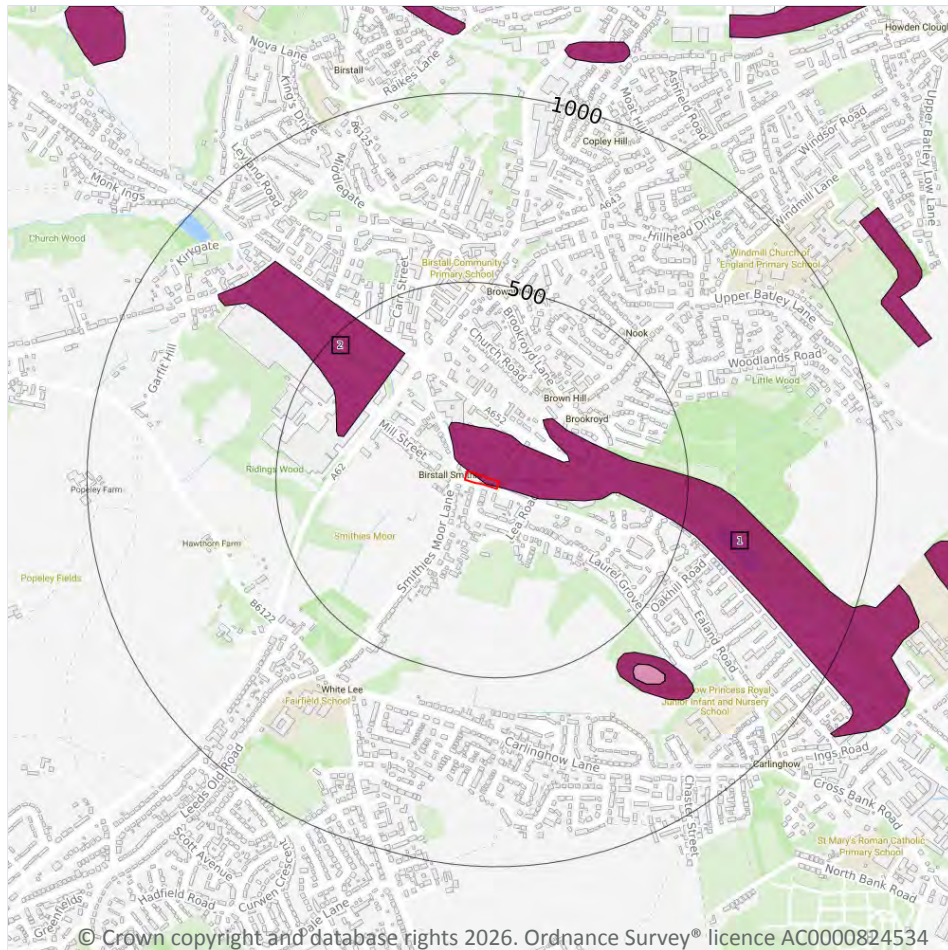
Features are displayed on the Geology 1:50,000 scale - Availability map on [page 100](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW077_huddersfield_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

2

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 101](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	Made Ground	Artificial deposit
2	318m NW	MGR-ARTDP	Made Ground	Artificial deposit

This data is sourced from the British Geological Survey.



15.3 Artificial ground permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial

15.4 Superficial geology (50k)

Records within 500m

0

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.

This data is sourced from the British Geological Survey.

15.5 Superficial 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 superficial deposits (the zone between the land surface and the water table).

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

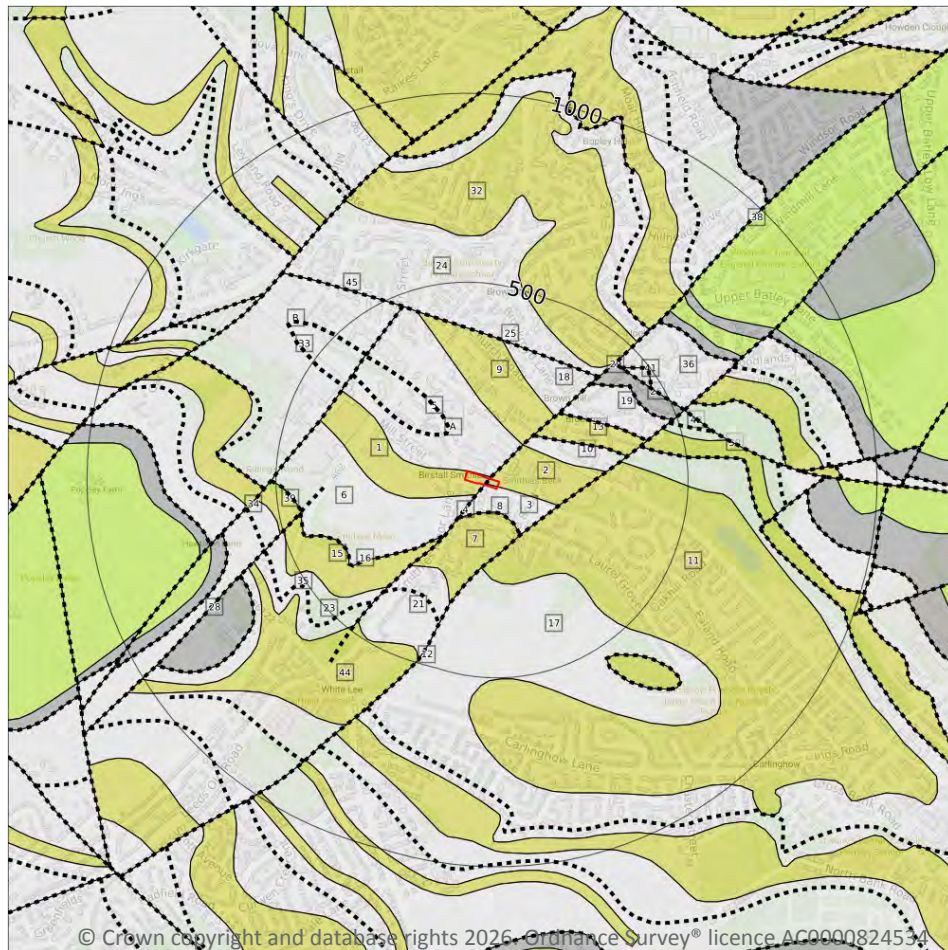
0

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

26

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 104](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
2	On site	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
3	On site	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian



ID	Location	LEX Code	Description	Rock age
5	1m N	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
6	30m S	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
7	62m S	ER-SDST	Emley Rock-Sandstone	Westphalian
9	116m NE	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
10	116m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
11	135m SE	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
13	152m NE	ER-SDST	Emley Rock-Sandstone	Westphalian
15	157m S	ER-SDST	Emley Rock-Sandstone	Westphalian
17	213m S	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
18	227m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
19	241m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
21	244m S	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
23	350m SW	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
24	353m N	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
26	354m NE	PMCM-MDSS	Pennine Middle Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
30	385m E	ER-SDST	Emley Rock-Sandstone	Westphalian
32	389m NE	BRSR-SDST	Birstall Rock-Sandstone	Westphalian
33	395m NW	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
36	438m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
39	440m W	ER-SDST	Emley Rock-Sandstone	Westphalian
41	441m NE	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian



ID	Location	LEX Code	Description	Rock age
43	454m E	PLCM-MDSS	Pennine Lower Coal Measures Formation-Mudstone, siltstone and sandstone	Westphalian
44	462m S	PLCM-SDST	Pennine Lower Coal Measures Formation-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
On site	Fracture	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	24
----------------------------	-----------

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 104 >](#)

ID	Location	Category	Description
4	On site	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
8	62m S	ROCK	Coal seam, inferred
A	114m NW	ROCK	Coal seam, inferred
A	114m NW	ROCK	Coal seam, inferred
12	135m SE	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
14	152m NE	ROCK	Coal seam, inferred
16	157m S	ROCK	Coal seam, inferred
20	241m NE	ROCK	Coal seam, inferred

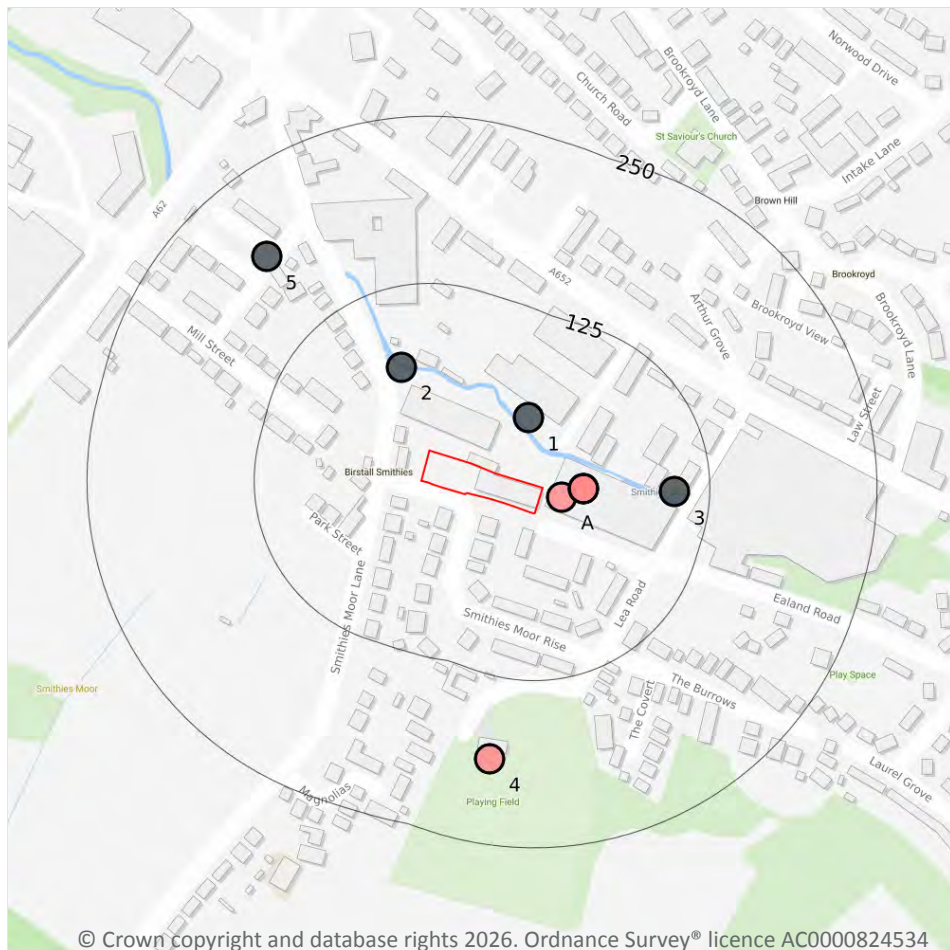


ID	Location	Category	Description
22	325m S	ROCK	Coal seam, inferred
25	353m N	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
27	354m NE	ROCK	Coal seam, inferred
28	374m W	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
29	383m NE	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
31	385m E	ROCK	Coal seam, inferred
34	395m NW	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
B	395m NW	ROCK	Coal seam, inferred
B	395m NW	ROCK	Coal seam, inferred
35	406m SW	ROCK	Coal seam, inferred
37	438m NE	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
38	438m NE	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
40	440m W	ROCK	Coal seam, inferred
42	441m NE	ROCK	Coal seam, inferred
45	468m N	FAULT	Fault, inferred, crossmark on downthrow side, throw in metres
46	476m E	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

8

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 108](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	16m E	422664 425584	BH AT BIRSTALL MILL BIRSTALL YORKS	365.76	N	58220 ↗
A	31m E	422680 425590	DEWHURST'S MILL, BIRSTALL	365.76	N	58852 ↗
A	31m E	422680 425590	DEWHURST'S MILL, BIRSTALL	365.76	N	58853 ↗

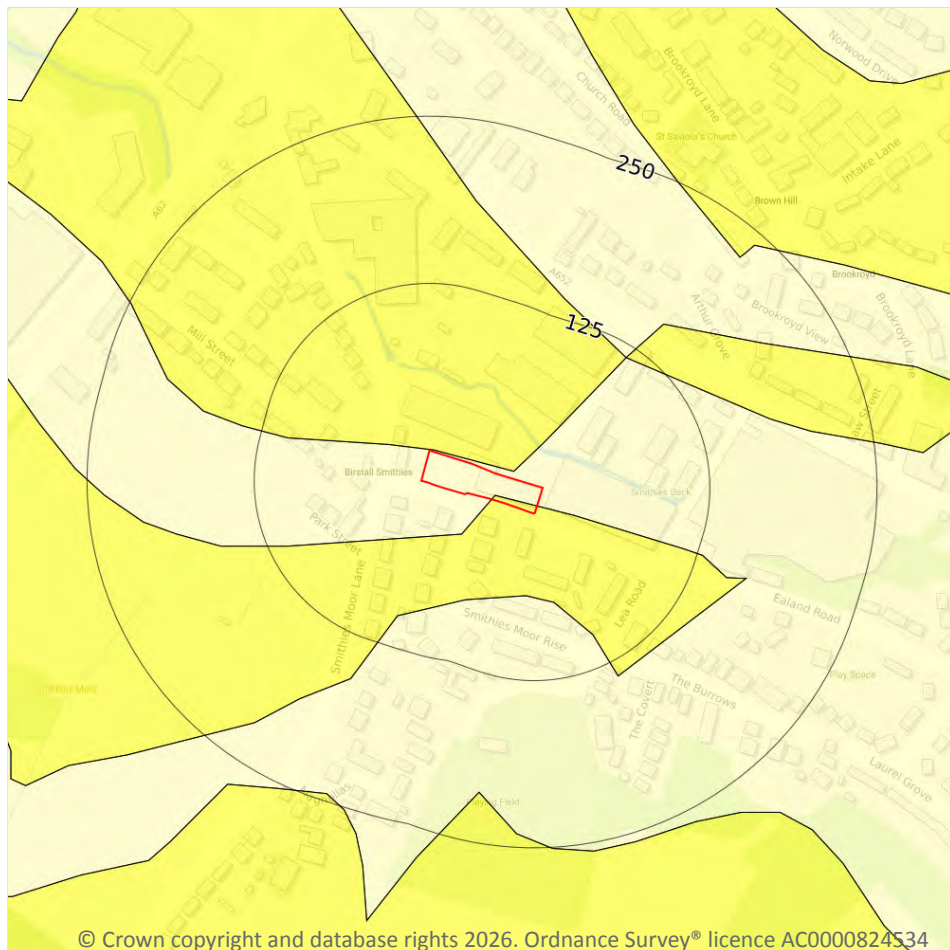


ID	Location	Grid reference	Name	Length	Confidential	Web link
1	47m N	422639 425643	BATLEY BECK FLOOD ALLEVIATION SCHEME B48	-	Y	N/A
2	66m N	422544 425681	BATLEY BECK FLOOD ALLEVIATION SCHEME B49	-	Y	N/A
3	99m E	422748 425588	BATLEY BECK FLOOD ALLEVIATION SCHEME B47	-	Y	N/A
4	186m S	422610 425388	BH AT BERSTALL MILL BIRSTALL YORKS	365.76	N	58219 ↗
5	190m NW	422443 425764	BATLEY BECK FLOOD ALLEVIATION SCHEME B50	-	Y	N/A

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



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

17.1 Shrink swell clays

Records within 50m

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).

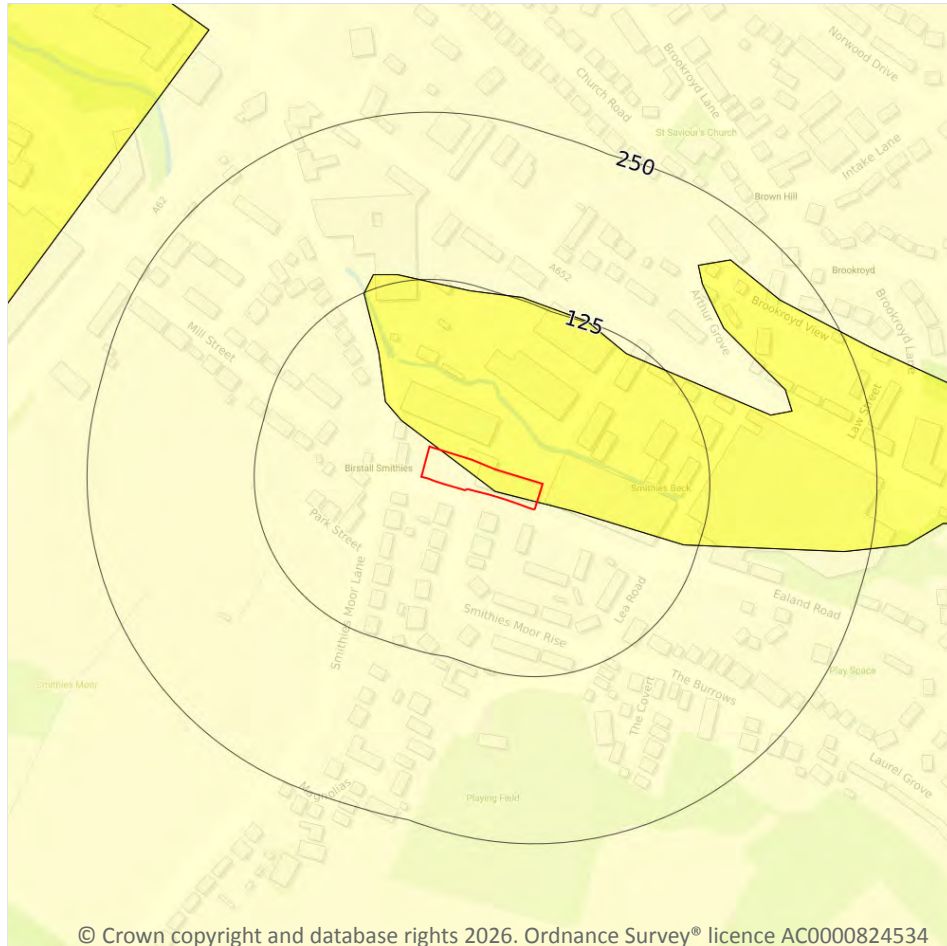
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 110](#) >

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



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

17.2 Running sands

Records within 50m

2

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 111](#) >

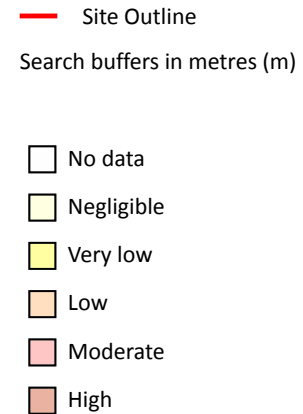
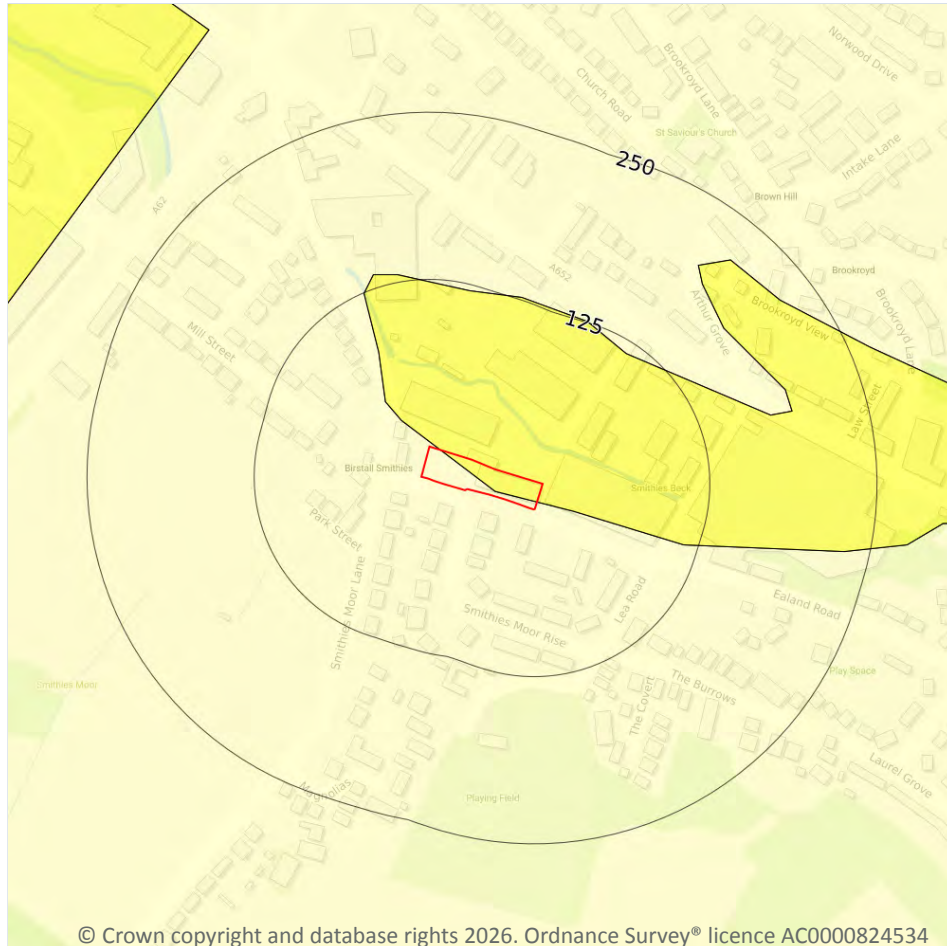
Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

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

2

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 113](#) >

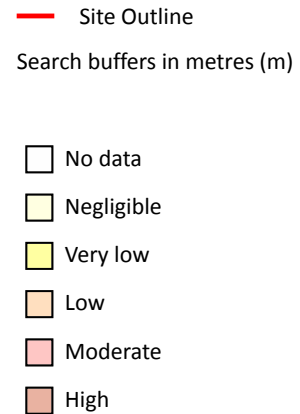
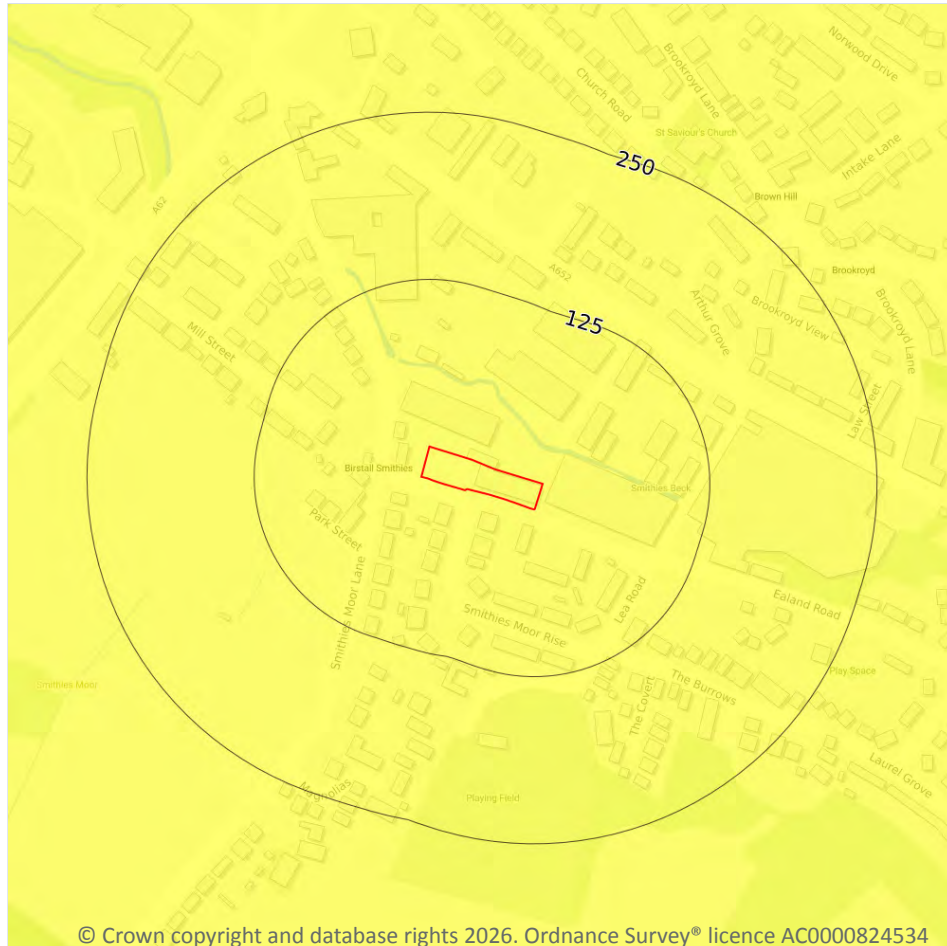
Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.



This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



17.4 Collapsible deposits

Records within 50m

1

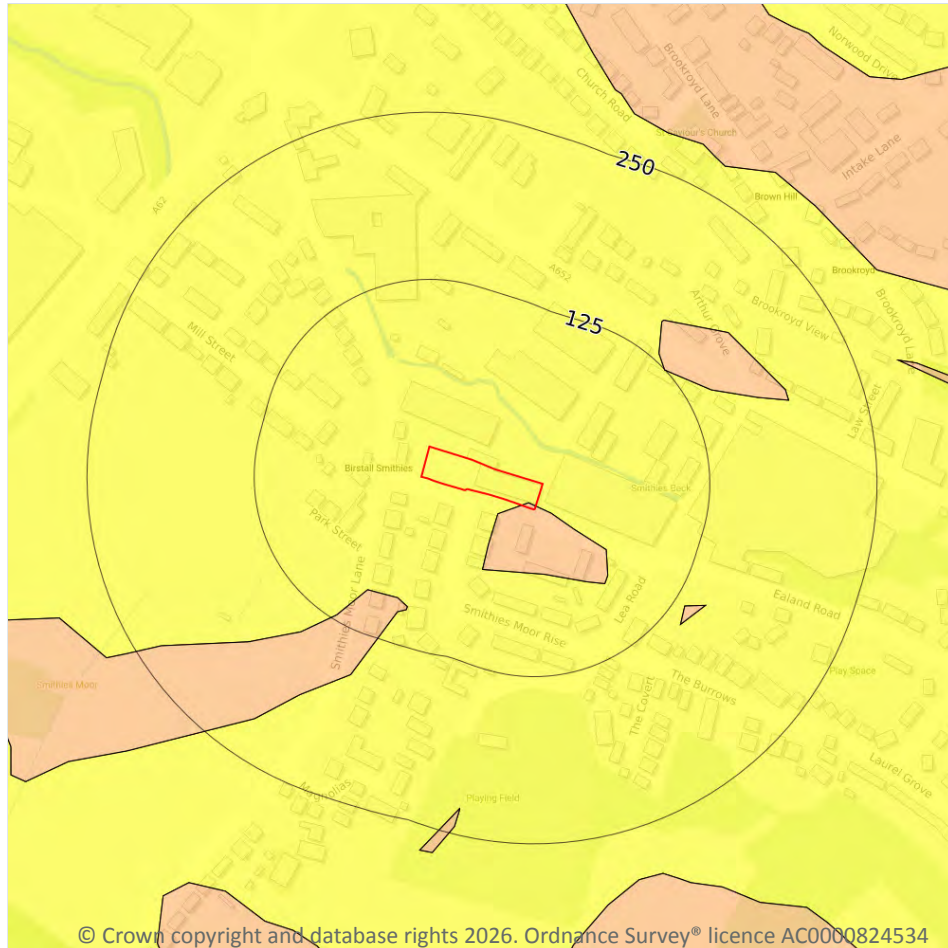
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 115 >](#)

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



— Site Outline
Search buffers in metres (m)

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

17.5 Landslides

Records within 50m

2

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 116](#) >

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.

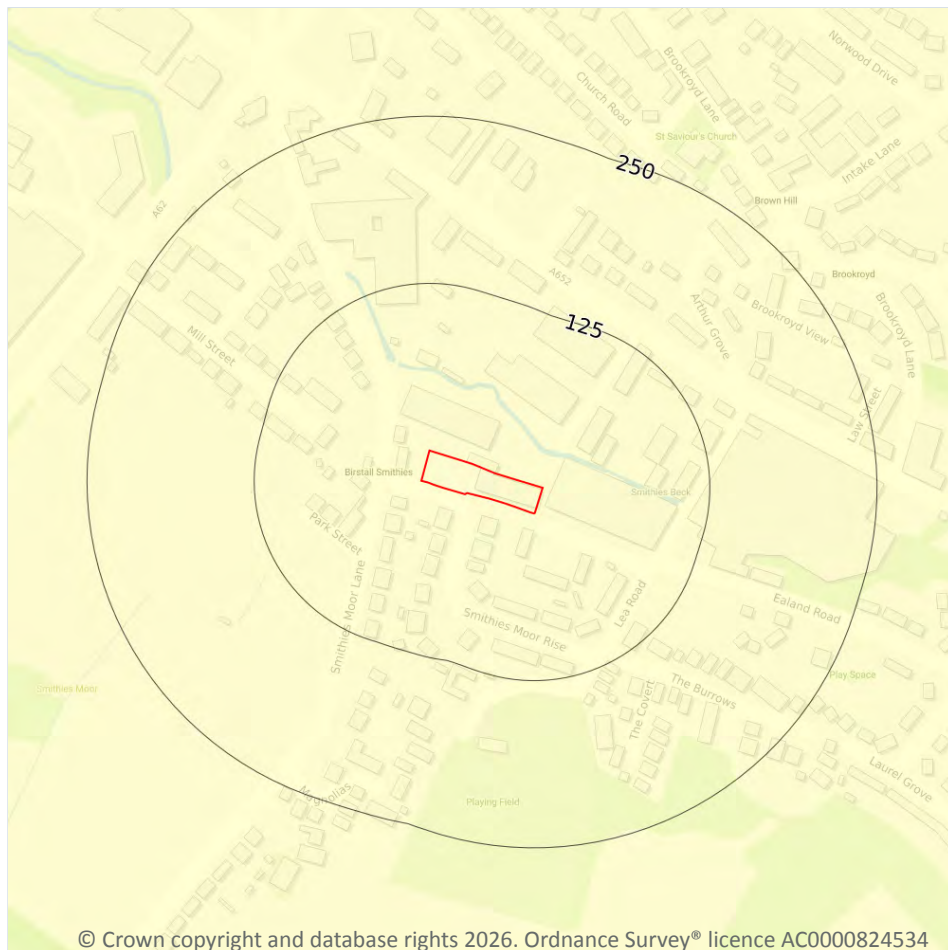


Location	Hazard rating	Details
On site	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

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 118 >](#)

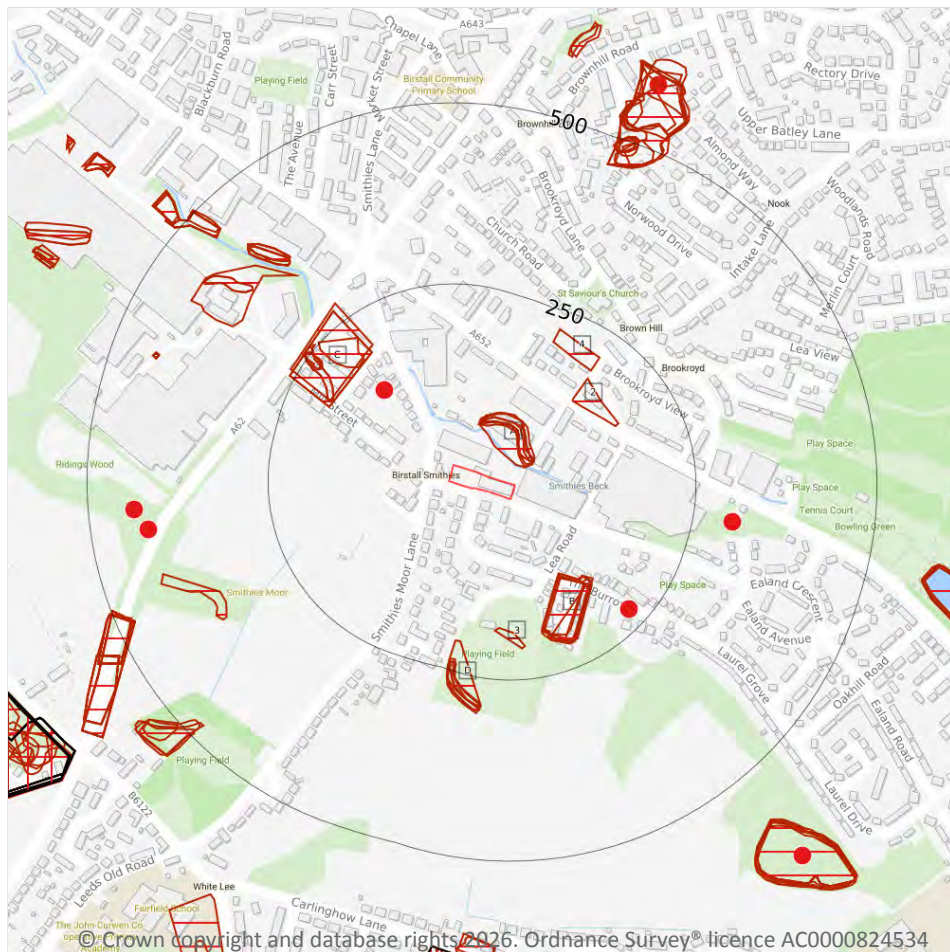
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



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

5

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 120 >](#)



ID	Location	Details	Description
1	140m NW	Name: Smithies Bridge Address: Birstall Smithies, BATLEY, West Yorkshire Commodity: Coal, Deep Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
5	224m SE	Name: Moor Side or White Lee House Address: Birstall Smithies, BATLEY, West Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
6	305m E	Name: Winsley Dale Address: BATLEY, West Yorkshire Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.
G	421m W	Name: Ridings Wood Address: Birstall Smithies, BATLEY, West Yorkshire Commodity: Coal, Deep Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.



ID	Location	Details	Description
G	437m W	Name: Ridings Wood Address: Birstall Smithies, BATLEY, West Yorkshire Commodity: Coal, Deep Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Delf, Delph, Gravel Pit, Sand Pit, Sand and Gravel Pit, Clay Pit, Pit, Opencast Coal Site or Surface Mine. It may be mapped as Worked Ground or Worked and Made Ground on BGS mapping. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	28
----------------------------	-----------

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 120 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
A	27m N	Refuse Heap	1955	1:10560
A	28m NE	Refuse Heap	1948	1:10560
A	33m NE	Refuse Heap	1932	1:10560
A	39m NE	Refuse Heap	1938	1:10560
A	40m N	Refuse Heap	1932	1:10560
B	122m SE	Reservoirs	1932	1:10560
B	124m SE	Reservoirs	1932	1:10560
B	125m SE	Reservoirs	1948	1:10560
B	127m SE	Reservoirs	1955	1:10560
B	128m SE	Reservoirs	1938	1:10560
2	141m NE	Unspecified Pit	1938	1:10560
B	157m SE	Unspecified Ground Workings	1974	1:10000
B	159m SE	Unspecified Pit	1985	1:10000
3	179m S	Unspecified Heap	1955	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
C	185m NW	Sewage Works	1948	1:10560
C	185m NW	Sewage Works	1938	1:10560
C	188m NW	Unspecified Ground Workings	1948	1:10560
C	188m NW	Unspecified Ground Workings	1938	1:10560
C	188m NW	Unspecified Pit	1892	1:10560
C	189m NW	Sewage Works	1955	1:10560
4	190m NE	Cuttings	1892	1:10560
D	208m S	Unspecified Pit	1955	1:10560
C	226m NW	Unspecified Ground Workings	1905	1:10560
C	228m NW	Unspecified Ground Workings	1892	1:10560
D	234m S	Unspecified Ground Workings	1948	1:10560
D	237m S	Unspecified Ground Workings	1938	1:10560
D	239m S	Unspecified Ground Workings	1948	1:10560
D	242m S	Unspecified Ground Workings	1931	1:10560

This data is sourced from Ordnance Survey®/Groundsure.

18.3 Underground workings

Records within 1000m

15

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 120 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
S	627m S	Disused Colliery	1955	1:10560
U	637m SW	Colliery	1931	1:10560
U	637m SW	Colliery	1905	1:10560
U	637m SW	Colliery	1892	1:10560
-	638m S	Disused Colliery	1938	1:10560
-	644m S	Disused Colliery	1948	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
-	645m S	Colliery	1892	1:10560
-	646m S	Colliery	1905	1:10560
U	647m SW	Disused Colliery	1966	1:10560
U	647m SW	Disused Colliery	1955	1:10560
U	648m SW	Colliery	1948	1:10560
-	680m W	Colliery	1892	1:10560
-	700m S	Unspecified Disused Shaft	1967	1:10560
-	711m S	Unspecified Shaft	1892	1:10560
-	746m N	Unspecified Workings	1974	1:10000

This 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

1

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.

Location	Mineral type
470m N	Stone

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**

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**

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.

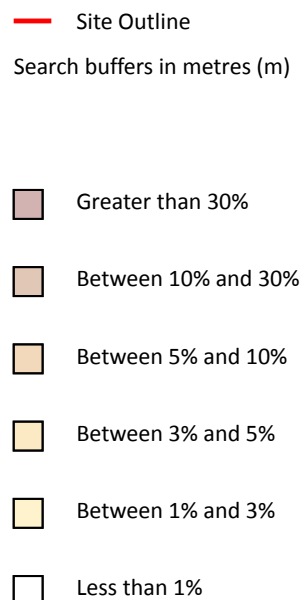
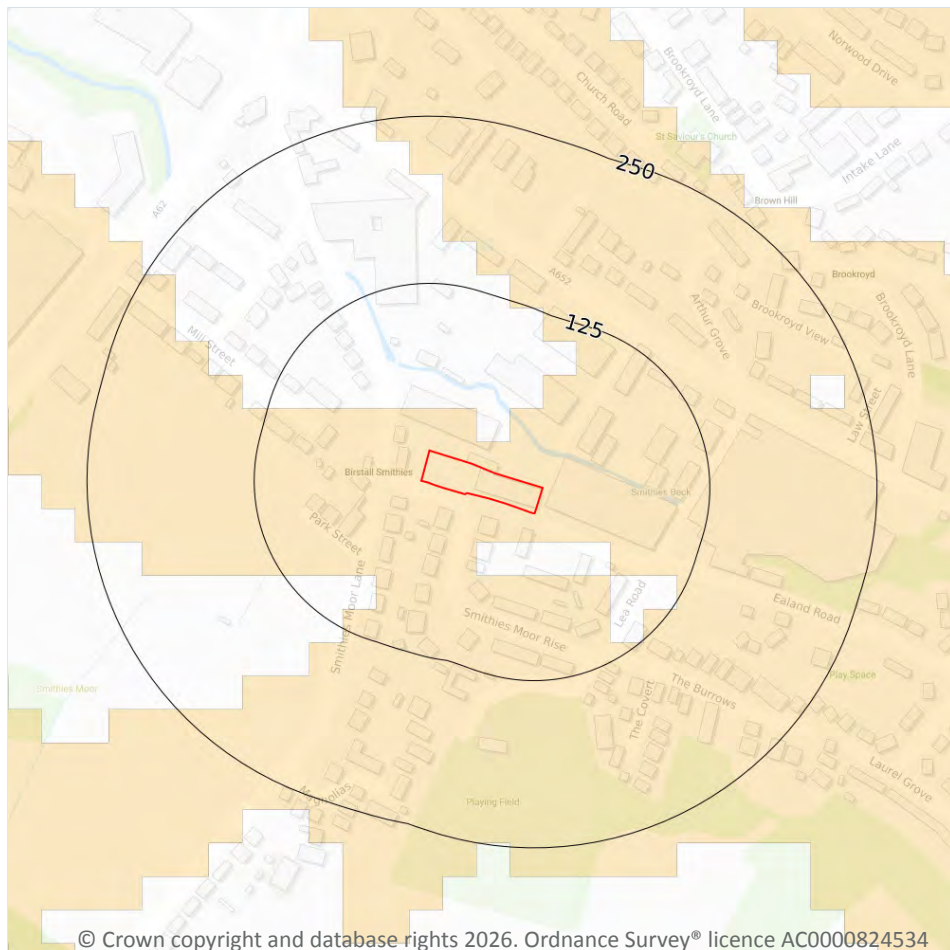
Not all 'holes' noted on Ordnance Survey® mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



20.1 Radon

Records on site

1

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 130 >](#)

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 3% and 5%	Basic



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

5

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	25 - 35 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	35 - 45 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	35 - 45 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
1m N	25 - 35 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
30m S	25 - 35 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

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

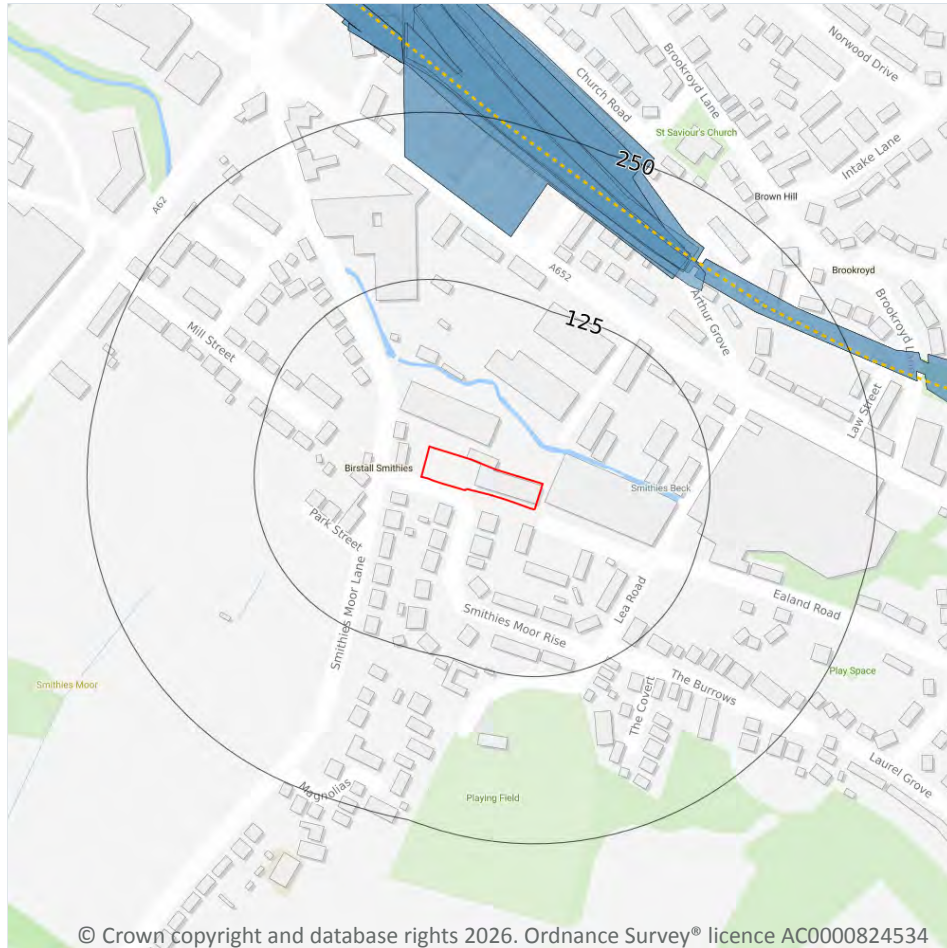
0

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

20

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 134 >](#)

Location	Land Use	Year of mapping	Mapping scale
168m N	Railway Sidings	1932	10560
168m N	Railway Sidings	1906	10560
168m N	Railway Sidings	1948	10560
184m NE	Railway Sidings	1955	10560
184m NE	Railway Sidings	1966	10560
190m NE	Railway Sidings	1892	10560
191m NE	Railway Sidings	1932	10560
191m NE	Railway Sidings	1932	10560
191m NE	Railway Sidings	1938	10560
191m NE	Railway	1892	-
191m NE	Railway	1908	-
191m NE	Railway	1922	-
203m NE	Railway Sidings	1955	1250
204m NE	Railway Sidings	1956	2500
218m NE	Railway Sidings	1933	2500
218m NE	Railway Sidings	1922	2500
218m NE	Railway Sidings	1894	2500



Location	Land Use	Year of mapping	Mapping scale
218m NE	Railway Sidings	1908	2500
224m N	Railway Sidings	1956	2500
225m N	Railway Sidings	1955	1250

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

2

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 134 >](#)

Location	Description
202m NE	Abandoned
248m N	Razed

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

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

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-conditions-april-2026/ ↗.



Appendix 4

Photographs



Photo 1: Image shows access access gate.



Photo 2: Image shows yard area.



Photo 3: Image shows existing commercial unit.



Rogers Geotechnical Services Ltd

Manor Croft, Skelmanthorpe, Huddersfield,
HD8 9DT

Job No:

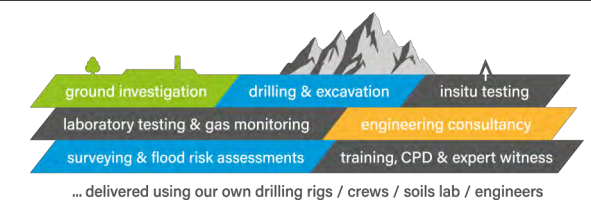
C6063/26/E/9391

Site:

Smithies Moor Rise,
Birstall,
Batley,
West Yorkshire,
WF17 8AX

Client:

Zafran Javed

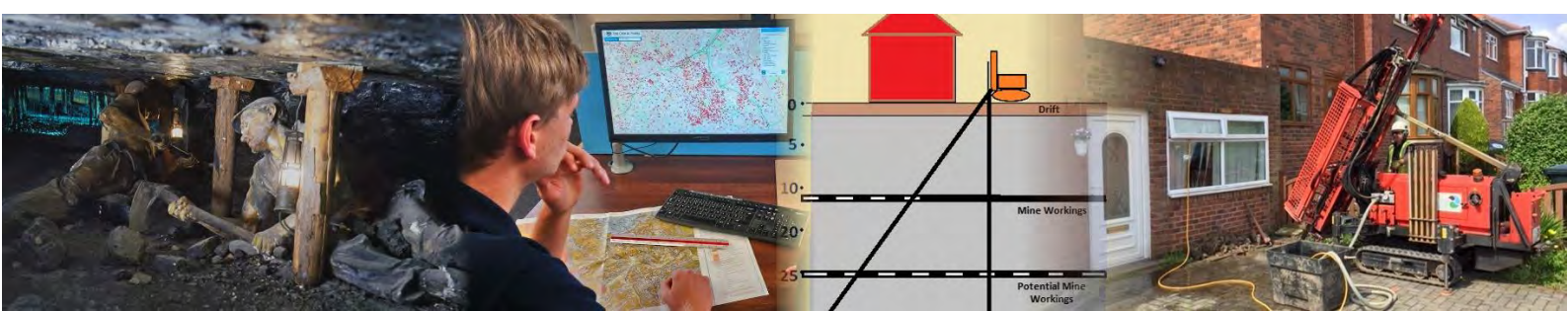


Appendix 5

Coal Mining Risk Assessment (GeoInvestigate)



GEOLOGICAL
GEOTECHNICAL
GEOENVIRONMENTAL
CONSULTANCY
DRILLING & DATA ACQUISITION



GEOINVESTIGATE LIMITED

Coal Mining Risk Assessment (CMRA)

LOCATION	Industrial Unit on Smithies Moor Rise, Batley, WF17 8AX
ISSUE DATE	9 th December 2024
FOR	Zafran Javed
CLIENT REF.	
OUR REF.	G24349

Prepared by

Checked by

Kris Rodway BSc (Hons) MEnvSc
Senior GeoEnvironmental Engineer

Ross Nicolson BSc (Hons) MSc (Eng) CEng MIMMM
Principal Geotechnical Engineer

1. CMRA INTRODUCTION & COAL MINING HAZARDS

1.1 Site Location and Description

The approximate centre of the site lies at 422609, 425596 with ground height around 85mAOD.

The boundary shown in RED on the Coal Authority (CA) report provided in Appendix A corresponds with the planning application area.

The site is currently occupied by an industrial unit and office in the east and parking hardstanding in the west. Site images are provided in Appendix B. It is proposed to carry out a building and roof infill extension of the existing unit on the east side of the property incorporating the existing front office block into the building as per the development plan provided in Appendix C.

1.2 Historical Maps

A desk study of limited available historical OS maps shows the site to be undeveloped open space/farmland between 1830 to 1880 with a beck/stream to the north of the property. Coal Pits and sandstone quarries are shown in the surrounding area but not within the site or immediately adjacent to it. By 1888-1915, the site is next to several small and large mills. The existing building/shed within the site was erected post-1965.

No evidence of surface mining activity, clay, sand or gravel pitting or stone quarrying is recorded on the historical maps within or immediately adjacent to the property.

1.3 Anticipated Geology

The location of the property is shown on the extract of British Geological Survey (BGS) 1:50,000 Solid and Drift geology map (Sheet 77) and 1:10560 map sheet SE22NW both presented in Appendix D. The mapping indicates the site to be directly underlain by the Pennine Lower Coal Measures Formation comprising Mudstone, Siltstone and Sandstone including subordinate named coal horizons. No superficial deposits are recorded, and bedrock may lie at or near surface though the 1:20560 map suggests an unknown thickness of infilled ground may underlain the building extension.

No coal outcrops are recorded within the development area. Outcrop of the Flockton Thin Coal (FN) is shown nearby to the south of the property, while outcrop of the 1st Brown Metal (1BM) and 2nd Brown Metal (2BM) Coals occur to the west of the site.

A geological fault lies close to or passes beneath the proposed building extension at the west end of the existing building. The bedrock strata are downthrown on the east side of the fault.

The tentative elevation of the site relative to the vertical geology column is shown in Appendix D.

BGS log SE22NW/624 on the downthrown eastern side of the fault presented in Appendix E, records superficial deposits / bedrock depth of 4.88m, with an unnamed coal at 50.90m. In Geoinvestigate's opinion, if underground mine workings occur in this coal on the east side of the building extension, it lies too deep to impact surface ground stability.

However, no borehole information is available on the upthrown west side of the fault beneath the west side of the building extension. Notwithstanding, as the geology mapping indicates the bedrock on this side is Birstall Rock then according to the geology column the 1BM or 2BM Coal horizons and underground workings in them (if present) may lie within very shallow or shallow depth below the new extension. This however is speculation.

Owing to uncertainty about the coal mining geology under the new building extension and the possible presence of shallow mine workings, it is Geoinvestigate's opinion that limited further intrusive drilling investigation is required beneath the new building extension to further enable the mine working hazard to be assessed beneath this end of the building.

1.4 Mine Workings & Mine Shafts

The CA report in Appendix A does not identify any levels of past recorded underground mining beneath the site.

However, the CA report places the site in an area of probable shallow coal mine workings. The CA define Probable Unrecorded Shallow Workings as “Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface” (i.e., less than 30m).

Section 1.3 of this CMRA report has identified a possible very shallow and/or shallow unrecorded underground mine working hazard beneath the new extension. The increased risk to the development is highlighted by the extract of CA online interactive mapping provided in Appendix F. According to this information the site falls within development high risk area (DHRA) and an area of probable shallow mine working hazard.

In Geoinvestigate’s opinions the possible presence of unrecorded mine workings within very shallow and shallow depth beneath the proposed new building poses a significant surface ground stability risk requiring further intrusive site investigation.

Encouragingly, the CA report does not identify any known mine shafts within 100m of the site boundary.

1.5 Geological Faults Fissures & Breaklines

The geological mapping and the CA report does not identify any fissures, or breaklines within the site or within influencing distance of it.

However, the CA report does show a geological fault line lying under or close to the proposed building extension. While most faults are stable and do not move, very occasionally faults in combination with underlying mine workings can give rise to minor creep movement at the surface. However, there is no evidence that such fault related movement has occurred at this locality.

1.6 Mine Gas

According to the CA report no mine gas incident or remediation has been recorded within 500m of the enquiry boundary and typically on the UK coalfields mine gas risk to surface development is low. Circumstances where gas risk increases include proximity (typically < 50m) to mine entries (adits and shafts), proximity to recorded mine gas incidents, where development is located above or adjacent to very shallow and shallow (< 30m) unflooded mine workings or roadway tunnels. In addition, increased mine gas risk may be attributable to coal seams with a history of spontaneous combustion, natural or artificial pathways providing routes for gas migration e.g. permeable soil cover, pathways created by geological faults, mining induced breaklines/fractures, collapsed mine roof strata, mining subsidence, mining sinkholes/crown holes and unsealed boreholes.

This CMRA has indicated that conditions may exist at this site increasing mine gas risk namely the possible presence of very shallow mine workings, with no/ limited thickness of superficial deposits, and a geological fault crossing the site. However, the risk may be reduced as there has been no reported mine gas incident at this locality.

2. RISK ASSESSMENT OF SITE-SPECIFIC COAL MINING ISSUES

The risk assessment methodology adopted in this section is based on CA publication RISK BASED APPROACH TO DEVELOPMENT MANAGEMENT - GUIDANCE FOR DEVELOPERS Version 3, 2014 and Version 4 - 2017. The template contained therein is broadly adopted in the table below with amendments made by Geoinvestigate Limited. The factual information it is based on, is derived mostly from the CA Consultants Coal Mining Report and additional desk study information including available historical maps, geological maps & memoirs, BGS boreholes, online articles etc. It is not an exhaustive desk study review. Therefore, if new information is released or found in the future, this CMRA may require updating.

The table also provides advice on next step mitigation and the likely planning decision.

RISK ASSESSMENT & MITIGATION		
Coal Mining Issues/Hazards	Risk	Next Step Mitigation
Past underground coal mining	NONE	
Probable unrecorded shallow workings	M	Drilling to enable further assessment
Outcrop	NONE	
Spine roadways at shallow depth	NONE	
Mine entries	NONE	
Geological faults, fissures and breaklines	M	Drilling to enable further assessment
Mine gas	M	Drilling to enable further assessment
Opencast mines within 500m	NONE	
Coal mining subsidence claims within 50m	NONE	
Site investigations within 50m	NONE	
Likely Planning Decision	Yes/No	Reason
Is planning permission likely to be given with respect to coal mining legacy issues CONDITIONAL upon carrying out further intrusive investigation leading to possible building design mitigation at a future date but before construction begins?	Yes	The site is NOT impacted by known mine entry proximity hazards and the site-specific ground stability and possible mine gas risks to the proposed development identified in this CMRA can be mitigated by further intrusive site investigation and if required thereafter routine engineering solutions.

Assessed risk level – High Medium Low. NONE

3. CMRA OUTCOME & RECOMMENDATIONS

This CMRA has identified increased risk to the proposed development from possible shallow mine workings as well as perhaps mine gas and a geological fault. Drilling investigation is required to further assess these risks. However as both risks can be mitigated by routine engineering solutions **planning permission should not in our opinion be withheld with respect to coal mining legacy issues** providing further intrusive investigation is carried out at a future date and the permission is **CONDITIONED** accordingly.

In Geoinvestigate's opinion a minimum of 2 or 3 rotary open boreholes (without need for core sample recovery) should be sunk at the site to depths up to 30m (but not necessarily reaching 30m) to establish bedrock depth and mine workings depth (if any) beneath the site.

A Coal Authority Permit needs to be obtained (ahead of) further intrusive exploratory drilling. As per the table below Water Drill Flush to be used when drilling. The permit application must state **WATER ONLY DRILL FLUSH** for the safety of the public and drill crew. **Failure to do so may result in prosecution by the HSE and a hefty fine.**

Risks for Different Drilling Scenarios					
Air flush	Mist flush	Foam flush	Water flush	Mud flush	Additional controls
HIGH	HIGH / MED'M	HIGH / MED'M	LOW	LOW	- Monitoring at rig and other open holes. - Seal boreholes

Boreholes must be sealed on completion.

Gas monitoring **MUST** be carried out during drilling and may provide further indication of mine gas risk.

However, if the drilling investigation encounters shallow mine working longer term gas monitoring in specially installed gas wells may be required to further assess the ground gas risk.

Alternatively, longer term gas monitoring may be avoidable if the installation of precautionary gas protection measures are included in the design of the new buildings in line with "Characteristic Situation 2" (CS2) based upon the CIRIA 665 (revised) report – "Assessing the risks posed by hazardous ground gases to buildings". However, agreement will be required from the Local Planning Authority for this alternative proposal.

Limited further shallow geotechnical and geotechnical investigation may also be required to enable foundation design and to check the ground for the presence of contamination and for waste disposal classification.

WHAT TO DO NEXT? Obtain quotes for the intrusive site investigation works. The cost of the SI works should be a **“lump sum” fixed price**. Geoinvestigate can provide advice and assistance with helping you find suitable site investigation & drilling contractors. Call us on 01642 713779 or email enquiries@geoinvestigate.co.uk.

Appendices:

- A. CA Consultants Coal Mining Report issued 3rd December 2024 ref. 51003466672001
- B. Site Images
- C. Proposed Development
- D. Geology Map Extracts
- E. CA online information
- F. BGS Borehole Record

APPENDIX B
COAL MINING REPORT



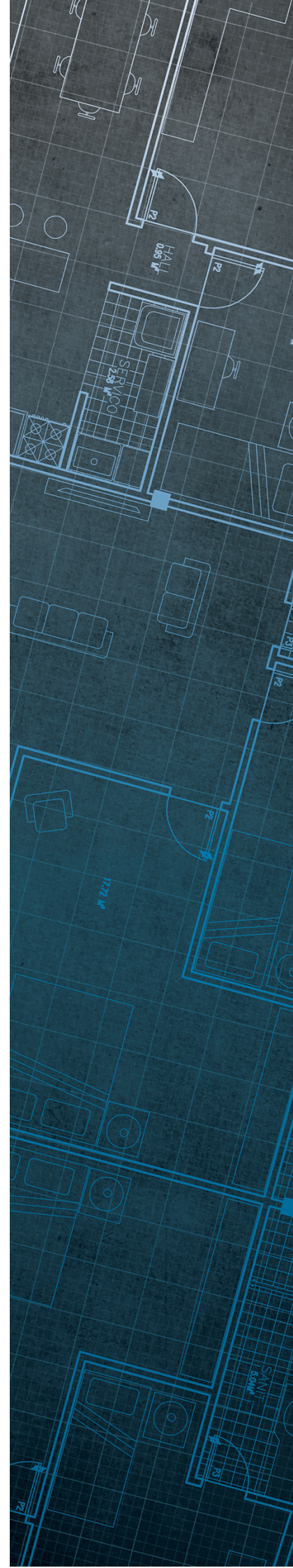
The Coal
Authority

Consultants Coal Mining Report

Smithies Moor Rise
Birstall
Batley
Kirklees
WF17 8AX

Date of enquiry:	2 December 2024
Date enquiry received:	2 December 2024
Issue date:	2 December 2024

Our reference:	51003466672001
Your reference:	G24349-KR



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

GEOINVESTIGATE

Enquiry address

Smithies Moor Rise
Birstall
Batley
Kirklees
WF17 8AX

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

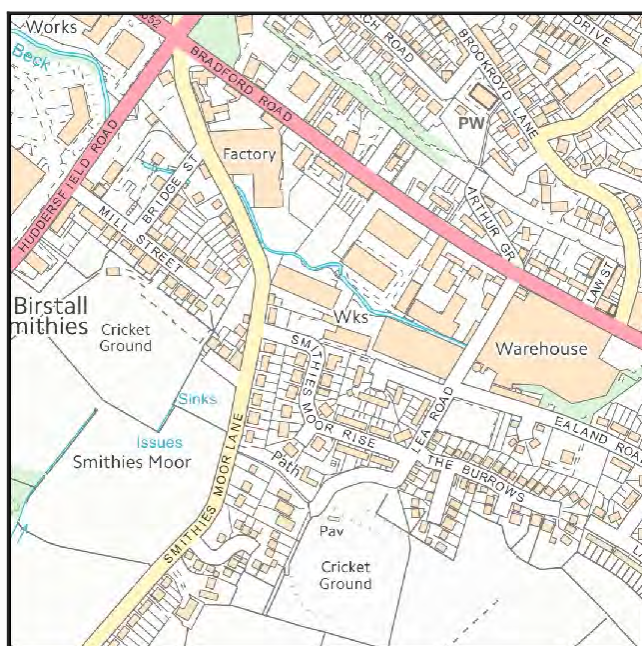
www.groundstability.com

 @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	BLACK BED	Coal	62NB	230	West	2.4	South-East	66	1921

Probable unrecorded shallow workings

Yes.

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:

8420	12673	8068
FGB759	FGB428	FGB419

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

Please refer to the 'Summary of findings' map (on separate sheet) for details of any geological faults, fissures or breaklines either within or intersecting the enquiry boundary.

Fault under or close to the property 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

None recorded within 50 metres of the enquiry boundary.

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.

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.

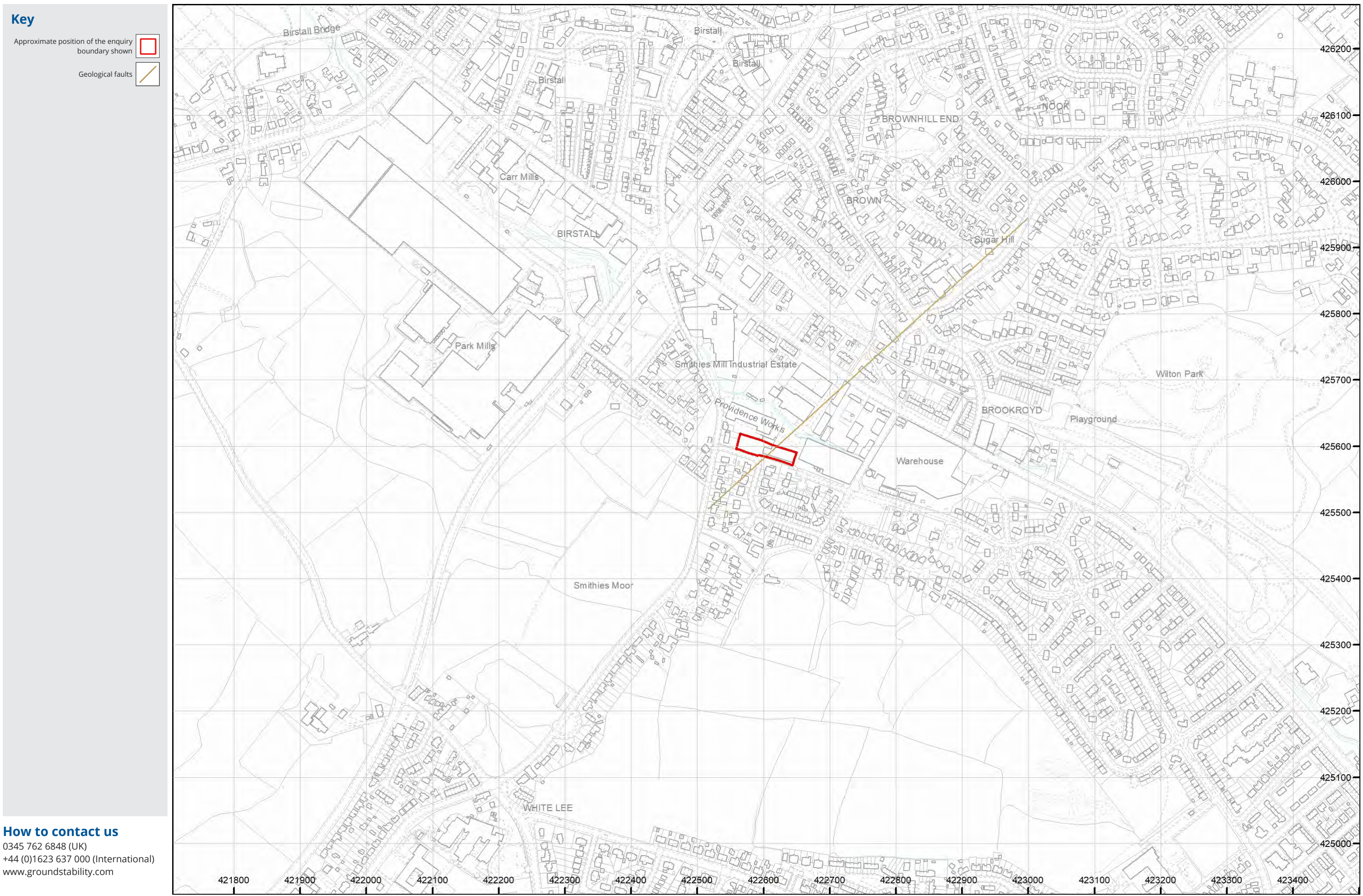
Withdrawal of support notices

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.

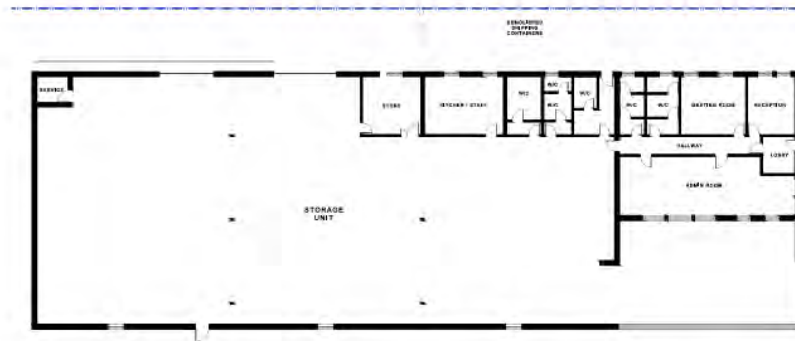


APPENDIX B SITE IMAGES

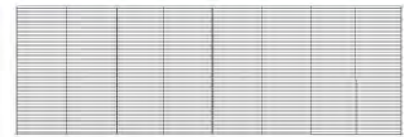


APPENDIX C

PROPOSED DEVELOPMENT



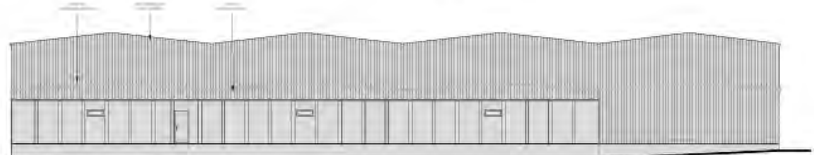
PROPOSED WAREHOUSE PLAN
Safe Storage



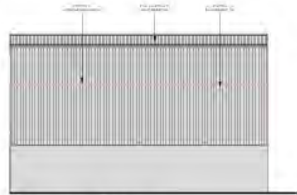
PROPOSED ROOF PLAN
Scale: 1/8"=1'-0"



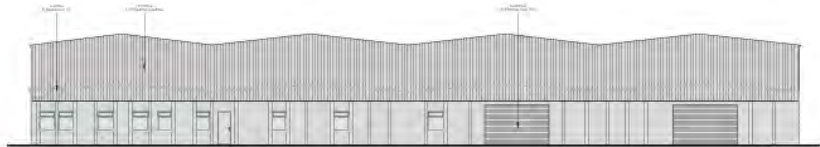
PROPOSED FRONT ELEVATION
Scale 1/8"=1'-0"



PROPOSED SIDE ELEVATION
Scale: 1/4"=1'-0"



PROPOSED REAR ELEVATION
Scale 1/4"=1'-0"

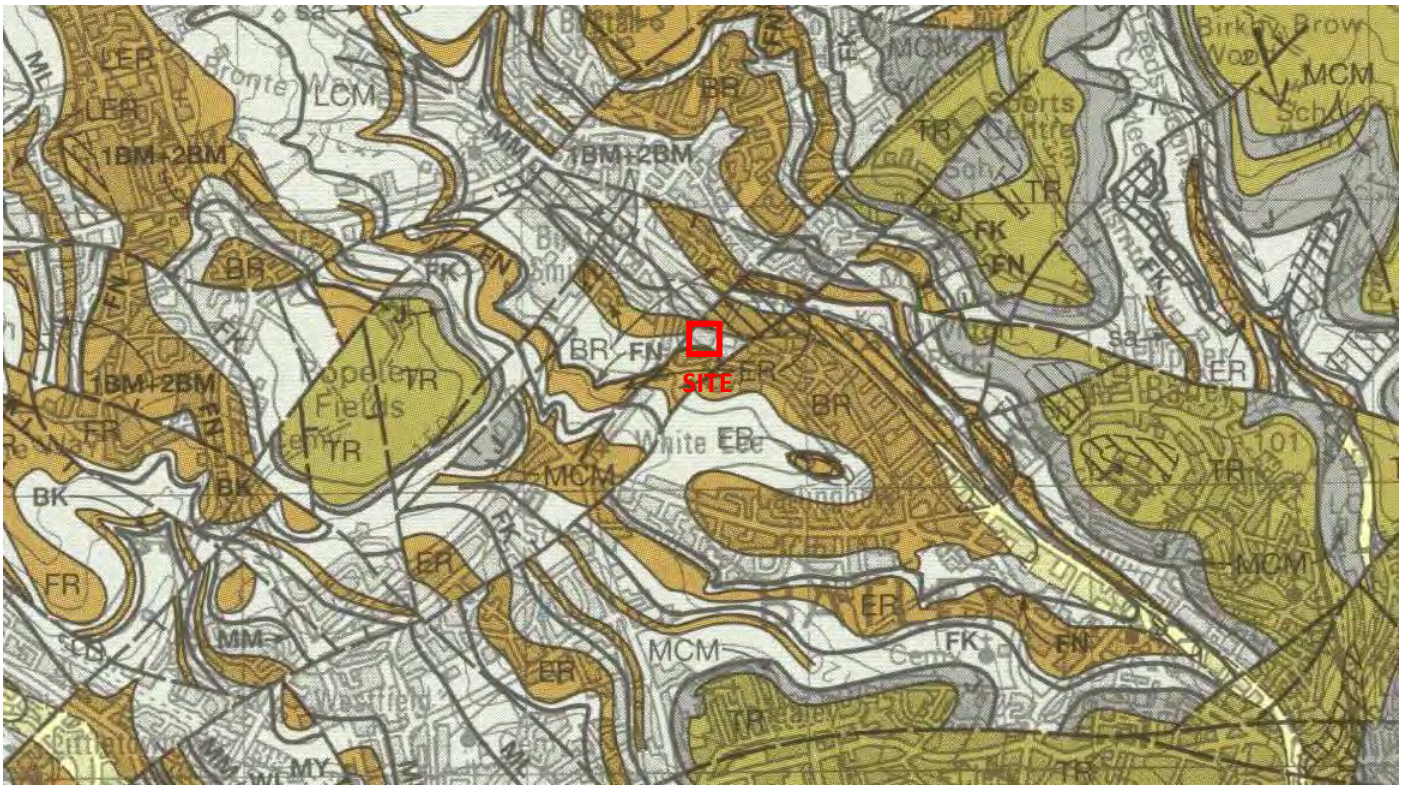


PROPOSED OTHER SIDE ELEVATION
Scale: 1/8"=1'-0"

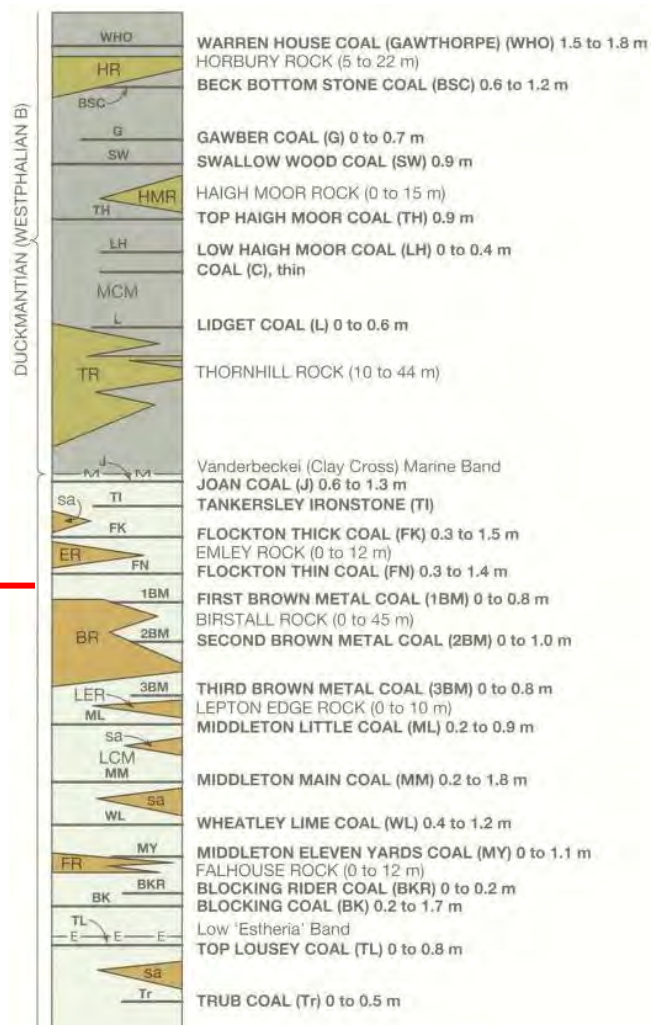
Date: 2009/01/19 11:59 AM
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 Country:
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 Fax:
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APPENDIX D

GEOLOGY MAP EXTRACTS

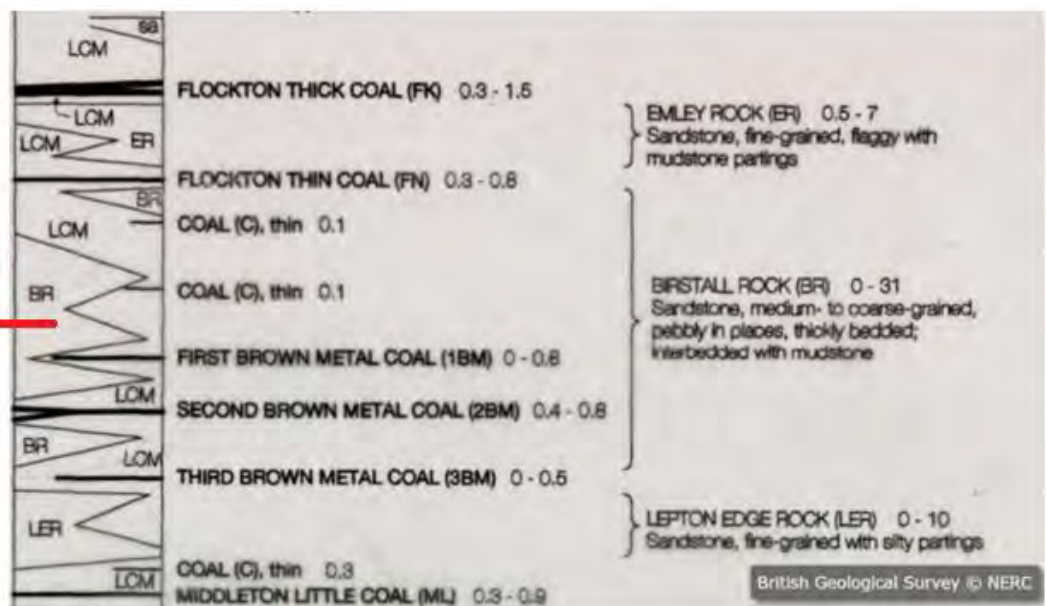


**TENTATIVE SITE
ELEVATION?**



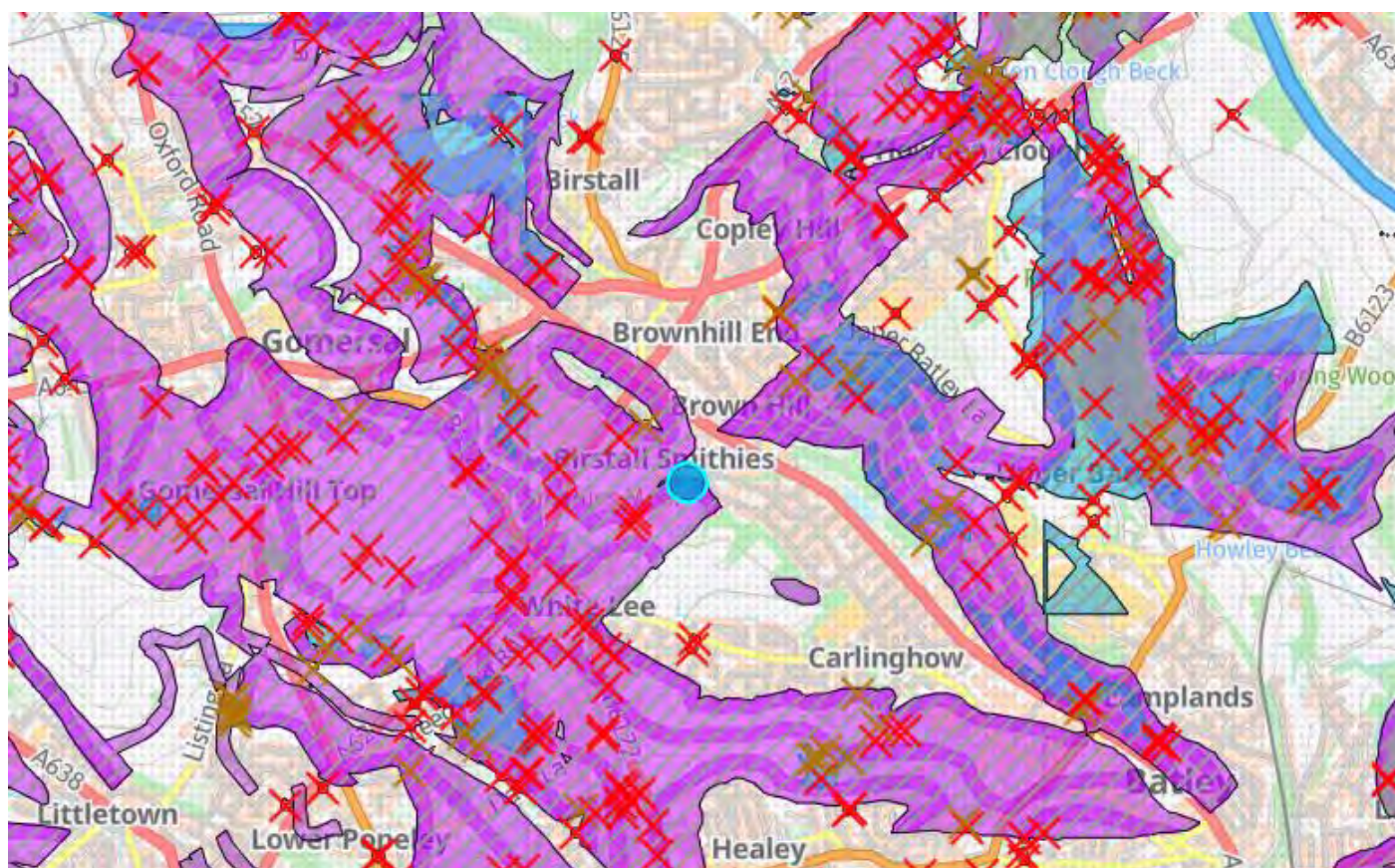


West side
of fault ?



APPENDIX F

CA ONLINE INTERACTIVE MAPPING



APPENDIX F

BGS BOREHOLE RECORD



British
Geological
Survey

BGS ID: 58853 : BGS Reference: SE22NW624
British National Grid (27700) : 422680,425590

SE22/21/183

RECORD OF WELL (SHAFT OR BORE)

At P. Dehewat & Co. SE2268 2559

Town or Village Batley County Yorks. W.R. Six-inch

Exact site _____

_____ in parish of _____

Level of ground surface above sea-level (O.D.) _____ ft. If well starts below ground surface, state how far _____ ft.

Shaft _____ ft., diameter _____ ft. Bore _____ ft. Diameter of bore: at top _____ ins.; at bottom _____ ins.

Details of permanent lining tubes (internal diameters preferred) 12' 6" x 15" from 3' down; 8 1/2" x 15" from 2 ft down; 7 1/2" x 10" from 2' down.

Water struck at depths of (feet) _____

Rest-level of water _____ below top of well _____ feet. Suction at _____ feet. Yield on _____ hours' test _____ gallons per _____ (with pump of capacity _____ g.p.h.); depressing water level to _____ feet below top. Time of recovery _____ hrs. Amount normally pumped daily _____ g.p.h. for _____ hours.

Quality (attach copy of analysis if available) _____

Sunk by C. Isler & Co. for Date of well 12/1/51

Information from C. Isler

GEOLOGICAL CLASSIFICATION	NATURE OF STRATA (and any additional remarks)	THICKNESS		DEPTH	
		Feet	Inches	Feet	Inches
	Top soil	1	-	1	-
	Clay & stones	15	-	16	-
	Soft shale	13	-	29	-
	Hard shale	5	-	34	-
	Soft shale	4	-	38	-
	Stone	18	-	56	-
	Soft shale	14	-	70	-
	Hard shale	40	-	110	-
	Stone	38	-	148	-
	Shale with shells	17	-	165	-
	Coal	2	-	167	-
	Soft coal	29	-	196	-
	Stone	2	-	198	-
	Shaley stone	38	-	236	-
	Coal	3	-	239	-
	Shaley stone	61	-	300	-
	True clay	21	-	321	-
	Stone	6	-	327	-
	Shale	37	-	364	-
	Stone	18	-	382	-
	Shale	3	-	385	-
	Stone	5	-	390	-
	Coal	1	-	391	-
	Shale	31	-	422	-
	Coal	1	-	423	-
	Stone	8	-	431	-
	Shale	9	-	440	-
	Stone	1	-	441	-
	Shale	28	-	469	-
	Stone	4	-	473	-
	Shale	3	-	476	-
	Stone	3	-	479	-

For Survey use only

Geological Survey and Museum, SOUTH KENSINGTON, LONDON, S.W.7.

Date received _____ G.S. Office File No. _____ Site marked on 1" map (use symbol) _____

NOV 1939

(*) 11/11, 12/12/11, 13/13, 14/14, 15/15, 16/16, 17/17, 18/18, 19/19, 20/20, 21/21, 22/22, 23/23, 24/24, 25/25, 26/26, 27/27, 28/28, 29/29, 30/30, 31/31, 32/32, 33/33, 34/34, 35/35, 36/36, 37/37, 38/38, 39/39, 40/40, 41/41, 42/42, 43/43, 44/44, 45/45, 46/46, 47/47, 48/48, 49/49, 50/50, 51/51, 52/52, 53/53, 54/54, 55/55, 56/56, 57/57, 58/58, 59/59, 60/60, 61/61, 62/62, 63/63, 64/64, 65/65, 66/66, 67/67, 68/68, 69/69, 70/70, 71/71, 72/72, 73/73, 74/74, 75/75, 76/76, 77/77, 78/78, 79/79, 80/80, 81/81, 82/82, 83/83, 84/84, 85/85, 86/86, 87/87, 88/88, 89/89, 90/90, 91/91, 92/92, 93/93, 94/94, 95/95, 96/96, 97/97, 98/98, 99/99, 100/100, 101/101, 102/102, 103/103, 104/104, 105/105, 106/106, 107/107, 108/108, 109/109, 110/110, 111/111, 112/112, 113/113, 114/114, 115/115, 116/116, 117/117, 118/118, 119/119, 120/120, 121/121, 122/122, 123/123, 124/124, 125/125, 126/126, 127/127, 128/128, 129/129, 130/130, 131/131, 132/132, 133/133, 134/134, 135/135, 136/136, 137/137, 138/138, 139/139, 140/140, 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