

PHASE 1 DESK STUDY

Report 1408: Rev 0

30th August 2022

PROPOSED DEVELOPMENT:

STABLES, OLD BOLD HALL

WARRINGTON ROAD, BOLD HEATH, WIDNES WA8 3XJ



<p>Client:</p> <p>Mr JOHN McLINDON Old Bold Hall Warrington Road Widnes WA8 3XJ</p>	<p>Planning Consultant:</p> <p>CW PLANNING SOLUTIONS 1, Reeveswood Eccleston Chorley Lancashire PR7 5RS</p>
---	---

G7 Geotech Ltd
49, Church Rd
Leyland
Lancashire PR25 3AA

t : 01772 435206
e : alan.w@g7geotech.co.uk
w : www.g7geotech.co.uk



G7 Geotech Ltd
23, Romilly Road
Cardiff
CF5 1FH

t : 02920 215865
e : keith.g@g7geotech.co.uk
w : www.g7geotech.co.uk

PHASE 1 DESK STUDY

PROPOSED DEVELOPMENT:

**STABLES, OLD BOLD HALL
WARRINGTON ROAD, BOLD HEATH, WIDNES WA8 3XJ**

DOCUMENT ISSUE RECORD

Revision	Author	Checked	Date
Rev 0	Keith Gibbs BSc, MSc, FGS	Alan Watson BSc (Eng), CEnv, CEng, MICE	30 th August 2022

G7 Geotech reports are independently checked

Report 1408: Rev 0

30th August 2022

G7 Geotech Ltd has prepared this Report for the Client and their professional advisors under the Standard Terms of Appointment for Ground Investigations and Geoenvironmental Consultancy accompanying our quotation. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by us. This Report may not be relied upon by any other party without the prior and express written agreement of G7 Geotech Ltd.

Contents

1.0	INTRODUCTION.....	5
2.0	SITE DESCRIPTION.....	5
3.0	SITE HISTORY	6
4.0	LAND USE	7
4.1	Historical industrial sites.....	7
4.2	Landfill and other waste sites.....	7
4.3	Current land use.....	7
4.4	Environmental permits, incidents and registers	8
4.5	St Helens Council Information.....	8
5.0	GEOLOGICAL INFORMATION	8
6.0	ENVIRONMENTAL INFORMATION.....	9
6.1	Hydrogeology and hydrology	9
6.2	Flooding.....	10
6.3	Designated environmentally sensitive areas.....	10
6.4	Visual and cultural designations.....	10
6.5	Agricultural Land Classification.....	10
6.6	Habitat designations.....	10
7.0	WALK-OVER SURVEY.....	11
8.0	DESK BASED COAL MINING RISK ASSESSMENT	11
9.0	PRELIMINARY GEOTECHNICAL ASSESSMENT.....	13
10.0	PRELIMINARY GROUND CONTAMINATION ASSESSMENT.....	13
10.1	Regulatory framework and assessment criteria.....	13
10.2	Proposed end use	13
10.3	Site sensitivity.....	14
10.4	Contaminant sources	14
10.5	Ground gas.....	14
11.0	PRELIMINARY CONCEPTUAL MODEL	15
12.0	PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS.....	16
12.1	Desk based coal mining risk assessment conclusions	16
12.2	Ground contamination conclusions.....	16
12.3	Geotechnical conclusions	17
12.4	Proposed sampling, field testing and analytical strategy	17

APPENDIX A	SITE PHOTOGRAPHS : SITE WALKOVER:09/08/2022
APPENDIX B	HISTORICAL MAPS GROUNDSURE MAPINSIGHT G7GEO-8928406: 25/07/2022
APPENDIX C	ENVIRONMENTAL AND GEOLOGICAL DATABASE GROUNDSURE ENVIRO+GEO INSIGHT G7GEO-8928408: 25/07/2022
APPENDIX D	COAL MINING REPORT GROUNDSURE CON29M SEARCH : G7GEO-8928407: 25/07/2022
APPENDIX E	PLANS AND MAPS EXISTING AERIAL PHOTOGRAPH / SITE PLAN LOCATION PLAN

1.0 INTRODUCTION

A new bungalow is proposed on the same footprint as existing stables, at Old Bold Hall, Warrington Road, Bold Heath, Widnes WA8 3XJ.

G7 Geotech Ltd have been instructed by CW Planning Solutions on behalf of the Client Mr John McLindon, to undertake a Phase 1 Desk Study with the aim of providing supporting documentation in seeking planning permission from the local planning authority.

This report presents the findings of our site walkover and review of commercially available databases and historical maps and includes preliminary geotechnical and ground contamination assessments with a tabulated conceptual model. Our report concludes with recommendations for a Phase 2 intrusive investigation.

2.0 SITE DESCRIPTION

Old Bold Hall is located in a rural setting about 1.2 km northeast of the village of Bold Heath. The site comprises a field and existing stables, within the grounds of Old Bold Hall. National grid reference 354120E 390280N is presented on the appended databases and maps and has been derived for the approximately rectangular site which measures about 34m x 42m and 0.14 hectares in area.

The ground surface is sensibly level, even to walk on, and consistent in level with the neighbouring fields, which suggests there is no evidence of any significant Made Ground upfilling on site. However, there is evidence of infilled ground, which is the partially infilled former pond along the south west side of the site, and extending north westwards, where some apparent farm waste, including soil, straw and occasional rubber tyres and plastic items have been deposited at intervals, possibly since the early 20th Century.

The site boundaries are partly defined by hedgerows and wooden fences, whilst along the south western boundary is an open farm track.

An L shaped stable block of timber construction with concrete floors is present along the central part of the south-eastern boundary. There is a paved area in front of the stable block.

Trees are present both within the site and around the boundaries. Along the south-western margin is a row of tall Sycamore trees, and there is a low Conifer hedge along the south-eastern boundary. Other smaller Damson trees are present along the southern side of the stable block.

The surrounding land to the north, west and south-west manly comprises fields and areas of planted woodland. To the south-east and north are adjacent farm and residential properties respectively.

The surrounding natural topography is generally relatively flat and the site area itself is mostly sensibly level. A spot level on the OS maps about 100m southeast of the site indicates an elevation of +26.2m OD.

The current site features are shown on the appended plans and photographs. The aerial photograph on the front cover was captured in April 2019.

3.0 SITE HISTORY

Historical maps were obtained from Groundsure to provide a basis for this summary of the history and usage of the site and surrounding land. The gradual development of the site and surrounding area can be seen on the historical maps (shown in Appendix B). The following table summarises the site history.

Site History		
Map Date	Site	Surrounding Area [generally within 250m]
❖ 1849 / 1893	❖ The earliest maps show the site within the grounds of Old Bold Hall. Most of the site appears to comprise an orchard or tree plantation. The SW margin of the site comprises the SE tip of a larger linear shaped pond which extends to the NW.	<ul style="list-style-type: none"> ❖ There are various buildings associated with Old Bold Hall or Old Bold Hall Farm in the immediate area of the site. These include a rectangular building 20m E, with the larger 'New Stables' buildings immediately beyond. A building annotated as Old Bold Farm 50m S, and another building annotated as Old Bold Hall 40m NE. Another rectangular building is shown between Old Bold Farm and the 'New Stables' about 50m SE. ❖ The Old Bold Hall Farm building is surrounded by a ditch or 'Moat'. Access to the building is provided by a roadway which crosses the Moat along the SE side and close to the N corner. On these series of maps the Moat appears to be water filled. ❖ A wooded area referred to as the Old Hall Plantation is shown to the N and E. ❖ The surrounding area is rural mainly comprising open fields but with scattered trees and copses or tree plantations. ❖ Other Ponds are present 70m NW and 260m NE. There are numerous other ponds and drains present in the surrounding area. Some of the ponds shown on the earliest 1849 map have been infilled by 1893.
❖ 1905 / 38	❖ The site remains unchanged though there appears to have been some slight infilling of the pond at the NW and SE extremities.	<ul style="list-style-type: none"> ❖ The immediate area around the site remains largely unchanged except that some additional rectangular shaped farm buildings are shown along the SE side. ❖ The 1905 smaller scale map shows a drain or watercourse about 400m NNE from the site. The watercourse flows in an approximate W to E direction. ❖ The 1925 map shows The Clock Face Colliery and railway siding is shown about 1.2 km N and NW from the site.
❖ 1947 / 77	❖ The larger scale map of 1961 indicates that the pond along the SW margin of the site was now a dry ditch.	<ul style="list-style-type: none"> ❖ The surrounding area remains largely unchanged. ❖ The ditch or Moat appears to have been partially infilled at the southern corner whilst the smaller scale map from 1965 suggests that the remaining sections of Moat had by this time been incorporated into the Old Hall Plantation. ❖ The larger scale map of 1961 shows the pond to the NW of the site but it is absent on the later larger scale 1977 edition this area now shown as woodland. ❖ The larger scale map of 1961 shows a drain NE of Old Bold Hall Farm and about 110m from the site. Other drains are shown on the 1965 map about 80m NW and 100m SE. ❖ Evidence from the 1965 map suggests that the Cock Face Colliery 1.2km N of the site had become disused by this time.
❖ 1981 / present	<ul style="list-style-type: none"> ❖ The maps in this series indicate the absence of any ditches and the area is occupied by open fields with some field boundaries dissecting the area. ❖ Although not shown on the maps, a single storey timber framed stables building is currently present along the SE side of the site. 	<ul style="list-style-type: none"> ❖ The 1981 map shows the route of the E-W trending M62 motorway about 500m N. ❖ The larger scale map of 2003 indicates some subdivision of the farm buildings to the SE and there are a pair of silos (presumably agricultural product storage) about 50m SE.

In summary, the site has remained in a predominantly agricultural setting since the earliest published maps. There is evidence of some infilling of nearby former ponds and ditches and, in the early 21st

Century, the stables building has been constructed on site. The surrounding area has remained predominantly rural in character comprising mainly open fields with scattered areas of managed woodland or copses.

4.0 LAND USE

The environmental database includes sections on land use, waste and pollution prevention and control. The information in this section will be used to check for potential sources of ground contamination and environmental risks. Database entries within 250m (unless otherwise stated) are listed below.

4.1 Historical industrial sites

- ❖ There are 4No entries in the database as potentially contaminative past land uses within 250m. These are Cuttings 15m NE , Unspecified Pits 16m NE, 68m NE and 70m NE (likely the historical Moat noted in the map review section above).
- ❖ Historical tanks: 1No entry for Unspecified Tank 58m E (we assume this are the Silos shown in the map review and were therefore likely used for storage of agricultural products).
- ❖ Historical energy features: none listed within 500m.
- ❖ Historical petrol or fuel filling stations: none listed within 500m.
- ❖ Historical garage and motor vehicle repair sites: none listed within 500m.
- ❖ Potentially infilled land: there are a number of ponds in the surrounding area shown on the historical maps, some of which may have been infilled, including the nearest immediately along the SW side of the site. In addition, there are the previously noted relict moat/ditches close by which are now wooded. Given the close proximity of the nearest of these infilled features, we have concluded that there may be a significant ground gas risk requiring further assessment or precautionary protective measures.

4.2 Landfill and other waste sites

- ❖ Environment Agency Landfill data and historic landfill sites; none recorded within 500m.
- ❖ Historical waste sites: none recorded within 500m.
- ❖ Licensed waste sites: none recorded within 500m.
- ❖ Waste exemptions: there are 29No entries within 250m, all related to farming or agricultural activities. These include deposit of waste from dredging inland waters, burning waste in the open, storage of waste in secure containers, crushing and emptying waste vehicle oils, treatment of waste wood and waste plant matter by chipping, shredding cutting or pulverising, use of waste in construction, spreading waste on agricultural land to confer benefit, use of waste for a specified purpose and storage of sludge.

4.3 Current land use

- ❖ Records of potentially contaminative industrial sites: 1No entry within 250m, for Hoppers and Silos 46m SE.
- ❖ Current petrol and fuel sites: none within 500m.
- ❖ National Grid high voltage underground electricity cables: none within 500m
- ❖ National Grid high pressure gas transmission pipelines: none within 500m
- ❖ Sites determined as contaminated land: none listed within 500m.
- ❖ Railways and tunnels: none within 250m.

4.4 Environmental permits, incidents and registers

- ❖ Control of Major Accident Hazards: none listed within 500m.
- ❖ Regulated explosive sites: none within 500m.
- ❖ Hazardous substance storage / usage: none within 500m.
- ❖ Integrated pollution control (IPC) records: none within 500m.
- ❖ Licensed Industrial Activities (Part A(1)): none within 500m.
- ❖ Licensed Pollutant Release (Part A(2) & Part B): none within 500m.
- ❖ Licensed Discharges to Controlled Waters: none within 500m.
- ❖ Pollutant release to surface waters (Red List): none within 500m.
- ❖ Pollutant release to public sewer: none within 500m.
- ❖ List 1 Dangerous Substances: none within 500m.
- ❖ List 2 Dangerous Substances: none within 500m.
- ❖ Recorded Pollution Incidents: none within 500m.
- ❖ Pollution inventory substances and waste transfers: none within 500m.

4.5 St Helens Council Information

We consulted St Helens Council Contaminated Land Officer, who stated that they are not aware of any ground contamination issues of note for the site.

5.0 GEOLOGICAL INFORMATION

The geological database includes sections on geology, Radon, historical workings and mining and hazard ratings for natural ground subsidence. The information in this section will be used to check for potential sources of ground contamination and environmental sensitivity. Database entries within 250m are described in the following listings.

- ❖ Artificial / Made Ground: no records within 500m.
- ❖ Superficial Deposits / Drift Geology: Devensian Till (gravelly clay), On-site (low to high permeability, mixed flow type). No records of landslide within 500m.
- ❖ Bedrock/Solid Geology: On-site for Chester Formation - Sandstone, pebbly (gravelly), (high to moderate permeability, mixed flow type)
- ❖ Bedrock faults and other linear features: 1 no entry within 500m for a normal fault 368m SW
- ❖ Borehole Records Map: 2No records within 250m, nearest 106m E and the next 206m N.
- ❖ Natural Ground Subsidence: very low to negligible hazard rating for all listed categories.
- ❖ Natural cavities: none recorded within 500m.
- ❖ BGS British Pits: none recorded within 500m.
- ❖ Surface ground workings: 11No. records within 250m, which are Cuttings 15m NE, Unspecified Pits 16m NE, 68m NE, and 70m NE and Ponds 58m NW, 60m NW and 242m E.
- ❖ Underground workings: none recorded within 1,000m.
- ❖ Historical mineral planning areas: none recorded within 500m.

- ❖ Non-coal mining: none recorded within 1,000m.
- ❖ Mining cavities: none recorded within 1,000m.
- ❖ Johnson, Poole & Bloomer mining areas: On site – area in which Coal Authority and JPB may have mining records.
- ❖ Coal mining: the site is located within a coal mining area. (see later CON29M report)
- ❖ Radon: the property is not in a Radon area as less than 1% of properties are above the Action Level. No Radon protective measures are necessary.
- ❖ Estimated Background Soil Chemistry: Arsenic 15-25mg/kg; Bioaccessible Arsenic: no data; Lead 300-600mg/kg; Bioaccessible Lead 240-360mg/kg; Cd 1.8mg/kg; Cr 90-120mg/kg; Ni 30-45mg/kg.

6.0 ENVIRONMENTAL INFORMATION

The environmental database also includes sections on hydrogeology, hydrology, flooding, and environmentally sensitive areas. The information in this section will be considered when determining the site sensitivity. Database entries within 250m are described in the following paragraphs.

6.1 Hydrogeology and hydrology

- ❖ Aquifer within superficial deposits: 'Secondary Undifferentiated' on site (Devensian Till).
- ❖ Aquifer within bedrock deposits: 'Principal' on site (Chester Formation).
- ❖ Groundwater vulnerability is given as low vulnerability as the Secondary Aquifer is 3-10m thickness thereby providing some protection of the underlying Principal Aquifer.
- ❖ Groundwater abstractions: none within 250m, the nearest being 1,199m S (for a borehole abstraction of potable water supply for North West Water Ltd).
- ❖ Surface water abstractions: none within 2000m.
- ❖ Potable water abstractions: none within 250m, the only records within 2000m are 1,199m S and 1,341m SE both for borehole abstractions by North West Water Ltd.
- ❖ Source Protection Zones: Total Catchment on site (Zone 3).
- ❖ Source Protection Zones (confined aquifer): none within 500m.
- ❖ Water Network (OS MasterMap): 7 No entries within 250m with nearest 94m NW for a watercourse.
- ❖ Surface water features: 5 No records within 250m, (assume these mainly comprise the various ponds and drains noted in the map review).
- ❖ WFD Surface water body catchments: 1 No on site: Whittle Brook (Mersey Lower Catchment).
- ❖ WFD Surface water bodies: 1 No entry for Whittle Brook 405m N.
- ❖ WFD Groundwater bodies: on site: Lower Mersey Basin and North Merseyside Permo-Triassic Sandstone Aquifers.

6.2 Flooding

- ❖ Risk of Flooding from Rivers and the Sea (RoFRaS): none recorded within 50m.
- ❖ Historical flood events: none recorded within 250m.
- ❖ Flood defences within 250m: none identified.
- ❖ Areas benefitting from flood defences and flood storage within 250m: none identified.
- ❖ Flood Zone 2 & Flood Zone 3: none recorded within 50m.
- ❖ Surface water flooding: Highest risk on site is negligible. Highest risk within 50m is 1 in 250 year, greater than 1.0m.
- ❖ Groundwater flooding: Highest risk on site is moderate. Highest risk within 50m is moderate.

6.3 Designated environmentally sensitive areas

- ❖ Sites of Special Scientific Interest: none within 2,000m.
- ❖ Special Protection Areas: none within 2,000m.
- ❖ Local Nature Reserves: none within 2,000m.
- ❖ National Nature Reserves: none within 2,000m.
- ❖ Designated Ancient Woodland: none within 2,000m.
- ❖ Forest Parks: none within 2,000m
- ❖ Green Belt Land: 4No entries within 2,000m. Nearest on-site for Merseyside and Greater Manchester Greenbelt (St Helens Authority).
- ❖ Nitrate Vulnerable Zones: 4No within 2,000m. Nearest record on-site for the Whittle Brook
- ❖ SSSI Impact Risk Zones: Impact Risk Zone on site. The requirements do not relate to the currently proposed residential development so there should be no need to consult with Natural England.

6.4 Visual and cultural designations

- ❖ Listed buildings: 2No within 250m, which are Gate Piers at Bold Old Hall 64m NE and Bridge at Bold Old Hall 67m NE.
- ❖ Scheduled Ancient Monuments: 1 No entry within 250m which is for Old Bold Hall moated site 13m NE

6.5 Agricultural Land Classification

- ❖ Agricultural Land Classification: on site, Grade 2 (very good quality agricultural land).
- ❖ Countryside Stewardship Schemes: none within 250m.

6.6 Habitat designations

- ❖ Priority Habitat Inventory: on-site for Deciduous woodland.

7.0 WALK-OVER SURVEY

Our site walkover survey was undertaken on 9th August 2022. We have incorporated many of our observations within Section 2.0, Site Description, which should be read in conjunction with this condensed summary.

The site and surrounding areas have remained farmland and managed woodland since the earliest published maps.

Most of the site has been and still is a grass field. An L shaped stable block of timber construction is present adjacent to the south-eastern boundary. We saw no evidence of any tanks, chemical containers or industrial processes being undertaken on site at the time of our visit. The stables are currently still in use for a horse and pony, whilst other stable compartments are used as storage for two lawn mowers, a greenhouse frame and glass panes, some logs of wood, and straw and saddles for the horses.

The ground surface is sensibly level and even to walk on and is consistent in level with the neighbouring fields. This evenness suggests there has been no significant upfilling on site, and that natural soils may be present at shallow depth. The exception is that part of the site close to the south-western corner of the stable block at the entrance through a field boundary, where there were some noticeable undulations in the ground surface. We understand from the client that some landscaping work may have been carried out in this area. There is also evidence that a former pond in this area may have been gradually infilled since the early 20th Century. Some farm waste comprising straw, tyres, and occasional plastic items was noted during our walkover survey.

Some of the historical infilling may have included biodegradable waste, so ground gas protection may be required. Alternatively, an intrusive ground investigation may be undertaken, incorporating the installation of ground gas monitoring standpipes, with the aim of assessing the risk.

There is a Conifer hedge running along the south-eastern side of the site and this hedge is in close proximity to the proposed building area. In addition, there is a screen of tall Sycamore trees presently growing along part of the south-western boundary. These trees may be within an influencing distance of the proposed new building. Foundations should therefore be designed in accordance with NHBC Guidance, the industry standard regarding the influence of trees on foundation design. Intrusive ground investigation may be required to inform foundation design.

Other than the infilled ground, we have found no evidence of any significant potential sources of ground contamination on site.

In addition to the infilled Pond along the south-western side of the site, other Ponds (and historical ditches or moats) are noted within 250m on the historical maps. Some of these features have been infilled / partially infilled. The close proximity to the proposed development of some of these infilled features would indicate that ground gas may be a significant risk, subject to further assessment, or alternatively provision of precautionary ground gas protection measures.

8.0 DESK BASED COAL MINING RISK ASSESSMENT

The database obtained has indicated that the site is within a coal mining area. We have therefore obtained the appended Coal Authority Reports so that mining risk can be assessed. The CON29M report states:

- The property lies within the potential zone of influence of recorded workings in 6 seam(s) of coal. The most recent underground working in the area was in 1973. These workings lie between 555 metres and 825 metres below ground level. Any ground movement due to this coal mining activity should have stopped.
- The property does not lie within the boundary of an underground site from which coal is being removed by underground methods.
- The property does not lie within the boundary of an underground site for which the Coal Authority is determining whether to grant a licence to remove coal by underground methods.

The property does not lie within the boundary of an underground site for which a licence to remove coal by underground methods has been granted.

The property does not lie within the zone of likely physical influence on the surface of planned future underground workings.

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

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

This information is based on the information that the Coal Authority has at the time of this enquiry.

- 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.
- The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.
- The property does not lie within 200m of the boundary of an opencast site from which coal is being removed by opencast methods.
- There are no licence requests outstanding or licenses granted to remove coal by opencast methods within 800m of the boundary.
- The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50m, since 31st 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 preventative works before coal is worked under Section 33 of the Coal Mining Subsidence Act 1991.

- The Coal Authority has no record of any mine gas emissions within the boundary of the property.
- The property has not been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.
- 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.
- The property is not in an area where an order has been made under the provisions of the Mines (Working Facilities and Supports) Acts 1923 and 1966 or any statutory modification or amendment thereof.
- Regarding 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 1975/1994.

The report includes the above statements based on known records held by the Coal Authority. The professional opinion given in the Coal Authority report states that they consider the property to be acceptably free from coal mining related risk. No further action is required with regards to past coal mining.

9.0 PRELIMINARY GEOTECHNICAL ASSESSMENT

The published geology indicates Glacial Till (Devensian-Diamicton), likely to comprise gravelly silty sandy clay, possibly with some sand lenses, overlying the Chester Formation.

The proposed development plan indicates a single bungalow covering the footprint of the existing stables.

Aerial photographs and our walkover visit indicate that outside the footprint of the existing stables the ground surface is grassed, There are some conifer hedgerows and some large Sycamore trees close by which may be within influencing distance of the proposed bungalow. Clay soils are anticipated so building foundations should be designed in accordance with NHBC Guidance, the industry standard for the influence of trees on foundation design and construction.

The ground level on site appears to be relatively level and compatible with the ground levels in the surrounding farm fields. This suggests that there has been no significant upfilling on site so natural soils are anticipated at shallow depth. Some undulations in the ground surface to the south of the site may reflect past landscaping work locally in this area. We believe conventional shallow foundations are likely to be an option to consider for the proposed house, subject to confirmation by suitable intrusive ground investigation and assessment of the influence of the trees and hedgerow.

Clay soils are likely to be present at formation level so suspended ground floor slabs may be required to allow for nearby trees and vegetation in accordance with NHBC Guidance.

The presence of clay soils and the presence of ponds suggest that soakaways may be of limited effectiveness.

10.0 PRELIMINARY GROUND CONTAMINATION ASSESSMENT

This assessment of risks to human health and environmental receptors is in accordance with current policy and practice in the UK and is applicable to new development under the planning regime.

10.1 Regulatory framework and assessment criteria

Development sites can only be assessed as significantly contaminated if all of the following are found to be present, namely

- i) A contaminant; a substance in, on or under the land which has the potential to cause harm or to cause pollution of controlled waters
- ii) A receptor; something that could be adversely affected by a contaminant, such as people, an ecological system, property, or a water body
- iii) A pathway; a route or means by which a receptor can be exposed to or affected by a contaminant

This type of linked combination of contaminant-pathway-receptor is known as a pollutant linkage.

In terms of this current risk assessment, we must assess whether or not there is a potential for such a pollutant linkage to exist here and whether or not further investigation or protective measures are required.

10.2 Proposed end use

A single bungalow with an associated external landscaped/garden and driveway/patio hardstanding area is proposed. On this basis the site should be considered of **high** sensitivity with regard to human health receptors.

10.3 Site sensitivity

The underlying geology includes a 'Secondary Undifferentiated' Aquifer overlying a 'Principal' Aquifer at depth. The site lies within a Total Catchment (Source Protection Zone 3) although the nearest potable groundwater abstraction is in excess of 1 km distance.

The superficial soils are expected to be of low leaching class and low vulnerability and 3-10m thickness, thereby protective of the underlying Principal Aquifer.

The nearest surface water features are the remaining Moat, drain 110m NE and the pond about 270m NE.

At this stage the available environmental and geological information has indicated that the site should be considered of **low to medium** sensitivity with regard to environmental receptors.

10.4 Contaminant sources

Ground levels are generally compatible with the surrounding land so it is likely that natural soils will be present at shallow depth. The map review has indicated the presence of a former pond along the southwestern margin of the site and our walkover survey has noted some undulations (indicative of past landscaping) of the ground surface. For these reasons therefore there may be localised made up ground.

There has been no significant development of the site historically and we have found no evidence of potential sources of ground contamination associated with the current usage.

Ground gas sources are considered in Section 10.5, below.

10.5 Ground gas

There are no nearby Licensed Waste Sites nor any historical landfills. Regarding Radon risk, less than 1% of properties are above the action level in this area, and Radon protection is not required.

The historical maps have identified an infilled pond along the SW side of the site with other infilled ponds/moats in the immediate area and others within a 250m radius. The local pond infilling is considered as including recent biodegradable deposits so there may be a significant ground gas risk requiring further assessment or precautionary protective measures.

The risk assessment findings are tabulated in Section 11.0: Preliminary Conceptual Model.

11.0 PRELIMINARY CONCEPTUAL MODEL

Sources	Contaminants	Receptors	Pathways	Mitigating Factors and Risk Management	Preliminary Risk Levels
<p>Made Ground is expected in the SW part of the site and may contain agricultural waste and contaminants.</p> <p>Walkover survey noted no obvious sources of current contamination.</p>	<p>Potential contaminants include metals, inorganics, hydrocarbons, pesticides & asbestos.</p>	<p>Construction workers, future site occupants and groundwater.</p>	<p>Ingestion, skin contact, breathing dust and permeation to aquifers.</p>	<p>Risks to construction workers can be managed by appropriate PPE.</p> <p>Intrusive Phase 2 ground investigation to sample the Made Ground and test for a range of common potential contaminants including metals, inorganics, hydrocarbons, pesticides & asbestos.</p>	<p>Low to Medium Risk (Subject to Phase 2 Investigation)</p>
<p>There are no nearby Licensed Waste Sites nor any historical landfills. Radon protection is not required.</p> <p>Possible biodegradable content of infilled ground.</p>	<p>Ground gas including carbon dioxide and methane.</p>	<p>Future site occupants</p>	<p>The close proximity of the infilled ground, including within the site, indicates there may be a plausible pathway for ground gas migration.</p>	<p>Ground gas protection could be considered as an alternative to ground gas monitoring.</p> <p>Phase 2 Ground Investigation should check for significant Made Ground in case there is an on-site source of ground gas.</p> <p>Radon protection is not required.</p>	<p>Low to Medium Risk (Subject to Phase 2 Investigation)</p>
<p>The locality has a history of farming which is likely to be low risk in terms of sources of ground contamination.</p>	<p>Potential contaminants include metals, inorganics, hydrocarbons, pesticides & asbestos.</p>	<p>Construction workers and future site occupants</p>	<p>Ingestion, skin contact and breathing dust</p>	<p>Intrusive Phase 2 ground investigation will be required to sample the Made Ground and test for a range of common potential contaminants including metals, inorganics, hydrocarbons, pesticides & asbestos.</p>	<p>Low to Medium Risk (Subject to Phase 2 Investigation)</p>

12.0 PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

On the basis of the available database, historical maps, and our site walkover we consider that a Phase 2 intrusive ground investigation should be undertaken prior to development so that ground contamination risks can be fully assessed.

12.1 Desk based coal mining risk assessment conclusions

The professional opinion given in the Coal Authority report states that they consider the property to be acceptably free from coal mining related risk. No further action is required with regards to past coal mining.

12.2 Ground contamination conclusions

Our preliminary assessment has drawn the following conclusions with regard to ground contamination.

- a) The history of farming / agricultural land usage indicates the potential for leaks and spills from plant and machinery, from fuel tanks, and possible use of pesticides.
- b) Soil samples should be obtained for laboratory analysis of a range of metals, inorganics, hydrocarbons, pesticides and asbestos.
- c) There are no nearby Licensed Waste Sites nor any historical landfills. Regarding Radon risk, less than 1% of properties are above the action level in this area, and Radon protection is not required.
- d) Ponds are noted within 250m on the historical maps and some of these features may have been infilled locally along the southwestern margin of the site. Some of this waste may have been biodegradable. The close proximity and likely biodegradable nature of the known infilling indicates there may be a significant ground gas risk requiring further assessment or alternatively precautionary protective measures.
- e) The underlying geology includes a 'Secondary Undifferentiated' Aquifer overlying a 'Principal' Aquifer at depth. The nearest potable groundwater abstractions are in excess of 1km distance, and the site lies within a Total Catchment (Source Protection Zone 3). The superficial soils are expected to be of low leaching class and low vulnerability and probably 3-10m thickness, thereby providing some protection to the underlying Principal Aquifer.
- f) There may be surplus spoil to be removed from site. The waste regulators may require laboratory chemical analysis of the spoil, including standard suites and Waste Acceptance Criteria (WAC) tests in order to accept / classify the soils for disposal. ACMs may also be present in the soils on site, and this should be investigated.

Based upon the information reviewed, our preliminary desk based assessment is that ground contamination risks to potential receptors should be considered **LOW TO MEDIUM** for the proposed development. Phase 2 intrusive ground investigation, further assessment and vigilance during construction will all be required. If ground contamination is found or is suspected, then specialist advice should be sought.

12.3 Geotechnical conclusions

Our preliminary assessment has drawn the following conclusions with regard to geotechnical aspects:

- a) The published geology indicates Devensian Till (gravelly clay) likely to be present beneath the proposed development area. The underlying 'solid' geology comprises the Chester Formation (sandstone).
- b) Trees and conifer hedgerows are locally present within influencing distance of the proposed development area. If clay soils are encountered in future ground investigations, then building foundations and floor slabs should be designed in accordance with NHBC Guidance, the industry standard for the influence of trees on foundation design and construction. If required, we recommend an Arboriculturist is consulted about providing a Tree Survey prior to development.
- c) There may have been some infilling and landscaping of the ground surface close to the building area within the site. Intrusive ground investigation should check the thickness and composition of the Made Ground to enable an assessment of required foundation depths, which may vary across the site.
- d) A conventional spread foundation solution for the proposed bungalow is anticipated but this will be dependent on the thickness of any Made Ground, the bearing capacity of the underlying natural strata and the depth of influence of the trees and hedgerow.
- e) Any foundations for the existing stable on site will require grubbing out and breaking up prior to new development to avoid any 'hardspots' beneath the new building.
- f) Pavement design for access roads may require in situ CBR testing to provide suitable data for design.

12.4 Proposed sampling, field testing and analytical strategy

Intrusive Phase 2 ground investigation should comprise the following elements:

- i) Dynamic sampling to check the thickness and composition of Made Ground, if any, and to obtain soil samples for laboratory analysis.
- ii) Environmental sampling for laboratory ground contamination testing to include a range of commonly occurring metals, inorganics, hydrocarbons, pesticides, and asbestos.
- iii) Installation of standpipes for ground gas monitoring, or alternatively agreeing precautionary ground gas protection with the Environmental Health Officer instead of monitoring.
- iv) Phase 2 report with ground contamination assessment, updated conceptual model, and remedial strategy, if required.

APPENDIX A	SITE PHOTOGRAPHS : SITE WALKOVER:09/08/2022
APPENDIX B	HISTORICAL MAPS GROUNDSURE MAPINSIGHT G7GEO-8928406: 25/07/2022
APPENDIX C	ENVIRONMENTAL AND GEOLOGICAL DATABASE GROUNDSURE ENVIRO+GEO INSIGHT G7GEO-8928408: 25/07/2022
APPENDIX D	COAL MINING REPORT GROUNDSURE CON29M SEARCH : G7GEO-8928407: 25/07/2022
APPENDIX E	PLANS AND MAPS EXISTING AERIAL SITE PLAN LOCATION PLAN

GENERAL INFORMATION, LIMITATIONS AND EXCEPTIONS

Unless otherwise stated, our Report is a Ground Investigation Report [GIR] as defined in BS EN1997-2. Our Report is not intended to be and should not be viewed or treated as a Geotechnical Design Report [GDR] as defined in EN1997-2. If 'design' recommendations are provided, they are for guidance only and are intended to allow the designer to assess the results and implications of our investigation/testing and to permit preliminary design of relevant elements of the proposed scheme. When the title of the report is 'Factual Report on Ground Investigation' this means that geotechnical design recommendations are not provided.

The scope and methods of investigation used have been chosen taking into account project and site constraints including but not limited to access and space limitations. Where it has not been possible to reasonably undertake an EC7 compliant scope or investigation technique we have adopted a practical and economic scope and technique(s) to obtain indicative soil parameters and any interpretation is based upon our engineering experience and relevant published information.

The Report is issued on the condition that G7 Geotech Ltd will under no circumstances be liable for any loss arising directly or indirectly from ground conditions between the exploratory points which differ from those identified during our investigation. In addition G7 Geotech Ltd will not be liable for any loss arising directly or indirectly from any opinion given on the possible configuration of strata both between the exploratory points and/or below the maximum depth of the investigation; such opinions, where given, are for guidance only and no liability can be accepted as to their accuracy. The results of any measurements taken may vary spatially or with time and further confirmatory measurements should be made after any significant delay in using this Report.

Comments made relating to ground-water or ground-gas are based upon observations made during our investigation unless otherwise stated. Ground-water and ground-gas conditions may vary with time from those reported due to factors such as seasonal effects, atmospheric effects and and/or tidal conditions. We recommend that if monitoring installations have been included as part of our investigation, continued monitoring should be carried out to maximise the information gained.

Specific geotechnical features/hazards such as [but not limited to] areas of root-related desiccation and dissolution features in chalk/soluble rock can exist in discrete localised areas - there can be no certainty that any or all of such features/hazards have been located, sampled or identified. Where a risk is identified the designer should provide appropriate contingencies to mitigate the risk through additional exploratory work and/or an engineered solution.

Where spread foundations are used, we recommend that all excavations are inspected and approved by suitably experienced personnel; appropriate inspection records should be kept. This should also apply to any structures which are in direct contact with the soil where the soil could have a detrimental effect on performance or integrity of the structure.

Ground contamination often exists in small discrete areas - there can be no certainty that any or all such areas have been located, sampled or identified.

The findings and opinions conveyed in this Report may be based on information from a variety of third party sources such as commercially available desk based geological and environmental searches, historical maps, mining reports, radon reports, geotechnical laboratory testing and contamination laboratory analyses. G7 Geotech Ltd cannot and does not provide any guarantee as to the authenticity, accuracy or reliability of such information from third parties; such information has not been independently verified unless stated in our Report.

Our Report is written in the context of an agreed scope of work between G7 Geotech Ltd and the Client and should not be used in any different context. In light of additional information becoming available, improved practices and changes in legislation, amendment or re-interpretation of the assessment or the Report in part or in whole may be necessary after its original publication.

Unless otherwise stated our investigation does not include an arboricultural survey, asbestos survey, ecological survey or flood risk assessment and these should be deemed to be outside the scope of our investigation.

Issue 04 : 3rd August 2020

G7 Geotech Ltd
49, Church Rd
Leyland
Lancashire PR25 3AA

t : 01772 435206
m : 07752 197426
e : alan.w@g7geotech.co.uk



G7 Geotech Ltd
23, Romilly Road
Cardiff
CF5 1FH

t : 02920 215865
m : 07778 782963
e : keith.g@g7geotech.co.uk

APPENDIX A

SITE PHOTOGRAPHS : SITE WALKOVER :09/08/2022



Photograph No 1 : View of stables from the NW



Photograph No 2 : Area of former Moat, since infilled in late 20th Century



Photograph No 3 : Conifer hedgerow along SE boundary, with farm buildings beyond

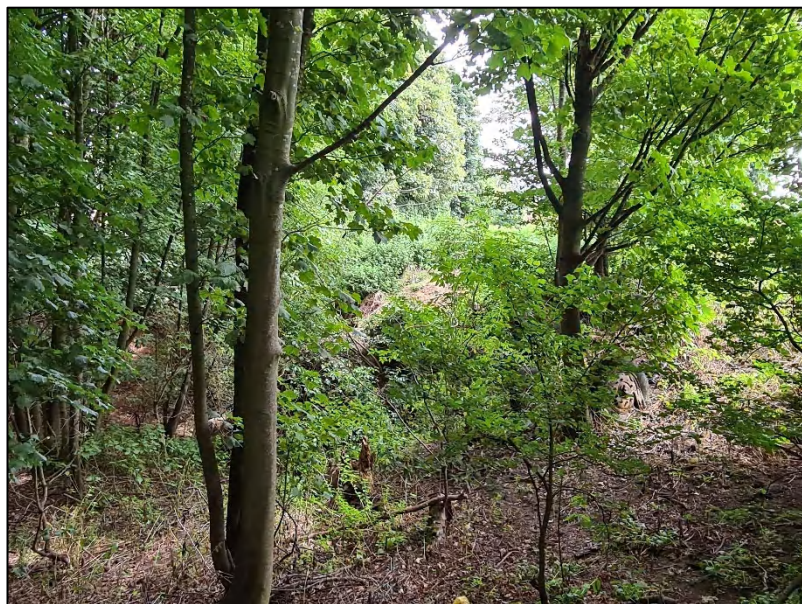


Photograph No 4 : The existing house at the former Old Bold Hall site



Photograph No 5 : The former pond about 70m NW of site.

There has been no water in this feature for many years.



Photograph No 6 : View along the partially infilled pond amongst woodland.

Some lower ground and some infilled ground.

Infilling appears to include agricultural waste, including possible biodegradable straw, silage and organic matter as well as occasional rubber tyre and plastic. The possibility of asbestos containing materials cannot be ruled out.



**Photograph No 7 : Undulating infilled ground in SW part of site.
Existing stables are behind the trees to the right hand side**



Photograph No 8 : Farm track directly outside the SW site boundary



Photograph No 9 : Farm fields to the SW of site.



**Photograph No 10 : Remaining part of Moat amongst trees to left.
Area of infilled Moat to right of photo.**

APPENDIX B
HISTORICAL MAPS
GROUNDSURE MAPINSIGHT G7GEO-8928406: 25/07/2022



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: County Series

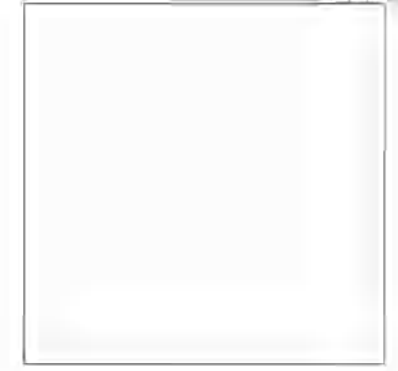
Map date: 1849

Scale: 1:10,560

Printed at: 1:10,560



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

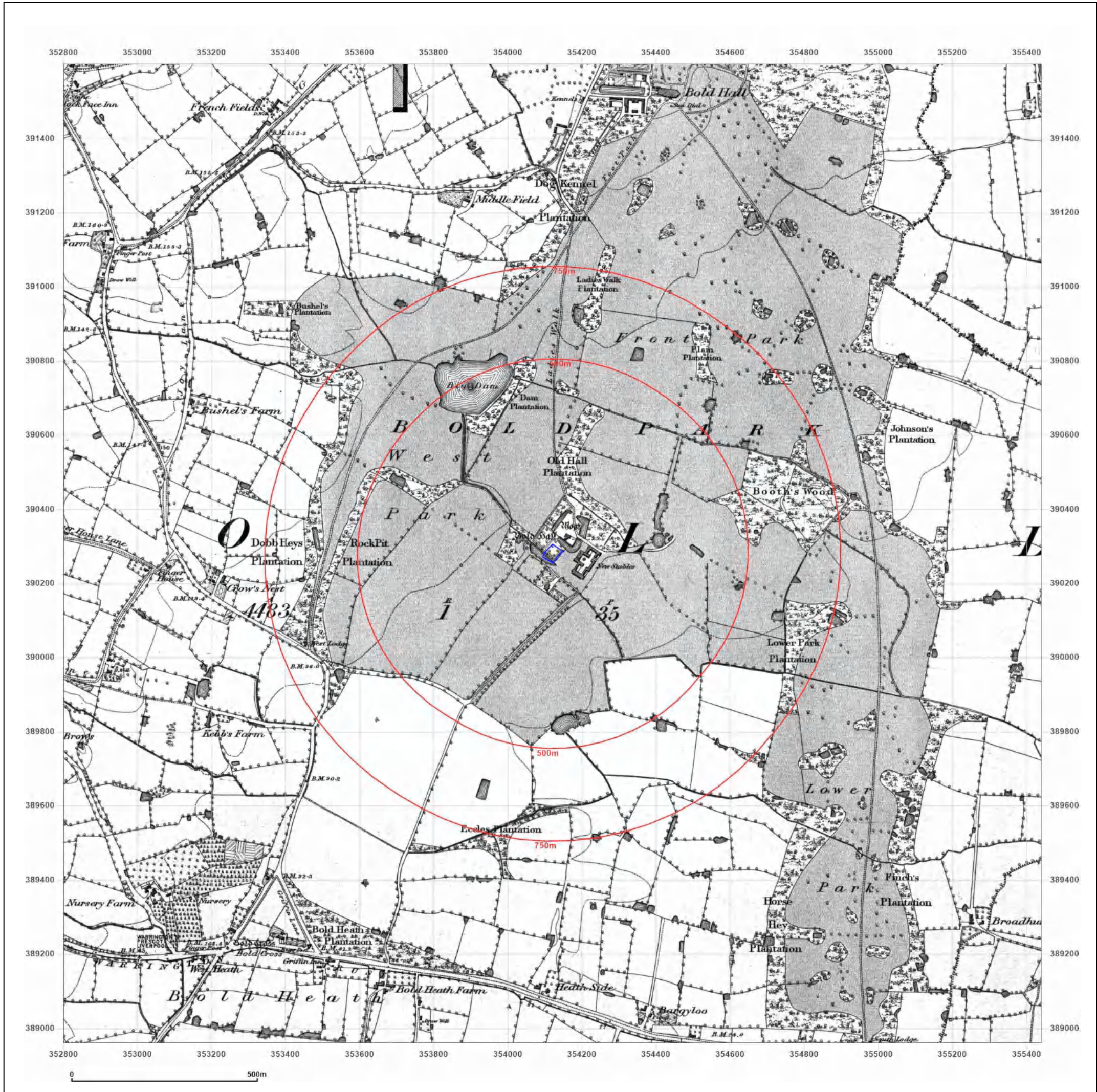


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: County Series

Map date: 1891

Scale: 1:10,560

Printed at: 1:10,560

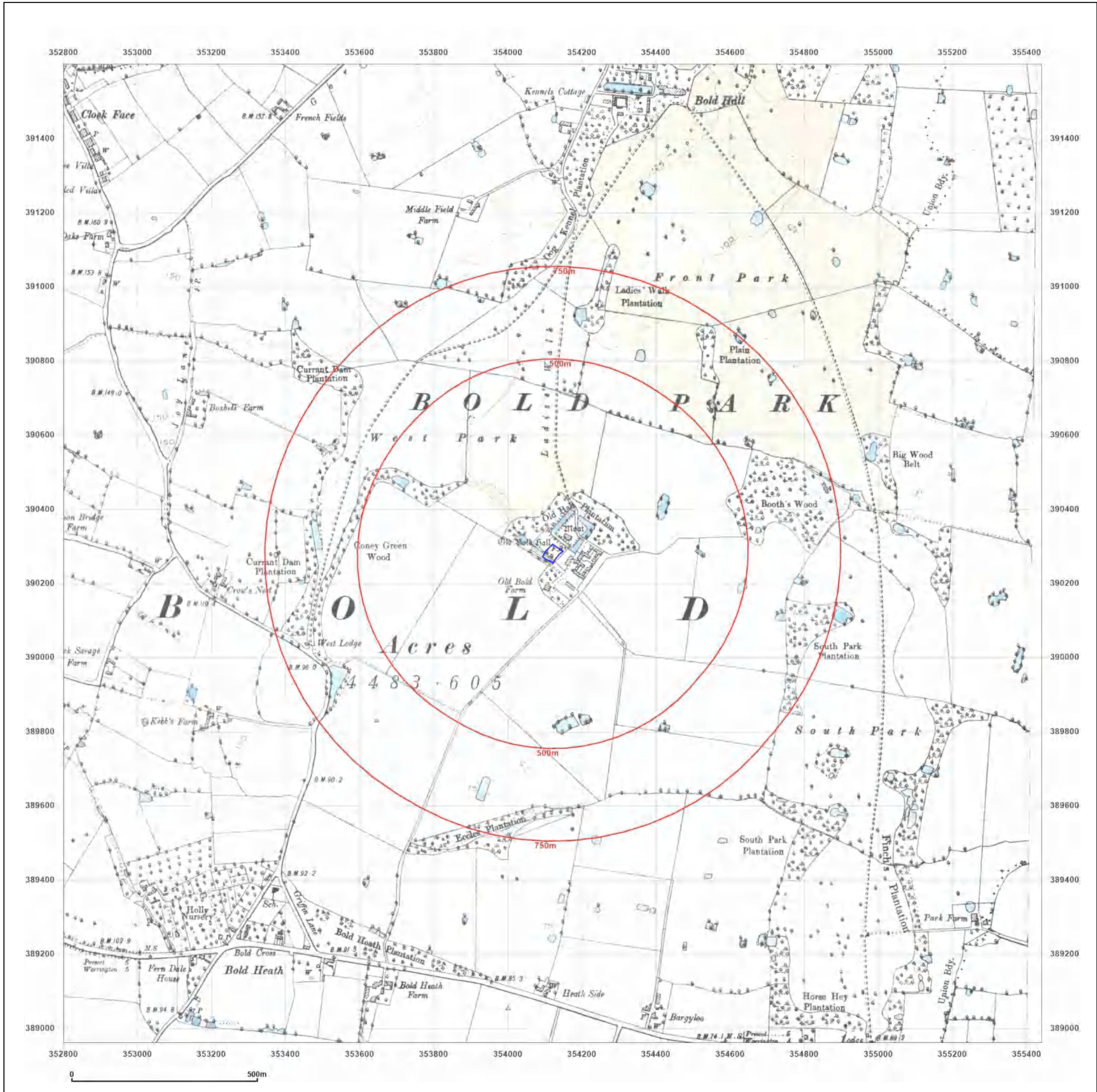


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: County Series

Map date: 1893

Scale: 1:2,500

Printed at: 1:2,500



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

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

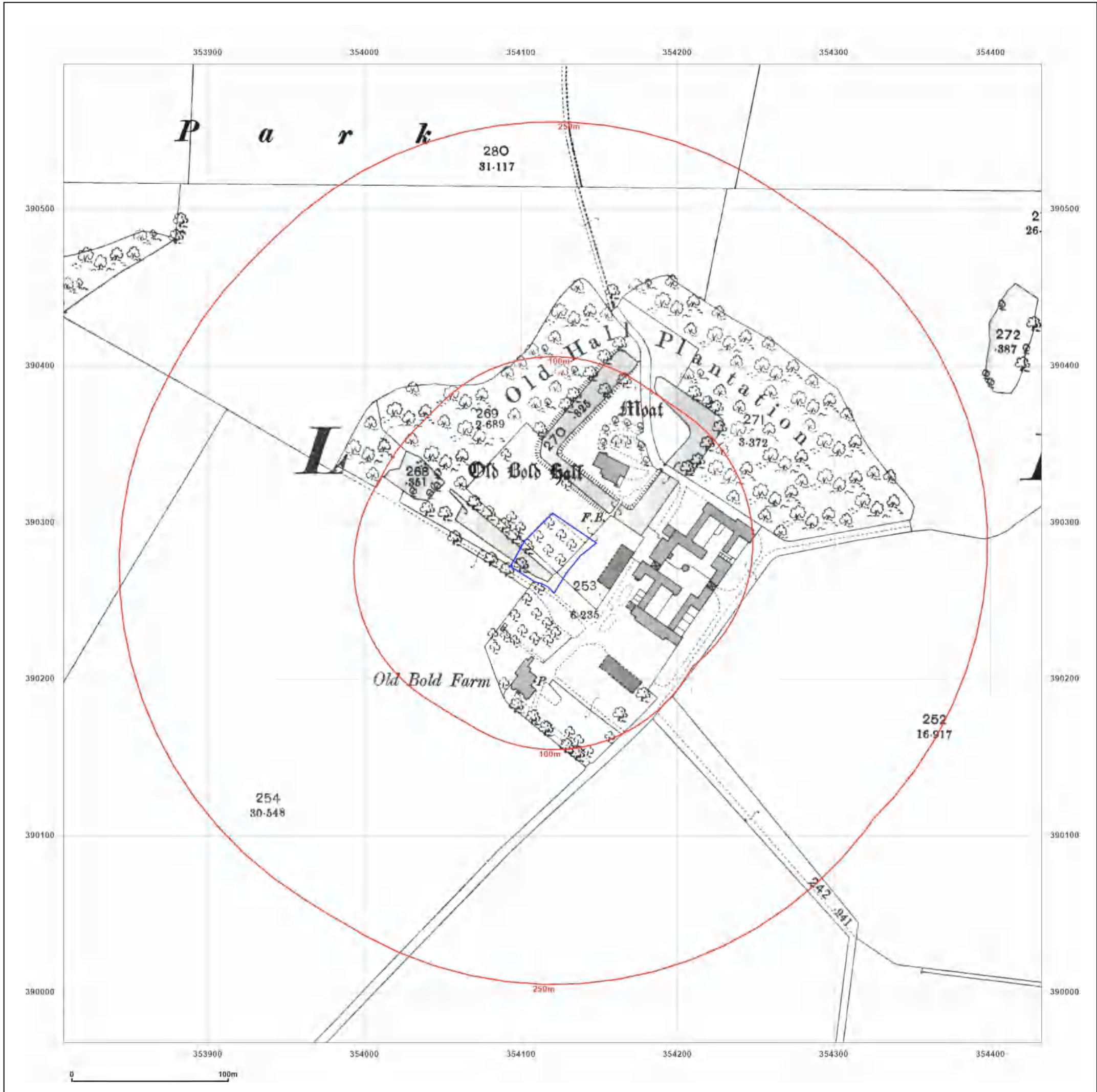


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

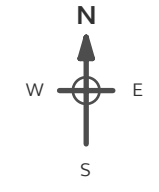
Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: County Series

Map date: 1905-1906

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1891
Revised 1906
Edition N/A
Copyright N/A
Lavaled N/A

Surveyed 1891
Revised 1905
Edition N/A
Copyright N/A
Lavaled N/A

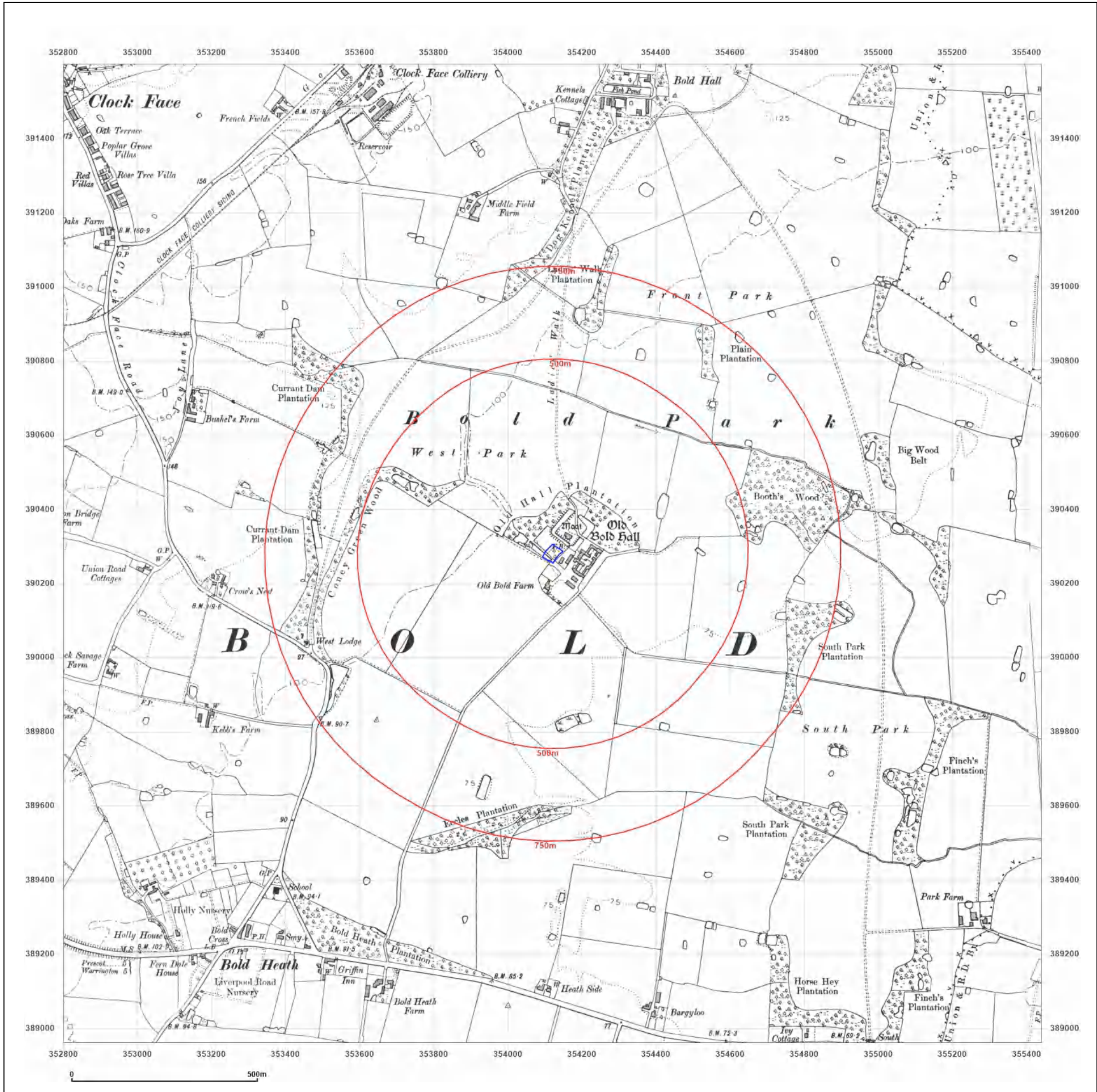


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: County Series

Map date: 1907

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1907
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1907
Revised 1907
Edition N/A
Copyright N/A
Levelled N/A

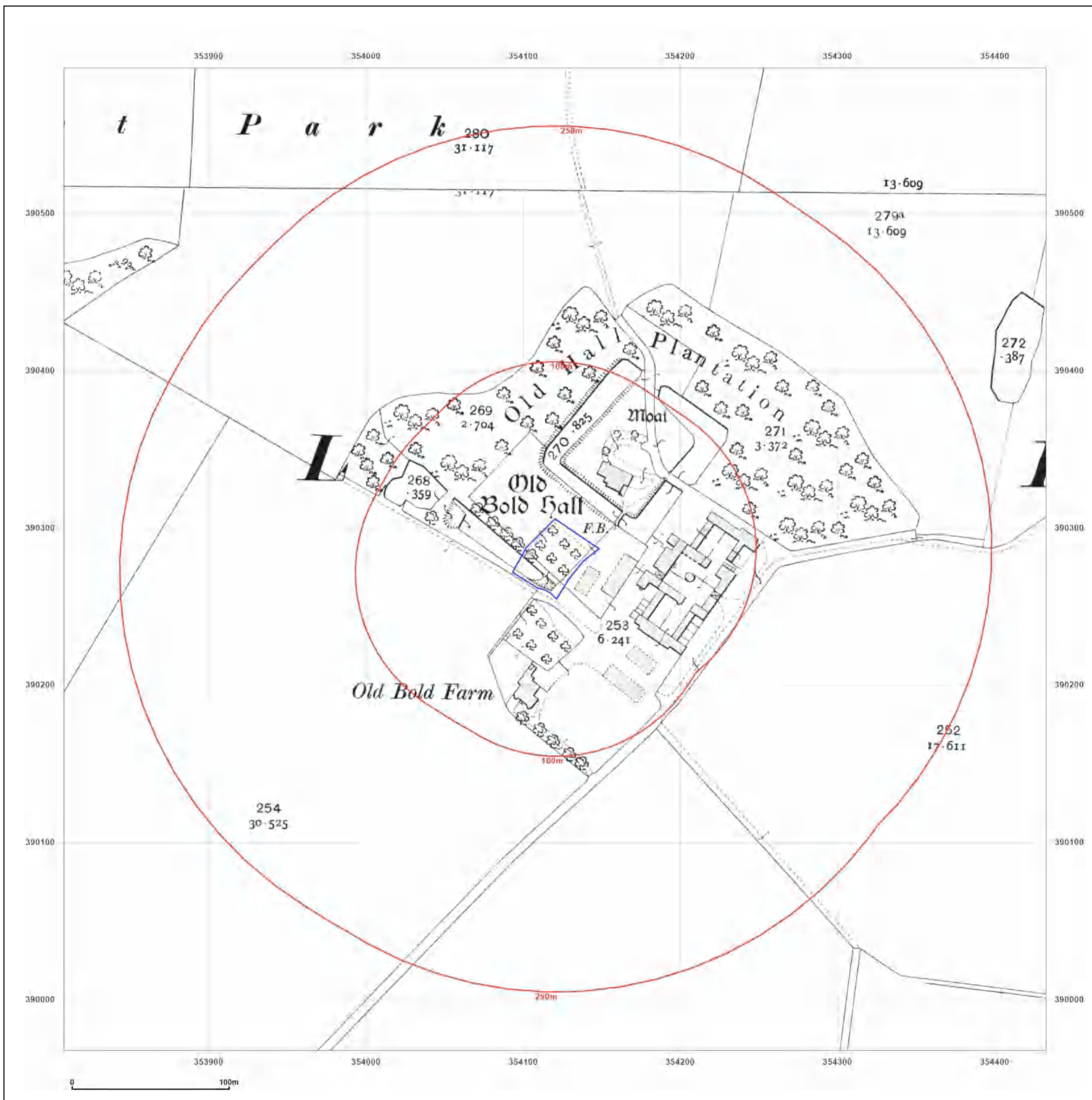


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

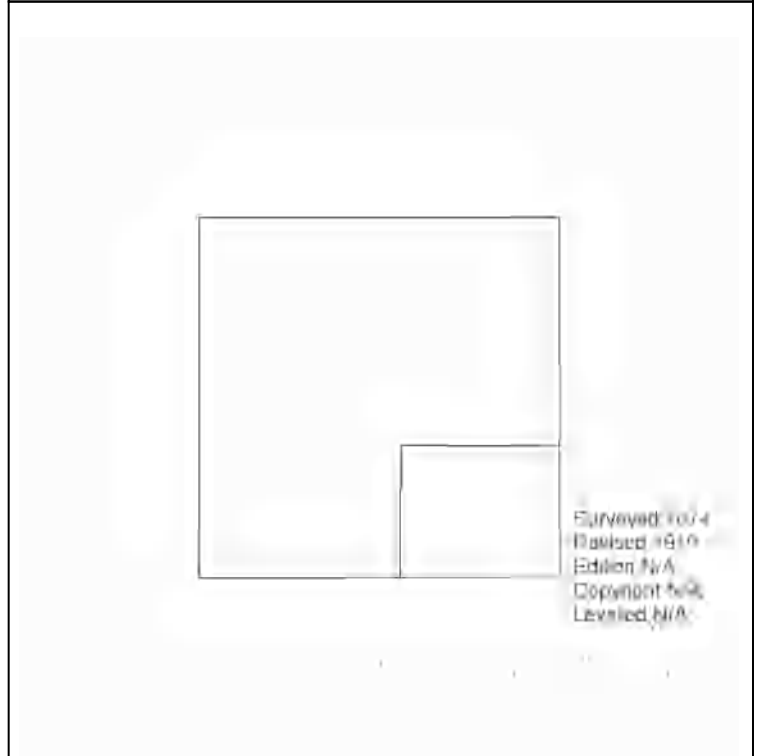
Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: County Series

Map date: 1910

Scale: 1:10,560

Printed at: 1:10,560

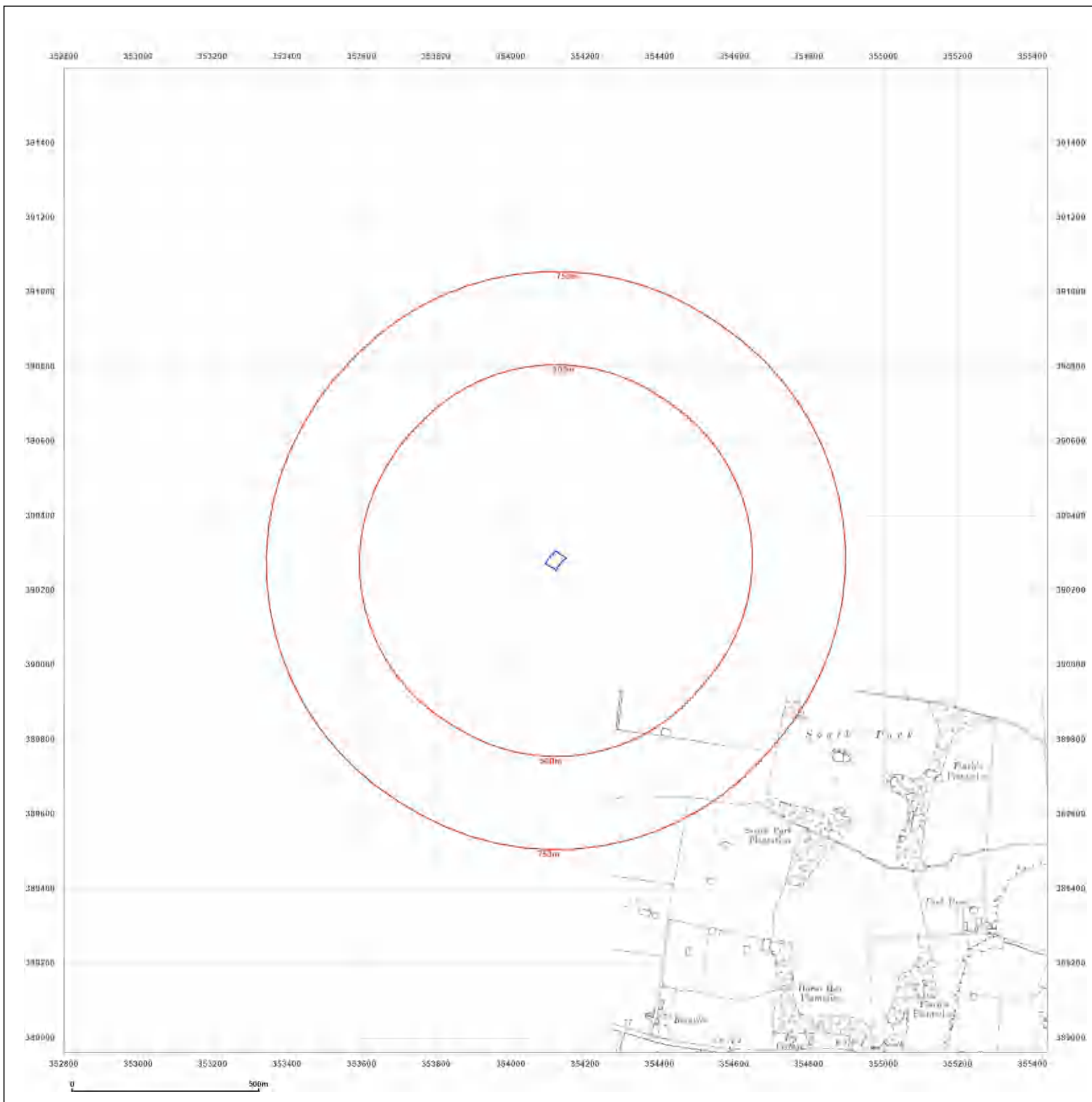


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

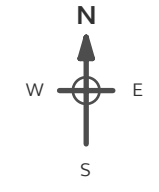
Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: County Series

Map date: 1925

Scale: 1:10,560

Printed at: 1:10,560

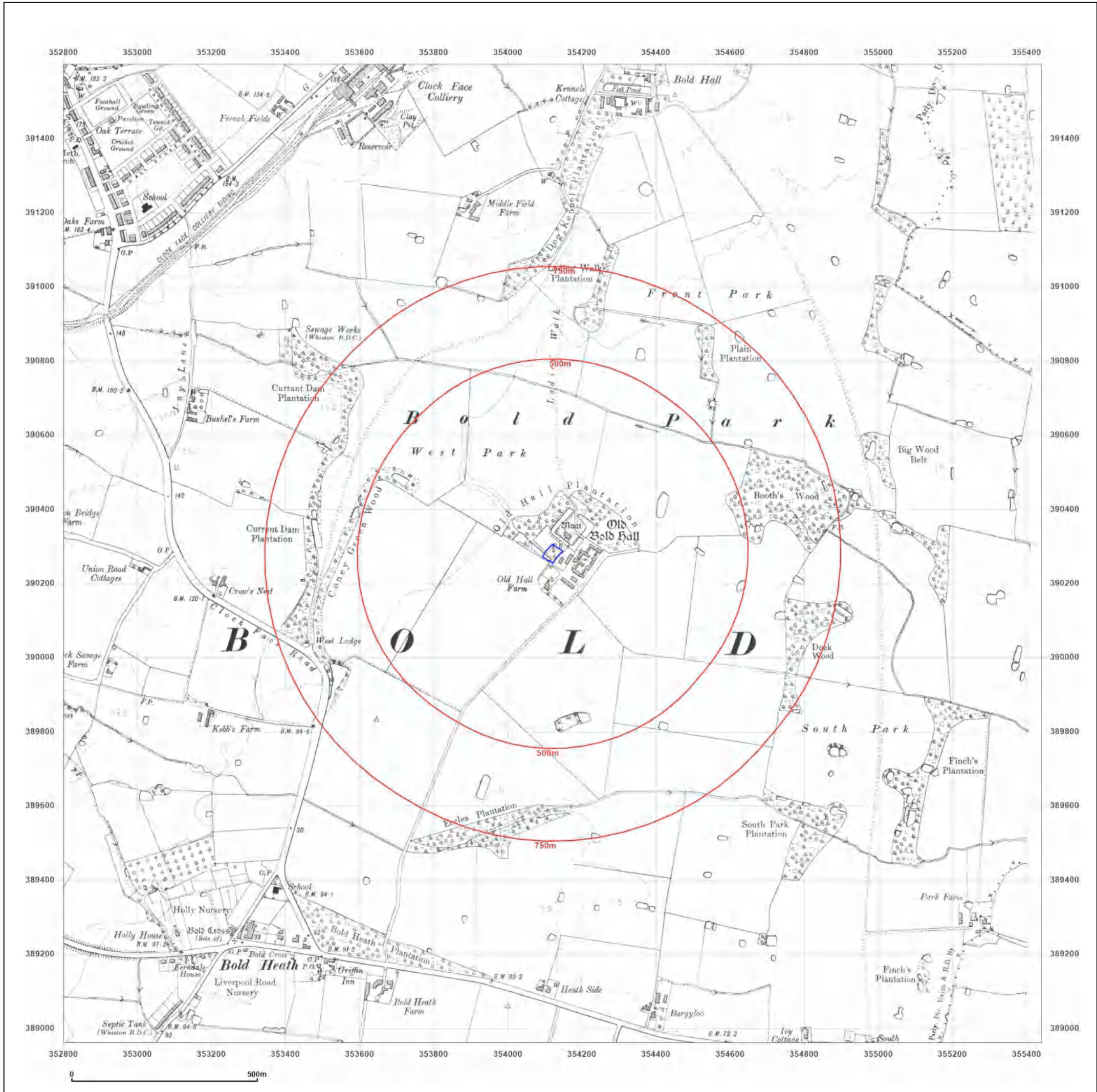


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: County Series

Map date: 1928

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1928
Revised 1828
Edition N/A
Copyright N/A
Levelled N/A

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

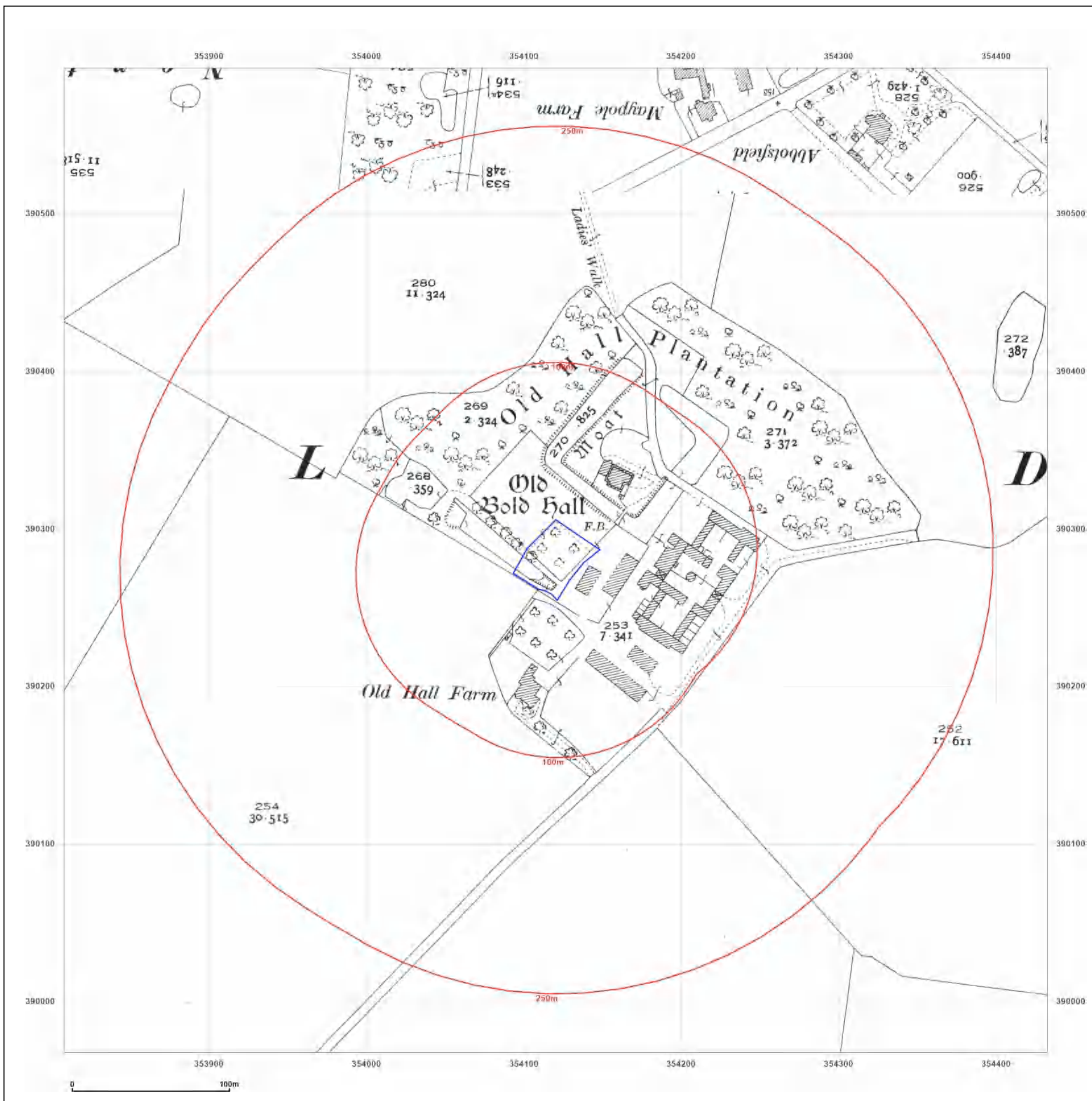


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

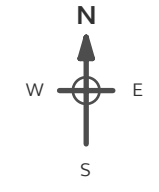
Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

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 1847
Revised 1938
Edition 1938
Copyright N/A
Levelled N/A

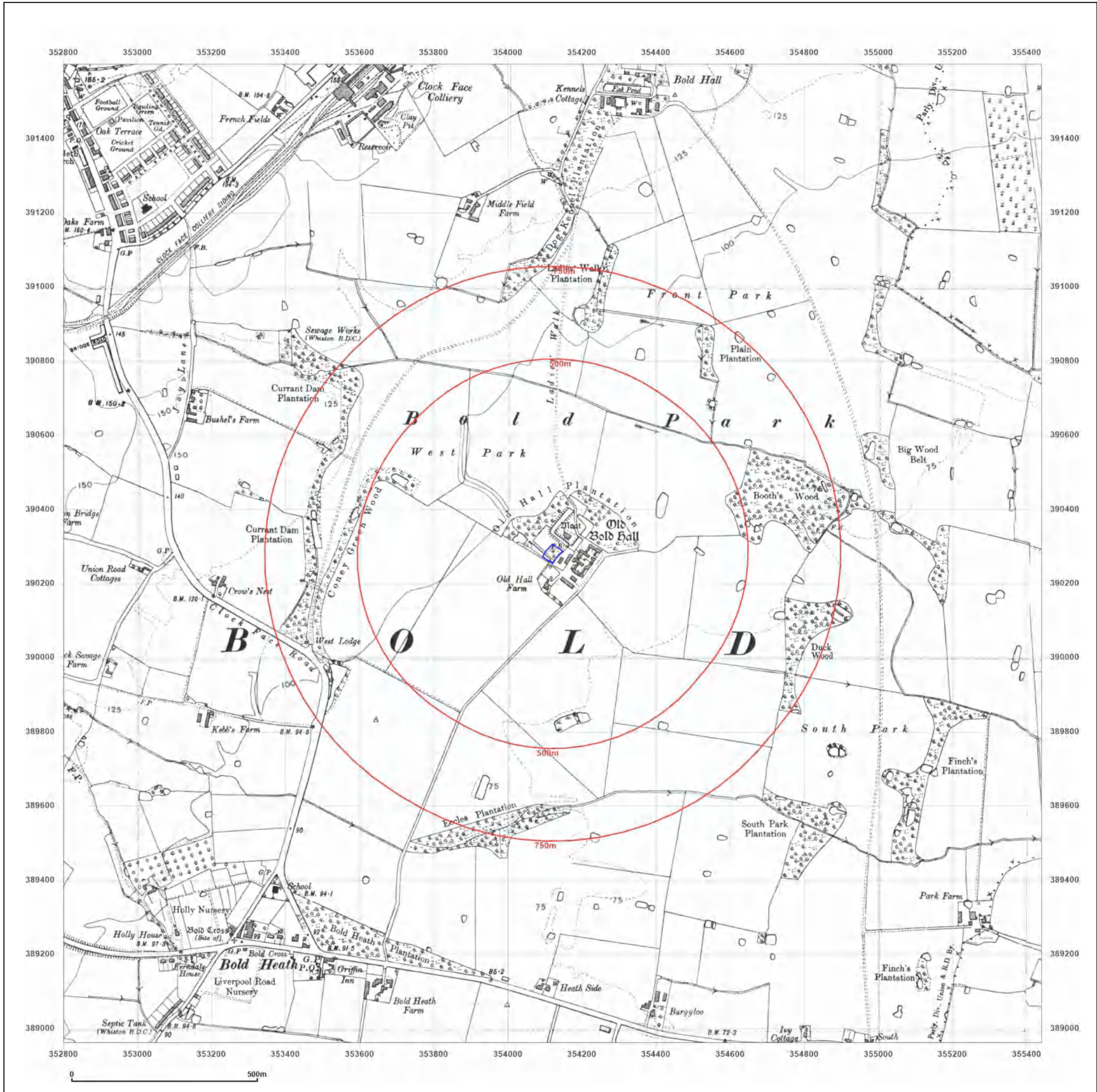


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: County Series

Map date: 1947

Scale: 1:10,560

Printed at: 1:10,560



Employed 10/46
Revised 1947
Edition 1947
Copyright N/A
Levelled N/A

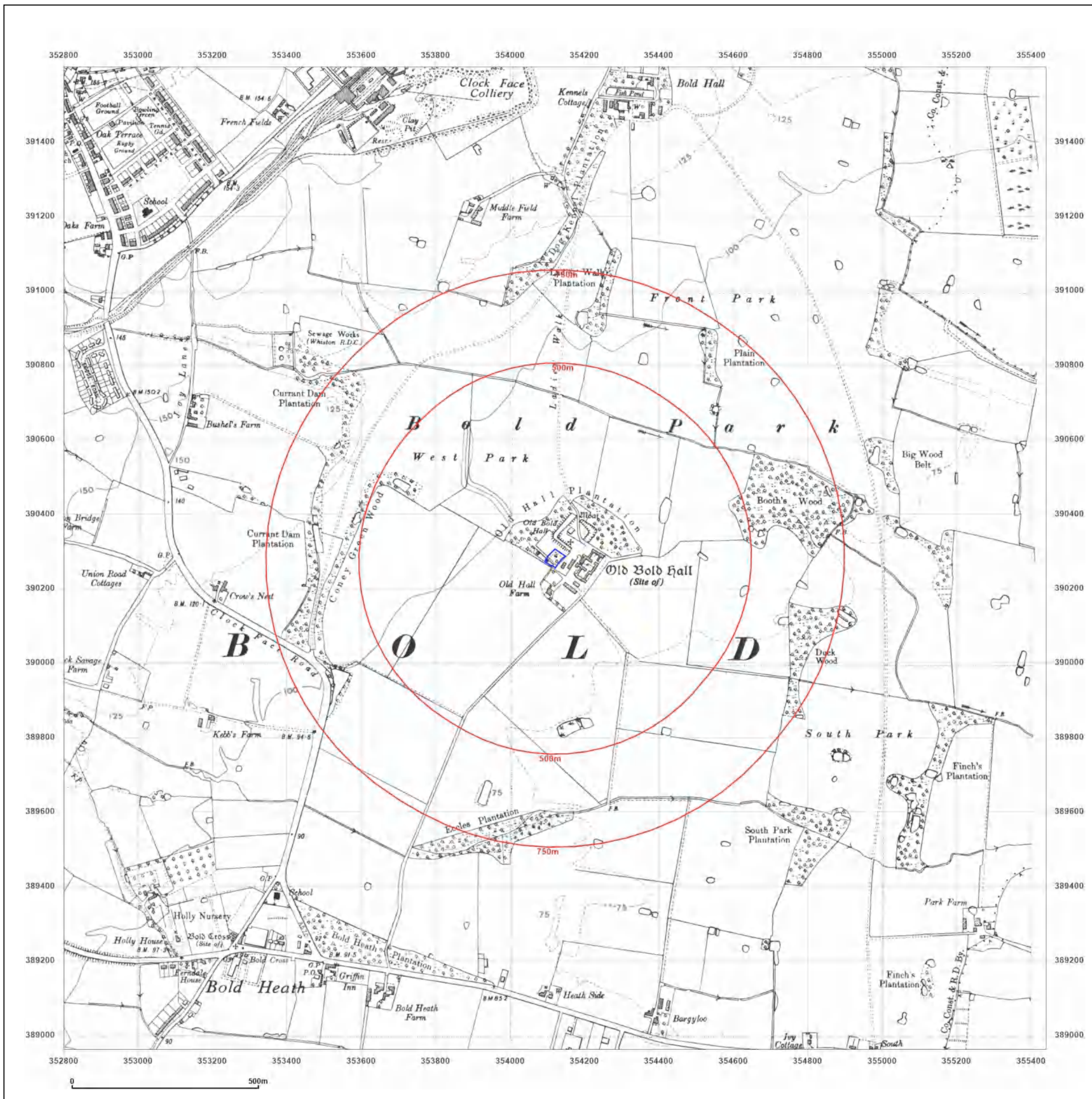


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: Provisional

Map date: 1956-1958

Scale: 1:10,560

Printed at: 1:10,560



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

Surveyed 1949
Revised 1955
Edition 1956
Copyright N/A
Levelled N/A

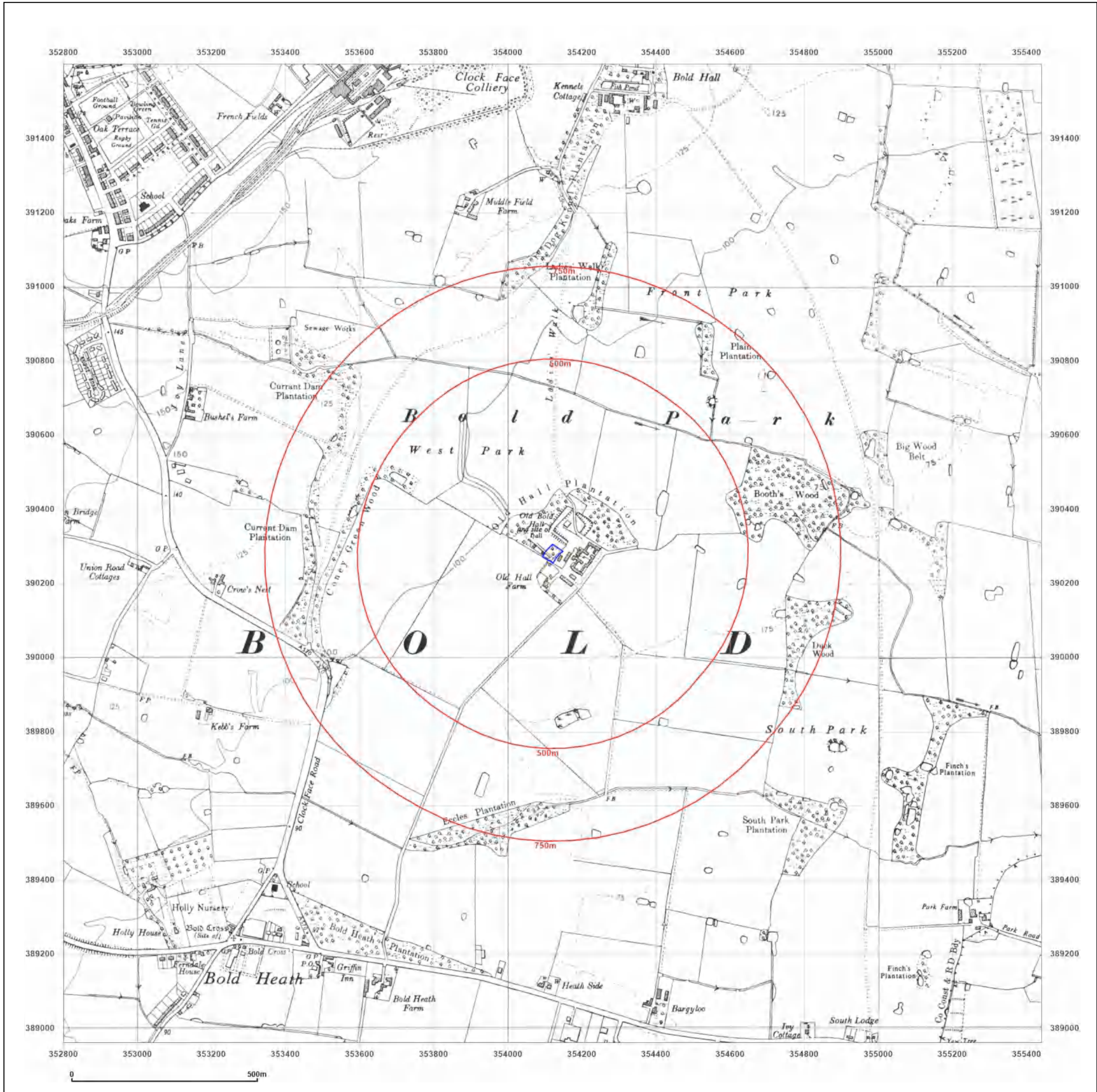


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: National Grid

Map date: 1961-1962

Scale: 1:2,500

Printed at: 1:2,500



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

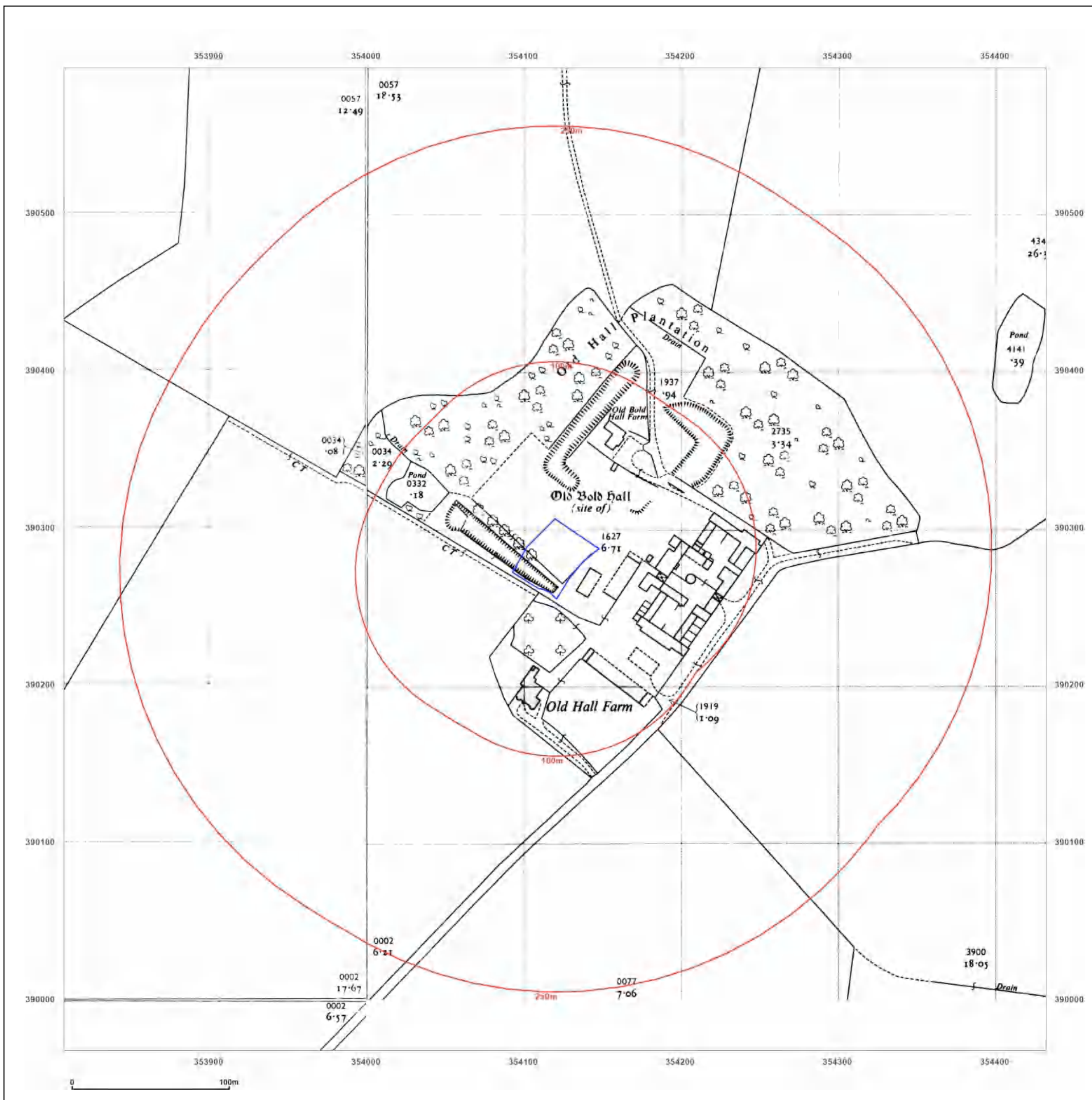


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: Provisional

Map date: 1965-1970

Scale: 1:10,560

Printed at: 1:10,560



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

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

Surveyed 1968
Revised 1970
Edition N/A
Copyright N/A
Levelled N/A

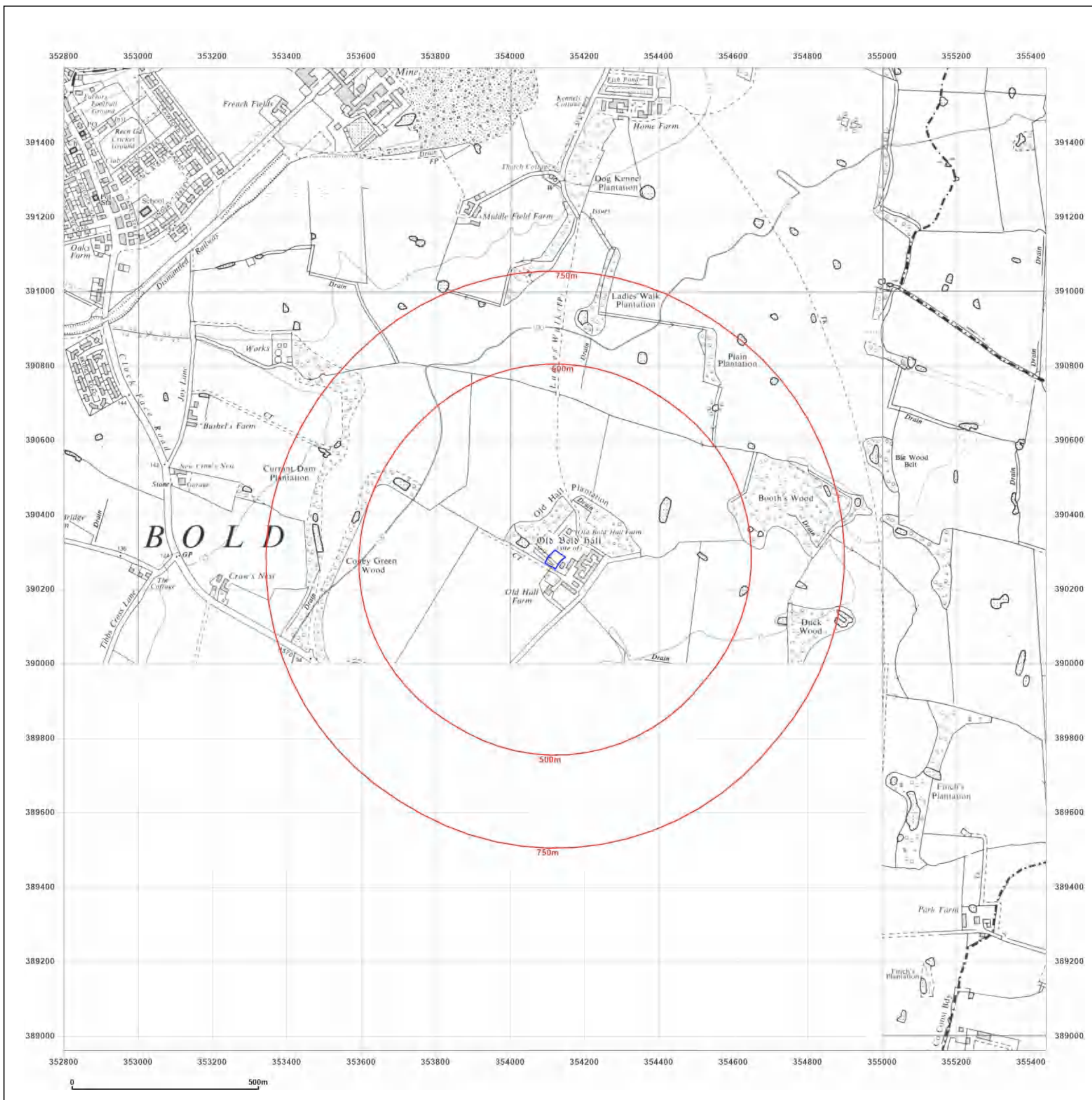


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: National Grid

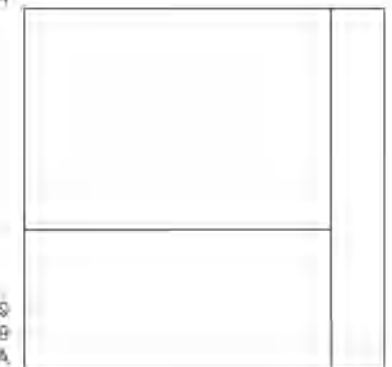
Map date: 1969-1974

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1972
Revised 1974
Edition N/A
Copyright 1974
Levelled 1984



Surveyed 1969
Revised 1989
Edition N/A
Copyright N/A
Levelled N/A

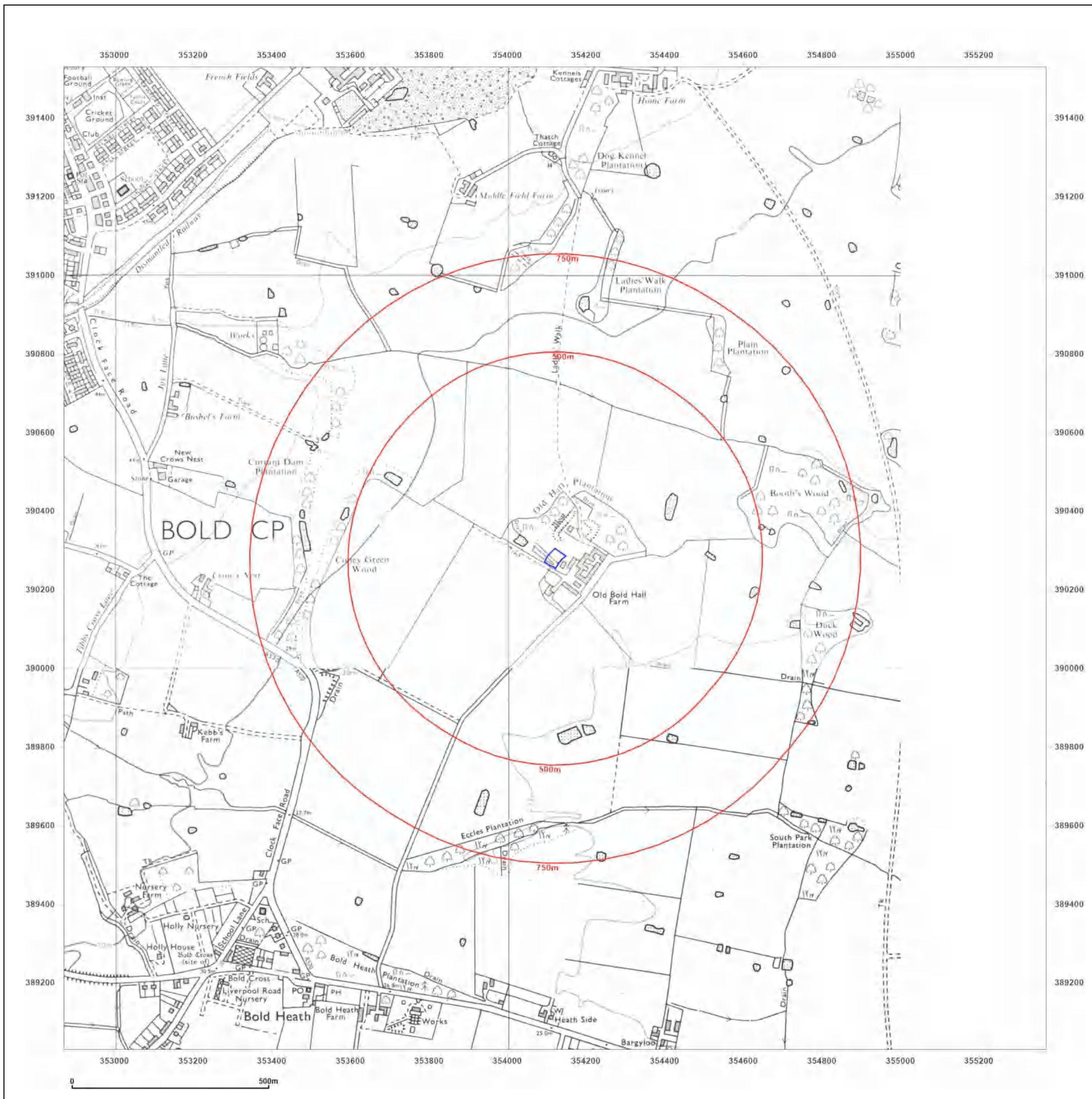


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: National Grid

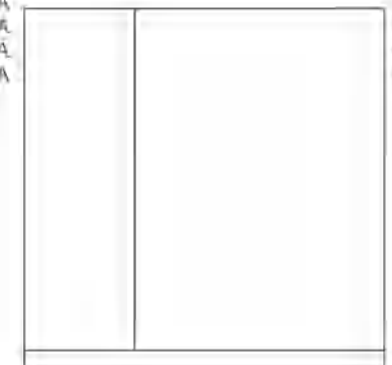
Map date: 1977

Scale: 1:2,500

Printed at: 1:2,500



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



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: 25 July 2022

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





Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: National Grid

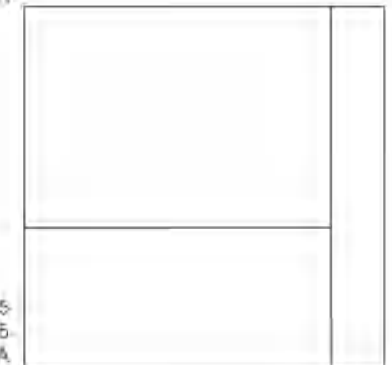
Map date: 1981-1985

Scale: 1:10,000

Printed at: 1:10,000



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



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

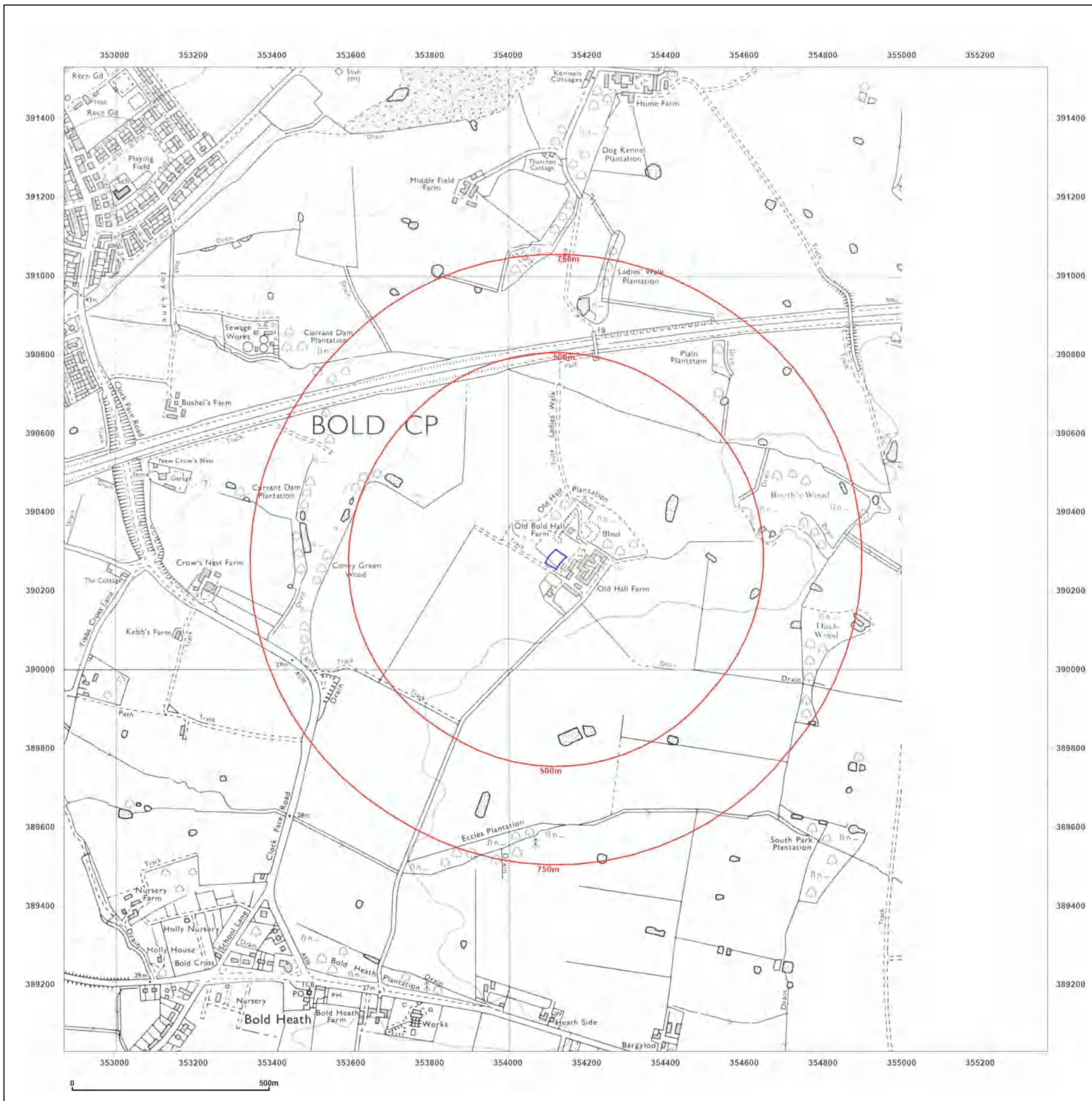


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: National Grid

Map date: 1993

Scale: 1:2,500

Printed at: 1:2,500



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

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

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

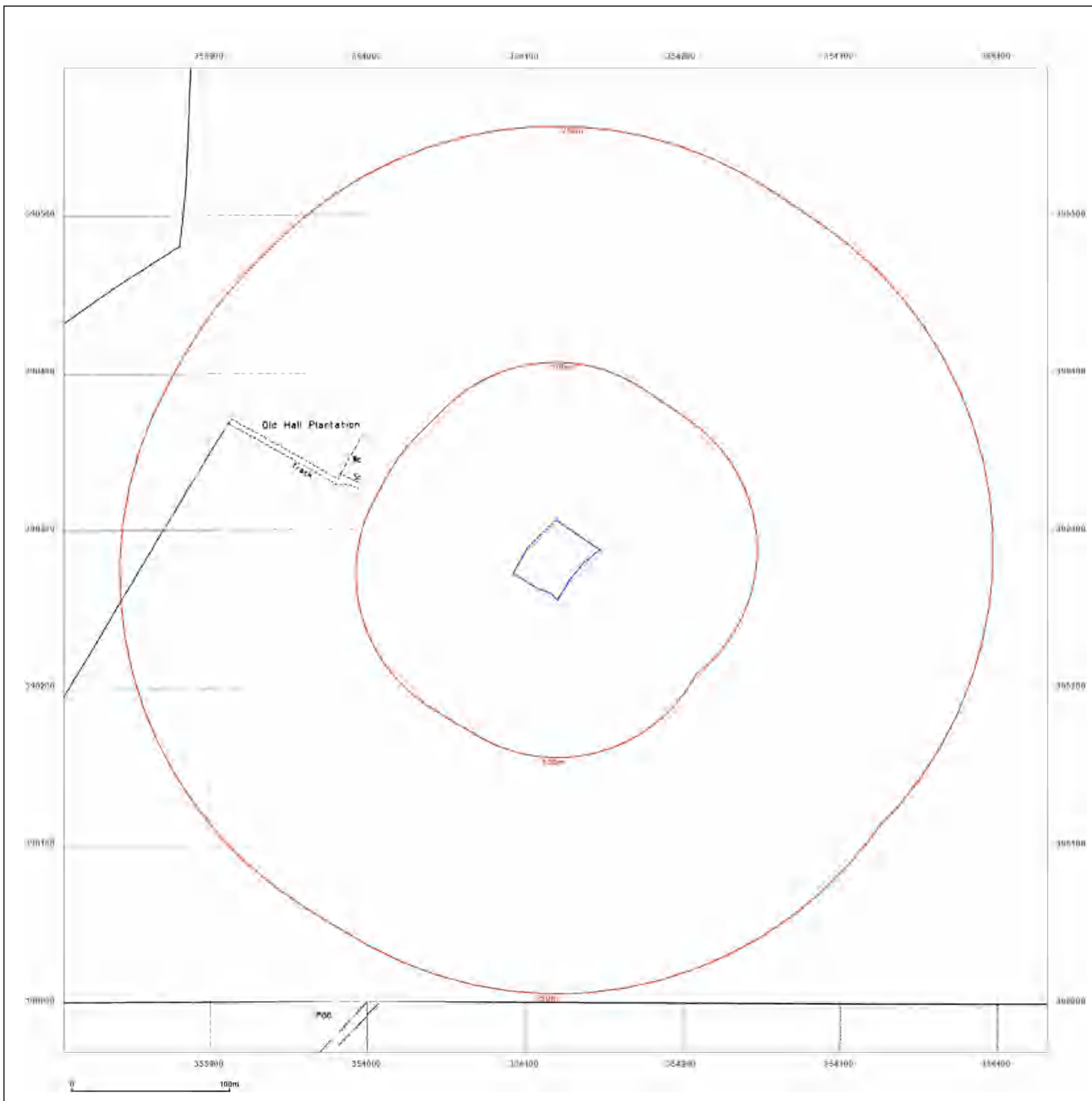


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

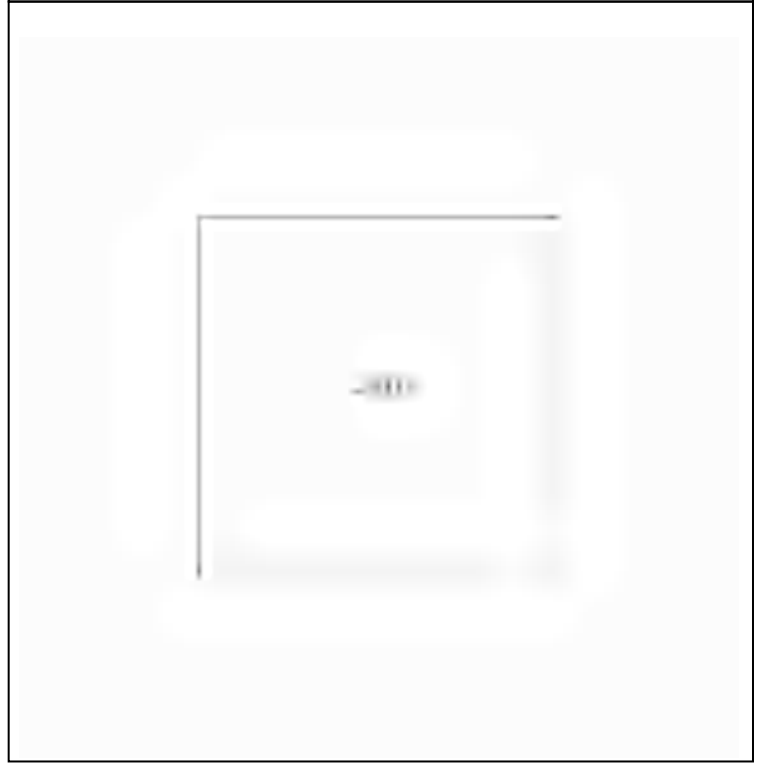
Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



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: 25 July 2022

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



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

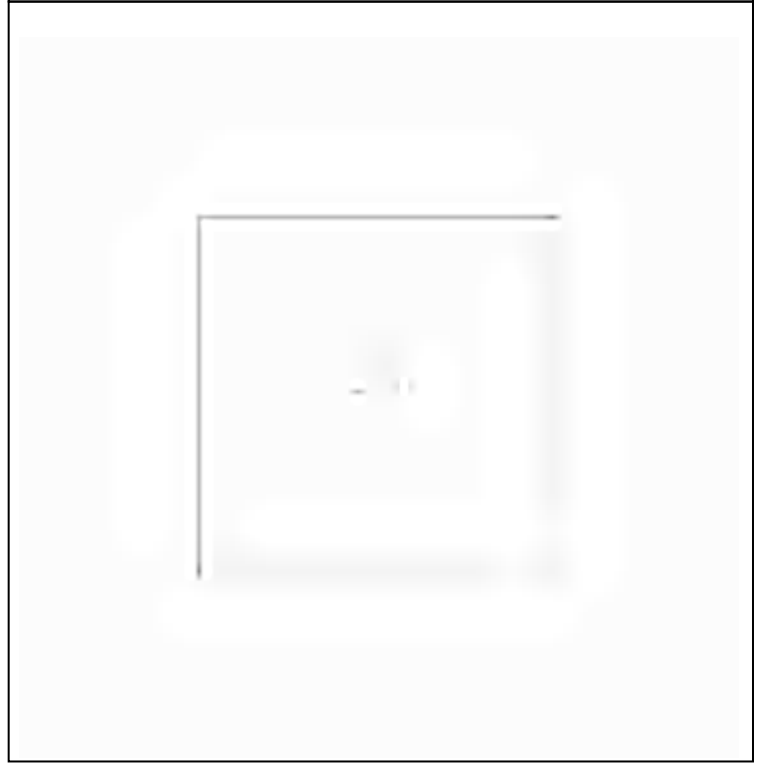
Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

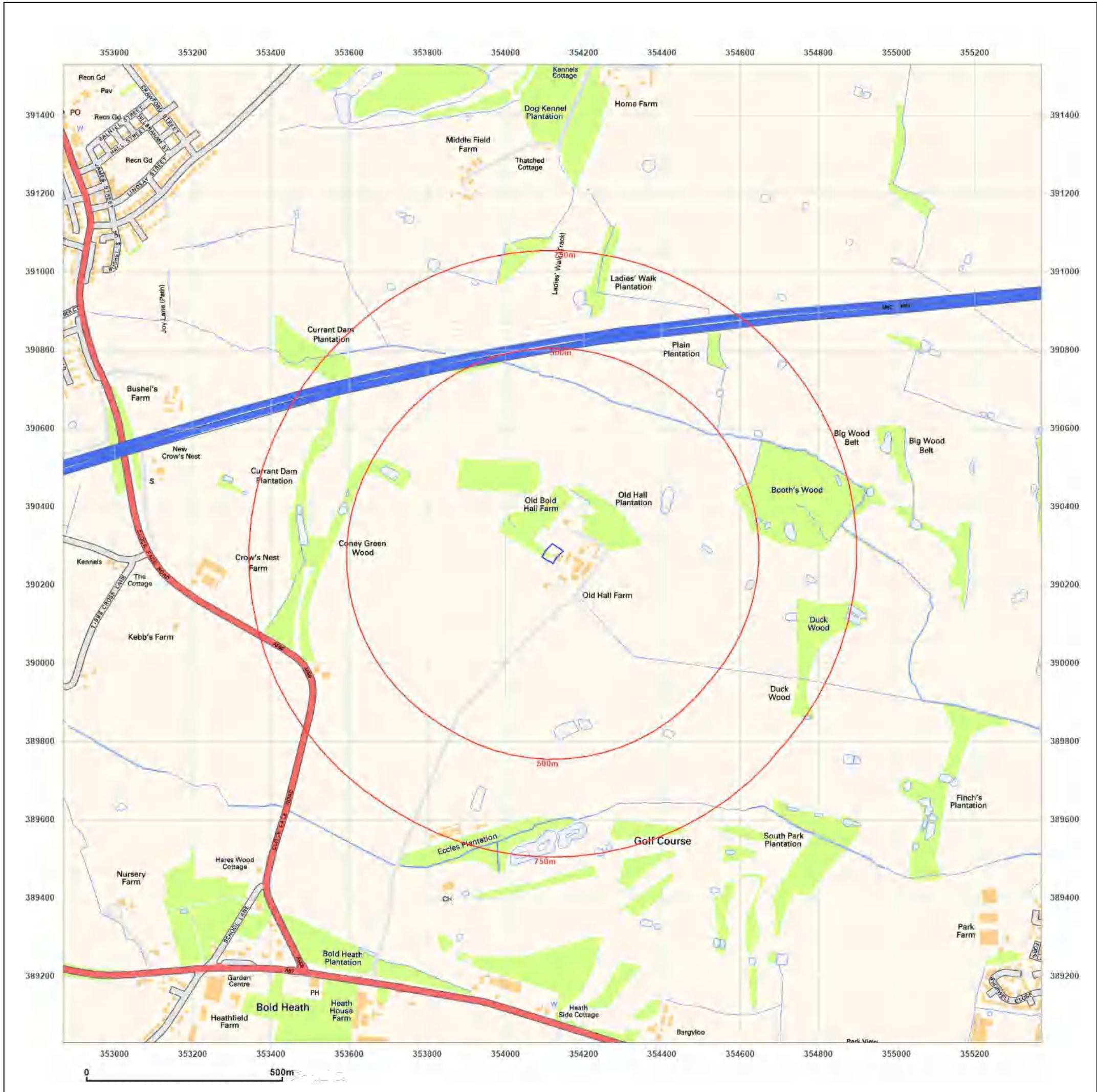


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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



Site Details:

STABLES, OLD BOLD HALL,
WARRINGTON ROAD, BOLD
HEATH, WA8 3XJ

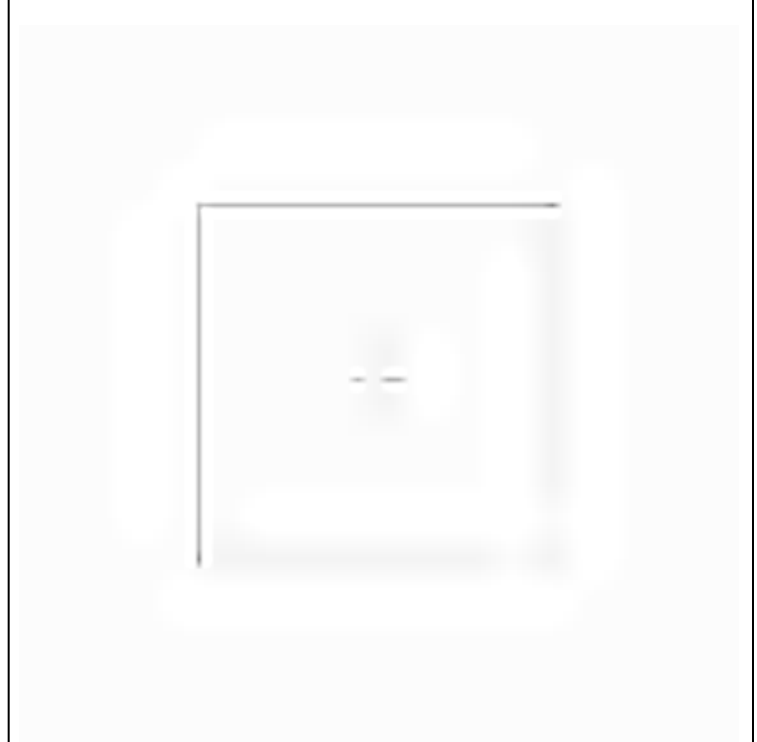
Client Ref: 1408
Report Ref: G7GEO-8928406
Grid Ref: 354120, 390280

Map Name: National Grid

Map date: 2022

Scale: 1:10,000

Printed at: 1:10,000

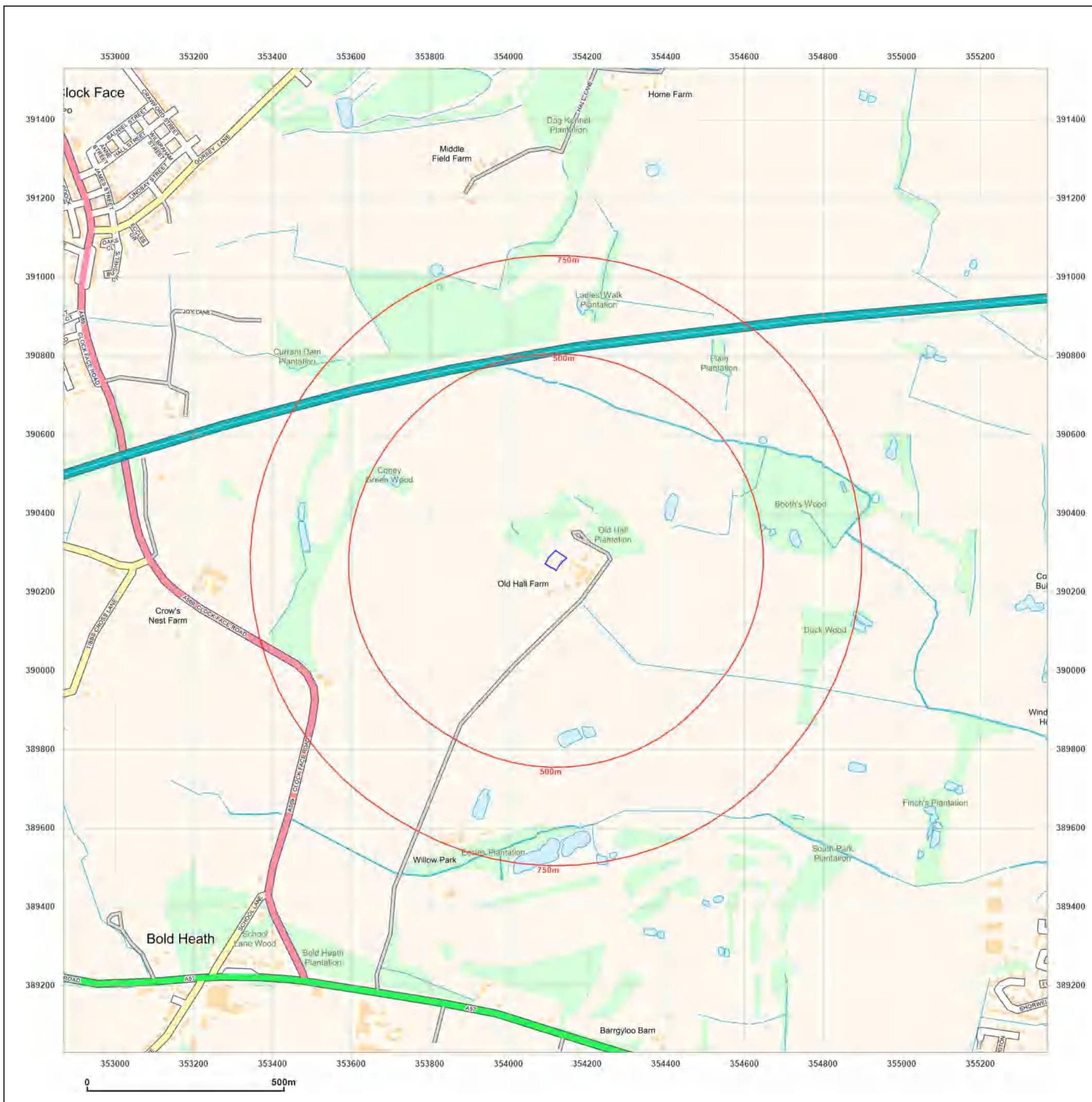


Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2018 Ordnance Survey 100035207

Production date: 25 July 2022

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



APPENDIX C
ENVIRONMENTAL AND GEOLOGICAL DATABASE
GROUNDSURE ENVIRO+GEO INSIGHT G7GEO-:8928408 25/07//2022

STABLES, OLD BOLD HALL, WARRINGTON ROAD, BOLD HEATH, WA8 3XJ

Order Details

Date: 25/07/2022
Your ref: 1408
Our Ref: G7GEO-8928408

Site Details

Location: 354121 390280
Area: 0.14 ha
Authority: [St Helens Metropolitan Borough Council](#)



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

Summary of findings

p. 2

Aerial image

p. 8

OS MasterMap site plan

p.13

groundsure.com/insightuserguide

Contact us with any questions at:

info@groundsure.com

08444 159 000

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	<u>Historical industrial land uses</u>	0	2	2	0	-
15	1.2	<u>Historical tanks</u>	0	0	1	0	-
15	1.3	Historical energy features	0	0	0	0	-
15	1.4	Historical petrol stations	0	0	0	0	-
16	1.5	Historical garages	0	0	0	0	-
16	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
17	2.1	<u>Historical industrial land uses</u>	0	2	2	0	-
18	2.2	<u>Historical tanks</u>	0	0	2	0	-
18	2.3	Historical energy features	0	0	0	0	-
18	2.4	Historical petrol stations	0	0	0	0	-
19	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
20	3.1	Active or recent landfill	0	0	0	0	-
20	3.2	Historical landfill (BGS records)	0	0	0	0	-
21	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
21	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
21	3.5	Historical waste sites	0	0	0	0	-
21	3.6	Licensed waste sites	0	0	0	0	-
21	3.7	<u>Waste exemptions</u>	0	0	29	2	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
25	4.1	<u>Recent industrial land uses</u>	0	1	0	-	-
26	4.2	Current or recent petrol stations	0	0	0	0	-
26	4.3	Electricity cables	0	0	0	0	-
26	4.4	Gas pipelines	0	0	0	0	-
26	4.5	Sites determined as Contaminated Land	0	0	0	0	-



26	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
27	4.7	Regulated explosive sites	0	0	0	0	-
27	4.8	Hazardous substance storage/usage	0	0	0	0	-
27	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
27	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
27	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
28	4.12	Radioactive Substance Authorisations	0	0	0	0	-
28	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
28	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
28	4.15	Pollutant release to public sewer	0	0	0	0	-
28	4.16	List 1 Dangerous Substances	0	0	0	0	-
29	4.17	List 2 Dangerous Substances	0	0	0	0	-
29	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
29	4.19	Pollution inventory substances	0	0	0	0	-
29	4.20	Pollution inventory waste transfers	0	0	0	0	-
29	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
30	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
32	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
34	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
35	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
35	5.5	Groundwater vulnerability- local information	None (within 0m)				
36	5.6	<u>Groundwater abstractions</u>	0	0	0	0	4
38	5.7	Surface water abstractions	0	0	0	0	0
38	5.8	<u>Potable abstractions</u>	0	0	0	0	2
39	5.9	<u>Source Protection Zones</u>	1	0	0	0	-
39	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
40	6.1	<u>Water Network (OS MasterMap)</u>	0	0	7	-	-



41	6.2	<u>Surface water features</u>	0	0	5	-	-
41	6.3	<u>WFD Surface water body catchments</u>	1	-	-	-	-
42	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
42	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
43	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
43	7.2	Historical Flood Events	0	0	0	-	-
43	7.3	Flood Defences	0	0	0	-	-
44	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
44	7.5	Flood Storage Areas	0	0	0	-	-
45	7.6	Flood Zone 2	None (within 50m)				
45	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
46	8.1	<u>Surface water flooding</u>	1 in 250 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding					
48	9.1	<u>Groundwater flooding</u>	Moderate (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
49	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
50	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
50	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
50	10.4	Special Protection Areas (SPA)	0	0	0	0	0
50	10.5	National Nature Reserves (NNR)	0	0	0	0	0
51	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
51	10.7	Designated Ancient Woodland	0	0	0	0	0
51	10.8	Biosphere Reserves	0	0	0	0	0
51	10.9	Forest Parks	0	0	0	0	0
52	10.10	Marine Conservation Zones	0	0	0	0	0
52	10.11	<u>Green Belt</u>	1	0	0	0	3
52	10.12	Proposed Ramsar sites	0	0	0	0	0



52	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
53	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
53	10.15	Nitrate Sensitive Areas	0	0	0	0	0
53	10.16	<u>Nitrate Vulnerable Zones</u>	1	1	0	0	2
54	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
55	10.18	SSSI Units	0	0	0	0	0

Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
56	11.1	World Heritage Sites	0	0	0	-	-
57	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
57	11.3	National Parks	0	0	0	-	-
57	11.4	<u>Listed Buildings</u>	0	0	2	-	-
58	11.5	Conservation Areas	0	0	0	-	-
58	11.6	<u>Scheduled Ancient Monuments</u>	0	1	0	-	-
58	11.7	Registered Parks and Gardens	0	0	0	-	-

Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
59	12.1	<u>Agricultural Land Classification</u>	Grade 2 (within 250m)				
60	12.2	Open Access Land	0	0	0	-	-
60	12.3	Tree Felling Licences	0	0	0	-	-
60	12.4	Environmental Stewardship Schemes	0	0	0	-	-
61	12.5	Countryside Stewardship Schemes	0	0	0	-	-

Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
62	13.1	<u>Priority Habitat Inventory</u>	1	1	3	-	-
63	13.2	Habitat Networks	0	0	0	-	-
63	13.3	Open Mosaic Habitat	0	0	0	-	-
63	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
64	14.1	<u>10k Availability</u>	Identified (within 500m)				
65	14.2	Artificial and made ground (10k)	0	0	0	0	-
66	14.3	<u>Superficial geology (10k)</u>	0	0	0	1	-



67	14.4	Landslip (10k)	0	0	0	0	-
68	14.5	<u>Bedrock geology (10k)</u>	0	0	0	2	-
69	14.6	<u>Bedrock faults and other linear features (10k)</u>	0	0	0	1	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
70	15.1	<u>50k Availability</u>	Identified (within 500m)				
71	15.2	Artificial and made ground (50k)	0	0	0	0	-
71	15.3	Artificial ground permeability (50k)	0	0	-	-	-
72	15.4	<u>Superficial geology (50k)</u>	1	0	0	0	-
73	15.5	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
73	15.6	Landslip (50k)	0	0	0	0	-
73	15.7	Landslip permeability (50k)	None (within 50m)				
74	15.8	<u>Bedrock geology (50k)</u>	1	0	0	1	-
75	15.9	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
75	15.10	<u>Bedrock faults and other linear features (50k)</u>	0	0	0	1	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
76	16.1	<u>BGS Boreholes</u>	0	0	2	-	-
Page	Section	Natural ground subsidence					
77	17.1	<u>Shrink swell clays</u>	Very low (within 50m)				
78	17.2	<u>Running sands</u>	Very low (within 50m)				
79	17.3	<u>Compressible deposits</u>	Negligible (within 50m)				
80	17.4	<u>Collapsible deposits</u>	Very low (within 50m)				
81	17.5	<u>Landslides</u>	Very low (within 50m)				
82	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
83	18.1	Natural cavities	0	0	0	0	-
84	18.2	BritPits	0	0	0	0	-
84	18.3	<u>Surface ground workings</u>	0	2	9	-	-
85	18.4	Underground workings	0	0	0	0	0
85	18.5	Historical Mineral Planning Areas	0	0	0	0	-



85	18.6	Non-coal mining	0	0	0	0	0
85	18.7	Mining cavities	0	0	0	0	0
85	18.8	<u>JPB mining areas</u>	Identified (within 0m)				
86	18.9	<u>Coal mining</u>	Identified (within 0m)				
86	18.10	Brine areas	None (within 0m)				
86	18.11	Gypsum areas	None (within 0m)				
87	18.12	Tin mining	None (within 0m)				
87	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
88	19.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
89	20.1	<u>BGS Estimated Background Soil Chemistry</u>	1	0	-	-	-
89	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
89	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
90	21.1	Underground railways (London)	0	0	0	-	-
90	21.2	Underground railways (Non-London)	0	0	0	-	-
90	21.3	Railway tunnels	0	0	0	-	-
90	21.4	Historical railway and tunnel features	0	0	0	-	-
90	21.5	Royal Mail tunnels	0	0	0	-	-
91	21.6	Historical railways	0	0	0	-	-
91	21.7	Railways	0	0	0	-	-
91	21.8	Crossrail 1	0	0	0	0	-
91	21.9	Crossrail 2	0	0	0	0	-
91	21.10	HS2	0	0	0	0	-



Recent aerial photograph



Capture Date: 22/04/2019

Site Area: 0.14ha



Recent site history - 2015 aerial photograph



Capture Date: 11/06/2015

Site Area: 0.14ha



Recent site history - 2009 aerial photograph



Capture Date: 24/06/2009

Site Area: 0.14ha



Recent site history - 2005 aerial photograph



Capture Date: 02/09/2005

Site Area: 0.14ha



Recent site history - 2001 aerial photograph



Capture Date: 12/05/2001

Site Area: 0.14ha



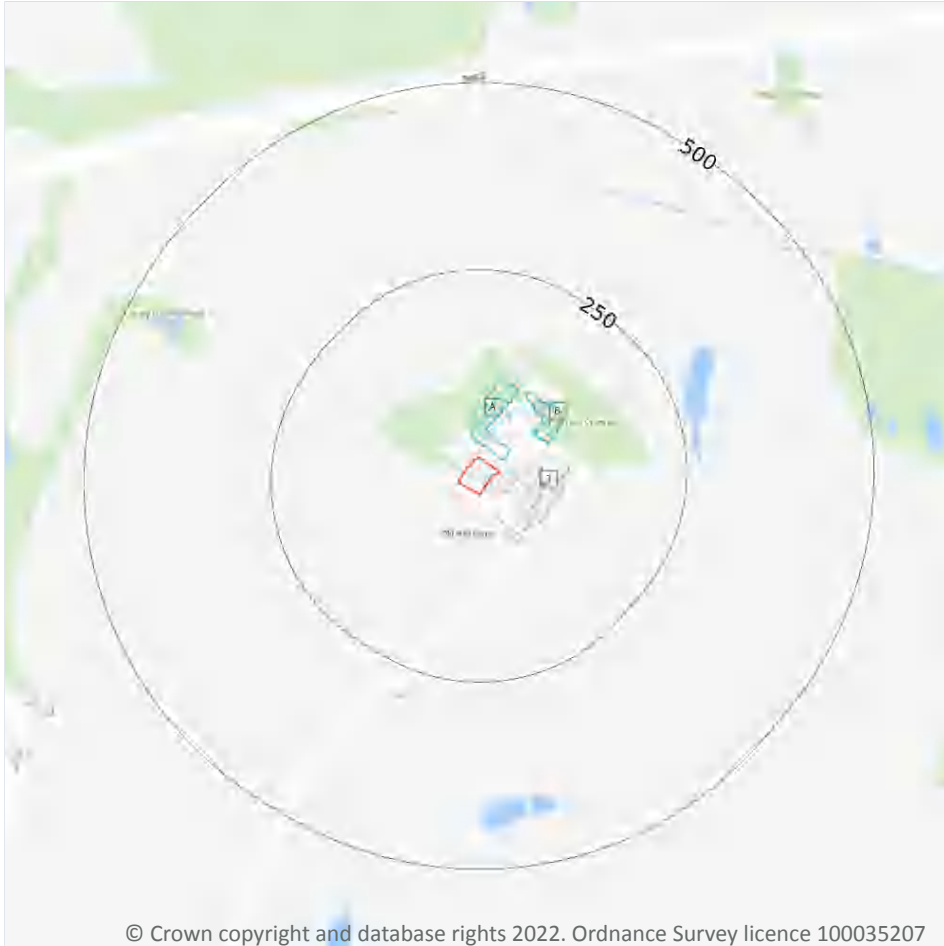
OS MasterMap site plan



Site Area: 0.14ha



1 Past land use



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

1.1 Historical industrial land uses

Records within 500m

4

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

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
A	15m NE	Cuttings	1955	795701

ID	Location	Land use	Dates present	Group ID
A	16m NE	Unspecified Pit	1981	839675
B	68m NE	Unspecified Pit	1955	858449
B	70m NE	Unspecified Pit	1974	966331

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

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

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

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
1	58m E	Unspecified Tank	1960 - 1975	139763

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

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

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'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

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

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

grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m

0

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'.

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

2.1 Historical industrial land uses

Records within 500m

4

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 17**

ID	Location	Land Use	Date	Group ID
A	15m NE	Cuttings	1955	795701
A	16m NE	Unspecified Pit	1981	839675
C	68m NE	Unspecified Pit	1955	858449

ID	Location	Land Use	Date	Group ID
C	70m NE	Unspecified Pit	1974	966331

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	2
----------------------------	----------

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 17**

ID	Location	Land Use	Date	Group ID
B	58m E	Unspecified Tank	1960	139763
B	58m E	Unspecified Tank	1975	139763

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

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

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'.

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

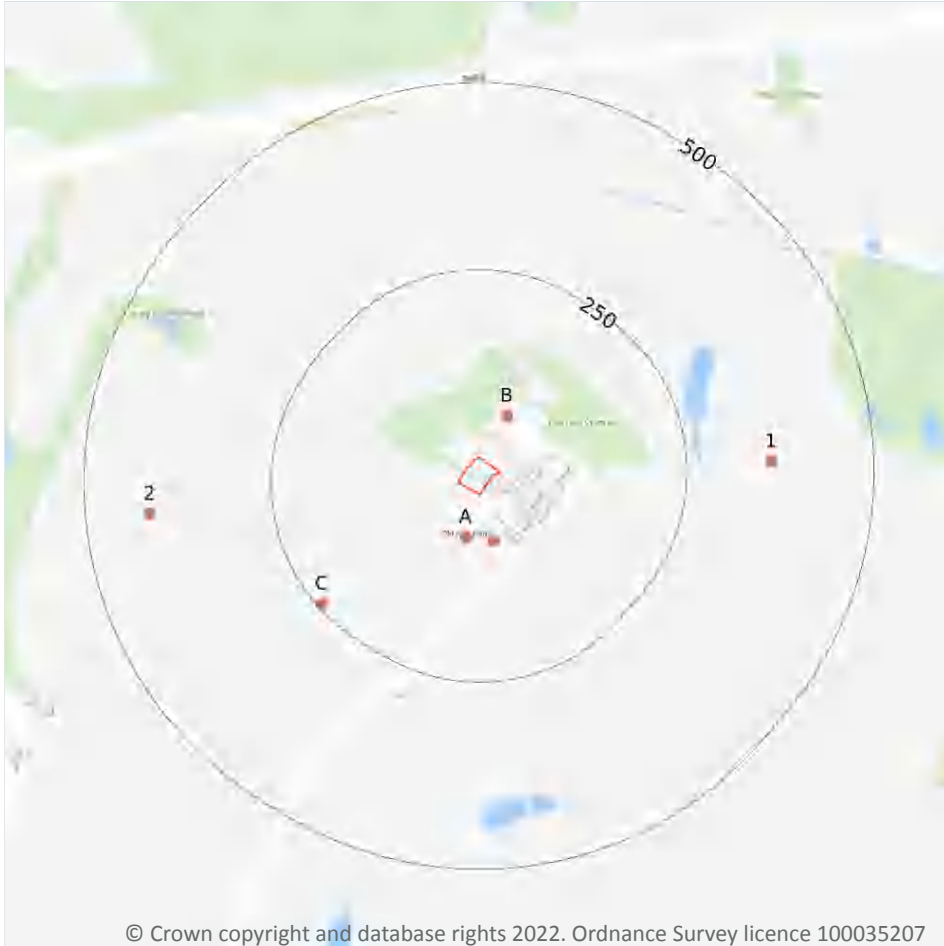
0

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'.

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



— Site Outline

Search buffers in metres (m)

● 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

0

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

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

3.5 Historical waste sites

Records within 500m

0

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

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

3.6 Licensed waste sites

Records within 500m

0

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

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

3.7 Waste exemptions

Records within 500m

31

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 20**

ID	Location	Site	Reference	Category	Sub-Category	Description
A	60m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX101375	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters

ID	Location	Site	Reference	Category	Sub-Category	Description
A	60m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX101375	Disposing of waste exemption	On a farm	Burning waste in the open
A	60m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX101375	Storing waste exemption	On a farm	Storage of waste in secure containers
A	60m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX101375	Storing waste exemption	On a farm	Storage of waste in a secure place
A	60m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX101375	Treating waste exemption	On a farm	Crushing and emptying waste vehicle oil filters
A	60m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX101375	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	60m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX101375	Using waste exemption	On a farm	Use of waste in construction
A	60m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX101375	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
A	60m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX101375	Using waste exemption	On a farm	Use of waste for a specified purpose
A	65m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX244811	Using waste exemption	On a farm	Use of waste in construction
A	65m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX244811	Using waste exemption	On a farm	Use of waste for a specified purpose
A	65m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX244811	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
A	65m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX244811	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	65m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX244811	Treating waste exemption	On a farm	Crushing and emptying waste vehicle oil filters



ID	Location	Site	Reference	Category	Sub-Category	Description
A	65m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX244811	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
A	65m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX244811	Disposing of waste exemption	On a farm	Burning waste in the open
A	65m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX244811	Storing waste exemption	On a farm	Storage of waste in secure containers
A	65m S	OLD HALL FARM, WARRINGTON ROAD, WIDNES, WA8 3XJ	WEX244811	Storing waste exemption	On a farm	Storage of waste in a secure place
B	66m NE	Oldhall Farm Clockface Road Cheshire WA8 3XJ	EPR/DF0030Q M/A001	Disposing of waste exemption	Both agricultural and non- agricultural waste	Deposit of waste from dredging of inland waters
B	66m NE	Oldhall Farm Clockface Road Cheshire WA8 3XJ	EPR/DF0030Q M/A001	Disposing of waste exemption	Both agricultural and non- agricultural waste	Burning waste in the open
B	66m NE	Oldhall Farm Clockface Road Cheshire WA8 3XJ	EPR/DF0030Q M/A001	Storing waste exemption	Both agricultural and non- agricultural waste	Storage of waste in secure containers
B	66m NE	Oldhall Farm Clockface Road Cheshire WA8 3XJ	EPR/DF0030Q M/A001	Storing waste exemption	Both agricultural and non- agricultural waste	Storage of waste in a secure place
B	66m NE	Oldhall Farm Clockface Road Cheshire WA8 3XJ	EPR/DF0030Q M/A001	Treating waste exemption	Both agricultural and non- agricultural waste	Crushing and emptying waste vehicle oil filters
B	66m NE	Oldhall Farm Clockface Road Cheshire WA8 3XJ	EPR/DF0030Q M/A001	Treating waste exemption	Both agricultural and non- agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

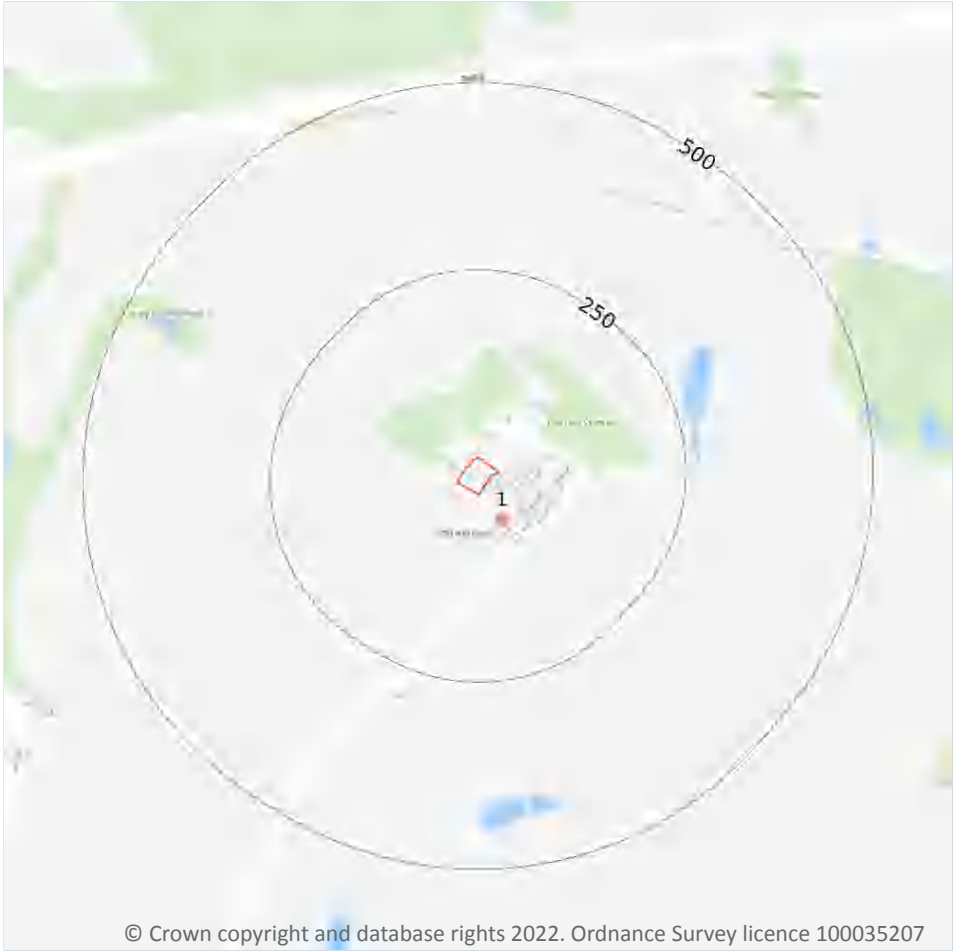


ID	Location	Site	Reference	Category	Sub-Category	Description
B	66m NE	Oldhall Farm Clockface Road Cheshire WA8 3XJ	EPR/DF0030Q M/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
B	66m NE	Oldhall Farm Clockface Road Cheshire WA8 3XJ	EPR/DF0030Q M/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit
B	66m NE	Oldhall Farm Clockface Road Cheshire WA8 3XJ	EPR/DF0030Q M/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose
C	245m SW	-	WEX188820	Storing waste exemption	On a Farm	Storage of sludge
C	245m SW	-	WEX104478	Storing waste exemption	On a farm	Storage of sludge
1	362m E	-	WEX140594	Storing waste exemption	On a farm	Storage of sludge
2	415m W	-	WEX188106	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

4.1 Recent industrial land uses

Records within 250m **1**

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 25**

ID	Location	Company	Address	Activity	Category
1	46m SE	Silo	Merseyside, WA8	Hoppers and Silos	Farming

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

0

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.

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

0

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

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

4.19 Pollution inventory substances

Records within 500m

0

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

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

4.20 Pollution inventory waste transfers

Records within 500m

0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m

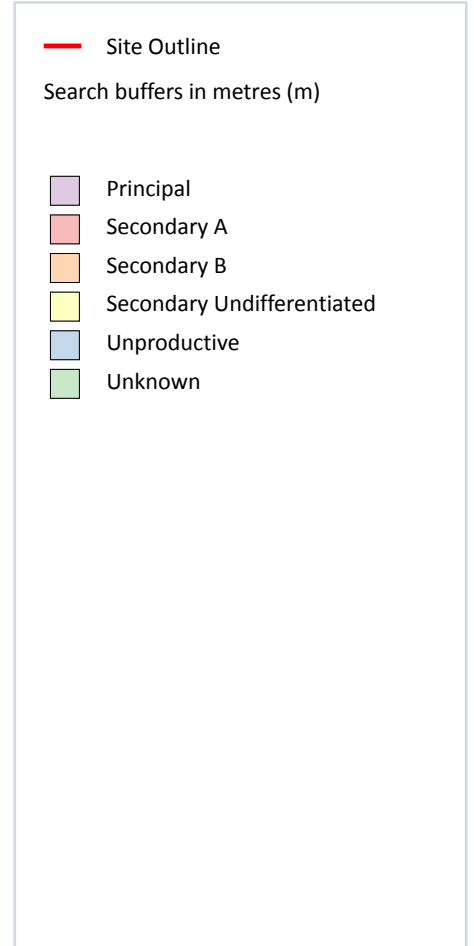
0

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

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



5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m

2

Aquifer status of groundwater held within superficial geology.

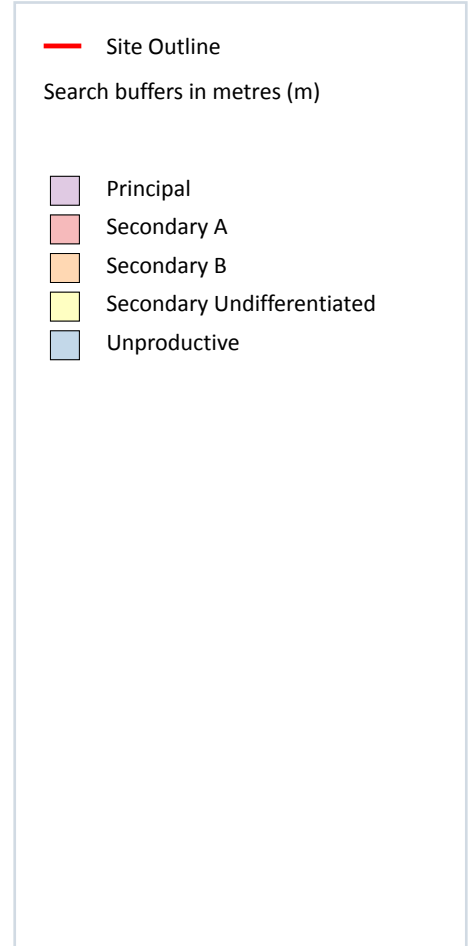
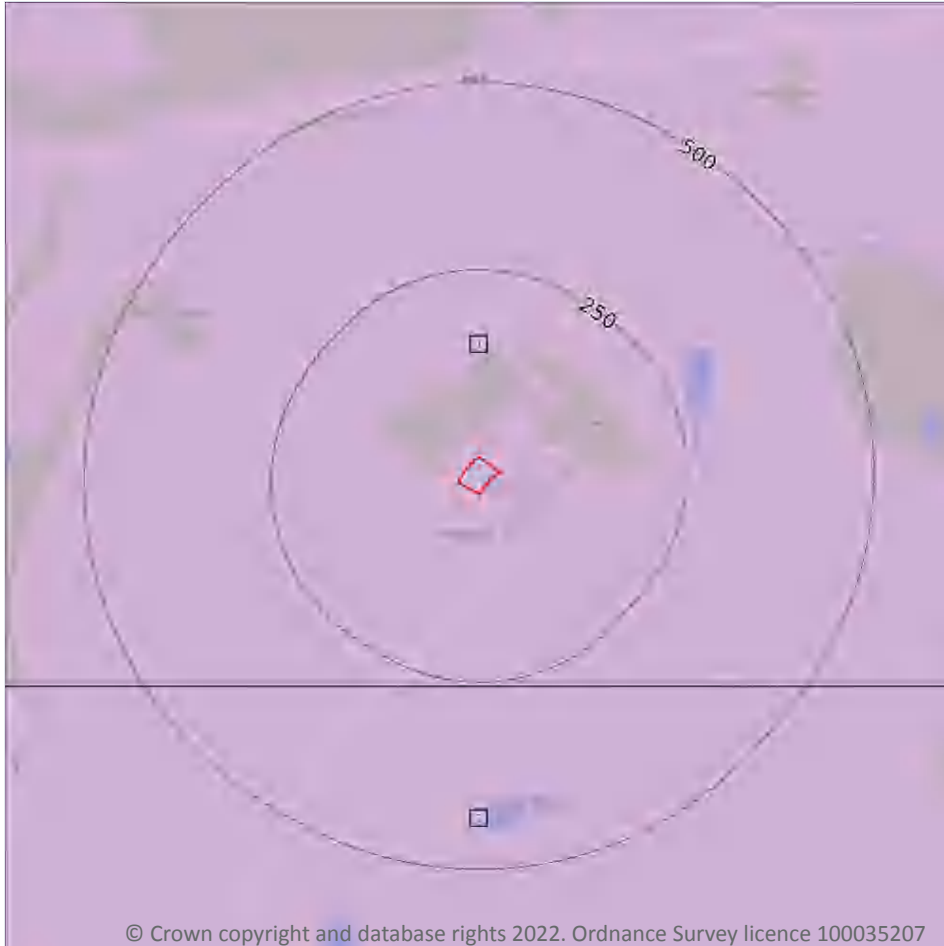
Features are displayed on the Hydrogeology map on **page 30**

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	256m S	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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



Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

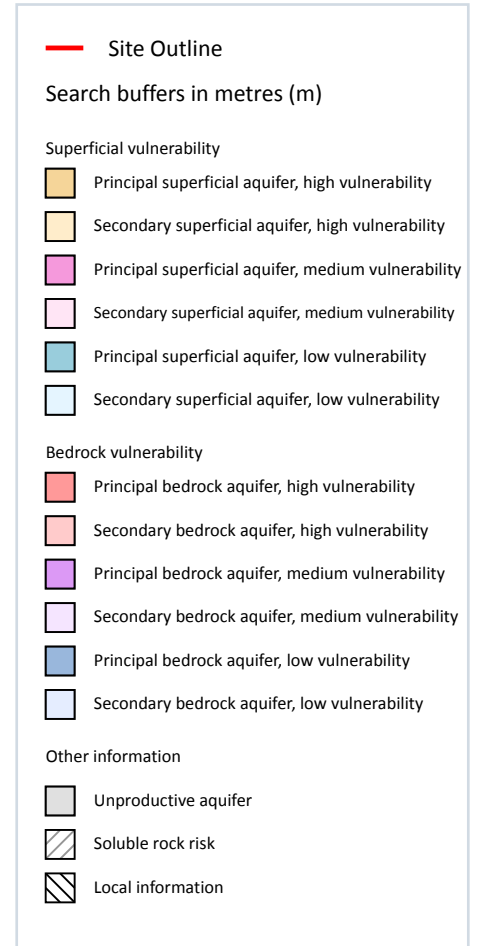
Features are displayed on the Bedrock aquifer map on **page 32**

ID	Location	Designation	Description
1	On site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	256m S	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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 34**

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

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

4

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 36**

ID	Location	Details	
-	1199m S	Status: Historical Licence No: 2569026001 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES (2) AT BOLD HEATH & PARK FARM, WHISTON Data Type: Point Name: NORTH WEST WATER LTD Easting: 353800 Northing: 389100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 04/07/1973 Version End Date: -
-	1210m S	Status: Historical Licence No: 2569026003 Details: Process water Direct Source: Ground Water - North West Region Point: BOLD HEATH Data Type: Point Name: UNITED UTILITIES CUSTOMER SALES LTD Easting: 353740 Northing: 389107	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 01/04/2002 Version End Date: -
-	1214m S	Status: Historical Licence No: 2569026003 Details: Process water Direct Source: Ground Water - North West Region Point: BOLD HEATH Data Type: Point Name: UNITED UTILITIES CUSTOMER SALES LTD Easting: 353735 Northing: 389104	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 01/04/2002 Version End Date: -
-	1341m SE	Status: Historical Licence No: 2569026001 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES (2) AT BOLD HEATH & PARK FARM, WHISTON 203 Data Type: Point Name: NORTH WEST WATER LTD Easting: 355300 Northing: 389600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 04/07/1973 Version End Date: -

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



5.7 Surface water abstractions

Records within 2000m

0

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

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

5.8 Potable abstractions

Records within 2000m

2

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 36**

ID	Location	Details	
-	1199m S	Status: Historical Licence No: 2569026001 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES (2) AT BOLD HEATH & PARK FARM, WHISTON Data Type: Point Name: NORTH WEST WATER LTD Easting: 353800 Northing: 389100	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 04/07/1973 Version End Date: -
-	1341m SE	Status: Historical Licence No: 2569026001 Details: Potable Water Supply - Direct Direct Source: Ground Water - North West Region Point: B/HOLES (2) AT BOLD HEATH & PARK FARM, WHISTON 203 Data Type: Point Name: NORTH WEST WATER LTD Easting: 355300 Northing: 389600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 24/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 04/07/1973 Version End Date: -

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



5.9 Source Protection Zones

Records within 500m

1

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on **page 36**

ID	Location	Type	Description
1	On site	3	Total catchment

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

5.10 Source Protection Zones (confined aquifer)

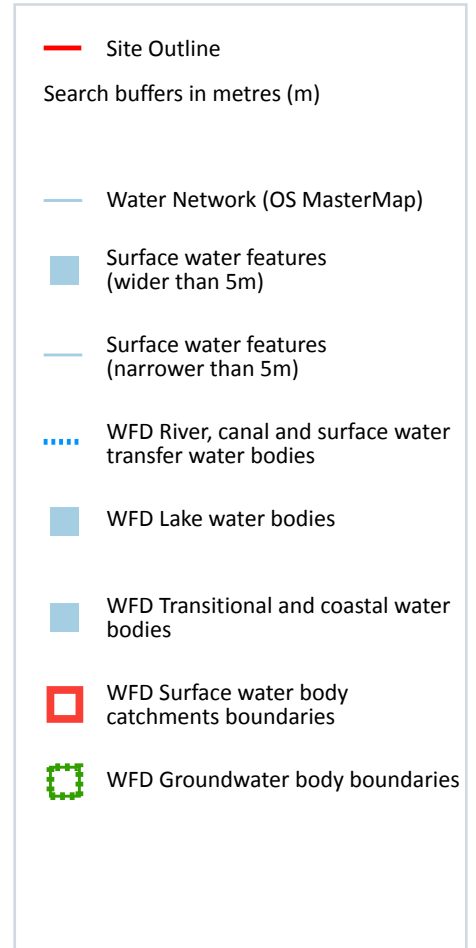
Records within 500m

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



6.1 Water Network (OS MasterMap)

Records within 250m

7

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 40**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	94m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
C	112m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	135m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	194m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	197m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	205m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	210m E	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

5

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 40**

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 40**



ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River	Whittle Brook (Mersey Estuary)	GB112069060990	Sankey	Mersey Lower

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 40**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
4	405m N	River	Whittle Brook (Mersey Estuary)	GB112069060990	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 40**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Lower Mersey Basin and North Merseyside Permo-Triassic Sandstone Aquifers	GB41201G101700	Poor	Poor	Poor	2019

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



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

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

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

7.2 Historical Flood Events

Records within 250m

0

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

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

7.3 Flood Defences

Records within 250m

0

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

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



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

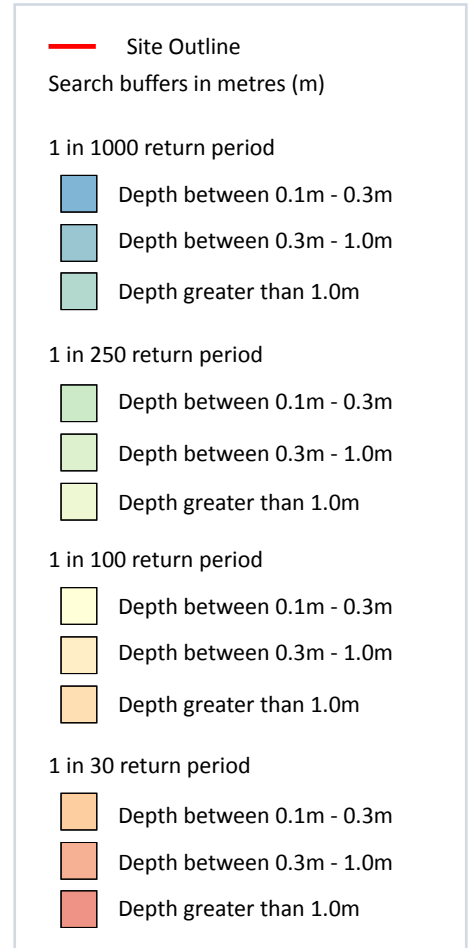
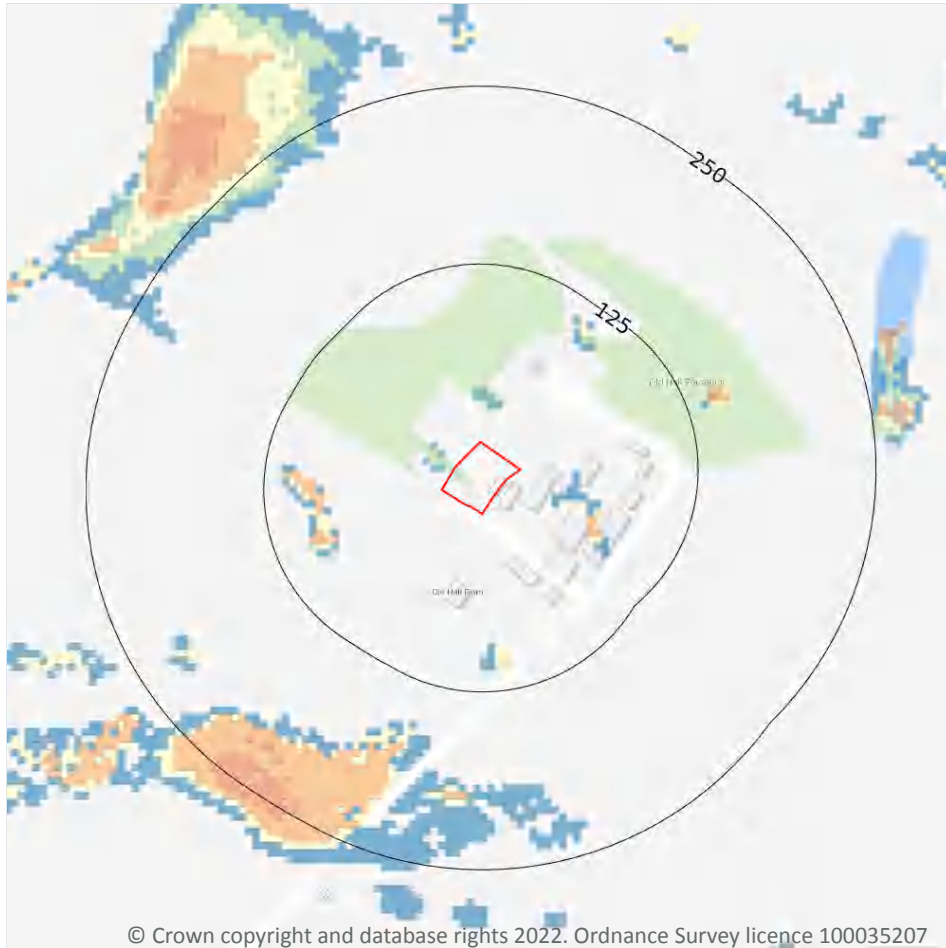
0

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

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



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

Negligible

Highest risk within 50m

1 in 250 year, Greater than 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 46**

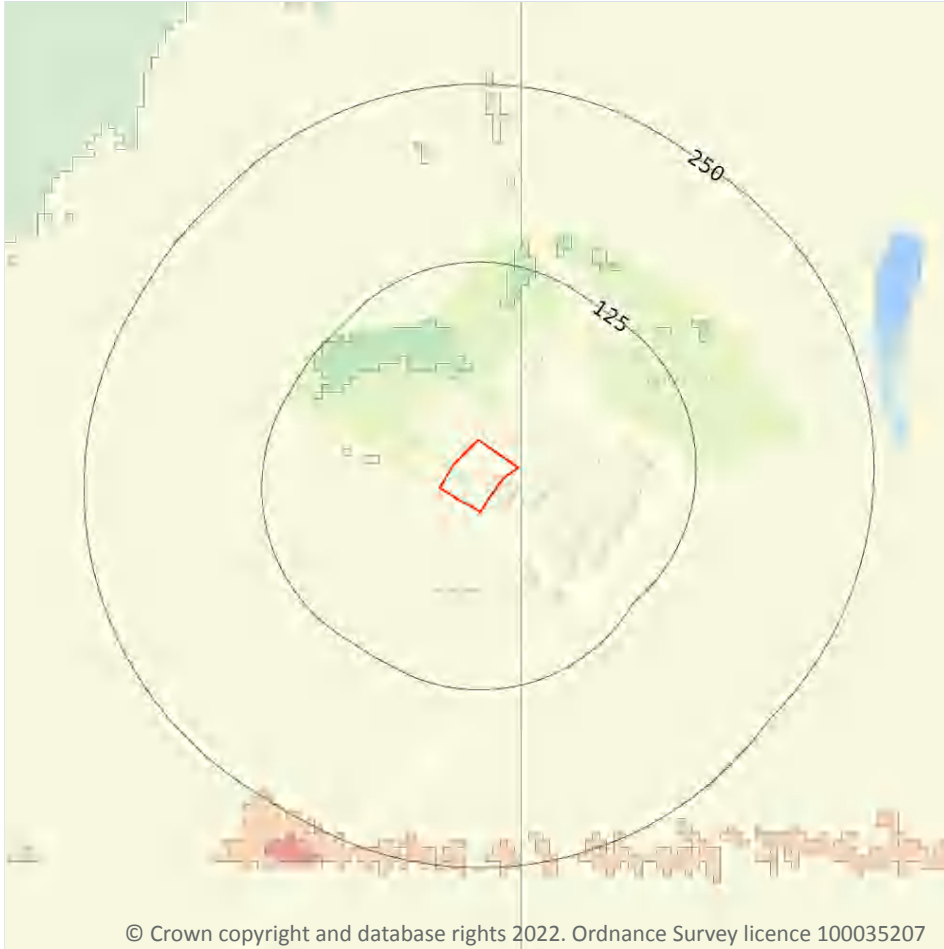
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

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

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



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

9.1 Groundwater flooding

Highest risk on site

Moderate

Highest risk within 50m

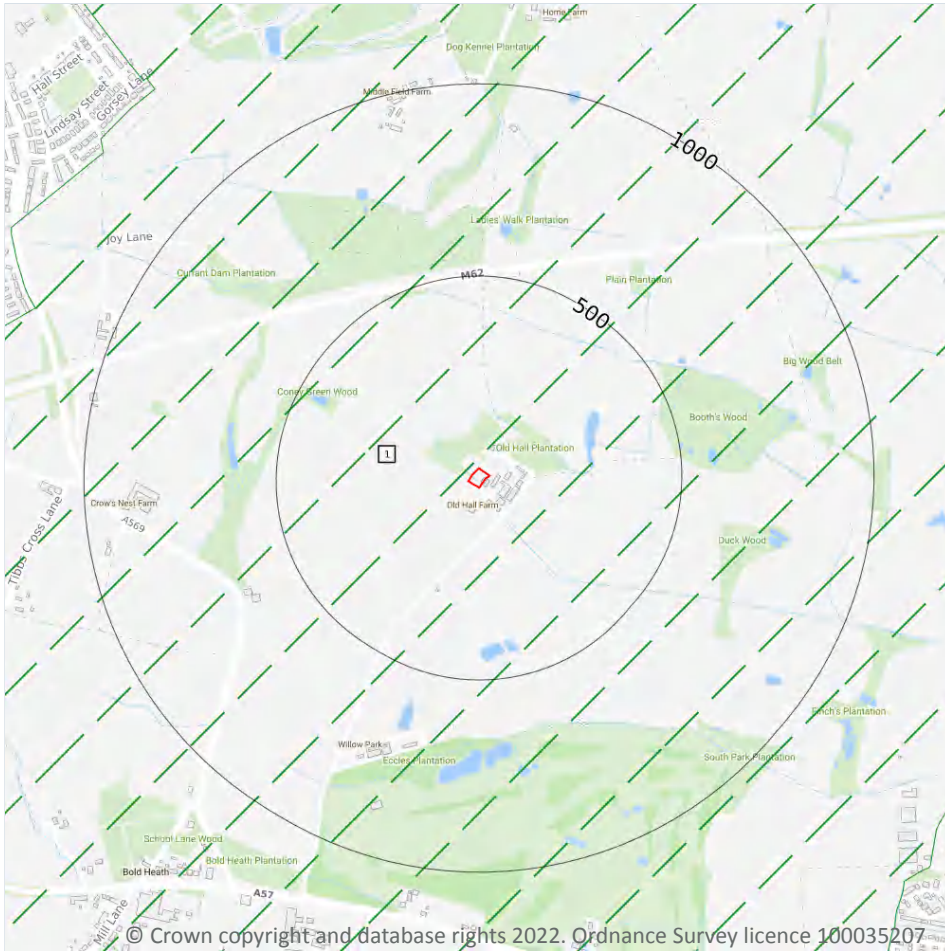
Moderate

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 48**

This data is sourced from Ambient Risk Analytics.

10 Environmental designations



10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m

0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m

0

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

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



10.6 Local Nature Reserves (LNR)

Records within 2000m

0

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

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

10.7 Designated Ancient Woodland

Records within 2000m

0

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

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

10.8 Biosphere Reserves

Records within 2000m

0

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

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

10.9 Forest Parks

Records within 2000m

0

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

4

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

Features are displayed on the Environmental designations map on **page 49**

ID	Location	Name	Local Authority name
1	On site	Merseyside and Greater Manchester	St. Helens
-	1704m SE	Merseyside and Greater Manchester	Warrington
-	1804m SW	Merseyside and Greater Manchester	Halton
-	1813m NE	Merseyside and Greater Manchester	Warrington

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

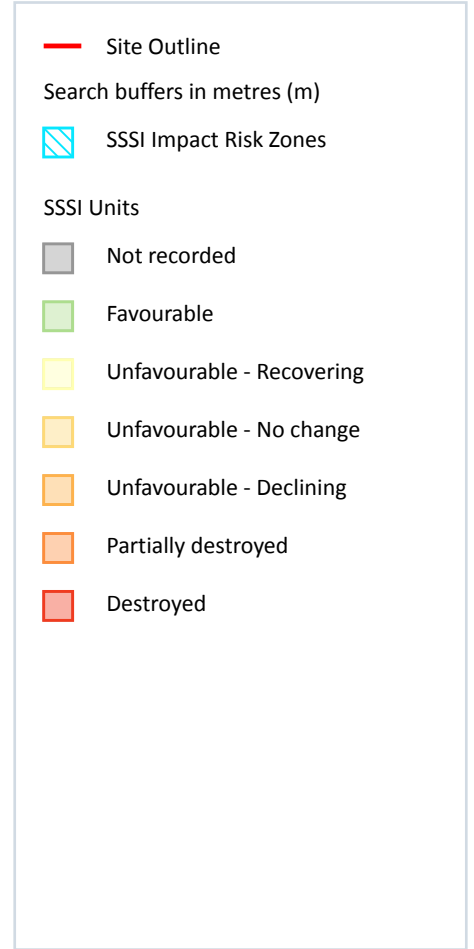
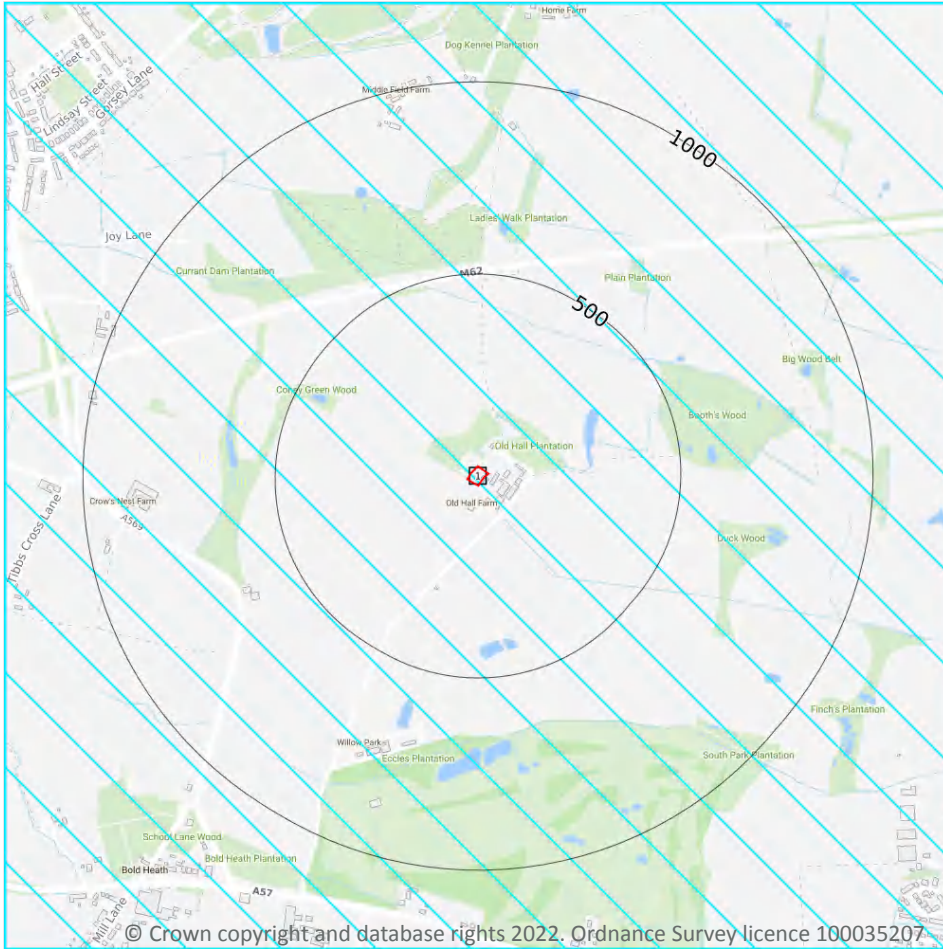
4

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
On site	Whittle Brook NVZ	Surface Water	637	Existing
1m SW	Whittle Brook NVZ	Surface Water	637	Existing
1586m NW	Sankey Brook (Black Bk to Mersey) NVZ	Surface Water	639	Existing
1726m NE	Sankey Brook (Black Bk to Mersey) NVZ	Surface Water	639	Existing

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

SSSI Impact Zones and Units



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 54**

ID	Location	Type of developments requiring consultation
1	On site	<p>Infrastructure - Airports, helipads and other aviation proposals.</p> <p>Wind and Solar - Solar schemes with footprint > 0.5ha, all wind turbines.</p> <p>Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 4000m².</p> <p>Combustion - General combustion processes >50mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.</p> <p>Waste - Landfill. incl: inert landfill, non-hazardous landfill, hazardous landfill.</p> <p>Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream.</p>

This data is sourced from Natural England.

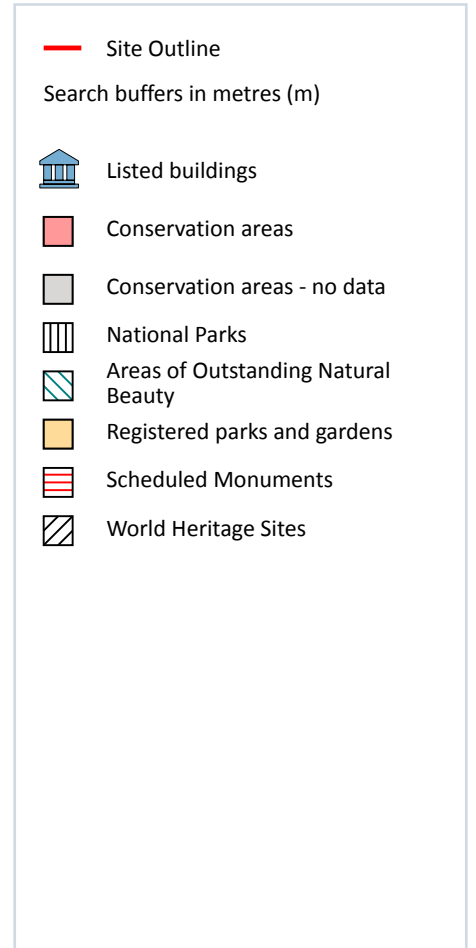
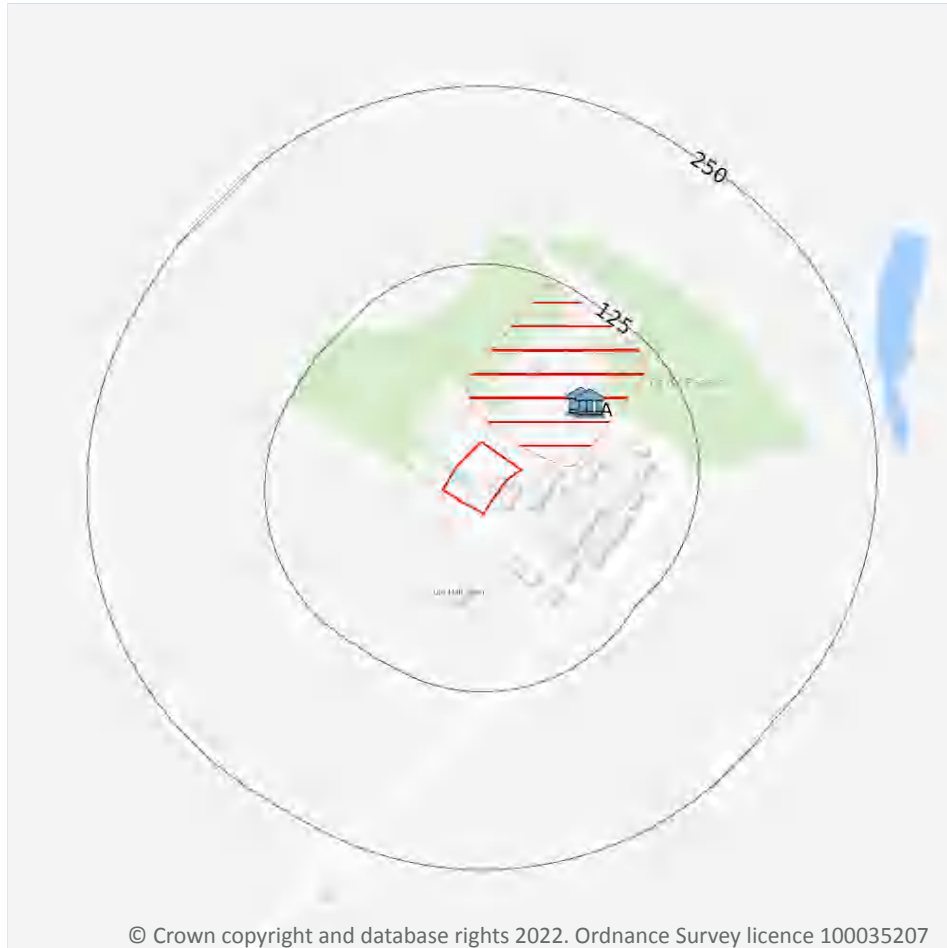
10.18 SSSI Units

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

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

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

11 Visual and cultural designations



11.1 World Heritage Sites

Records within 250m

0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m**0**

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

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

11.3 National Parks

Records within 250m**0**

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

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

11.4 Listed Buildings

Records within 250m**2**

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 56**

ID	Location	Name	Grade	Reference Number	Listed date
A	64m NE	Gate Piers At Bold Old Hall, Bold, St. Helens, WA8	II	1253233	28/05/1958
A	67m NE	Bridge At Bold Old Hall, Bold, St. Helens, WA8	II	1253234	28/05/1958

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

1

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.

Features are displayed on the Visual and cultural designations map on **page 56**

ID	Location	Ancient monument name	Reference number
A	13m NE	Old Bold Hall moated site, Bold	1010703

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

11.7 Registered Parks and Gardens

Records within 250m

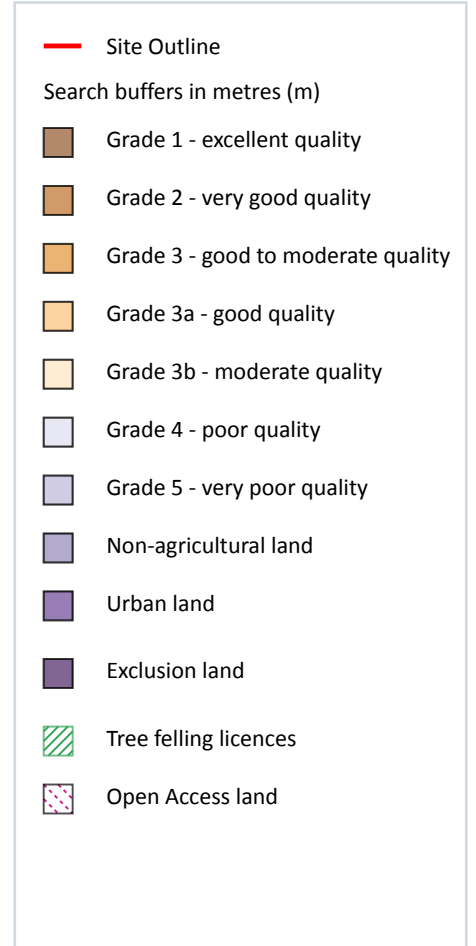
0

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



12.1 Agricultural Land Classification

Records within 250m

1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 59**

ID	Location	Classification	Description
1	On site	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

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

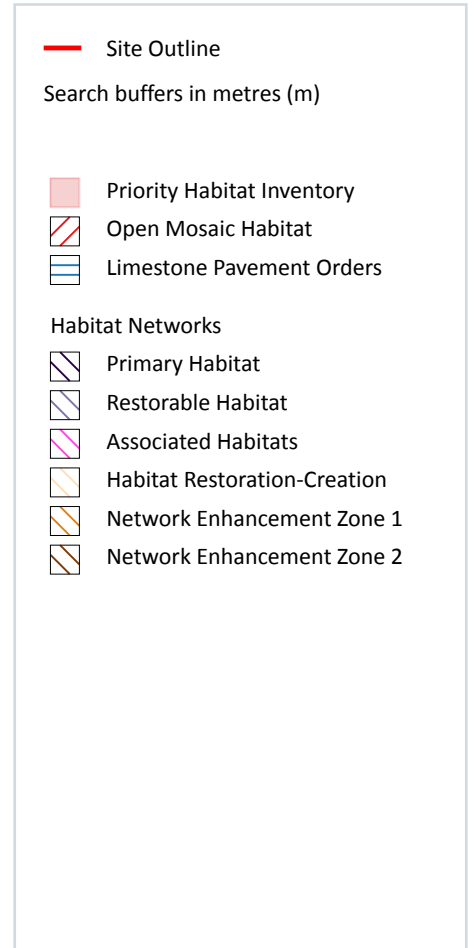
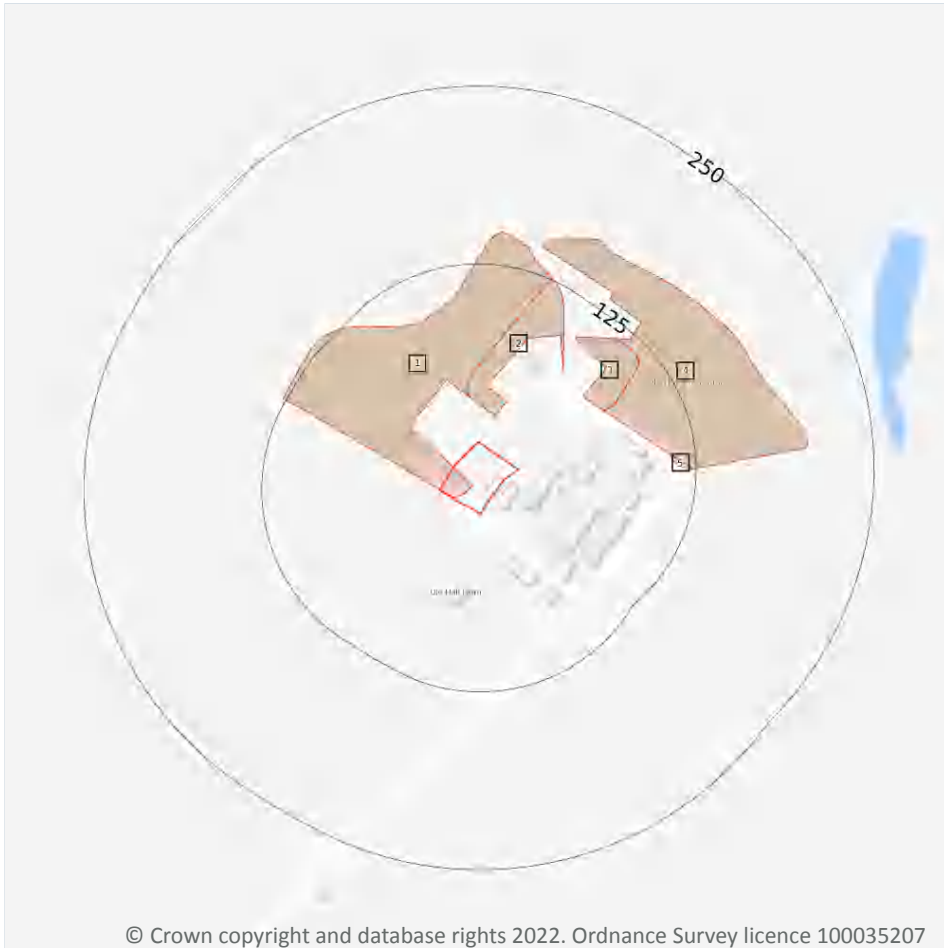
0

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



13.1 Priority Habitat Inventory

Records within 250m

5

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

Features are displayed on the Habitat designations map on **page 62**

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	22m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	69m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	73m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	107m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

0

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

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



— Site Outline
 Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

14.1 10k Availability

Records within 500m

2

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

Features are displayed on the Geology 1:10,000 scale - Availability map on **page 64**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	No coverage	No coverage	No coverage	NoCov
2	256m S	No coverage	Full	Full	No coverage	SJ58NW

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m

0


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.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
-  Landslip (10k)
- Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

1

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 66**

ID	Location	LEX Code	Description	Rock description
1	256m S	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

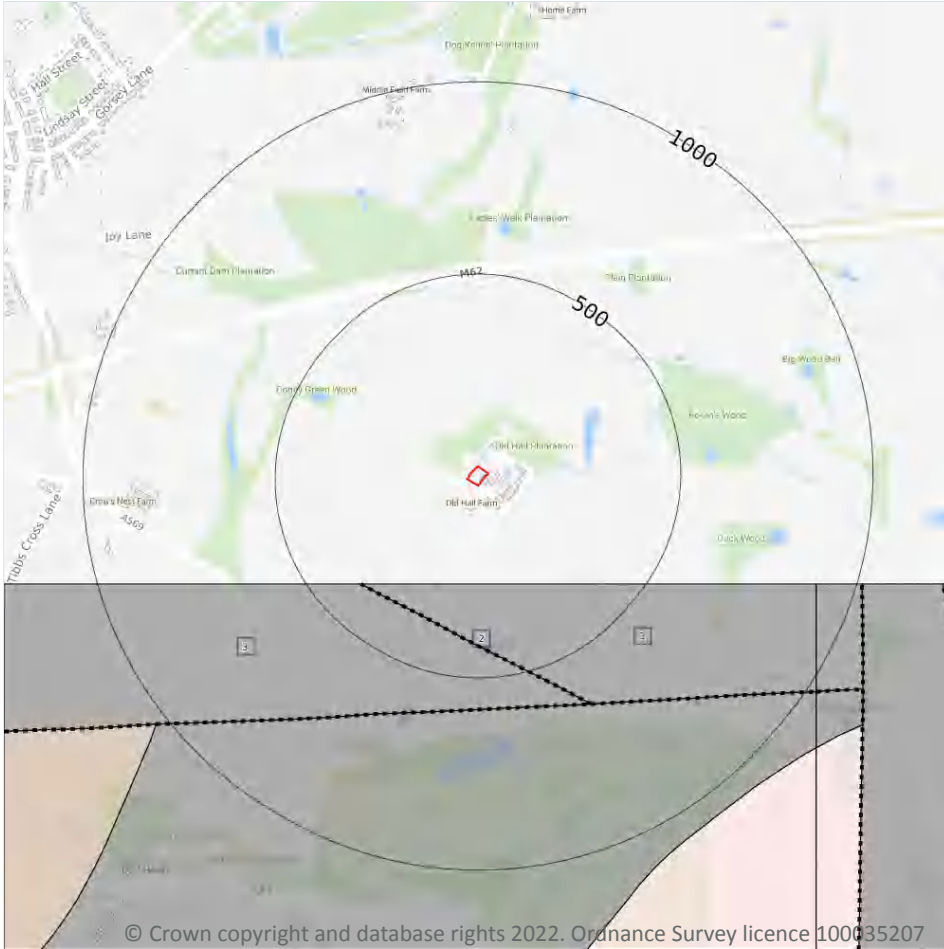
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (10k)
- Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

2

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 68**

ID	Location	LEX Code	Description	Rock age
1	256m S	CPB-SDST	Chester Pebble Beds Formation - Sandstone	Early Triassic Epoch
3	368m SW	CPB-SDST	Chester Pebble Beds Formation - Sandstone	Early Triassic Epoch

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

1

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 68**

ID	Location	Category	Description
2	368m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



— Site Outline
 Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 70**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW097_runcorn_v4

This data is sourced from the British Geological Survey.



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

15.2 Artificial and made ground (50k)

Records within 500m

0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m

0

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



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

- Site Outline
- Search buffers in metres (m)
- Landslip (50k)
- Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 72**

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

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m **1**

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

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m **0**

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

This data is sourced from the British Geological Survey.

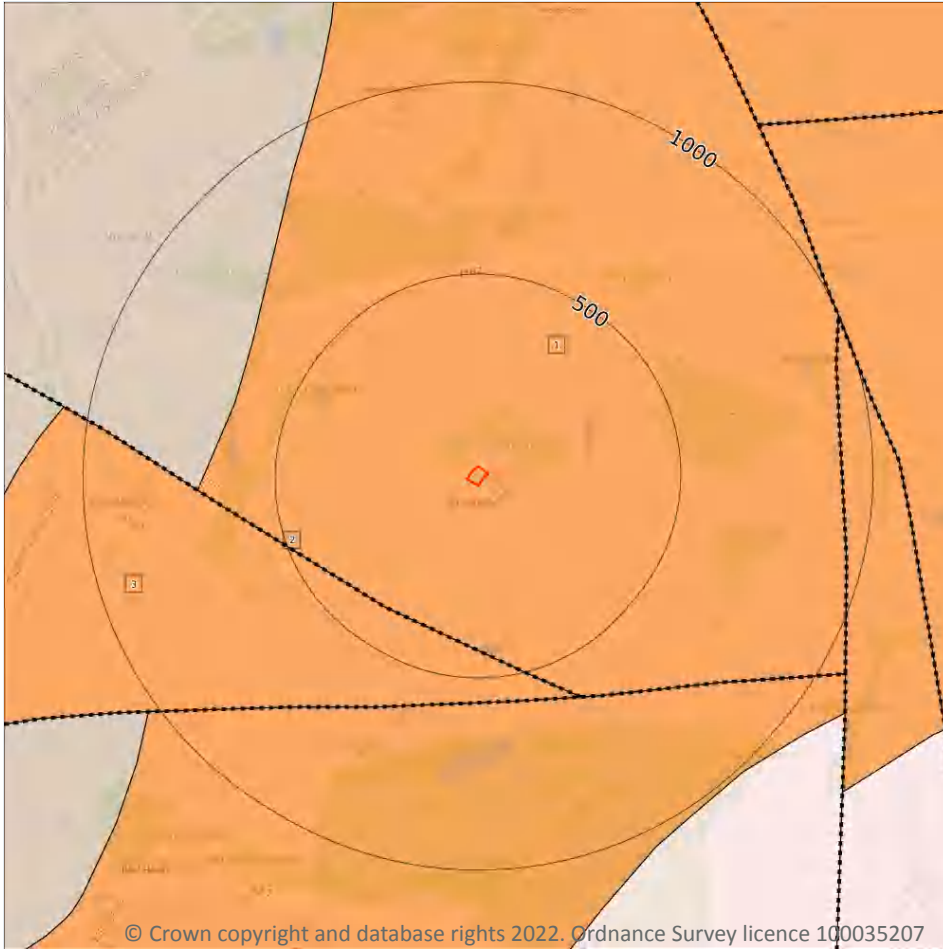
15.7 Landslip permeability (50k)

Records within 50m **0**

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (50k)
- Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

2

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 74**

ID	Location	LEX Code	Description	Rock age
1	On site	CHES-PESST	CHESTER FORMATION - SANDSTONE, PEBBLY (GRAVELLY)	OLENEKIAN
3	389m SW	CHES-PESST	CHESTER FORMATION - SANDSTONE, PEBBLY (GRAVELLY)	OLENEKIAN

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	Mixed	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

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

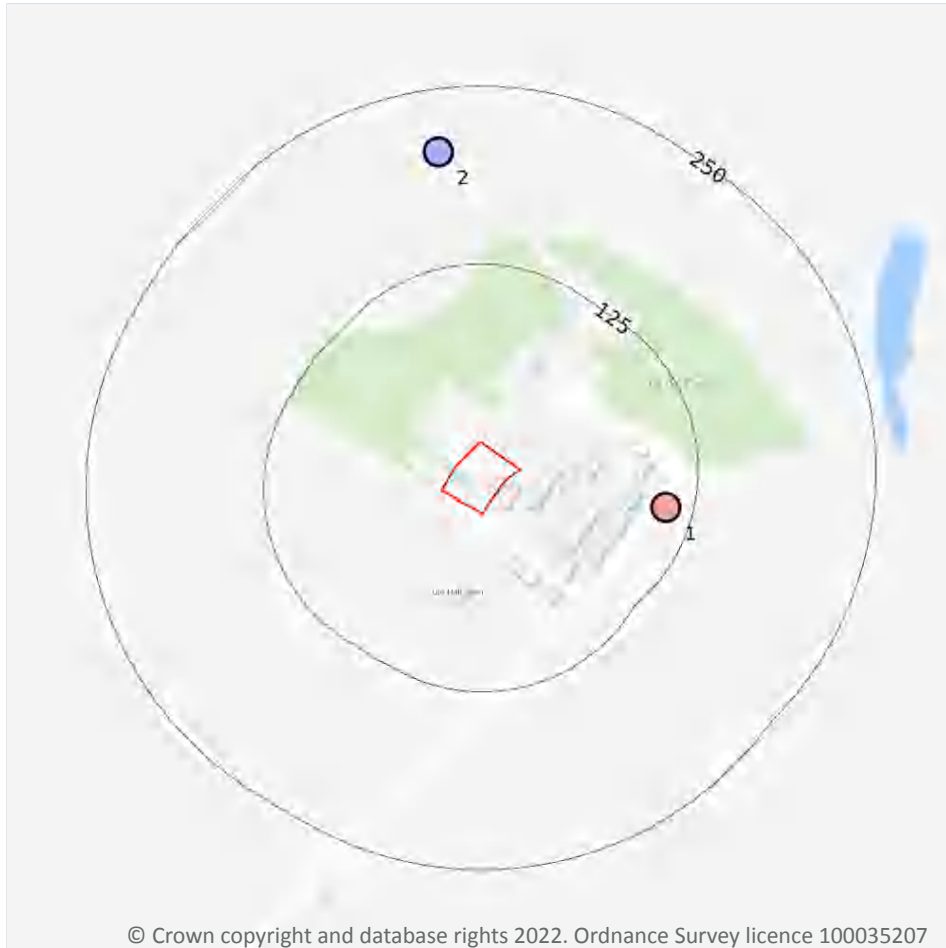
Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 74**

ID	Location	Category	Description
2	389m SW	FAULT	Fault, inferred

This data is sourced from the British Geological Survey.

16 Boreholes



— Site Outline
Search buffers in metres (m)

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

16.1 BGS Boreholes

Records within 250m

2

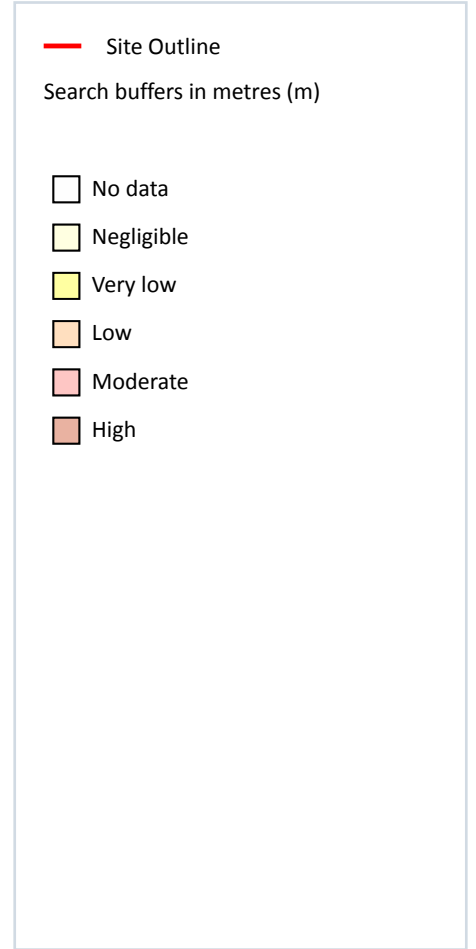
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 76**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	106m E	354250 390260	BOLD HALL ST HELENS	63.56	N	172964
2	206m N	354090 390510	LANCASTER/YORKSHIRE M62 C41	2.74	N	173155

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 77**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



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 78**

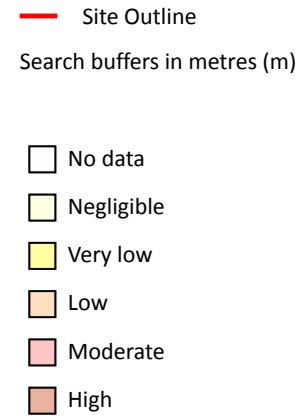
Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



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



17.3 Compressible deposits

Records within 50m

1

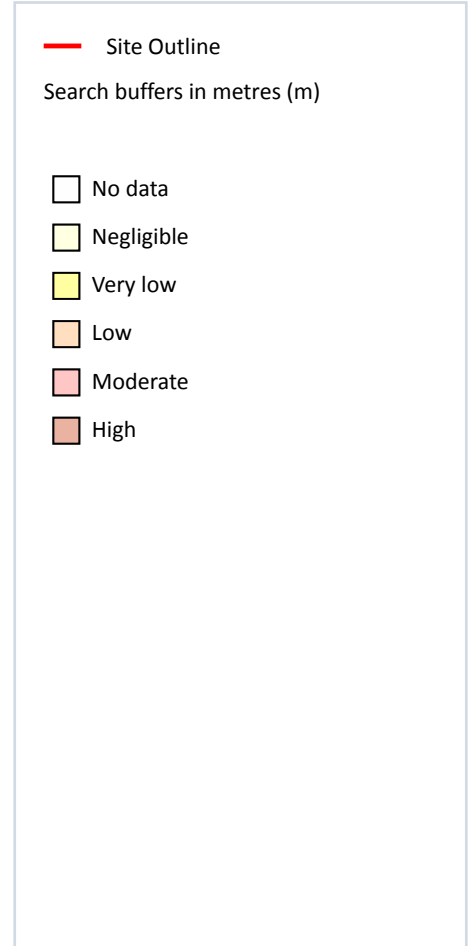
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 79**

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



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

17.4 Collapsible deposits

Records within 50m

1

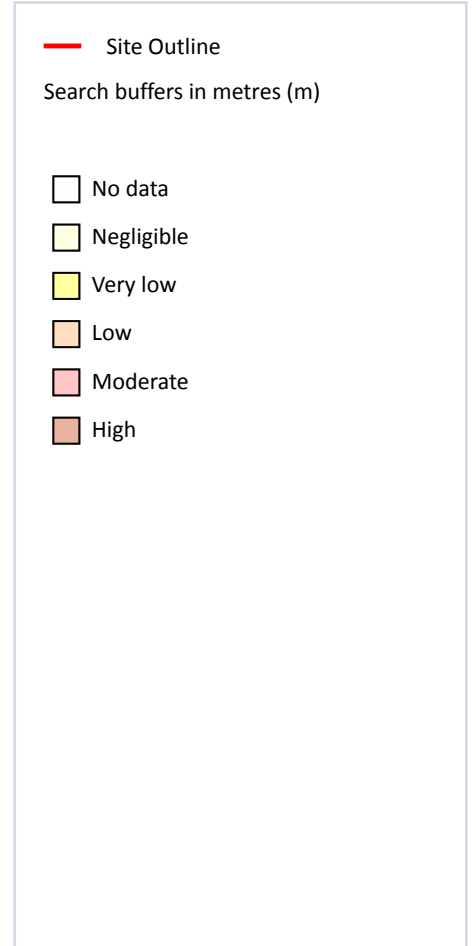
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 80**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



17.5 Landslides

Records within 50m

1

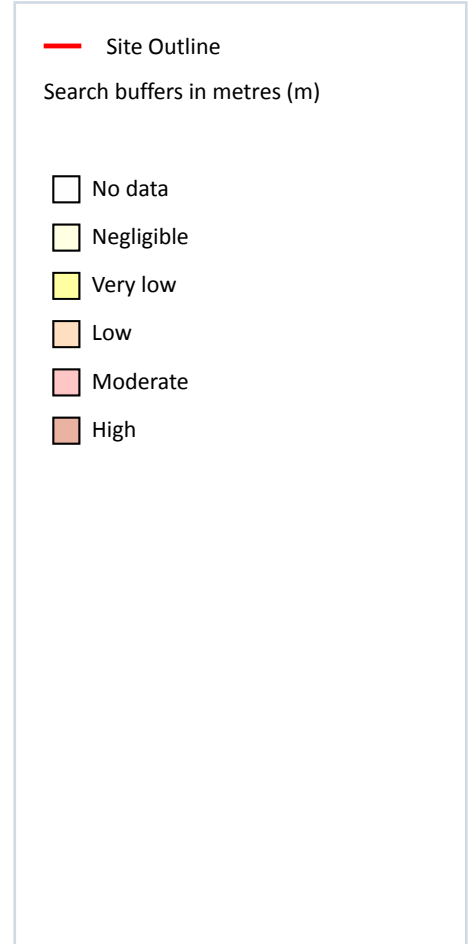
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 81**

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



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

17.6 Ground dissolution of soluble rocks

Records within 50m

1

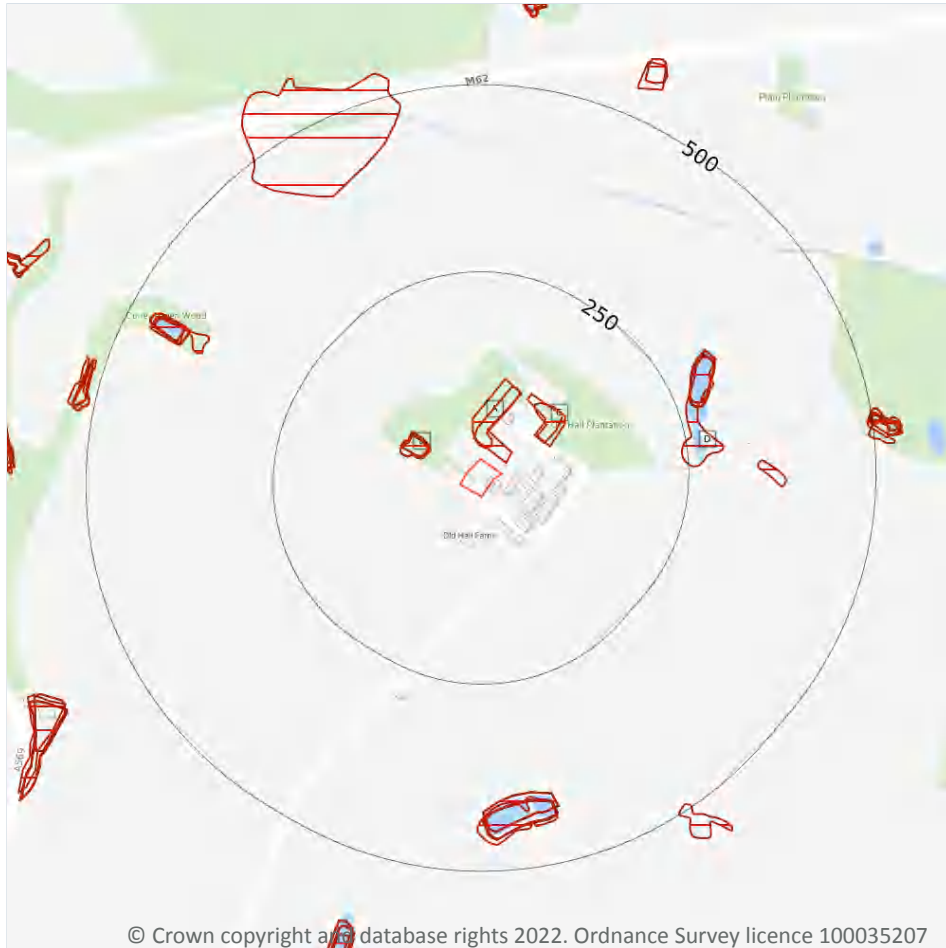
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 82**

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



18.1 Natural cavities

Records within 500m

0

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

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

0

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

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

11

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 83**

ID	Location	Land Use	Year of mapping	Mapping scale
A	15m NE	Cuttings	1955	1:10560
A	16m NE	Unspecified Pit	1981	1:10000
B	58m NW	Pond	1938	1:10560
B	58m NW	Pond	1925	1:10560
B	58m NW	Pond	1906	1:10560
B	58m NW	Pond	1891	1:10560
B	60m NW	Pond	1974	1:10000
B	60m NW	Pond	1965	1:10560
C	68m NE	Unspecified Pit	1955	1:10560
C	70m NE	Unspecified Pit	1974	1:10000
D	242m E	Ponds	1849	1:10560

This is data is sourced from Ordnance Survey/Groundsure.



18.4 Underground workings

Records within 1000m

0

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

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m

0

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

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

0

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

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site

1

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



Location	Details
On site	In addition to being located inside an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property which may supplement this information. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk .

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site	1
------------------------	----------

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

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

This data is sourced from the Coal Authority.

18.10 Brine areas

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

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

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

18.11 Gypsum areas

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

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

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

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

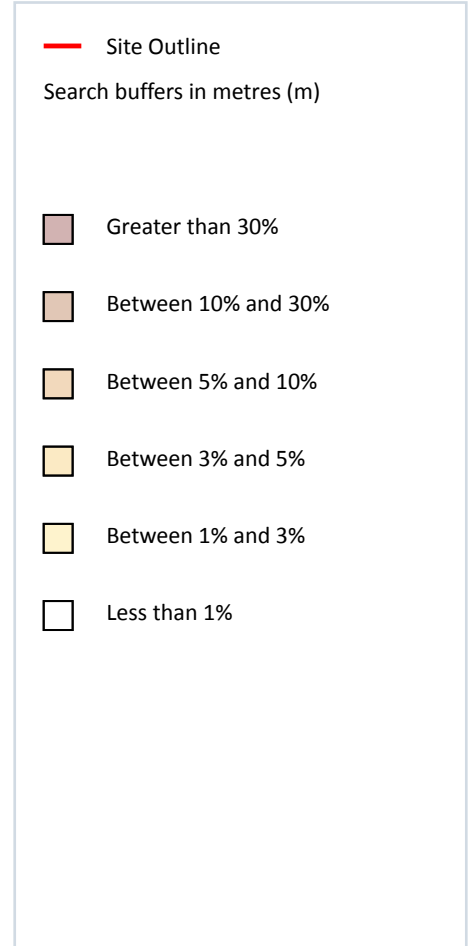
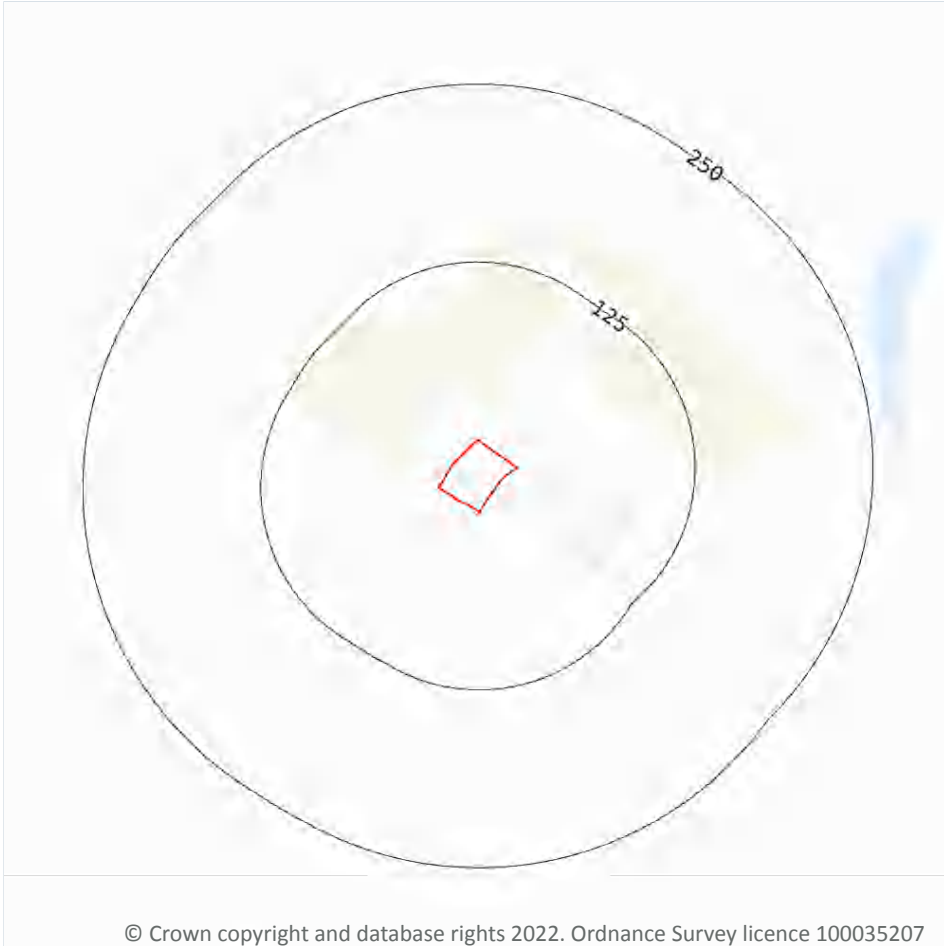
18.13 Clay mining

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

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

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

19 Radon



19.1 Radon

Records on site

1

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

Features are displayed on the Radon map on **page 88**

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

This data is sourced from the British Geological Survey and Public Health England.

20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

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	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

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 D

COAL MINING REPORTS

GROUNDSURE CON29M SEARCH : G7GEO-8928407: 25/07/2022

STABLES, OLD BOLD HALL, WARRINGTON ROAD, BOLD HEATH, WA8 3XJ

Professional opinion

Inc. integrated mine entry interpretive assessment



Site plan



Search results

- | | | | | |
|--|---|--------|---|---|
|  | 1. Past underground coal mining
Identified | page 4 |  | 9. Coal mining subsidence claims
Not identified |
|  | 2. Present underground coal mining
Not identified | |  | 10. Mine gas emissions
Not identified |
|  | 3. Future underground coal mining
Not identified | |  | 11. Emergency Call Out incidents
Not identified |
|  | 4. Shafts and adits (mine entries)
Not identified | |  | 12. Withdrawal of support
Not identified |
|  | 5. Coal mining geology
Not identified | |  | 13. Working facilities orders
Not identified |
|  | 6. Past opencast coal mining
Not identified | |  | 14. Payments to copyhold owners
Not identified |
|  | 7. Present opencast coal mining
Not identified | |  | Cheshire Brine
Not identified |
|  | 8. Future opencast coal mining
Not identified | | | |

Coal mining (CON29M) assessment

We consider the property to be acceptably free from coal mining related risk. No further action is required with regards to past coal mining.



Coal mining

Coal Mining Subsidence Act 1991

If any coal mining subsidence damage has occurred, as determined by the appropriate persons/bodies, the property will benefit from the protection of the Coal Mining Subsidence Acts of 1991 and as amended 1994.

This Act, however, 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. In this instance it would be prudent to have the property visually inspected for signs of mining related settlement or subsidence by a suitably qualified and experienced person, who could be sought through <https://www.ricsfirms.com/>.

The Coal Authority provide a call out service on 01623 646 333 to take remedial action concerning the movement or collapse of any coal entries or coal mining surface hazards. Further details can be found on www.groundstability.com.

CON29M reports are a requirement for conveyancing and are recommended throughout the official Coal Mining Reporting Area. This is the area within which it is deemed prudent to clarify the risk presented by coal mining, using the questions laid out in the Law Society's CON29M form. The need for a CON29M does not always translate to an identification of risk, and reports will often be assessed as free from risk or 'Passed' even though they are within the official Coal Mining Reporting Area.



Coal mining (CON29M)



- Site Outline
- Search buffers in metres (m)
- Mine entries
 - Adits
 - Shafts
 - Calculated 'zone of influence'
- Subsidence claims
 - Awaiting decision
 - Rejected
 - Admitted
 - Deferred
 - Settled
 - Withdrawn
- Probable shallow coal mine workings
- Coal outcrops
- Past shallow coal mine workings

Coal mining (CON29M)

The map above shows relevant, mappable hazards identified that could constitute a risk to the property. It does not necessarily show all features or potential issues identified in this report. Further details of any features shown indicating the location of Mine Entries or Subsidence Claims can be found in the relevant sections of this report (4 and 9 respectively).

Responses to the Law Society CON29M Coal Mining search enquiries are produced using official Coal Authority data and the expert interpretation of Groundsure. This report is prepared in accordance with The Law Society CON29M (2018) Guidance Notes. Additional interpretation and calculation of mine entry zones of influence has also been carried out by Groundsure using Coal Authority and British Geological Survey data.

Please read this report carefully, and in particular any sections flagged with an amber 'i'.



The Law Society

These enquiries are The Law Society CON29M (2018) Coal Mining search enquiries and are used with permission of The Law Society. The Law Society CON29M Coal Mining search enquiries are protected by copyright owned by The Law Society of 113 Chancery Lane, London WC2A 1PL. The Law Society has no responsibility for information provided in response to CON29M (2018) Coal Mining search enquiries within this report or otherwise.

1. Past underground coal mining



Is the property within the zone of likely physical influence on the surface of past underground coal workings?

- The property lies within the potential zone of influence of recorded workings in 6 seam(s) of coal. The most recent underground working in the area was in 1973. These workings lie between 555 metres and 825 metres. Any ground movement due to this coal mining activity should have stopped.

2. Present underground coal mining



Is the property within the zone of likely physical influence on the surface of present underground coal workings?

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

3. Future underground coal mining



(a) Is the property within any geographical area for which the Coal Authority is determining whether to grant a licence to remove coal by underground methods?

- The property does not lie within the boundary of an underground site for which the Coal Authority is determining whether to grant a licence to remove coal by underground methods.

(b) Is the property within any geographical area for which a licence to remove coal by underground methods has been granted?

- The property does not lie within the boundary of an underground site for which a licence to remove coal by underground methods has been granted.

(c) Is the property within the zone of likely physical influence on the surface of planned future underground coal workings?

- The property does not lie within the zone of likely physical influence on the surface of planned future underground workings.

(d) Has any notice of proposals relating to underground coal mining operations been given under section 46 of the Coal Mining Subsidence Act 1991?

- 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. Shafts and adits (mine entries)



Are there any shafts and adits or other entries to underground coal mine workings within the property or within 20 metres of the boundary of the property?

- No coal mine entries are recorded to lie within 20 metres of the property.

5. Coal mining geology



Is there any record of any fault or other line of weakness due to coal mining at the surface within the boundary of the property that has made the property unstable?

- No damage arising from geological faults or other lines of weakness activated by coal mining are recorded within the property.

6. Past opencast coal mining



Is the property situated within the geographical boundary of an opencast site from which coal has been removed in the past by opencast methods?

- The property does not lie within the boundary of an opencast site from which coal was removed by opencast methods.

7. Present opencast coal mining



Is the property within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods?

- 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



(a) Is the property within 800 metres of the boundary of an opencast site for which the Coal Authority are determining whether to grant a licence to remove coal by opencast methods?

- **The property does not lie within 800 metres of the boundary of an opencast site for which the Coal Authority are determining whether to grant a licence to remove coal by opencast methods.**

(b) Is the property within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted?

- **The property does not lie 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 claims



(a) Has any damage notice or claim for alleged coal mining subsidence damage to the property been given, made or pursued since 31st October 1994?

- **We have no evidence of a damage notice or subsidence claim for the property or within 50m of the property since 31st October 1994.**

(b) In respect of any such notice or claim has the responsible person given notice agreeing that there is a remedial obligation or otherwise accepted that a claim would lie against them?

- **Not applicable.**

(c) In respect of any such notice or acceptance has the remedial obligation or claim been discharged?

- **Not applicable.**

(d) Does any current "Stop Notice" delaying the start of remedial works or repairs affect the property?

- **There are no current Stop Notices delaying the start of remedial works or repairs to the property.**

(e) Has any request been made under Section 33 of the 1991 Act to execute preventive works before coal is worked, which would prevent the occurrence or reduce the extent of subsidence damage to any buildings, structures or works and, if yes, has any person withheld consent or failed to comply with any such request to execute preventive works?

- **There is no record of a request that has been made to carry out preventive works before coal is worked under Section 33 of the Coal Mining Subsidence Act 1991.**

NB. Records of damage notices or subsidence claims before 31st October 1994 are excluded from The Coal Authority data from which this search is compiled.

10. Mine gas emissions



Does the Coal Authority have record of any mine gas emission within the boundary of the property being reported that subsequently required action by the Authority to mitigate the effects of the mine gas emission?

- **No mine gas emissions are recorded within the boundary of the property.**

11. Emergency Surface Hazard Call Out incidents



Have the Coal Authority carried out any work on or within the boundaries of the property following a report of an alleged hazard related to coal mining under the Authority's Emergency Surface Hazard Call Out procedures?

- **No Emergency Surface Hazard Call Out procedures are recorded against the property.**

12. Withdrawal of support



(a) Does the land lie within a geographical area in respect of which a notice of entitlement to withdraw support has been published?

- **The property does not lie in an area where the right to withdraw support has been granted.**

(b) Does the land lie within a geographical area in respect of which a revocation notice has been given under section 41 of the Coal Industry Act 1994?

- **The property does not lie within a geographical area in which a revocation notice has been given under section 41 of the Coal Industry Act 1994.**

13. Working facilities orders



Is the property within a geographical area subject to an order in respect of the working of coal under the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof?

- **The property is not in an area where a court order has been issued.**

14. Payments to owners of former copyhold land



(a) Has any relevant notice, which may affect the property, been given?

- **The property does not lie within former copyholder land.**

(b) If yes, has any notice of retained interests in coal and coal mines been given?

- **No notices of retained interests in coal and coal mines been given.**

(c) If yes, has any acceptance notice or rejection notice been served?

- **No acceptance or rejection notices have been served.**

(d) If any such acceptance notice has been served, has any compensation been paid to a claimant?

- **No compensation has been paid to a claimant.**

CON29M notes and guidance

This report is prepared in accordance with [The Law Society Guidance Notes 2018](#); under which all replies to these enquiries are made. Groundsure's Terms and Conditions are applicable at the time the report was produced.

Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage from disused coal mine workings including disused coal mine entries. A leaflet setting out the rights and obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by telephoning 0345 762 6848. Further information can be found on their website:

www.groundstability.com.

The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries).

The Coal Authority emergency telephone number at all times is 01623 646333.

Responses to The Law Society CON29M (2018) Coal Mining Search enquiries and associated findings and recommendations relating to coal mining risk have been provided by Groundsure Ltd. Groundsure Ltd have additionally provided information relating to the Cheshire Brine Compensation Area, and have compiled all information into this report.

Queries should be made of Groundsure Ltd on 0844 415 9000, or via email: info@groundsure.com.

CON29M report limitations

This CON29M (2018) Coal Mining Report has been carried out with reference to all available official Coal Authority licensed data, an extensive collection of abandoned mine plans, maps and records. From this material, we have endeavoured to provide as accurate a report as possible. Any and all analysis and interpretation of licensed Coal Authority data in this report is made by Groundsure

The information provided in this report by Groundsure Ltd has been compiled in response to The Law Society CON29M (2018) Coal Mining search enquiries. The scope of the assessment is limited to interpretation of past, present and future extraction of coal, and does not consider the impact from non-coal mining hazards and/or natural ground stability hazards. The Law Society's Guidance Notes 2018 recommends separate enquiries to the appropriate sources are made with regard to other minerals.

The Report is created by a remote investigation and reviews only information provided by the client (address and site location boundaries) and from the databases of publicly available and/or licensable information that enable a desk-based assessment of the Site. The Report does not include a Site Investigation, nor does Groundsure Ltd make additional specific information requests of the regulatory authorities for any relevant information they may hold.

This report is concerned solely with the Site searched and should not be used in connection with nearby properties, as only known coal mining features that could potentially have a direct influence upon the Site searched are considered relevant; other features present in the general area may have been omitted for ease of reference.

This report is confidential to the client, the client's legal advisor and the client's Mortgage lender, as defined in the Groundsure terms & conditions, and as such may be used by them for conveyancing or related purposes. Groundsure has no liability toward any person or organisation not party to commissioning this report. This report or any part of it is not permitted to be reproduced, copied, altered or in any other way distributed by any other person or organisation.

Additional mine entry assessment is based on and limited to the data supplied by the Coal Authority at the time of production. In order to determine whether a property is within the likely zone of influence of a disused coal mine entry the following is considered: the actual or plotted position of the mine entry, its known or assumed diameter and the thickness of superficial deposits above rockhead. Where these figures are not known, assumptions based on established estimations have been made.

CON29M report licensing

This report contains Data provided by the Coal Authority. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure Ltd prior to any re-use.

The Law Society CON29M Coal Mining search enquiries are protected by copyright owned by The Law Society of 113 Chancery Lane, London WC2A 1PL.

© Crown Copyright (2022) Ordnance Survey Licence Number 0100035207. May contain British Geological Survey materials © NERC (2022).

This report may contain public sector information licensed under the Open Government Licence v3.0.

This report may contain plans and records held by the Coal Authority and made publicly available at the time of inspection which may include British Geological Survey and Ordnance Survey data.

Conveyancing Information Executive and our terms & conditions

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Groundsure Ltd, Sovereign House, Church Street, Brighton, BN1 1UJ. Tel: 08444 159 000. Email: info@groundsure.com. Groundsure adheres to the Conveyancing Information Executive Standards.

The Standards

- Conveyancing Information Executive Members shall act in a professional and honest manner at all times in line with the Conveyancing Information Executive Standards and carry out the delivery of the Search with integrity and due care and skill.
- Compliance with the Conveyancing Information Executive Standards will be a condition within the Conveyancing Information Executive Member's Terms and Conditions.
- Conveyancing Information Executive Members will promote the benefits of and deliver the Search to the agreed standards and in the best interests of the customer and associated parties.

Complaints Advice

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure.

If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Standards.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs.

COMPLAINTS PROCEDURE: If you want to make a complaint, we will:

- acknowledge it within 5 working days of receipt
- normally deal with it fully and provide a final response, in writing, within 20 working days of receipt
- liaise, at your request, with anyone acting formally on your behalf

Complaints should be sent to:

Operations Director, Groundsure Ltd, Sovereign House, Church Street, Brighton, BN1 1UJ. Tel: 08444 159 000. Email: info@groundsure.com If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk We will co-operate fully with the Ombudsman during an investigation and comply with their final decision.

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

Important consumer protection information

All of the advice and reports that Groundsure produces are covered by a comprehensive Remediation Contribution policy to ensure customers are protected, see <https://www.groundsure.com/remediation> for full details.

Data providers

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

Coal Mining Report Insurance Policy



Coal Mining Report Insurance Policy

The Schedule

Policy Number: The Reference contained in the **Coal Mining Search Report**

Premium: £1.40 inclusive of Insurance Premium Tax at 12%

Property: The property which is the subject of the **Coal Mining Search Report**

Limit of Indemnity: £100,000 increasing by 10% compound per annum on each anniversary of and for the first 10 years following the **Commencement Date**

Commencement Date: The date of the **Coal Mining Search Report**

You/Your:

1. A purchaser of the **Property**
2. A lender providing a **Mortgage** in connection with a purchase of the **Property**
3. A lender providing a **Mortgage** by way of a re-mortgage of the **Property**

Definitions

Where a word is defined below or in the schedule it shall carry the same meaning wherever it appears in bold text in this policy

Insured Use: The continued use of the **Property** as a single house or flat or a single commercial premises

Market Value: The value as determined by a surveyor appointed by agreement between **You** and **Us** or (in default of agreement) the President for the time being of the Royal Institution of Chartered Surveyors

Mortgage: A mortgage or charge secured on the **Property** by an institutional mortgage lender

Coal Mining Search Report: The coal mining search report attached to this policy

Search: An official search comprising a search in form CON29M (2018) being mining searches relating to coal and brine in the area in which the **Property** is situated

We/Our/Us:

Zurich Insurance plc. A public limited company incorporated in Ireland. Registration No. 13460. Registered Office: Zurich House, Ballsbridge Park, Dublin 4, Ireland. UK Branch registered in England and Wales Registration No. BR7985. UK Branch Head Office: The Zurich Centre, 3000 Parkway, Whiteley, Fareham, Hampshire PO15 7JZ.

Zurich Insurance plc is authorised by the Central Bank of Ireland and authorised and subject to limited regulation by the Financial Conduct Authority. Details about the extent of our authorisation by the Financial Conduct Authority are available from us on request. Our FCA Firm Reference Number is 203093.

Communications may be monitored or recorded to improve our service and for security and regulatory purposes.

© Copyright – Zurich Insurance plc 2018. All rights reserved. Reproduction, adaptation, or translation without prior written permission is prohibited except as allowed under copyright laws.

Your Policy

This is a legal document and should be kept in a safe place.

This policy is an agreement between **You** and **Us** and cover is provided subject to the payment of the **Premium**.

You must read this policy and its conditions, exclusions, schedule and any endorsements as one contract. Please read all of them to make sure that they provide the cover **You** require. If they do not, please contact **Us** or **Your** insurance adviser who arranged the policy for **You**.

When **You** take out and make changes to the cover provided by this policy, **You** must take reasonable care to ensure that **You** accurately answer any questions which **We** ask of **You** and that any information **You** give **Us** is accurate. If **You** are taking out this policy for purposes which are mainly related to **Your** trade, business or profession, **You** must also let **Us** know about all facts which are material to **Our** decision to provide **You** with insurance. Failure to meet these obligations could result in this policy being invalidated, a claim not being paid, or an additional premium being charged.

Fair presentation of the risk

a) At inception of this policy and also whenever changes are made to it at **Your** request **You** must:

- i) where **You** have taken out this policy for purposes which are wholly or mainly related to **Your** trade, business or profession, disclose to **Us** all material facts in a clear and accessible manner and not misrepresent any material facts, and
- ii) where **You** have taken out this policy for purposes which are wholly or mainly unrelated to **Your** trade, business or profession, take reasonable care not to misrepresent any material facts.

b) If **You** do not comply with clause a) of this condition **We** may:

- i) avoid this policy which means that **We** will treat it as if it had never existed and refuse all claims where any non-disclosure or misrepresentation by **You** is proven by **Us** to be deliberate or reckless in which case **We** will not return the premium paid by **You**; and
- ii) recover from **You** any amount **We** have already paid for any claims including costs or expenses **We** have incurred.

c) If **You** do not comply with clause a) of this condition and the non-disclosure or misrepresentation is not deliberate or reckless this policy may be affected in one or more of the following ways depending on what **We** would have done if **We** had known about the facts which **You** failed to disclose or misrepresented:

- i) if **We** would not have provided **You** with any cover **We** will have the option to:
 1. avoid the policy which means that **We** will treat it as if it had never existed and repay the premium paid; and
 2. recover from **You** any amount **We** have already paid for any claims including costs or expenses **We** have incurred
- ii) if **We** would have applied different terms to the cover **We** will have the option to treat this policy as if those different terms apply. **We** may recover any payments made by **Us** on claims which have already been paid to the extent that such claims would not have been payable had such additional terms been applied
- iii) if **We** would have charged **You** a higher premium for providing the cover **We** will charge **You** the additional premium which **You** must pay in full.

d) If any insured person, other than **You**, is responsible for a misrepresentation or failure to make a fair presentation of the risk, **We** will invoke the remedies available to **Us** under this condition as against that particular person as if a separate insurance contract had been issued to them leaving the remainder of the policy unaffected.

NB: For the purposes of the duty of disclosure stated in paragraphs a) i) and ii) above the content of the **Coal Mining Search Report** will be deemed to satisfy **Your** disclosure obligations.

Cover

1. **You** are in the process of purchasing the **Property** relying on the **Coal Mining Search Report** and/or
2. **You** (being a lender) have agreed to provide a **Mortgage** in connection with **Your** borrower's purchase or re-mortgage of the **Property** relying on the **Coal Mining Search Report**.

We will pay the following losses sustained by **You** arising out of the **Property** being affected by any matter which would have been revealed by a **Search** had one been carried out on the date of the **Coal Mining Search Report** but which was not revealed by the **Coal Mining Search Report**:

1. any reduction in **Market Value** of the **Property** calculated at the date **You** become aware of the matter(s) and/or loss in connection with a **Mortgage** as a result of such reduction.
2. all other costs and expenses including out of court settlement costs incurred by **Us** or by **You** with **Our** prior written agreement.

Waiver of Breach of Policy Condition

We will not exercise **Our** right to avoid **Our** liability to **You** in respect of loss where **You** have inadvertently breached any term or condition of the policy provided that such breach does not prejudice **Our** rights and remedies under the policy or otherwise directly or indirectly result in or increase the amount of any loss.

Protection for Mortgagees and Successors in Title

We will not avoid **Our** liability to make a payment to **You** solely because another person breaches the terms and conditions of this policy, provided such breach was not committed on **Your** behalf or with **Your** agreement, and **We** will invoke the remedies available to **Us** under the Policy as against that other person as if a separate insurance contract had been issued to them leaving the remainder of the policy unaffected.

Joint Insured

Any party insured under this policy standing in the relation of parent company, subsidiary company, associated company, branch office or joint venture partner to each other will be deemed to be joint insured for the purposes of this policy and jointly liable and responsible for any breach of any terms and conditions of this policy. If there is any inconsistency between this clause and any other term of this policy, this clause shall prevail.

Exclusions

We will not pay for any:

1. amount in excess of the **Limit of Indemnity**.
2. loss which would be recoverable under a household buildings insurance policy.
3. loss arising from any matter that **You** were aware of at the **Commencement Date**.
4. loss if the **Property** is used for any purpose other than the **Insured Use**.

Claims Conditions and How to Claim

1. **You** must:

- i) give **Us** written notice as soon as possible of any potential or actual claim or any circumstances likely to result in a claim. Please provide the policy number, **Your** name, the full address of the **Property** and a brief description of the incident that has occurred. Notifications should be sent to: Speciality Lines Claims Team, Zurich Insurance, 8th Floor, 70 Mark Lane, London, EC3R 7NQ. Email: claims@uk.zurich.com, Enquiry line: telephone 0207 648 3523
- ii) pass all court documents and/or other communications to **Us** as soon as possible after receipt
- iii) not deal with, make any admission of liability or attempt to settle a claim without **Our** prior written agreement.
- iv) agree to and carry out at **Our** expense all things necessary to minimise any loss.
- v) provide all information and assistance that **We** may require to help defend and settle the claim.

2. **We** are entitled to:

- i) decide how to settle or defend a claim and may carry out proceedings in the name of any person insured under this policy, including proceedings for recovering any claim.
- ii) pay to **You** at any time, an amount equal to the **Limit of Indemnity** or any lower amount for which the claim can be settled, after deduction of any sum already paid. **We** may then give up control of and have no further liability in connection with the claim.

3. If **We** admit liability for a claim but there is a dispute as to the amount to be paid the dispute will be referred to an arbitrator. The arbitrator will be appointed jointly by **You** and **Us** in accordance with the law at the time. **You** may not take any legal action against **Us** over the dispute before the arbitrator has reached a decision.

4. If **You** or anyone acting on Your behalf:

- a) makes a fraudulent or exaggerated claim under this policy; or
- b) uses fraudulent means or devices including the submission of false or forged documents in support of a claim whether or not the claim is itself genuine; or
- c) makes a false statement in support of a claim whether or not the claim is itself genuine; or
- d) submits a claim under this policy for loss or damage which **You** or anyone acting on **Your** behalf or in connivance with **You** deliberately caused; or
- e) realises after submitting what **You** reasonably believed was a genuine claim under this policy and then fails to tell **Us** that **You** have not suffered any loss or damage; or
- f) suppresses information which **You** know would otherwise enable **Us** to refuse to pay a claim under this policy

We will be entitled to refuse to pay the whole of the claim and recover any sums that **We** have already paid in respect of the claim.

If any fraud is perpetrated by or on behalf of an insured person and not on behalf of **You** this condition should be read as if it applies only to that insured person's claim and references to this policy should be read as if they were references to the cover effected for that person alone and not to the policy as a whole.

5. If any claim is covered by any other insurance, **We** will not pay for more than **Our** share of that claim.

6. The most **We** will pay for any loss (or all losses in the aggregate), including costs and expenses agreed by **Us** is the **Limit of Indemnity**. Once **We** have paid a loss or losses equal to the amount of the **Limit of Indemnity**, **We** will have no further liability under this policy.

General Conditions

1. Neither **You** (nor anyone acting on **Your** behalf) must disclose the existence of this policy to any other party except **Your** legal and other professional advisers, prospective purchasers, lessees and tenants of the **Property**, their respective mortgagees, legal and other professional advisers.
2. In the UK the law allows both **You** and **Us** to choose the law applicable to the contract. This contract will be subject to the relevant law of England and Wales, Scotland, Northern Ireland, the Isle of Man or the Channel Islands depending upon the **Property** address stated in the Schedule. If there is any dispute as to which law applies it will be English law. The parties agree to submit to the exclusive jurisdiction of the English courts.
3. Notwithstanding any other terms of this policy **We** will be deemed not to provide cover nor will **We** make any payment or provide any service or benefit to **You** or any other party to the extent that such cover, payment, service, benefit and/or any business or activity of **Yours** would violate any applicable trade or economic sanctions law or regulation.

Cancellation Clause

If **You** have taken out this policy for purposes which are wholly or mainly unrelated to **Your** trade, business or profession, **You** may cancel this policy within 14 days of receiving the policy by writing to **Us** and in such event **We** may, at **Our** discretion, charge **You** for the time that **You** have been on cover. Any refund will be made to the party who paid the premium. If **You** do cancel, **You** may be in breach of the terms of **Your** mortgage or the terms of the contract for the sale of **Your** property. If **You** are in doubt, **You** may wish to seek legal advice prior to cancellation.

Fair Processing and Complaints Procedure Our Complaints Procedure

Our commitment to customer service

We are committed to providing a high level of customer service. If you feel we have not delivered this, we would welcome the opportunity to put things right for you.

Who to contact in the first instance

Many concerns can be resolved straight away. Therefore in the first instance, please get in touch with your usual contact at Zurich or your broker or insurance intermediary, as they will generally be able to provide you with a prompt response to your satisfaction.

Contact details will be provided on correspondence that we or our representatives have sent you.

Many complaints can be resolved within a few days of receipt

If we can resolve your complaint to your satisfaction within the first few days of receipt, we will do so. Otherwise, we will keep you

updated with progress and will provide you with our decision as quickly as possible.

Next steps if you are still unhappy

If you are not happy with the outcome of your complaint, you may be able to ask the Financial Ombudsman Service to review your case.

We will let you know if we believe the ombudsman service can consider your complaint when we provide you with our decision. The service they provide is free and impartial, but you would need to contact them within 6 months of the date of our decision.

More information about the ombudsman and the type of complaints they can review is available via their website www.financial-ombudsman.org.uk.

You can also contact them as follows:

Post: Financial Ombudsman Service, Exchange Tower, London, E14 9SR

Telephone: 08000 234567 (free on mobile phones and landlines)

Email: complaint.info@financial-ombudsman.org.uk

If the Financial Ombudsman Service is unable to consider your complaint, you may wish to obtain advice from the Citizens Advice Bureau or seek legal advice.

The Financial Services Compensation Scheme (FSCS)

We are covered by the Financial Services Compensation Scheme (FSCS) which means that you may be entitled to compensation if we are unable to meet our obligations to you. Further information is available on www.fscs.org.uk or by contacting the FSCS directly on 0800 678 1100.

How we use your information

Who controls your personal information

This notice tells you how Zurich Insurance plc ('Zurich'), as data controller, will deal with your personal information. Where Zurich introduces you to a company outside the group, that company will tell you how your personal information will be used.

You can ask for further information about our use of your personal information or complain about its use in the first instance, by contacting our Data Protection Officer at: Zurich Insurance Group, Tri-centre 1, Newbridge Square, Swindon, SN1 1HN or by emailing the Data Protection Officer at GBZ.General.Data.Protection@uk.zurich.com.

If you have any concerns regarding our processing of your personal information, or are not satisfied with our handling of any request by you in relation to your rights, you also have the right to make a complaint to the Information Commissioner's Office. Their address is: First Contact Team, Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, SK9 5AF.

What personal information we collect about you

We will collect and process the personal information that you give us by phone, e-mail, filling in forms, including on our website, and when you report a problem with our website. We also collect personal information from your appointed agent such as your trustee, broker, intermediary or financial adviser in order to provide you with the services you have requested and from other sources, such as credit reference agencies and other insurance companies, for verification purposes. We will also collect information you have volunteered to be in the public domain and other industry-wide sources. We will only collect personal information that we require to fulfil our contractual or legal requirements unless you consent to provide additional information. The type of personal information we will collect includes; basic personal information (i.e. name, address and date of birth), occupation and financial details, health and family information, claims and convictions information and where you have requested other individuals be included in the arrangement, personal information about those individuals.

If you give us personal information on other individuals, this will be used to provide you with a quotation and/or contract of insurance and/or provision of financial services. You agree you have their permission to do so. Except where you are managing the contract on another's behalf, please ensure that the individual knows how their personal information will be used by Zurich. More information about this can be found in the 'How we use your personal information' section.

How we use your personal information

We and our selected third parties will only collect and use your personal information (i) where the processing is necessary in connection with providing you with a quotation and/or contract of insurance and/or provision of financial services that you have requested; (ii) to meet our legal or regulatory obligations; or (iii) for our 'legitimate interests'. It is in our legitimate interests to collect

your personal information as it provides us with the information that we need to provide our services to you more effectively including providing you with information about our products and services. We will always ensure that we keep the amount of information collected and the extent of any processing to the absolute minimum to meet this legitimate interest. Examples of the purposes for which we will collect and use your personal information are:

1. to provide you with a quotation and/or contract of insurance;
2. to identify you when you contact us;
3. to deal with administration and assess claims;
4. to make and receive payments;
5. to obtain feedback on the service we provide to you;
6. to administer our site and for internal operations including troubleshooting, data analysis, testing, research, statistical and survey purposes;
7. for fraud prevention and detection purposes.

We will contact you to obtain consent prior to processing your personal information for any other purpose, including for the purposes of targeted marketing unless we already have consent to do so.

Who we share your personal information with

Where necessary, we will share the personal information you gave us for the purposes of providing you with the goods and services you requested with the types of organisations described below:

associated companies including reinsurers, suppliers and service providers;
introducers and professional advisers;
regulatory and legal bodies;
survey and research organisations;
credit reference agencies;
healthcare professionals, social and welfare organisations; and
other insurance companies

Or, in order to meet our legal or regulatory requirements, with the types of organisations described below:

regulatory and legal bodies;
central government or local councils;
law enforcement bodies, including investigators;
credit reference agencies; and
other insurance companies

How we use your personal information for websites and email communications

When you visit one of our websites we may collect information from you such as your email address or IP address. This helps us to track unique visits and monitor patterns of customer website traffic, such as who visits and why they visit.

We use cookies and/or pixel tags on some pages of our website. A cookie is a small text file sent to your computer. A pixel tag is an invisible tag placed on certain pages of our website but not on your computer. Pixel tags usually work together with cookies to assist us to provide you with a more tailored service. This allows us to monitor and improve our email communications and website. Useful information about cookies, including how to remove them, can be found on our websites.

How we transfer your personal information to other countries

Where we transfer your personal information to countries that are outside of the UK and the European Union (EU) we will ensure that it is protected and that the transfer is lawful. We will do this by ensuring that the personal information is given adequate safeguards by using 'standard contractual clauses' which have been adopted or approved by the UK and the EU, or other solutions that are in line with the requirements of European data protection laws.

A copy of our security measures for personal information transfers can be obtained from our Data Protection Officer at: Zurich Insurance Group, Tri-centre 1, Newbridge Square, Swindon, SN1 1HN, or by emailing the Data Protection Officer at GBZ.General.Data.Protection@uk.zurich.com.

How long we keep your personal information for

We will retain and process your personal information for as long as necessary to meet the purposes for which it was originally

collected. These periods of time are subject to legal, tax and regulatory requirements or to enable us to manage our business.

Your data protection rights

You have a number of rights under the data protection laws, namely:

- to access your data (by way of a subject access request);
 - to have your data rectified if it is inaccurate or incomplete;
 - in certain circumstances, to have your data deleted or removed;
 - in certain circumstances, to restrict the processing of your data;
 - a right of data portability, namely to obtain and reuse your data for your own purposes across different services;
 - to object to direct marketing;
 - not to be subject to automated decision making (including profiling), where it produces a legal effect or a similarly significant effect on you;
 - to claim compensation for damages caused by a breach of the data protection legislation.
- if we are processing your personal information with your consent, you have the right to withdraw your consent at any time.

We will, for the purposes of providing you with a contract of insurance, processing claims, reinsurance and targeted marketing, process your personal information by means of automated decision making and profiling where we have a legitimate interest or you have consented to this.

What happens if you fail to provide your personal information to us

If you do not provide us with your personal information, we will not be able to provide you with a contract or assess future claims for the service you have requested.

Fraud prevention and detection

In order to prevent and detect fraud we may at any time:

- check your personal data against counter fraud systems
- use your information to search against various publicly available and third party resources
- use industry fraud tools including undertaking credit searches and to review your claims history
- share information about you with other organisations including but not limited to the police, the Insurance Fraud Bureau (IFB), other insurers and other interested parties.

If you provide false or inaccurate information and fraud is identified, the matter will be investigated and appropriate action taken. This may result in your case being referred to the Insurance Fraud Enforcement Department (IFED) or other police forces and fraud prevention agencies. You may face fines or criminal prosecution. In addition, Zurich may register your name on the Insurance Fraud Register, an industry-wide fraud database.

Claims history

We may pass information relating to claims or potential claims to any relevant database. We and other insurers may search these databases when you apply for insurance, when claims or potential claims are notified to us or at time of renewal to validate your claims history or that of any other person or property likely to be involved in the policy or claim.

This helps to check information provided and prevent fraudulent claims.

APPENDIX E
PLANS AND MAPS
EXISTING AERIAL PHOTOGRAPH / SITE PLAN
LOCATION PLAN

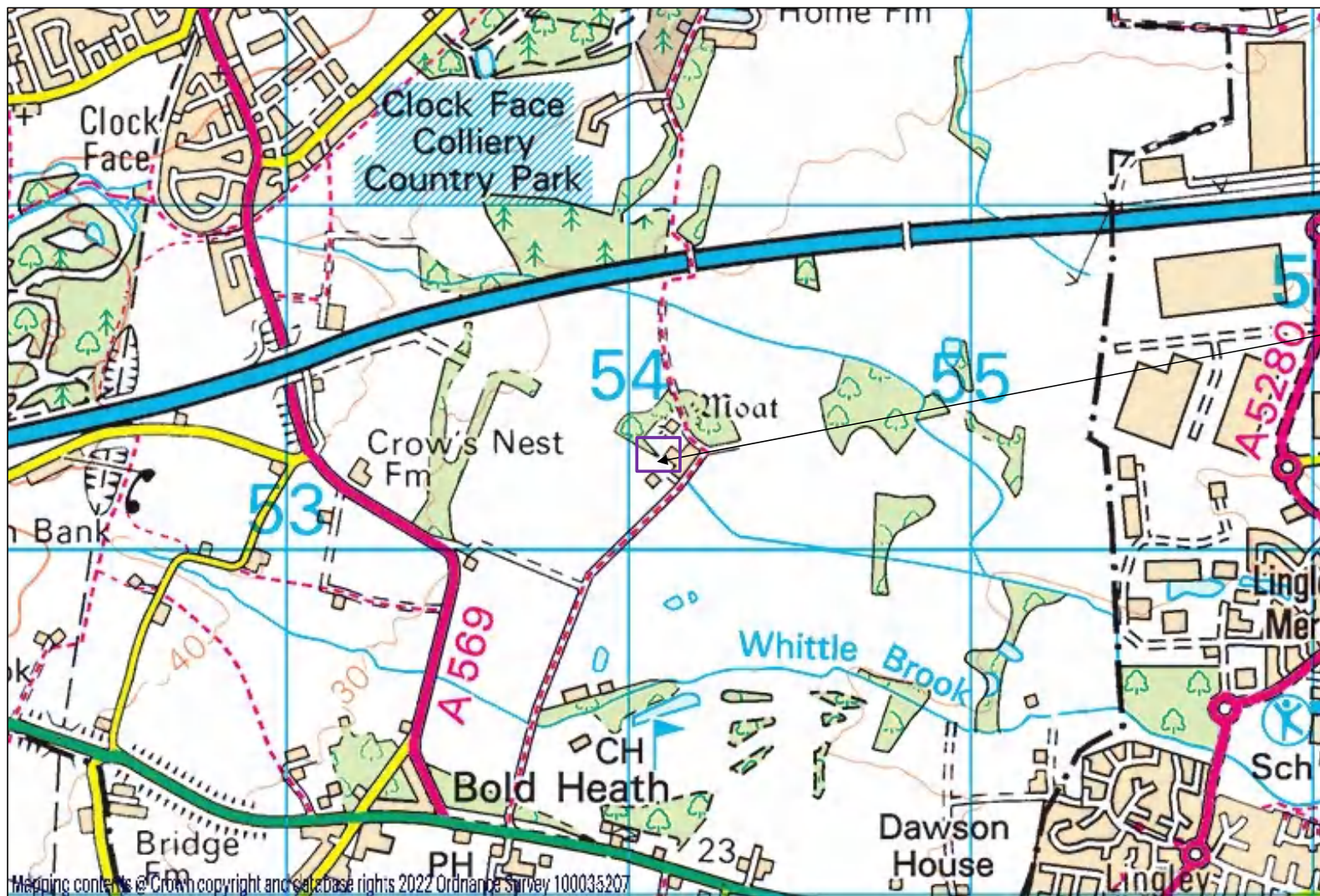
OBLIQUE AERIAL PHOTOGRAPH WITH SITE FEATURES (southward facing)



Approx NGR of site 354120E 390280N



LOCATION PLAN



Not to scale

THE SITE



Mapping contents © Crown copyright and database rights 2022 Ordnance Survey 100035207