



Phase 1 Desk Study Site Investigation Report

LOCATION	Harefield Hall Farm, Chadwick Lane, Heywood OL10 1QL
ISSUE DATE	May 2023
FOR	PGC Estates Ltd
CLIENT REF.	
OUR REF.	G23108

Prepared by



Carl Mayfield BSc (Hons) FGS GradIOSH
Geoenvironmental Engineer

Checked by



Stuart Howe BSc (Hons) FGS
Senior Geotechnical Engineer

Table of Contents

EXECUTIVE SUMMARY	3
1. INTRODUCTION	3
2. SCOPE OF WORKS	3
3. FINDINGS OF PHASE 1 INVESTIGATION	4
3.1 ANTICIPATED GEOLOGY	4
3.2 HISTORICAL OS MAPS AND HISTORICAL LAND USE	4
3.3 GROUNDSURE ENVIRO + GEO INSIGHT REPORT	4
3.4 WALKOVER SURVEY OBSERVATIONS	8
3.5 COAL AUTHORITY REPORT SUMMARY	10
4. QUALITATIVE RISK ASSESSMENT	11
4.1 METHOD	11
4.2 RISK ASSESSMENT	11
5. CONCLUSIONS.....	14
6. RECOMMENDATIONS.....	14



Units 3a and 4 Terry Dicken Industrial Estate
Ellerbeck Way
Stokesley
North Yorkshire
TS9 7AE

Tel. 01642 713779

Fax 01642713923

Email enquiries@geoinvestigate.co.uk

Executive Summary

The major conclusions of this desk-based Phase one study are summarised in the table below:

Site Suitability	Desk Study Finding	Preliminary Assessment
Normal Foundations	Unknown depth of sand and gravel superficial geology. Some noted as loose	Potentially suitable, depending on strength.
Soakaways	Recorded superficial geology is sand and gravel.	Likely to be suitable

Potential Risks	Desk Study Finding	Preliminary Risk Assessment
Radon Gas	Less than 1% of properties affected	Negligible
Chemical Contamination	Historical nearby and on-site land uses potentially giving rise to a range of inorganic and organic contaminants including asbestos, metals/metalloids, PAHs, petroleum hydrocarbons, and pathogens.	Moderate
Hazardous Gas	Potential for hazardous gas to be generated in made/infilled ground deposits.	Moderate
Ground Instability/subsidence	Potential for vegetation influence on shrink-swell clays which may be present, including risk of soil heave.	Low
Ground Instability/subsidence	Potential for significant deposits of compressible made/infilled ground.	Very Low

NB. Arbitrary potential hazard assessment: High (Red), Moderate (Amber), Low (Yellow), Very Low (Green), Negligible (uncoloured)

1. Introduction

In accordance with your instruction, Geoinvestigate Ltd. has carried out a Phase 1 Desk Study Investigation of the land at Harefield Hall Farm, Chadwick Lane, Heywood OL10 1QL. The location of the site is shown on the Groundsure Enviro+Geo Insight report presented in Appendix 2.

The site currently comprises an area of land some 1.8ha in size with access from Chadwick Lane to the west side of the site. The site has a 50m driveway leading to the main former Farmstead and extended farm buildings occupying land to the northwest of the site. Possible former farmhouse and principally stone built agricultural barns and more recent structures are present surrounded by hardstanding and courtyards. To the south and east agricultural land is present in the form of grassland with fences and sporadic trees and hedges.

It is understood the proposal is to convert the existing agricultural barns to residential dwellings. One of the more recent barns will be demolished and replaced by new dwellings.

The purpose of the Phase 1 Desk Study investigation was to review the historical land use and geological information for the site in order to provide an assessment of the potential geotechnical/foundation problems together with a qualitative contamination and ground gas risk assessment.

2. Scope of Works

The investigation comprised a review of the following information:

- An extract from the 1:50,000 BGS geological mapping.
- Historical OS maps of various scales dating back to 1851 (presented in Appendix 1).
- Observations from a walkover study carried out by Stuart Howe of Geoinvestigate.
- A GroundSure Enviro+Geo Insight Report. This is included in Appendix 2.
- A Con29 Coal Mining Report, included in Appendix 3.

3. Findings of Phase 1 Investigation

3.1 Anticipated Geology

The extract of the 1: 50,000 BGS geological mapping indicates that superficial geology present will comprise of Devensian Glaciofluvial deposits of sand and gravel underlain by bedrock of the Pennine Lower Coal Measures Formation (mudstone, siltstone, and sandstone). An area of artificial ground is noted some 80m to the south of the site.

Nearby published BGS boreholes suggest that sand and gravel soils may be present at the site at shallow depth, with deeper deposits comprising weak clay.

3.2 Historical OS Maps and Historical Land Use

Copies of historical OS maps were obtained for the site covering the period 1851 to 2022. Historical land uses and major features located within the site boundary and externally but potentially within influencing distance are summarised in Table 1 below. The earliest OS map of 1851 shows the site to be undeveloped land to the east of a lane and a farmstead noted as 'Captain Fold Farm'.

Table 1: Summary of Historical OS Map Land Use & Potential Hazard Identification

Map Feature	Location	Appears	Absent	Notes
Coal Pit	400m northwest	1851	1890	Potential for infilled ground.
Harefield Farm	Onsite	1890	Present	Construction and land use may have lead to potential contamination
Sand Pits	Several noted 23m – 67m west, southwest, and north.	1851	1890	Potential for infilled ground - possible source of ground gas and contamination and indicates permeable strata may be present
Roeacre Dam	400m west	1851	Present	Potential flood risk
Roeacre Brook	10m south	1851	Present	Potential contamination receptor
Residential dwellings	100m northwest	1908	Present	By 1979 the surrounding area is mostly developed.
Unspecified tank	2m Northeast	1956	1973	Adjacent wall to site boundary with Harefield House

NB. Arbitrary potential hazard assessment: High (Red), Moderate (Amber), Low (Yellow), Very Low (Green), Negligible (uncoloured)

A review of the historical OS maps has highlighted the land uses most likely to present (or have presented) a hazard or source of potentially harmful contamination to the study area. The primary features of interest are the development on site, surrounding sand pitting and possible infilling activities and tank present northwest of the site.

3.3 GroundSure Enviro + Geo Insight Report

The GroundSure Enviro+Geo Insight Report presented in Appendix 2 provides listings of potentially contaminative current and past land uses together with possible pathway and receptor information. It also covers other potential risks to the site including ground hazards associated with the area's natural geological setting and man-made hazards such as those arising from development activities. A summary of the relevant report findings is presented in Table 2 below and on the following pages.

Table 2: GroundSure Enviro+Geo Insight Summary:

Details	Feature	Location relative to site
Past land use		
Historical industrial land uses	Unspecified Ground workings (19) Unspecified Pit (6) Sand Pit (8) Unspecified Heap (9) Rope walk (2) Old Shaft (4) Unspecified Mill (16) Shed Leather works (4) Chimney (2) Unspecified depot Cotton Mill (2) Gravel hole (3) Tannery Coal Pit Colliery Brickyard Tank (3) Railway wagon works (3) Railway sidings	23m west (closest) 52m west (closest) 67m southwest (closest) 78m southwest (closest) 159m northwest (closest) 186m south (closest) 216m west (closest) 242m northwest 249m west (closest) 301m west (closest) 309m south 330m northwest (closest) 337m northeast (closest) 337m west 356m northwest 443m northwest 447m west 468m southwest (closest) 477m southwest (closest) 481m southwest
Historical Tanks	Unspecified Tank (65)	2m northeast (closest)
Historical Energy Features	Electrical Substation (8)	175m northwest (closest)
Historical Garages	Garage	356m north
Landfill and Other Waste Sites		
Historical landfill (LA/mapping records)	No records within 500m	N/A
Historical landfill (EA/NRW records)	Inert industrial, commercial (2) Inert Commercial environmental	8m south (closest) 258m west
Historical waste sites	Industrial Yard / Tannery Environmental Management depot	405m west 423m south
Licensed waste sites	Household/commercial/industrial (2) Inert and excavation special waste (3)	399m west (closest) 402m west (closest)
Waste exemptions	Storing waste exemption (8) Using waste exemption (11) Treating waste exemption (17)	Onsite (closest) 314m North (closest) 314m North (closest)
Current Land uses		
Recent industrial land uses	Sport and Leisure equipment repair Electric Pylon Textile machinery unit Electric sub station General construction supplies Rubber and plastics unit	59m northwest 93m southeast 158m northwest 174m northwest 208m west 246m west
Current or recent petrol stations	No records within 500m	N/A
Control of Major Accident Hazards (COMAH)	No records within 500m	N/A
Licensed pollutant release (Part A(2)/B)	No enforcements notified (5)	278m southwest (closest)
Pollution incidents (EA/NRW)	General biodegradable waste Construction and demolition (7) Pollutants /smoke Cutting oils	287m west 287m west (closest) 417m west 482m west

Table 2 is continued on the following page

NB Arbitrary potential hazard assessment: potentially significant (yellow), or unlikely to be significant (uncoloured). Potential receptors for contamination are highlighted blue.

Table 2 (ctd.): GroundSure Enviro+Geo Insight Summary:

Details	Feature	Location relative to site
Hydrogeology		
Superficial aquifer	Secondary A	Onsite
Bedrock aquifer	Secondary A	On site
Groundwater vulnerability	High vulnerability	On site
Groundwater abstractions	Historical (11) Active (2)	393m west (closest) 681m south (closest)
Surface Water Abstractions	Historical (8) Active (4)	640m north (closest) 1542m southeast (closest)
Potable abstractions	None recorded within 2000m	N/A
Hydrology		
Water Network (OS MasterMap)	Inland river not influenced by tidal action (5)	29m southwest (closest)
WFD Surface water body catchments	River Roch	On site
WFD Surface water bodies	River Roch	639m north
WFD Groundwater bodies	Northern Manchester Carboniferous Aquifers	On site
River and coastal flooding		
Risk of Flooding from Rivers and Sea (RoFRaS)	No records within 50m	N/A
Historical Flood Events	No records within 250m	N/A
Surface water flooding		
Surface water flooding	Highest risk on site Highest risk within 50m	1 in 1000 year 0.1m – 0.3m 1 in 30 year, 0.3m - 1.0m
Groundwater flooding		
Groundwater flooding	Highest risk on site Highest risk within 50m	Moderate Moderate
Environmental designations		
Sites of Special Scientific Interest (SSSI)	Rochdale Canal (3)	1460m east (closest)
Local Nature Reserves (LNR)	Hopwood Woodlands	1962m south
Green Belt	Merseyside and Greater Manchester	On site
Nitrate Vulnerable Zones	River Irk (Moston Brook to Irwell)	870m southeast
Visual and cultural designations		
Listed Buildings	Church of all souls, north Heywood	148m northwest
Agricultural and Habitat designations		
Agricultural Land Classification	Urban Grade 4	On site On site
Open mosaic habitat	Environment Agency National land use database	3m south 30m southwest
Geology 1:10,000 scale		
Artificial and made ground (10k)	Made ground (Undivided) (5) Infilled ground (Artificial)	2m west (closest) 217m southeast (closest)
Superficial geology (10k)	Glaciofluvial deposits - Sand and Gravel Peat	Onsite 151m northeast
Bedrock geology (10k)	Pennine lower coal measures – mudstone, siltstone, sandstone (2) Old Lawrence Rock - Sandstone	On site (closest) 492m west
Bedrock faults and other linear features (10k)	Fault, normal inferred (5) Landform kettle hole	On site (2) (closest) 294m east
Table 2 is continued on the following page		

NB Arbitrary potential hazard assessment: potentially significant (yellow), or unlikely to be significant (uncoloured). Potential receptors for contamination are highlighted blue.

Table 2 (ctd.): GroundSure Enviro+Geo Insight Summary:

Details	Feature	Location relative to site
Geology 1:50,000 scale		
Artificial and made ground (50k)	Made ground (Undivided)	13m southeast
Artificial ground permeability (50k)	Mixed - Very high to Low	13m southeast
Superficial geology (50k)	Glaciofluvial deposits - Sand and Gravel Peat	Onsite 151m northeast
Superficial permeability (50k)	Intergranular (Very High to High)	On site
Bedrock geology (50k)	Pennine lower coal measures – mudstone, siltstone, sandstone (2) Old Lawrence Rock - Sandstone	On site (closest) 492m west
Bedrock permeability (50k)	Fracture (Moderate to Low)	On site
Bedrock faults and other linear features (50k)	Fault, inferred (2)	193m west (closest)
Natural ground subsidence		
Shrink swell clays	Negligible	On site
Running sands	Very low	On site
Compressible deposits	Negligible Very low	On site 13m southeast
Collapsible deposits	Very low	On site
Landslides	Very low	On site
Ground dissolution of soluble rocks	Negligible	On site
Mining, ground workings and natural cavities		
BritPits	Sand (3) Sand and Gravel	103m west (closest) 118m southwest
Surface ground workings	Unspecified ground workings (4) Pond Unspecified Pit (4) Sand pit (9) Unspecified heap (3) Refuse heap (3)	23m west (closest) 52m west 52m west (closest) 67m southwest (closest) 78m southwest (closest) 114m west (closest)
Underground workings	Old shafts (6)	186m south (closest)
Mining, ground workings and natural cavities		
Historic mineral planning areas	Surface mineral workings (2)	112m south (closest)
Coal mining	The site is located within a coal mining area	On site
JPB mining areas	Whilst outside of an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) may have information such as mining plans and maps held within their archive that have occurred within 1km of this property. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk.	On site
Radon Risk		
Radon Risk	Less than 1%. No protection required	On site
Soil chemistry		
Mostly normal levels but may find slightly elevated Lead and Cadmium		
Railway infrastructure and projects		
Historical railway and tunnel features	No records within 250m	N/A
Railways	No records within 250m	N/A

NB Arbitrary potential hazard assessment: potentially significant (yellow), or unlikely to be significant (uncoloured). Potential receptors for contamination are highlighted blue.

The GeoInsight report has highlighted no additional potential risks to the site or the intended development arising due to historical or current land uses and the site's geological setting, beyond those already discussed, save for perhaps that the site is present within a nitrate vulnerable zone. The adjacent Roeacre Brook surface water body as well as groundwater have been highlighted as a potential receptor of contamination.

3.4 Walkover Survey Observations

A site reconnaissance visit was undertaken on 14th December 2022 by Stuart Howe of Geoinvestigate.

The site currently comprises an area of land some 1.8ha in size with access from Chadwick Lane to the west of the site. The site has a 50m driveway leading to the main former Farmstead and extended farm buildings occupying land to the northwest of the site. Possible former farmhouse and principally stone built agricultural barns and more recent structures are present surrounded by hardstanding and courtyards. To the south and east agricultural land is present in the form of grassland with fences and sporadic trees and hedges.

Two hydrocarbon tanks are present on the site, one (heating oil – kerosene, of plastic construction) within the courtyard area, adjacent to the possible former farmhouse and the other to the south of the more recent (to be demolished) agricultural open barn. The latter tank is of poor condition (although no leakage was apparent) and of large volume being of the appearance of a former converted road tanker, possibly to supply on-site farm machinery.

On the basis of the walkover inspection only, the risk of a serious contamination hazard occurring at this site would be assessed to be Moderate given the current condition of the site and use and tanks on or adjacent to the site. However, no evidence of any physical hazards was found, such as hydrocarbon staining.

The hazardous gas risk at the site, based solely on the findings of the walkover survey, would be assessed to be very low given it is unlikely any substantial gas source exists beneath the site. The limited evidence of minor groundworks does not indicate that significant made ground might be present.

It is noted however that despite the apparent lack of evidence of any widespread contamination encountered during the visual inspection described above, any planning application is likely to require confirmation that no contamination is likely to have occurred. Photographs taken during the walkover survey are presented below and on the following page:

Photograph 1: Under open barn building**Photograph 2:** Cobbled courtyard hardstanding.**Photograph 3:** Cobbled courtyard adjacent to above ground fuel tank**Photograph 4:** Field area overlooking the southeast of the site**Photograph 5:** Fuel tank adjacent to south side of new barn**Photograph 6:** Oil heating tank in cobbled courtyard

3.5 Coal Authority Report Summary

According to the Coal Authority (CA), the site is not located within a development high risk area. The CA report states that:

- The site has previously been in an area of underground coal mining with the property in the vicinity of one coal seam between 100m and 110m in depth last worked in 1840. It suggests that any movement associated with this activity should have since stopped. Importantly the report does not state the coal authority believes that there is coal at or close to the surface or that any such strata may have been worked sometime in the past as may often be the case.
- There are “no known coal mine entries within, or within 20m of, the boundary of the property”. Again, importantly, not suggesting that there may exist in the local area mine entries of which the Coal authority has no knowledge, as may sometimes be the case.
- The report also states that the “The property is not within the boundary of an opencast site from which coal is being removed by opencast methods.
- There has been no damage notice or claim for any property within 50m of the site and no records of mine gas, subsidence or remedial works are recorded for the site.

Based on the CA report, a significant risk of subsidence to the proposed development would **not** be inferred as it is likely that coal seams are likely too deep to impact this site.

4. Qualitative Risk Assessment

4.1 Method

In order to assess the potential risks to the site, information obtained on the potential sources of hazard identified in Section 3 have been reviewed and applied to a model of the site. This allows an assessment of the potential sources of contamination to be made by examining the potential pollutant linkages between these and the receptors at the site.

The risk assessment presented comprises a source-pathway-receptor model developed in the context of the intended end use of the site (Residential use).

It is noted that an alternative land use would present different pollutant linkages with more or less vulnerable receptors and differing pathways for exposure. Were the intended land use to be changed at the site, a revised risk assessment would be required.

Identified potential sources of hazard or contamination, vulnerable receptors, and possible pathways by which they may be exposed are presented in the Conceptual Ground Hazard Model (CGHM) presented in Figure 1, see Section 4.2.

In addition to risks to human health and controlled waters and aquifers posed by contamination and ground gas, the CGHM examines the potential risks to the construction of the development including its buildings from geological or geotechnical hazards.

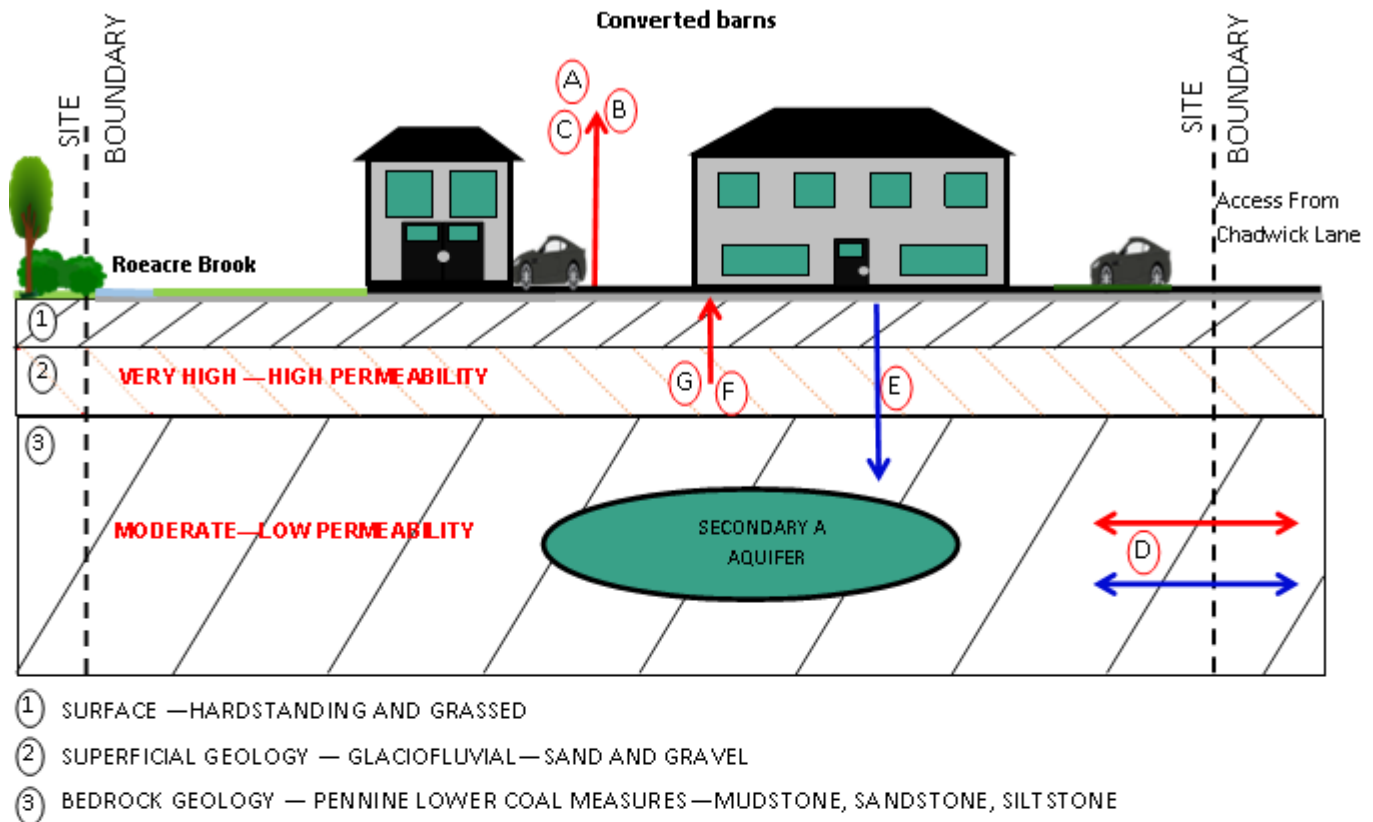
It allows an overall assessment to be made of the potential hazards and risks to the site and the proposed development with respect to “fitness for purpose”. Superficial and bedrock geology which is anticipated to underlie the site is assumed to exhibit very high to high and moderate to low permeability, respectively.

4.2 Risk Assessment

The desk study has highlighted the presence of possible sources of contamination which could potentially affect (or have affected) the site, primarily regarding the onsite the fuel tanks and nearby sand pits and likely subsequent infilled ground.

Contamination from external sources would require a favourable pathway for migration into the site. BGS mapping suggests that the superficial deposits will primarily consist of sand and gravel which would have intrinsically very high to high permeability. As such, it is likely that a plausible pathway for contamination migration into or out of the site could exist. However, save for the adjacent sand extraction and infilled land, the majority of potential sources for contamination from external sources are likely to be too distant or minor to pose any significant risk.

Potential receptors at the site would include the end users of the site (residents), workers employed in the construction of the new development, the buildings themselves and their services, plants and vegetation, neighbouring sites (and their users/occupants), nearby surface water and ground water at depth. A representation of the potential hazards and pollutant linkages is shown in Figure 1 overleaf.

Figure 1 – Conceptual Ground Hazard Model of site including a Source, Pathway and Receptor Model

IDENTIFIED HAZARDS Including Potential CONTAMINATION SOURCES

- Onsite derelict barns
- Potential hydrocarbon contamination from onsite fuel tanks
- Potential for ground gases from made ground onsite and adjacent infilled sand pits

IDENTIFIED RECEPTORS and ASSOCIATED PATHWAY

- A** — End Users through Direct Contact / Inhalation / Ingestion. Buildings and hard standing will encompass some of the site, removing any pathway to end users through direct contact in these areas.
- B** — Plants and Trees through uptake, likely given the intended end use of the site.
- C** — End Users through cultivation and consumption of vegetables / fruit. Likely given the intended end use of the site.
- D** — Neighbouring Sites through lateral migration (in soil and water, including surface water run off).
- E** — Groundwater through leaching of sub-soil.
- F** — Buildings and services through direct contact. Buildings and hard standing will encompass some of the site, removing any pathway to end users through direct contact in these areas.
- G** — End users and buildings through ground gas migration.

The CGHM and the summary table below (Table 3) present the most likely potential sources of contamination, gas or geotechnical risk that are considered to be possible either within or near to the study site.

The identified potential contamination sources could feasibly have given rise to harmful and potentially mobile contamination of made ground and/or natural deposits which might underlie the site. Superficial deposits are anticipated to primarily comprise high permeability sand and gravel soils and so significant contamination migration into or out of the site is currently considered to be possible or have occurred.

Therefore, assuming the worst-case scenario, the potential for harmful contamination to exist at the site from historical sources is assessed to be Moderate to Low due to the potentially contaminative activities located near to and/or within the study area (primarily concerning the onsite fuel tanks and adjacent infilled land).

The hazardous gas risk is currently assessed to be Moderate as it is possible that a source (via the adjacent infilled ground) of potential hazardous gas exists at the site or within influencing distance.

The actual current level of risk to the development and its users can only be ascertained for certain through confirmation of the ground conditions by a Phase 2 intrusive investigation, including a contamination survey, and potentially a gas monitoring survey.

Table 3: Summary of Conceptual Ground Hazard Model

Potential Source	Nature of Hazard	Associated Contaminants	Pathway	Receptor	Preliminary Risk Rating
Historical land use and development Possible adjacent made ground. Onsite fuel tanks	Inorganic and organic chemical contaminants within soil.	-Trace metals -PAHs -Petroleum hydrocarbons -Asbestos -Pathogens (microbiology)	-Direct human contact -Ingestion of soil -Ingestion of dust -Inhalation of vapour -Leaching into ground or surface waters	-Site Operatives -End Users -Vegetation -Controlled waters -Structures and services -Neighbouring sites/users	Moderate - Low
Possible made ground	Hazardous ground gas migration.	Landfill-type gases (CO ₂ , CH ₄ etc.)	-Inhalation -Explosion risk	-Site Operatives -End Users -Structures	Moderate
Local Geology	Radon gas migration	Radon gas	-Inhalation	-End Users	Negligible
Shrink-swell clays	Ground instability vegetation influence / heave	N/A	Direct	-End Users -Structures	Negligible
Infilled ground	Ground instability via risk of settlement	N/A	Direct	-End Users -Structures	Very Low

NB. Arbitrary potential hazard assessment: High (Red), Moderate (Amber), Low (Yellow), Very Low (Green), Negligible (uncoloured)

5. Conclusions

A summary of the anticipated ground conditions, risks and implications based on the findings of Sections 3 and 4 of this report is presented in Table 4 below:

Table 4: Summary of Phase 1 Desk Study Findings

Concern	Desk Study Finding	Initial Risk Assessment	Potentially Useful Action in a Phase 2 Site Investigation
Normal Foundations	Unknown depth of sand and gravel superficial geology. Some noted as loose	Potentially suitable	Borehole investigation to confirm strength of ground with regard to supporting building loads.
Soakaways	Recorded superficial geology is sand and gravel.	Likely to be suitable	Water infiltration testing to quantify permeability of superficial deposits
Radon Gas	Less than 1% of properties affected	Negligible	None. No radon protection required.
Chemical Contamination	Historical nearby and on-site land uses potentially giving rise to a range of inorganic and organic contaminants including asbestos, metals/metalloids, PAHs, petroleum hydrocarbons, and pathogens.	Moderate - Low	Chemical analysis for potential contaminants in soil samples (and potentially leachate). Samples should be recovered from made ground (if found) and topsoil, and also potentially underlying natural sub soils to check for potential leaching and/or migration into the site from possible external sources.
Hazardous Gas	Potential for hazardous gas to be generated in made/infilled ground deposits.	Moderate	Ground gas monitoring required due to sand and gravel deposits likely present providing a viable pathway from the identified nearby ground gas sources.
Ground Instability/ subsidence	Potential for vegetation influence on shrink-swell clays which may be present, including risk of soil heave.	Negligible	Borehole investigation to confirm strength of both natural and made ground.
	Potential for significant deposits of compressible made/infilled ground.	Very Low	

NB. Arbitrary potential hazard assessment: High (Red), Moderate (Amber), Low (Yellow), Very Low (Green), Negligible (uncoloured)

The initial risk assessment provided above is tentative as it is based only on the Phase 1 desk study. The risks will need to be reassessed and may perhaps change significantly becoming higher or lower depending on the results of the Phase 2 intrusive investigation and contamination/gas survey, should these be undertaken.

6. Recommendations

In light of the Phase 1 desk study findings it is recommended that a Phase 2 investigation be undertaken at the site to better explore the possible risks that have been identified. This should include contamination analyses and ground gas monitoring together with a geotechnical appraisal of the site to establish correct foundation requirements. As there are relative uncertainties, this work is recommended in order to establish the actual site conditions and to properly assess both geotechnical and environmental risks.

The Phase 2 investigation should be designed to focus on the potential contaminants highlighted in the CGHM (Figure 1 and Table 4).

Table 5: Proposed Phase 2 Site Investigation Specification

Action	Quantities	Justification/Details
Window Sampling Boreholes	Up to 10 boreholes. (up to 4-5m in depth – if achievable)	Establish actual ground conditions and confirm strength of ground. Retrieve samples of possible made ground and natural soils for geotechnical testing and contamination analysis. Potentially recover ground water samples if encountered. Installation of ground gas monitoring wells (if appropriate).
Hand excavated trial pits	Up to 6 (up to 1m in depth – if achievable)	Further inspect condition and composition of soils and recover additional samples for contamination analyses, including in locations which may be difficult for plant to access.
Chemical Contamination Analysis of Soils and Leachate (and possibly ground water if pertinent)	Up to 8 No. samples from topsoil and/or made ground at shallow depth (<1m) and potentially also deeper natural strata or made ground (if encountered).	Quantify risk posed to receptors identified in CGHM (see Figure 1) for revised risk assessment. Determinands should include a range of metals/metalloids, speciated PAH content, petroleum hydrocarbon content, BTEX, asbestos presence, and soil organic matter content (to aid in revised risk assessment).
Gas monitoring	Up to 6 No. visits over 3 months. Preferably including occasions of <1000mb and after sharp drop (may only be required in made ground encountered at site).	Quantify risk posed by potential hazardous gas from made/in-filled ground or shallow coal mining. Possible analysis of Total Organic Carbon (TOC) to support gas measure recommendations (or in the absence of gas monitoring data) using guidance published in CL:AIRE research bulletin RB17.
Geotechnical Testing	Up to 50+ No. Up to 5 No.	Moisture content determination to classify nature of soils. Atterberg Limit determinations to assess the shrinkage and swelling characteristics of the ground should clay soils be encountered.
Provision of Factual and Interpretive Report	N/A	Presentation of findings and implications including: • Site plan • Borehole and trial pit logs • Results of geotechnical testing • Contamination analysis results • Results of water infiltration testing • Ground gas measurements (if appropriate) • Revised CGHM and chemical contamination risk assessment including appropriate soil assessment criteria. • Advice regarding any necessary remediation/validation • Advice regarding foundation design etc.

It should be noted that the scope, extent and cost of the Phase 2 work may increase if extensive ground contamination, or extensive amounts of made ground or drift deposits were found to exist at the site and/or the Local Authority or the Environment Agency require additional information.

END OF REPORT

The findings and contents of this (desk study) Site Investigation Report pertain solely to the study area(s) outlined herein and are based solely on the information presented within this document which has been acquired or provided for the current exercise, unless otherwise stated. The findings and/or recommendations of this report do not take into account any information that is not presented herein and, being a desk-based exercise only, cannot make comment on the actual ground conditions at the site as these have not been directly inspected through excavation. As such, further investigation and/or a reconsideration of the findings of this report should be undertaken if conditions are subsequently discovered to vary from those predicted by this report, or an alternative development plan or land use is subsequently proposed.

This report considers various hypothetical environmental and/or geological risks posed to the site and/or proposed development and offers advice accordingly as guidance only. The findings of this report will remain valid provided ground conditions are as predicted, and no changes to ground or groundwater conditions, either natural or anthropogenic, subsequently take place. No warrantee is offered or implied.

No copying of this report or any part of its contents is permitted without written permission of Geoinvestigate Ltd. nor should the report be made available to any third party without similar prior arrangement.



Units 3a and 4 Terry Dicken Industrial Estate
Ellerbeck Way
Stokesley
North Yorkshire
TS9 7AE

Tel. 01642 713779

Fax 01642713923

Email enquiries@geoinvestigate.co.uk

APPENDIX 1

HISTORICAL MAP RECORD

Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: County Series

Map date: 1890

Scale: 1:2,500

Printed at: 1:2,500



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

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

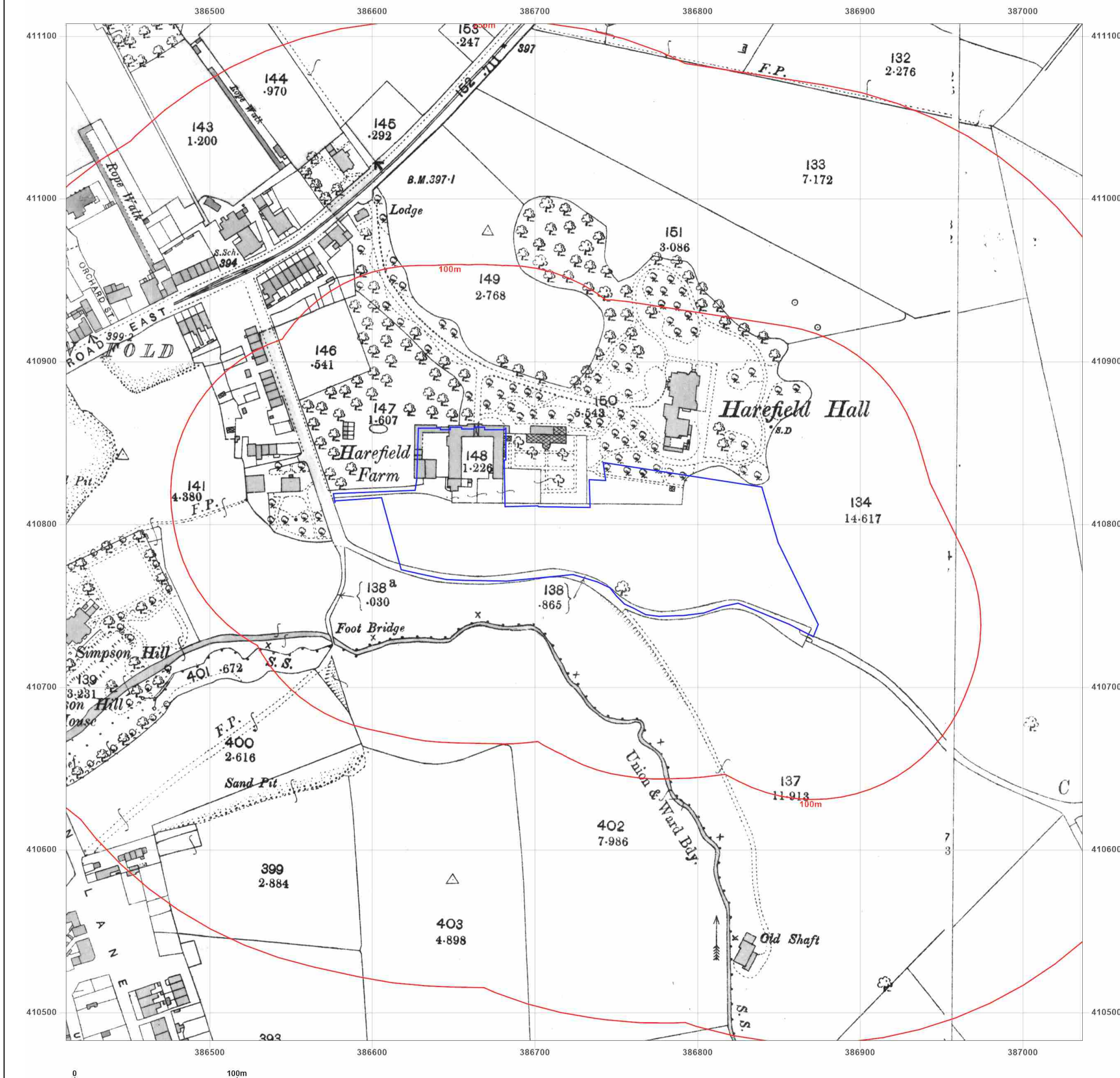


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: County Series

Map date: 1910

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1910
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1910
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

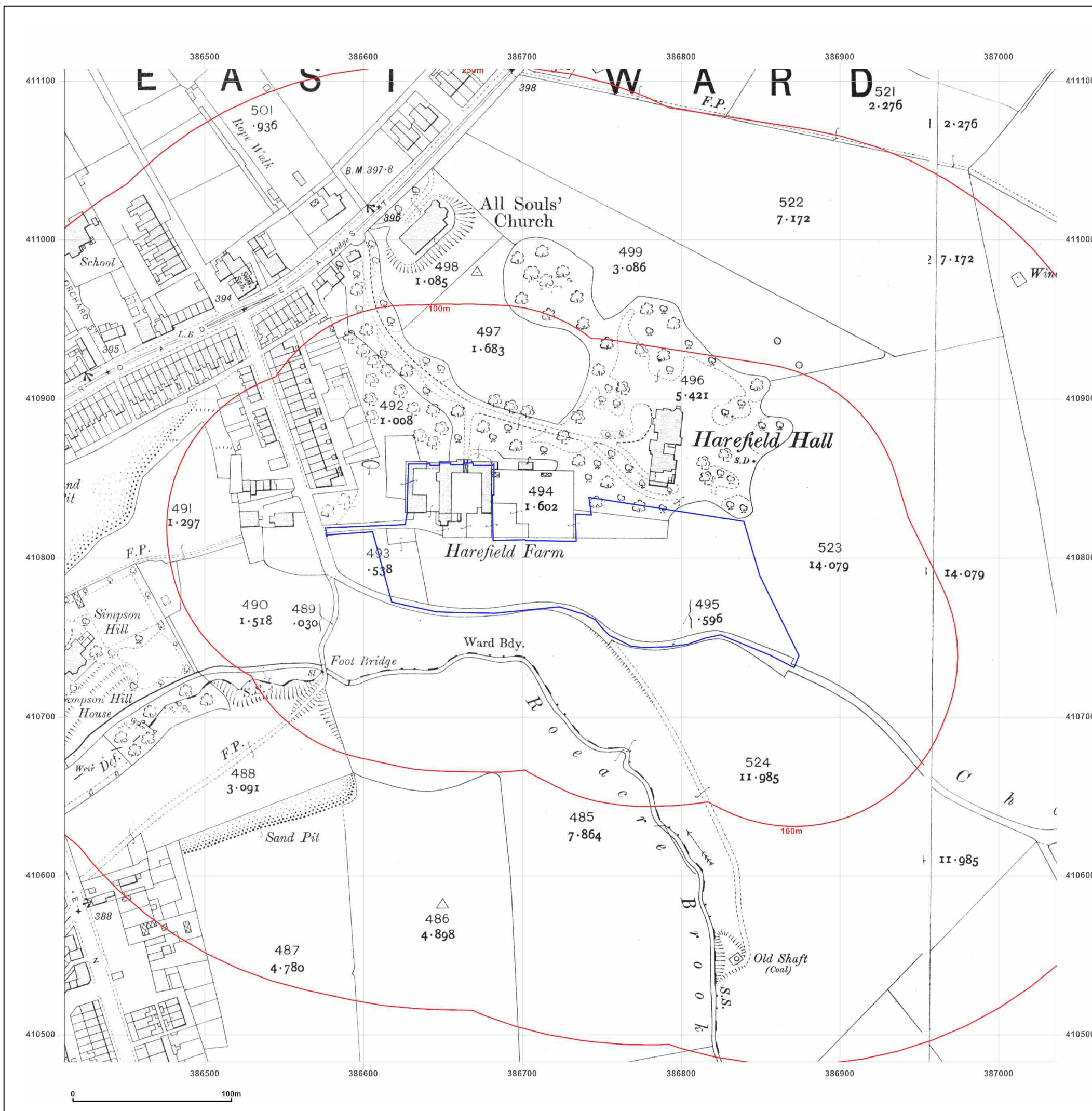


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: County Series

Map date: 1929

Scale: 1:2,500

Printed at: 1:2,500



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

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

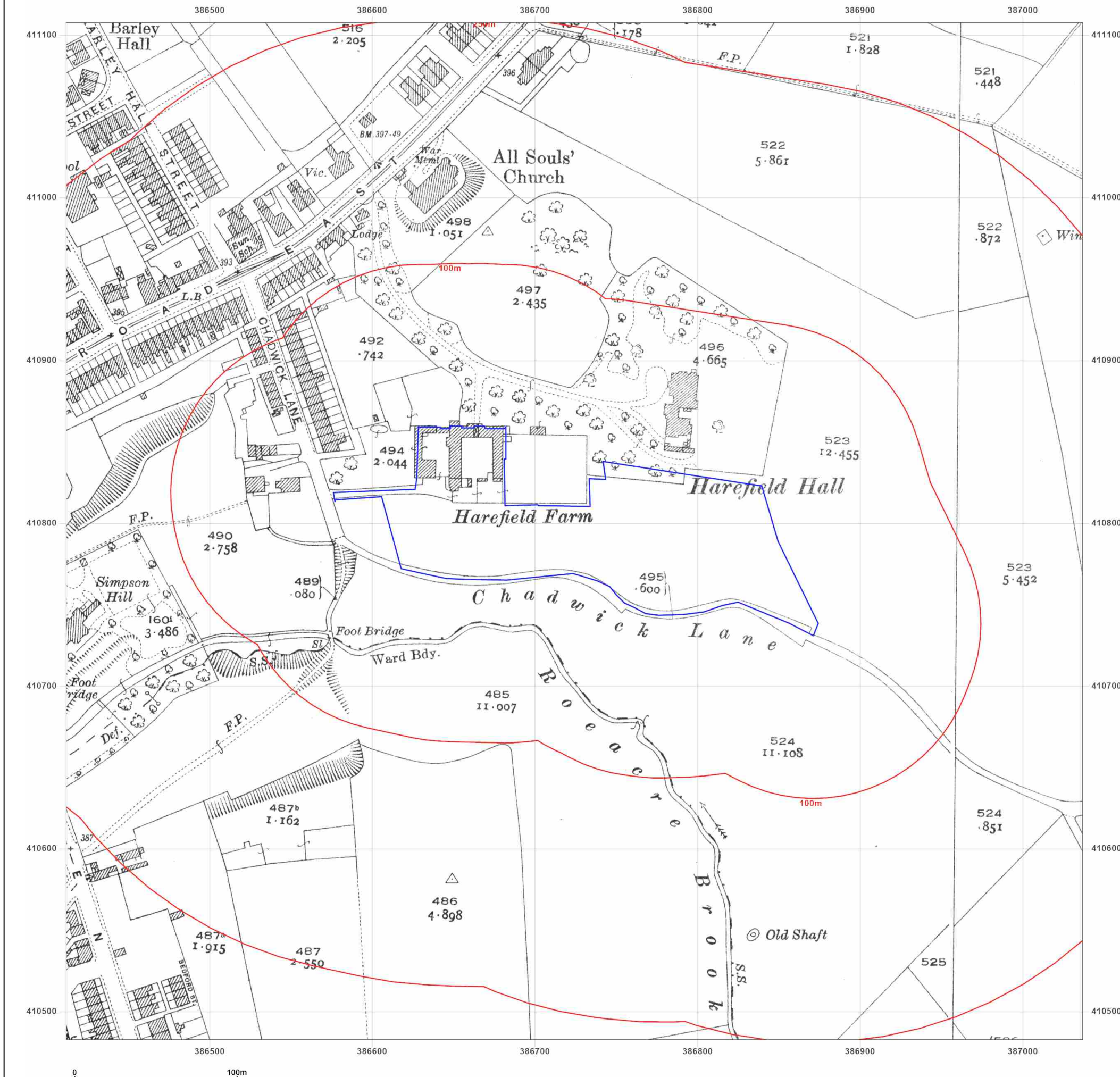


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: County Series

Map date: 1937

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1937
Revised 1937
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1937
Revised 1937
Edition N/A
Copyright N/A
Levelled N/A

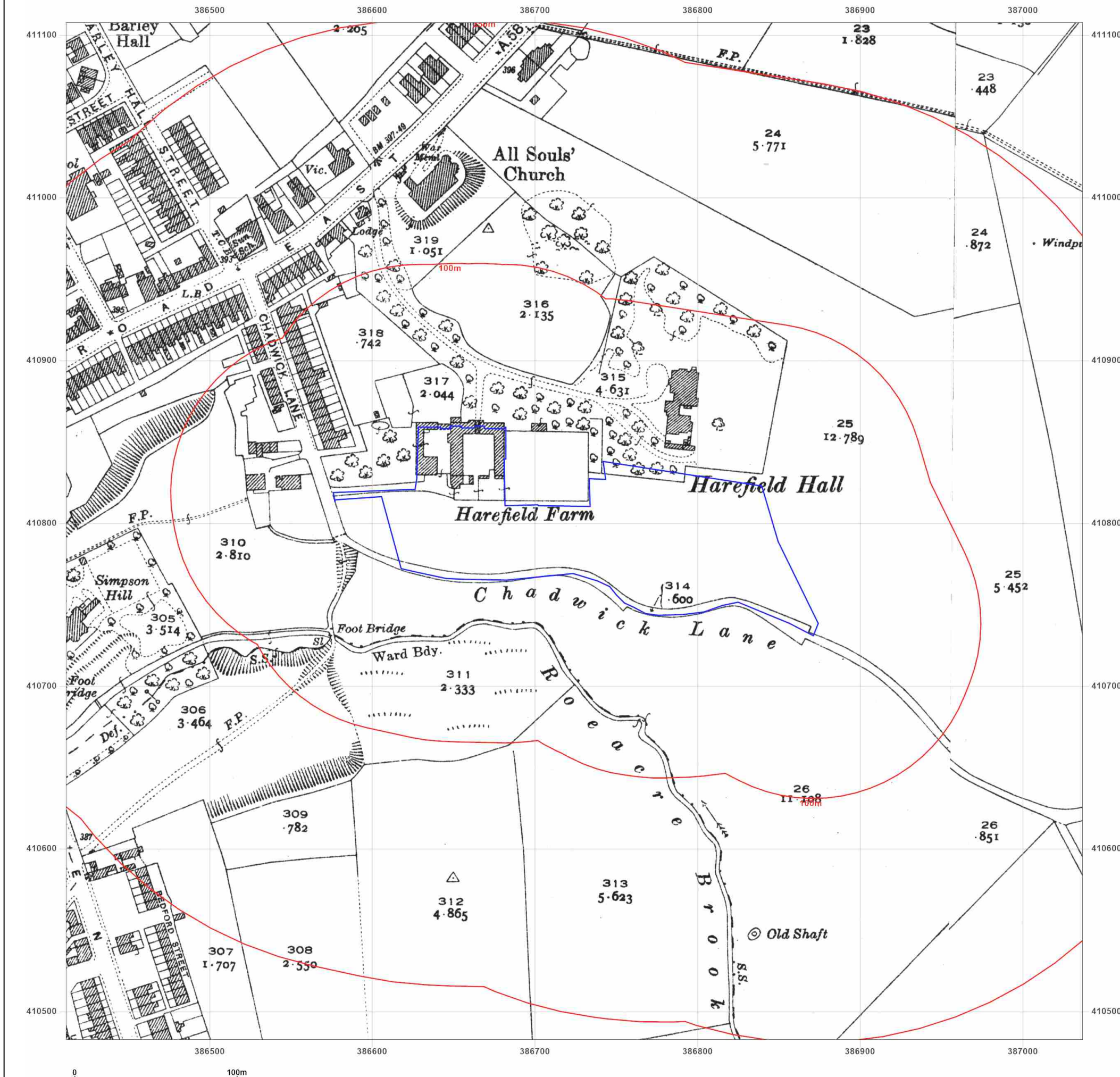


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 1956

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1956
Revised 1956
Edition N/A
Copyright N/A
Levelled 1928

Surveyed 1956
Revised 1956
Edition N/A
Copyright N/A
Levelled 1928

Surveyed 1956
Revised 1956
Edition N/A
Copyright N/A
Levelled 1928

Surveyed 1956
Revised 1956
Edition N/A
Copyright N/A
Levelled 1928



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

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 1957

Scale: 1:1,250

Printed at: 1:2,000



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

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

Surveyed 1956
Revised N/A
Edition 1957
Copyright N/A
Levelled 1928

Surveyed 1956
Revised N/A
Edition N/A
Copyright 1957
Levelled 1928

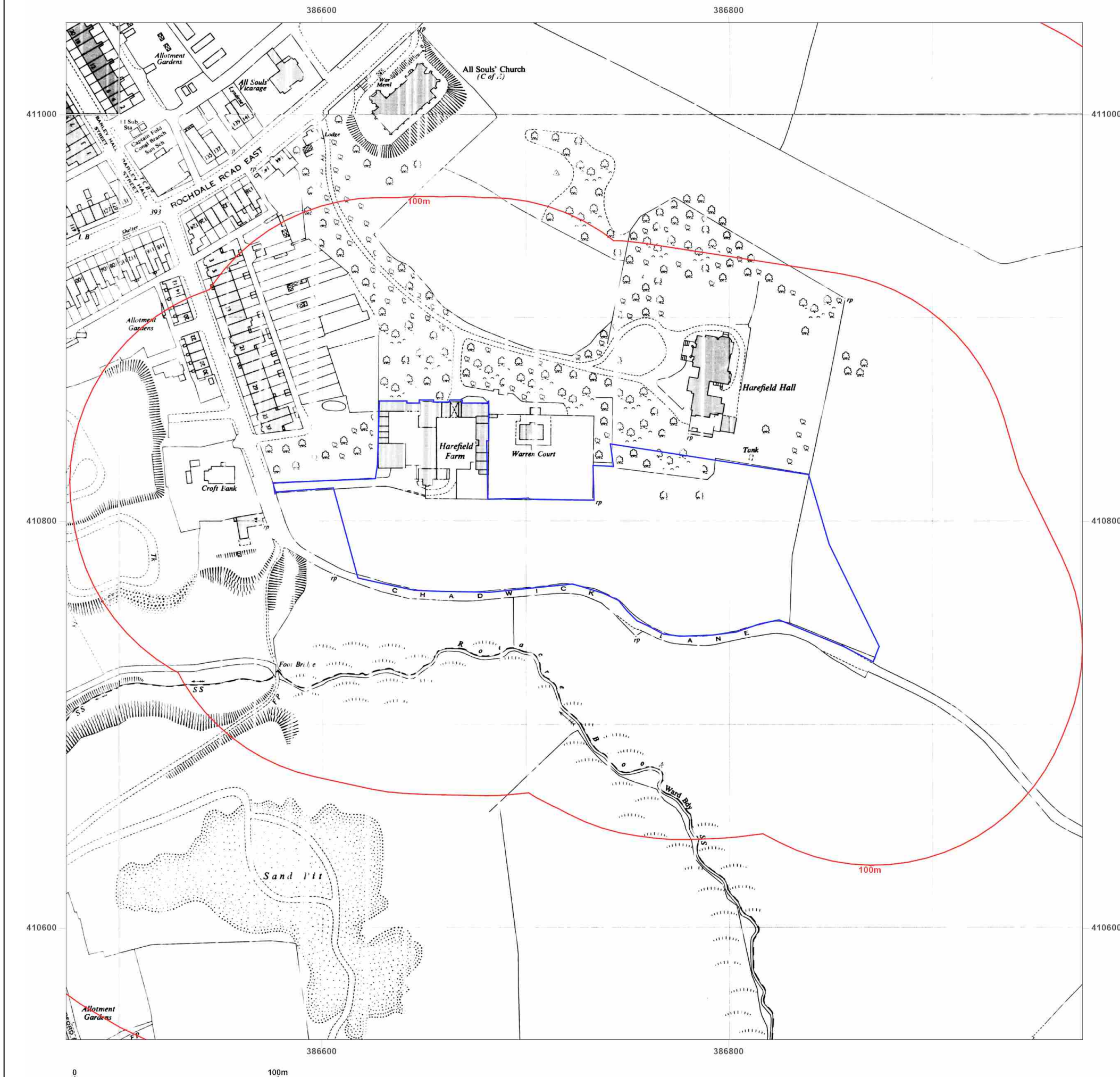


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 1956-1958

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1956
Revised 1956
Edition 1957
Copyright N/A
Levelled 1928

Surveyed 1956
Revised 1956
Edition 1957
Copyright N/A
Levelled 1928

Surveyed 1956
Revised 1956
Edition 1958
Copyright N/A
Levelled 1928

Surveyed 1955
Revised 1955
Edition 1956
Copyright N/A
Levelled 1928

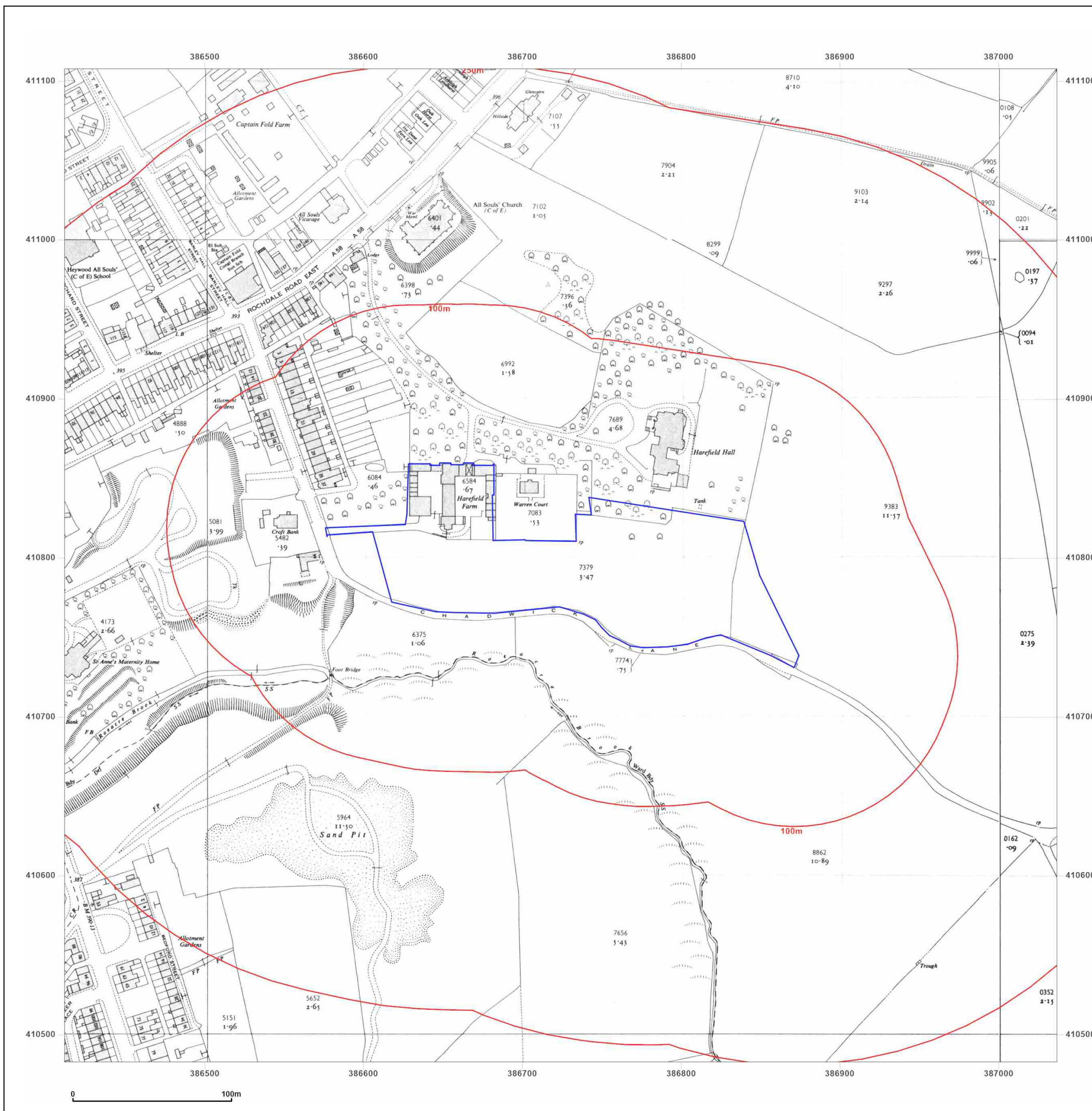


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 1973-1975

Scale: 1:1,250

Printed at: 1:2,000



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1975
Levelled N/A

Surveyed 1956
Revised 1973
Edition N/A
Copyright 1974
Levelled 1956

Surveyed 1956
Revised 1973
Edition N/A
Copyright 1973
Levelled 1962



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

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 1991-1992

Scale: 1:1,250

Printed at: 1:2,000

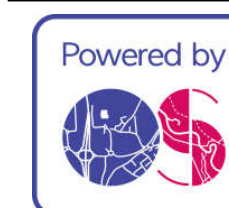


Surveyed N/A
Revised N/A
Edition N/A
Copyright 1992
Levelled N/A

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

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

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



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

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



2003

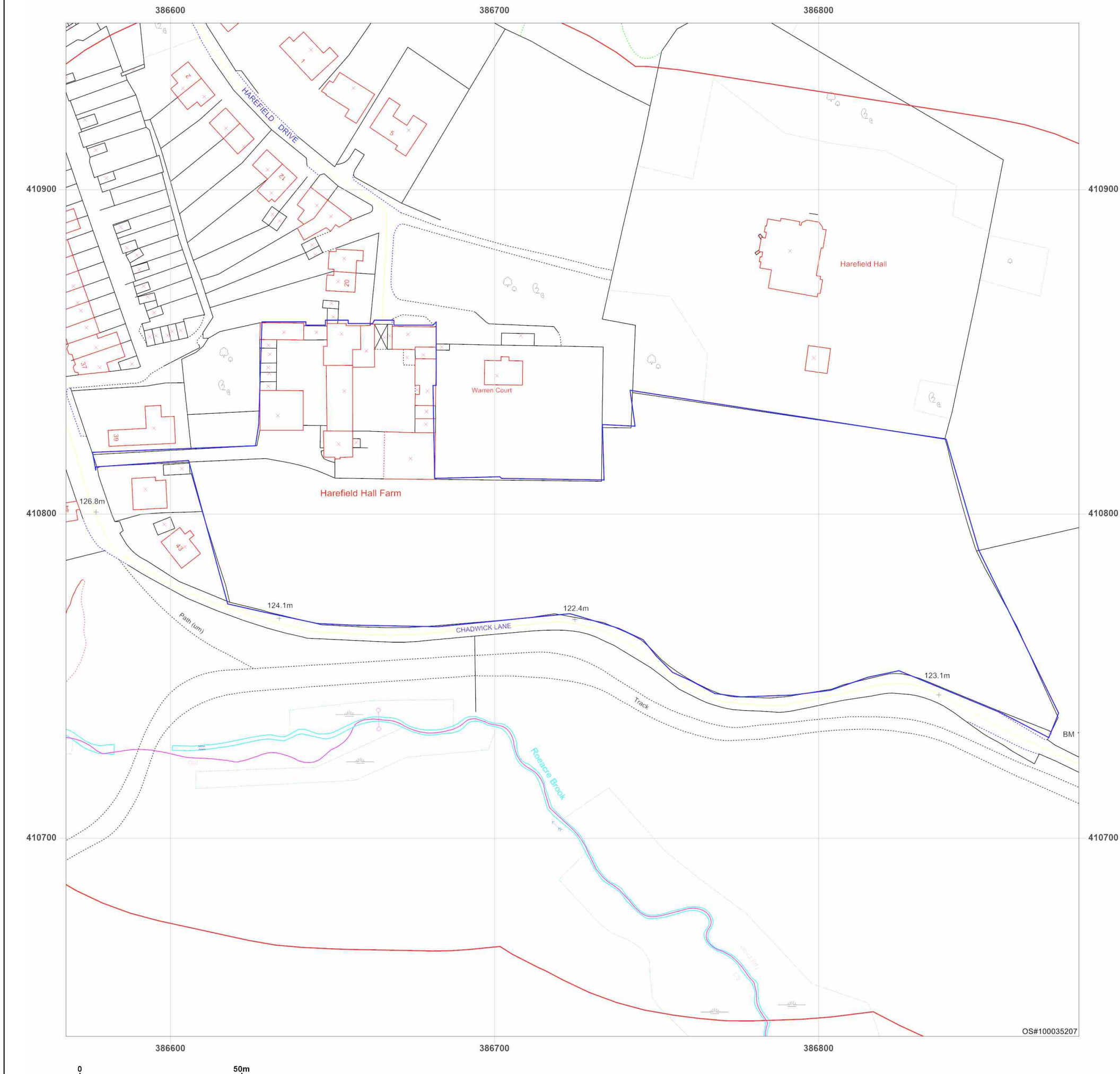


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: County Series

Map date: 1851

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1847
Revised N/A
Edition 1851
Copyright N/A
Levelled N/A

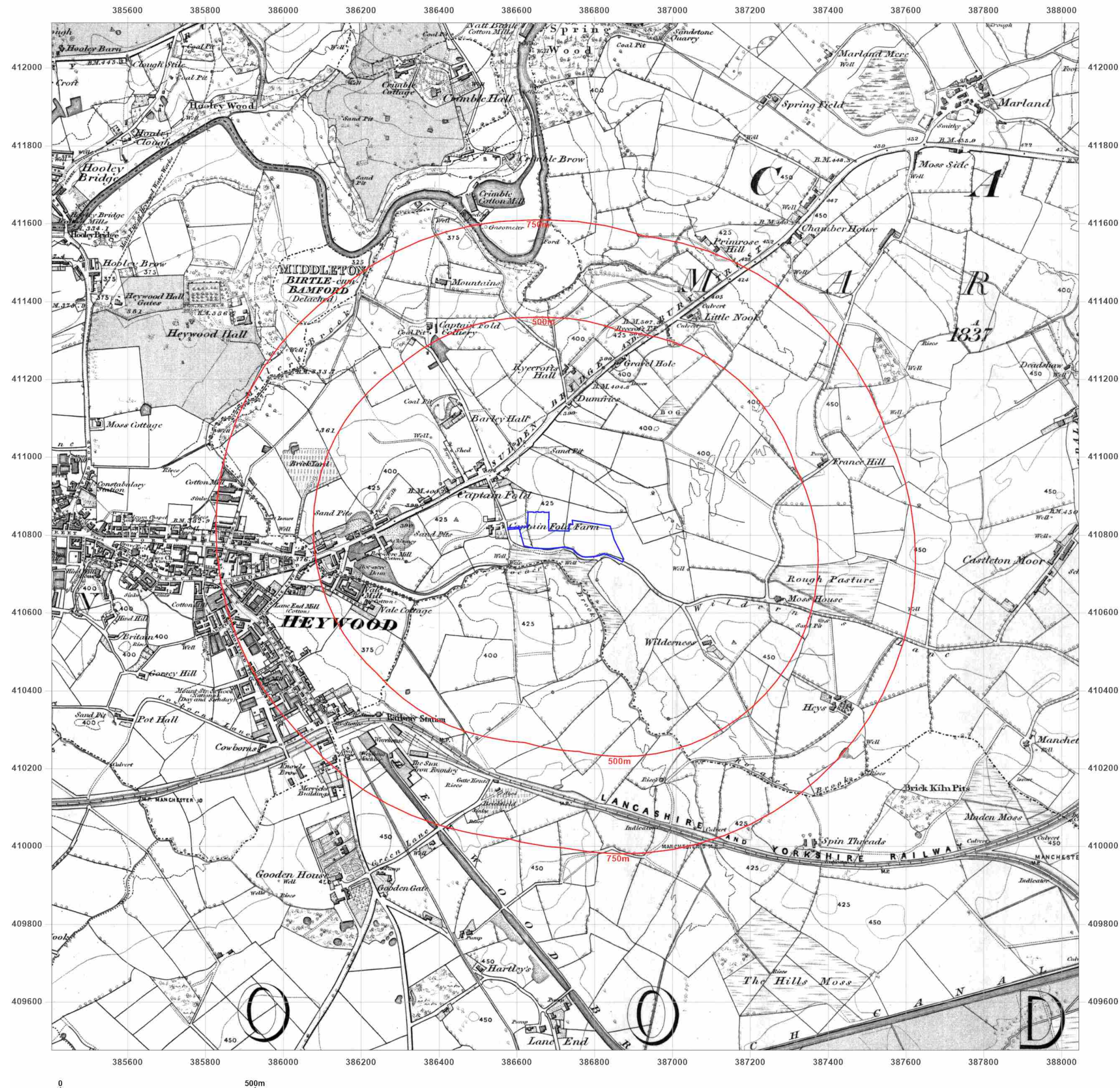


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: County Series

Map date: 1890

Scale: 1:10,560

Printed at: 1:10,560



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

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

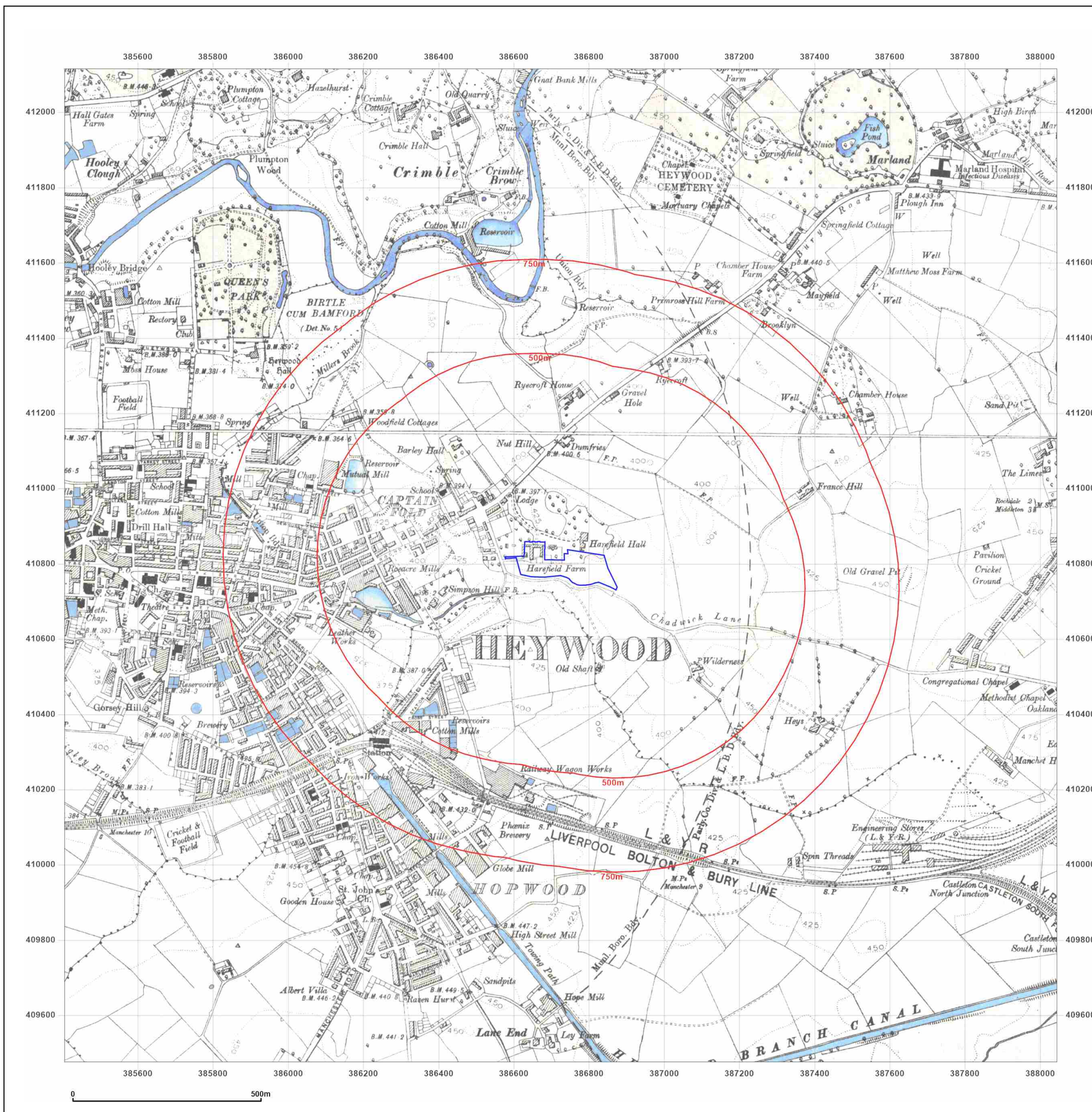


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: County Series

Map date: 1908-1909

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1848
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1848
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

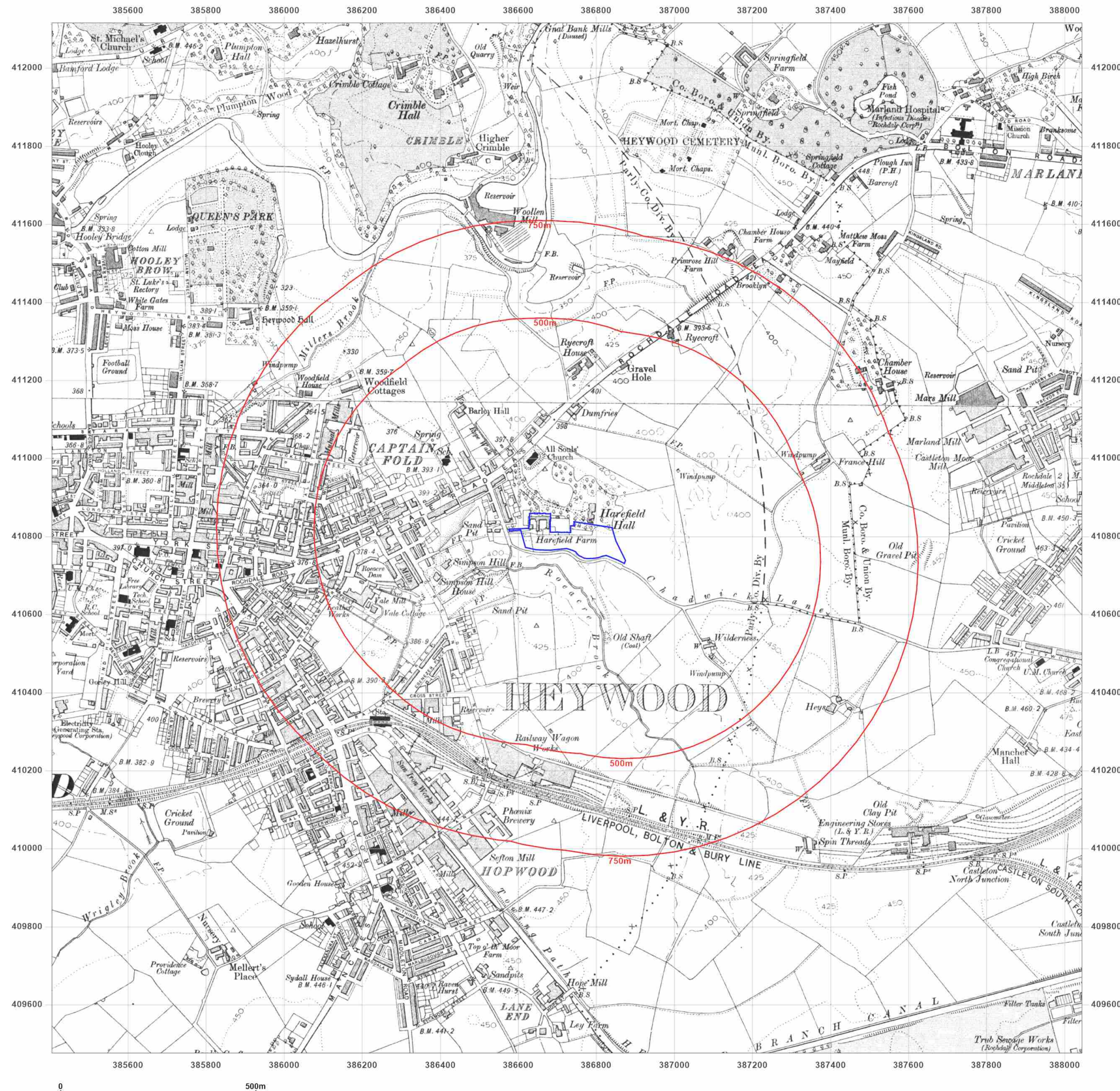


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: County Series

Map date: 1928

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1848
Revised 1928
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1848
Revised 1928
Edition N/A
Copyright N/A
Levelled N/A

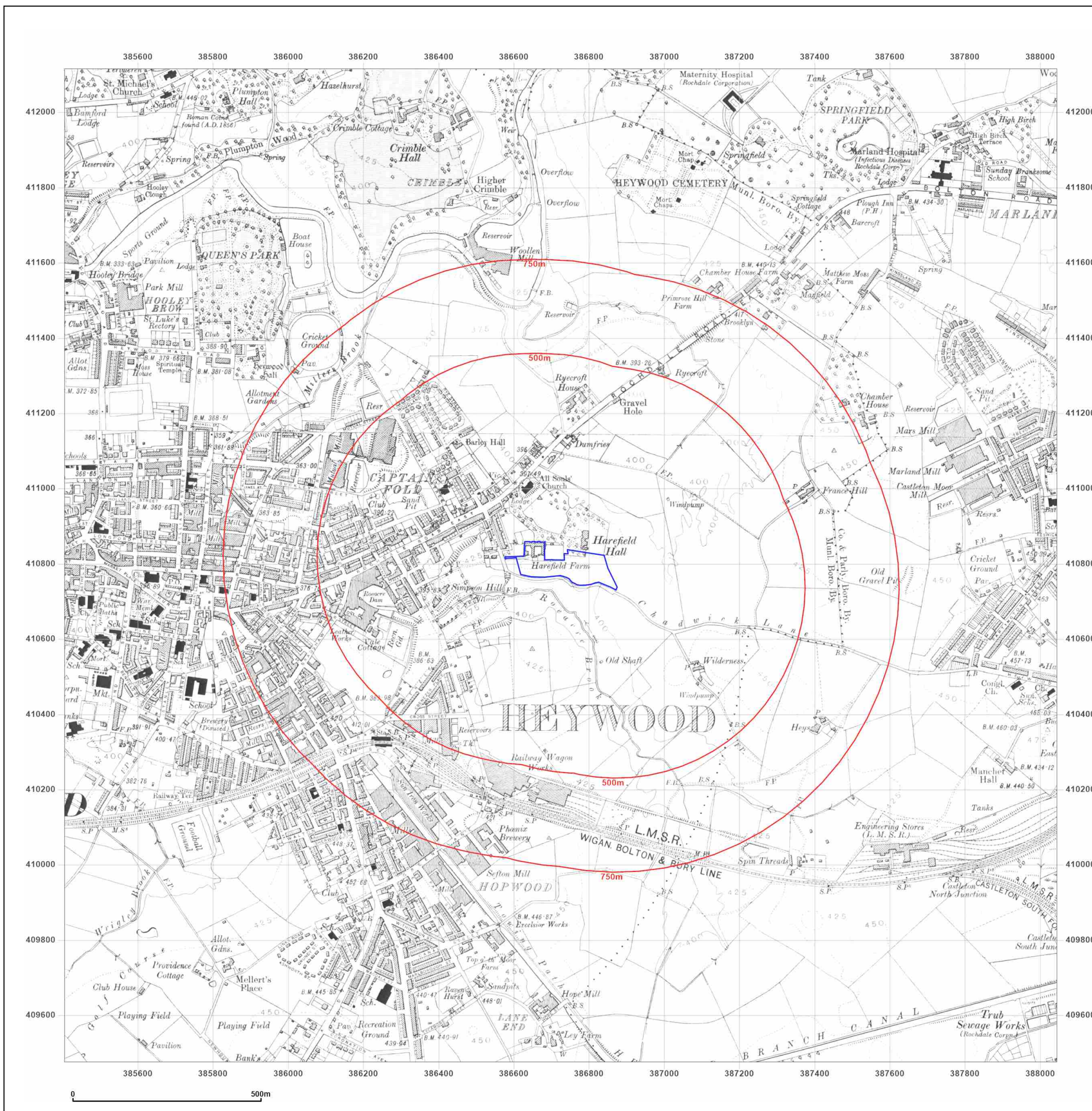


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1848
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1848
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

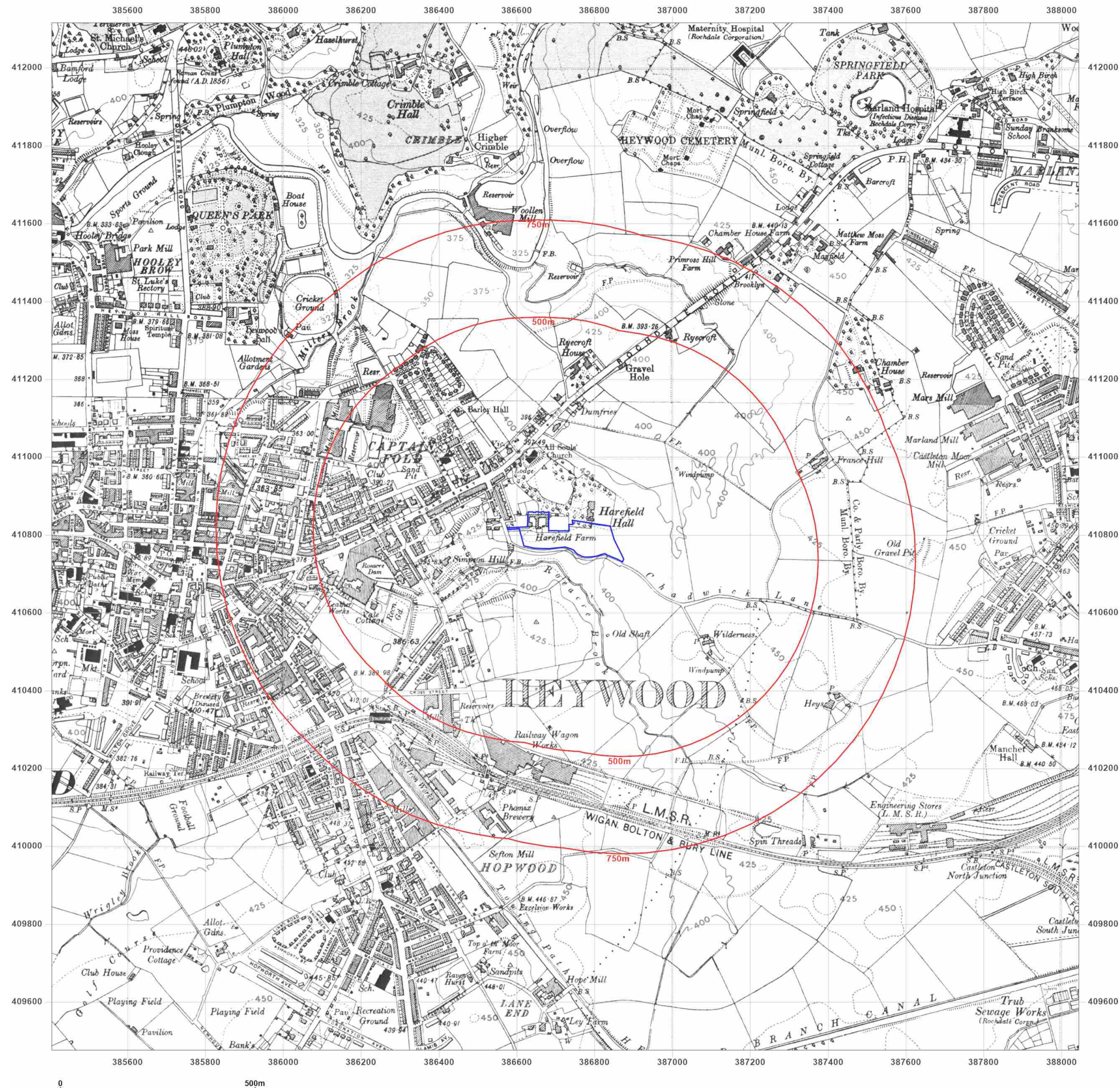


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: Provisional

Map date: 1955-1956

Scale: 1:10,560

Printed at: 1:10,560



Surveyed N/A
Revised 1955
Edition 1956
Copyright N/A
Levelled N/A

Surveyed N/A
Revised 1955
Edition N/A
Copyright N/A
Levelled N/A

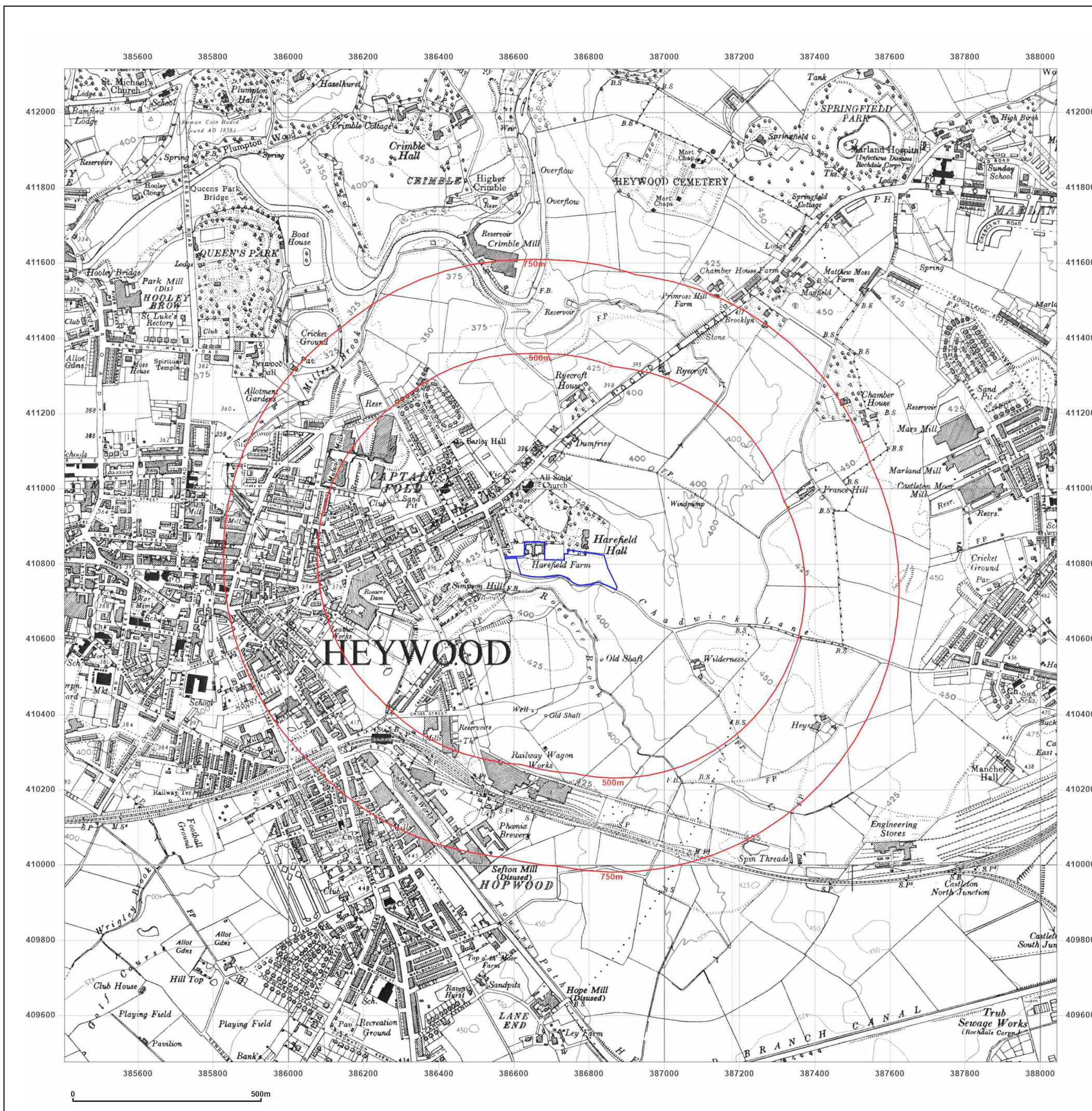


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: Provisional

Map date: 1965-1968

Scale: 1:10,560

Printed at: 1:10,560



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

Surveyed 1965
Revised 1965
Edition N/A
Copyright N/A
Levelled N/A

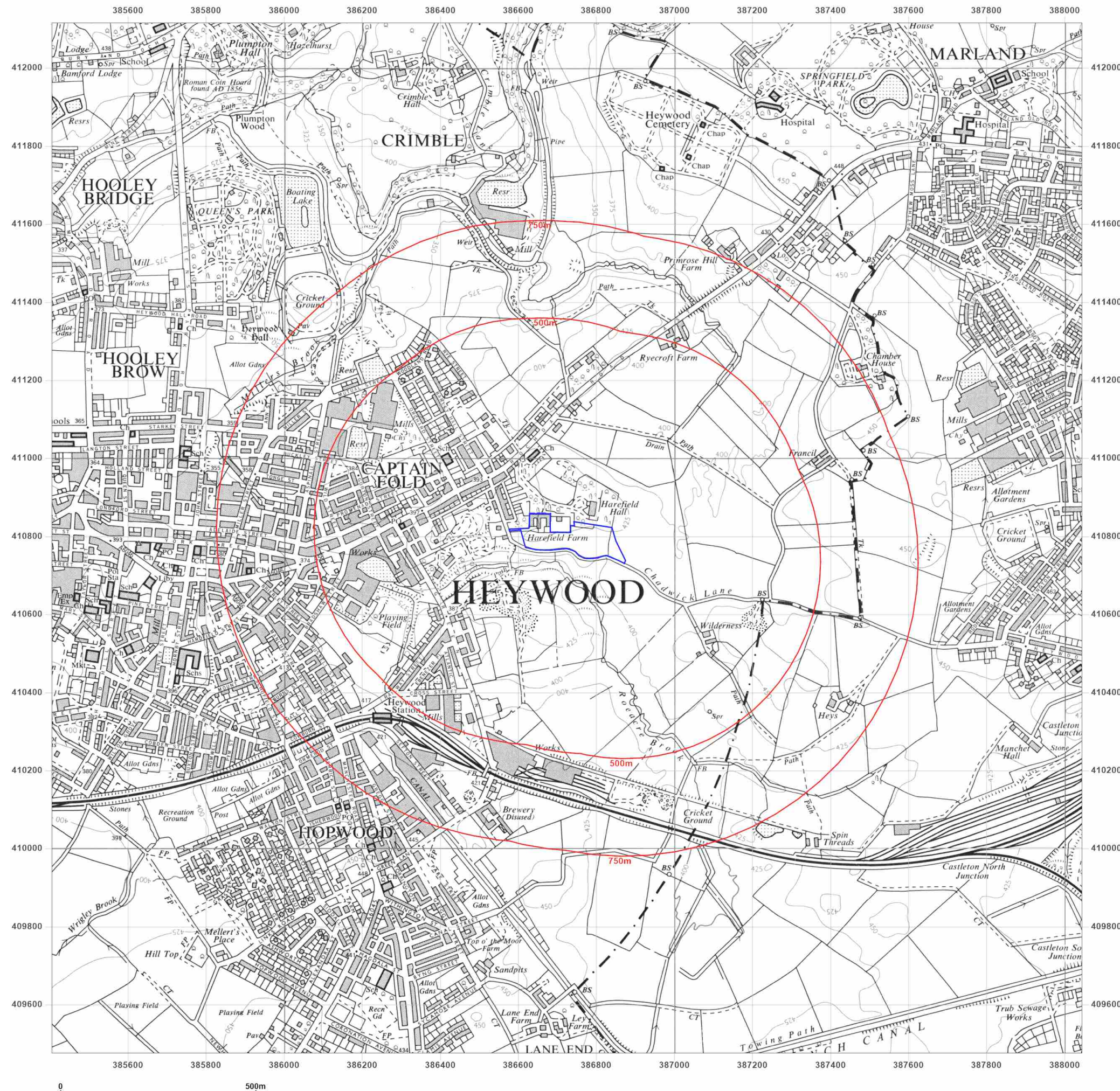


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 1975

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1974
Revised 1975
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1974
Revised 1975
Edition N/A
Copyright N/A
Levelled N/A

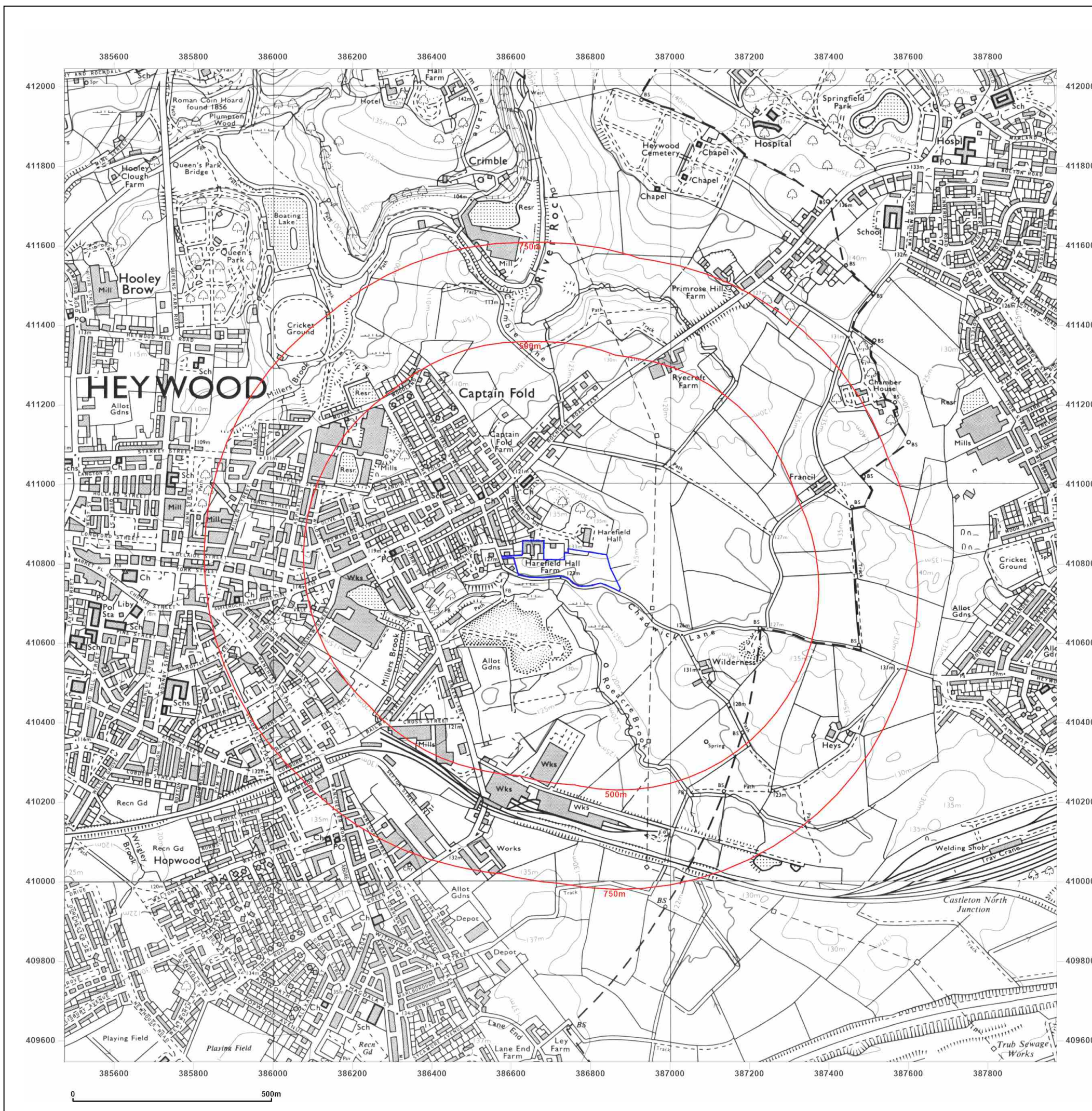


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 1982-1987

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1984
Revised 1987
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1980
Revised 1982
Edition N/A
Copyright N/A
Levelled N/A



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

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 1992

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1984
Revised 1992
Edition N/A
Copyright N/A
Levelled N/A

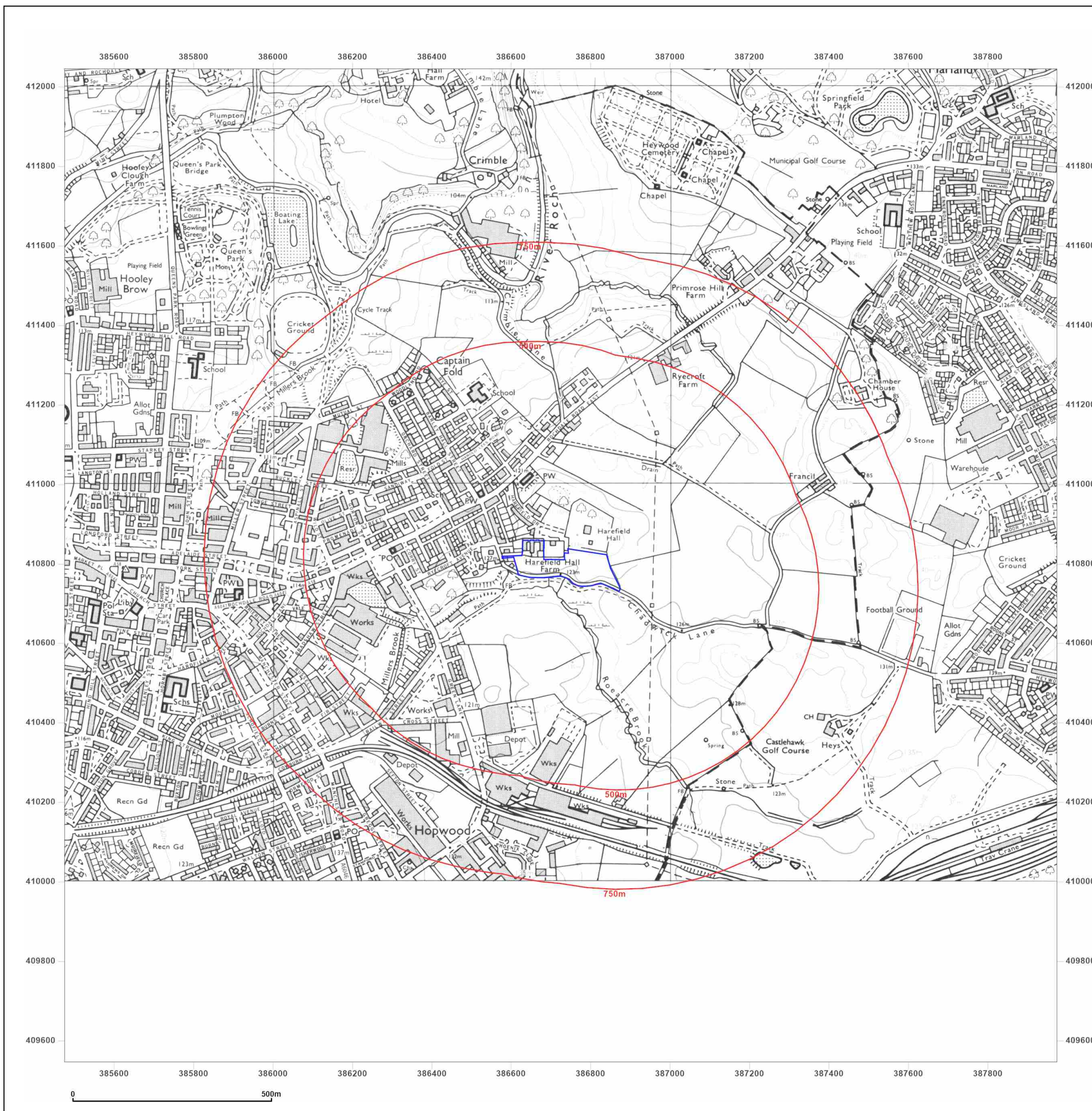


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 2001

Scale: 1:10,000

Printed at: 1:10,000



2001

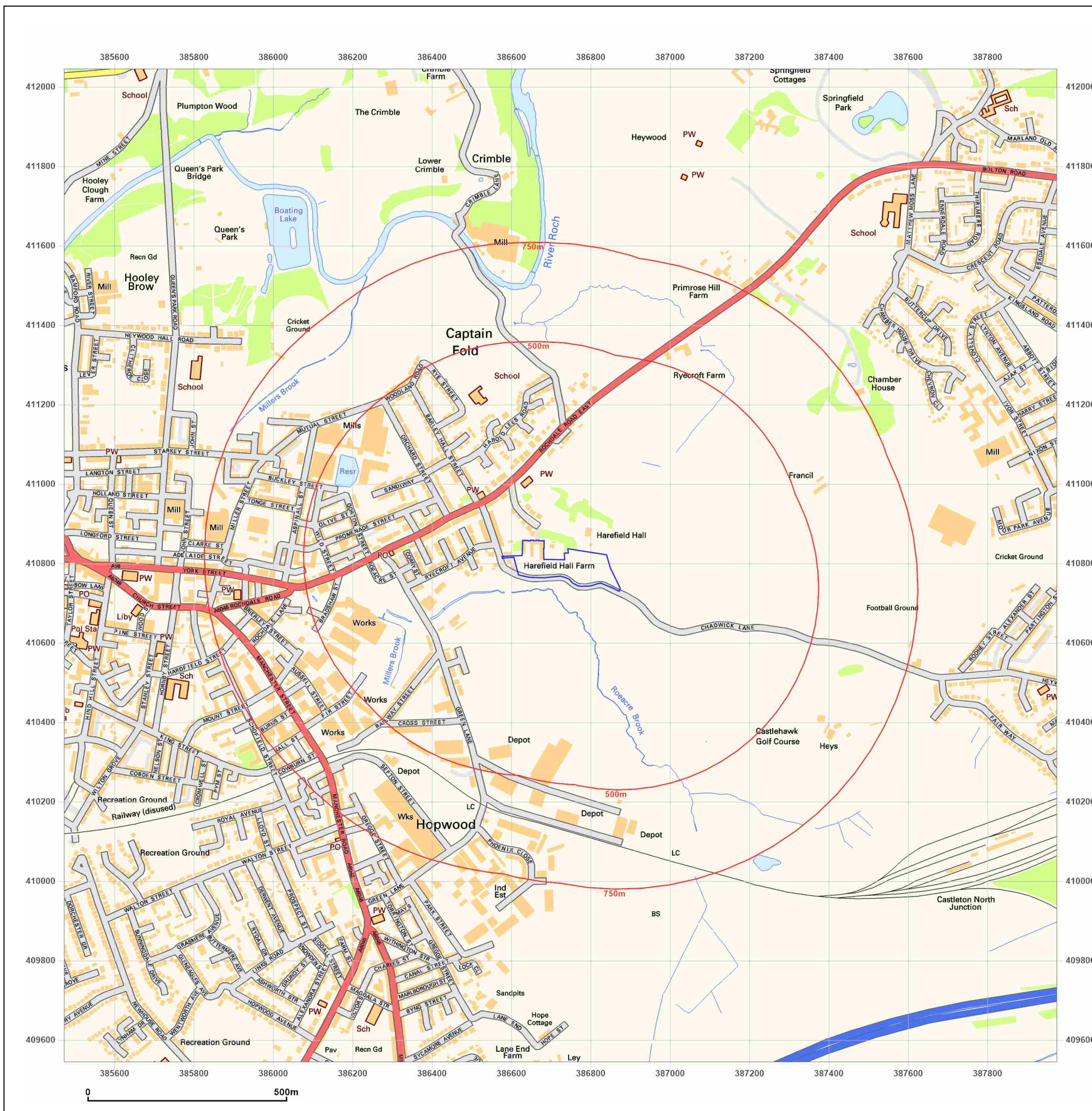


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010

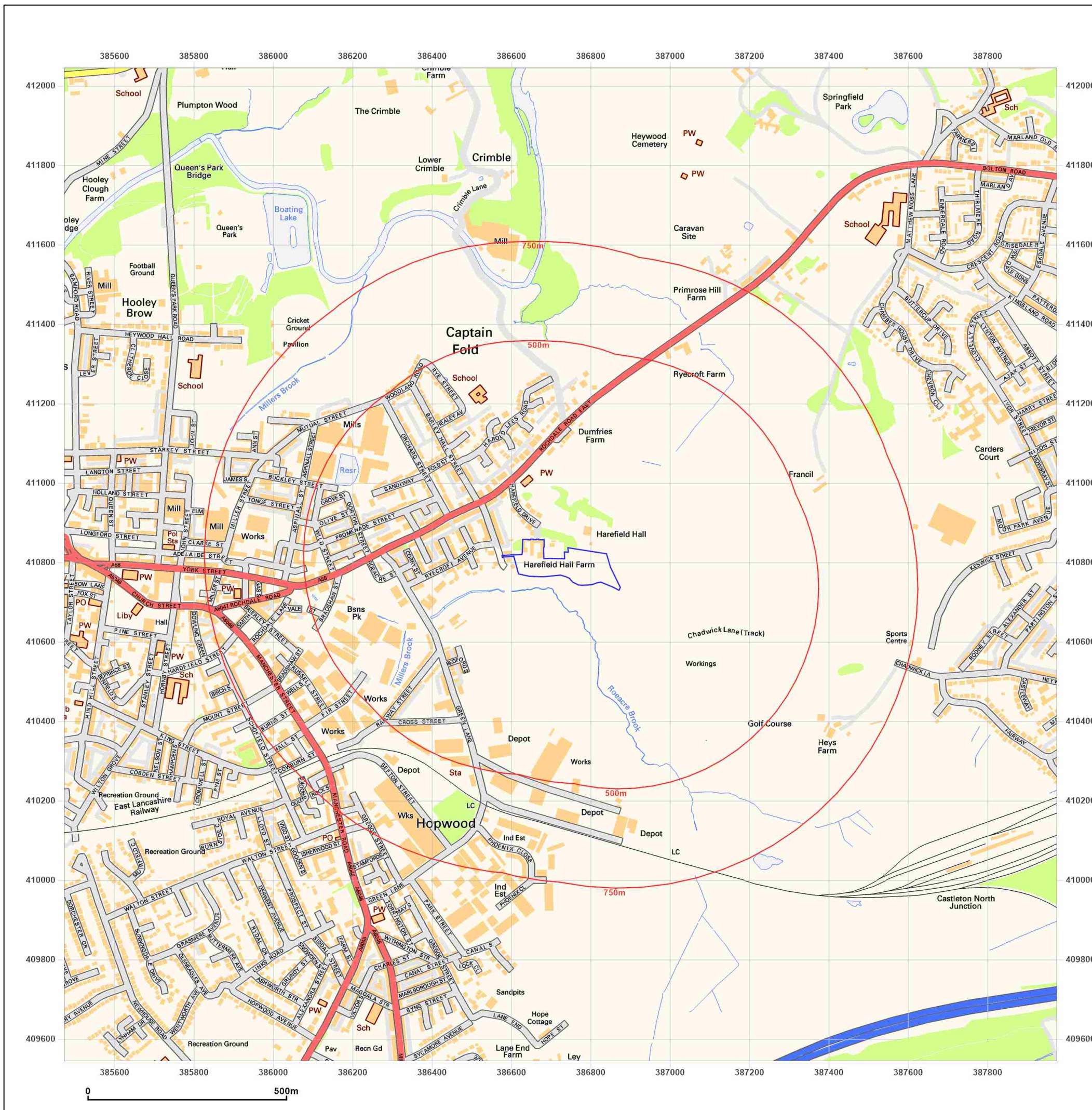


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



Site Details:

HAREFIELD HALL FARM,
CHADWICK LANE, HEYWOOD,
OL10 1QL

Client Ref: G23108
Report Ref: GS-I62-6UN-SHJ-YSZ
Grid Ref: 386724, 410795

Map Name: National Grid

Map date: 2023

Scale: 1:10,000

Printed at: 1:10,000



2023

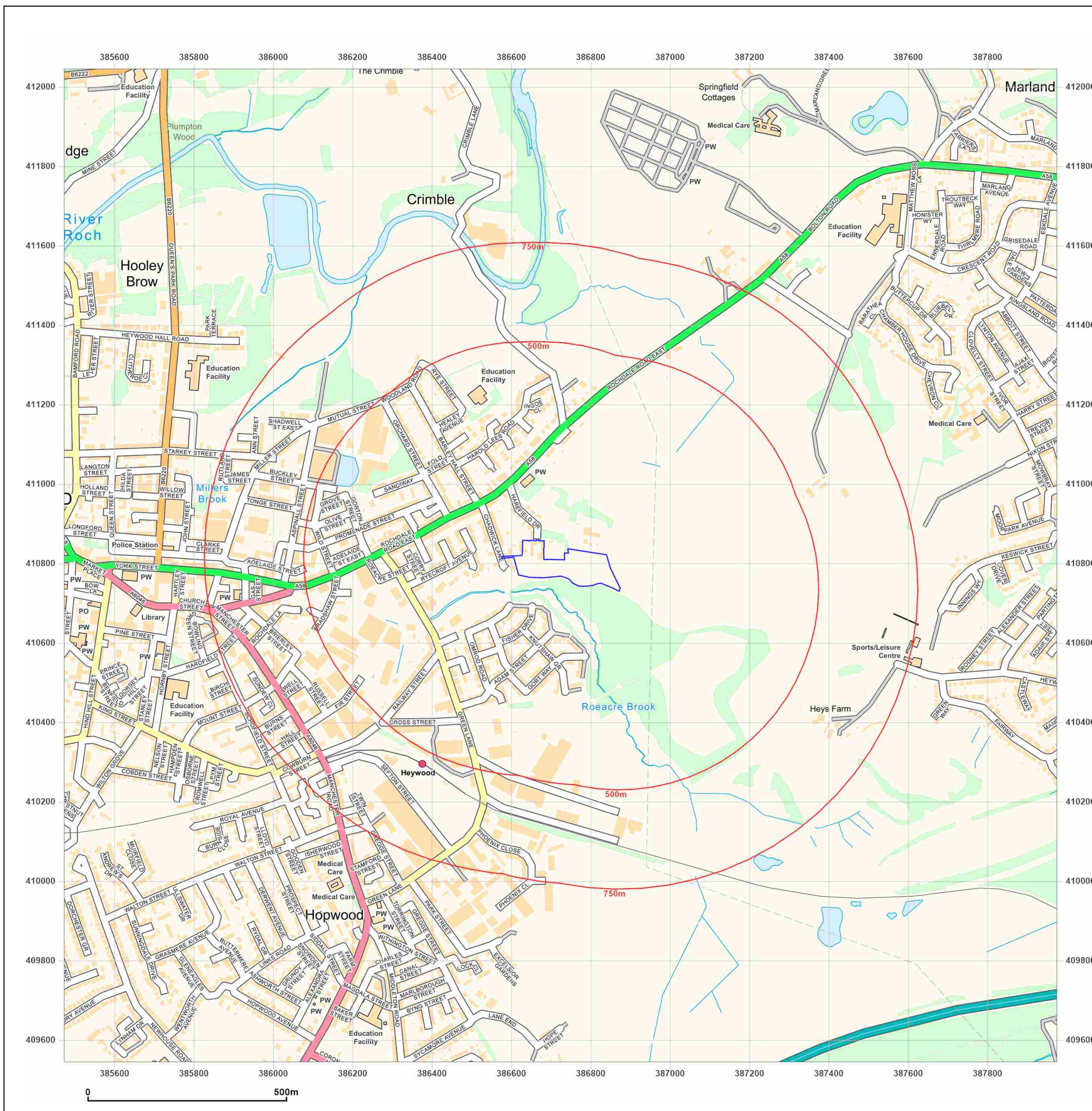


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 31 March 2023

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



APPENDIX 2

GROUNDSURE ENVIRO + GEO INSIGHT REPORT

HAREFIELD HALL FARM, CHADWICK LANE, HEYWOOD, OL10 1QL

Order Details

Date: 31/03/2023
Your ref: G23108
Our Ref: GS-H6F-YHQ-6DC-XAT

Site Details

Location: 386705 410795
Area: 1.8 ha
Authority: [Rochdale Metropolitan Borough Council](#)



Summary of findings

p. 2 **Aerial image**

p. 8

OS MasterMap site plan

p.12 groundsure.com/insightuserguide

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
13	1.1	Historical industrial land uses	0	1	27	65	-
17	1.2	Historical tanks	0	4	3	58	-
20	1.3	Historical energy features	0	0	1	7	-
20	1.4	Historical petrol stations	0	0	0	0	-
21	1.5	Historical garages	0	0	0	1	-
21	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
22	2.1	Historical industrial land uses	0	2	31	89	-
27	2.2	Historical tanks	0	4	3	111	-
31	2.3	Historical energy features	0	0	5	16	-
32	2.4	Historical petrol stations	0	0	0	0	-
33	2.5	Historical garages	0	0	0	2	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
34	3.1	Active or recent landfill	0	0	0	0	-
34	3.2	Historical landfill (BGS records)	0	0	0	0	-
35	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
35	3.4	Historical landfill (EA/NRW records)	0	2	0	1	-
36	3.5	Historical waste sites	0	0	0	2	-
36	3.6	Licensed waste sites	0	0	0	5	-
38	3.7	Waste exemptions	2	0	0	34	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
42	4.1	Recent industrial land uses	0	0	6	-	-
43	4.2	Current or recent petrol stations	0	0	0	0	-
43	4.3	Electricity cables	0	0	0	0	-
43	4.4	Gas pipelines	0	0	0	0	-
43	4.5	Sites determined as Contaminated Land	0	0	0	0	-



44	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
44	4.7	Regulated explosive sites	0	0	0	0	-
44	4.8	Hazardous substance storage/usage	0	0	0	0	-
44	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
44	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
45	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	0	5	-
45	4.12	Radioactive Substance Authorisations	0	0	0	0	-
46	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
46	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
46	4.15	Pollutant release to public sewer	0	0	0	0	-
46	4.16	List 1 Dangerous Substances	0	0	0	0	-
46	4.17	List 2 Dangerous Substances	0	0	0	0	-
47	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	0	11	-
48	4.19	Pollution inventory substances	0	0	0	0	-
48	4.20	Pollution inventory waste transfers	0	0	0	0	-
49	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
50	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
51	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
52	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
53	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
53	5.5	Groundwater vulnerability- local information	None (within 0m)				
54	5.6	<u>Groundwater abstractions</u>	0	0	0	2	11
58	5.7	<u>Surface water abstractions</u>	0	0	0	0	12
61	5.8	Potable abstractions	0	0	0	0	0
61	5.9	Source Protection Zones	0	0	0	0	-
61	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
62	6.1	<u>Water Network (OS MasterMap)</u>	0	2	3	-	-



63	6.2	<u>Surface water features</u>	0	1	2	-	-
63	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
64	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
64	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
65	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
65	7.2	Historical Flood Events	0	0	0	-	-
65	7.3	Flood Defences	0	0	0	-	-
66	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
66	7.5	Flood Storage Areas	0	0	0	-	-
67	7.6	Flood Zone 2	None (within 50m)				
67	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
68	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
70	9.1	<u>Groundwater flooding</u>	Moderate (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
71	10.1	<u>Sites of Special Scientific Interest (SSSI)</u>	0	0	0	0	3
72	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
72	10.3	<u>Special Areas of Conservation (SAC)</u>	0	0	0	0	3
73	10.4	Special Protection Areas (SPA)	0	0	0	0	0
73	10.5	National Nature Reserves (NNR)	0	0	0	0	0
73	10.6	<u>Local Nature Reserves (LNR)</u>	0	0	0	0	1
73	10.7	<u>Designated Ancient Woodland</u>	0	0	0	0	8
74	10.8	Biosphere Reserves	0	0	0	0	0
74	10.9	Forest Parks	0	0	0	0	0
74	10.10	Marine Conservation Zones	0	0	0	0	0
75	10.11	<u>Green Belt</u>	1	0	0	0	0
75	10.12	Proposed Ramsar sites	0	0	0	0	0



75	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
75	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
76	10.15	Nitrate Sensitive Areas	0	0	0	0	0
76	10.16	<u>Nitrate Vulnerable Zones</u>	0	0	0	0	1
77	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
78	10.18	<u>SSSI Units</u>	0	0	0	0	3
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
80	11.1	World Heritage Sites	0	0	0	-	-
81	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
81	11.3	National Parks	0	0	0	-	-
81	11.4	<u>Listed Buildings</u>	0	0	1	-	-
82	11.5	Conservation Areas	0	0	0	-	-
82	11.6	Scheduled Ancient Monuments	0	0	0	-	-
82	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
83	12.1	<u>Agricultural Land Classification</u>	Grade 3 (within 250m)				
84	12.2	Open Access Land	0	0	0	-	-
84	12.3	Tree Felling Licences	0	0	0	-	-
85	12.4	Environmental Stewardship Schemes	0	0	0	-	-
85	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
86	13.1	Priority Habitat Inventory	0	0	0	-	-
86	13.2	Habitat Networks	0	0	0	-	-
87	13.3	<u>Open Mosaic Habitat</u>	0	2	0	-	-
87	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
88	14.1	<u>10k Availability</u>	Identified (within 500m)				
89	14.2	<u>Artificial and made ground (10k)</u>	0	3	1	2	-
91	14.3	<u>Superficial geology (10k)</u>	1	0	1	0	-



92	14.4	Landslip (10k)	0	0	0	0	-
93	14.5	<u>Bedrock geology (10k)</u>	1	0	1	1	-
94	14.6	<u>Bedrock faults and other linear features (10k)</u>	2	0	2	3	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
95	15.1	<u>50k Availability</u>	Identified (within 500m)				
96	15.2	<u>Artificial and made ground (50k)</u>	0	1	0	0	-
97	15.3	<u>Artificial ground permeability (50k)</u>	0	1	-	-	-
98	15.4	<u>Superficial geology (50k)</u>	1	0	1	0	-
99	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
99	15.6	Landslip (50k)	0	0	0	0	-
99	15.7	Landslip permeability (50k)	None (within 50m)				
100	15.8	<u>Bedrock geology (50k)</u>	1	0	1	1	-
101	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
101	15.10	<u>Bedrock faults and other linear features (50k)</u>	0	0	1	1	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
102	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence					
103	17.1	<u>Shrink swell clays</u>	Negligible (within 50m)				
104	17.2	<u>Running sands</u>	Very low (within 50m)				
105	17.3	<u>Compressible deposits</u>	Very low (within 50m)				
107	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
108	17.5	<u>Landslides</u>	Very low (within 50m)				
109	17.6	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
111	18.1	Natural cavities	0	0	0	0	-
112	18.2	<u>BritPits</u>	0	0	2	2	-
113	18.3	<u>Surface ground workings</u>	0	2	23	-	-
114	18.4	<u>Underground workings</u>	0	0	5	1	0
114	18.5	<u>Historical Mineral Planning Areas</u>	0	0	1	1	-



115	18.6	Non-coal mining	0	0	0	0	0
115	18.7	Mining cavities	0	0	0	0	0
115	18.8	JPB mining areas	None (within 0m)				
115	18.9	<u>Coal mining</u>	Identified (within 0m)				
116	18.10	Brine areas	None (within 0m)				
116	18.11	Gypsum areas	None (within 0m)				
116	18.12	Tin mining	None (within 0m)				
116	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
117	19.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
119	20.1	<u>BGS Estimated Background Soil Chemistry</u>	1	0	-	-	-
119	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
119	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
120	21.1	Underground railways (London)	0	0	0	-	-
120	21.2	Underground railways (Non-London)	0	0	0	-	-
120	21.3	Railway tunnels	0	0	0	-	-
120	21.4	Historical railway and tunnel features	0	0	0	-	-
120	21.5	Royal Mail tunnels	0	0	0	-	-
121	21.6	Historical railways	0	0	0	-	-
121	21.7	Railways	0	0	0	-	-
121	21.8	Crossrail 1	0	0	0	0	-
121	21.9	Crossrail 2	0	0	0	0	-
121	21.10	HS2	0	0	0	0	-



Recent aerial photograph



Capture Date: 23/05/2019

Site Area: 1.8ha



Recent site history - 2011 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2023. All Rights Reserved

Capture Date: 02/05/2011

Site Area: 1.8ha



Recent site history - 2000 aerial photograph



Capture Date: 19/06/2000

Site Area: 1.8ha



Recent site history - 1999 aerial photograph

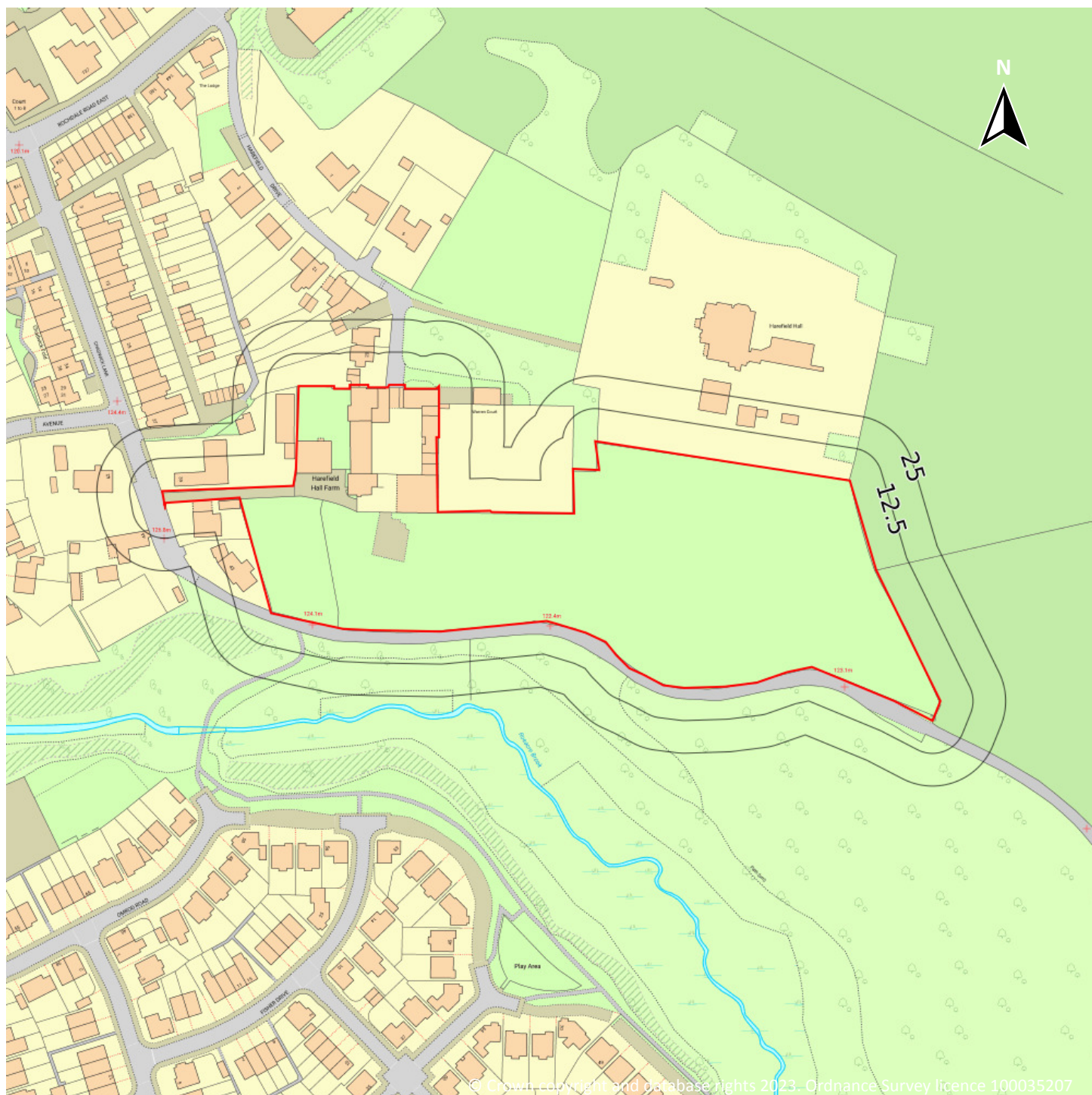


Capture Date: 10/09/1999

Site Area: 1.8ha



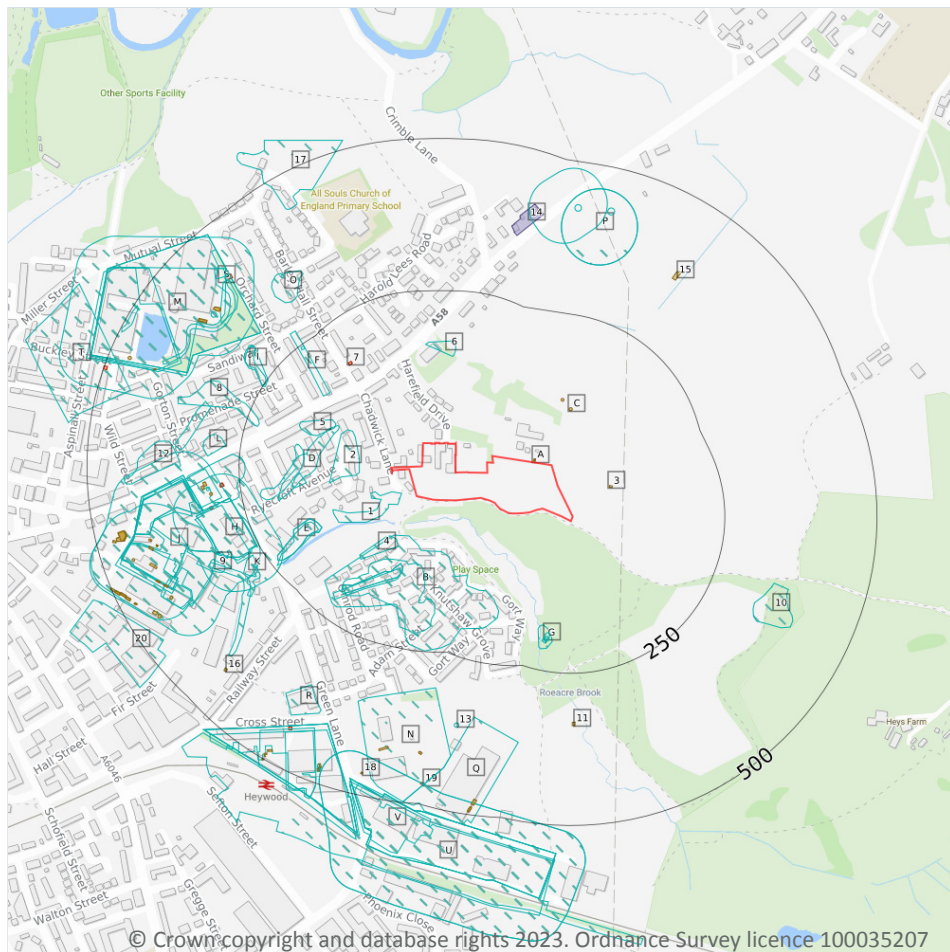
OS MasterMap site plan



Site Area: 1.8ha



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

93

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

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

ID	Location	Land use	Dates present	Group ID
1	23m W	Unspecified Ground Workings	1968 - 1975	730409



ID	Location	Land use	Dates present	Group ID
2	52m W	Unspecified Pit	1968	690986
B	67m SW	Sand Pit	1975 - 1987	739400
4	78m SW	Unspecified Heap	1968	650923
D	107m W	Sand Pit	1909	643890
B	108m SW	Sand Pit	1968	703638
5	114m W	Refuse Heap	1890	677956
B	114m SW	Unspecified Ground Workings	1938	648065
B	114m SW	Refuse Heap	1890	677958
B	122m SW	Sand Pit	1909	729135
D	142m W	Unspecified Heap	1968	650922
6	142m N	Sand Pit	1851	643887
D	143m W	Refuse Heap	1890	677955
E	148m W	Unspecified Pit	1949	704001
E	148m W	Unspecified Pit	1968	738518
E	153m W	Unspecified Ground Workings	1938	648064
F	159m NW	Rope Walk	1851	641250
G	176m S	Unspecified Heap	1909	650749
G	186m S	Unspecified Old Shaft	1928 - 1949	772596
G	193m S	Old Coal Shaft	1909	639855
G	198m S	Unspecified Old Shaft	1890	651878
H	216m W	Unspecified Mills	1938	753816
8	228m W	Unspecified Pit	1890	690988
H	240m W	Sand Pits	1851	664408
F	242m NW	Shed	1851	659594
I	246m NW	Sand Pit	1938 - 1949	730921
I	249m NW	Sand Pit	1928	721471
J	249m W	Leather Works	1928 - 1938	756615
H	253m W	Unspecified Mills	1949	705883



ID	Location	Land use	Dates present	Group ID
J	253m W	Unspecified Works	1968	718291
J	253m W	Unspecified Works	1975	774525
K	267m W	Unspecified Pit	1968 - 1975	749750
H	269m W	Unspecified Mills	1909 - 1928	709769
K	273m W	Unspecified Ground Workings	1909	769255
L	274m W	Refuse Heap	1851	677954
H	282m W	Unspecified Mills	1890	757084
K	294m W	Unspecified Ground Workings	1938	787871
H	301m W	Chimney	1851	684516
M	308m NW	Unspecified Mills	1968 - 1992	704476
M	308m NW	Unspecified Mill	1949	730399
N	309m S	Unspecified Depot	1987 - 1992	762211
L	313m W	Rope Walk	1851	641249
J	314m W	Leather Works	1949	780460
9	316m W	Unspecified Heap	1909	650924
J	316m W	Leather Works	1909	751143
O	317m NW	Unspecified Heap	1851	650921
J	317m W	Unspecified Works	1992	726411
J	317m W	Unspecified Works	1987	784167
M	322m NW	Unspecified Mills	1928	765674
J	330m W	Cotton Mill	1851	644474
10	330m SE	Sand Pit	1968 - 1975	697205
P	337m NE	Unspecified Hole	1938	658675
P	337m NE	Gravel Hole	1928	722708
J	337m W	Tannery	1987 - 1992	726106
Q	340m S	Unspecified Works	1975 - 1992	701826
12	346m W	Sand Pits	1851	664409
R	355m SW	Unspecified Works	1992	679031



ID	Location	Land use	Dates present	Group ID
13	355m S	Unspecified Old Shaft	1949	651877
O	356m NW	Coal Pit	1851	654364
S	359m NW	Unspecified Ground Workings	1928	733555
P	363m N	Gravel Hole	1890	766244
S	364m NW	Unspecified Pit	1968 - 1992	695481
M	369m W	Unspecified Mill	1938	708740
J	373m W	Unspecified Mill	1909	657012
S	381m NW	Chimney	1968 - 1992	717336
J	385m W	Leather Works	1890	752449
M	385m W	Unspecified Mills	1909	768510
J	389m W	Vale Mill	1851	653298
M	392m W	Unspecified Mill	1890	701813
R	402m SW	Unspecified Mills	1968 - 1975	695623
R	402m SW	Unspecified Mill	1987 - 1992	709811
R	402m SW	Unspecified Mills	1949	737761
R	412m SW	Cotton Mills	1890	659340
S	414m NW	Unspecified Ground Workings	1987 - 1992	703815
R	416m SW	Unspecified Mills	1938	704732
P	419m N	Gravel Hole	1908	788192
R	421m SW	Unspecified Mills	1909 - 1928	746018
P	422m NE	Gravel Hole	1851	700693
U	431m SW	Railway Wagon Works	1890	712119
U	431m SW	Railway Wagon Works	1938	728873
17	443m NW	Colliery	1851	645259
T	447m W	Brick Yard	1851	681784
20	467m SW	Unspecified Works	1987 - 1992	709429
R	468m SW	Unspecified Tank	1949	764770
R	472m SW	Unspecified Tank	1938	727398



ID	Location	Land use	Dates present	Group ID
R	475m SW	Unspecified Tank	1928	731390
U	477m SW	Railway Wagon Works	1975	695509
U	477m SW	Unspecified Works	1968	708904
U	477m SW	Railway Wagon Works	1949	756735
V	481m SW	Unspecified Works	1987 - 1992	761763
V	481m SW	Railway Sidings	1938	785365
U	487m SW	Railway Wagon Works	1909 - 1928	735874
M	487m NW	Unspecified Ground Workings	1890	648069

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

65

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

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

ID	Location	Land use	Dates present	Group ID
A	2m NE	Unspecified Tank	1973	91949
A	2m NE	Unspecified Tank	1956	92834
A	3m NE	Unspecified Tank	1968	100571
A	3m NE	Unspecified Tank	1956	100664
3	75m E	Unspecified Tank	1910	84271
C	95m NE	Unspecified Tank	1910	84272
C	106m NE	Unspecified Tank	1910	84273
H	297m W	Unspecified Tank	1890	84268
H	304m W	Unspecified Tank	1956	89615
H	309m W	Unspecified Tank	1929 - 1937	91906



ID	Location	Land use	Dates present	Group ID
11	330m S	Unspecified Tank	1930	84732
15	366m NE	Unspecified Tank	1910 - 1930	102264
S	381m NW	Tanks	1968 - 1992	102877
S	382m NW	Tanks	1990	102605
S	385m NW	Unspecified Tank	1956 - 1968	102797
S	386m NW	Unspecified Tank	1956	88867
J	403m W	Unspecified Tank	1985 - 1991	93180
J	404m W	Unspecified Tank	1956	101238
J	404m W	Unspecified Tank	1967	102754
J	404m W	Unspecified Tank	1974	103735
J	404m W	Unspecified Tank	1956	89753
J	404m W	Unspecified Tank	1968	103236
J	410m W	Tanks	1910	87691
J	412m W	Unspecified Tank	1967 - 1985	94372
N	412m S	Tanks	1977	87734
J	413m W	Tanks	1967 - 1991	97662
N	414m S	Tanks	1977	87732
J	415m W	Unspecified Tank	1974 - 1991	93605
J	417m W	Tanks	1910	87690
T	419m W	Unspecified Tank	1956	97974
T	420m W	Unspecified Tank	1956	102506
16	422m SW	Unspecified Tank	1930	84730
J	422m W	Unspecified Tank	1968	103232
J	422m W	Unspecified Tank	1967 - 1974	101967
J	423m W	Unspecified Tank	1991	89965
J	423m W	Unspecified Tank	1985	95020
J	447m W	Unspecified Tank	1985 - 1991	89174
J	447m W	Unspecified Tank	1890 - 1910	99566



ID	Location	Land use	Dates present	Group ID
J	448m W	Tanks	1956 - 1974	100380
J	449m W	Tanks	1985	93097
J	450m W	Unspecified Tank	1967 - 1968	102803
J	450m W	Tanks	1991	100808
18	462m SW	Unspecified Tank	1977	84726
T	463m W	Unspecified Tank	1890 - 1937	98153
J	467m W	Unspecified Tank	1956 - 1991	93744
R	467m SW	Unspecified Tank	1956 - 1968	89669
J	472m W	Unspecified Tank	1967 - 1974	92815
J	473m W	Unspecified Tank	1968	99132
Q	474m S	Unspecified Tank	1977 - 1998	90874
R	475m SW	Unspecified Tank	1929 - 1937	96401
J	477m W	Unspecified Tank	1967 - 1974	95970
J	478m W	Unspecified Tank	1985 - 1991	90659
R	480m SW	Unspecified Tank	1968	95619
J	482m W	Unspecified Tank	1991	98857
J	482m W	Unspecified Tank	1985	102098
J	482m W	Unspecified Tank	1974	95545
Q	486m S	Tanks	1985 - 1998	99062
Q	487m S	Tanks	1977	96334
J	488m W	Unspecified Tank	1967 - 1974	89391
R	489m SW	Tanks	1929	87731
J	490m W	Unspecified Tank	1991	96091
J	490m W	Unspecified Tank	1985	100804
R	494m SW	Unspecified Tank	1937	84731
J	495m W	Unspecified Tank	1985 - 1991	100572
R	499m SW	Tanks	1929	87730

This data is sourced from Ordnance Survey / Groundsure.



1.3 Historical energy features

Records within 500m

8

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

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

ID	Location	Land use	Dates present	Group ID
7	175m NW	Electricity Substation	1956 - 1992	53567
H	276m W	Electricity Substation	1956 - 1991	49472
H	276m W	Electricity Substation	1968	53172
H	300m W	Electricity Substation	1956	59242
S	407m NW	Electricity Substation	1968 - 1992	50460
R	431m SW	Electricity Substation	1986	45526
19	465m S	Electricity Substation	1977	45525
T	494m W	Electricity Substation	1974 - 1991	51680

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

1

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

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

ID	Location	Land use	Dates present	Group ID
14	356m N	Garage	1975 - 1995	19768

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

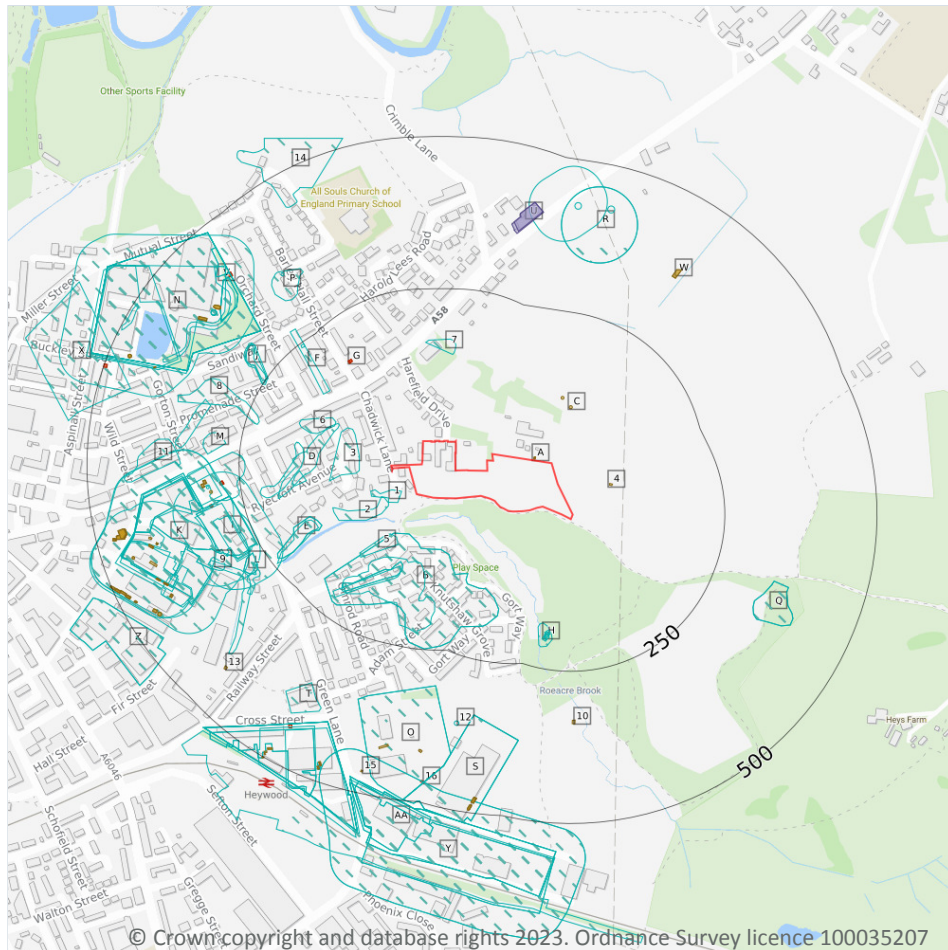
0

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

122

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
1	23m W	Unspecified Ground Workings	1968	730409
2	46m W	Unspecified Ground Workings	1975	730409
3	52m W	Unspecified Pit	1968	690986



ID	Location	Land Use	Date	Group ID
B	67m SW	Sand Pit	1987	739400
B	67m SW	Sand Pit	1975	739400
5	78m SW	Unspecified Heap	1968	650923
D	107m W	Sand Pit	1909	643890
B	108m SW	Sand Pit	1968	703638
6	114m W	Refuse Heap	1890	677956
B	114m SW	Unspecified Ground Workings	1938	648065
B	114m SW	Refuse Heap	1890	677958
B	122m SW	Sand Pit	1909	729135
D	142m W	Unspecified Heap	1968	650922
7	142m N	Sand Pit	1851	643887
D	143m W	Refuse Heap	1890	677955
E	148m W	Unspecified Pit	1949	704001
E	148m W	Unspecified Pit	1968	738518
E	153m W	Unspecified Ground Workings	1938	648064
F	159m NW	Rope Walk	1851	641250
H	176m S	Unspecified Heap	1909	650749
H	186m S	Unspecified Old Shaft	1949	772596
H	189m S	Unspecified Old Shaft	1938	772596
H	191m S	Unspecified Old Shaft	1928	772596
H	193m S	Old Coal Shaft	1909	639855
H	198m S	Unspecified Old Shaft	1890	651878
I	216m W	Unspecified Mills	1938	753816
8	228m W	Unspecified Pit	1890	690988
I	240m W	Sand Pits	1851	664408
F	242m NW	Shed	1851	659594
J	246m NW	Sand Pit	1938	730921
J	248m NW	Sand Pit	1949	730921



ID	Location	Land Use	Date	Group ID
J	249m NW	Sand Pit	1928	721471
K	249m W	Leather Works	1938	756615
I	253m W	Unspecified Mills	1949	705883
K	253m W	Unspecified Works	1975	774525
K	253m W	Unspecified Works	1968	718291
K	267m W	Leather Works	1928	756615
L	267m W	Unspecified Pit	1975	749750
L	267m W	Unspecified Pit	1968	749750
I	269m W	Unspecified Mills	1928	709769
I	272m W	Unspecified Mills	1909	709769
L	273m W	Unspecified Ground Workings	1909	769255
M	274m W	Refuse Heap	1851	677954
I	282m W	Unspecified Mills	1890	757084
L	294m W	Unspecified Ground Workings	1938	787871
I	301m W	Chimney	1851	684516
N	308m NW	Unspecified Mills	1992	704476
N	308m NW	Unspecified Mills	1987	704476
N	308m NW	Unspecified Mills	1975	704476
N	308m NW	Unspecified Mill	1949	730399
N	308m NW	Unspecified Mills	1968	704476
O	309m S	Unspecified Depot	1992	762211
O	309m S	Unspecified Depot	1987	762211
M	313m W	Rope Walk	1851	641249
K	314m W	Leather Works	1949	780460
9	316m W	Unspecified Heap	1909	650924
K	316m W	Leather Works	1909	751143
P	317m NW	Unspecified Heap	1851	650921
K	317m W	Unspecified Works	1992	726411



ID	Location	Land Use	Date	Group ID
K	317m W	Unspecified Works	1987	784167
N	322m NW	Unspecified Mills	1928	765674
K	330m W	Cotton Mill	1851	644474
Q	330m SE	Sand Pit	1975	697205
Q	330m SE	Sand Pit	1968	697205
R	337m NE	Unspecified Hole	1938	658675
R	337m NE	Gravel Hole	1928	722708
K	337m W	Tannery	1992	726106
K	337m W	Tannery	1987	726106
S	340m S	Unspecified Works	1992	701826
S	340m S	Unspecified Works	1987	701826
S	340m S	Unspecified Works	1975	701826
11	346m W	Sand Pits	1851	664409
T	355m SW	Unspecified Works	1992	679031
12	355m S	Unspecified Old Shaft	1949	651877
P	356m NW	Coal Pit	1851	654364
V	359m NW	Unspecified Ground Workings	1928	733555
R	363m N	Gravel Hole	1890	766244
V	364m NW	Unspecified Pit	1992	695481
V	364m NW	Unspecified Pit	1987	695481
V	364m NW	Unspecified Pit	1975	695481
V	364m NW	Unspecified Pit	1968	695481
N	369m W	Unspecified Mill	1938	708740
K	373m W	Unspecified Mill	1909	657012
V	381m NW	Chimney	1992	717336
V	381m NW	Chimney	1987	717336
V	381m NW	Chimney	1975	717336
V	381m NW	Chimney	1968	717336



ID	Location	Land Use	Date	Group ID
K	385m W	Leather Works	1890	752449
N	385m W	Unspecified Mills	1909	768510
K	389m W	Vale Mill	1851	653298
N	392m W	Unspecified Mill	1890	701813
T	402m SW	Unspecified Mill	1992	709811
T	402m SW	Unspecified Mill	1987	709811
T	402m SW	Unspecified Mills	1975	695623
T	402m SW	Unspecified Mills	1949	737761
T	402m SW	Unspecified Mills	1968	695623
T	412m SW	Cotton Mills	1890	659340
V	414m NW	Unspecified Ground Workings	1992	703815
V	414m NW	Unspecified Ground Workings	1987	703815
T	416m SW	Unspecified Mills	1938	704732
R	419m N	Gravel Hole	1908	788192
T	421m SW	Unspecified Mills	1928	746018
T	421m SW	Unspecified Mills	1909	746018
R	422m NE	Gravel Hole	1851	700693
Y	431m SW	Railway Wagon Works	1938	728873
Y	431m SW	Railway Wagon Works	1890	712119
14	443m NW	Colliery	1851	645259
X	447m W	Brick Yard	1851	681784
Z	467m SW	Unspecified Works	1992	709429
Z	467m SW	Unspecified Works	1987	709429
T	468m SW	Unspecified Tank	1949	764770
T	472m SW	Unspecified Tank	1938	727398
T	475m SW	Unspecified Tank	1928	731390
Y	477m SW	Railway Wagon Works	1975	695509
Y	477m SW	Railway Wagon Works	1949	756735



ID	Location	Land Use	Date	Group ID
Y	477m SW	Unspecified Works	1968	708904
AA	481m SW	Unspecified Works	1992	761763
AA	481m SW	Unspecified Works	1987	761763
AA	481m SW	Railway Sidings	1938	785365
Y	487m SW	Railway Wagon Works	1928	735874
Y	487m SW	Railway Wagon Works	1909	735874
N	487m NW	Unspecified Ground Workings	1890	648069

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m

118

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

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
A	2m NE	Unspecified Tank	1973	91949
A	2m NE	Unspecified Tank	1956	92834
A	3m NE	Unspecified Tank	1956	100664
A	3m NE	Unspecified Tank	1968	100571
4	75m E	Unspecified Tank	1910	84271
C	95m NE	Unspecified Tank	1910	84272
C	106m NE	Unspecified Tank	1910	84273
I	297m W	Unspecified Tank	1890	84268
I	304m W	Unspecified Tank	1956	89615
I	306m W	Unspecified Tank	1956	89615
I	309m W	Unspecified Tank	1929	91906
I	309m W	Unspecified Tank	1937	91906
10	330m S	Unspecified Tank	1930	84732



ID	Location	Land Use	Date	Group ID
W	366m NE	Unspecified Tank	1910	102264
W	366m NE	Unspecified Tank	1930	102264
V	381m NW	Tanks	1992	102877
V	382m NW	Tanks	1968	102877
V	382m NW	Tanks	1990	102605
V	385m NW	Unspecified Tank	1968	102797
V	385m NW	Unspecified Tank	1956	102797
V	386m NW	Unspecified Tank	1956	88867
K	403m W	Unspecified Tank	1985	93180
K	403m W	Unspecified Tank	1991	93180
K	404m W	Unspecified Tank	1967	102754
K	404m W	Unspecified Tank	1956	101238
K	404m W	Unspecified Tank	1974	103735
K	404m W	Unspecified Tank	1956	89753
K	404m W	Unspecified Tank	1968	103236
K	410m W	Tanks	1910	87691
K	412m W	Unspecified Tank	1967	94372
K	412m W	Unspecified Tank	1974	94372
O	412m S	Tanks	1977	87734
K	412m W	Unspecified Tank	1985	94372
K	413m W	Unspecified Tank	1968	94372
K	413m W	Tanks	1967	97662
K	413m W	Tanks	1974	97662
O	414m S	Tanks	1977	87732
K	414m W	Tanks	1985	97662
K	414m W	Tanks	1991	97662
K	415m W	Tanks	1968	97662
K	415m W	Unspecified Tank	1985	93605



ID	Location	Land Use	Date	Group ID
K	415m W	Unspecified Tank	1991	93605
K	416m W	Unspecified Tank	1974	93605
K	417m W	Tanks	1910	87690
X	419m W	Unspecified Tank	1956	97974
X	420m W	Unspecified Tank	1956	102506
13	422m SW	Unspecified Tank	1930	84730
K	422m W	Unspecified Tank	1968	103232
K	422m W	Unspecified Tank	1967	101967
K	422m W	Unspecified Tank	1974	101967
K	423m W	Unspecified Tank	1985	95020
K	423m W	Unspecified Tank	1991	89965
K	447m W	Unspecified Tank	1985	89174
K	447m W	Unspecified Tank	1991	89174
K	447m W	Unspecified Tank	1890	99566
K	447m W	Unspecified Tank	1910	99566
K	448m W	Tanks	1967	100380
K	448m W	Tanks	1956	100380
K	448m W	Tanks	1974	100380
K	449m W	Tanks	1956	100380
K	449m W	Tanks	1968	100380
K	449m W	Tanks	1985	93097
K	450m W	Unspecified Tank	1967	102803
K	450m W	Tanks	1991	100808
K	450m W	Unspecified Tank	1968	102803
15	462m SW	Unspecified Tank	1977	84726
X	463m W	Unspecified Tank	1890	98153
X	463m W	Unspecified Tank	1910	98153
X	463m W	Unspecified Tank	1929	98153



ID	Location	Land Use	Date	Group ID
X	463m W	Unspecified Tank	1937	98153
K	467m W	Unspecified Tank	1967	93744
K	467m W	Unspecified Tank	1956	93744
K	467m W	Unspecified Tank	1974	93744
T	467m SW	Unspecified Tank	1968	89669
T	467m SW	Unspecified Tank	1956	89669
T	468m SW	Unspecified Tank	1956	89669
T	468m SW	Unspecified Tank	1968	89669
K	468m W	Unspecified Tank	1985	93744
K	468m W	Unspecified Tank	1991	93744
K	468m W	Unspecified Tank	1956	93744
K	468m W	Unspecified Tank	1968	93744
K	472m W	Unspecified Tank	1967	92815
K	472m W	Unspecified Tank	1974	92815
K	473m W	Unspecified Tank	1968	99132
S	474m S	Unspecified Tank	1995	90874
S	474m S	Unspecified Tank	1995	90874
S	474m S	Unspecified Tank	1998	90874
S	474m S	Unspecified Tank	1977	90874
S	474m S	Unspecified Tank	1985	90874
S	474m S	Unspecified Tank	1990	90874
T	475m SW	Unspecified Tank	1929	96401
T	475m SW	Unspecified Tank	1937	96401
K	477m W	Unspecified Tank	1967	95970
K	477m W	Unspecified Tank	1974	95970
K	478m W	Unspecified Tank	1985	90659
K	478m W	Unspecified Tank	1991	90659
K	479m W	Unspecified Tank	1968	95970

ID	Location	Land Use	Date	Group ID
T	480m SW	Unspecified Tank	1968	95619
T	480m SW	Unspecified Tank	1968	95619
K	482m W	Unspecified Tank	1985	102098
K	482m W	Unspecified Tank	1991	98857
K	482m W	Unspecified Tank	1974	95545
S	486m S	Tanks	1995	99062
S	486m S	Tanks	1995	99062
S	486m S	Tanks	1998	99062
S	487m S	Tanks	1977	96334
S	487m S	Tanks	1985	99062
S	487m S	Tanks	1990	99062
K	488m W	Unspecified Tank	1967	89391
K	488m W	Unspecified Tank	1974	89391
T	489m SW	Tanks	1929	87731
K	490m W	Unspecified Tank	1968	89391
K	490m W	Unspecified Tank	1985	100804
K	490m W	Unspecified Tank	1991	96091
T	494m SW	Unspecified Tank	1937	84731
K	495m W	Unspecified Tank	1985	100572
K	495m W	Unspecified Tank	1991	100572
T	499m SW	Tanks	1929	87730

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

21

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

Features are displayed on the Past land use - un-grouped map on **page 22**



ID	Location	Land Use	Date	Group ID
G	175m NW	Electricity Substation	1973	53567
G	175m NW	Electricity Substation	1956	53567
G	175m NW	Electricity Substation	1992	53567
G	175m NW	Electricity Substation	1956	53567
G	175m NW	Electricity Substation	1968	53567
I	276m W	Electricity Substation	1956	49472
I	276m W	Electricity Substation	1968	53172
I	277m W	Electricity Substation	1985	49472
I	277m W	Electricity Substation	1991	49472
I	277m W	Electricity Substation	1967	49472
I	278m W	Electricity Substation	1956	49472
I	278m W	Electricity Substation	1974	49472
I	300m W	Electricity Substation	1956	59242
I	301m W	Electricity Substation	1956	59242
V	407m NW	Electricity Substation	1992	50460
V	407m NW	Electricity Substation	1968	50460
V	408m NW	Electricity Substation	1990	50460
T	431m SW	Electricity Substation	1986	45526
16	465m S	Electricity Substation	1977	45525
X	494m W	Electricity Substation	1974	51680
X	495m W	Electricity Substation	1991	51680

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.



2.5 Historical garages

Records within 500m

2

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

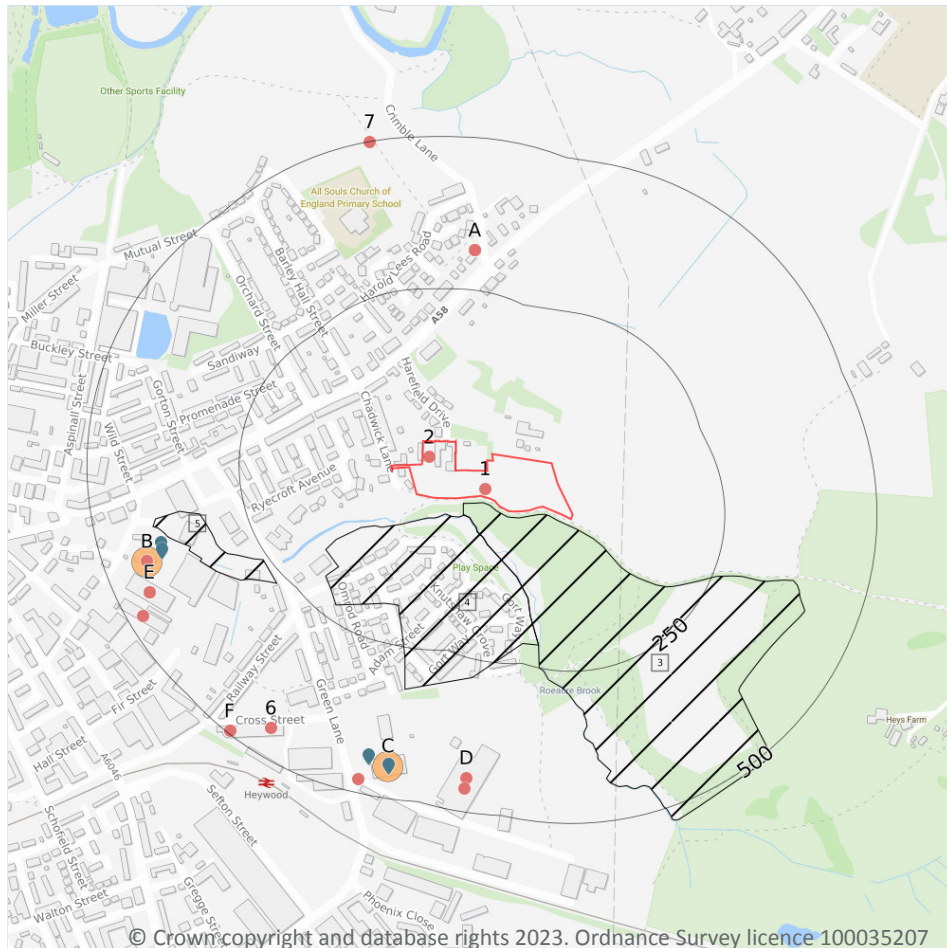
Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
U	356m N	Garage	1975	19768
U	360m N	Garage	1995	19768

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



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

3.1 Active or recent landfill

Records within 500m

0

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

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

3.2 Historical landfill (BGS records)

Records within 500m

0

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

This data is sourced from the British Geological Survey.



3.3 Historical landfill (LA/mapping records)

Records within 500m

0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m

3

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

Features are displayed on the Waste and landfill map on **page 34**

ID	Location	Details		
3	8m S	Site Address: Land South of Chadwick Lane, Heywood, Rochdale Licence Holder Address: Victoria House, Higher Bury Street, Stockport	Waste Licence: Yes Site Reference: RD/LIC/350/84, D009, RD/LIC/265/83, 4200/9007 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 28/09/1984 Licence Surrender: 28/04/1994	Operator: - Licence Holder: Wilderness Quarries Limited First Recorded 31/12/1984 Last Recorded: 31/12/1986
4	26m SW	Site Address: Brook Bank, Green Lane, Heywood, Bury, Greater Manchester Licence Holder Address: Brook Bank, Green Lane, Heywood	Waste Licence: Yes Site Reference: D043, D15461, RD/LIC/193/80 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01/10/1980 Licence Surrender: -	Operator: - Licence Holder: Gort Bank Sand Pits Limited First Recorded - Last Recorded: -
5	258m W	Site Address: Roe Acre Mill, Rochdale Road East, Heywood, Greater Manchester Licence Holder Address: -	Waste Licence: - Site Reference: D121, 0786 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: Rochdale Canal Company Licence Holder: Roe Acre Dye and Finishing Company Limited First Recorded 01/05/1972 Last Recorded: 31/08/1992

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



3.5 Historical waste sites

Records within 500m

2

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 34**

ID	Location	Address	Further Details	Date
B	405m W	Site Address: Silvester House, Bradshaw Street, Roe Acre Tannery, HEYWOOD, Greater Manchester, OL10 1PN	Type of Site: Recycling Centre (Conversion) Planning application reference: 08/D50670 Description: Scheme comprises change of use from industrial yard/tannery to waste recycling centre. An application (ref: 08/D50670) for detailed planning permission was granted by Rochdale B.C. Planning decision obtained Data source: Historic Planning Application Data Type: Point	21/02/2009
C	423m S	Site Address: Environmental Management, Green Lane, HEYWOOD, Greater Manchester, OL10 2DY	Type of Site: Recycling Centre (Conversion) Planning application reference: 06/D46798 Description: Scheme comprises of conversion to batching centre for recycling from environmental management depot. An application (ref: 06/D46798) for detailed planning permission was granted by Rochdale B.C. Planning decision obtained 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

5

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

Features are displayed on the Waste and landfill map on **page 34**



ID	Location	Details		
B	399m W	Site Name: Roe Acre Transfer Station Site Address: Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, Lancashire, OL10 1PN Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PGC006 EPR reference: EA/EPR/AB3206XV/T001 Operator: P G C Demolition Limited Waste Management licence No: 100414 Annual Tonnage: 24999	Issue Date: 24/11/2008 Effective Date: 20/08/2013 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked
B	402m W	Site Name: Silvester House Site Address: ROCHDALE SKIP HIRE LTD, Silvester House, Bradshaw Street, Heywood, OL10 1PN Correspondence Address: -	Type of Site: Inert & Excavation WTS with treatment Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: - EPR reference: EA/EPR/WE3011AA/T002 Operator: ROCHDALE SKIP HIRE LTD Waste Management licence No: 120078 Annual Tonnage: -	Issue Date: 10/06/2019 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
C	439m SW	Site Name: Green Lane Transfer Station Site Address: Rochdale Metropolitan Borough Council, Green Lane, Heywood, Rochdale, Lancashire, OL10 2DY Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ROC006 EPR reference: EA/EPR/DP3694CE/A001 Operator: Rochdale Metropolitan Borough Council Waste Management licence No: 50455 Annual Tonnage: 4999	Issue Date: 01/06/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
C	447m S	Site Name: Nww - Heywood Transfer Station Site Address: Green Lane, Heywood, Lancashire, OL10 2DY Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: NNW001 EPR reference: EA/EPR/LP3892CQ/S002 Operator: North West Water Ltd Waste Management licence No: 53420 Annual Tonnage: 50000	Issue Date: 07/01/2000 Effective Date: - Modified: - Surrendered Date: 27/06/2001 Expiry Date: - Cancelled Date: - Status: Surrendered
C	447m S	Site Name: Nww - Heywood Transfer Station Site Address: Green Lane, Heywood, Lancashire, OL10 2DY Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: NNW001 EPR reference: EA/EPR/LP3892CQ/S002 Operator: North West Water Ltd Waste Management licence No: 53420 Annual Tonnage: 50000	Issue Date: 07/01/2000 Effective Date: - Modified: - Surrendered Date: Jun 27 2001 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered

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

3.7 Waste exemptions

Records within 500m	36
----------------------------	-----------

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 34**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	On site	RIVERS LANE, URMSTON, MANCHESTER, M41 7JB	WEX098917	Storing waste exemption	On a farm	Storage of sludge
2	On site	Chadwicks Farm Chadwicks Lane	EPR/PE5851FM/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge



ID	Location	Site	Reference	Category	Sub-Category	Description
A	314m N	-	WEX262581	Using waste exemption	Not on a farm	Use of waste in construction
A	314m N	-	WEX262581	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
A	314m N	-	WEX262581	Using waste exemption	Not on a farm	Use of waste for a specified purpose
A	314m N	-	WEX262581	Using waste exemption	Not on a farm	Spreading waste on agricultural land to confer benefit
A	314m N	-	WEX262581	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
A	314m N	-	WEX262581	Treating waste exemption	Not on a farm	Screening and blending of waste
A	314m N	-	WEX262581	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	314m N	-	WEX262581	Disposing of waste exemption	Not on a farm	Burning waste in the open
A	314m N	-	WEX262581	Storing waste exemption	Not on a farm	Storage of waste in secure containers
A	314m N	-	WEX262581	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	431m W	SILVESTER HOUSE, BRADSHAW STREET, HEYWOOD, OL10 1PN	WEX130753	Treating waste exemption	Not on a farm	Screening and blending of waste
B	431m W	SILVESTER HOUSE, BRADSHAW STREET, HEYWOOD, OL10 1PN	WEX130753	Using waste exemption	Not on a farm	Use of waste in construction
D	445m S	Manchester Galvanizing Ltd., GREEN LANE, HEYWOOD, OL10 2DY	WEX100428	Treating waste exemption	Not on a farm	Treatment of waste aerosol cans
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Using waste exemption	Not on a farm	Use of waste in construction
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Using waste exemption	Not on a farm	Use of waste for a specified purpose



ID	Location	Site	Reference	Category	Sub-Category	Description
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Treating waste exemption	Not on a farm	Screening and blending of waste
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Treating waste exemption	Not on a farm	Sorting mixed waste
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Treating waste exemption	Not on a farm	Manual treatment of waste
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Treating waste exemption	Not on a farm	Aerobic composting and associated prior treatment
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Disposing of waste exemption	Not on a farm	Burning waste in the open
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Storing waste exemption	Not on a farm	Storage of waste in secure containers
E	448m W	Silvester House, Roe Acre Tannery, Bradshaw Street, Heywood, OL10 1PN	WEX241788	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	448m W	SILVESTER HOUSE, BRADSHAW STREET, HEYWOOD, OL10 1PN	WEX272599	Using waste exemption	Not on a farm	Use of waste in construction
E	448m W	SILVESTER HOUSE, BRADSHAW STREET, HEYWOOD, OL10 1PN	WEX272599	Treating waste exemption	Not on a farm	Screening and blending of waste
6	454m SW	Southgate Industrial Estate Unit 25 Cross Street HEYWOOD Lancashire OL10 1PW	EPR/ZF0906M B/A001	Treating waste exemption	Non-Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste

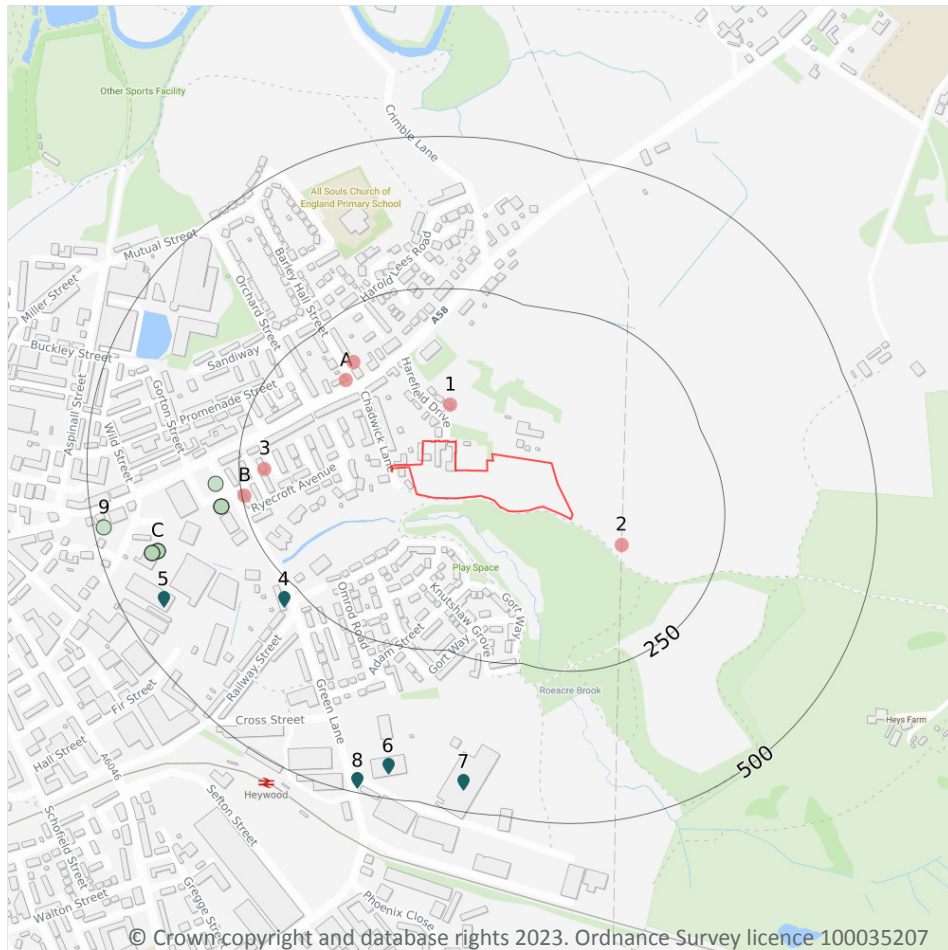


ID	Location	Site	Reference	Category	Sub-Category	Description
D	463m S	Manchester Galvanizing Ltd Green Lane Heywood Lancashire OL10 2DY	EPR/ZF0932YK /A001	Treating waste exemption	Non-Agricultural Waste Only	Treatment of waste aerosol cans
E	475m W	ROEACRE BUSINESS PARK, UNIT 9, BRADSHAW STREET, HEYWOOD, OL10 1PN	WEX125077	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
C	479m SW	JUNCTION 19 INDUSTRIAL PARK, GREEN LANE, HEYWOOD, OL10 1NB	WEX176442	Storing waste exemption	Not on a farm	Storage of waste in a secure place
F	497m SW	UNIT 25, SOUTHGATE INDUSTRIAL ESTATE, CROSS STREET, HEYWOOD, OL10 1PW	WEX259063	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
F	497m SW	UNIT 25, SOUTHGATE INDUSTRIAL ESTATE, CROSS STREET, HEYWOOD, OL10 1PW	WEX118010	Treating waste exemption	Not on a farm	Cleaning, washing, spraying or coating relevant waste
7	499m N	RIVERS LANE, URMSTON, MANCHESTER, M41 7JB	WEX097922	Storing waste exemption	On a farm	Storage of sludge

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
- Licensed pollutant release (Part A(2)/B)
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

6

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 42**

ID	Location	Company	Address	Activity	Category
1	59m NW	Trevor Noon Communica tion Services	Floreat, 5, Harefield Drive, Heywood, Greater Manchester, OL10 1RN	Sports and Leisure Equipment Repair	Repair and Servicing
2	93m SE	Pylon	Greater Manchester, OL10	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
A	158m NW	Fairfield Yarns	131, Rochdale Road East, Heywood, Greater Manchester, OL10 1QU	Textiles, Fabrics, Silk and Machinery	Industrial Products
A	174m NW	Electricity Sub Station	Greater Manchester, OL10	Electrical Features	Infrastructure and Facilities
3	208m W	H C Water Engineering Ltd	7, Corry Street, Heywood, Greater Manchester, OL10 1QA	General Construction Supplies	Industrial Products
B	246m W	P A R	19, Green Lane, Heywood, Greater Manchester, OL10 1NQ	Rubber, Silicones and Plastics	Industrial Products

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

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

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

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

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

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

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

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

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

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

Records within 500m

5

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

Features are displayed on the Current industrial land use map on **page 42**

ID	Location	Address	Details	
4	278m SW	Motorama Bodyshop, Green Lane, Rochdale	Process: Respraying of Road Vehicles; Spray Painting Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
5	432m W	Sylvester Litton Bradshaw St, OL10 1PN	Process: leather/hide/tannery process Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
6	447m S	Pillar Wedge, Green Lane, Heywood, Rochdale, OL10 2DY	Process: Hot Dip Galvanizing Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
7	451m S	Manchester Galvanizing Ltd, Green Lane, Heywood, Lancashire, OL10 1NQ	Process: Hot Dip Galvanizing Processes Status: Current Permit Permit Type: Part A2	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified
8	481m SW	Merrion Packaging Ltd, Green Lane, Rochdale, OL10 1NB	Process: Flexible Packaging ; Flexible Packaging Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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



4.13 Licensed Discharges to controlled waters

Records within 500m**0**

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

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m**0**

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

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

4.15 Pollutant release to public sewer

Records within 500m**0**

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m**0**

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

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

4.17 List 2 Dangerous Substances

Records within 500m**0**

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m

11

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 42**

ID	Location	Details	
B	287m W	Incident Date: 02/04/2001 Incident Identification: 1314 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Vegetable Cuttings and Deposits	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
B	287m W	Incident Date: 02/04/2001 Incident Identification: 1314 Pollutant: Inert Materials and Wastes:General Biodegradable Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes:Vegetable Cuttings and Deposits	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
B	287m W	Incident Date: 02/04/2001 Incident Identification: 1314 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
B	290m W	Incident Date: 09/01/2002 Incident Identification: 51428 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
C	407m W	Incident Date: 06/11/2002 Incident Identification: 119164 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
C	407m W	Incident Date: 06/11/2002 Incident Identification: 119164 Pollutant: Inert Materials and Wastes:Specific Waste Materials Pollutant Description: Construction and Demolition Materials and Wastes:Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
C	407m W	Incident Date: 06/11/2002 Incident Identification: 119164 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)



ID	Location	Details	
C	417m W	Incident Date: 13/09/2001 Incident Identification: 30668 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
C	417m W	Incident Date: 13/09/2001 Incident Identification: 30668 Pollutant: Atmospheric Pollutants and Effects:Inert Materials and Wastes Pollutant Description: Smoke:Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
C	417m W	Incident Date: 13/09/2001 Incident Identification: 30668 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
9	482m W	Incident Date: 29/01/2003 Incident Identification: 133895 Pollutant: Oils and Fuel Pollutant Description: Cutting Oils	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m

0

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

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

4.20 Pollution inventory waste transfers

Records within 500m

0

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

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



4.21 Pollution inventory radioactive waste

Records within 500m

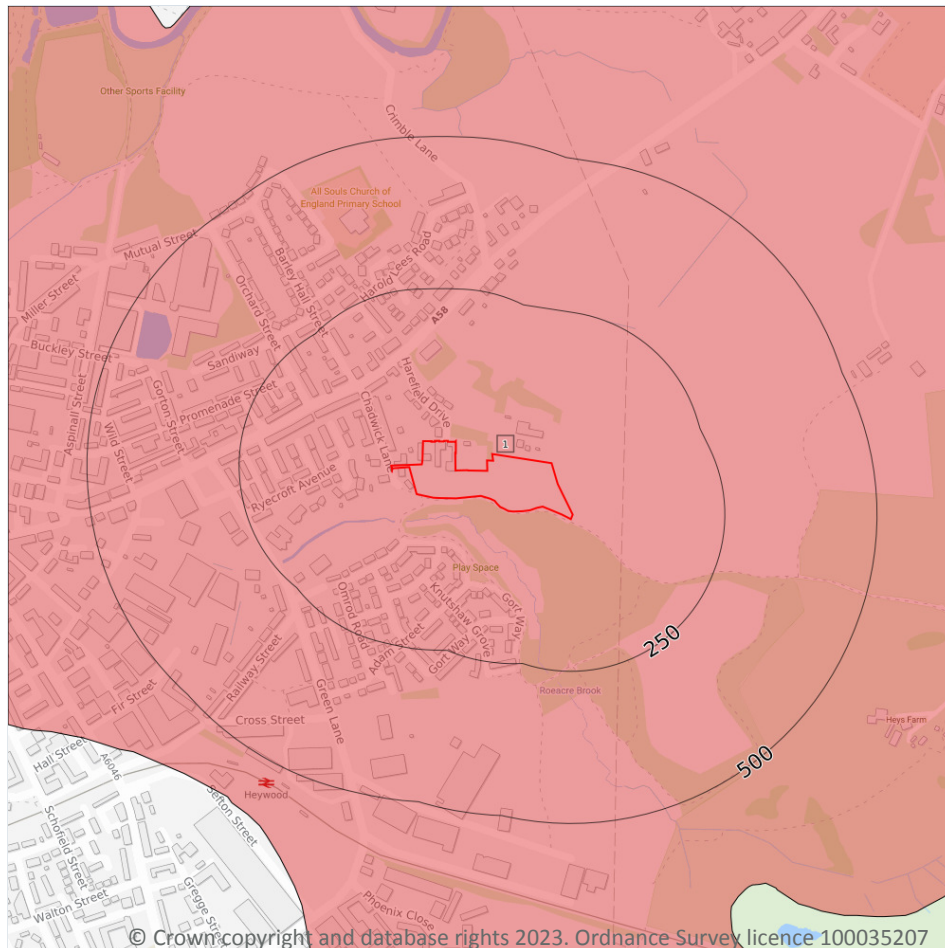
0

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

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



5 Hydrogeology - Superficial aquifer



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

5.1 Superficial aquifer

Records within 500m

1

Aquifer status of groundwater held within superficial geology.

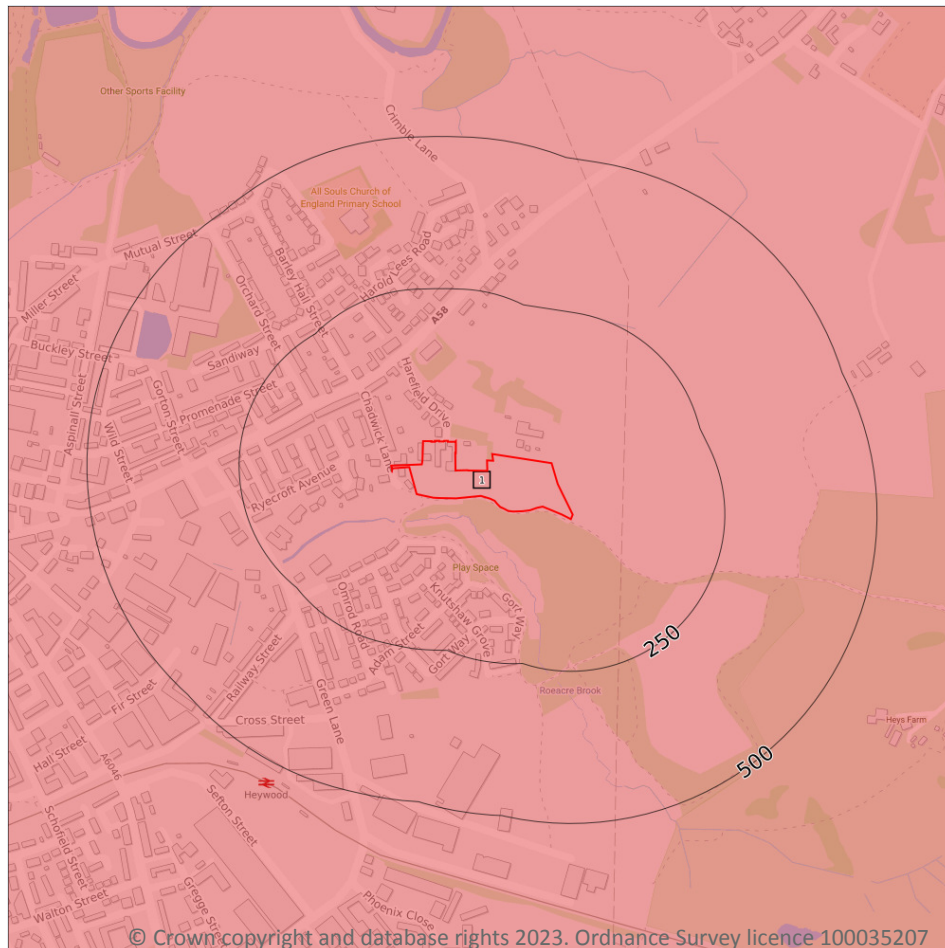
Features are displayed on the Hydrogeology map on **page 50**

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

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



Bedrock aquifer



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

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

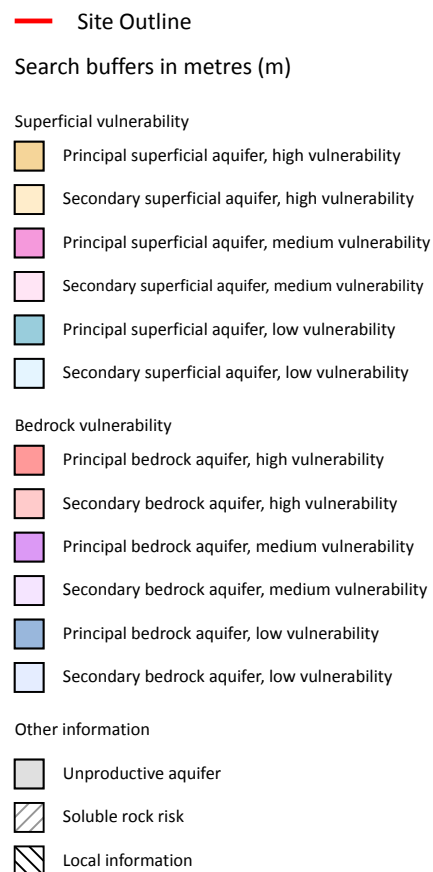
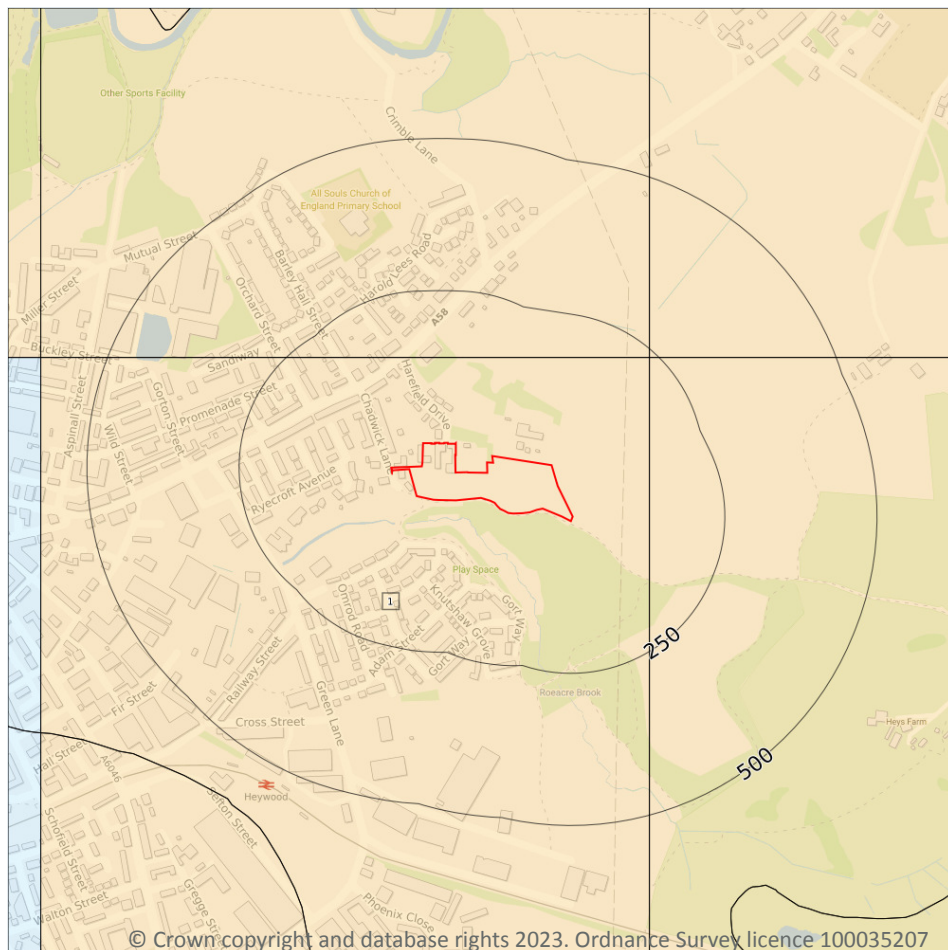
Features are displayed on the Bedrock aquifer map on **page 51**

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



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 52**



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

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

5.4 Groundwater vulnerability- soluble rock risk

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

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

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

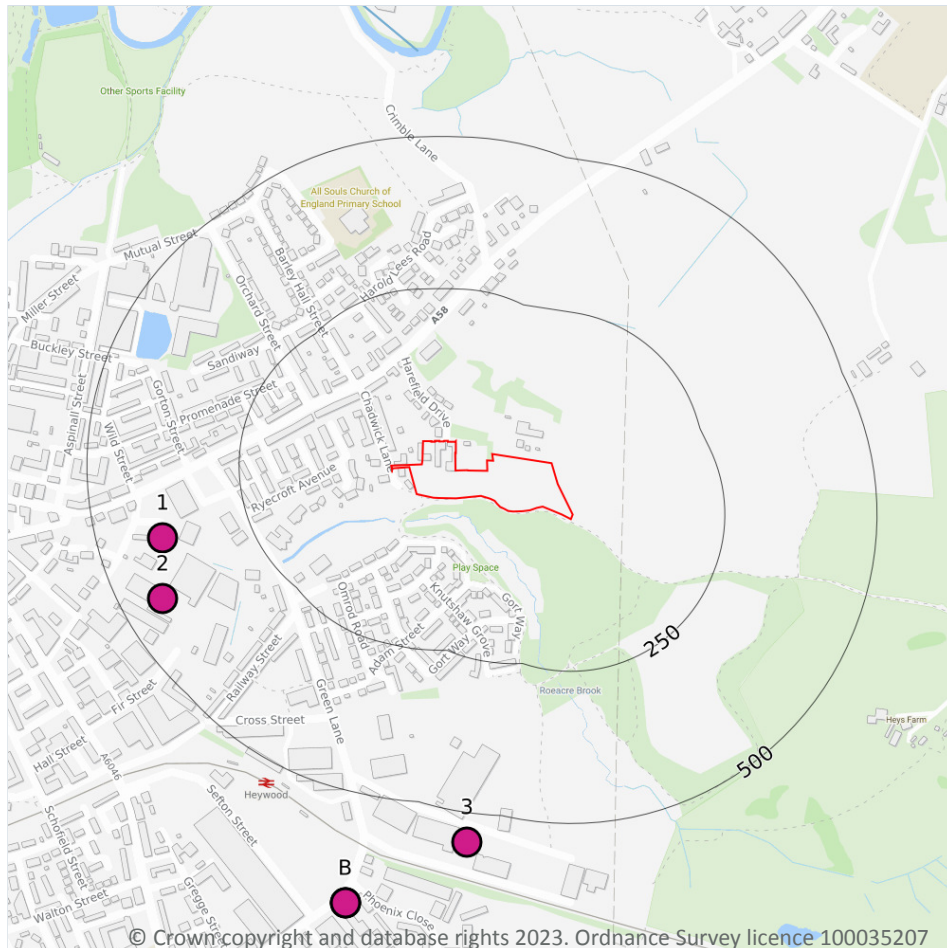
5.5 Groundwater vulnerability- local information

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

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

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

Abstractions and Source Protection Zones



5.6 Groundwater abstractions

Records within 2000m

13

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 54**

ID	Location	Details	
1	393m W	Status: Historical Licence No: 2569002082 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLES (2) AT PREMISES, ROEACRE TANNERY, HEYWOOD Data Type: Point Name: G. S. COLD STORAGE AND WAREHOUSING LTD. Easting: 386200 Northing: 410700	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/12/2000 Version End Date: -
2	433m W	Status: Historical Licence No: 2569002082 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLES (2) AT PREMISES, ROEACRE TANNERY, HEYWOOD, L97 Data Type: Point Name: G. S. COLD STORAGE AND WAREHOUSING LTD. Easting: 386200 Northing: 410600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/12/2000 Version End Date: -
3	548m S	Status: Historical Licence No: 2569002257 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT GREEN LANE, HEYWOOD Data Type: Point Name: TARMAC TOPMIX LTD Easting: 386700 Northing: 410200	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 28/06/1993 Expiry Date: - Issue No: 100 Version Start Date: 28/06/1993 Version End Date: -
B	681m S	Status: Historical Licence No: 2569002029 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, GREEN LANE, HEYWOOD" Data Type: Point Name: OAK BREWING COMPANY LTD Easting: 386500 Northing: 410100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/11/1990 Version End Date: -

ID	Location	Details	
B	681m S	Status: Historical Licence No: 2569002029 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, GREEN LANE, HEYWOOD Data Type: Point Name: OAK BREWING COMPANY LTD Easting: 386500 Northing: 410100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/11/1990 Version End Date: -
B	681m S	Status: Active Licence No: 2569002029 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, GREEN LANE, HEYWOOD Data Type: Point Name: OAK BREWING COMPANY LTD Easting: 386500 Northing: 410100	Annual Volume (m ³): 79,645.92 Max Daily Volume (m ³): 218.21 Original Application No: 0203 Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/11/1990 Version End Date: -
-	751m N	Status: Historical Licence No: 2569002037 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, CRIMBLE MILLS,HEYWOOD" Data Type: Point Name: ROE ACRE DYEING & FELTING CO LTD Easting: 386500 Northing: 411600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/05/1993 Version End Date: -
-	751m N	Status: Historical Licence No: 2569002037 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, CRIMBLE MILLS,HEYWOOD" Data Type: Point Name: ROE ACRE DYEING & FELTING CO LTD Easting: 386500 Northing: 411600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/05/1993 Version End Date: -



ID	Location	Details	
-	751m N	Status: Historical Licence No: 2569002037 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, CRIMBLE MILLS,HEYWOOD Data Type: Point Name: K.SHAW & COMPANY LTD. Easting: 386500 Northing: 411600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/2002 Version End Date: -
-	751m N	Status: Historical Licence No: 2569002037 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, CRIMBLE MILLS,HEYWOOD Data Type: Point Name: K.SHAW & COMPANY LTD. Easting: 386500 Northing: 411600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/2002 Version End Date: -
-	1749m NW	Status: Historical Licence No: 2569002217 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT BUTTERWORTH FOLD FARM, BAMFORD, ROCHDALE" Data Type: Point Name: JAMES SWALLOW LTD Easting: 385800 Northing: 412400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 22/09/1980 Expiry Date: - Issue No: 100 Version Start Date: 22/09/1980 Version End Date: -
-	1749m NW	Status: Historical Licence No: 2569002217 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT BUTTERWORTH FOLD FARM, BAMFORD, ROCHDALE Data Type: Point Name: JAMES SWALLOW LTD Easting: 385800 Northing: 412400	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 22/09/1980 Expiry Date: - Issue No: 100 Version Start Date: 22/09/1980 Version End Date: -



ID	Location	Details	
-	1749m NW	Status: Active Licence No: 2569002217 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT BUTTERWORTH FOLD FARM BAMFORD ROCHDALE Data Type: Point Name: JAMES SWALLOW LTD Easting: 385800 Northing: 412400	Annual Volume (m ³): 33,185.80 Max Daily Volume (m ³): 90.92 Original Application No: 2563 Original Start Date: 22/09/1980 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2007 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	12
-----------------------------	-----------

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 54**

ID	Location	Details	
A	640m N	Status: Historical Licence No: 2569002270 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RIVER ROCH AT HEYWOOD Data Type: Line Name: ROE ACRE DYEING & FELTING CO LTD Easting: 386620 Northing: 411500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 17/06/1999 Version End Date: -
A	640m N	Status: Historical Licence No: 2569002270 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RIVER ROCH AT HEYWOOD Data Type: Line Name: ROE ACRE DYEING & FELTING CO LTD Easting: 386620 Northing: 411500	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 17/06/1999 Version End Date: -



ID	Location	Details	
-	1542m SE	Status: Active Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-Tidal - North West Region Point: TRUB BRK AT ROCHDALE Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD Easting: 387800 Northing: 409500	Annual Volume (m ³): 1,473 Max Daily Volume (m ³): 26.20 Original Application No: 1704 Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -
-	1786m SE	Status: Historical Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-Tidal - North West Region Point: TRUB BRK AT ROCHDALE 122 Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD Easting: 387600 Northing: 409100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/03/1997 Version End Date: -
-	1786m SE	Status: Historical Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-Tidal - North West Region Point: TRUB BRK AT ROCHDALE \$122 Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD Easting: 387600 Northing: 409100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/03/1997 Version End Date: -
-	1786m SE	Status: Active Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-Tidal - North West Region Point: TRUB BRK AT ROCHDALE Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD Easting: 387600 Northing: 409100	Annual Volume (m ³): 1,473 Max Daily Volume (m ³): 26.20 Original Application No: 1704 Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -
-	1862m NW	Status: Historical Licence No: 2569002255 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: NADEN BROOK AT SIMPSON CLOUGH, HEYWOOD 112 Data Type: Point Name: J R CROMPTON LTD Easting: 385360 Northing: 412230	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/02/1993 Expiry Date: - Issue No: 101 Version Start Date: 10/10/2000 Version End Date: -



ID	Location	Details	
-	1862m NW	Status: Historical Licence No: 2569002255 Details: General use relating to Secondary Category (Medium Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "NADEN BROOK AT SIMPSON CLOUGH, HEYWOOD \$112" Data Type: Point Name: J R CROMPTON LTD Easting: 385360 Northing: 412230	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/02/1993 Expiry Date: - Issue No: 101 Version Start Date: 10/10/2000 Version End Date: -
-	1862m NW	Status: Historical Licence No: 2569002255 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: NADEN BROOK AT SIMPSON CLOUGH, HEYWOOD \$112 Data Type: Point Name: J R CROMPTON LTD Easting: 385360 Northing: 412230	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 12/02/1993 Expiry Date: - Issue No: 101 Version Start Date: 10/10/2000 Version End Date: -
-	1862m NW	Status: Active Licence No: 2569002255 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: NADEN BROOK AT SIMPSON CLOUGH, HEYWOOD Data Type: Point Name: UNION PAPERTECH LIMITED Easting: 385360 Northing: 412230	Annual Volume (m ³): 2,136,620 Max Daily Volume (m ³): 6,219 Original Application No: 949 Original Start Date: 12/02/1993 Expiry Date: - Issue No: 102 Version Start Date: 13/08/2007 Version End Date: -
-	1970m SE	Status: Historical Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-Tidal - North West Region Point: TRUB BRK AT ROCHDALE *34 Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD Easting: 387600 Northing: 408900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/03/1997 Version End Date: -

ID	Location	Details	
-	1970m SE	Status: Active Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-Tidal - North West Region Point: TRUB BRK AT ROCHDALE Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD Easting: 387600 Northing: 408900	Annual Volume (m ³): 1,473 Max Daily Volume (m ³): 26.20 Original Application No: 1704 Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -

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

5.8 Potable abstractions

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

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

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

5.9 Source Protection Zones

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

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

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

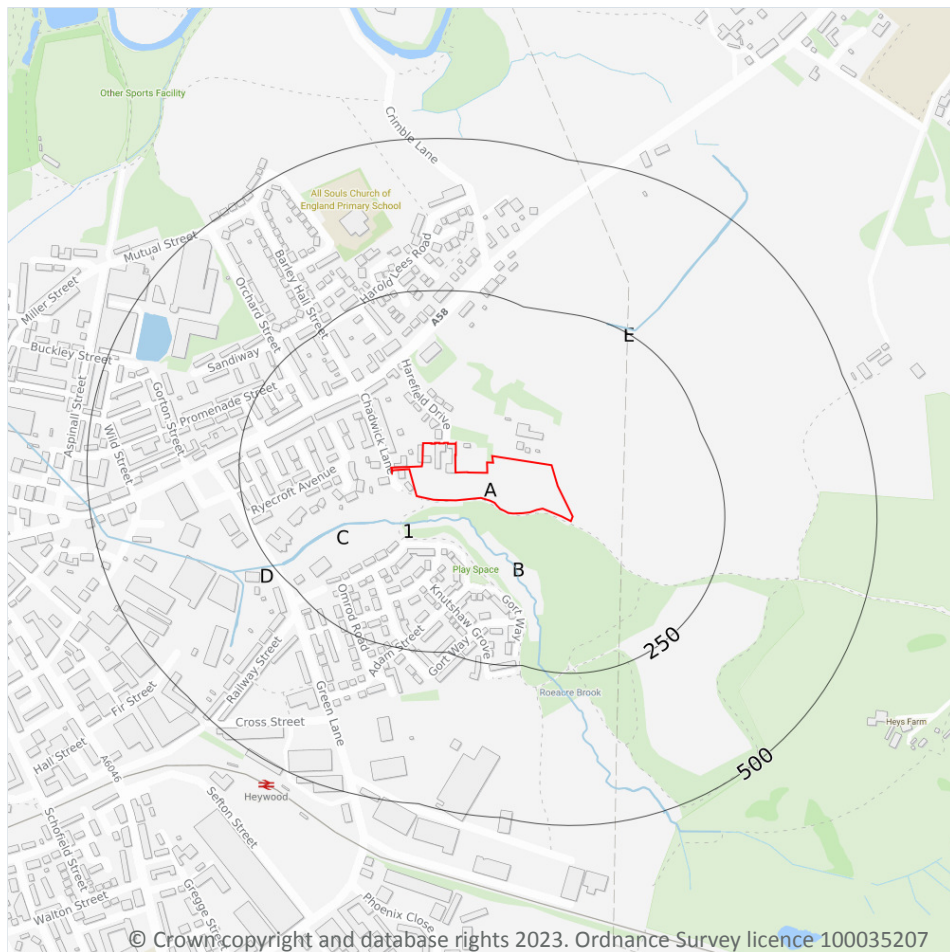
5.10 Source Protection Zones (confined aquifer)

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

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

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

6 Hydrology



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

6.1 Water Network (OS MasterMap)

Records within 250m

5

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 62**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	29m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Roeacre Brook



ID	Location	Type of water feature	Ground level	Permanence	Name
1	47m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	Roeacre Brook
C	57m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Roeacre Brook
D	235m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Roeacre Brook
E	249m NE	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

3

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

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

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 62**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River	Roch (Spodden to Irwell)	GB112069064600	Roch Irk Medlock	Irwell

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



6.4 WFD Surface water bodies

Records identified

1

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

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

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	639m N	River	Roch (Spodden to Irwell)	GB112069064600	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site

1

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

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

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Northern Manchester Carboniferous Aquifers	GB41202G101800	Poor	Poor	Good	2019

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



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

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

7.2 Historical Flood Events

Records within 250m

0

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

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

7.3 Flood Defences

Records within 250m

0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

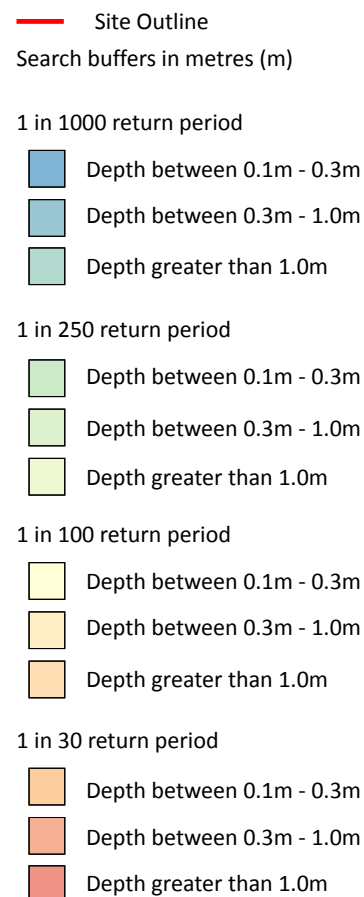
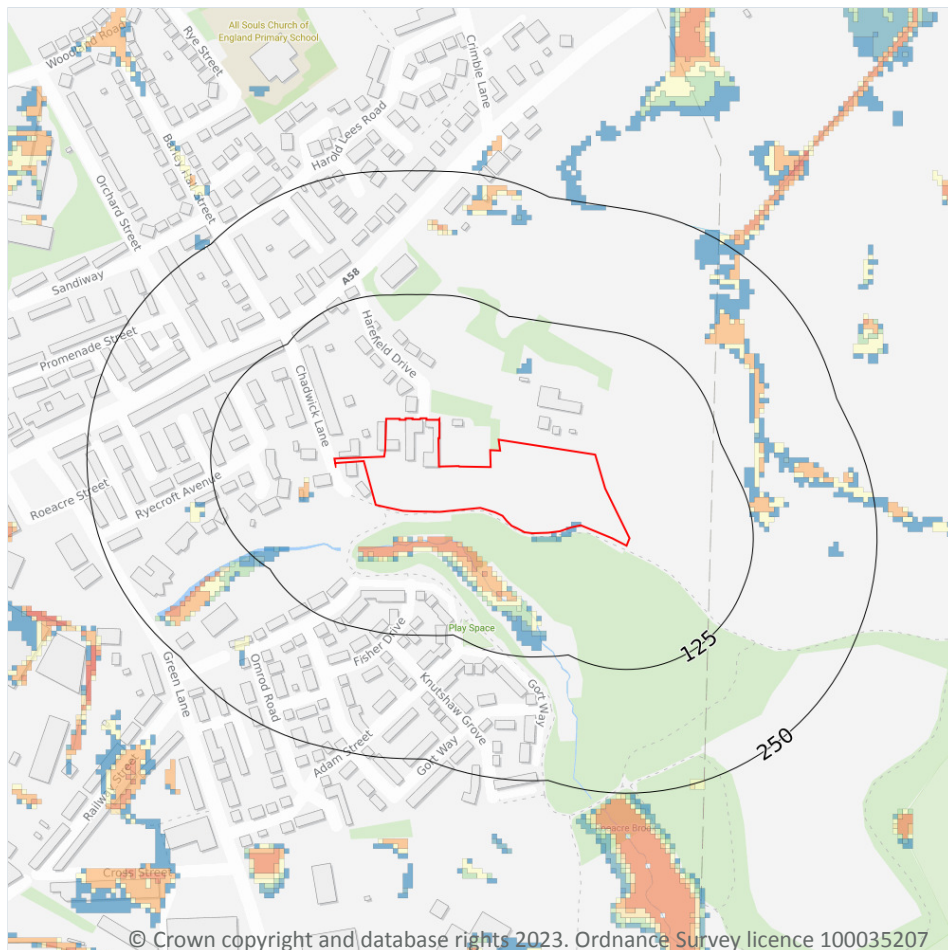
0

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

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



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 1000 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

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

Features are displayed on the Surface water flooding map on **page 68**

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

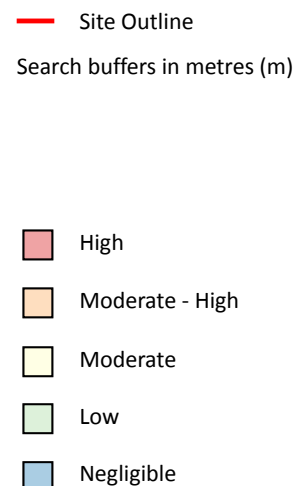
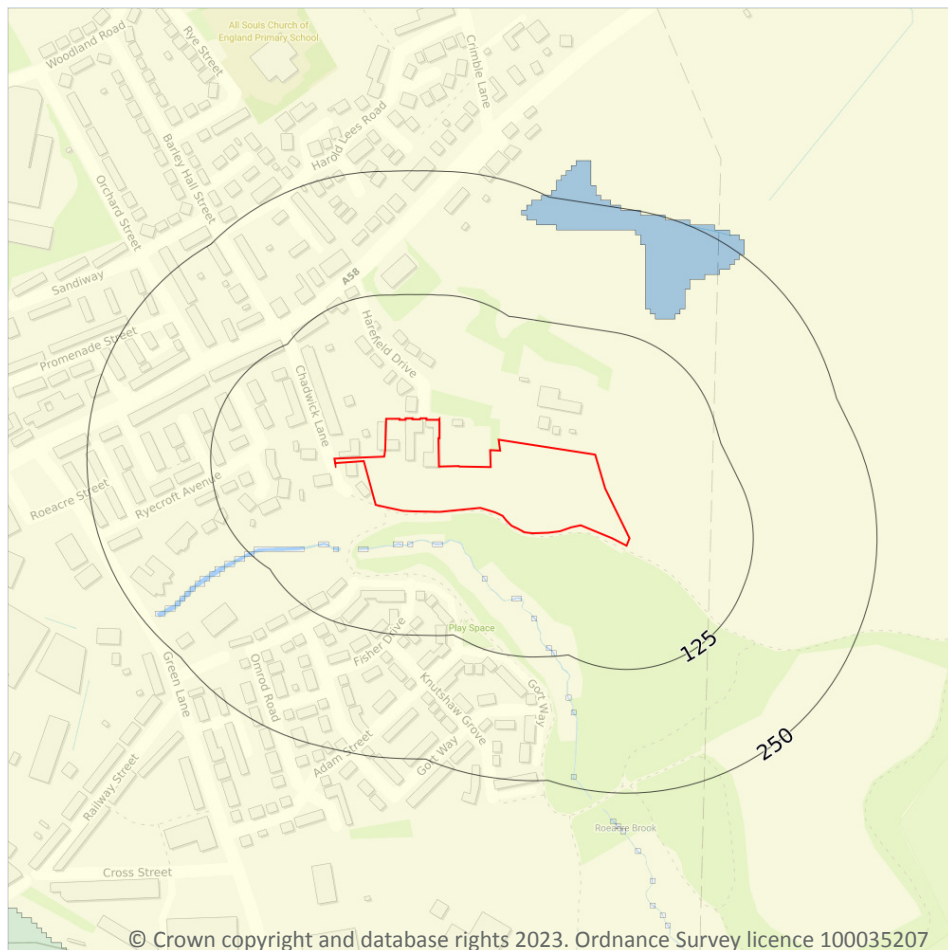
The table below shows the maximum flood depths for a range of return periods for the site.

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

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Moderate

Highest risk within 50m

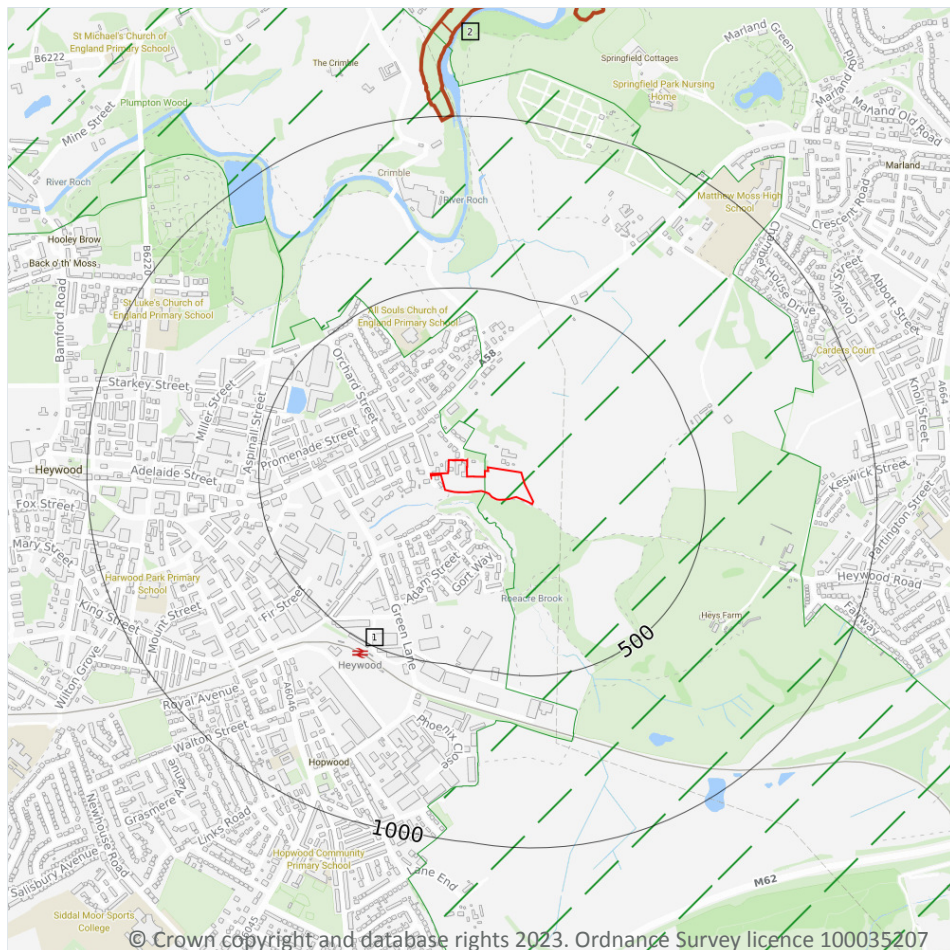
Moderate

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

Features are displayed on the Groundwater flooding map on **page 70**

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- + Special Areas of Conservation (SAC)
- + Local Nature Reserves (LNR)
- Designated Ancient Woodland
- Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

3

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.

Features are displayed on the Environmental designations map on **page 71**

ID	Location	Name	Data source
-	1460m E	Rochdale Canal	Natural England



ID	Location	Name	Data source
-	1480m E	Rochdale Canal	Natural England
-	1731m SE	Rochdale Canal	Natural England

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

3

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.

Features are displayed on the Environmental designations map on **page 71**

ID	Location	Name	Features of interest	Habitat description	Data source
-	1460m E	Rochdale Canal	Floating water-plantain.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water)	Natural England
-	1480m E	Rochdale Canal	Floating water-plantain.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water)	Natural England
-	1731m SE	Rochdale Canal	Floating water-plantain.	Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Inland water bodies (Standing water, Running water)	Natural England

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 71**

ID	Location	Name	Data source
-	1962m S	Hopwood Woodlands	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m**8**

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 71**



ID	Location	Name	Woodland Type
2	988m N	Unknown	Ancient & Semi-Natural Woodland
3	1324m N	Springfield Wood	Ancient & Semi-Natural Woodland
-	1575m N	River Rock Wood (2)	Ancient & Semi-Natural Woodland
-	1844m NW	Simpson Clough Wood	Ancient & Semi-Natural Woodland
-	1852m NW	Jowkin Wood	Ancient & Semi-Natural Woodland
-	1878m NW	Jowkin Wood	Ancient & Semi-Natural Woodland
-	1975m S	Oaken Bank Wood	Ancient & Semi-Natural Woodland
-	1987m W	Unknown	Ancient & Semi-Natural 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

1

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

Features are displayed on the Environmental designations map on **page 71**

ID	Location	Name	Local Authority name
1	On site	Merseyside and Greater Manchester	Rochdale

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

10.12 Proposed Ramsar sites

Records within 2000m

0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

1

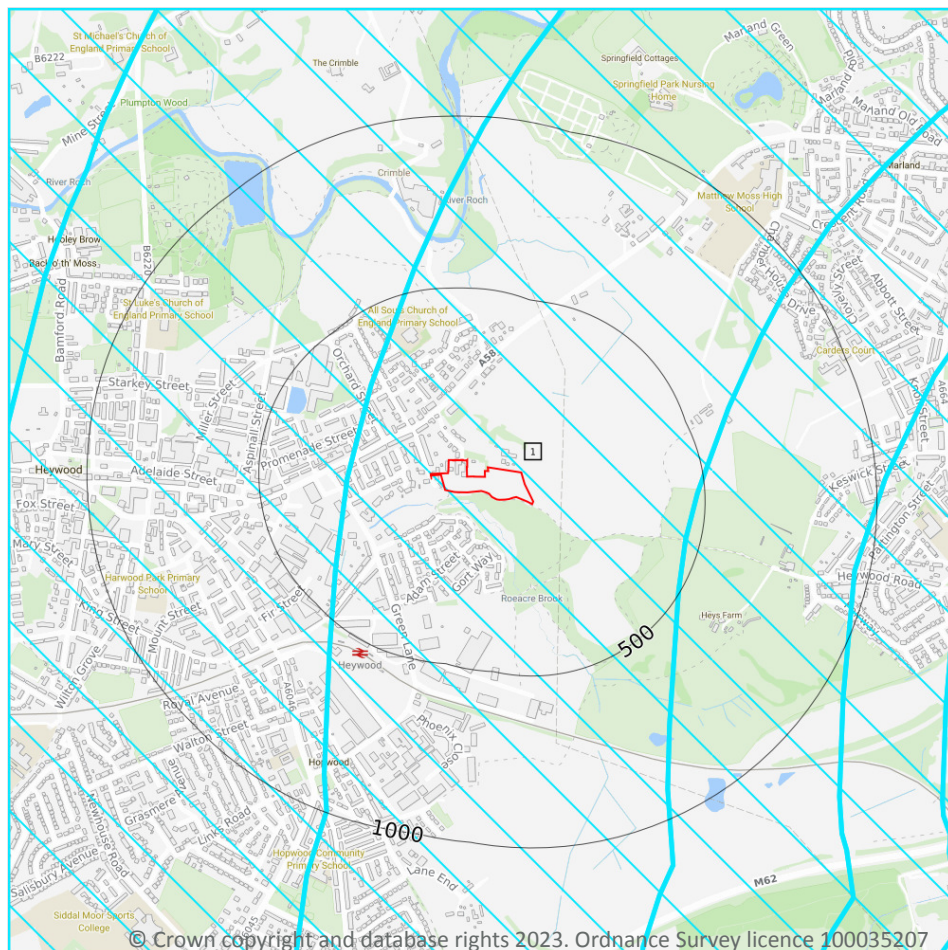
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
870m SE	River Irk (Moston Brook to River Irwell) NVZ	Surface Water	638	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 77**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Pipelines, pylons and overhead cables. any transport proposal including road, rail and by water (excluding routine maintenance). airports, helipads and other aviation proposals. Minerals, Oil and Gas - Planning applications for quarries, including: new proposals, review of minerals permissions (romp), extensions, variations to conditions etc. oil & gas exploration/extraction. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 200m², manure stores > 250t). Combustion - General combustion processes >20mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion. Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill. Composting - Any composting proposal with more than 75000 tonnes maximum annual operational throughput. incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management. Water supply - Large infrastructure such as warehousing / industry where total net additional gross internal floorspace following development is 1,000m² or more.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	3
-----------------------------	----------

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.

Features are displayed on the SSSI Impact Zones and Units map on **page 77**

ID: -
 Location: 1460m E
 SSSI name: Rochdale Canal
 Unit name: Failsworth
 Broad habitat: Standing Open Water And Canals
 Condition: Unfavourable - Recovering
 Reportable features:

Feature name	Feature condition	Date of assessment
Population of Schedule 8 plant - Luronium natans, Floating Water-plantain	Unfavourable - Recovering	25/11/2010



ID: -
Location: 1480m E
SSSI name: Rochdale Canal
Unit name: Failsworth
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Population of Schedule 8 plant - Luronium natans, Floating Water-plantain	Unfavourable - Recovering	25/11/2010

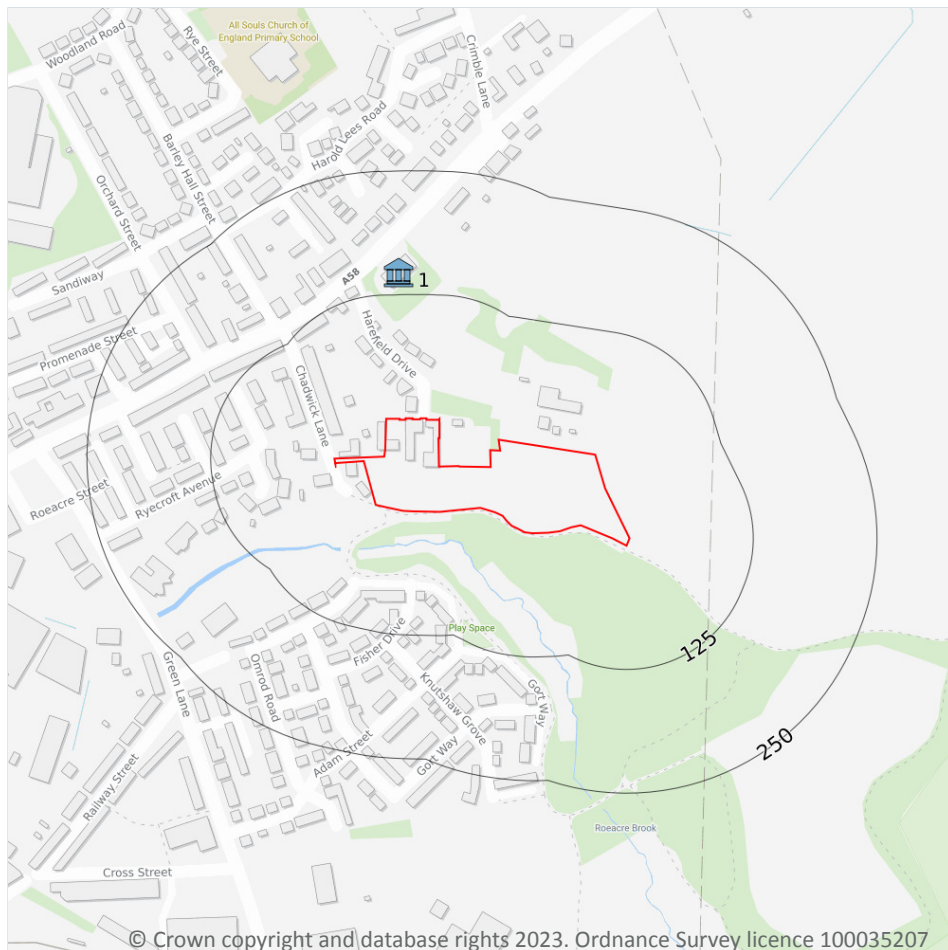
ID: -
Location: 1731m SE
SSSI name: Rochdale Canal
Unit name: Failsworth
Broad habitat: Standing Open Water And Canals
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Population of Schedule 8 plant - Luronium natans, Floating Water-plantain	Unfavourable - Recovering	25/11/2010

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



11 Visual and cultural designations



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

11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

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

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

11.3 National Parks

Records within 250m

0

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

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

11.4 Listed Buildings

Records within 250m

1

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

Features are displayed on the Visual and cultural designations map on **page 80**

ID	Location	Name	Grade	Reference Number	Listed date
1	148m NW	Church of All Souls, North Heywood, Rochdale, OL10	II	1040076	12/02/1985

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



11.5 Conservation Areas

Records within 250m

0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m

0

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

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

11.7 Registered Parks and Gardens

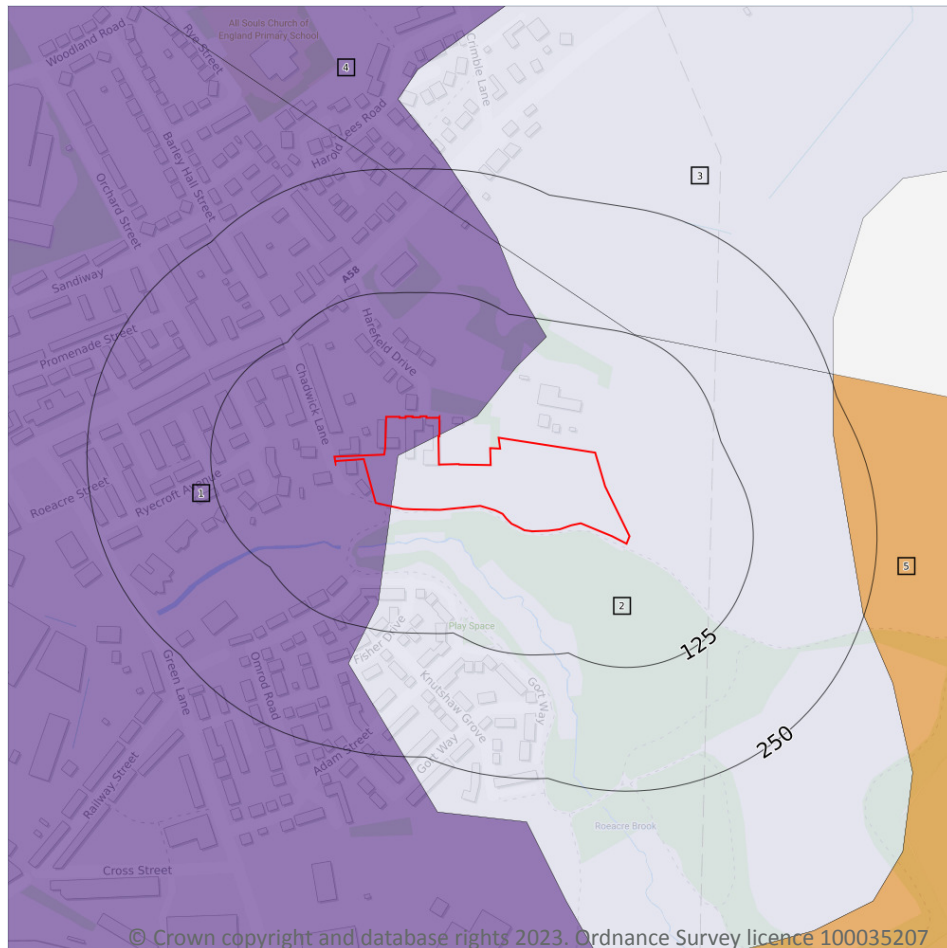
Records within 250m

0

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

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

12 Agricultural designations



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

12.1 Agricultural Land Classification

Records within 250m

5

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 83**

ID	Location	Classification	Description
1	On site	Urban	-

ID	Location	Classification	Description
2	On site	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.
3	126m NE	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.
4	185m N	Urban	-
5	220m E	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.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m

0

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

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

12.3 Tree Felling Licences

Records within 250m

0

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

This data is sourced from the Forestry Commission.



12.4 Environmental Stewardship Schemes

Records within 250m

0

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

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

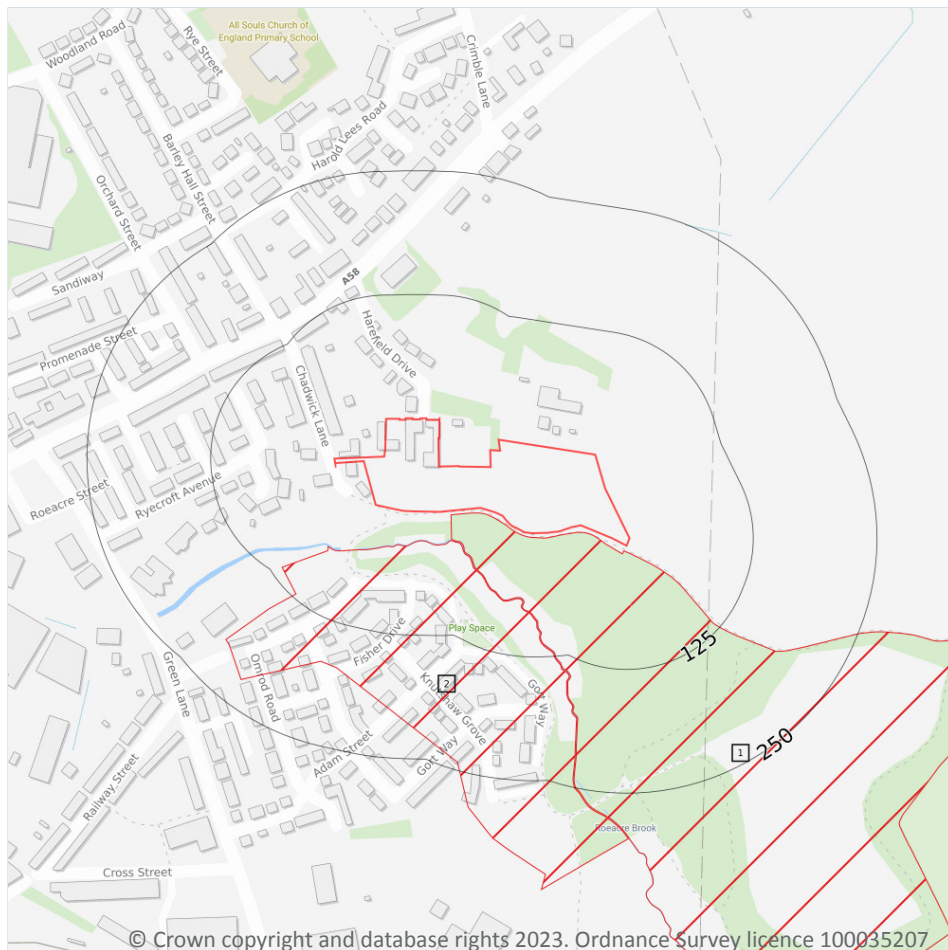
0

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

This data is sourced from Natural England.



13 Habitat designations



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

13.1 Priority Habitat Inventory

Records within 250m

0

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

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.



13.3 Open Mosaic Habitat

Records within 250m

2

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

Features are displayed on the Habitat designations map on **page 86**

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
1	3m S	HLD_refs: EAHLD1579 2; EAHLD1579 4	Low	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography	-
2	30m SW	NLUD Ref: 422500011; BRITPITS ref: 3822	Low	National Land Use Database - Previously Developed Land	British Geological Survey BRITPITS database	UK Perspectives Aerial Photography

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

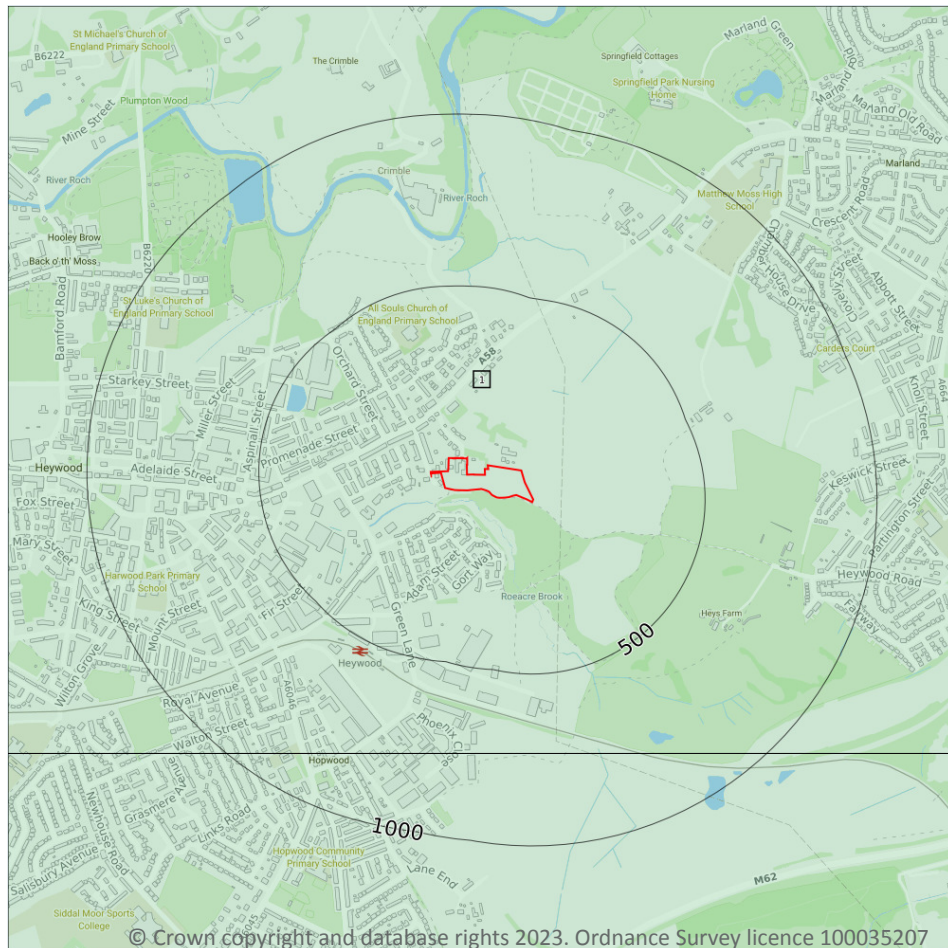
0

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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

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.

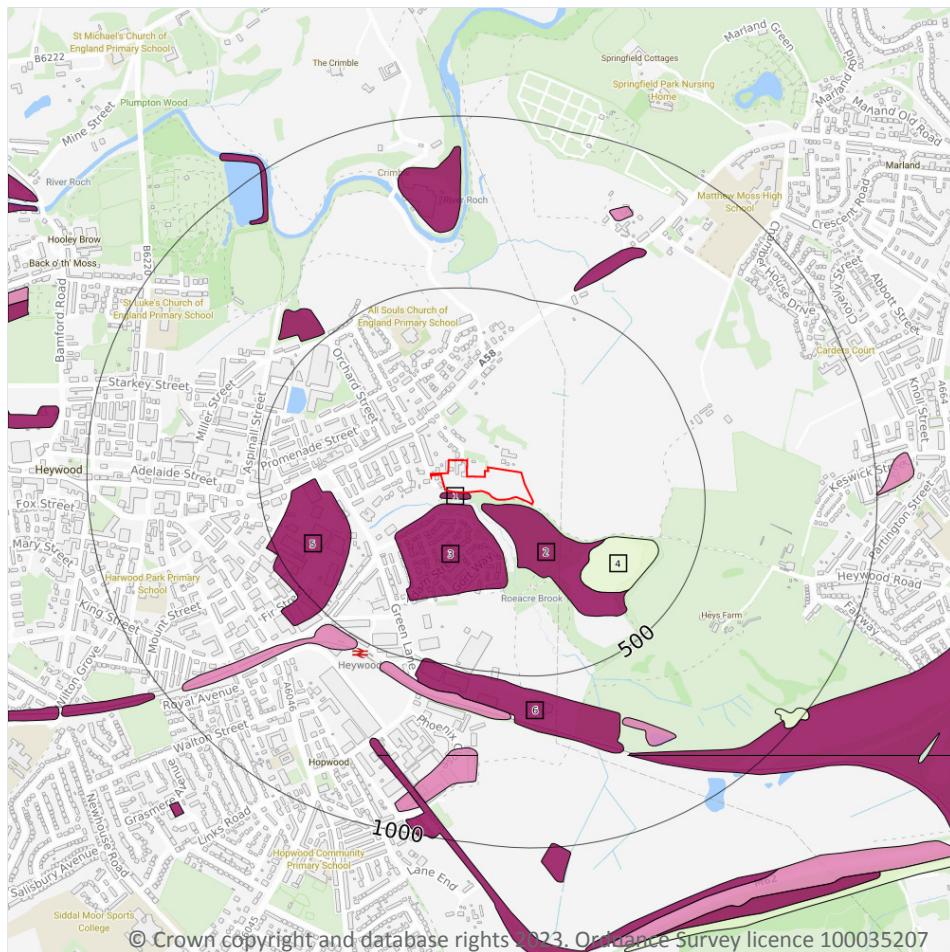
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 88**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	SD81SE

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

6

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 89**

ID	Location	LEX Code	Description	Rock description
1	2m W	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	13m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	35m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	217m SE	WMGR-ARTDP	Infilled Ground	Artificial Deposit

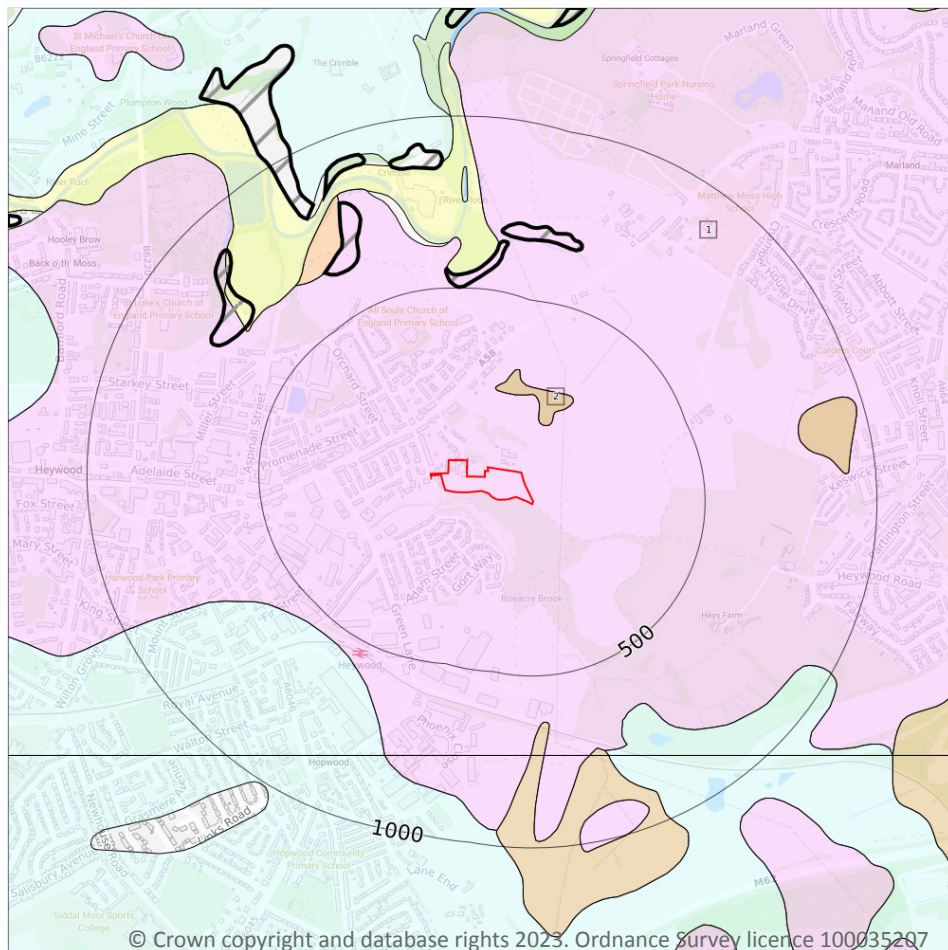


ID	Location	LEX Code	Description	Rock description
5	275m W	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	491m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (10k)

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

14.3 Superficial geology (10k)

Records within 500m

2

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 91**

ID	Location	LEX Code	Description	Rock description
1	On site	GFDUD-XSV	Glaciofluvial Deposits, Devensian - Sand And Gravel	Sand And Gravel
2	151m NE	PEAT-P	Peat - Peat	Peat

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

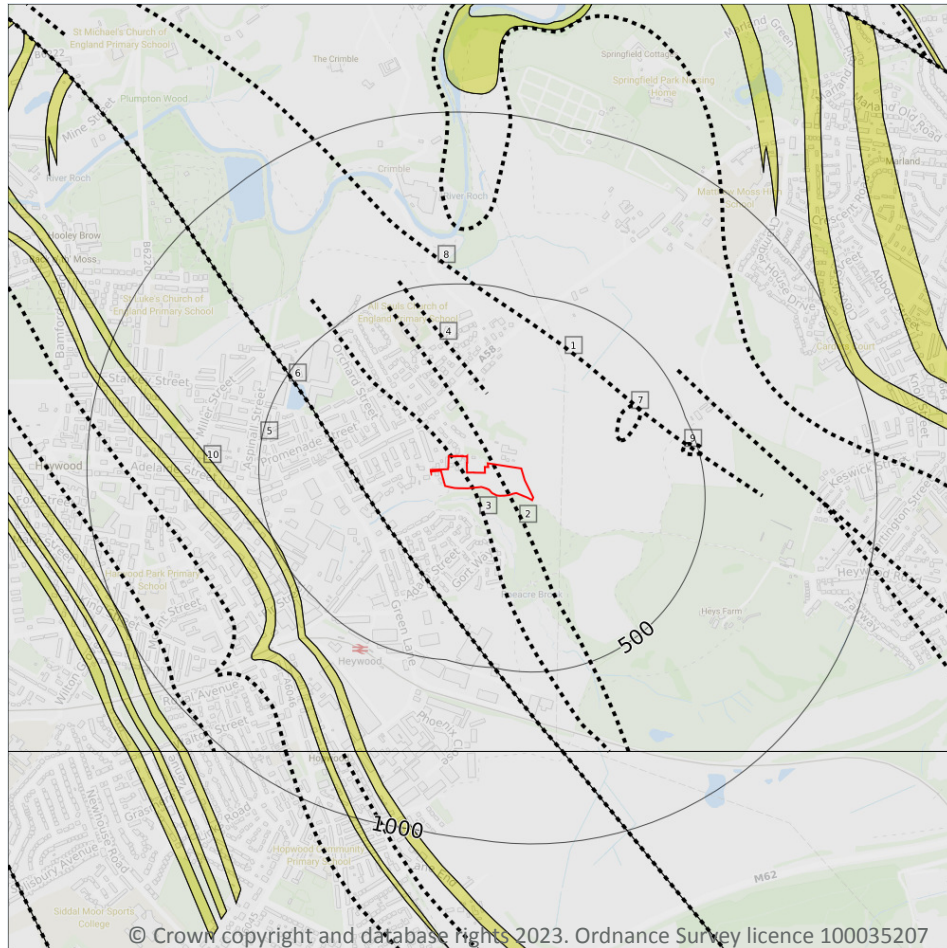
0

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

3

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 93**

ID	Location	LEX Code	Description	Rock age
1	On site	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
5	193m W	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
10	492m W	OL-SDST	Old Lawrence Rock - Sandstone	Langsettian Sub-age



This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

7

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.

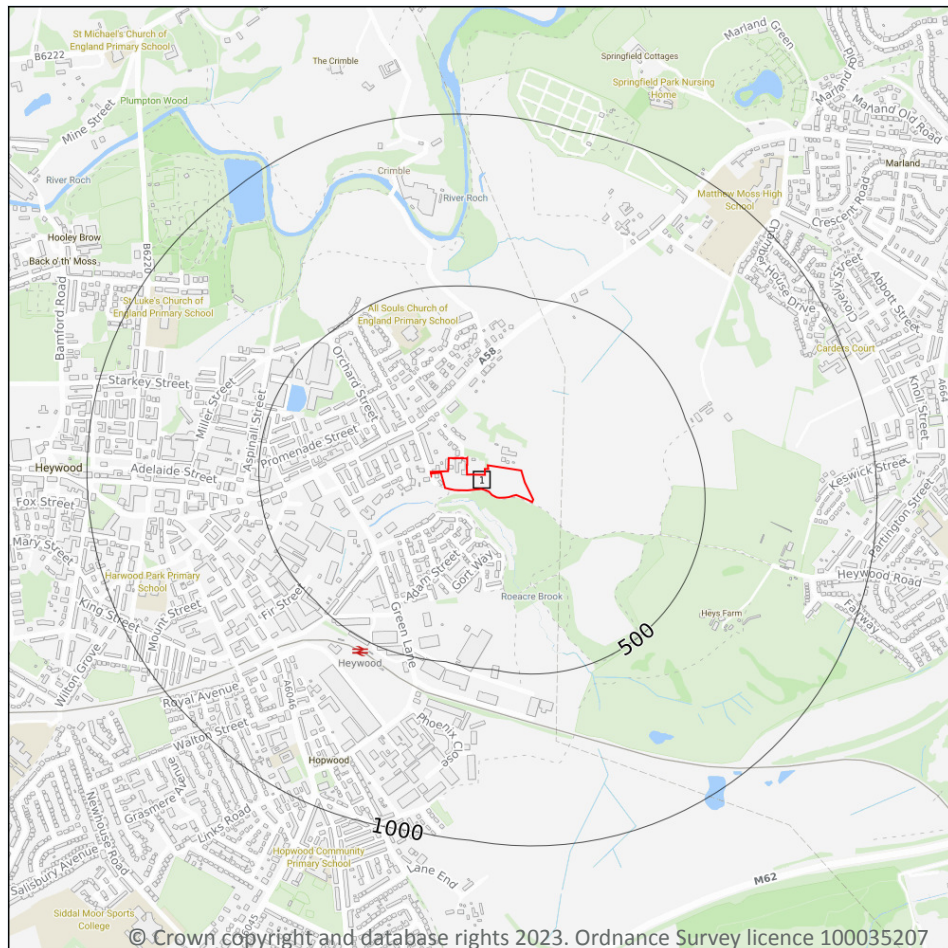
Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 93**

ID	Location	Category	Description
2	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side
3	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side
4	191m N	FAULT	Normal fault, inferred; crossmarks on downthrow side
6	193m W	FAULT	Normal fault, inferred; crossmarks on downthrow side
7	294m E	LANDFORM	Kettle hole; closed hollow
8	354m NE	FAULT	Normal fault, inferred; crossmarks on downthrow side
9	457m E	LANDFORM	Kettle hole; closed hollow

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.

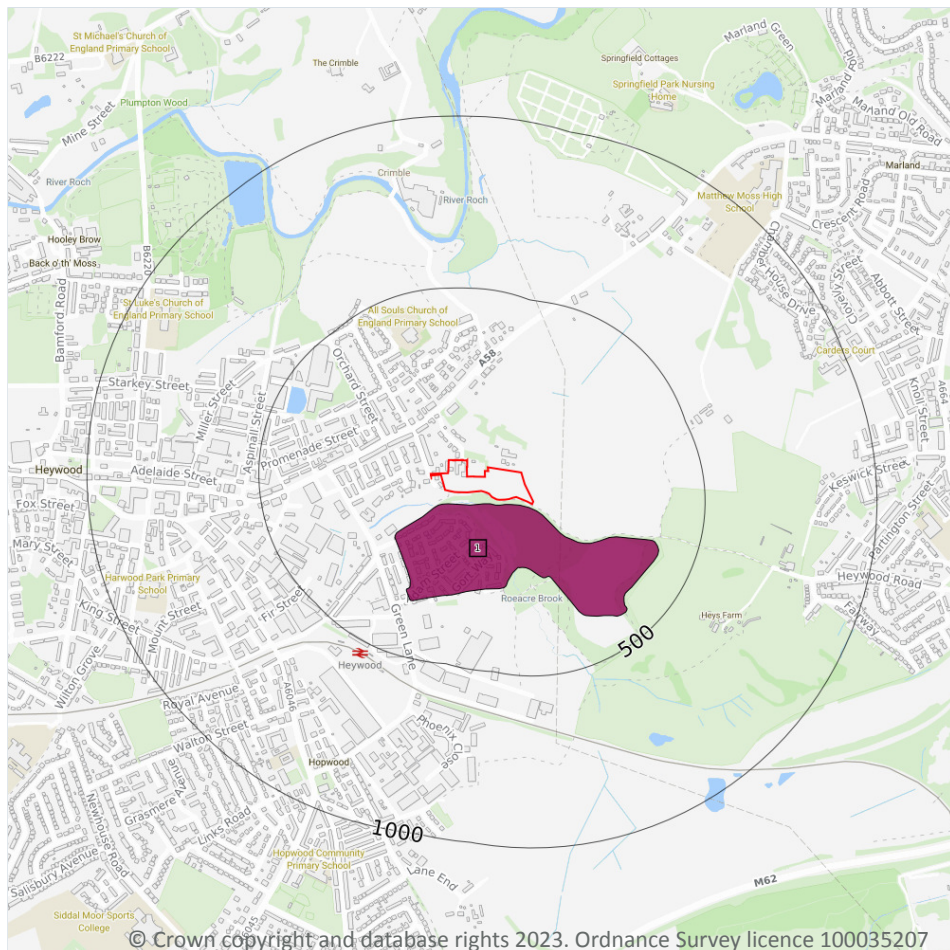
Features are displayed on the Geology 1:50,000 scale - Availability map on **page 95**

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

This data is sourced from the British Geological Survey.



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



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

15.2 Artificial and made ground (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 96**

ID	Location	LEX Code	Description	Rock description
1	13m SE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.



15.3 Artificial ground permeability (50k)

Records within 50m

1

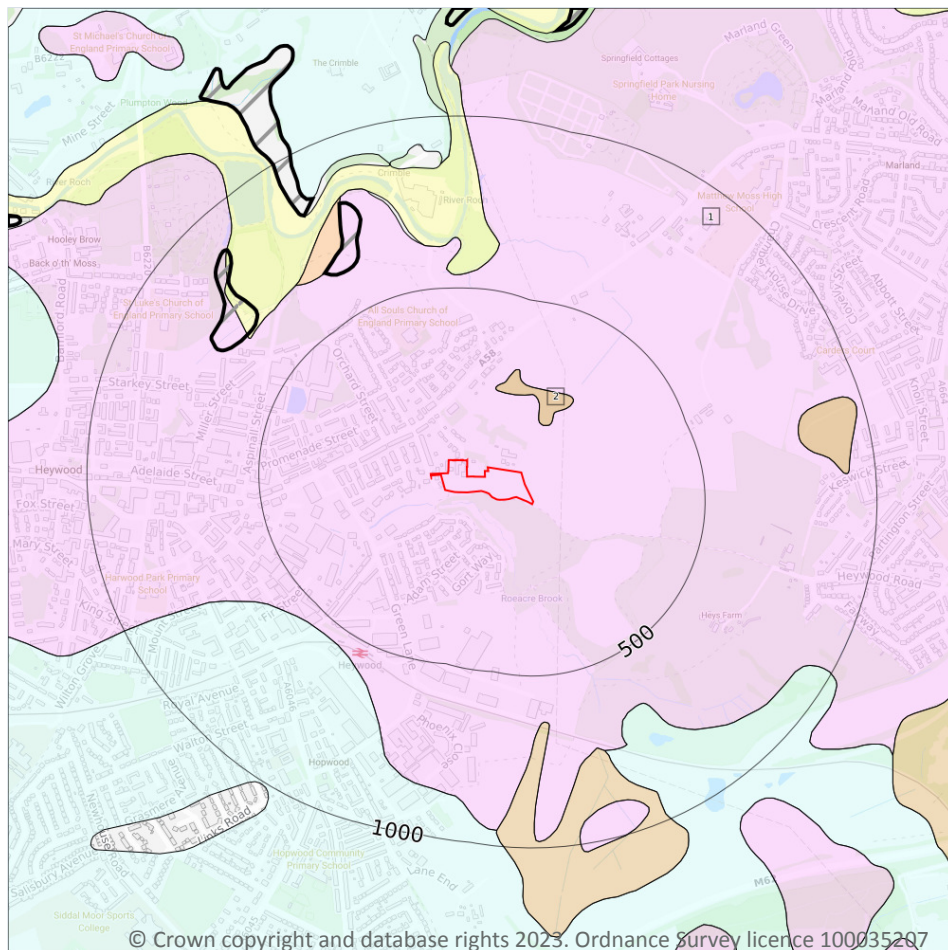
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
13m SE	Mixed	Very High	Low

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



Site Outline

Search buffers in metres (m)

Landslip (50k)

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

15.4 Superficial geology (50k)

Records within 500m

2

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 98**

ID	Location	LEX Code	Description	Rock description
1	On site	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL
2	151m NE	PEAT-P	PEAT	PEAT

This data is sourced from the British Geological Survey.



15.5 Superficial permeability (50k)

Records within 50m**1**

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

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m**0**

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

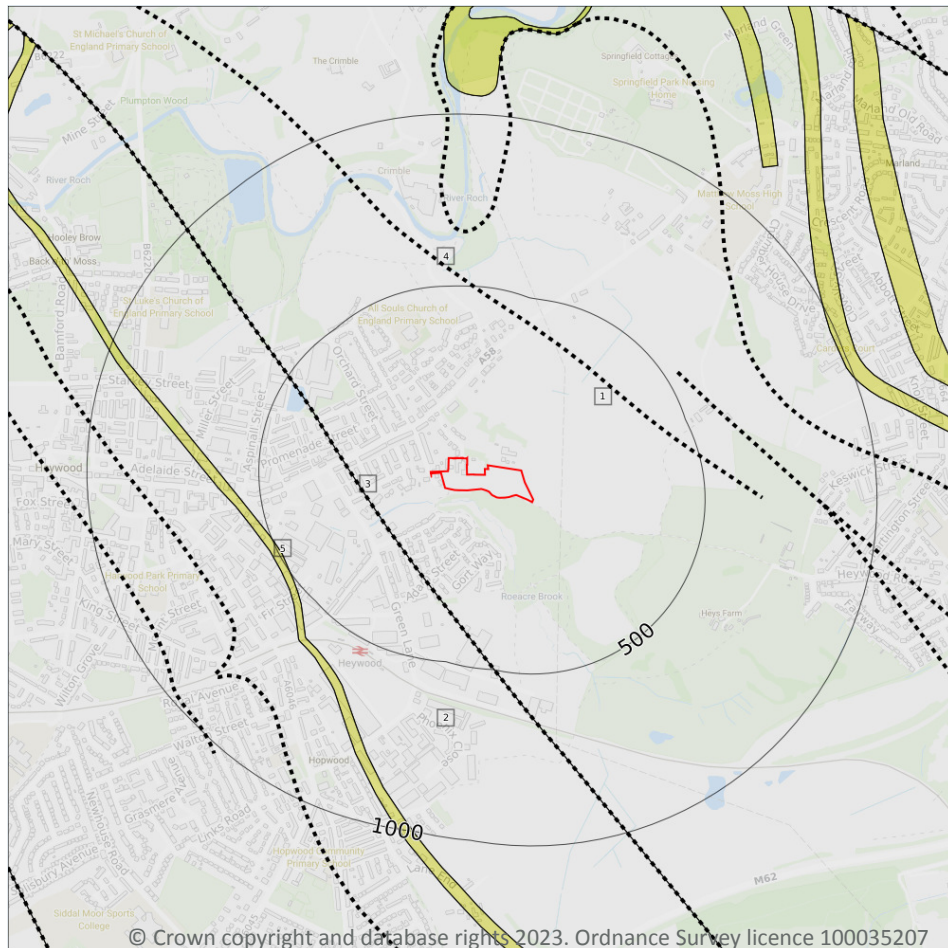
Records within 50m**0**

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m

3

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 100**

ID	Location	LEX Code	Description	Rock age
1	On site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
2	193m W	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
5	492m W	OL-SDST	OLD LAWRENCE ROCK - SANDSTONE	WESTPHALIAN



This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

2

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 100**

ID	Location	Category	Description
3	193m W	FAULT	Fault, inferred
4	354m NE	FAULT	Fault, inferred

This data is sourced from the British Geological Survey.



16 Boreholes

16.1 BGS Boreholes

Records within 250m

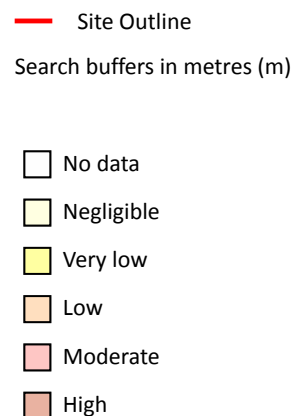
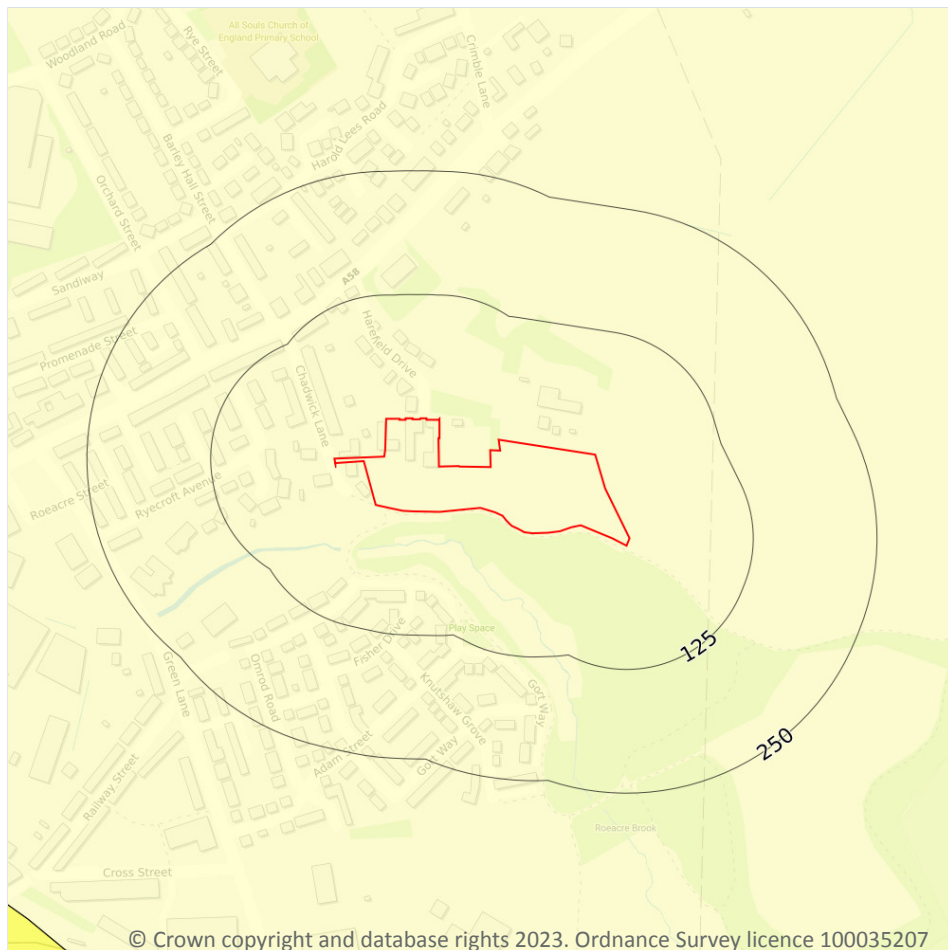
0

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.

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m

1

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

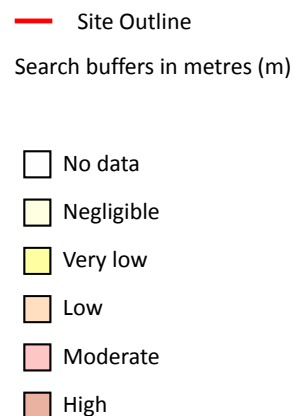
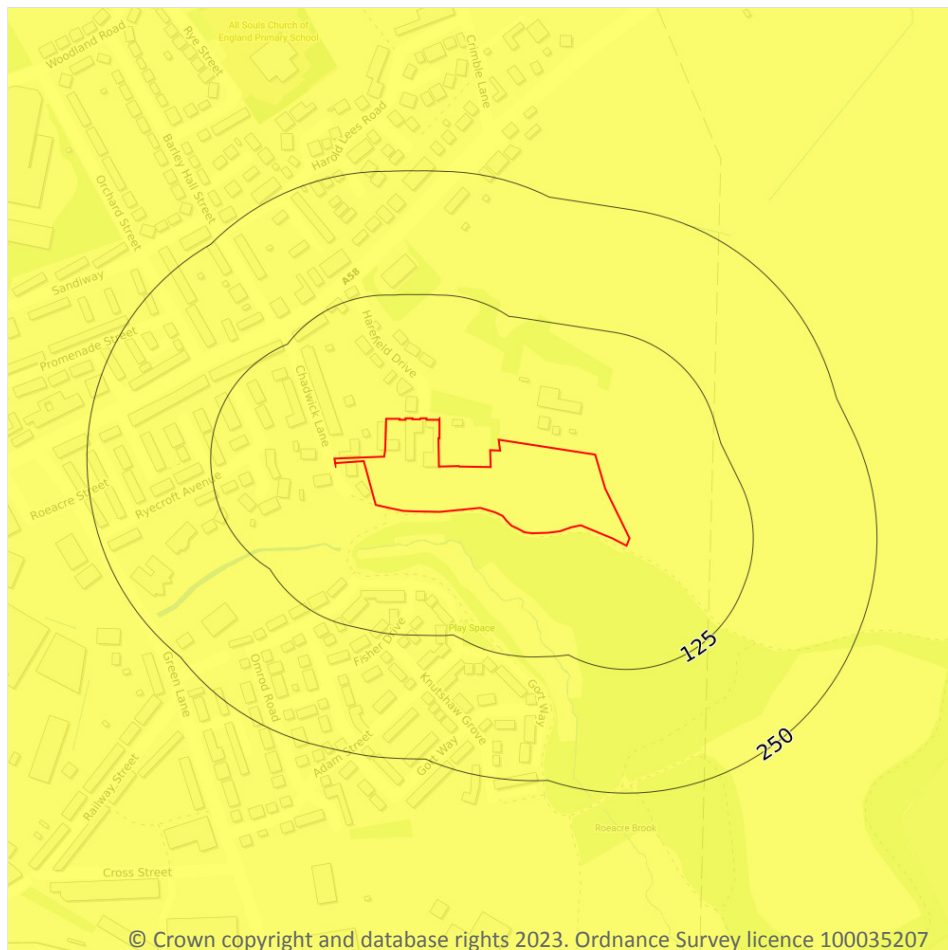
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 103**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



17.2 Running sands

Records within 50m

1

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

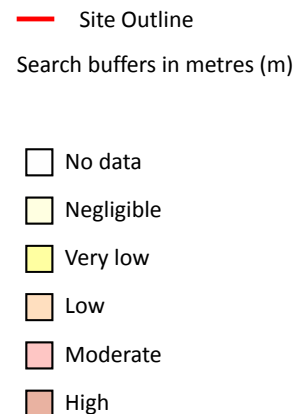
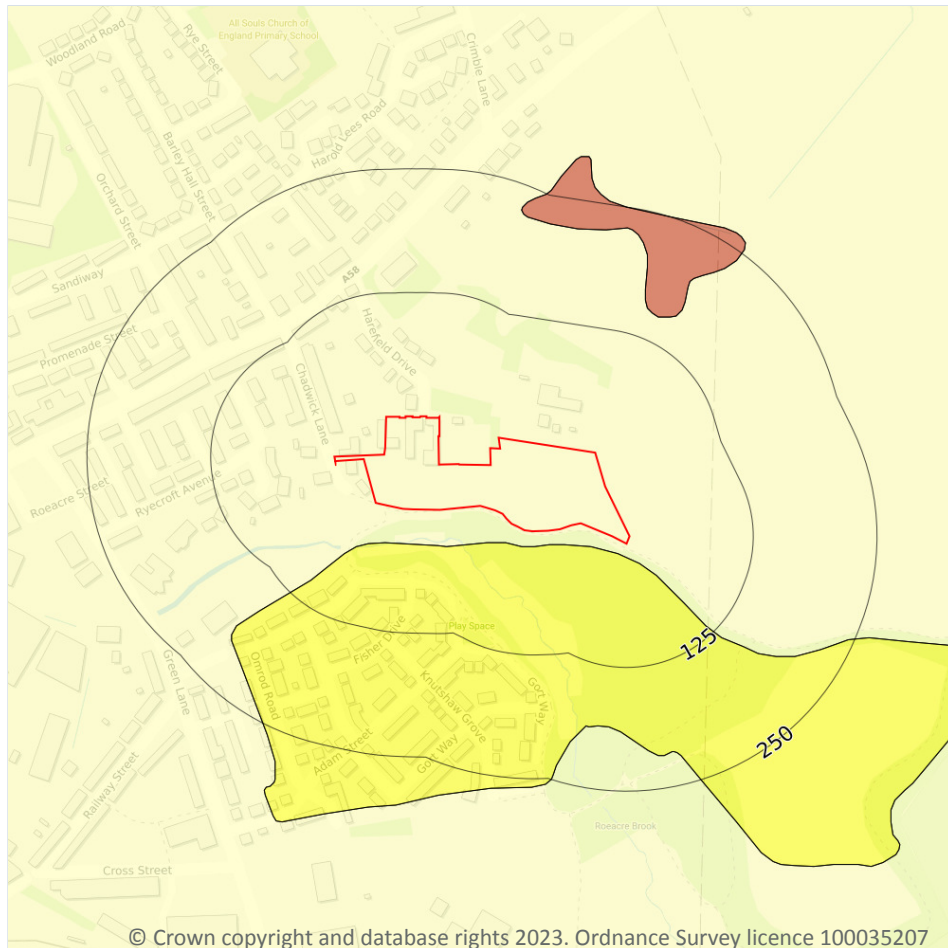
Features are displayed on the Natural ground subsidence - Running sands map on **page 104**

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 105**

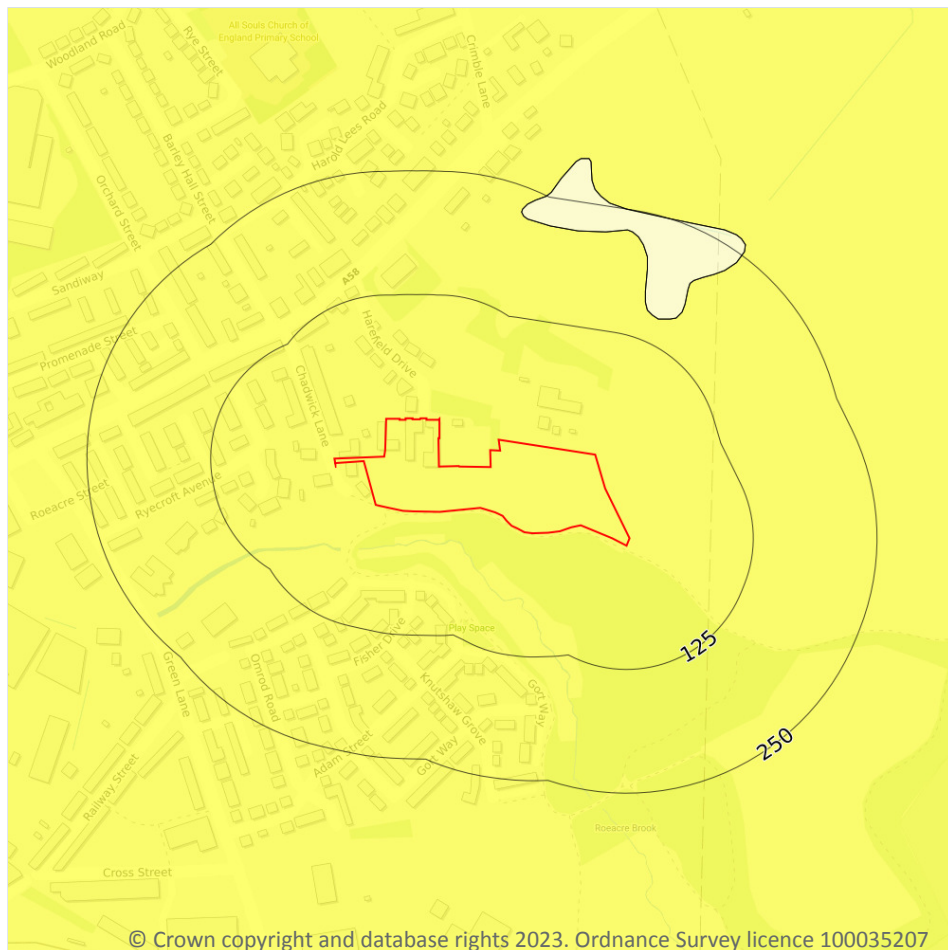
Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
13m SE	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.



This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



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

17.4 Collapsible deposits

Records within 50m

1

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

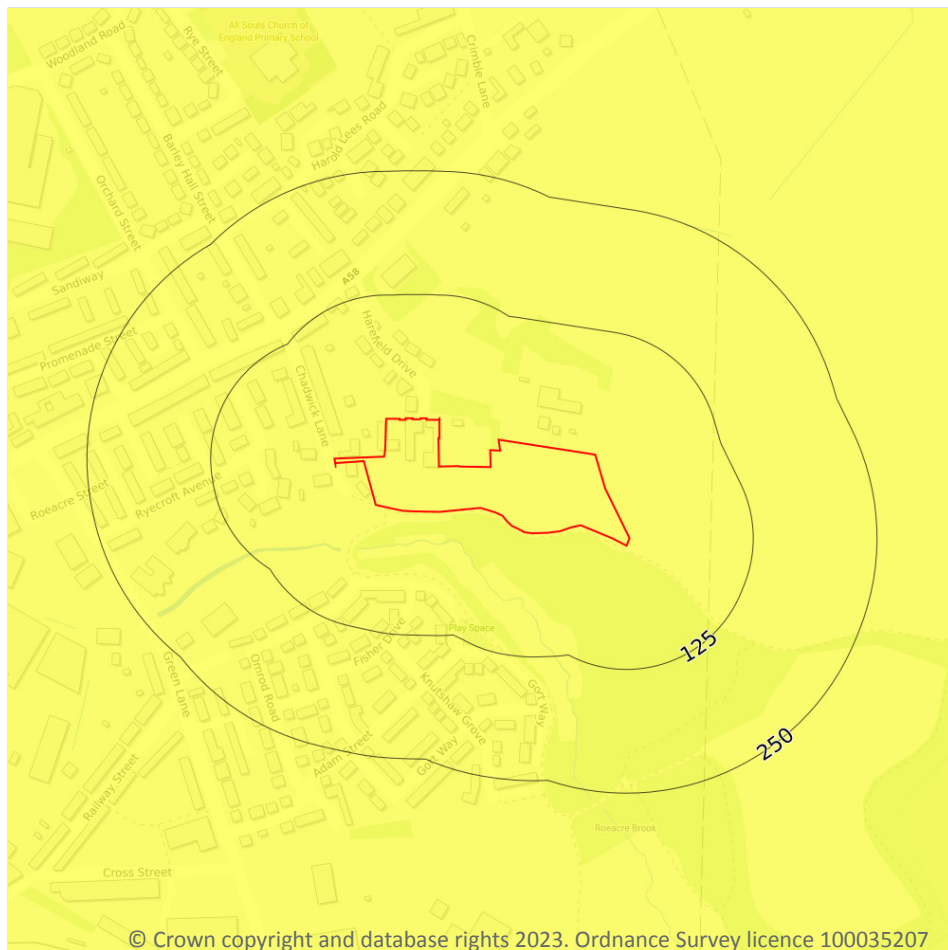
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 107**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



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

17.5 Landslides

Records within 50m

1

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

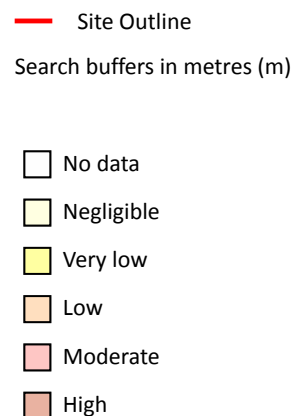
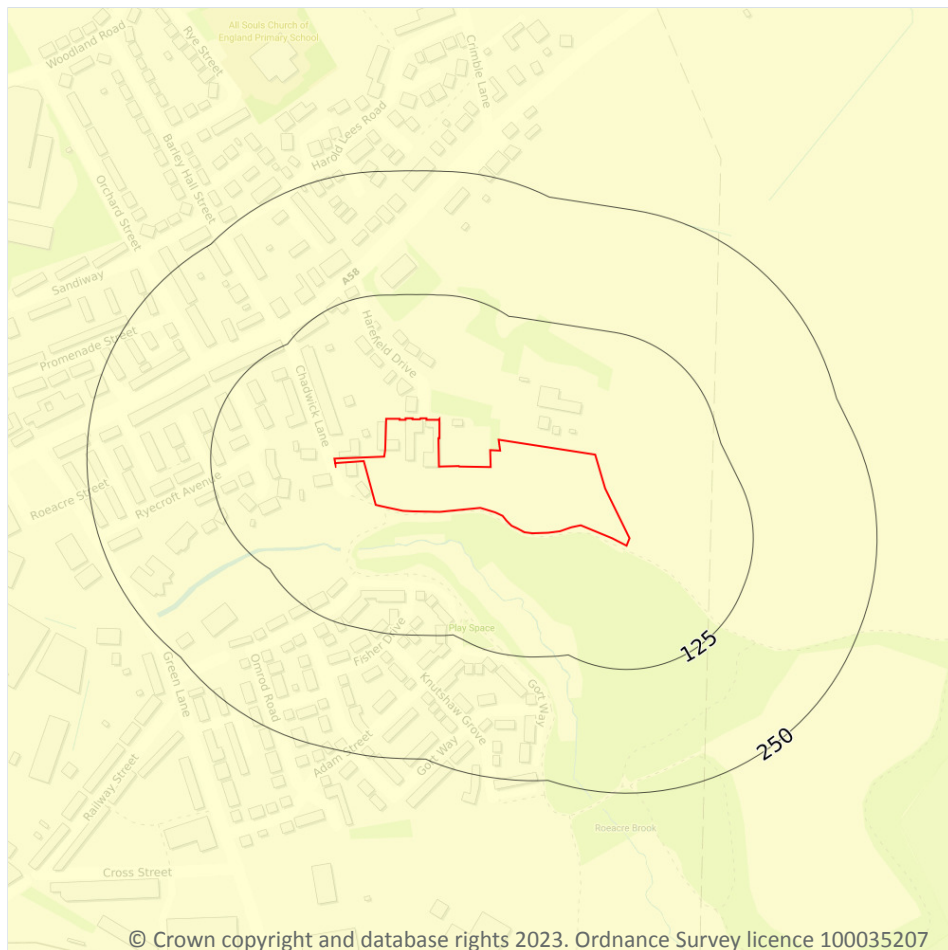
Features are displayed on the Natural ground subsidence - Landslides map on **page 108**

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



17.6 Ground dissolution of soluble rocks

Records within 50m

1

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

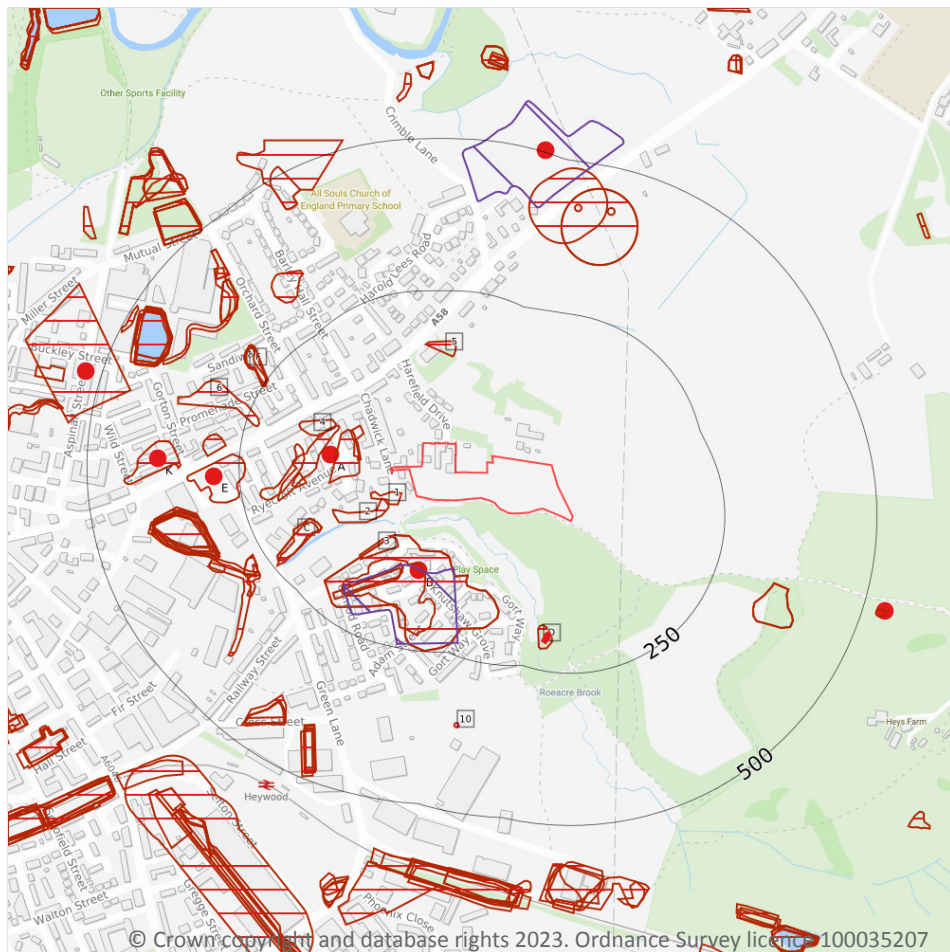
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 109**

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

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



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

18.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

4

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 111**

ID	Location	Details	Description
A	103m W	Name: Off Green Lane Sand Pit Address: Captain Fold, HEYWOOD, Lancashire Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
B	118m SW	Name: Wilderness Sandpit Address: Heywood, ROCHDALE, Lancashire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
E	292m W	Name: Captain Fold Sand Pit Address: HEYWOOD, Lancashire Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
K	384m W	Name: Captain Fold Sand Pit Address: HEYWOOD, Lancashire Commodity: Sand Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.



18.3 Surface ground workings

Records within 250m

25

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 111**

ID	Location	Land Use	Year of mapping	Mapping scale
1	23m W	Unspecified Ground Workings	1968	1:10560
2	46m W	Unspecified Ground Workings	1975	1:10000
A	52m W	Pond	1949	1:10560
A	52m W	Unspecified Pit	1968	1:10560
B	67m SW	Sand Pit	1987	1:10000
B	67m SW	Sand Pit	1975	1:10000
3	78m SW	Unspecified Heap	1968	1:10560
A	107m W	Sand Pit	1909	1:10560
B	108m SW	Sand Pit	1968	1:10560
4	114m W	Refuse Heap	1890	1:10560
B	114m SW	Unspecified Ground Workings	1938	1:10560
B	114m SW	Refuse Heap	1890	1:10560
B	122m SW	Sand Pit	1909	1:10560
A	142m W	Unspecified Heap	1968	1:10560
5	142m N	Sand Pit	1851	1:10560
A	143m W	Refuse Heap	1890	1:10560
C	148m W	Unspecified Pit	1949	1:10560
C	148m W	Unspecified Pit	1968	1:10560
C	153m W	Unspecified Ground Workings	1938	1:10560
D	176m S	Unspecified Heap	1909	1:10560
6	228m W	Unspecified Pit	1890	1:10560
E	240m W	Sand Pits	1851	1:10560
F	246m NW	Sand Pit	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
F	248m NW	Sand Pit	1949	1:10560
F	249m NW	Sand Pit	1928	1:10560

This data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

6

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, ground workings and natural cavities map on **page 111**

ID	Location	Land Use	Year of mapping	Mapping scale
D	186m S	Unspecified Old Shaft	1949	1:10560
D	189m S	Unspecified Old Shaft	1938	1:10560
D	191m S	Unspecified Old Shaft	1928	1:10560
D	193m S	Old Coal Shaft	1909	1:10560
D	198m S	Unspecified Old Shaft	1890	1:10560
10	355m S	Unspecified Old Shaft	1949	1:10560

This data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

2

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 111**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
B	112m S	Green Lane	Sand	Surface mineral working	Valid	Not available
N	399m N	Ryecroft Farm	Sand and gravel	Surface mineral working	Valid	23/7/73



This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

0

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

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

0

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

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site

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.

18.9 Coal mining

Records on site

1

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

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

This data is sourced from the Coal Authority.



18.10 Brine areas

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

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

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

18.11 Gypsum areas

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

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

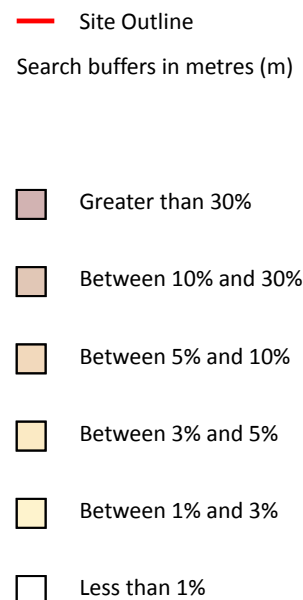
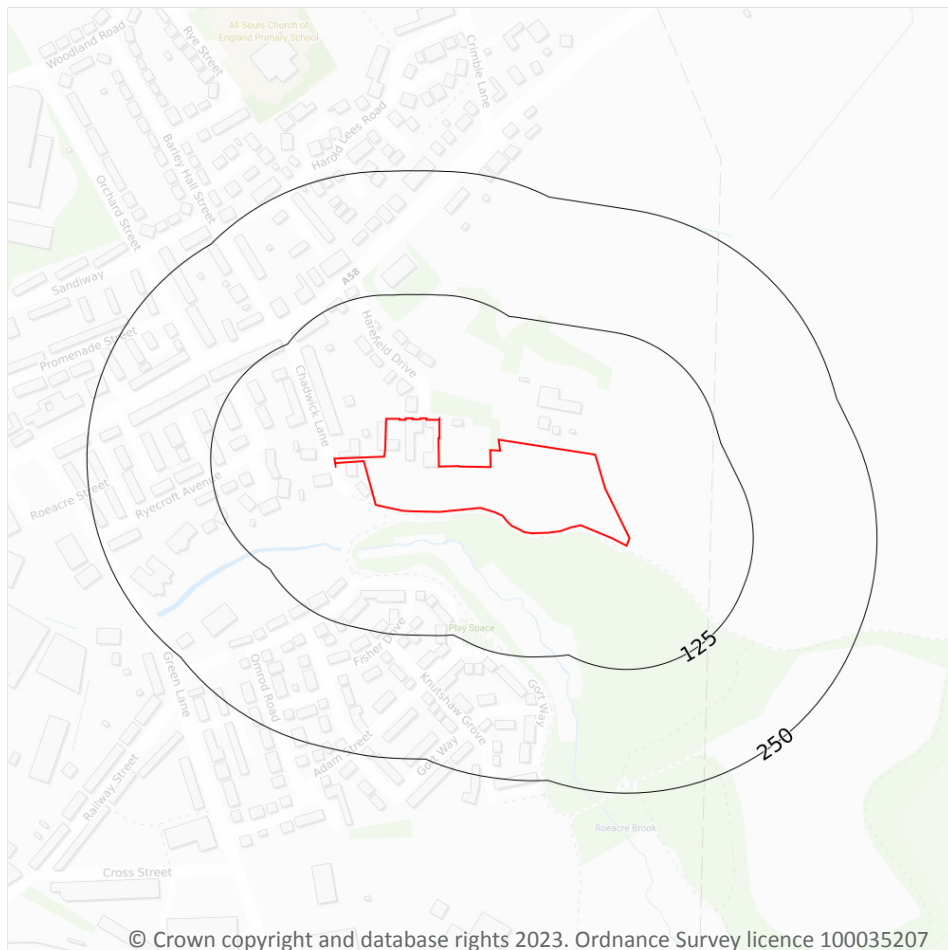
18.13 Clay mining

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

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

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

19 Radon



19.1 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 117**

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



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



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

1

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	2.2 - 3.0 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 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.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

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

This data is sourced from the British Geological Survey.



21 Railway infrastructure and projects

21.1 Underground railways (London)

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

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

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

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

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

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

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

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

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

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

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

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

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



This data is sourced from Groundsure/the Postal Museum.

21.6 Historical railways

Records within 250m

0

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

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m

0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m

0

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

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.



Data providers

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

Terms and conditions

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



APPENDIX 3

COAL AUTHORITY CON29 COAL MINING REPORT



The Coal
Authority

CON29M

coal mining report

HAREFIELD HALL FARM, CHADWICK LANE, HEYWOOD, ROCHDALE, OL10 1QL



Known or potential coal mining risks

Past underground coal mining	Page 4
Future underground coal mining	Page 4



Further action

No further reports from the Coal Authority are required. Further information on any next steps can be found in our Professional opinion.

For more information on our reports please visit
www.groundstability.com



Professional opinion

According to the official mining information records held by the Coal Authority at the time of this search, evidence of, or the potential for, coal mining related features have been identified. It is unlikely that these features will impact on the stability of the enquiry boundary.

Your reference: **G23108**
Our reference: **51003352575001**
Date: **2 May 2023**

Client name:
GEOINVESTIGATE

If you require any further assistance please
contact our experts on:
0345 762 6848
groundstability@coal.gov.uk



The Law
Society

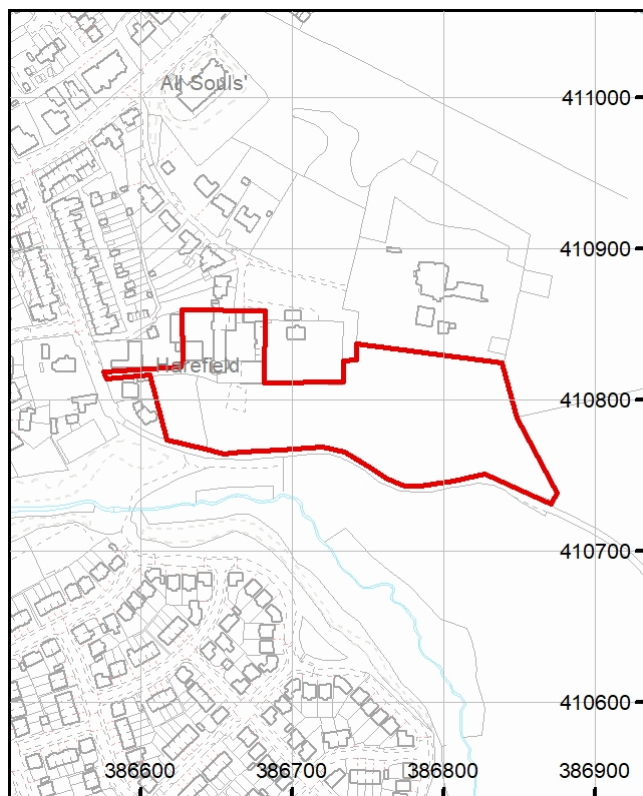
Enquiry boundary

Key

Approximate position of enquiry boundary shown



We can confirm that the location is
on the coalfield



Reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2018. All rights reserved.
Ordnance Survey Licence number: 100020315.

This report is prepared in accordance with the latest Law Society's Guidance Notes 2018, the User Guide 2018 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.



Accessibility

If you would like this information in an alternative format, please contact our communications team on 0345 762 6848 or email communications@coal.gov.uk.

Professional opinion



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 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.

If you are looking to develop, or undertake works, within a coal mining development high risk area your Local Authority planning department may require a Coal Mining Risk Assessment to be undertaken by a qualified mining geologist or engineer. Should you require any additional information then please contact the Coal Authority on **0345 762 6848** or email **cmra@coal.gov.uk**.

Detailed findings

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL.

The Coal Authority owns the copyright in this report and the information used to produce this report is protected by our database rights. All rights are reserved and unauthorised use is prohibited. If we provide a report for you, this does not mean that copyright and any other rights will pass to you. However, you can use the report for your own purposes.

1 Past underground coal mining

The property is in a surface area that could be affected by underground mining in 1 seam of coal at 100m to 110m depth, and last worked in 1840.

Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.

2 Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3 Future underground coal mining

The property is not in an area where the Coal Authority has received an application for, and is currently considering whether to grant a licence to remove or work coal by underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

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

4 Mine entries

There are no recorded coal mine entries known to the Coal Authority within, or within 20 metres, of the boundary of the property.

5 Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6 Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

7 Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8 Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9 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.

10 Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11 Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.

12 Withdrawal of support

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.

13 Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14 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.

Statutory cover



Coal mining subsidence

In the unlikely event of any coal mining related subsidence damage, the Coal Authority or the mine operator has a duty to take remedial action in respect of subsidence caused by the withdrawal of support from land or property in connection with lawful coal mining operations.

When the works are the responsibility of the Coal Authority, our dedicated public safety and subsidence team will manage the claim. The house or land owner ("the owner") is covered for these works under the terms of the Coal Mining Subsidence Act 1991 (as amended by the Coal Industry Act 1994). Please note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

If you believe your land or property is suffering from coal mining subsidence damage and you need more information on what to do next, please use the following link to our website which sets out what your rights are and what you need to consider before making a claim.

www.gov.uk/government/publications/coal-mining-subsidence-damage-notice-form



Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call **0800 288 4242**. Further information can be found on our website: www.gov.uk/coalauthority.

Glossary



Key terms

adit - horizontal or sloped entrance to a mine

coal mining subsidence - ground movement caused by the removal of coal by underground mining

Coal Mining Subsidence Act 1991 - the Act setting out the duties of the Coal Authority to repair damage caused by coal mining subsidence

coal mining subsidence damage - damage to land, buildings or structures caused by the removal of coal by underground mining

coal seams - bed of coal of varying thickness

future opencast coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal from the surface

future underground coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal underground. Although it is unlikely, remaining coal reserves could create a possibility for future mining, which would be licensed by the Coal Authority

mine entries - collective name for shafts and adits

mine gas - reports of alleged mine gas emissions received by the Coal Authority within 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

payments to owners of former copyhold land - historically, copyhold land gave rights to coal to the copyholder. Legislation was set up to allow others to work this coal, but they had to issue a notice and pay compensation if a copyholder came forward

shaft - vertical entry into a mine

site investigation - investigations of coal mining risks carried out with the Coal Authority's permission

stop notice - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

subsidence claim - a formal notice of subsidence damage to the Coal Authority since it was established on 31 October 1994

withdrawal of support - a historic notice informing landowners that the coal beneath their property was going to be worked

working facilities orders - a court order which gave permission, restricted or prevented coal mine workings