PHASE I DESK STUDY

SCOBELL STREET, BURY

REC REFERENCE: 107765P1R1

REPORT PREPARED FOR: HIMOR LIMITED

DECEMBER 2019

An Ensafe Company

DELIVERING ENVIRONMENTAL AND RISK MANAGEMENT SOLUTIONS

QUALITY ASSURANCE

Issue/revision	Issue 1	Revision 1	Revision 2
Remarks	-	Updated with client comments	
Date	13.11.2019	06.12.2019	
Prepared by	N. Beckett	L.Moore	
Signature			
Position	Consultant	Consultant	
Checked by	C.Lima	M.Lucass	
Signature			
Position	Consultant	Associate Director	
Authorised by	M.Lucass	M.Lucass	
Signature			
Position	Associate Director	Associate Director	
Project number	1CO107765		

Office address:

REC Ltd, Osprey House, Pacific Quay, Broadway, M50 2UE
Tel: 0161 868 1300

General enquiries:

t: 0845 676 9303
E: info@recltd.co.uk
www.recltd.co.uk

EXECUTIVE SUMMARY

Site Address	Scobell Street, Bury, BL8 3DE.
Grid Reference	378065,412054
Site Area	11.55 hectares
Current Site Use	Arable land bordered by hedgerows.
Proposed Use	The proposed development is for the construction of residential dwellings, secondary roads, pocket greenspaces and footpath connections. Pedestrian and cycle routes are also proposed.
Environmental Setting	▶ The site is underlain by superficial deposits of Till (secondary undifferentiated) and Glaciofluvial Deposits (Secondary A aquifer) which overlies bedrock of the Pennine Lower Coal Measures (Secondary A aquifer); ▶ The site is not located within a Groundwater Source Protection Zone (SPZ); ▶ The site has a very low risk rating of flooding from Rivers and the Sea; ▶ The site is located in a Coal Mining Reporting Area with sections defined as Development High Risk Areas by the Coal Authority and there are probable coal outcrops located throughout the site. 1no. of mine entries are recorded in the south west of the site.
Site History	In 1850 the site was open space with a sand pit and well in the north east. It has remained broadly undeveloped with a few small structures built and the sand pits were later filled in. A suspected capped mine shaft is present.
Conceptual Site Model (CSM)	**Contaminant Sources** ▶ Made Ground associated with demolished structures; ▶ Infilled sand pits and ponds in the northeast; ▶ Ground gas generation and Made Ground related to the mine shaft and immediate surrounding area; ▶ Ground gas generated from coal seams; **Potential Pathways** Receptors may be potentially at risk from the identified potential sources of contamination via the following pathways: ▶ Migration of mobile contaminants off site via services, sewers and manmade conduits; ▶ Direct contact, ingestion and inhalation of contaminants on site; ▶ Migration of mobile contaminants into groundwater and transport into surface waters; ▶ Migration of hazardous gases; and, ▶ Uptake of toxins/phytotoxins by plants. **Potential Receptors - Human Health** Future site users are potentially at risk. **Potential Receptors -Controlled Waters** The Walshaw Brook which forms one of the boundaries on site is a key receptor for potential contamination in that part of the site. Groundwater within the underlying superficial and bedrock aquifers is also potentially at risk.

Conclusions and Recommendations	Based on the proposed end use of residential with access roads and footpath connections and the lack of historical development it is considered that intrusive ground investigation is only required with respect to contaminated land in the areas identified. It is understood however that a ground investigation to establish geotechnical properties for subsequent foundation design will be undertaken. During this investigation a watching brief by the geotechnical / geo-environmental site engineer should be kept to look for the potential for any contamination and adjust the scope of the investigation as appropriate. Due to the presence of coal seams and a historical mine shaft on site it would be appropriate to identify the depth and extent of coal within the underlying strata, and if appropriate to install combined ground gas and ground water monitoring pipes to evaluate any requirements for gas remediation measures. Dependant on what is found a typical monitoring of 3 months would be required based on likely ground gas generation and proposed use of the site.

TABLE OF CONTENTS

APPENDICES

1.0 INTRODUCTION

1.1 Background

Resource and Environmental Consultants Ltd (REC) has been commissioned by HIMOR Limited herein referred to as 'the Client', to undertake a Phase I Desk Study at Scobell Street, Bury, BL8 3DE, 'the site'.

1.2 Proposed Development

Construction of residential dwellings, access roads, public open space, footpaths and cycle routes.

1.3 Objectives

The objectives of the desk-based study are to:

- Undertake a site walkover to identify any current areas of potential environmental concern in order to establish the source, pathway, receptor conceptual site model (CSM);
- Review historical plans, geology, hydrogeology, site sensitivity, flood-plain issues, mining records and any local authority information available in order to complete a Phase I Desk Study in line with Environment Agency (EA) document Model Procedures for the Management of Contaminated Land (Contaminated Land Report 11);
- Assess the implications of potential environmental risks, liabilities, and development constraints associated with the site in relation to the future use of the site and in relation to potential off-site receptors;
- Provide preliminary recommendations on potential development issues; and,
- Provide recommendations regarding future works required.

1.4 Sources of Information

Background information was sought from the following sources:

- Groundsure database search (report GS-6447702 & GS-6447703, dated 07/11/19), provided in Appendix V;
- Coal Authority Consultants Coal Mining Report (GS-6447705), provided in Appendix V;
- Historical mapping dated 1850 to 2019. A selection of historical map excerpts is reproduced in Section 3.1 and provided in full within Appendix V;
- Online planning records held by Bury Metropolitan Borough Council;
- Radon: Guidance on protective measures for new buildings (BRE Document BR 211, 2015) and HPA Indicative Radon Atlas for England and Wales); and,
- British Geological Survey Online Mapping (http://www.bgs.ac.uk).

1.5 Limitations and Confidentiality

The full limitations of this report are presented in Appendix I. REC has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from REC.

2.0 SITE SETTING

2.1 Site Details

Key details are summarised in Table 2.1 below. A site location plan (107765-001) is provided within Appendix III. All acronyms used within this report are defined in the Glossary presented in Appendix II.

Table 2.1 Site Summary

Site Address	Scobell Street, Bury, BL8 3DE
National Grid Reference	378065,412054
Site Area	11.55 hectares

2.2 Site Description

A site walkover was undertaken on 8th November 2019 and the following description comprises the layout and features based on observations at the time. Selected photographs from the walkover are presented in Appendix IV.

The site consists of a number of undulating green fields separated by hedgerows and fencing. The topography of these fields varies throughout and the lower areas were waterlogged. The site is covered with patches of overgrown grass and small clusters of trees. The fields are surrounded by residential housing to the north and west whilst the southern boarder consists of the Stables Country Club and Best Western hotel and the associated grounds. A small watercourse was observed along the western and part of the southern boundary.

There was no evidence of overhead services or manholes at the time of the walkover.

Hazardous Materials Storage

No underground or aboveground storage tanks are known to be present.

Polychlorinated Biphenyls (PCBs)

No electricity substations were observed.

Waste Storage

No waste streams were identified.

2.3 Surrounding Area

A summary of surrounding uses is provided in Table 2.2.

Table 2.2 Summary of Land use

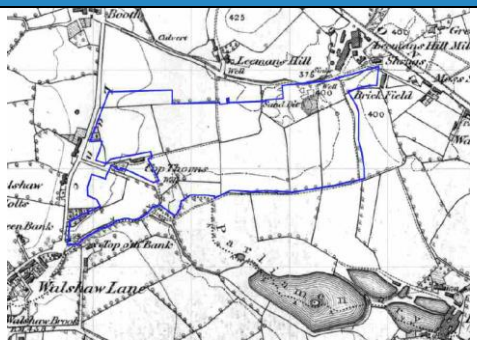
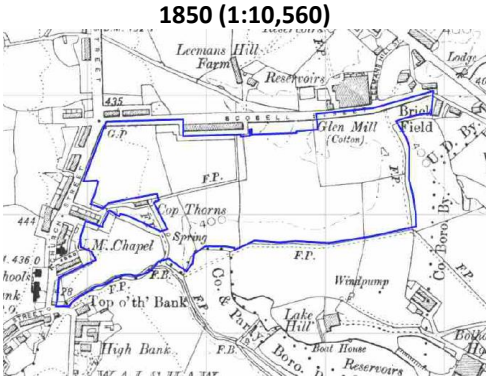
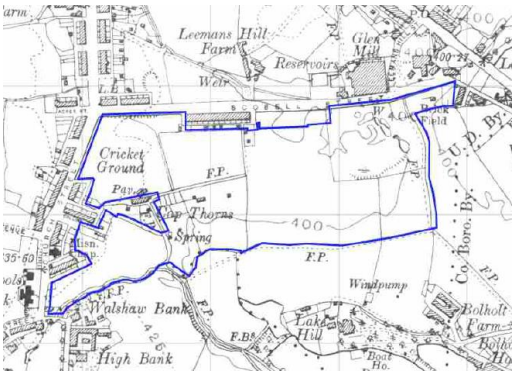
Direction	Land Use
North	Residential properties and Scobell Street
East	Agricultural fields
South	Stables Country Club and Best Western hotel and agricultural fields
West	Residential properties and Church Street

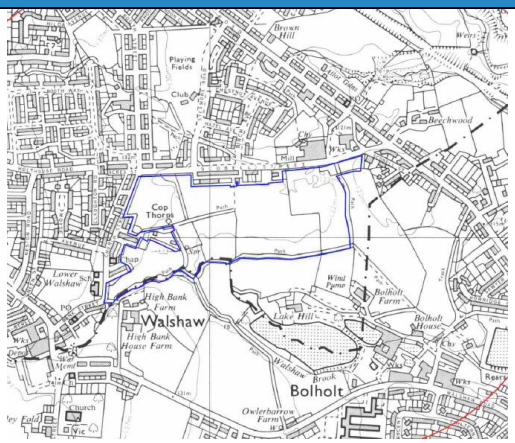
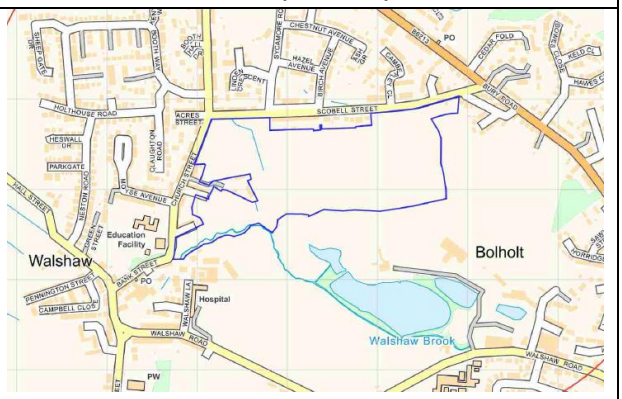
3.0 SITE HISTORY

3.1 Historical Maps

A review of historical maps pertinent to the site is summarised in Table 3.1 below.

Table 3.1 Summary of Potentially Contaminative Historical Land Uses

Map Edition	Historical Land Use	Historical map excerpt
1850-1909 (1:10,560)	In 1850 the site was predominantly open land with both a sand pit and a well to the north east. A sand pit is present in the northeast of the site. A reservoir exists south of the site and Walshaw Brook enters the site in the south west corner. The site is surrounded predominantly by arable land. By 1909, a cotton mill is located north east of the site and a spring on site in the south. North and adjacent, some residential properties are present. The sand pits are no longer marked.	 **1850 (1:10,560)**  **1909 (1:10,560)**
1928 (1:10,560)	A cricket ground and pavilion building are located in the west of the site and potential further extraction in the northeast. Small buildings or structures are present near the centre of the site, the southwest area and potentially in the north east. Two ponds are present in the northeast. Further development has occurred in the surrounding areas.	 **1928 (1:10,560)**

Map Edition	Historical Land Use	Historical map excerpt
1974 (1:10,000)	Large scale development has occurred in the surrounding areas by 1974 and a public footpath is located on the southern boundary, running south west. The ponds appear to be infilled and all structures removed except the pavilion. By 1980 the contours change in the northeast indicating further infilling of ground.	 **1974 (1:10,000)**
2019 (1:10,000)	The site remains as open space surrounded by residential properties to the north and west. Two schools and a hospital are located south of the site.	 **2019 (1:10,000)**

3.2 Historical Database

A review of potentially contaminative land uses identified on historical Ordnance Survey maps within a 250m radius of the site is summarised below in Table 3.2.

Table 3.2 Summary of Potentially Contaminative Historical Land Uses

Surrounding Feature	Distance (m)	Dates	Direction
Brick field	0	1851-1956	Eastern border
Unspecified / Sand pit	0	1851-1956	On Site
Unspecified / Cotton Mill	3-220	1851-1980	N/NW/S/SW
Unspecified Depot	11-115	1969-1980	SW
Unspecified Works	15-201	1969-1980	N/S/SW
Unspecified Pit	15-201	1909-1956	N
Unspecified Tank	32	1851	N
Chimney	61	1969-1974	N
Refuse Heap	135-148	1928-1980	N
Boat House	162-165	1909-1956	S
Pump	198	1851	E

3.3 Planning History

REC has undertaken a review of online planning records held by Bury Metropolitan Borough Council and found 7no. planning applications relating to the houses on the northern boundary of the site but no records for the site itself. The planning applications relate to single storey extensions to the properties.

4.0 ENVIRONMENTAL SETTING

4.1 Geology & Hydrogeology

The British Geological Survey (BGS) GeoIndex indicates superficial and bedrock geology as detailed in Table 4.1. The Glaciofluvial deposits are present generally in the centre of the site running north to south.

Table 4.1 Summary of Geological Information

Classification	Strata	Description	Aquifer Classification	Permeability	Sensitivity
Superficial Deposits	Devensian Till	Diamicton	Secondary (undifferentiated)	Low / Moderate	Low / Moderate
	Glaciofluvial Deposits	Sand and gravel	Secondary A	Moderate	Moderate
Bedrock	Pennine Lower Coal Measures	Mudstone, Siltstone and Sandstone	Secondary A	Moderate	Moderate

There are no nearby borehole logs with information relevant to the site. The data search report indicates that there are 5no. historical and no active groundwater abstraction license within 1km of the site; the closest being located 52m south. The site does not lie within a Groundwater Source Protection Zone (SPZ).

The surface soils on site are categorised as being minor aquifer/high leaching potential. These soils are therefore assumed to be highly permeable in the absence of site-specific information.

4.2 Hydrology

The nearest surface water feature is an inland river called Walshaw Brook and is located on site. The river forms part of the Mersey catchment area. The site is not located within any Environment Agency Floodplain Zones and is in an area with a “Very Low” (less than 1 in 1000) risk of flooding from rivers and the sea (RoFRaS) in any given year.

Additionally, the site is located within 50m of a groundwater flooding susceptibility area for superficial deposits flooding. This means that given the geological conditions flooding associated with shallow unconsolidated sedimentary aquifers should be considered in all land-use planning decisions.

4.3 Geotechnical Data

Qualitative geotechnical data presented within the Groundsure Report identifies the following ground conditions.

Table 4.2 Summary of Data Search Geotechnical Information

Hazard	Designation	Comments
Shrink-Swell Clay	Very Low	Ground conditions predominantly low plasticity. No special actions required.
Landslides	Very Low	Slope instability are unlikely to be present. No special actions required to avoid problems due to landslides.
Ground Dissolution	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions.
Compressible Ground	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits.
Collapsible Deposits	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.
Running Sand	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required.

4.4 Mining and Ground Workings

The site is located within a Coal Mining Reporting Area with sections defined as Development High Risk Areas by the Coal Authority. The site has coal subcrops throughout and 1no. disused mine shaft has been recorded in the south west.

Coal seams and mine shafts have the potential to generate ground gases as well as the potential for ground stability issues.

4.5 Railways and Tunnels

The nearest active railway line is located approximately 5km west of the site and serves the northern line in and out of Manchester. A review of available data found no historical or active tunnels are located within 250m of the site.

4.6 Radon Risk Potential

The site is not situated within a radon affected area as less than 1% of properties are above the action level. No radon protective measures are necessary in the construction of new buildings.

4.7 Industrial Land Uses

Available records identify the following potentially contaminative current industrial land uses within 200m of the site.

Table 4.3 Industrial Land Uses

Category	Activity	Distance (m)	Direction
Repair and Servicing*	Vehicle Repair, Testing and Servicing	16	NW
Infrastructure and Facilities*	Electricity Substation	27	NW
Industrial Features	Tanks	36	SE
Industrial Features	Unspecified Works / Factories	47	N
Engineering / Construction Services	Engineering, cutting, drilling and welding services	142	SW
Motoring	New vehicles	179	N

**Only the closest industrial land use is noted.*

The data search report indicates that there are no high voltage underground electricity transmission cables; or pressure gas transmission pipelines within 500m. An obsolete petrol / fuel site is located 476m north.

4.8 Sensitive Land Uses

The following sensitive land uses have been identified within 2km:

- 5no. records of Local Nature Reserves; the closest being the Kirklees Valley, located 274m north east; and
- 9no. records of Green Belt Land, the closest being the Liverpool, Manchester and West Yorks Greenbelt located on site.

4.9 Site Sensitivity Assessment

The site is considered to be located within a **Low to Moderate** sensitivity setting for the following reasons:

- The underlying superficial deposits and bedrock aquifers are classified as secondary A;
- The Walshaw Brook is located on site and the underlying superficial and bedrock geology are classified as Secondary A aquifers;
- The site is located in a Coal Mining Reporting Area with sections defined as Development High Risk Areas by the coal authority (coal outcrops and mine entries are recorded within the site).
- The site forms part of the Liverpool, Manchester and West Yorks Greenbelt; and
- The site is located within close proximity to residential properties.

5.0 CONSULTATIONS

5.1 Contaminated Land Officer

A request for information pertaining to the site was sent to the Planning Department at Bury Council. At the time of writing, no response has been received.

5.2 Landfill Sites and Waste Treatment Sites

A review of data from the environmental search indicates that there are 5no. historic Environmental Agency licenced waste sites within 1km. The closest was located 92m north and was located on Bury Road, Greater Manchester. The waste type disposed at this landfill is industrial and was last recorded on 31/12/1977. This is unlikely to impact the development.

There is 1no. record of landfills from local authority and historical mapping records within 1km; a disused refuse tip located 244m south. On review of available records, 2no. Environment Agency licensed waste sites are located within 1.5km; the closest being Metcalfe Demolition & Skip Hire Ltd accepting household, commercial and industrial waste located 844m north.

5.3 Regulatory Database

Information in Table 5.2 below has been obtained from a commercially available environmental database and includes records not otherwise detailed in this report.

Table 5.2 Summary of Data Search Regulatory Data

Activity	0 - 249m	250 - 500m	Details
Records of Licensed Discharge Consents	0	2	The nearest licensed discharge consent is located 285m south west and is related to trade discharges to Walshaw Brook. It was first effective on 01.09.1983 and was revoked on 13.02.1991.
Records of Part A(2) and Part B Activities and Enforcements	0	1	The nearest permit is historical and is located 493m south east relating to petrol vapour recovery. The permit was Part B and no enforcements were notified.
Records of National Incidents Recording System (NIRS), List 2 (Pollution Incidents)	3	1	Land pollution incident occurred on 02.04.2001 on site. The pollutant was not identified and caused a Category 3 (Minor) impact to land.

6.0 CONCEPTUAL SITE MODEL (CSM)

In accordance with Environment Agency, CLR 11 (2004) and BSI 10175 (Code of Practice for Investigation of Potentially Contaminated Land), REC Ltd has developed an initial CSM to identify potential contamination sources, migration pathways and receptors within the study area.

6.1 Contaminant Sources

- Made Ground associated with small central and north eastern structures which appear to have been demolished in approximately 1969;
- Infilled sand pits and ponds in the northeast;
- Ground gas generation and Made Ground related to the mine shaft and immediate surrounding area; and
- Ground gas generated from coal seams.

6.2 Potential Pathways

Receptors may be potentially at risk from the identified potential sources of contamination via the following pathways:

- Migration of mobile contaminants off site via services, sewers and manmade conduits;
- Direct contact, ingestion and inhalation of contaminants on site;
- Migration of mobile contaminants into groundwater and transport into surface waters;
- Migration of hazardous gases; and,
- Uptake of toxins/phytotoxins by plants.

6.3 Potential Receptors

Human Receptors

Future site users are potentially at risk. Construction workers are not considered to be a plausible receptor as exposure will be managed through the use of appropriate PPE and hygienic working practices, as required under HSE/ CDM regulations. Furthermore, exposure to contaminated materials is likely to be for a short duration.

Controlled Waters

The Walshaw Brook which forms one of the boundaries on site is a key receptor for potential contamination in that part of the site.

Groundwater within the underlying superficial and bedrock aquifers is also potentially at risk.

6.4 Risk Assessment

CIRIA 552: Contaminated Land Risk Assessment ‘A Guide to Good Practice’, 2001 provides guidance on the approach to risk assessment. For any potential contaminant linkage consideration is given to:

- The potential severity of the risk; and
- The likelihood of the risk occurring.

Severity is assessed with consideration to the receptor and magnitude of impact. Table 6.1 overleaf provides details of each category.

Table 6.1 Severity Categories

Category	Description
Minor	Requirement for protective equipment during site works to mitigate health effects. Damage to non-sensitive ecosystems or species.
Mild	Pollution of non-sensitive water resources.
Medium	Chronic (long-term) risk to human health; Pollution of sensitive controlled waters (surface waters or aquifers)
Severe	Acute (short term) risks to human health; Major pollution of controlled waters (watercourses or groundwater)

The probability of a risk occurring considers the plausibility and sustainability of the contaminant linkage. Table 6.2 provides details of each category.

Table 6.2 Probability Categories

Category	Description
Unlikely	Contaminant linkage may be present, but the circumstances under which harm would occur are improbable.
Low Likelihood	Contaminant linkage may be present, and there is a possibility of the risk occurring, although there is no certainty that it will do so.
Likely	Contaminant linkage may be present, and it is probable that the risk will occur over the long term.
High Likelihood	Contaminant linkage may be present, and risk is almost certain to occur in long term, or there is evidence of harm to the receptor.

Table 6.3 compares the probability against the severity to provide an overall risk rating for each contaminant linkage.

Table 6.3 Comparison of Probability and Severity

Probability	Severity			
	Minor	**Mild**	**Medium**	**Severe**
Unlikely	Very Low Risk	Very Low Risk	Low Risk	Low / Moderate Risk
Low Likelihood	Very Low Risk	Low Risk	Low / Moderate Risk	Moderate Risk
Likely	Low Risk	Low / Moderate Risk	Moderate Risk	High Risk
High Likelihood	Low / Moderate Risk	Moderate Risk	High Risk	Very High Risk

Typical consequences for each category of risk rating and likely required actions are provided in Table 6.4.

Table 6.4 Typical Risk Category Consequences and Actions

Risk Category	Typical Consequence and Actions
Very Low Risk	Harm is unlikely to occur and be any worse than mild.
Low Risk	Harm could occur and at worst would normally be mild. Limited further investigation may be required to clarify the risk. Remediation works are unlikely to be required and would be limited.
Low /Moderate Risk	Harm could occur, but it is unlikely that it would be severe. Limited further investigation may be required to clarify the risk. If required, remediation works are likely to be limited.
Moderate Risk	Harm could occur, but there is a low likelihood that it would be severe. Harm is likely to be mild. Some remediation works may be required in the short-term or long-term.
High Risk	Harm is likely to occur, and is likely to be severe, unless appropriate remediation or mitigation measures are completed. Remedial works may be required in the short-term and are likely to be required over the long-term.
Very High Risk	Severe harm might already be occurring, or a high likelihood that severe harm will occur unless immediate remediation or mitigation measures are completed.

It should be noted that the identification of potential contaminant linkages does not indicate that they are significant.

6.5 Conceptual Site Model

A CSM has been created using the above information and is provided on the following page.

Table 6.5 Conceptual Site Model

Source	Contaminant	Migration Pathway	Potential Receptors	Probability	Severity	Overall Risk Rating	Active / Inactive
On-Site							
Made Ground associated with demolished structures which appear to have been demolished in approximately 1969	Heavy Metals	Ingestion, inhalation or dermal contact with soils	Future site users	Low Likelihood	Mild	Low	Active in areas of former structures only. Localised investigation only required.
		Leaching to groundwater	Superficial and Bedrock aquifers	Low Likelihood	Mild	Low	
		Leaching to groundwater and subsequent lateral migration	Walshaw Brook	Unlikely	Mild	Very Low	
	Total Petroleum Hydrocarbons and Polycyclic Aromatic Hydrocarbons	Ingestion, inhalation or dermal contact with soils	Future site users	Unlikely	Mild	Very Low	
		Leaching to groundwater	Superficial and Bedrock aquifers	Low Likelihood	Mild	Low	
		Leaching to groundwater and subsequent lateral migration	Walshaw Brook	Unlikely	Mild	Very Low	
	Asbestos fibres	Inhalation of fibres	Future site users	Low Likelihood	Medium	Low / Moderate	
Infilled sand pits in NE of site	Heavy Metals	Ingestion, inhalation or dermal contact with soils	Future site users	Low Likelihood	Mild	Low	Active in area of infilled sand pits. Further investigation required to confirm type of fill and extent.
		Leaching to groundwater	Superficial and Bedrock aquifers	Low Likelihood	Mild	Low	
		Leaching to groundwater and subsequent lateral migration	Walshaw Brook	Unlikely	Mild	Very Low	
	Total Petroleum Hydrocarbons and Polycyclic Aromatic Hydrocarbons	Ingestion, inhalation or dermal contact with soils	Future site users	Unlikely	Mild	Very Low	
		Leaching to groundwater	Superficial and Bedrock aquifers	Low Likelihood	Mild	Low	
		Leaching to groundwater and subsequent lateral migration	Walshaw Brook	Unlikely	Mild	Very Low	

	Asbestos fibres	Inhalation of fibres	Future site users	Low Likelihood	Medium	Low / Moderate	
Ground gases generated from coal seams	Ground gases	Migration of gases into buildings and subsequent inhalation.	Future site users	Low Likelihood	Mild	Low	Active in areas where coal seams present – Further investigation required.
Mine Entry	Heavy Metals	Ingestion, inhalation or dermal contact with soils	Future site users	Low Likelihood	Mild	Low	Active in areas of former structures only. Localised investigation only required.
		Leaching to groundwater	Superficial and Bedrock aquifers	Low Likelihood	Mild	Low	
		Leaching to groundwater and subsequent lateral migration	Walshaw Brook	Unlikely	Mild	Very Low	
	Total Petroleum Hydrocarbons and Polycyclic Aromatic Hydrocarbons	Ingestion, inhalation or dermal contact with soils	Future site users	Unlikely	Mild	Very Low	
		Leaching to groundwater	Superficial and Bedrock aquifers	Low Likelihood	Mild	Low	
		Leaching to groundwater and subsequent lateral migration	Walshaw Brook	Unlikely	Mild	Very Low	
	Asbestos fibres	Inhalation of fibres	Future site users	Low Likelihood	Medium	Low / Moderate	
Mine Entry	Ground gases	Migration of gases into buildings and subsequent inhalation.	Future site users	Low Likelihood	Medium	Low / Moderate	Active in area of mine entry and immediate surrounding area. Further investigation required to confirm location and backfilling / capping.
Off Site							
Vehicle Repair and Servicing (nearest located 16m NW) and Generic Tank (36m SE)	Heavy Metals	Ingestion, inhalation or dermal contact with soils	Future site users	Unlikely	Mild	Very Low	**Potentially Active –** Further investigation required.
		Leaching to groundwater and lateral migration within groundwater	Secondary A aquifers and Walshaw Brook	Low Likelihood	Mild	Low	
	Total Petroleum Hydrocarbons and Polycyclic Aromatic Hydrocarbons	Ingestion, inhalation or dermal contact with soils	Future site users	Unlikely	Mild	Very Low	
		Leaching to groundwater and lateral migration within groundwater	Secondary A aquifers and Walshaw Brook	Low Likelihood	Mild	Low	

Electricity Substation (nearest located 27m NW)	PCB's	Leaching to groundwater and lateral migration within groundwater	Secondary A aquifers and Walshaw Brook	Unlikely	Mild	Very Low	**Inactive** – due to the immobile nature of the contaminants, it is unlikely to present a risk.
Unspecified Works / Factories / Depot (nearest located 47m N)	Heavy Metals	Ingestion, inhalation or dermal contact with soils	Future site users	Low Likelihood	Mild	Low	**Inactive –** contamination pathway unlikely to be active due to distance from source to receptor.
		Leaching to groundwater and lateral migration within groundwater	Secondary A aquifers and Walshaw Brook	Unlikely	Mild	Very Low	
	Total Petroleum Hydrocarbons and Polycyclic Aromatic Hydrocarbons	Ingestion, inhalation or dermal contact with soils	Future site users	Low Likelihood	Mild	Low	
		Leaching to groundwater and lateral migration within groundwater	Secondary A aquifers and Walshaw Brook	Low Likelihood	Mild	Low	
	Asbestos fibres	Inhalation of fibres	Future site users	Unlikely	Medium	Low	
	Ground gases	Migration of gases into buildings and subsequent inhalation.	Future site users	Unlikely	Mild	Very Low	
Landfill 92m north accepting industrial waste last used 1977	Ground gases	Migration of gases into buildings and subsequent inhalation.	Future site users	Unlikely	Mild	Very Low	**Inactive –** contamination pathway unlikely to be active due to distance from source to receptor.

7.0 CONCLUSIONS & RECOMMENDATIONS

7.1 Human Health

Overall, the preliminary risk classification of the site in relation to the proposed development is considered to be **Low / Moderate** in localised areas only. The remainder of the site is very low risk with no historic contaminating land uses identified.

The risk to human health from potential **off-site** sources is considered to be **Very Low / Low.**

7.2 Controlled Waters

The risk posed to surface water groundwater aquifers is considered to be **Very Low / Low** in localised areas only. The remainder of the site is very low risk with no historic contaminating land uses identified.

7.3 Geotechnical Constraints

Coal seams, a mine entry and infilled land have been identified as part of this desk study and future ground investigation should incorporate the following to address these risks:

- Trenching around the mine shaft to confirm location and backfilling or capping details;
- Boreholes and trial trenches in the area of the infilled sand pits to confirm the extent and depth and inform design of foundations; and
- Boreholes to confirm the presence of coal seam, their thickness and if they have been worked locally.

7.3 Recommendations

Based on the proposed end use of residential with access roads and footpath connections and the lack of historical development it is considered that intrusive ground investigation is only required with respect to contaminated land in the areas identified.

It is understood however that a ground investigation to establish geotechnical properties for subsequent foundation design will be undertaken. During this investigation a watching brief by the geotechnical / geo-environmental site engineer should be kept to look for the potential for any contamination and adjust the scope of the investigation as appropriate. Due to the presence of coal seams and a historical mine shaft on site it would be appropriate to identify the depth and extent of coal within the underlying strata, and if appropriate to install combined ground gas and ground water monitoring pipes to evaluate any requirements for gas remediation measures. Dependant on what is found a typical monitoring of 3 months would be required based on likely ground gas generation and proposed use of the site.

APPENDIX I

LIMITATIONS

1. This report and its findings should be considered in relation to the terms of reference and objectives agreed between REC Ltd and the Client.

2. For the work, reliance has been placed on publicly available data obtained from the sources identified. The information is not necessarily exhaustive and further information relevant to the site may be available from other sources. When using the information, it has been assumed it is correct. No attempt has been made to verify the information.

3. This report has been produced in accordance with current UK policy and legislative requirements for land and groundwater contamination which are enforced by the local authority and the Environment Agency. Liabilities associated with land contamination are complex and requires advice from legal professionals.

4. During the site walkover reasonable effort has been made to obtain an overview of the site conditions. However, during the site walkover no attempt has been made to enter areas of the site that are unsafe or present a risk to health and safety, are locked, barricaded, overgrown, or the location of the area has not be made known or accessible.

5. Access considerations, the presence of services and the activities being carried out on the site limited the locations where sampling locations could be installed and the techniques that could be used.

6. Site sensitivity assessments have been made based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.

7. Where mention has been made to the identification of Japanese Knotweed and other invasive plant species and asbestos or asbestos-containing materials this is for indicative purposes only and do not constitute or replace full and proper surveys.

8. The executive summary, conclusions and recommendations sections of the report provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.

9. REC cannot be held responsible for any use of the report or its contents for any purpose other than that for which it was prepared. The copyright in this report and other plans and documents prepared by REC is owned by them and no such plans or documents may be reproduced, published or adapted without written consent. Complete copies of this may, however, be made and distributed by the client as is expected in dealing with matters related to its commission. Should the client pass copies of the report to other parties for information, the whole report should be copied, but no professional liability or warranties shall be extended to other parties by REC in this connection without their explicit written agreement there to by REC.

10. New information, revised practices or changes in legislation may necessitate the re-interpretation of the report, in whole or in part.

APPENDIX II

GLOSSARY

TERMS

AST	Above Ground Storage Tank
BGS	British Geological Survey
BSI	British Standards Institute
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CIEH	Chartered Institute of Environmental Health
CIRIA	Construction Industry Research Association
CLEA	Contaminated Land Exposure Assessment
CSM	Conceptual Site Model
DNAPL	Dense Non-Aqueous Phase Liquid (chlorinated solvents, PCB)
DWS	Drinking Water Standard
EA	Environment Agency
EQS	Environmental Quality Standard
GAC	General Assessment Criteria
GL	Ground Level
GSV	Gas Screening Value
HCV	Health Criteria Value
ICSM	Initial Conceptual Site Model
LNAPL	Light Non-Aqueous Phase Liquid (petrol, diesel, kerosene)
ND	Not Detected
LMRL	Lower Method Reporting Limit
NR	Not Recorded
PAH	Poly Aromatic Hydrocarbon
PCB	Poly-Chlorinated Biphenyl
PID	Photo Ionisation Detector
QA	Quality Assurance
SGV	Soil Guideline Value
SPH	Separate Phase Hydrocarbon
Sp.TPH (CWG)	Total Petroleum Hydrocarbon (Criteria Working Group)
SPT	Standard Penetration Test
SVOC	Semi Volatile Organic Compound
UST	Underground Storage Tank
VCCs	Vibro Concrete Columns
VOC	Volatile Organic Compound
WTE	Water Table Elevation

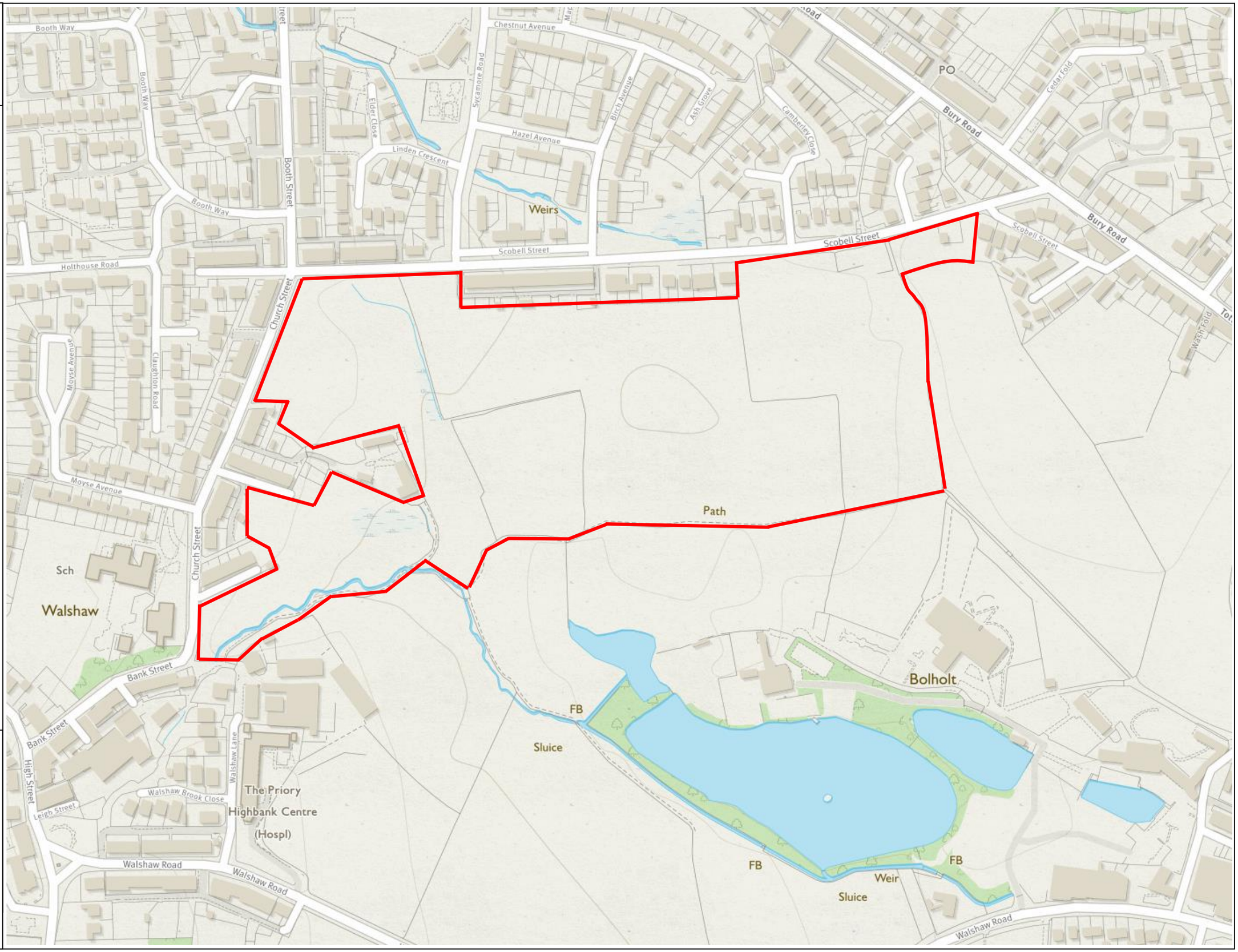
APPENDIX III

DRAWINGS

KEY:

N

Site Boundary



REC Ltd
Osprey House,
Pacific Quay, Broadway,
Manchester, M50 2UE

T: +44 161 868 1300
recltd.co.uk

Job Title:

Scobell Street, Bury

Client:

HIMOR

Job No:	107765
Drawn By:	LM
Approved by:	ML

Notes:

Drawing Title:

Site Location Plan – 107765 - 001

APPENDIX IV

PHOTOGRAPHS

Photograph 1 - Site Access

Photograph 2 – Typical ground conditions throughout site

Photograph 3 – Typical ground conditions

APPENDIX V

GROUNDSURE AND COAL AUTHORITY REPORT

Groundsure
LOCATION INTELLIGENCE

Resource & Environmental Consultants Ltd REC

RESOURCE & ENVIRONMENTAL
CONSULTANTS LTD, OSPREY HOUSE 217-227,
BROADWAY,
SALFORD, M50 2UE

Groundsure Reference:	GS-6447702
Your Reference:	107765_Walshaw_Road_-_Himor
Report Date	7 Nov 2019
Report Delivery Method:	Email - pdf

Enviro Insight

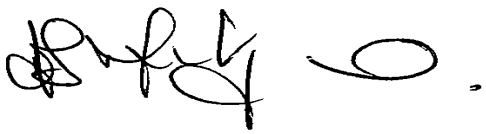
Address: Walshaw Road, BL8 3DE

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Enviro Insight

Address:	**Walshaw Road, BL8 3DE**
Date:	**7 Nov 2019**
Reference:	**GS-6447702**
Client:	**Resource & Environmental Consultants Ltd REC**

NW N NE

W E

SW S SE

Aerial Photograph Capture date:	26-Mar-2012
Grid Reference:	378065,412054
Site Size:	11.5537ha

Report Reference: GS-6447702
Client Reference: 107765_Walshaw_Road_-_Himor

Contents Page

Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	7	18	37	82
1.2 Additional Information – Historical Tank Database	0	6	22	39
1.3 Additional Information – Historical Energy Features Database	0	0	6	21
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	9	20
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	10	8	39	102

Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	1
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	2
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	1	1	1	1
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	2	2	1	5
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	1
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	1	0	0	4
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	1	1

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	4	11	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	1
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	0-500m
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	2	0	3	16
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	4	3	15
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	1	0	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

	0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	Yes	Yes
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	12	4	26	56	Not searched	Not searched
6.11 Surface water features within 250m of the study site	Yes	Yes	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site	None identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Potential at Surface
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Low

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	0
8.7 Records of Local Nature Reserves (LNR)	0	0	0	3	1	1
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0
8.14 Records of Green Belt land	1	0	0	1	0	7

Section 9: Natural Hazards

9.1 Maximum risk of natural ground subsidence	Very Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Very Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining

10.1 Coal mining areas within 75m of the study site	Identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	None identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

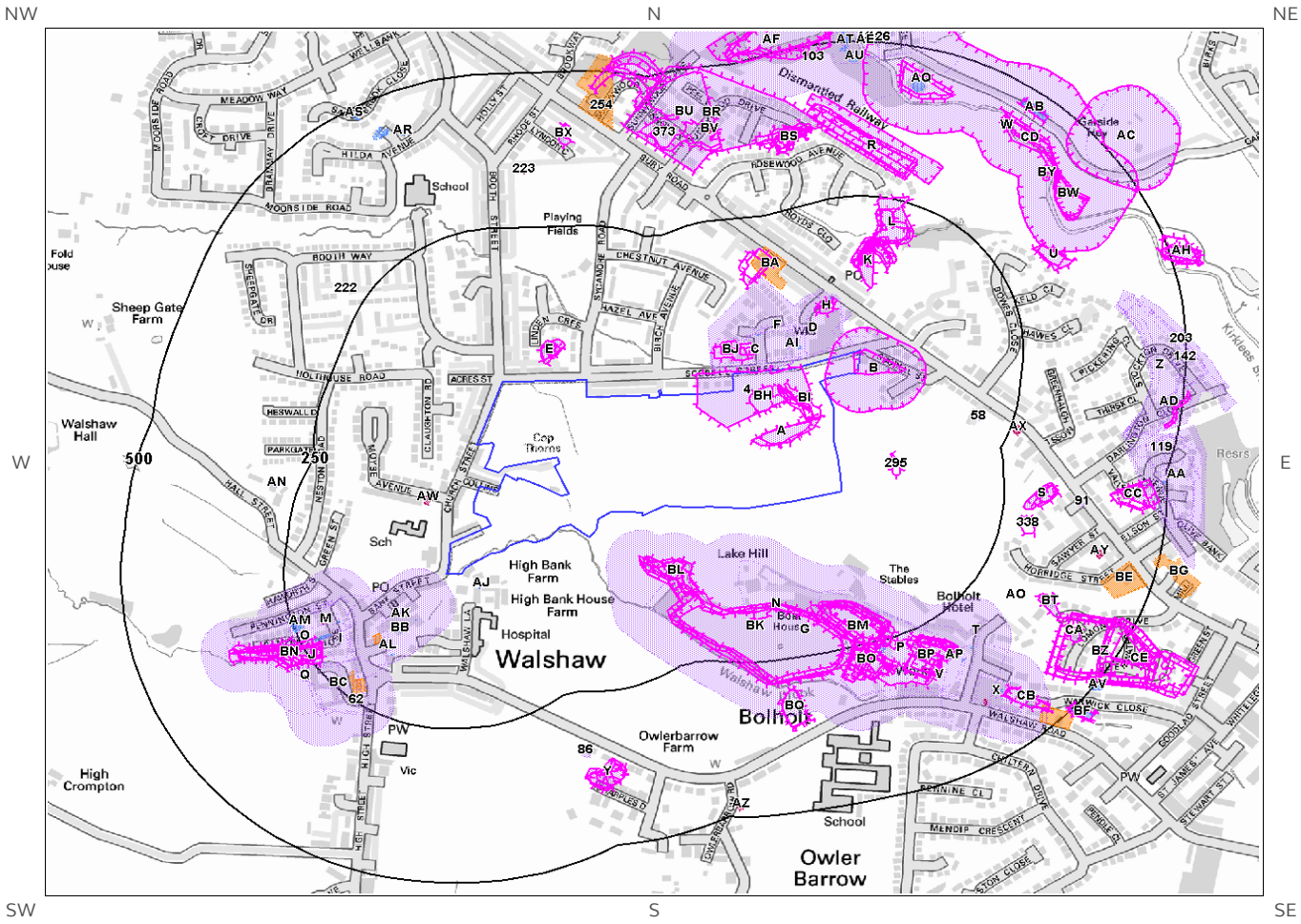
Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier “A” on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as “Not Shown”.

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Historical Land Use



Site Outline

250
500
Search Buffers (m)

Historical 1:10,000 and 1:10,560 scale mapping

Industrial Land Use

Potentially Infilled Land

Historical 1:2,500, 1:1,250 and 1:500 scale mapping

Energy Features

Petrol Stations

Historical military sites

Tanks

Garages

1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 144

ID	Distance [m]	Direction	Use	Date
1B	0	On Site	Brick Field	1909
2A	0	On Site	Unspecified Pit	1928
3BH	0	On Site	Sand Pit	1851
4	0	On Site	Brick Field	1851
5A	0	On Site	Unspecified Pit	1956
6B	0	On Site	Brick Field	1956
7B	0	On Site	Brick Field	1928
8C	3	N	Unspecified Mill	1938
9C	3	N	Cotton Mill	1909
10C	3	N	Unspecified Mill	1928
11F	4	NE	Unspecified Mills	1891
12D	7	N	Unspecified Mill	1851
13C	11	N	Unspecified Mill	1956
14AK	11	SW	Unspecified Depot	1980
15D	15	N	Unspecified Works	1969
16D	15	N	Unspecified Works	1980
17D	15	N	Unspecified Works	1974
18C	16	N	Unspecified Mill	1974
19C	16	N	Unspecified Mill	1980
20C	16	N	Unspecified Mill	1969
21G	24	S	Print Works	1938
22E	28	N	Unspecified Pit	1938
23AI	32	N	Unspecified Tank	1851
24E	34	N	Unspecified Pit	1928
25E	37	N	Unspecified Pit	1956
26F	61	N	Chimney	1969
27F	61	N	Chimney	1980
28F	61	N	Chimney	1974
29G	66	S	Print Works	1909
30G	66	S	Print Works	1891
31G	66	S	Print Works	1928
32H	72	N	Refuse Heap	1938
33H	79	N	Refuse Heap	1928
34K	102	N	Unspecified Pit	1909

35I	115	SW	Unspecified Depot	1969
36I	115	SW	Unspecified Depot	1974
37J	116	W	Unspecified Mills	1928
38J	116	W	Cotton Mills	1909
39K	134	N	Refuse Heap	1938
40L	135	N	Refuse Heap	1974
41K	136	N	Refuse Heap	1928
42L	140	N	Refuse Heap	1969
43K	143	N	Refuse Heap	1956
44L	148	N	Refuse Heap	1980
45P	152	S	Unspecified Works	1969
46O	155	W	Unspecified Mills	1956
47M	157	SW	Unspecified Works	1969
48M	157	SW	Unspecified Works	1980
49M	157	SW	Unspecified Works	1974
50N	162	S	Boat House	1956
51N	164	S	Boat House	1909
52N	165	S	Boat House	1928
53N	165	S	Boat House	1938
54I	166	SW	Unspecified Mills	1938
55O	172	SW	Unspecified Mill	1891
56O	186	SW	Cotton Mill	1851
57BC	190	SW	Unspecified Mill	1956
58	198	E	Pump	1851
59P	201	S	Unspecified Works	1974
60Q	220	SW	Unspecified Mill	1928
61J	240	SW	Unspecified Tank	1851
62	247	SW	Unspecified Tank	1956
63BO	256	S	Filter Beds	1909
64Q	269	SW	Unspecified Mill	1938
65S	280	E	Unspecified Pit	1891
66R	285	N	Cuttings	1938
67R	288	N	Cuttings	1969
68R	288	N	Cuttings	1974
69R	288	N	Cuttings	1980
70R	290	N	Cuttings	1928
71R	294	N	Cuttings	1909
72R	294	N	Cuttings	1891
73S	296	E	Unspecified Pit	1909
74S	303	E	Unspecified Pit	1938
75T	306	SE	Chimney	1969
76T	306	SE	Chimney	1974
77V	309	SE	Mills	1851
78U	311	NE	Cuttings	1928
79X	315	SE	Print Works	1956
80U	317	NE	Cuttings	1909

81U	317	NE	Cuttings	1891
82V	318	S	Unspecified Works	1980
83W	324	NE	Sewage Works	1928
84W	324	NE	Sewage Works	1909
85BR	332	N	Brick Field	1891
86	337	SE	Pump House	1938
87BT	347	SE	Unspecified Pit	1891
88Y	359	S	Unspecified Heap	1891
89BU	364	N	Unspecified Pit	1891
90X	365	SE	Unspecified Works	1969
91	365	E	Smithy	1851
92X	366	SE	Unspecified Works	1974
93X	366	SE	Unspecified Works	1980
94Y	368	S	Unspecified Heap	1938
95Y	371	S	Unspecified Heap	1928
96Y	371	S	Unspecified Heap	1909
97Y	376	S	Unspecified Old Shaft	1891
98Y	376	S	Old Coal Shaft	1909
99Y	377	S	Unspecified Ground Workings	1956
100Y	379	SE	Unspecified Heap	1938
101BX	382	N	Sand Pit	1851
102BW	383	NE	Filter Beds	1909
103	391	N	Unspecified Works	1938
104BY	394	NE	Filter Beds	1909
105Z	396	E	Railway Sidings	1909
106Z	401	E	Railway Sidings	1928
107Z	402	E	Railway Sidings	1891
108Z	410	E	Railway Sidings	1938
109CA	412	SE	Unspecified Pit	1891
110Z	422	E	Railway Sidings	1956
111AQ	425	N	Filter Beds	1909
112AA	427	E	Unspecified Commercial/Industrial	1980
113AA	427	E	Unspecified Commercial/Industrial	1974
114AA	428	E	Unspecified Mill	1928
115AA	429	E	Unspecified Mill	1891
116AA	429	E	Cotton Mill	1909
117BD	443	N	Refuse Heap	1969
118AC	448	NE	Sewage Works	1938
119	454	E	Unspecified Works	1969
120AA	455	E	Unspecified Mill	1956
121AE	464	N	Unspecified Works	1928
122AB	466	NE	Unspecified Tanks	1928
123AB	466	NE	Unspecified Tanks	1909
124AC	466	NE	Irrigation Works	1891

125AD	469	E	Railway Building	1938
126	472	N	Unspecified Works	1969
127AD	472	E	Railway Building	1928
128AE	473	N	Unspecified Works	1974
129AE	473	N	Unspecified Works	1980
130AA	473	E	Unspecified Mill	1938
131	475	N	Unspecified Works	1956
132AD	478	E	Unspecified Ground Workings	1928
133Z	478	E	Railway Building	1928
134Z	479	E	Railway Building	1938
135AF	481	N	Unspecified Pit	1980
136AF	481	N	Unspecified Pit	1974
137AD	483	E	Railway Building	1956
138AG	484	N	Unspecified Ground Workings	1980
139AG	485	N	Unspecified Heap	1974
140AA	487	E	Unspecified Mill	1969
141AH	487	E	Unspecified Heap	1969
142	492	E	Railway Building	1956
143AH	495	E	Unspecified Heap	1974
144AH	495	E	Unspecified Heap	1980

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary: 67

ID	Distance (m)	Direction	Use	Date
145AI	27	N	Unspecified Tank	1890
146AJ	34	SE	Unspecified Tank	1998
147AJ	34	SE	Unspecified Tank	1989
148AJ	34	SE	Unspecified Tank	1989
149AJ	34	SE	Unspecified Tank	1989
150AJ	35	SE	Unspecified Tank	1975
151F	57	N	Unspecified Tank	1890
152F	57	N	Unspecified Tank	1910
153AK	89	SW	Unspecified Tank	1975
154H	90	N	Unspecified Tank	1890
155BB	117	SW	Unspecified Tank	1975
156AL	149	SW	Unspecified Tank	1959
157AL	149	SW	Unspecified Tank	1959

158AL	153	SW	Unspecified Tank	1975
159M	182	SW	Unspecified Tank	1890
160M	206	SW	Tanks	1975
161O	206	SW	Tanks	1989
162O	206	SW	Tanks	1989
163O	206	SW	Tanks	1989
164O	223	SW	Tanks	1975
165O	236	W	Tanks	1975
166AM	239	W	Tanks	1975
167AM	239	W	Tanks	1989
168AM	239	W	Tanks	1989
169AM	239	W	Tanks	1989
170AM	245	W	Tanks	1975
171AM	250	W	Tanks	1975
172AM	250	W	Tanks	1975
173P	254	S	Tanks	1930
174AN	283	W	Unspecified Tank	1959
175AN	283	W	Unspecified Tank	1992
176AN	283	W	Unspecified Tank	1959
177AO	319	SE	Unspecified Tank	1891
178AP	320	SE	Unspecified Tank	1891
179T	320	SE	Unspecified Tank	1890
180AO	322	SE	Unspecified Tank	1891
181AP	329	SE	Unspecified Tank	1990
182X	404	SE	Tanks	1930
183AR	426	N	Unspecified Tank	1930
184AQ	428	N	Unspecified Tank	1960
185AR	436	NW	Tanks	1997
186AR	437	NW	Tanks	1973
187AR	438	NW	Tanks	1989
188AR	438	NW	Tanks	1997
189AR	439	NW	Tanks	1973
190AR	440	NW	Tanks	1989
191AR	445	NW	Tanks	1967
192AB	467	NE	Tanks	1890
193AB	467	NE	Tanks	1910
194AB	467	NE	Unspecified Tank	1930
195AU	467	N	Tanks	1930
196AB	468	NE	Unspecified Tank	1930
197AT	478	N	Tanks	1960
198AS	478	NW	Tanks	1967
199AS	478	NW	Tanks	1960
200AT	478	N	Tanks	1959
201AS	484	NW	Tanks	1965
202AU	486	N	Unspecified Tank	1930
203	492	E	Unspecified Tank	1891

204AA	494	E	Unspecified Tank	1890
205AT	494	N	Tanks	1960
206AT	494	N	Tanks	1959
207BF	498	SE	Settling Tanks	1930
208AV	498	SE	Unspecified Tank	1978
209AV	499	SE	Unspecified Tank	1959
210AV	499	SE	Unspecified Tank	1967
211AV	499	SE	Unspecified Tank	1959

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary: 27

ID	Distance (m)	Direction	Use	Date
212AW	68	W	Electricity Substation	1998
213AW	68	W	Electricity Substation	1975
214AW	69	W	Electricity Substation	1989
215AW	69	W	Electricity Substation	1989
216AW	69	W	Electricity Substation	1989
217AM	203	W	Electricity Substation	1998
218AX	255	E	Electricity Substation	1988
219AX	255	E	Electricity Substation	1985
220AX	256	E	Electricity Substation	1978
221AX	256	E	Electricity Substation	1992
222	278	NW	Electricity Substation	1992
223	337	N	Electricity Substation	1992
224BV	391	N	Electricity Substation	1992
225AY	400	E	Electricity Substation	1990
226AY	401	E	Electricity Substation	1993
227AY	401	E	Electricity Substation	1996
228X	402	SE	Electricity Substation	1993
229X	402	SE	Electricity Substation	1996
230X	402	SE	Electricity Substation	1990
231AY	405	E	Electricity Substation	1987
232AY	405	E	Electricity Substation	1978
233AY	405	E	Electricity Substation	1988
234AY	405	E	Electricity Substation	1985
235AY	405	E	Electricity Substation	1988
236AY	405	E	Electricity Substation	1967
237AZ	480	S	Electricity Substation	1975
238AZ	481	S	Electricity Substation	1992

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 29

ID	Distance (m)	Direction	Use	Date
239BA	127	N	Garage	1960
240BA	127	N	Garage	1959
241BA	127	N	Garage	1968
242BB	141	SW	Garage	1959
243AL	142	SW	Garage	1959
244BC	211	SW	Garage	1989
245BC	211	SW	Garage	1989
246BC	211	SW	Garage	1989
247BC	216	SW	Garage	1975
248BD	406	N	Garage	1960
249BD	413	N	Garage	1973
250BD	413	N	Garage	1967
251BE	424	E	Garage	1996
252BE	424	E	Garage	1993
253BE	424	E	Garage	1990
254	432	N	Garage	1965
255BF	464	SE	Garage	1993
256BF	464	SE	Garage	1996
257BF	464	SE	Garage	1987
258BF	464	SE	Garage	1985
259BF	464	SE	Garage	1988
260BF	464	SE	Garage	1988
261BF	464	SE	Garage	1978
262BF	465	SE	Garage	1990
263BF	465	SE	Garage	1967
264BG	492	E	Garage	1988

265BG	492	E	Garage	1985
266BG	492	E	Garage	1988
267BG	492	E	Garage	1987

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary: 0

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 159

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

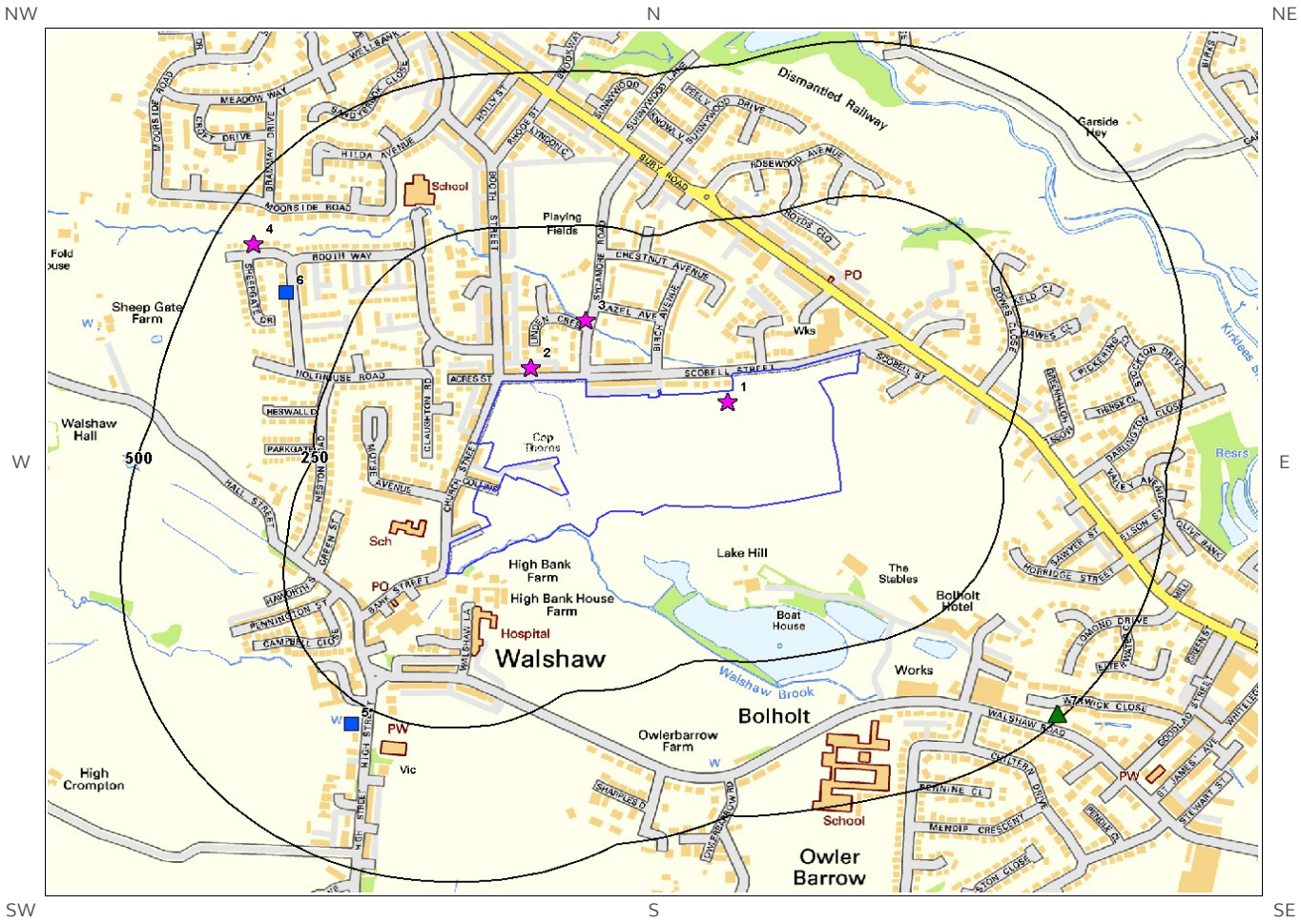
ID	Distance(m)	Direction	Use	Date
268A	0	On Site	Unspecified Pit	1928
269A	0	On Site	Unspecified Pit	1956
270B	0	On Site	Brick Field	1928
271B	0	On Site	Brick Field	1909
272BH	0	On Site	Sand Pit	1851
273BH	0	On Site	Brick Field	1851
274B	0	On Site	Brick Field	1956
275BI	0	On Site	Ponds	1956
276BI	0	On Site	Ponds	1928
277BI	0	On Site	Ponds	1938
278BJ	21	N	Ponds	1891
279BJ	21	N	Reservoirs	1928
280BJ	21	N	Reservoirs	1909
281BJ	21	N	Reservoirs	1938
282E	28	N	Unspecified Pit	1938
283BJ	28	N	Reservoirs	1956
284E	34	N	Unspecified Pit	1928
285E	37	N	Unspecified Pit	1956
286BK	66	S	Reservoirs	1928
287BK	66	S	Reservoir	1891
288BK	66	S	Reservoirs	1909
289BL	67	S	Reservoirs	1956
290BL	67	S	Pond	1969
291BL	68	S	Pond	1980

292H	72	N	Refuse Heap	1938
293BK	74	S	Reservoirs	1938
294H	79	N	Refuse Heap	1928
295	80	E	Pond	1909
296K	102	N	Unspecified Pit	1909
297K	134	N	Refuse Heap	1938
298L	135	N	Refuse Heap	1974
299K	136	N	Refuse Heap	1928
300BK	138	S	Reservoirs	1956
301BK	138	S	Pond	1980
302BK	138	S	Pond	1969
303BK	138	S	Pond	1974
304L	140	N	Refuse Heap	1969
305BA	140	N	Reservoirs	1909
306BA	140	N	Ponds	1891
307K	143	N	Refuse Heap	1956
308L	148	N	Refuse Heap	1980
309BA	150	N	Pond	1851
310G	160	S	Water Bodies	1851
311BM	168	S	Ponds	1891
312BM	171	S	Pond	1980
313BM	171	S	Pond	1974
314BM	171	S	Pond	1969
315BM	172	S	Reservoirs	1956
316BM	172	S	Ponds	1928
317BM	176	S	Pond	1909
318J	220	SW	Reservoirs	1956
319J	223	SW	Reservoir	1980
320BN	228	SW	Reservoirs	1938
321BN	232	SW	Ponds	1891
322BN	232	SW	Reservoirs	1909
323BN	232	SW	Reservoirs	1928
324BN	242	SW	Pond	1851
325BO	252	S	Ponds	1938
326BO	256	S	Filter Beds	1909
327AP	259	SE	Pond	1891
328AP	262	SE	Ponds	1969
329AP	262	SE	Ponds	1974
330AP	263	SE	Pond	1980
331AP	267	SE	Reservoirs	1956
332BP	267	SE	Reservoirs	1928
333BP	267	SE	Reservoirs	1909
334BP	267	SE	Reservoirs	1938
335BO	271	S	Pond	1980
336BO	272	S	Ponds	1938
337S	280	E	Unspecified Pit	1891

338	281	E	Ponds	1891
339R	285	N	Cuttings	1938
340R	288	N	Cuttings	1974
341R	288	N	Cuttings	1969
342R	288	N	Cuttings	1980
343R	290	N	Cuttings	1928
344R	294	N	Cuttings	1891
345R	294	N	Cuttings	1909
346S	296	E	Unspecified Pit	1909
347BQ	301	S	Ponds	1938
348BQ	301	S	Ponds	1928
349S	303	E	Unspecified Pit	1938
350U	311	NE	Cuttings	1928
351U	317	NE	Cuttings	1909
352U	317	NE	Cuttings	1891
353W	324	NE	Sewage Works	1928
354W	324	NE	Sewage Works	1909
355BR	332	N	Brick Field	1891
356BS	339	N	Ponds	1938
357BS	339	N	Ponds	1909
358BS	341	N	Ponds	1928
359BS	342	N	Ponds	1956
360BT	347	SE	Unspecified Pit	1891
361BS	347	N	Ponds	1891
362BS	352	N	Pond	1851
363Y	359	S	Unspecified Heap	1891
364BU	364	N	Unspecified Pit	1891
365Y	368	S	Unspecified Heap	1938
366BV	369	N	Ponds	1891
367Y	371	S	Unspecified Heap	1909
368Y	371	S	Unspecified Heap	1928
369Y	376	S	Unspecified Old Shaft	1891
370Y	376	S	Old Coal Shaft	1909
371Y	377	S	Unspecified Ground Workings	1956
372Y	379	SE	Unspecified Heap	1938
373	381	N	Pond	1909
374BW	381	NE	Ponds	1938
375BX	382	N	Sand Pit	1851
376BY	383	NE	Ponds	1928
377BW	383	NE	Ponds	1891
378BW	383	NE	Filter Beds	1909
379BY	394	NE	Filter Beds	1909
380BZ	398	SE	Reservoirs	1938
381BZ	398	SE	Reservoirs	1928
382BZ	398	SE	Reservoirs	1909

383BZ	404	SE	Ponds	1969
384BZ	404	SE	Reservoirs	1974
385BZ	406	SE	Reservoirs	1956
386BZ	407	SE	Reservoirs	1980
387CB	409	SE	Pond	1938
388CA	412	SE	Unspecified Pit	1891
389CB	412	SE	Pond	1928
390CD	412	NE	Ponds	1938
391CC	413	E	Pond	1891
392CC	413	E	Pond	1909
393CC	413	E	Reservoir	1938
394CC	414	E	Reservoir	1928
395AQ	418	N	Ponds	1938
396CD	423	NE	Ponds	1891
397AQ	425	N	Ponds	1891
398AQ	425	N	Ponds	1928
399AQ	425	N	Filter Beds	1909
400CC	427	E	Reservoir	1980
401CC	427	E	Reservoir	1974
402CC	427	E	Pond	1969
403CC	427	E	Reservoir	1956
404BD	443	N	Refuse Heap	1969
405AC	448	NE	Sewage Works	1938
406AB	466	NE	Ponds	1891
407AB	466	NE	Ponds	1938
408CE	466	SE	Reservoirs	1891
409CE	466	SE	Reservoirs	1909
410AD	478	E	Unspecified Ground Workings	1928
411AF	481	N	Unspecified Pit	1980
412AF	481	N	Unspecified Pit	1974
413AG	484	N	Unspecified Ground Workings	1980
414AG	485	N	Unspecified Heap	1974
415AH	487	E	Unspecified Heap	1969
416AH	488	E	Reservoir	1938
417AH	489	E	Reservoir	1928
418AH	489	E	Reservoir	1909
419CE	489	SE	Ponds	1851
420AF	492	N	Reservoir	1938
421BF	494	SE	Ponds	1938
422BF	495	SE	Ponds	1928
423AF	495	N	Reservoir	1928
424AH	495	E	Unspecified Heap	1974
425AH	495	E	Unspecified Heap	1980
426AF	497	N	Reservoir	1956

2. Environmental Permits, Incidents and Registers Map



- Site Outline
- Search Buffers (m) — 250 — 500
- Recorded Pollution Incident
- Dangerous Substances (List 1)
- Dangerous Substances (List 2)
- Water Industry Referrals
- Licenced Discharge Consents
- Red List Discharge Consents
- RAS 3 & 4 Authorisations
- Part A(1) Authorised Processes and Historic IPC Authorisations
- Part A(2) and Part B Authorised Processes
- COMAH / NIHHS Sites
- Sites Determined as Contaminated Land
- Hazardous Substance Consents and Enforcements

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

1

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
7	493	SE	378684 411615	Address: Hooshang Ghayouri, Walshaw Road Filling Station, Walshaw Road, BL8 1PY Process: Petrol Vapour Recovery Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

2

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
5	285	SW	377600 411600	Address: DUSSEK CAMPBELL LTD, NEWHIVE WORKS, WALSHAW, BURY, GREATER MANCHESTER Effluent Type: TRADE DISCHARGES - COOLING WATER Permit Number: 016990436 Permit Version: 1	Receiving Water: WALSHAW BROOK Status: REVOKED - UNSPECIFIED Issue date: Effective Date: 01-Sep-1983 Revocation Date: 13/02/1991
6	361	NW	377500 412300	Address: BALI-HAI, BRADSHAW ROAD, TOTTINGTON, BURY, LANCASHIRE, BL8 3PL Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 01M/61 Permit Version: 1	Receiving Water: UNKNOWN Status: TRANSFERRED FROM WRA 1963 Issue date: 21/04/1964 Effective Date: 21-Apr-1964 Revocation Date:

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site: 0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

4

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
1	0	On Site	378176.0 412123.0	Incident Date: 02-Apr-2001 Incident Identification: 1322.0 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
2	21	N	377875.0 412178.0	Incident Date: 15-Apr-2002 Incident Identification: 71385.0 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
3	96	N	377958.0 412255.0	Incident Date: 27-Jul-2001 Incident Identification: 19615.0 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
4	443	NW	377449.0 412379.0	Incident Date: 28-Aug-2001 Incident Identification: 27167.0 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

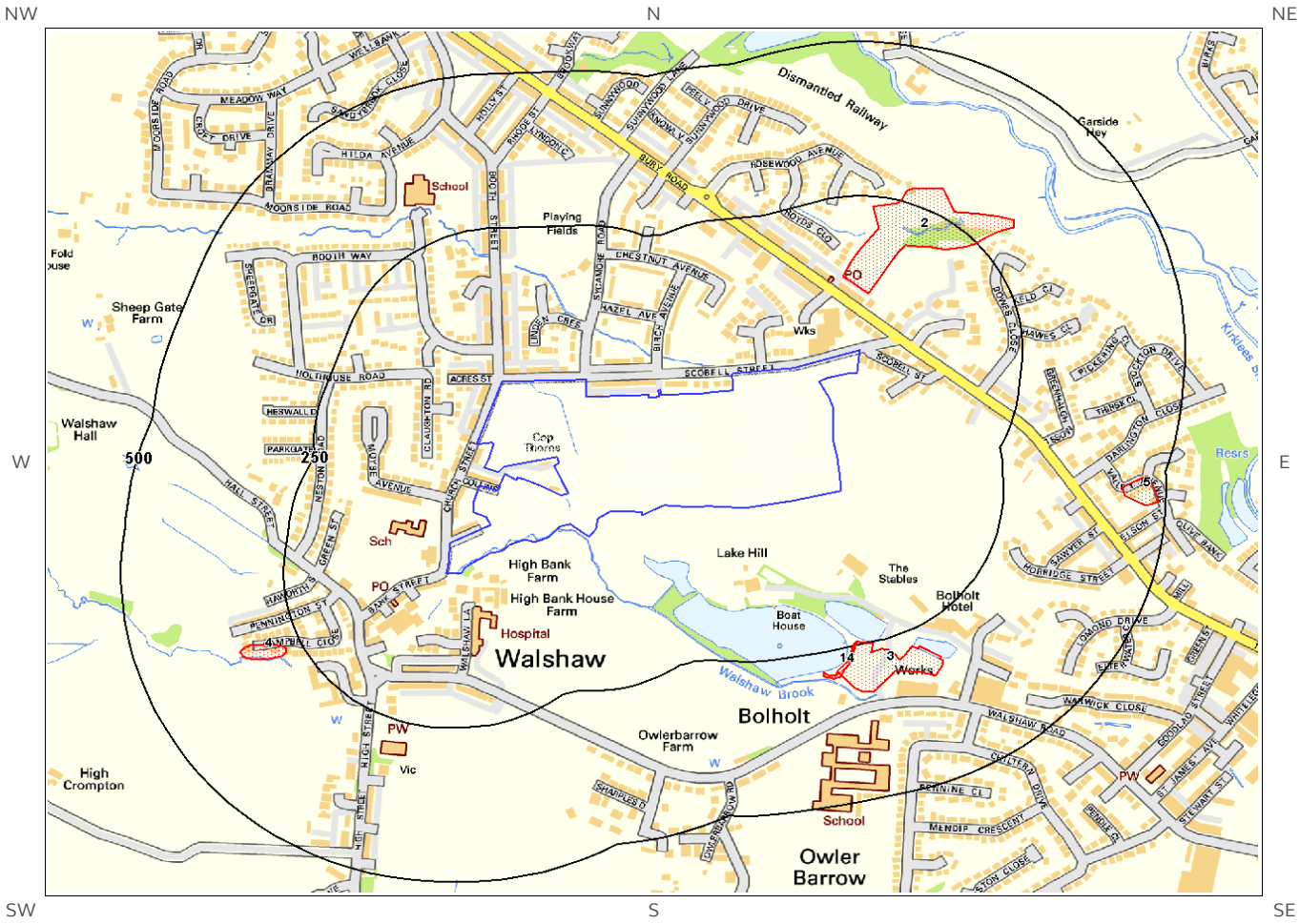
Database searched and no data found.

2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site	0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

10

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
2	92	N		Site Address: Bury Road, Tottington, Greater Manchester Waste Licence: - Site Reference: C121 Waste Type: Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 31-Dec-1875 Last Recorded: 31-Dec-1977
3	244	S		Site Address: Bolholt Works, Walshaw Road, Bury Waste Licence: Yes Site Reference: RD/LIC/186/79, C016 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 01-Jan-1980 Licence Surrendered: Licence Holder Address: 11 Whitelegge Street, Bury Operator: - Licence Holder: Mancunian Waste Company First Recorded: 31-Dec-1980 Last Recorded: 31-Dec-1984
4	276	SW		Site Address: Newhive Works, Walshaw, Greater Manchester Waste Licence: - Site Reference: C119 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
5	432	E		Site Address: Tottington, Bury Waste Licence: Yes Site Reference: C055, RD/LIC/208/80 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 03-Feb-1981 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: G and J Seddon Limited First Recorded: 01-Mar-1981 Last Recorded: 31-Dec-1986
Not	932	E		Site Address: Woolfold paper Mills,	Licence Issue: 06-Nov-1979

ID	Distance (m)	Direction	NGR	Details	
shown				Tottington Road, Bury Waste Licence: Yes Site Reference: 0226, RD/LIC/080/77 Waste Type: Inert, Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Olive's Paper Mill Company Limited First Recorded: 31-Dec-1950 Last Recorded: 02-Apr-1986
Not shown	1137	SE		Site Address: Land off Newbold Street, Newbold Street, Bury Waste Licence: Yes Site Reference: RD/LIC/0752/91, C015, RD/LIC/357/84, 4200/9727 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 12-Sep-1984 Licence Surrendered: 19-Jun-1991 Licence Holder Address: 29, Pickering Close, Woolfold, Bury Operator: - Licence Holder: Cooke, Simm and Bentley First Recorded: 01-Oct-1984 Last Recorded: 31-Dec-1988
Not shown	1164	E		Site Address: Woolfold Paper Mills, Tottington, Bury Waste Licence: Yes Site Reference: C005b, RD/LIC/080/77 , 0226 Waste Type: Inert, Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 06-Nov-1979 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Olive's Paper Mill Company Limited First Recorded: 31-Dec-1950 Last Recorded: 02-Apr-1986
Not shown	1168	SE		Site Address: King George V Playing Fields, Elton, Bury, Greater Manchester Waste Licence: Yes Site Reference: C050 Waste Type: Inert, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 01-Jan-1974 Licence Surrendered: Licence Holder Address: - Operator: County Borough of Bury Cleansing Department Licence Holder: Bury Metropolitan Borough Council First Recorded: 31-Dec-1967 Last Recorded: 01-Jun-1974
Not shown	1287	E		Site Address: Land South of Cricket Ground, Woolfold, Bury Waste Licence: - Site Reference: WML/0451 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
Not shown	1448	E		Site Address: Land Off Woodhill Road, Woodhill Road, Burrs, Bury Waste Licence: Yes Site Reference: RD/LIC/508/88, C075 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 10-Aug-1988 Licence Surrendered: Licence Holder Address: Town Hall, Bury Operator: - Licence Holder: Director of Planning and Architecture, Bury Borough Council First Recorded: 31-Dec-1988 Last Recorded: 31-Dec-1991

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

1

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1453	SE	379200.0 410800.0	Address: King George V Playing Fields, Ainsworth Rd, Bury BGS Number: 1085.0	Risk: Risk to minor aquifer Waste Type: N/A

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

5

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
14	244	S	378365 411704	Refuse Tip	1974 mapping	Polygon
Not shown	1128	SE	378892 410976	Refuse Tip	1968 mapping	Polygon
Not shown	1129	SE	378891 410975	Refuse Tip	1963 mapping	Polygon
Not shown	1224	SE	379488 411486	Refuse Tip	1995 mapping	Polygon
Not shown	1310	SE	379290 410889	Refuse Tip	1974 mapping	Polygon

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

Database searched and no data found.

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

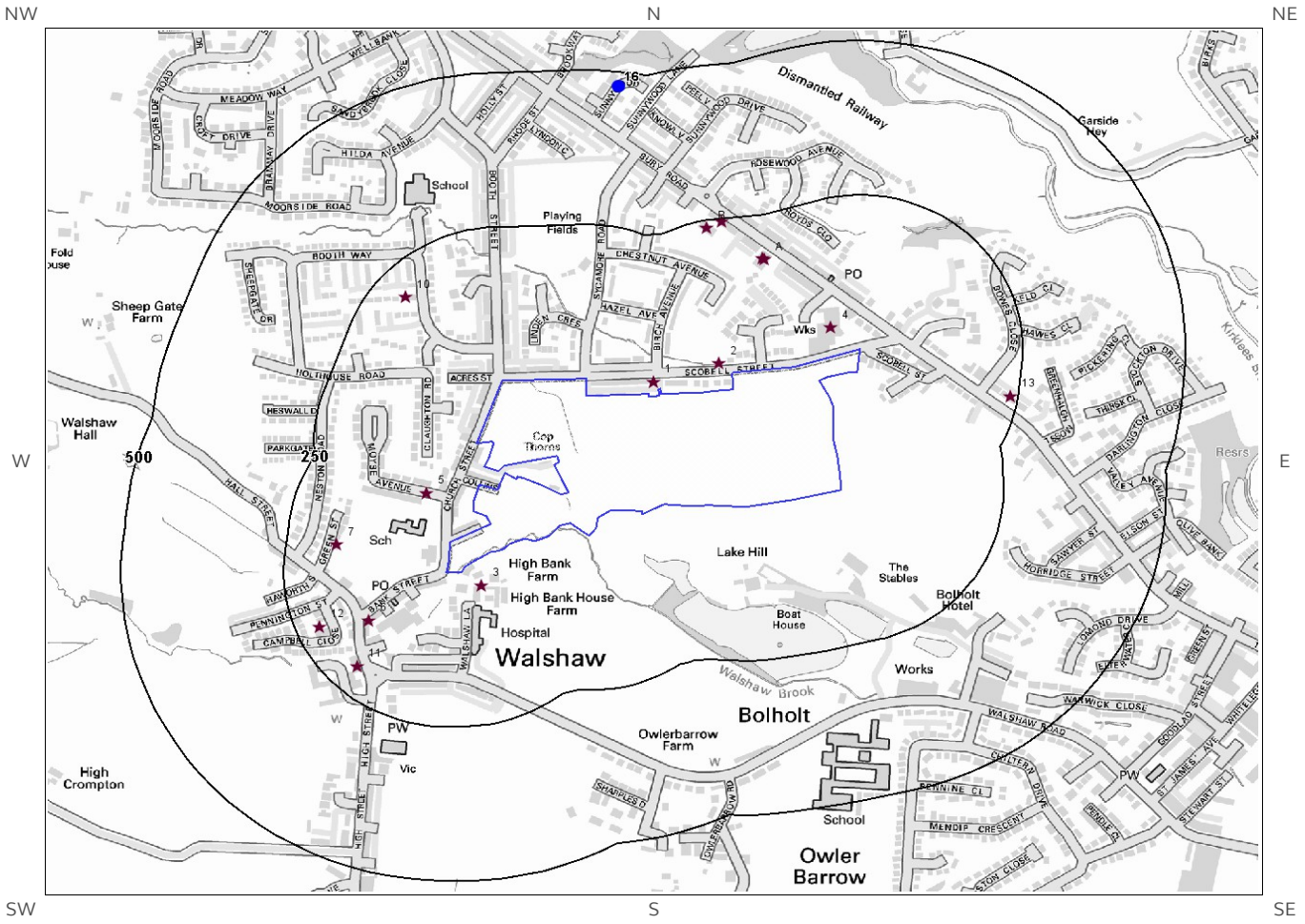
2

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
Not shown	844	N	377519 412940	Site Address: 10, Spring Vale Street, Tottington, Bury, Lancashire, BL8 3LR Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MET001 EPR reference: EA/EPR/GP3892CA/T001 Operator: Metcalfe Demolition & Skip Hire Ltd Waste Management licence No: 53463 Annual Tonnage: 5000.0	Issue Date: 16/02/1999 Effective Date: 28/07/2001 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Metcalfe Demolition & Skip Hire Ltd Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
Not shown	1077	SE	379089 411195	Site Address: Unit F Bonmore Industrial Centre, Leigh Lane, Bury, Lancashire, BL8 1NR Type: Vehicle Depollution Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CLU002 EPR reference: EA/EPR/EB3009CB/A001 Operator: Club 500 Italia Limited Waste Management licence No: 403221 Annual Tonnage: 4999.0	Issue Date: 25/08/2016 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Club 500 Italia Limited Correspondence Address: -

4. Current Land Use Map



Site Outline

Search Buffers (m)
250
500

Current Industrial Sites

Petrol & Fuel Sites

Electricity Transmission Cables

Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 15

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	16	NW	Braketech Mobile	378063 412155	167, Scobell Street, Tottington, Bury, Greater Manchester, BL8 3DE	Vehicle Repair, Testing and Servicing	Repair and Servicing
2	27	NW	Electricity Sub Station	378163 412185	Greater Manchester, BL8	Electrical Features	Infrastructure and Facilities
3	36	SE	Tank	377799 411825	Greater Manchester, BL8	Tanks (Generic)	Industrial Features
4	47	N	Works	378335 412243	Greater Manchester, BL8	Unspecified Works Or Factories	Industrial Features
5	74	W	Electricity Sub Station	377715 411975	Greater Manchester, BL8	Electrical Features	Infrastructure and Facilities
6	142	SW	J T R Controls Ltd	377626 411768	2, Bank Street, Walshaw, Bury, Greater Manchester, BL8 3AZ	Precision Engineers	Engineering Services
7	174	W	Hallmark Chasing	377577 411891	2, Green Street, Walshaw, Bury, Greater Manchester, BL8 3BJ	Cutting, Drilling and Welding Services	Construction Services
8A	179	N	Paul Anthony Commercials Ltd	378233 412353	Bury Road, Tottington, Bury, Greater Manchester, BL8 3DT	New Vehicles	Motoring
9A	181	N	Tottington M O T Centre	378231 412355	Bury Road, Tottington, Bury, Greater Manchester, BL8 3DT	Vehicle Repair, Testing and Servicing	Repair and Servicing
10	201	NW	Caravan Services North West	377683 412292	3, Acresbrook Walk, Tottington, Bury, Greater Manchester, BL8 3JR	Sports and Leisure Equipment Repair	Repair and Servicing
11	205	SW	Works	377608 411694	Greater Manchester, BL8	Unspecified Works Or Factories	Industrial Features
12	215	SW	Electricity Sub Station	377550 411758	Greater Manchester, BL8	Electrical Features	Infrastructure and Facilities
13	237	E	Altech Consulting Engineers	378611 412131	400, Tottington Road, Bury, Greater Manchester, BL8 1TU	Civil Engineers	Engineering Services
14B	239	N	Corporate Recognition	378144 412404	Unit 2 200a, Bury Road, Tottington, Bury, Greater Manchester, BL8 3DX	Giftware	Consumer Products
15B	247	N	Fridgeland Online	378168 412415	200c Bury Road, Tottington, Bury, Greater Manchester, BL8 3DX	Cooling and Refrigeration	Industrial Products

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 1

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
16	476	N	378010 412633	OBSOLETE	Bury Road, Tottington, Bury, Greater Manchester, BL8 3EU	Not Applicable	Obsolete

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site: 0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL

5.3 Bedrock and Solid Geology

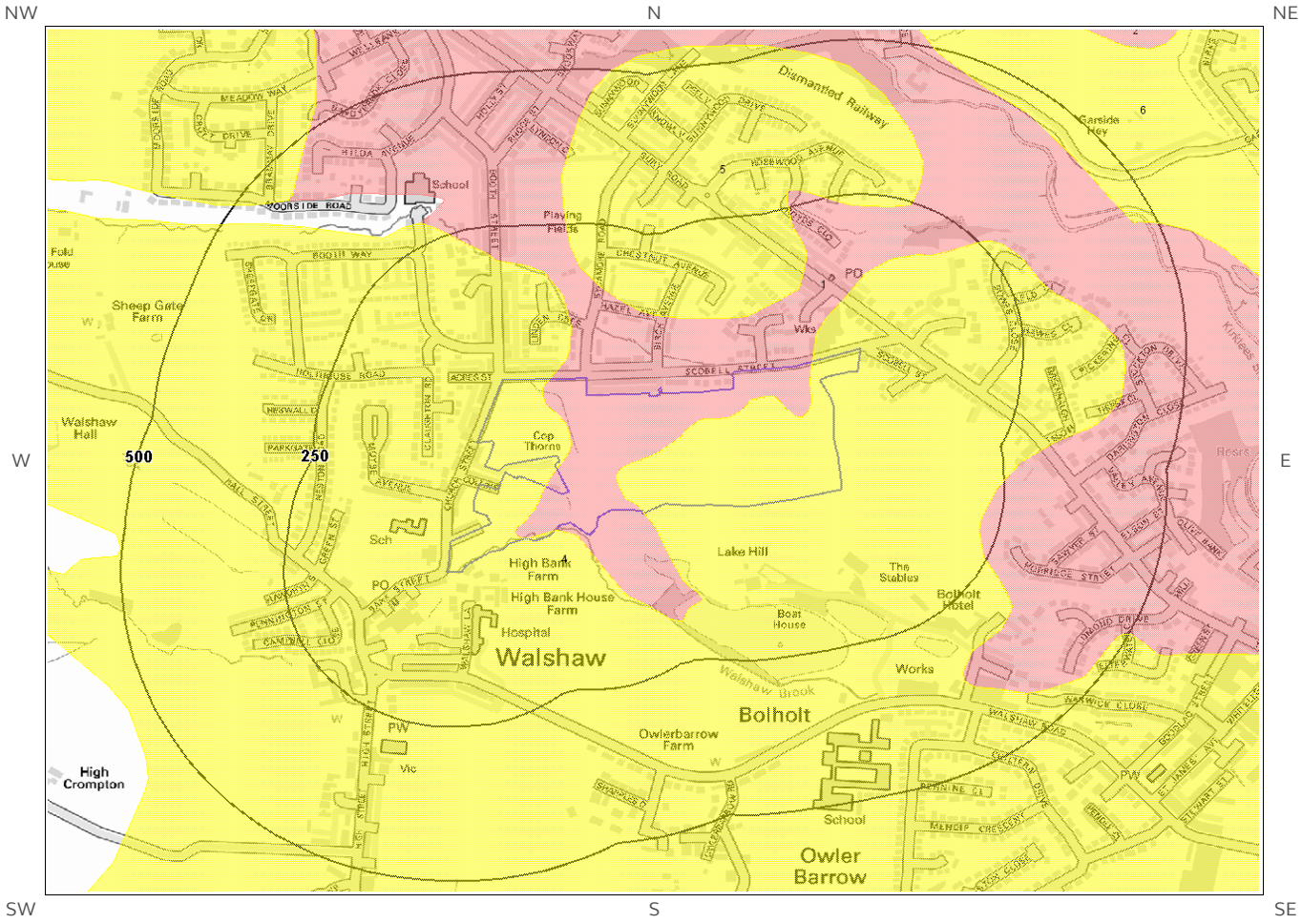
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE)	SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
OL-SDST	OLD LAWRENCE ROCK	SANDSTONE
PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION	SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION	SANDSTONE
HER-SDST	HELPET EDGE ROCK	SANDSTONE
OL-SDST	OLD LAWRENCE ROCK	SANDSTONE

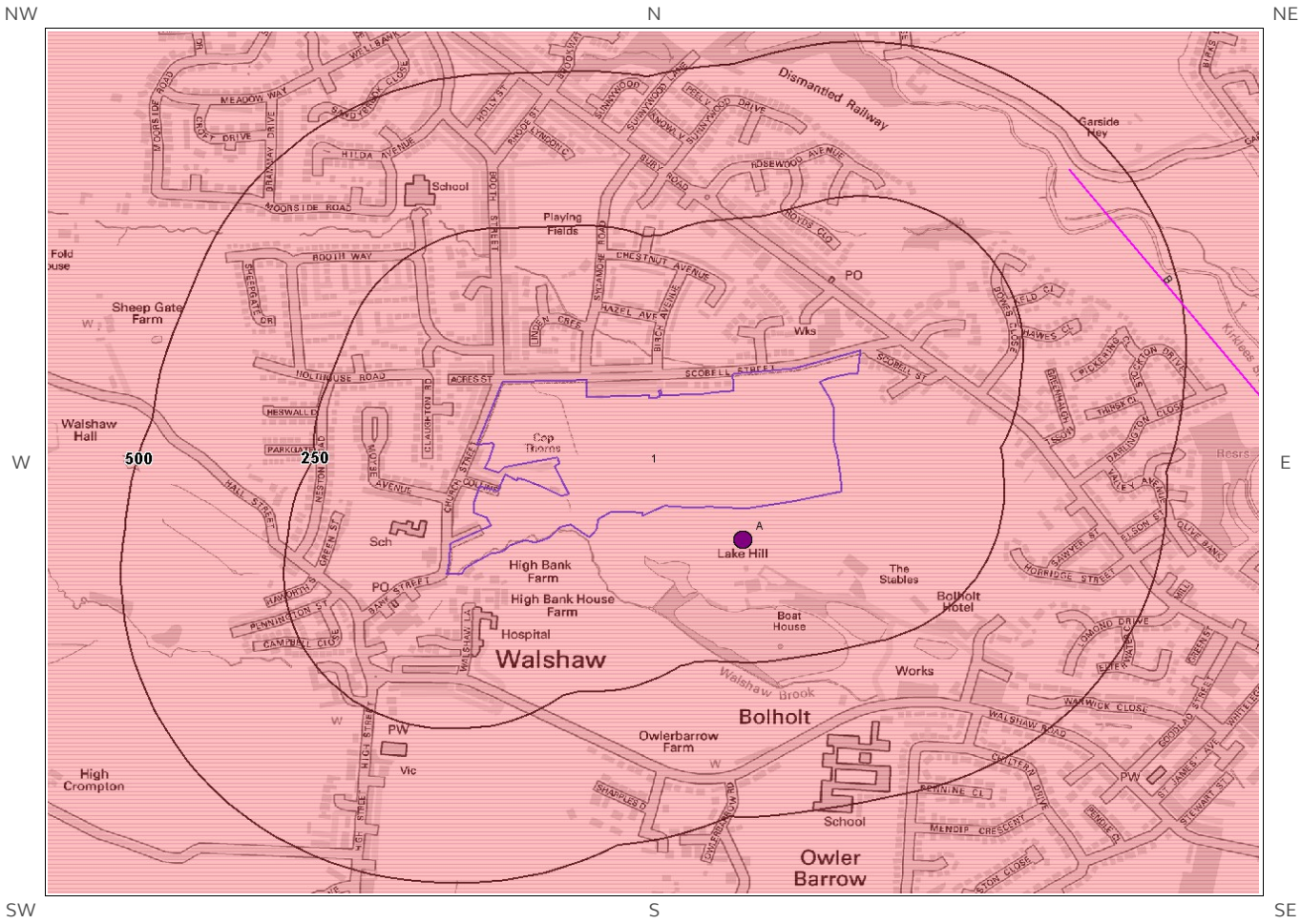
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



6b. Aquifer Within Bedrock Geology and Abstraction Licences



Site Outline

250
500
Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

Secondary (B) Aquifer - Lower Permeability Layers

Groundwater Abstraction Licence

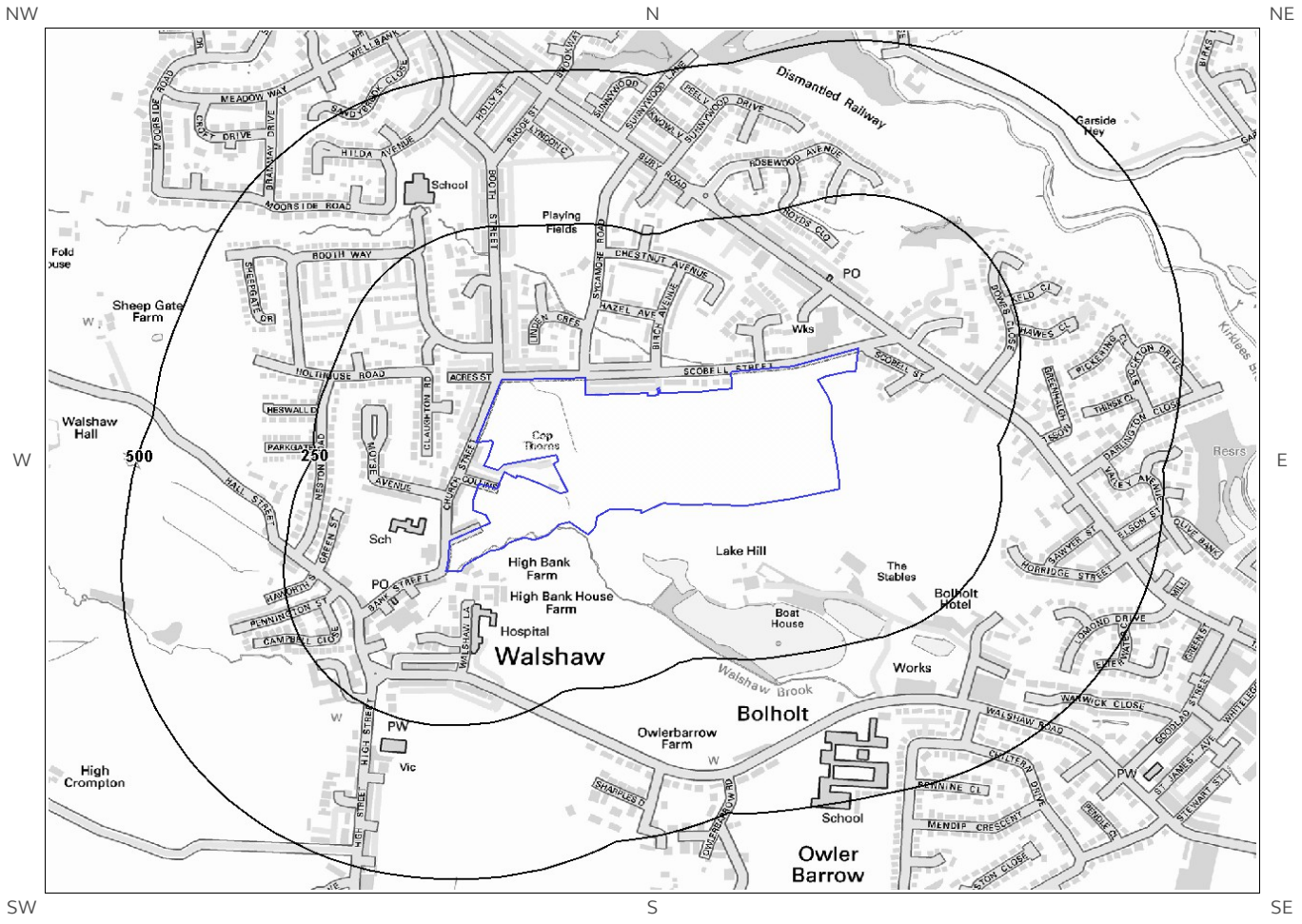
Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

Surface Water Abstraction Licence

6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



Site Outline

250 Search Buffers (m)
500

Source Protection Zone 1 - Inner Catchment

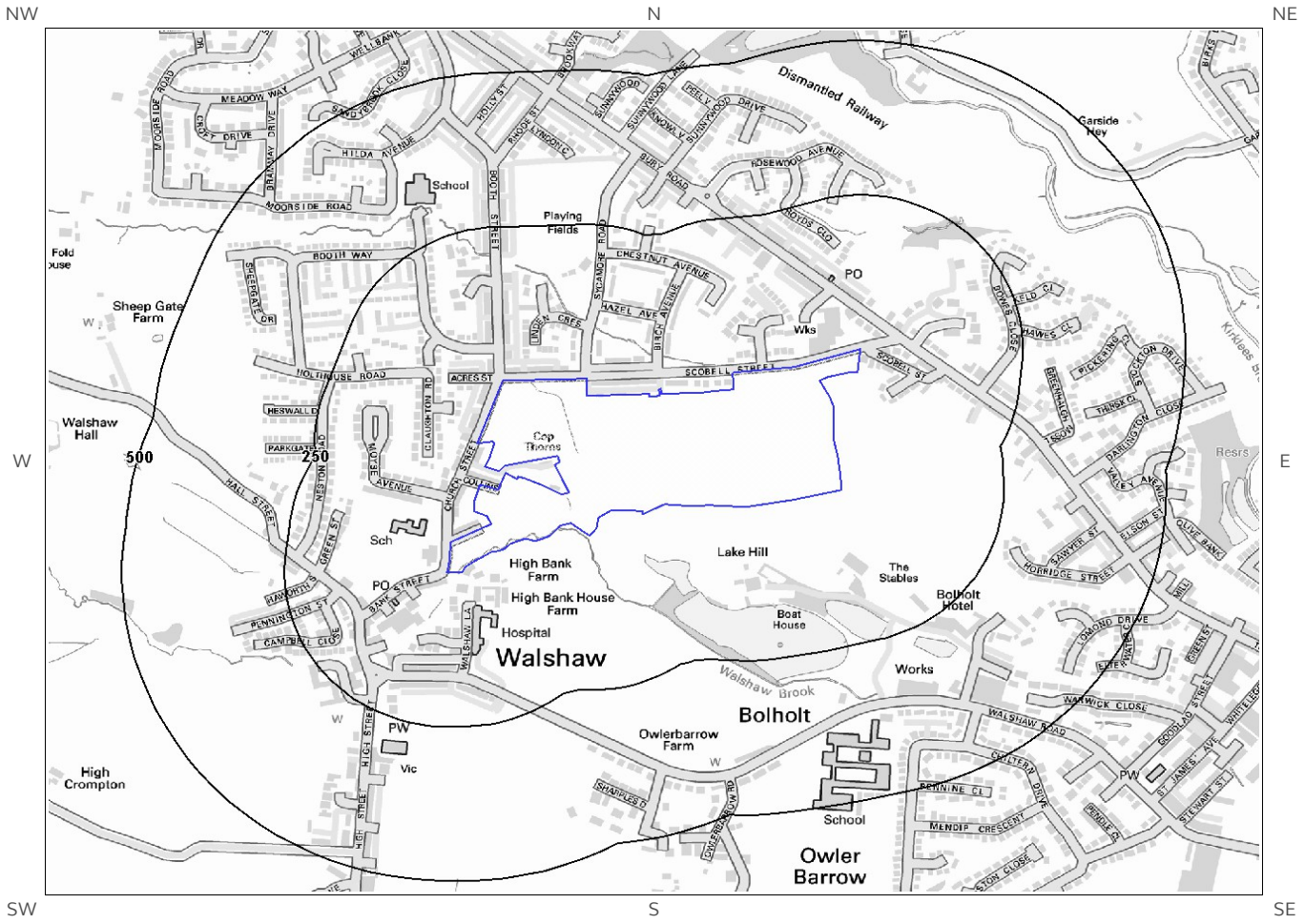
Source Protection Zone 2 - Outer Catchment

Source Protection Zone 3 - Total Catchment

Source Protection Zone 4 - Zone of Special Interest

Potable Water Abstraction Licence

6d. Hydrogeology – Source Protection Zones within confined aquifer



Source Protection Zone 1 - Inner Catchment

Source Protection Zone 2C - Outer Catchment within Confined Aquifer

Source Protection Zone 3C - Total Catchment within Confined Aquifer

Potable Water Abstraction Licence

Site Outline

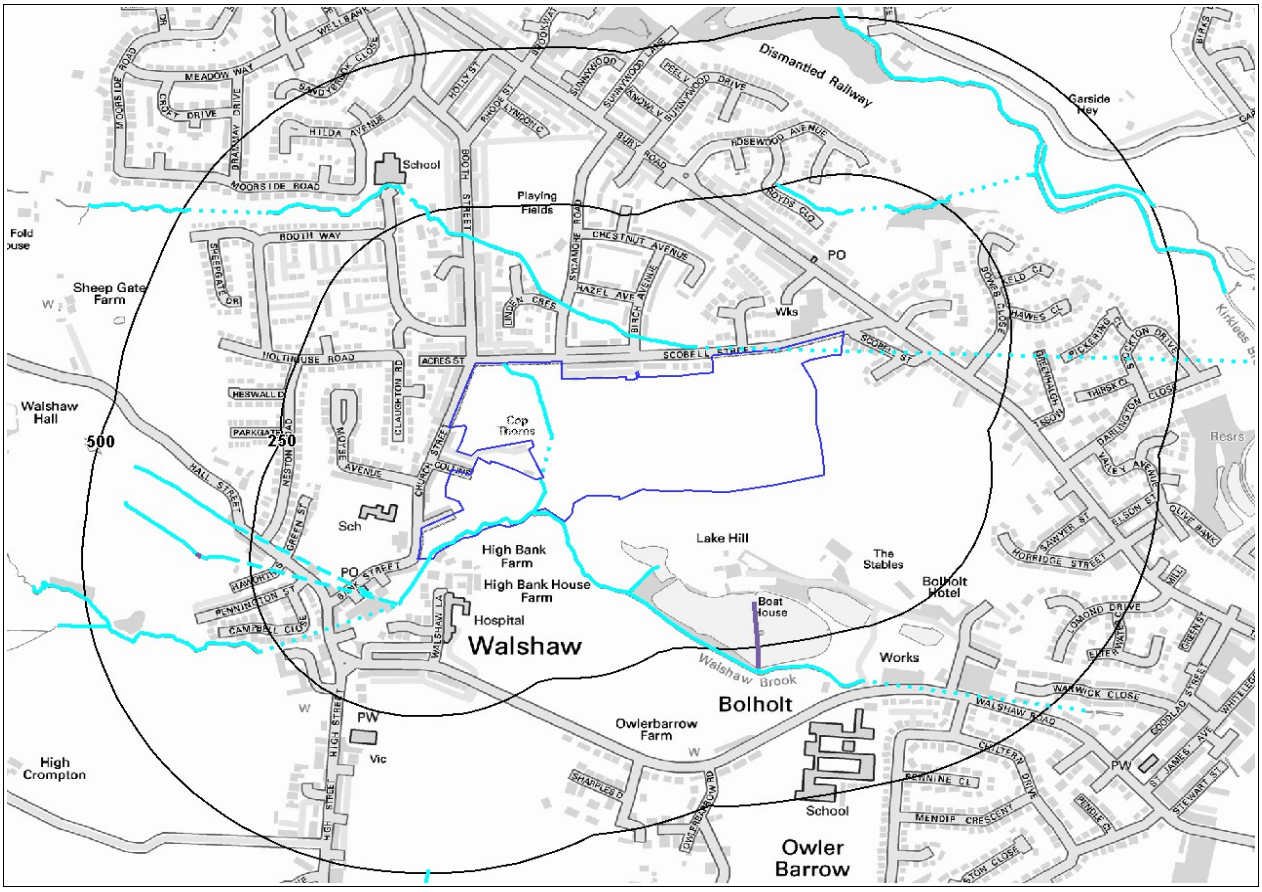
250 — 500 Search Buffers (m)

6e. Hydrology – Watercourse Network and River Quality

NW N NE

W E

SW S SE



Site Outline

250 Search Buffers (m)
500

Watercourse type

- Tidal River
- Inland River
- Canal
- Lock or Flight of Locks
- Lake, Reservoir, or Marsh
- Foreshore
- Drain or Transfer

Watercourse level

- On ground surface
- Underground or Elevated
- Level unknown

- General Quality Assessment: Biology
- General Quality Assessment: Chemistry

6.Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	0	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
5	88	N	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	450	NE	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

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site — Identified

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details	
2A	52	S	378200 411900	Status: Historical Licence No: 2569001057 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT BOLHOLT FARM, WALSHAW, BURY Data Type: Point Name: HEYS	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 10/02/1966 Version End Date:
3A	52	S	378200 411900	Status: Historical Licence No: 2569001057 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT BOLHOLT FARM, WALSHAW, BURY" Data Type: Point Name: HEYS	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 10/02/1966 Version End Date:
Not shown	646	E	379000 412000	Status: Historical Licence No: 2569001017 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES,OLIVES PAPERMILLS, BURY" Data Type: Point Name: ACTIVECRAFT LTD PAPERMAKERS	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 16/06/1995 Version End Date:
Not shown	646	E	379000 412000	Status: Historical Licence No: 2569001017 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, OLIVES PAPERMILLS, BURY Data Type: Point Name: ACTIVECRAFT LTD PAPERMAKERS	Annual Volume (m^3): 154,564 Max Daily Volume (m^3): 1,591 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 16/06/1995 Version End Date:
Not shown	646	E	379000 412000	Status: Historical Licence No: 2569001017 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES,OLIVES PAPERMILLS, BURY Data Type: Point Name: ACTIVECRAFT LTD PAPERMAKERS	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 16/06/1995 Version End Date:
Not shown	1344	N	377820 413500	Status: Historical Licence No: 2569001253R1 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT EDWARD TURNBULL, TOTTINGTON, BURY Data Type: Point Name: EDWARD TURNBULL LTD	Annual Volume (m^3): 39,000 Max Daily Volume (m^3): 200 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 27/02/2009 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1344	N	377820 413500	Status: Historical Licence No: 2569001253 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT STORMER HILL, TOTTINGTON Data Type: Point Name: EDWARD TURNBULL LTD	Annual Volume (m^3): 100,000 Max Daily Volume (m^3): 364 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 04/12/2007 Version End Date:
Not shown	1344	N	377820 413500	Status: Historical Licence No: 2569001253 Details: Process water Direct Source: Ground Water - North West Region Point: BOREHOLE AT STORMER HILL,TOTTINGTON Data Type: Point Name: EDWARD TURNBULL & CO LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 05/10/1998 Version End Date:
Not shown	1344	N	377820 413500	Status: Active Licence No: 2569001253R02 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT EDWARD TURNBULL, TOTTINGTON, BURY Data Type: Point Name: Turnbull Prints Limited	Annual Volume (m^3): 39,000 Max Daily Volume (m^3): 200 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 01/04/2015 Version End Date:
Not shown	1344	N	377820 413500	Status: Historical Licence No: 2569001253 Details: Process water Direct Source: Ground Water - North West Region Point: "BOREHOLE AT STORMER HILL,TOTTINGTON" Data Type: Point Name: EDWARD TURNBULL & CO LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 05/10/1998 Version End Date:
Not shown	1344	N	377820 413500	Status: Historical Licence No: 25/69/001/253/R02 Details: Process Water Direct Source: Ground Water - North West Region Point: BOREHOLE AT EDWARD TURNBULL, TOTTINGTON, BURY Data Type: Point Name: Turnbull Prints Limited	Annual Volume (m^3): 39,000 Max Daily Volume (m^3): 200 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 01/04/2015 Version End Date:
Not shown	1515	W	376260 412160	Status: Historical Licence No: 2569001248 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT HEIGHTS BARN, FOUR LANE ENDS, TOTTINGTON Data Type: Point Name: MILLWARD ROGERS	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 08/09/1995 Version End Date:
Not shown	1515	W	376260 412160	Status: Historical Licence No: 2569001248 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT HEIGHTS BARN, FOUR LANE ENDS, TOTTINGTON" Data Type: Point Name: MILLWARD ROGERS	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 08/09/1995 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1547	W	376200 411800	Status: Historical Licence No: 2569001177 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: B/HOLE , OLD HOLTS FARMROADING BROOK RD, HARWOOD, BOLTON Data Type: Point Name: MARSDEN	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 24/02/1969 Version End Date:
Not shown	1547	W	376200 411800	Status: Historical Licence No: 2569001177 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "B/HOLE , OLD HOLTS FARMROADING BROOK RD, HARWOOD, BOLTON" Data Type: Point Name: MARSDEN	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 24/02/1969 Version End Date:
Not shown	1609	NW	376700 413300	Status: Historical Licence No: 2569001113 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT STORMER HILL CLOSES FARM, TOTTINGTON, NR BURY Data Type: Point Name: PETER & JANET HOYLE	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 03/09/2000 Version End Date:
Not shown	1609	NW	376700 413300	Status: Historical Licence No: 2569001113 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT STORMER HILL CLOSES FARM, TOTTINGTON, NR BURY" Data Type: Point Name: PETER & JANET HOYLE	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 03/09/2000 Version End Date:
Not shown	1778	W	376100 412600	Status: Historical Licence No: 2569001019 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT ISHERWOODS FARM, WALSHAW Data Type: Point Name: HOUGHTON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 12/01/1966 Version End Date:
Not shown	1778	W	376100 412600	Status: Historical Licence No: 2569001019 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT ISHERWOODS FARM, WALSHAW" Data Type: Point Name: HOUGHTON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 12/01/1966 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1938	NE	380100 413100	Status: Historical Licence No: 2569001123 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT IRWELL VIEW FARM, WALMESLEY,BURY, LANCASHIRE" Data Type: Point Name: FITTON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 19/01/1966 Version End Date:
Not shown	1938	NE	380100 413100	Status: Historical Licence No: 2569001123 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT IRWELL VIEW FARM, WALMESLEY,BURY, LANCASHIRE Data Type: Point Name: FITTON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 19/01/1966 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site — Identified

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details	
23B	433	NE	378700 412500	Status: Historical Licence No: 2569001170 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: KIRKLEES BRK AT WOOLFOLD, BURY93 Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date:
24B	433	NE	378700 412500	Status: Historical Licence No: 2569001170 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: KIRKLEES BRK AT WOOLFOLD, BURY Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS	Annual Volume (m^3): 850,102 Max Daily Volume (m^3): 3,182 Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date:
25B	433	NE	378700 412500	Status: Historical Licence No: 2569001170 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "KIRKLEES BRK AT WOOLFOLD, BURY $93" Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date:
26B	433	NE	378700 412500	Status: Historical Licence No: 2569001170 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: KIRKLEES BRK AT WOOLFOLD, BURY	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100

ID	Distance (m)	Direction	NGR	Details	
				$93 Data Type: Line Name: ACTIVECRAFT LTD PAPERMAKERS	Version Start Date: 16/06/1995 Version End Date:
Not shown	653	E	379000 411900	Status: Historical Licence No: 2569001170 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY KIRKLESS BROOK AND SURFACE DRAINAGE Data Type: Point Name: ACTIVECRAFT LTD PAPERMAKERS	Annual Volume (m^3): 850,102 Max Daily Volume (m^3): 3,182 Application No: - Original Start Date: 23/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/06/1995 Version End Date:
Not shown	977	S	377500 410900	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY Data Type: Point Name: THE ELTON COP DYEING CO LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date:
Not shown	988	S	378500 411000	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY 88 Data Type: Point Name: THE ELTON COP DYEING CO LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date:
Not shown	1010	S	378600 411000	Status: Historical Licence No: 2569001155 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS Data Type: Point Name: CURTAIN STYLING LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date:
Not shown	1010	S	378600 411000	Status: Historical Licence No: 2569001155 Details: General use relating to Secondary Category (Medium Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS " Data Type: Point Name: CURTAIN STYLING LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date:
Not shown	1010	S	378600 411000	Status: Historical Licence No: 2569001155 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS " Data Type: Point Name: CURTAIN STYLING LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975 Version End Date:
Not shown	1010	S	378600 411000	Status: Historical Licence No: 2569001155 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY SURFACE DRAINAGE ATBURY, (KNOWN AS PARKERS	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 07/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 03/01/1975

ID	Distance (m)	Direction	NGR	Details	
				Data Type: Point Name: CURTAIN STYLING LTD	Version End Date:
Not shown	1077	SE	378800 411000	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY [10 Data Type: Point Name: THE ELTON COP DYEING CO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date:
Not shown	1086	S	378500 410900	Status: Historical Licence No: 2569001160 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIRS FED BY ELTON BRK AT BURY *27 Data Type: Point Name: THE ELTON COP DYEING CO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 10/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/02/1975 Version End Date:
Not shown	1351	N	377700 413500	Status: Historical Licence No: 2569001009 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR FED BY UNNAMED TRIB OF KIRKLEES BRK, TOTTINGTON" Data Type: Point Name: SITE ELECTRICAL PH LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/11/1996 Version End Date:
Not shown	1351	N	377700 413500	Status: Historical Licence No: 2569001009 Details: Process water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY UNNAMED TRIB OF KIRKLEES BRK, TOTTINGTON Data Type: Point Name: SITE ELECTRICAL PH LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/11/1996 Version End Date:
Not shown	1351	N	377700 413500	Status: Historical Licence No: 2569001009 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY UNNAMED TRIB OF KIRKLEES BRK, TOTTINGTON Data Type: Point Name: SITE ELECTRICAL PH LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/11/1996 Version End Date:
Not shown	1351	N	377700 413500	Status: Historical Licence No: 2569001009 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "RESERVOIR FED BY UNNAMED TRIB OF KIRKLEES BRK, TOTTINGTON" Data Type: Point Name: SITE ELECTRICAL PH LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/11/1996 Version End Date:
Not shown	1351	N	377700 413500	Status: Active Licence No: 2569001009 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY UNNAMED TRIBUTAR Y KIRKLEES BROOK Data Type: Point Name: Greenwood & Coope Limited	Annual Volume (m³): 27,277 Max Daily Volume (m³): 136 Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 103 Version Start Date: 02/09/2016 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1351	N	377700 413500	Status: Active Licence No: 2569001009 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: RESERVOIR FED BY UNNAMED TRIBUTAR Y KIRKLEES BROOK Data Type: Point Name: Greenwood & Coope Limited	Annual Volume (m^3): 27,277 Max Daily Volume (m^3): 136 Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 103 Version Start Date: 02/09/2016 Version End Date:
Not shown	1759	E	380014 411406	Status: Active Licence No: NW/069/0001/007 Details: Hydroelectric Power Generation Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT CHAMBER HALL WEIR Data Type: Point Name: Bury Council	Annual Volume (m^3): 90,000,000 Max Daily Volume (m^3): 340,416 Application No: - Original Start Date: 10/06/2016 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 10/06/2016 Version End Date:
Not shown	1866	SE	379706 410696	Status: Historical Licence No: 2569001285 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RMC NORTHERNT BURY CANAL WHARF Data Type: Point Name: CEMEX UK MATERIALS LTD	Annual Volume (m^3): 5,500 Max Daily Volume (m^3): 21 Application No: - Original Start Date: 23/03/2005 Expiry Date: 31/03/2015 Issue No: 2 Version Start Date: 01/04/2008 Version End Date:
Not shown	1866	SE	379706 410696	Status: Active Licence No: 2569001285R01 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Surface, Non-Tidal - North West Region Point: RIVER IRWELL AT RMC NORTHERNT BURY CANAL WHARF Data Type: Point Name: CEMEX UK MATERIALS LTD	Annual Volume (m^3): 5,500 Max Daily Volume (m^3): 21 Application No: - Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 2 Version Start Date: 21/12/2018 Version End Date:

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site — None identified

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site — None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
233	W	Minor Aquifer/Low Leaching Potential	L	Soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to attenuate diffuse pollutants.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site Identified

6.9.1 Biological Quality:

Database searched and no data found.

6.9.2 Chemical Quality:

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAHI). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (6e):

					Chemical Quality Grade				
ID	Distance (m)	Direction	NGR	River Quality Grade	2005	2006	2007	2008	2009
Not shown	876	S	378000 411000	River Name: Elton Bk. Reach: Qsl At Dow Lane To Irwell End/Start of Stretch: Start of Stretch NGR	B	B	B	B	B
Not shown	1115	E	379400 411600	River Name: Kirklees Bk. Reach: Olives Paper Mill To Irwell End/Start of Stretch: Start of Stretch NGR	A	A	A	A	A

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
5	0 On Site	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
6	0 SE	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
15	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
16	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
17	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
18	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
19	0 On Site	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
20	0 SE	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
7	30 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
21	30 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
8	50 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
22	50 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	54	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	N			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
23	54 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
10	75 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
24	75 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
11	78 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
12	78 S	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
25	78 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
26	78 S	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
13	80 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
27	80 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
14	84 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
15	84 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
28	84 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): Not Provided
29	84 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
16	120 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
30	120 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
17	147 SE	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
31	147 SE	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
18	180 S	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 39.9
32	180 S	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 39.9
19	187 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
33	187 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
20	192 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
34	192 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
21	209 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
35	209 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3
22	264 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
36	264 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
23	279 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	279 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
24	280 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
25	280 SW	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
38	280 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
39	280 SW	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
26	285 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
40	285 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
27	288 S	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
28	288	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	W			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
41	288 S	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
Not shown	288 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
29	292 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.1
43	292 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.1
30	294 S	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
44	294 S	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
31	295 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
45	295 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
32	323 W	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
Not shown	323 W	-	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
33	331 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	331 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): Not Provided
34	332 S	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
48	332 S	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
35	368 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	368 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
36	369 NE	Kirklees Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.3
37	369 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
Not shown	369 NE	Kirklees Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.3
Not shown	369 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
38	381 NE	Kirklees Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.9
Not shown	381 NE	Kirklees Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.9
39	383 NE	Goit	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
Not shown	383 NE	Goit	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
40	393 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
54	393 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
41	405 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
Not shown	405 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
42	412 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	412 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
43	446 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.7
Not shown	446 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.7
44	454 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	454 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
45	473 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
46	473 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	473	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	W			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	473 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
47	494 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.1
48	494 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	494 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.1
Not shown	494 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
49	496 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.1
Not shown	496 W	Walshaw Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.1

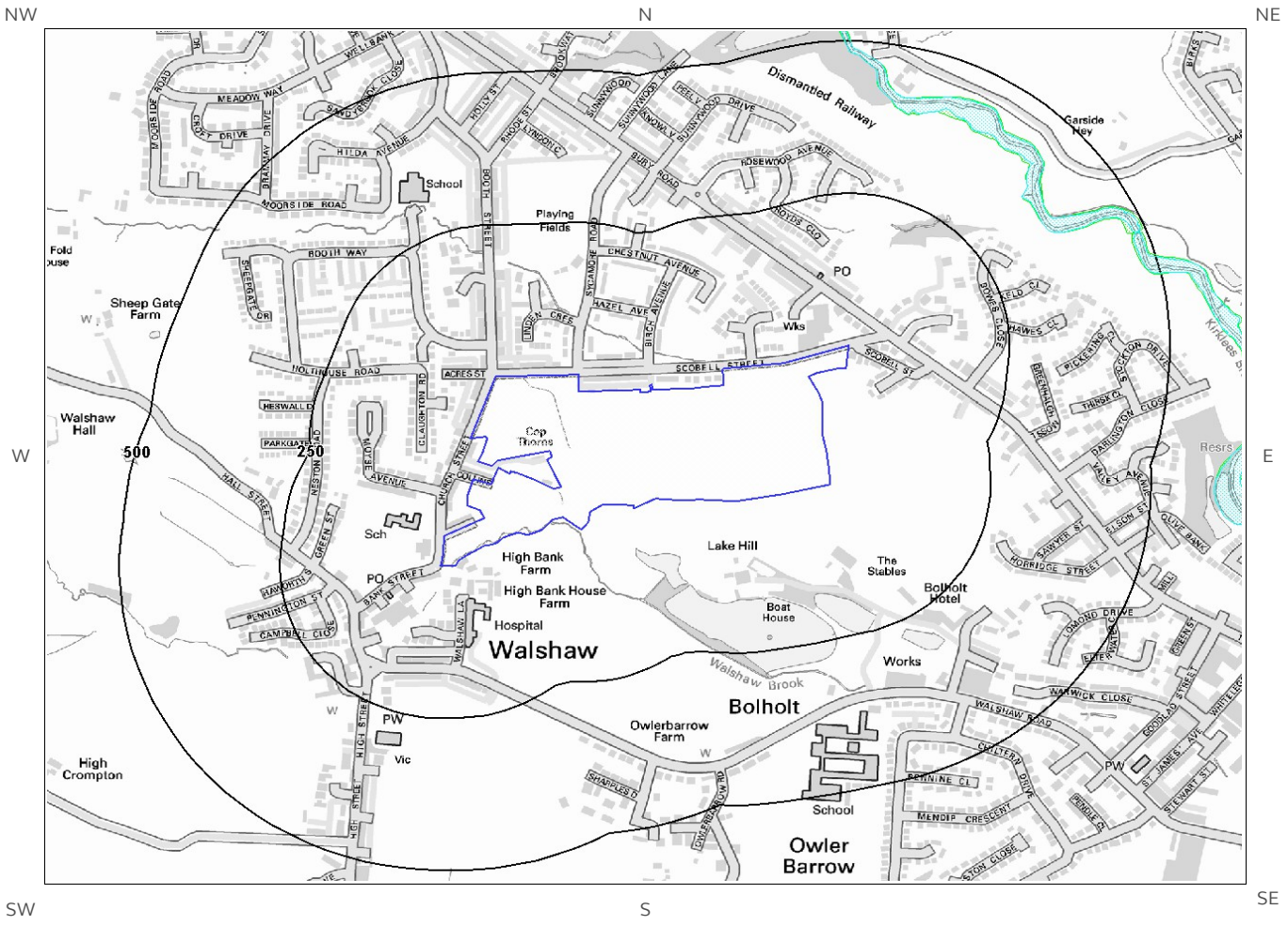
6.11 Surface Water Features

Surface water features within 250m of the study site | Identified

The following surface water records are not represented on mapping:

Distance (m)	Direction
0	On Site
0	On Site
0	On Site
42	S
50	N
63	S
75	N
137	S
170	S
187	N

7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



Site Outline

Search Buffers (m)
100
250

Zone 2 Floodplain

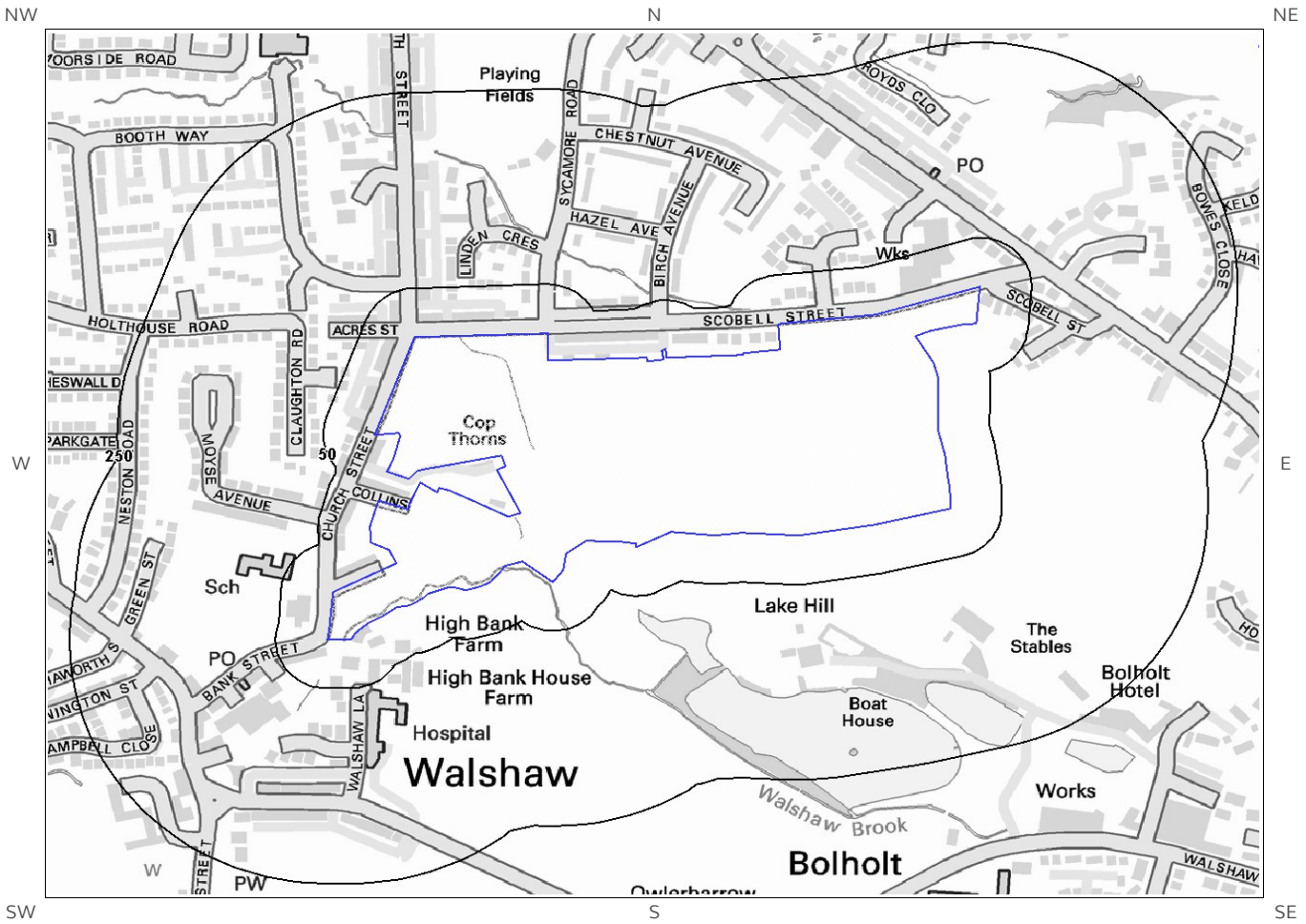
Zone 3 Floodplain

Flood Defences

Area used for Flood Storage

Area Benefiting from Flood Defences

7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



Site Outline

100 / 250 Search Buffers (m)

RoFRaS Rating

- Very Low
- Low
- Medium
- High

7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m — None identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m — None identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite — Very Low

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

7.4 Flood Defences

Flood Defences within 250m of the study site — None identified

Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site — None identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site	None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site: Identified

Clearwater Flooding or Superficial Deposits Flooding	Superficial Deposits Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Potential at Surface

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

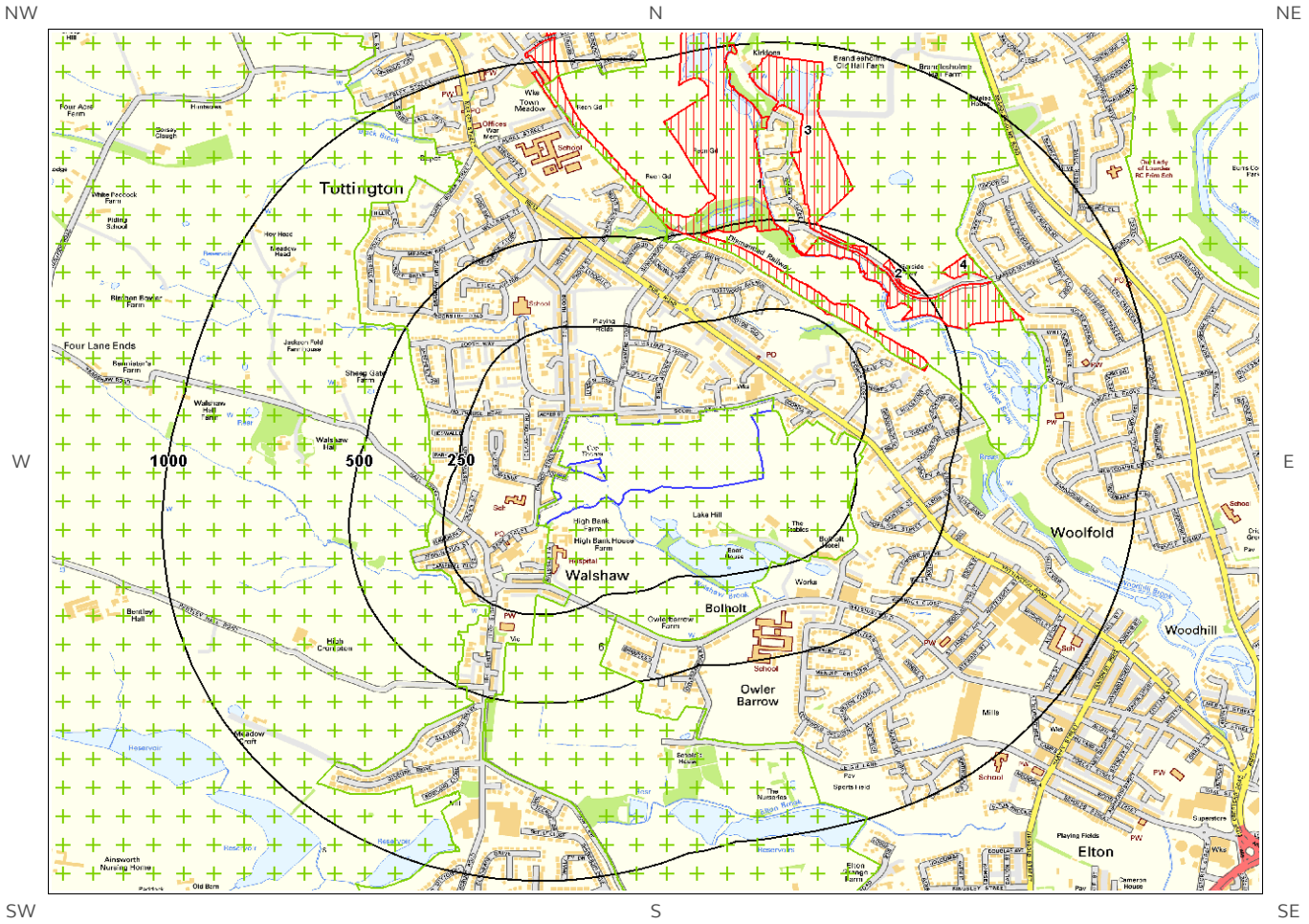
7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result	Low

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



Site Outline

100
250
Search Buffers (m)

AONB
National Park
SSSI
Special Protection Areas
Nitrate Vulnerable Zones

Green Belt
Environmentally Sensitive Areas
Special Areas of Conservation
World Heritage Sites
Nitrate Sensitive Areas

Ancient Woodland
National Nature Reserve
Local Nature Reserves
Ramsar Sites

8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site	Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

0

Database searched and no data found.

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

0

Database searched and no data found.

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

5

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
1	274	NE	Kirklees Valley	Natural England
2	462	NE	Kirklees Valley	Natural England
3	470	NE	Kirklees Valley	Natural England
4	569	NE	Kirklees Valley	Natural England
Not shown	1400	N	Kirklees Valley	Natural England

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

0

Database searched and no data found.

8.14 Records of Green Belt land within 2000m of the study site:

9

Green Belt data contains Ordnance Survey data © Crown copyright and database right [2015].

ID	Distance	Direction	Green Belt Name	Local Authority Name
6	0	On Site	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
7	258	SW	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
Not shown	1522	E	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
Not shown	1624	E	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
Not shown	1643	E	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
Not shown	1649	E	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
Not shown	1751	W	Liverpool, Manchester and West Yorks Greenbelt	Bolton District (B)
Not shown	1845	S	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)
Not shown	1985	S	Liverpool, Manchester and West Yorks Greenbelt	Bury District (B)

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a Groundsure Geo Insight, available from our website. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell*[*] hazard rating identified on the study site — Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site — Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site — Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site — Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site — Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

Maximum Running Sand*[*] hazard rating identified on the study site — Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

* This indicates an automatically generated 50m buffer and site.

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing
ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site — Identified

The following coal mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0	On Site	The site lies in or in proximity to the coal mining reporting area as defined by the Coal Authority

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary — None identified

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site — None identified
Guidance: No Guidance Required.

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com

British Geological Survey Enquiries
Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:
Web:**www.bgs.ac.uk**
BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

Environment Agency
National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 03708 506 506
Web: **www.environment-agency.gov.uk**
Email: enquiries@environment-agency.gov.uk

Public Health England
Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe
Email:**enquiries@phe.gov.uk**
Main switchboard**: 020 7654 8000**

The Coal Authority
200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk

Ordnance Survey
Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority
Authority: Bury Metropolitan Borough Council
Phone: 01612 535 000
Web: http://www.bury.gov.uk/
Address: Town Hall, Knowsley Street, Bury, Lancashire, BL9 OSW

Gemapping PLC
Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444

Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:

https://www.groundsure.com/terms-and-conditions-feb11-2019

Groundsure
LOCATION INTELLIGENCE

Resource & Environmental Consultants Ltd REC RESOURCE & ENVIRONMENTAL CONSULTANTS LTD, OSPREY HOUSE 217-227, BROADWAY, SALFORD, M50 2UE	Groundsure Reference:	GS-6447703
	Your Reference:	107765_Walshaw_Road_-_Himor
	Report Date	7 Nov 2019
	Report Delivery Method:	Email - pdf

Geo Insight

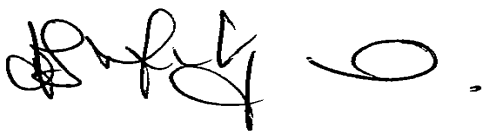
Address: Walshaw Road, BL8 3DE

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geo Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Geo Insight

Geo Insight

Address:	**Walshaw Road, BL8 3DE**
Date:	**7 Nov 2019**
Reference:	**GS-6447703**
Client:	**Resource & Environmental Consultants Ltd REC**

NW N NE

W E

SW S SE

Aerial Photograph Capture date:	26-Mar-2012
Grid Reference:	378065,412054
Site Size:	11.5537ha

Groundsure
LOCATION INTELLIGENCE

Contents Page

Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 and 1:10,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Non-coal mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Geology 1:10,000 Scale		
1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	Yes
	1.2.2 Are there any records of landslip within 500m of the study site boundary at 1:10,000 scale?	Yes
1.3 Bedrock, Solid Geology and linear features	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale?	Yes

Section 2: Geology 1:50,000 Scale		
2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	No
2.2 Superficial Geology and Landslips	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	Yes
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	Yes
	2.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No

Section 2: Geology 1:50,000 Scale

2.3 Bedrock, Solid Geology and linear features	2.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	2.3.2 Are there any records relating to permeability of bedrock ground within the study site boundary?	Yes
	2.3.3 Are there any records of linear features within 500m of the study site boundary?	Yes

Section 3: Radon

3. Radon	3.1Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
	3.2Radon Protection	No radon protective measures are necessary.

Section 4: Ground Workings	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	10	8	39	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	2	0
4.3 Current Ground Workings	1	0	0	2	3

Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	0	0	0	2	0
5.2 Coal Mining	1	0	0	0	0
5.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
5.4 Non-Coal Mining*	0	0	0	0	0
5.5 Non–Coal Mining Cavities	0	0	0	0	0
5.5 Natural Cavities	0	0	0	0	0

Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Cornwall and Devon Metalliferous Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0

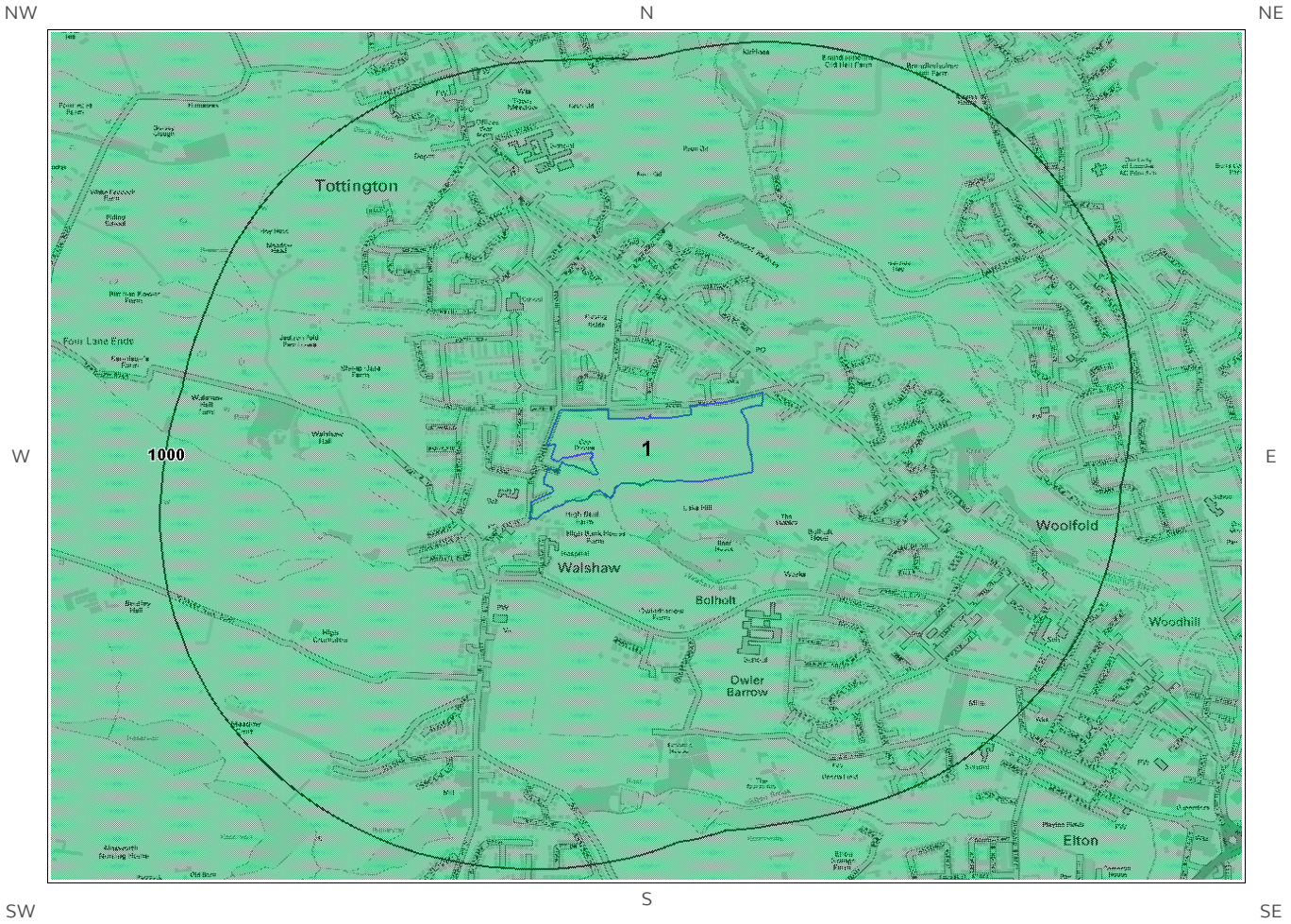
Section 6: Natural Ground Subsidence	On-site
6.1 Shrink-Swell Clay	Very Low
6.2 Landslides	Very Low
6.3 Ground Dissolution of Soluble Rocks	Negligible
6.4 Compressible Deposits	Negligible
6.5 Collapsible Deposits	Very Low
6.5 Running Sand	Very Low

Section 7: Borehole Records	On-site	0-50m	51-250
7 BGS Recorded Boreholes	0	0	6

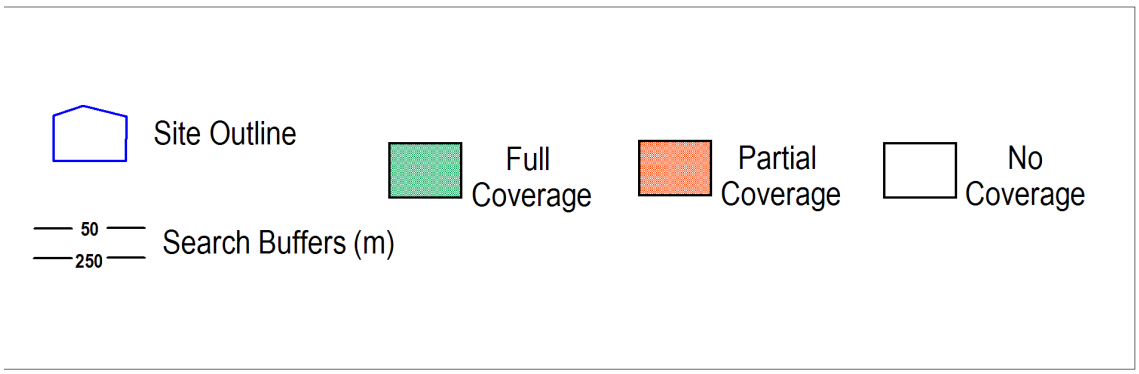
Section 8: Estimated Background Soil Chemistry	On-site	0-50m	51-250
8 Records of Background Soil Chemistry	24	7	0

Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500
9.1 Tunnels	0	0	0	Not Searched
9.2 Historical Railway and Tunnel Features	0	0	0	Not Searched
9.3 Historical Railways	0	0	0	Not Searched
9.4 Active Railways	0	0	0	Not Searched
9.5 Railway Projects	0	0	0	0

1:10,000 Scale Availability



1_10,000 Availability Legend



Availability of 1:10,000 Scale Geology Mapping

The following information represents the availability of the key components of the 1:10,000 scale geological data.

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	Some deposits are mapped	Full	Full	Some deposits are mapped
N2	1620.0	Some deposits are mapped	Full	Full	Some deposits are mapped
N3	1845.0	Some deposits are mapped	Full	Full	Some deposits are mapped

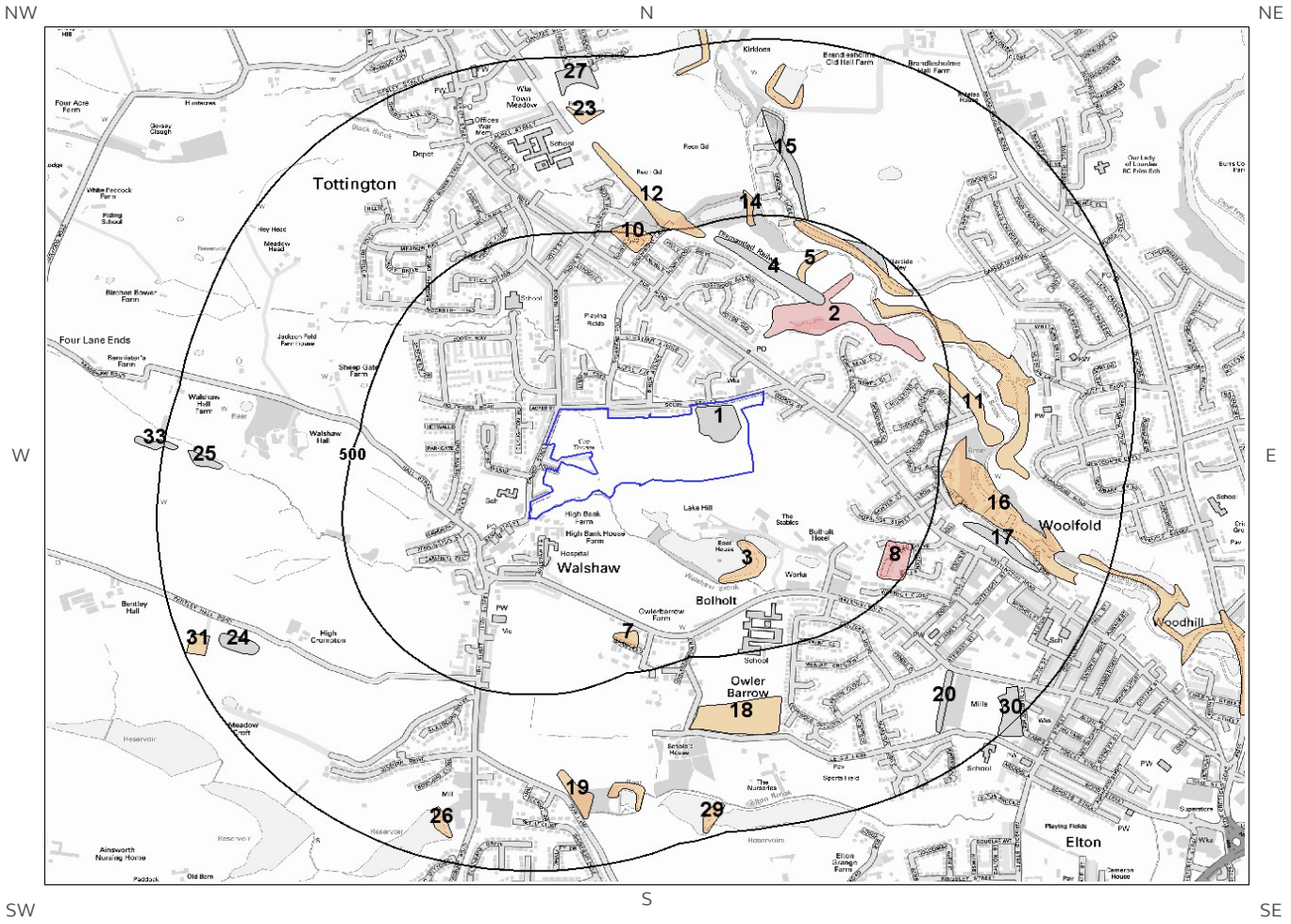
Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not all themes are mapped or available on every map sheet. Therefore a coverage layer showing the availability of the four themes is presented above.

The definitions of coverage are as follows:

Geology	Full Coverage	Partial Coverage	No Coverage
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped	No coverage
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage
Artificial	Some deposits are mapped on this tile	-	No deposits are mapped
Mass Movement	Some deposits are mapped on this tile	-	No coverage

1 Geology (1:10,000 scale).

1.1 Artificial Ground map (1:10,000 scale)



Artificial Ground Legend

Site Outline

500
1000
Search Buffers (m)

Made Ground (undivided)

Disturbed Ground (undivided)

Worked Ground (undivided)

Landscaped Ground (undivided)

Infilled Ground

Reclaimed Ground

1. Geology 1:10,000 scale

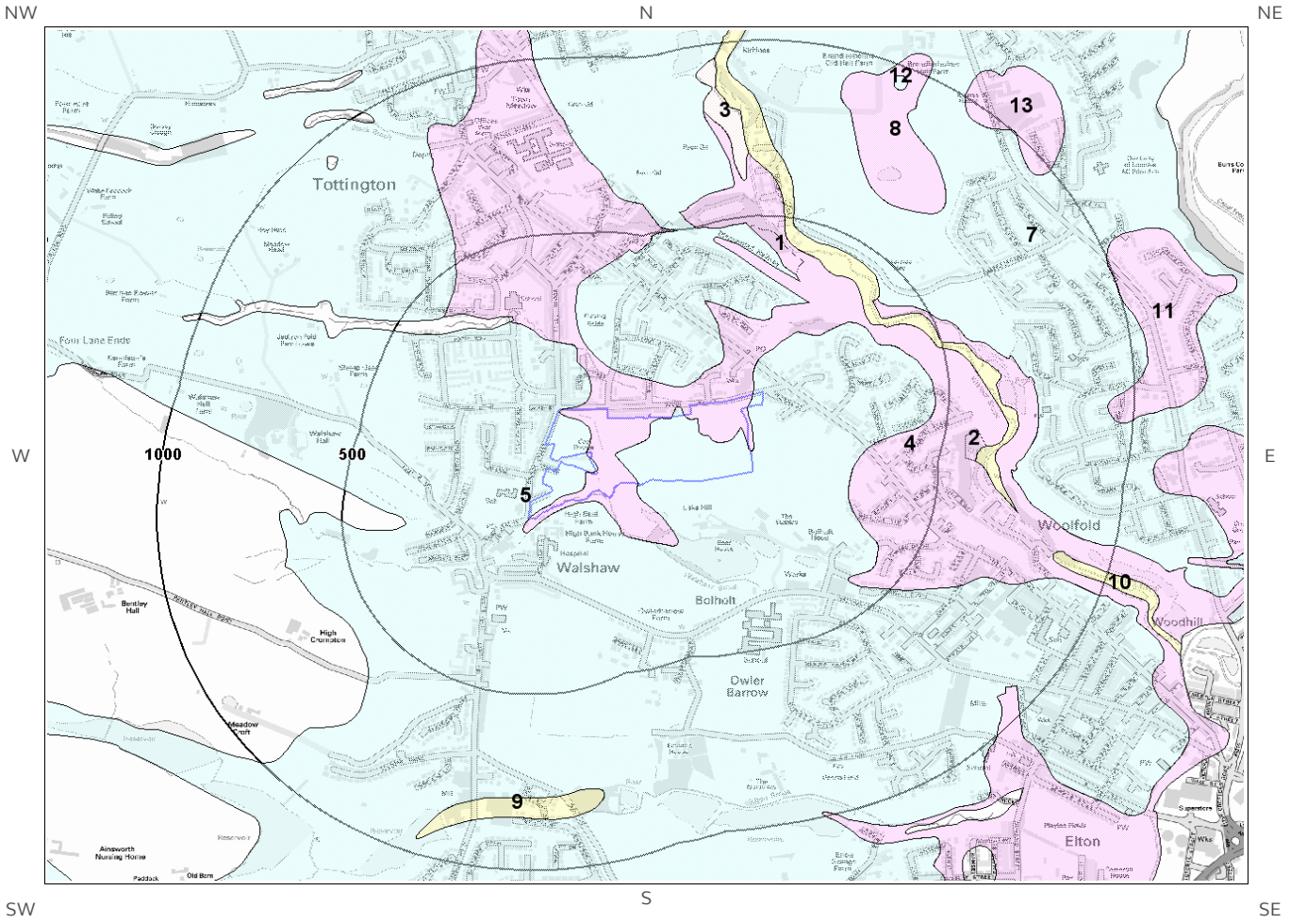
1.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	WGR-VOID	Worked Ground (Undivided)	Void
2	153.0	N	WMGR-ARTDP	Infilled Ground	Artificial Deposit
3	184.0	S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	283.0	NE	WGR-VOID	Worked Ground (Undivided)	Void
5	326.0	N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	380.0	NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
7	381.0	S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
8	410.0	SE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
9A	432.0	NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
10	449.0	N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
11	461.0	E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
12	466.0	N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
13A	470.0	NE	WGR-VOID	Worked Ground (Undivided)	Void
14	473.0	N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

1.2 Superficial Deposits and Landslips map (1:10,000 scale)



Artificial Ground Legend

Site Outline

500
1000
Search Buffers (m)

1.2 Superficial Deposits and Landslips

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
4	0.0	On Site	GFDUD-XSV	Glaciofluvial Deposits, Devensian - Sand And Gravel	Sand And Gravel
5	0.0	On Site	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton
6	348.0	NE	ALV-XCZSV	Alluvium - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
7	404.0	NE	TILLD-DMTN	Till, Devensian - Diamicton	Diamicton

1.2.2 Landslip

Are there any records of Landslip within 500m of the study site boundary at 1:10,000 scale?

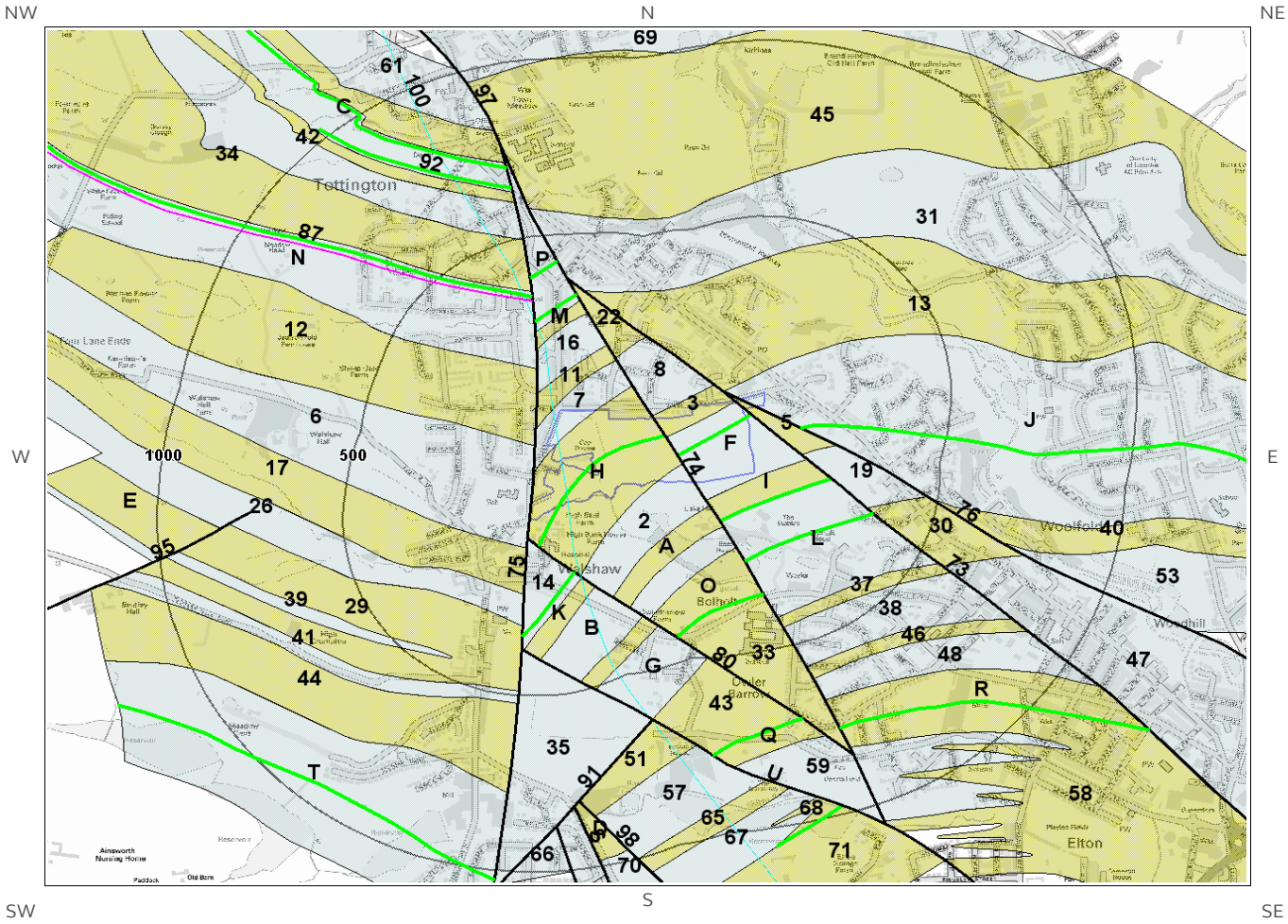
Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	345.0	N	SLIP-UKNOWN	Landslide Deposits	Unknown/unclassified Entry

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

1.3 Bedrock and linear features map (1:10,000 scale)



Bedrock and linear features Legend

Site Outline

500
1000
Search Buffers (m)

1.3 Bedrock and linear features

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary at 1:10,000 scale.

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1H	0.0	On Site	CAR-SDST	Cannel Rock (south Lancashire) - Sandstone	Langsettian Sub-age
2	0.0	On Site	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
3	0.0	On Site	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
4F	0.0	On Site	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
5	0.0	On Site	OL-SDST	Old Lawrence Rock - Sandstone	Langsettian Sub-age
6	0.0	On Site	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
7	0.0	On Site	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
8	0.0	On Site	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
9J	0.0	On Site	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
10I	14.0	SE	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
11	19.0	NW	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
12	31.0	W	HER-SDST	Helpet Edge Rock - Sandstone	Langsettian Sub-age
13	33.0	N	OL-SDST	Old Lawrence Rock - Sandstone	Langsettian Sub-age
14	53.0	S	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
15A	69.0	S	CAR-SDST	Cannel Rock (south Lancashire) - Sandstone	Langsettian Sub-age
16	78.0	NW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
17	80.0	S	MLRS-SDST	Milnrow Sandstone - Sandstone	Langsettian Sub-age
18L	88.0	SE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
19	129.0	E	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
20A	134.0	S	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
21N	134.0	NW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
22	147.0	N	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
23M	185.0	N	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
24O	196.0	S	CAR-SDST	Cannel Rock (south Lancashire) - Sandstone	Langsettian Sub-age
25K	202.0	SE	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
26	203.0	S	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
27P	233.0	N	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
28B	242.0	S	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
29	281.0	SW	OL-SDST	Old Lawrence Rock - Sandstone	Langsettian Sub-age
30	317.0	E	OL-SDST	Old Lawrence Rock - Sandstone	Langsettian Sub-age
31	333.0	N	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
32B	342.0	S	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
33	342.0	S	TRBR-SDST	Trencherbone Rock - Sandstone	Langsettian Sub-age
34	347.0	N	GAS-SDST	Great Arc Sandstone - Sandstone	Langsettian Sub-age
35	369.0	S	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
36G	381.0	S	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
37	399.0	SE	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
38	432.0	SE	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
39	441.0	SW	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
40	484.0	E	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age
41	485.0	S	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
42	495.0	N	PLCM-MDSS	Pennine Lower Coal Measures Formation - Mudstone, Siltstone And Sandstone	Langsettian Sub-age
43	497.0	S	PLCM-SDST	Pennine Lower Coal Measures Formation - Sandstone	Langsettian Sub-age

1.3.2 Linear features

Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance (m)	Direction	Category Description	Feature Description
73	0.0	On Site	FAULT	Normal fault, inferred; crossmarks on downthrow side
74	0.0	On Site	FAULT	Normal fault, inferred; crossmarks on downthrow side
75	0.0	On Site	FAULT	Normal fault, inferred; crossmarks on downthrow side

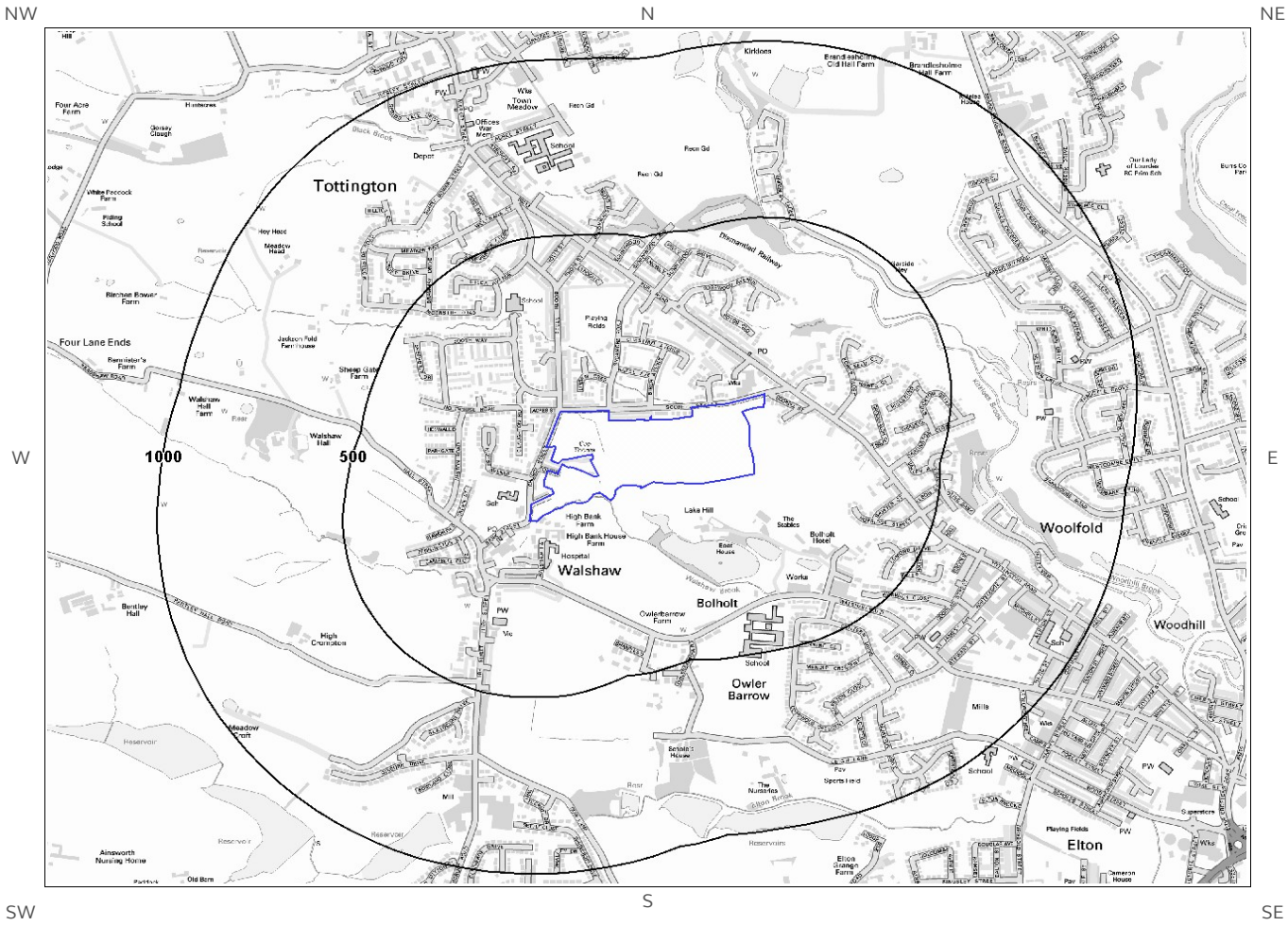
ID	Distance (m)	Direction	Category Description	Feature Description
76	0.0	On Site	FAULT	Normal fault, inferred; crossmarks on downthrow side
77F	0.0	On Site	ROCK	Coal seam, inferred
78G	0.0	On Site	LANDFORM	Buried channel or valley margin
79H	0.0	On Site	ROCK	Coal seam, inferred
80	53.0	S	FAULT	Normal fault, inferred; crossmarks on downthrow side
81I	88.0	SE	ROCK	Coal seam, inferred coincident with bedrock geology boundary
82J	117.0	SE	ROCK	Coal seam, inferred
83K	179.0	SE	ROCK	Coal seam, inferred
84L	215.0	S	ROCK	Coal seam, inferred
85M	261.0	N	ROCK	Coal seam, inferred
86N	319.0	N	FOSSIL_HORIZON	Fossil horizon, marine band
87	333.0	N	ROCK	Coal seam, inferred
88O	342.0	S	ROCK	Coal seam, inferred coincident with bedrock geology boundary
89U	369.0	S	FAULT	Normal fault, inferred; crossmarks on downthrow side
90P	384.0	N	ROCK	Coal seam, inferred

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of great Britain at 1:10,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2 Geology 1:50,000 Scale

2.1 Artificial Ground map



Site Outline

500
1000
Search Buffers (m)

Made Ground (undivided)

Disturbed Ground (undivided)

Worked Ground (undivided)

Landscaped Ground (undivided)

Infilled Ground

Reclaimed Ground

2. Geology 1:50,000 scale

2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 085

2.1.1 Artificial/ Made Ground

Are there any records of Artificial/ Made Ground within 500m of the study site boundary? No

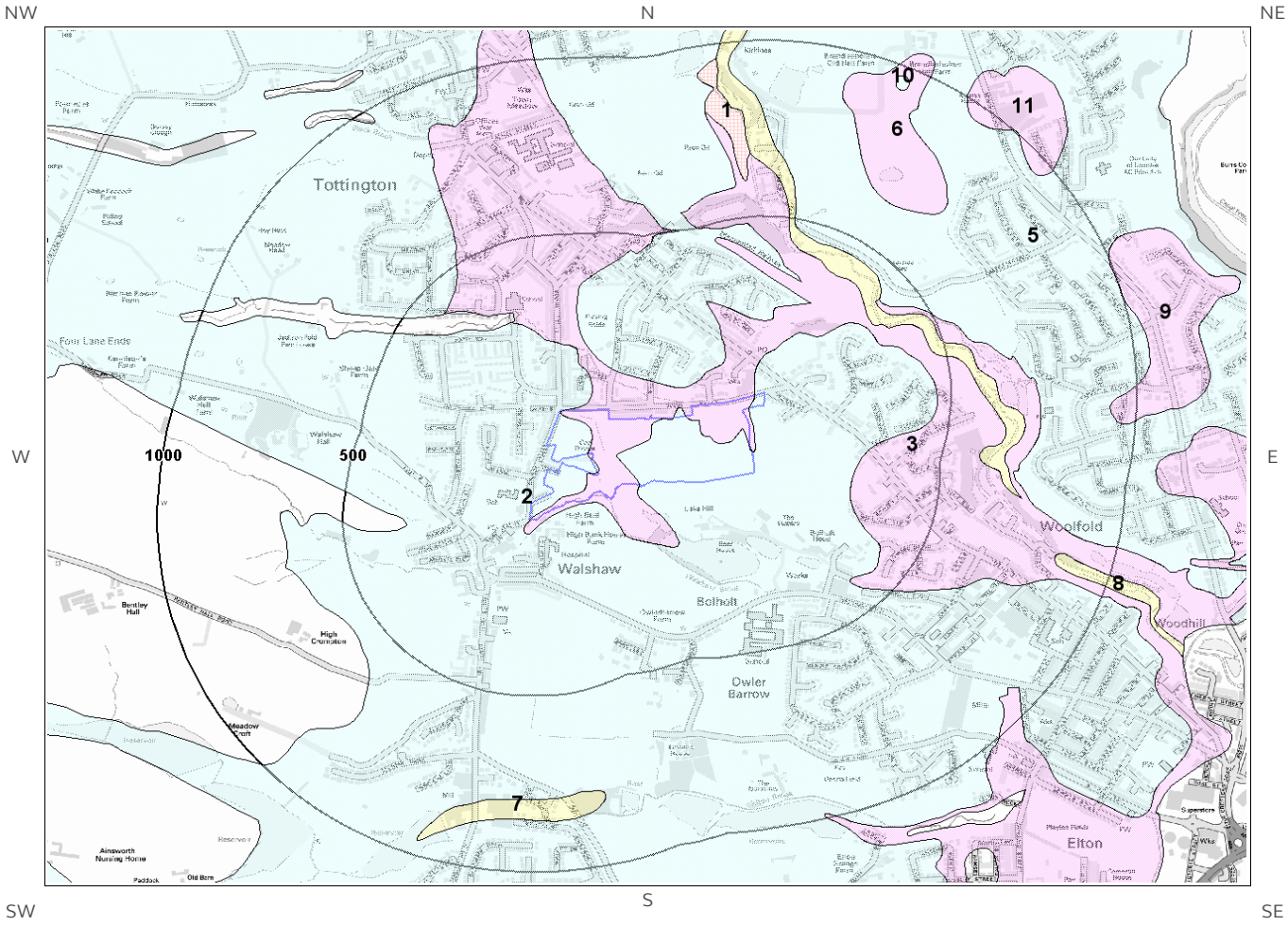
Database searched and no data found.

2.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? No

Database searched and no data found.

2.2 Superficial Deposits and Landslips map (1:50,000 scale)



Site Outline

500
1000
Search Buffers (m)

2.2 Superficial Deposits and Landslips

2.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
2	0.0	On Site	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON
3	0.0	On Site	GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL
4	348.0	NE	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
5	404.0	NE	TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

2.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	High	Low
0.0	On Site	Intergranular	Very High	High

2.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

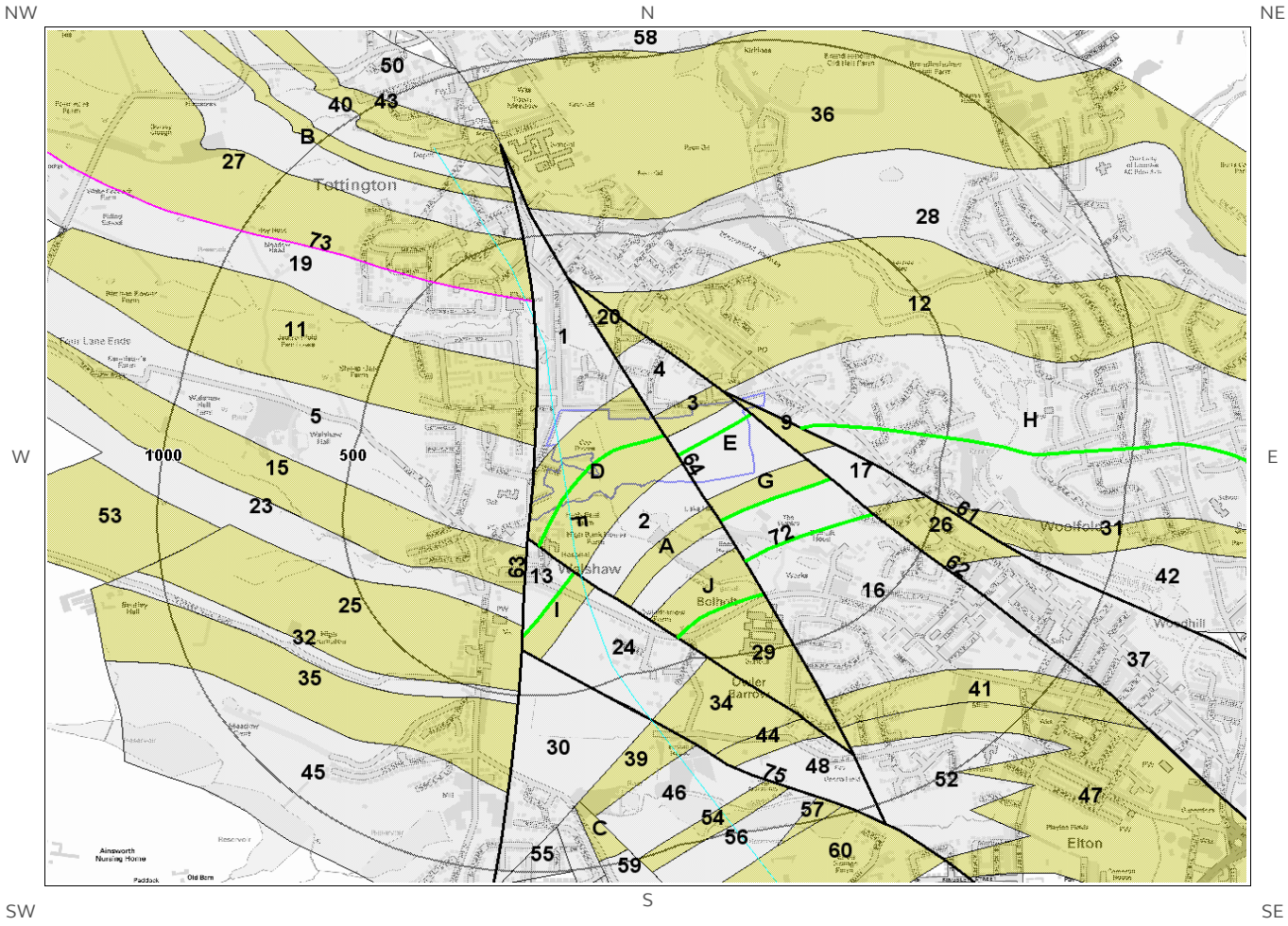
This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site boundary? No

Database searched and no data found.

2.3 Bedrock and linear features map (1:50,000 scale)



2.3 Bedrock, Solid Geology & linear features

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 085

2.3.1 Bedrock/Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary:

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
2	0.0	On Site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
3	0.0	On Site	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
4	0.0	On Site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
5	0.0	On Site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
6D	0.0	On Site	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
7H	0.0	On Site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
8E	0.0	On Site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
9	0.0	On Site	OL-SDST	OLD LAWRENCE ROCK - SANDSTONE	WESTPHALIAN
10G	14.0	SE	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
11	31.0	W	HER-SDST	HELPET EDGE ROCK - SANDSTONE	WESTPHALIAN
12	33.0	N	OL-SDST	OLD LAWRENCE ROCK - SANDSTONE	WESTPHALIAN
13	52.0	S	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
14A	69.0	S	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
15	80.0	S	MLRS-SDST	MILNROW SANDSTONE - SANDSTONE	WESTPHALIAN
16	88.0	SE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
17	129.0	E	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
18A	134.0	S	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
19	134.0	NW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
20	147.0	N	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
21I	179.0	SE	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
22J	196.0	S	CAR-SDST	CANNEL ROCK (SOUTH LANCASHIRE) - SANDSTONE	WESTPHALIAN
23	204.0	S	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
24	242.0	S	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
25	280.0	SW	OL-SDST	OLD LAWRENCE ROCK - SANDSTONE	WESTPHALIAN
26	317.0	E	OL-SDST	OLD LAWRENCE ROCK - SANDSTONE	WESTPHALIAN
27	319.0	N	GAS-SDST	GREAT ARC SANDSTONE - SANDSTONE	WESTPHALIAN
28	333.0	N	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
29	342.0	S	TRBR-SDST	TRENCHERBONE ROCK - SANDSTONE	WESTPHALIAN
30	370.0	S	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
31	485.0	E	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
32	485.0	S	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
33B	495.0	N	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
34	497.0	S	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN

2.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site boundary? Yes

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Fracture	High	Moderate
0.0	On Site	Fracture	High	Low
0.0	On Site	Fracture	High	Low
0.0	On Site	Fracture	High	Low
0.0	On Site	Fracture	High	Moderate
14.0	SE	Fracture	High	Low
31.0	W	Fracture	High	Moderate

2.3.3 Linear features

Are there any records of linear features within 500m of the study site boundary? Yes

ID	Distance	Direction	Category Description	Feature Description
61	0.0	On Site	FAULT	Fault, inferred
62	0.0	On Site	FAULT	Fault, inferred
63	0.0	On Site	FAULT	Fault, inferred
64	0.0	On Site	FAULT	Fault, inferred
65F	0.0	On Site	LANDFORM	Approximate margin of buried (superficial deposit-filled) channel or valley
66D	0.0	On Site	ROCK	Coal seam, inferred
67E	0.0	On Site	ROCK	Coal seam, inferred
68F	52.0	S	FAULT	Fault, inferred
69G	88.0	SE	ROCK	Coal seam, inferred
70H	117.0	SE	ROCK	Coal seam, inferred
71I	179.0	SE	ROCK	Coal seam, inferred
72	215.0	S	ROCK	Coal seam, inferred
73	319.0	N	FOSSIL_HORIZON	Marine band
74J	342.0	S	ROCK	Coal seam, inferred
75	370.0	S	FAULT	Fault, inferred

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nation wide coverage.

3 Radon Data

3.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

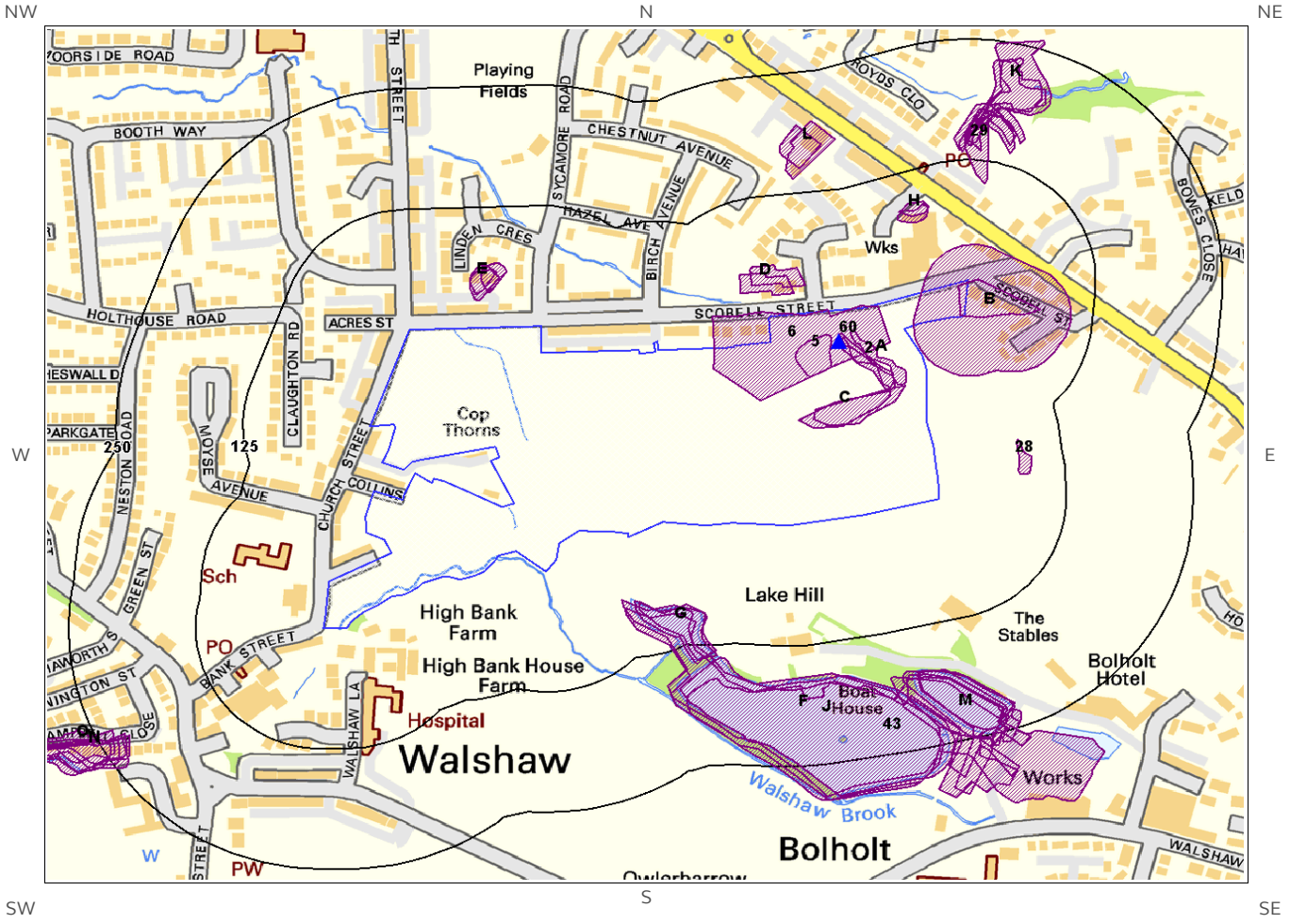
The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

3.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

---

4 Ground Workings map



Ground Workings Legend

Site Outline

125
250
Search Buffers (m)

Historic Surface Ground Workings

Historic Underground Workings

Current Ground Workings

4 Ground Workings

4.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Use	Date
1A	0.0	On Site	378292 412126	Ponds	1956
2	0.0	On Site	378280 412123	Ponds	1928
3A	0.0	On Site	378281 412116	Ponds	1938
4B	0.0	On Site	378404 412175	Brick Field	1909
5	0.0	On Site	378229 412128	Sand Pit	1851
6	0.0	On Site	378216 412131	Brick Field	1851
7C	0.0	On Site	378259 412072	Unspecified Pit	1928
8B	0.0	On Site	378411 412188	Brick Field	1956
9B	0.0	On Site	378404 412175	Brick Field	1928
10C	0.0	On Site	378274 412076	Unspecified Pit	1956
11D	21.0	N	378182 412203	Reservoirs	1928
12D	21.0	N	378182 412203	Reservoirs	1909
13D	21.0	N	378182 412203	Ponds	1891
14D	21.0	N	378182 412203	Reservoirs	1938
15E	28.0	N	377895 412201	Unspecified Pit	1938
16D	28.0	N	378193 412211	Reservoirs	1956
17E	34.0	N	377904 412207	Unspecified Pit	1928
18E	37.0	N	377914 412209	Unspecified Pit	1956
19F	66.0	S	378229 411775	Reservoir	1891
20F	66.0	S	378229 411775	Reservoirs	1928
21F	66.0	S	378229 411775	Reservoirs	1909

ID	Distance (m)	Direction	NGR	Use	Date
22G	67.0	S	378093 411841	Reservoirs	1956
23G	67.0	S	378093 411841	Pond	1969
24G	68.0	S	378095 411843	Pond	1980
25H	72.0	N	378326 412276	Refuse Heap	1938
26J	74.0	S	378232 411766	Reservoirs	1938
27H	79.0	N	378327 412281	Refuse Heap	1928
28	80.0	E	378435 412023	Pond	1909
29	102.0	N	378382 412346	Unspecified Pit	1909
30I	134.0	N	378382 412361	Refuse Heap	1938
31K	135.0	N	378420 412398	Refuse Heap	1974
32I	136.0	N	378381 412367	Refuse Heap	1928
33J	138.0	S	378233 411743	Pond	1980
34J	138.0	S	378233 411743	Reservoirs	1956
35J	138.0	S	378233 411743	Pond	1969
36J	138.0	S	378233 411743	Pond	1974
37K	140.0	N	378418 412391	Refuse Heap	1969
38L	140.0	N	378225 412342	Reservoirs	1909
39L	140.0	N	378225 412342	Ponds	1891
40I	143.0	N	378394 412369	Refuse Heap	1956
41K	148.0	N	378416 412396	Refuse Heap	1980
42L	150.0	N	378216 412345	Pond	1851
43	160.0	S	378309 411729	Water Bodies	1851
44M	168.0	S	378379 411746	Ponds	1891
45M	171.0	S	378379 411770	Pond	1980
46M	171.0	S	378379 411770	Pond	1974
47M	171.0	S	378379 411770	Pond	1969
48M	172.0	S	378381 411764	Reservoirs	1956
49M	172.0	S	378375 411734	Ponds	1928
50M	176.0	S	378370 411762	Pond	1909

ID	Distance (m)	Direction	NGR	Use	Date
51N	220.0	SW	377504 411717	Reservoirs	1956
52N	223.0	SW	377465 411720	Reservoir	1980
53N	228.0	SW	377490 411713	Reservoirs	1938
54O	232.0	SW	377450 411723	Ponds	1891
55O	232.0	SW	377486 411713	Reservoirs	1928
56O	232.0	SW	377486 411713	Reservoirs	1909
57O	242.0	SW	377475 411711	Pond	1851

4.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? Yes

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	376.0	S	378007 411528	Unspecified Old Shaft	1891
Not shown	376.0	S	378007 411528	Old Coal Shaft	1909

4.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

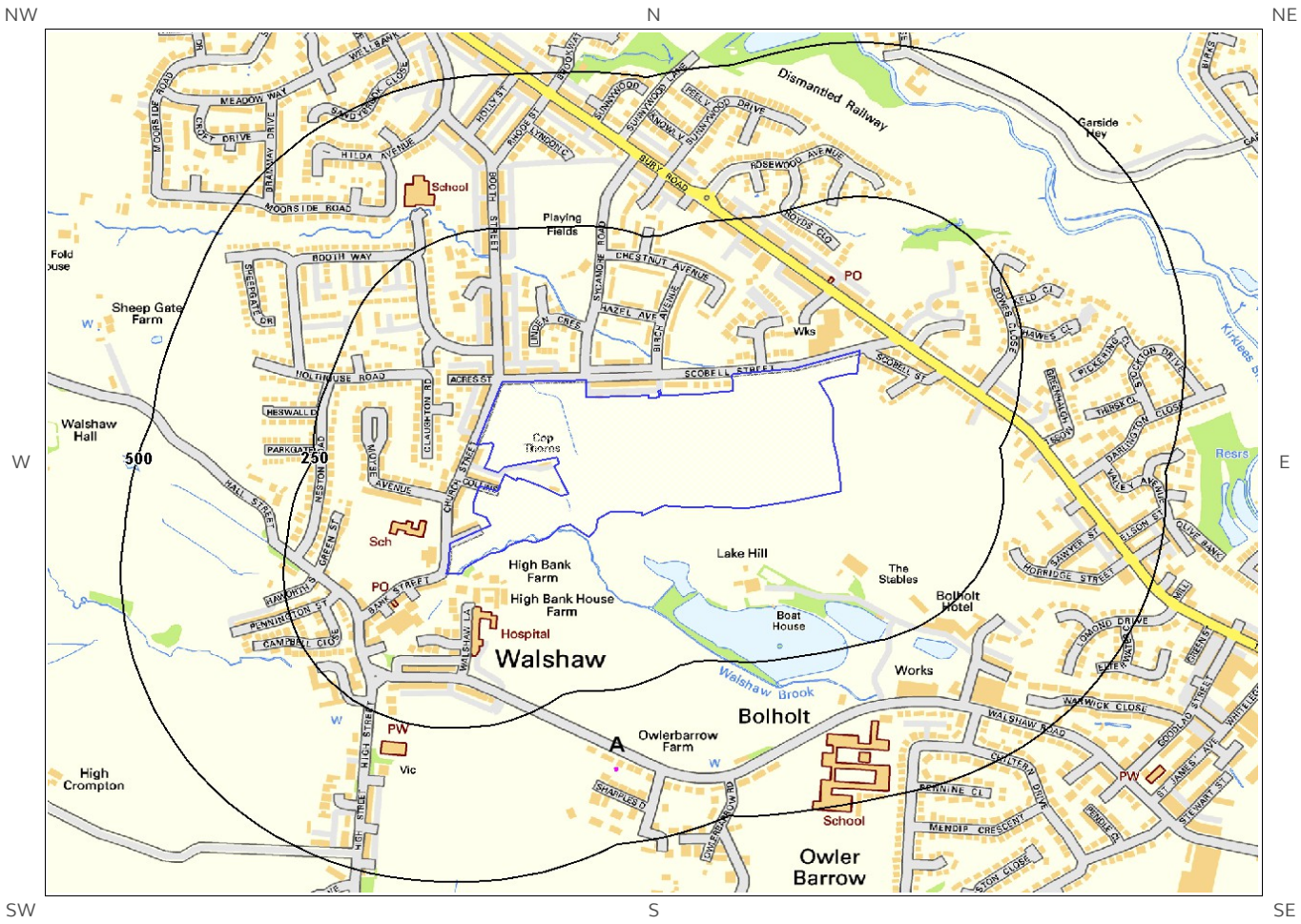
Are there any BGS Current Ground Workings within 1000m of the study site boundary? Yes

The following Current Ground Workings information is provided by British Geological Survey:

ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
60	0.0	On Site	378253 412143	Sandstone	Leemans Hill	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	410.0	N	377943 412569	Sand	Copp Hill Sand Pit	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
Not shown	457.0	N	378129 412622	Clay & Shale	Brown Hill Brick Field	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	629.0	NW	377271 412441	Sandstone	Jacksons Fold	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	797.0	NW	377165 412593	Sandstone	Meadow Head	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased
Not shown	843.0	SW	376977 411501	Sandstone	Lower Bently Hall	A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site	Ceased

5 Mining, Extraction & Natural Cavities map



Mining, Extraction and Natural Cavities Legend

- Site Outline
- Search Buffers (m): 250, 500
- Historical Mining
- Non-Coal Mining Cavities
- Natural Cavities (point data)
- Natural Cavities (polygon data)

Non-Coal Mining
- Highly likely
- Likely
- Unlikely
- Highly unlikely
- Rare

5 Mining, Extraction & Natural Cavities

5.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? Yes

The following Historical Mining information is provided by Groundsure:

ID	Distance (m)	Direction	NGR	Details	Date
1A	376.0	S	378007 411528	Old Coal Shaft	1909
2A	376.0	S	378007 411528	Unspecified Old Shaft	1891

5.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? Yes

The following Coal Mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0.0	On Site	The site lies in or in proximity to the coal mining reporting area as defined by the Coal Authority

5.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

5.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled “Review of mining instability in Great Britain, 1990” PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

5.6 Natural Cavities

This dataset provides information based on the Peter Brett Associates natural cavities database. The dataset is made up of points and polygons. Where polygons are used these represent an area in which it is expected the cavities could be found. It does not indicate that cavities are present everywhere within the polygon, and caution should be used in the interpretation of this data.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

5.7 Brine Extraction

This data provides information from the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.9 Cornwall and Devon Metalliferous Mining

This dataset provides information on metalliferous mining areas in Cornwall/Devon and is derived from records held by Mining Searches UK.

Are there any Cornwall and Devon Metalliferous Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

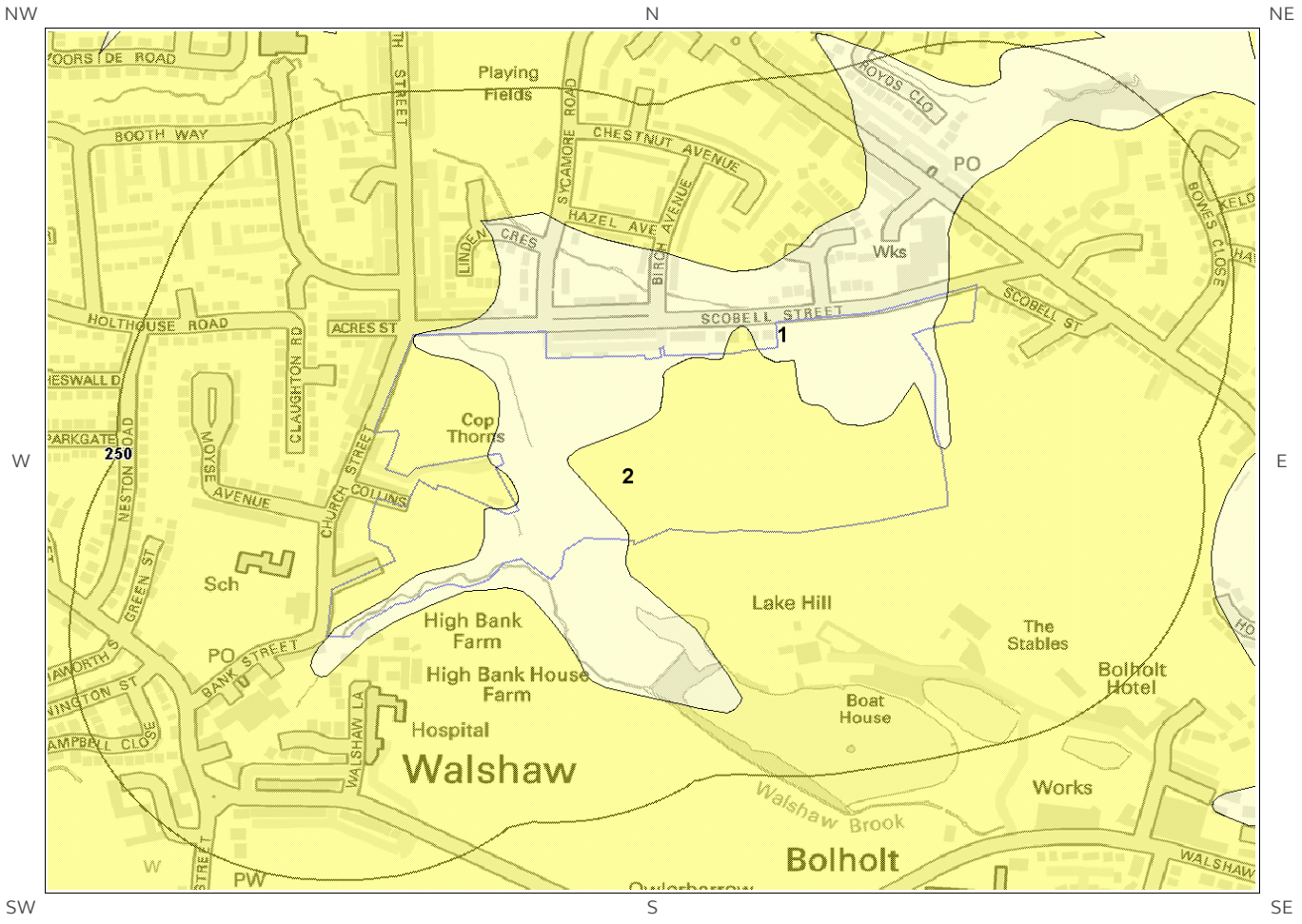
Are there any Clay Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

---

6 Natural Ground Subsidence

6.1 Shrink-Swell Clay map



Shrink Swell Clay Legend

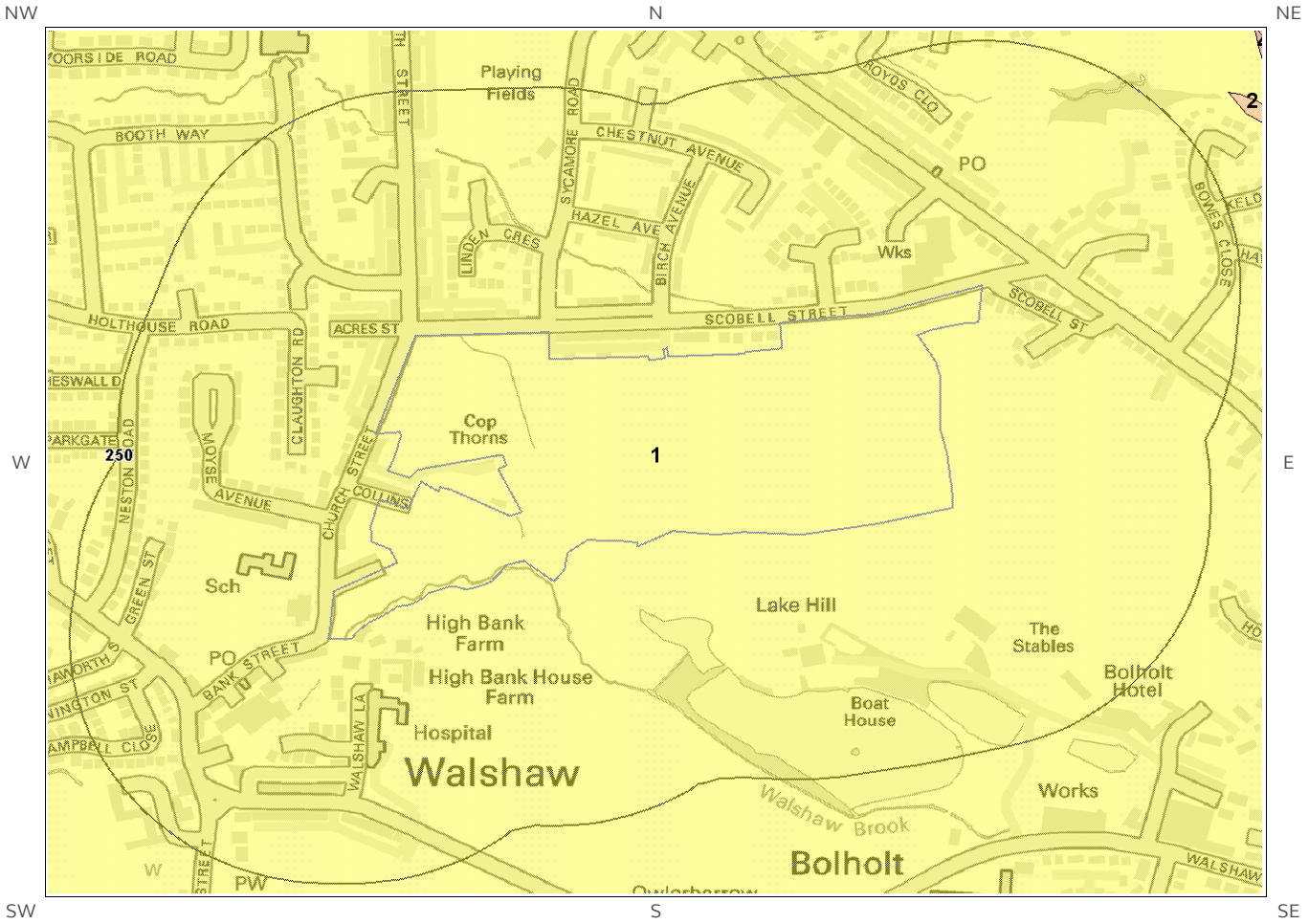
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6.2 Landslides map



Landslides Legend

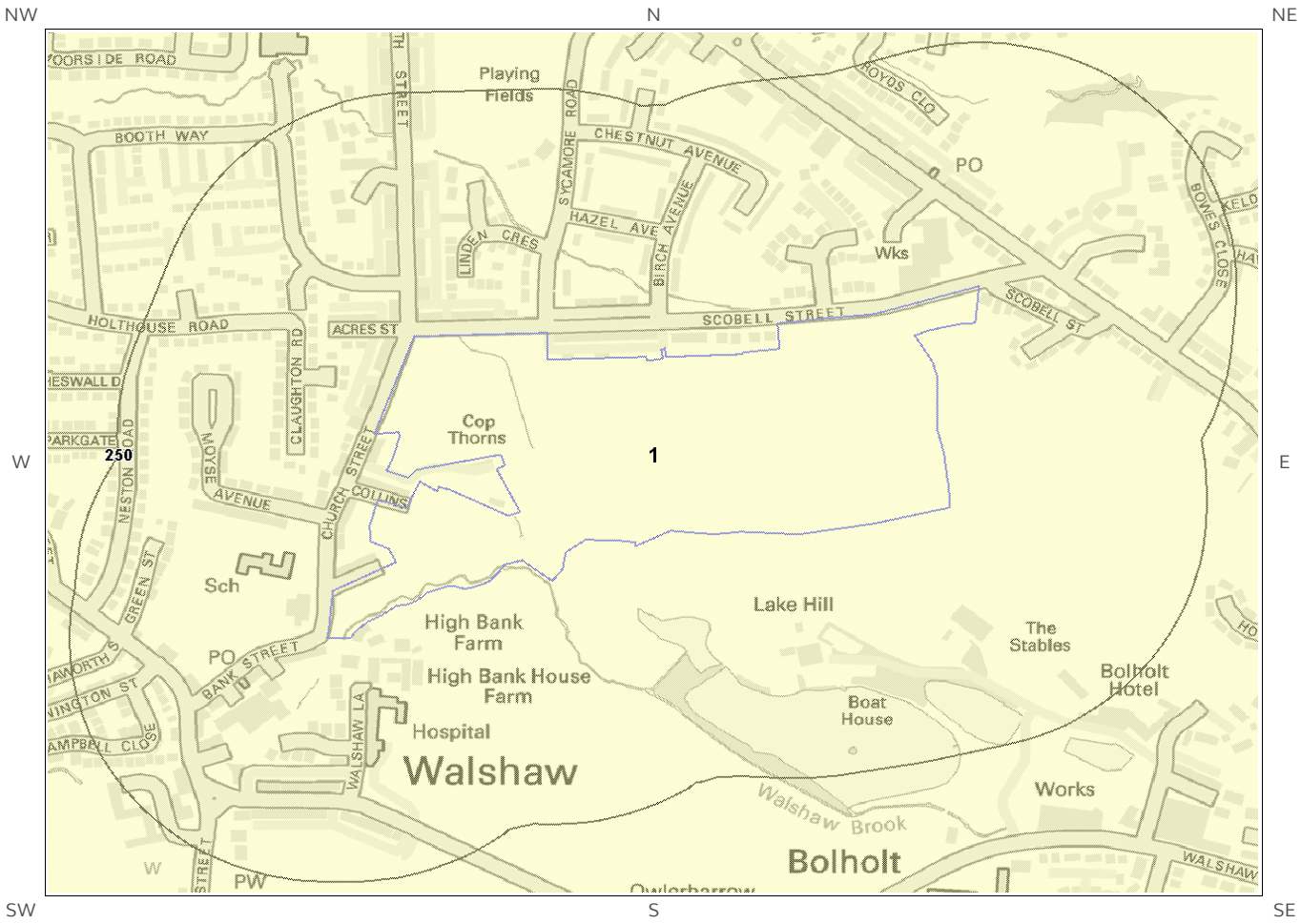
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6.3 Ground Dissolution of Soluble Rocks map



Ground Dissolution Soluble Rocks Legend

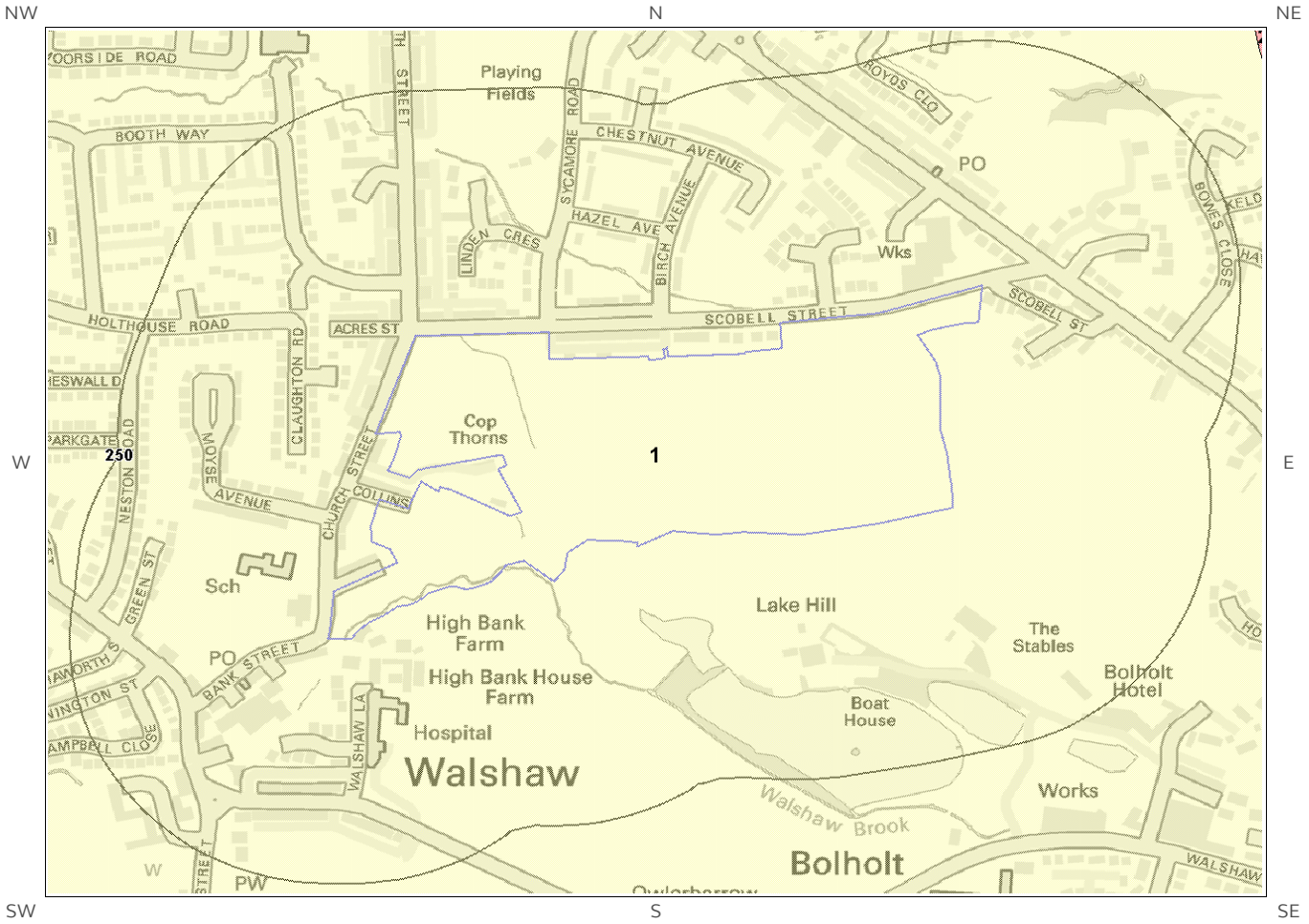
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6.4 Compressible Deposits map



Compressible Deposits Legend

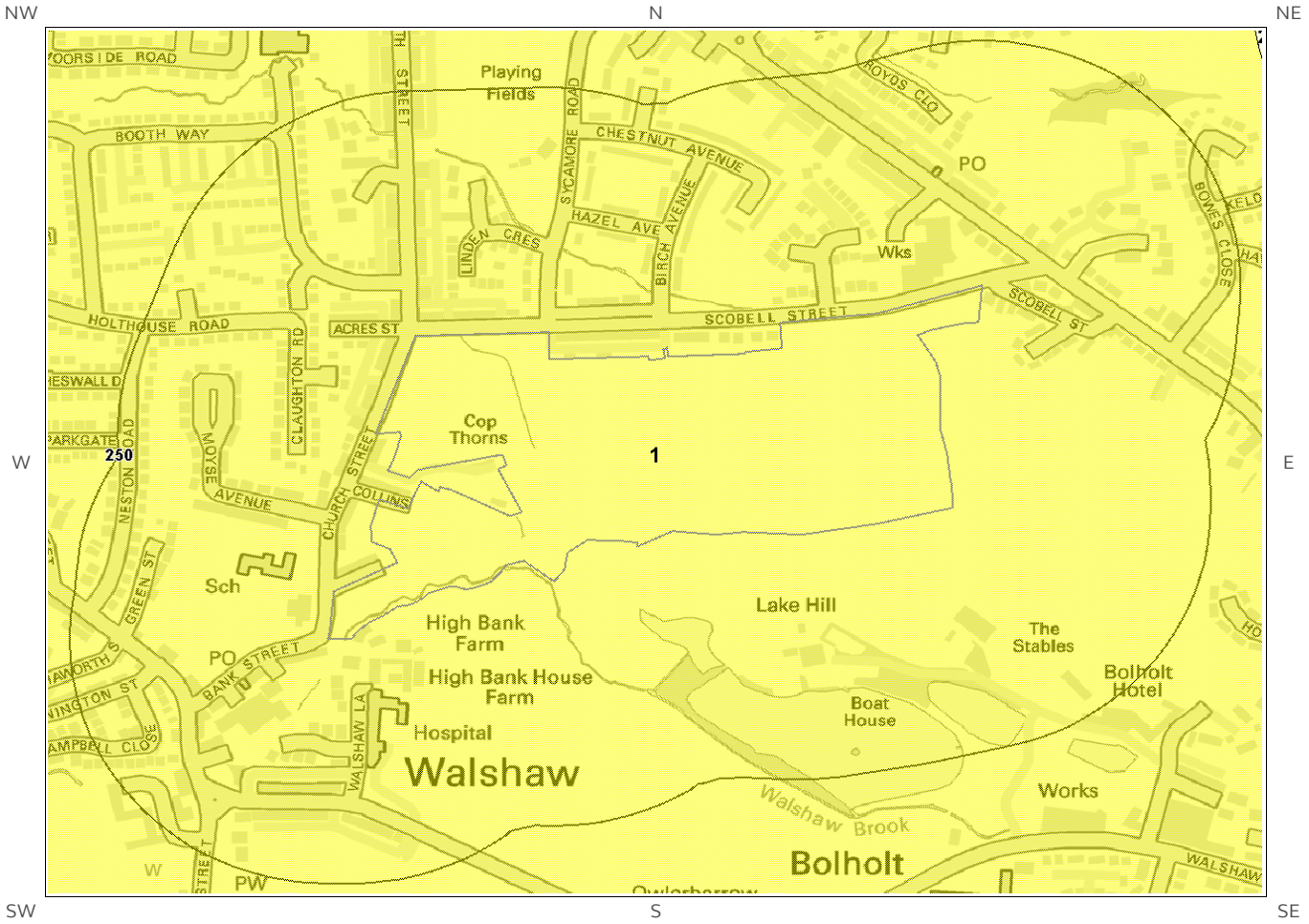
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6.5 Collapsible Deposits map



Collapsible Deposits Legend

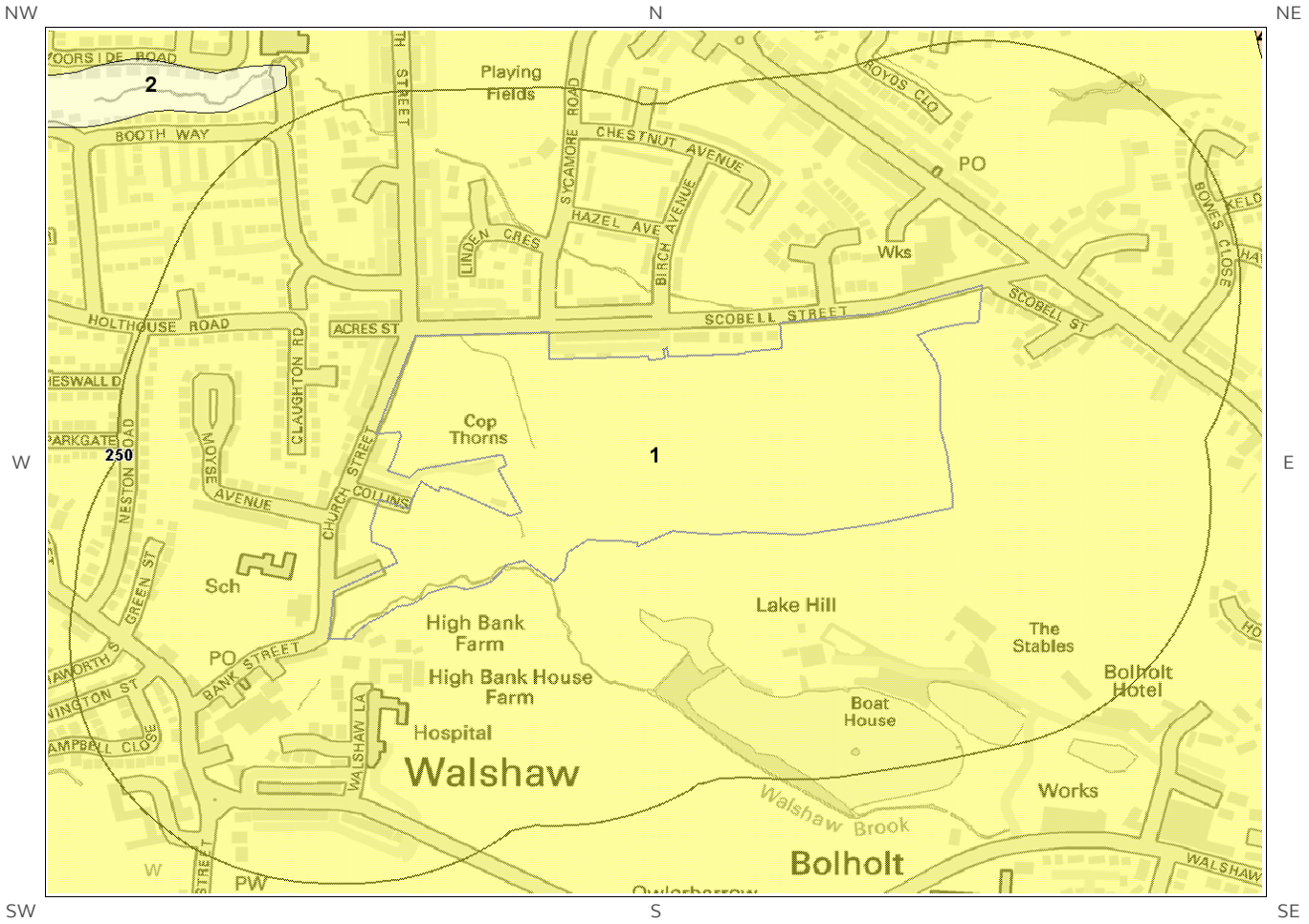
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6.6 Running Sand map



Running Sand Legend

Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

6 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site*[*] boundary? Very Low

6.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Ground conditions predominantly non-plastic. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely likely due to potential problems with shrink-swell clays.
2	0.0	On Site	Very Low	Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

6.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

* This includes an automatically generated 50m buffer zone around the site

6.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

6.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

6.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

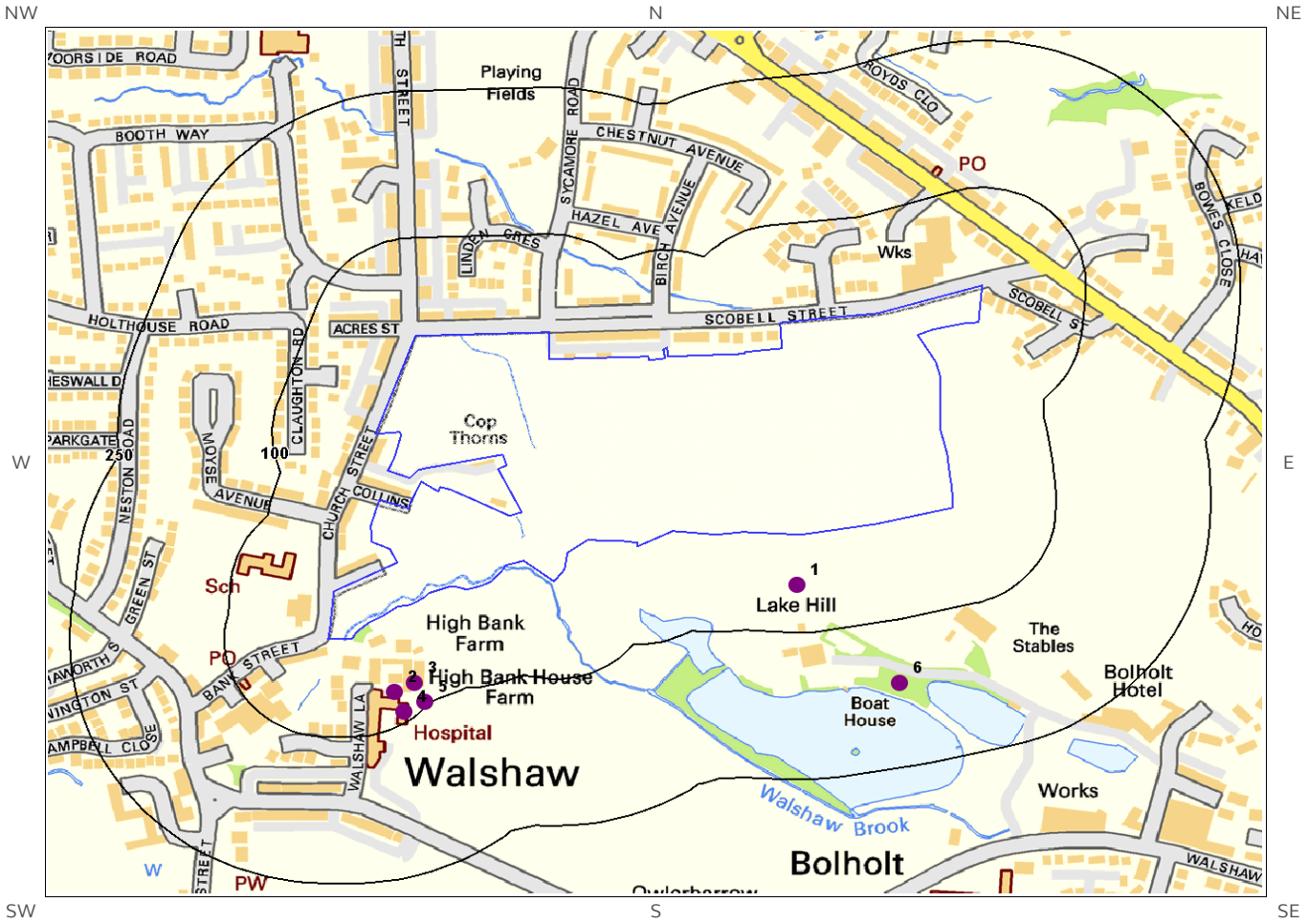
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

6.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

7 Borehole Records map



Borehole Records Legend

Site Outline

Borehole Locations

125
250
Search Buffers (m)

7 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary: 6

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	52.0	S	378200 411900	SD71SE79	No details	BOLTHOLT FARM
2	69.0	SE	377810 411790	SD71SE132	6.5	WALSHAW ROAD BURY 2
3	76.0	SE	377830 411800	SD71SE134	2.2	WALSHAW ROAD BURY 4
4	91.0	SE	377820 411770	SD71SE131	6.5	WALSHAW ROAD BURY 1
5	96.0	SE	377840 411780	SD71SE133	3.2	WALSHAW ROAD BURY 3
6	164.0	S	378300 411800	SD71SE89	No details	S. SMETHURST & SONS LTD

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#1: scans.bgs.ac.uk/sobi_scans/boreholes/22837
#2: scans.bgs.ac.uk/sobi_scans/boreholes/610179
#3: scans.bgs.ac.uk/sobi_scans/boreholes/610181
#4: scans.bgs.ac.uk/sobi_scans/boreholes/610178
#5: scans.bgs.ac.uk/sobi_scans/boreholes/610180
#6: scans.bgs.ac.uk/sobi_scans/boreholes/22847

8 Estimated Background Soil Chemistry

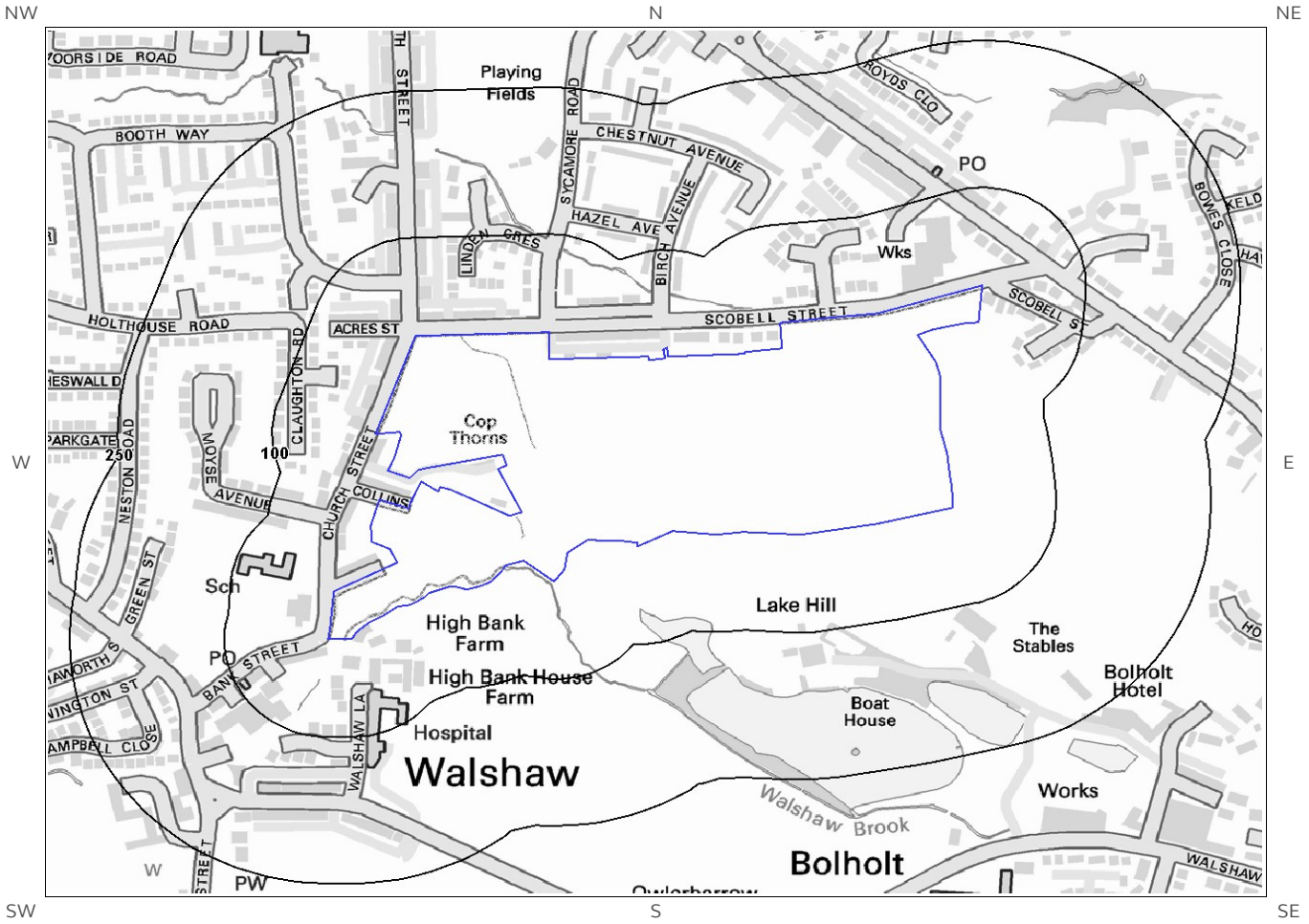
Records of background estimated soil chemistry within 250m of the study site boundary: 31

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	200 - 300 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	200 - 300 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	200 - 300 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	200 - 300 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
0.0	On Site	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
11.0	N	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg	300 - 600 mg/kg
13.0	W	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
17.0	W	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	200 - 300 mg/kg
21.0	NW	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	200 - 300 mg/kg
32.0	N	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
33.0	SE	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg
44.0	NE	Sediment	15 - 25 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	300 - 600 mg/kg

*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.

9 Railways and Tunnels map



Railways and Tunnels Legend

- Site Outline
- Search Buffers (m) — 250 — 500
- Underground or Partially Underground Railway / Subway System
- Railway Tunnel (OS Mapping)
- Abandoned or Dismantled Railway (OpenStreetMap)
- Railway Track (OS Mapping)
- Railway Track (OpenStreetMap)
- High Speed 2
- High Speed 2 Revised Proposed Route
- Crossrail 1
- Railway and/or Tunnel Feature from Historical Mapping

9 Railways and Tunnels

9.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary?	No
Have any underground railway lines been identified within 250m of the study site boundary?	No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels map.

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary?	No
Have any other railway tunnels been identified within 250m of the site boundary?	No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels map.

9.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary?	No
Have any historical railway or tunnel features been identified within 250m of the study site boundary?	No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels map.

9.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Multiple sections of the same track may be listed in the detail above
Any records that have been identified are represented on the Railways and Tunnels map.

9.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Multiple sections of the same track may be listed in the detail above
Any records that have been identified are represented on the Railways and Tunnels map.

9.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? No

Is the study site within 500m of the route of the Crossrail 1 rail project? No

Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a Groundsure HS2 and Crossrail 1 Report.

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.

Contact Details

Groundsure Helpline

Telephone: 08444 159 000
info@groundsure.com

British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:**enquiries@bgs.ac.uk**
Web:**www.bgs.ac.uk**
BGS Geological Hazards Reports and general geological enquiries

British Gypsum

British Gypsum Ltd
East Leake
Loughborough
Leicestershire
LE12 6HX

The Coal Authority

200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk

Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
https://www.gov.uk/government/organisations/public-health-england
Email: **enquiries@phe.gov.uk**
Main switchboard: 020 7654 8000

Johnson Poole & Bloomer Limited

Harris and Pearson Building, Brettel Lane
Brierley Hill, West Midlands
DY5 3LH
Tel: +44 (0) 1384 262 000
Email:**enquiries.gs@jpb.co.uk**
Website: **www.jpb.co.uk**

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS

Tel: 08456 050505
Website: http://www.ordnancesurvey.co.uk/

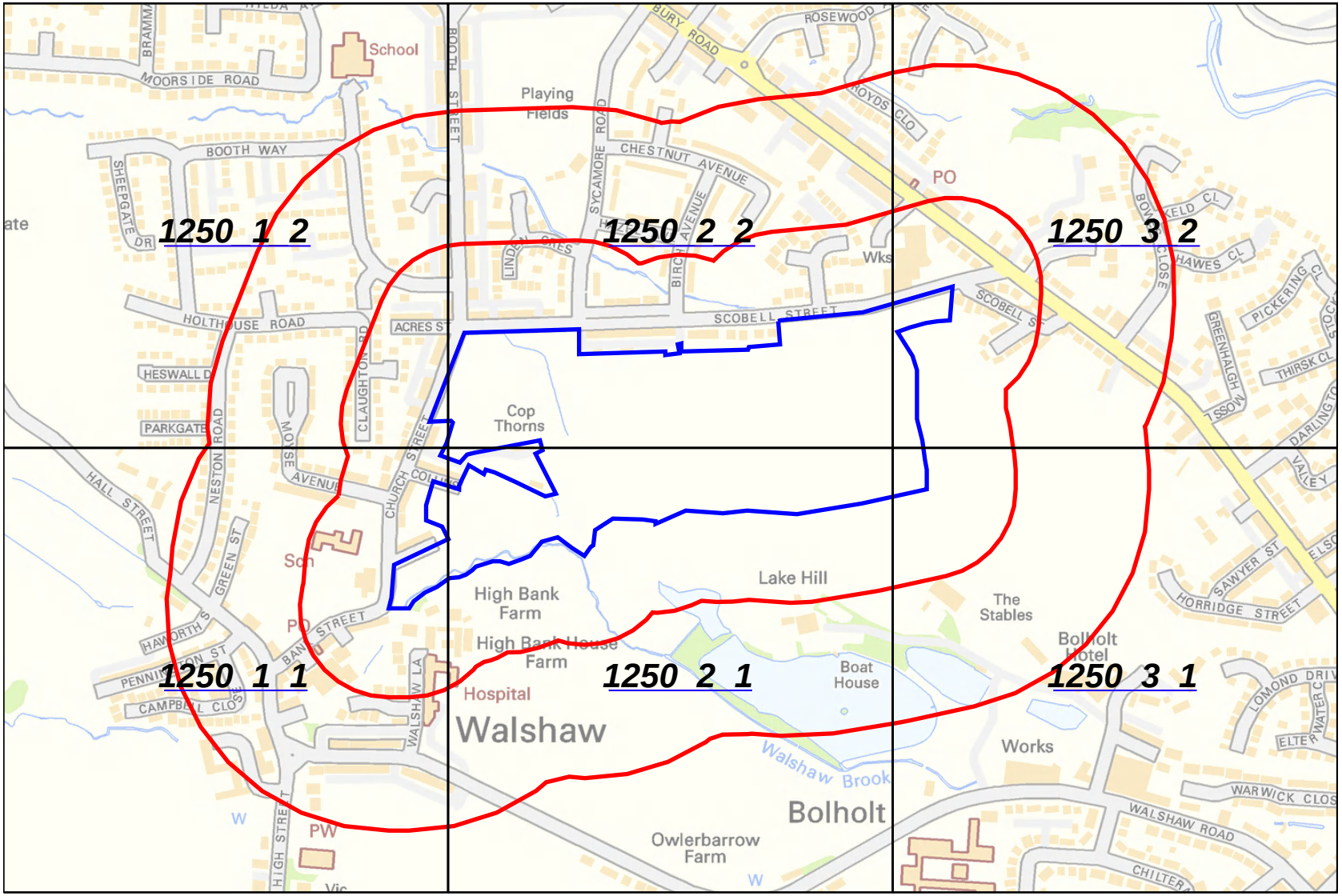
Getmapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444
Website:**http://www1.getmapping.com/**

Peter Brett Associates
Caversham Bridge House
Waterman Place
Reading
Berkshire RG1 8DN
Tel: +44 (0)118 950 0761 E-mail:**reading@pba.co.uk**
Website:**http://www.peterbrett.com/home**

Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:
https://www.groundsure.com/terms-and-conditions-feb11-2019



Groundsure INSIGHTS

N
W E
S

1:1250 Scale Grid Index

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_1
Grid Ref: 377562, 411775

Map Name: National Grid

Map date: **1959-1960**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1959
Levelled 1957

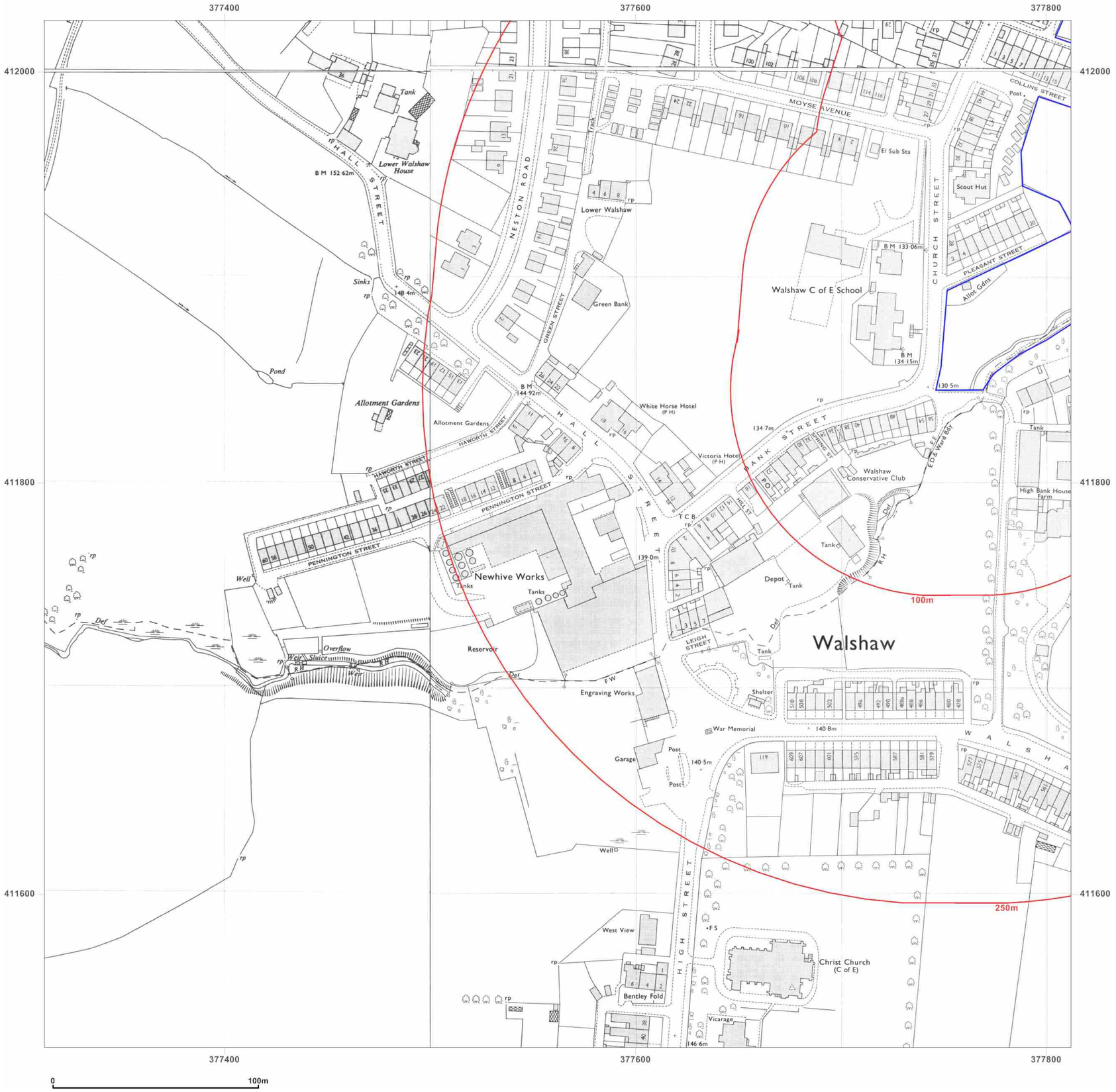
Surveyed 1959
Revised 1959
Edition N/A
Copyright 1959
Levelled 1957

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_1
Grid Ref: 377562, 411775

Map Name: National Grid

Map date: **1971-1976**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

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

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

Surveyed 1959
Revised 1974
Edition N/A
Copyright 1975
Levelled 1962

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_1
Grid Ref: 377562, 411775

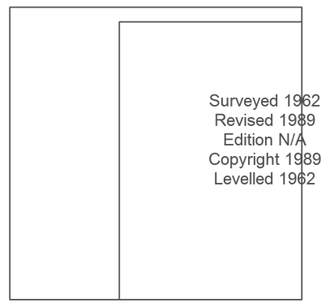
Map Name: National Grid

Map date: **1989**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_1
Grid Ref: 377562, 411775

Map Name: National Grid

Map date: **1989**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1962
Revised 1989
Edition N/A
Copyright 1989
Levelled 1962

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_1
Grid Ref: 377562, 411775

Map Name: National Grid

Map date: **1989-1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

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

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

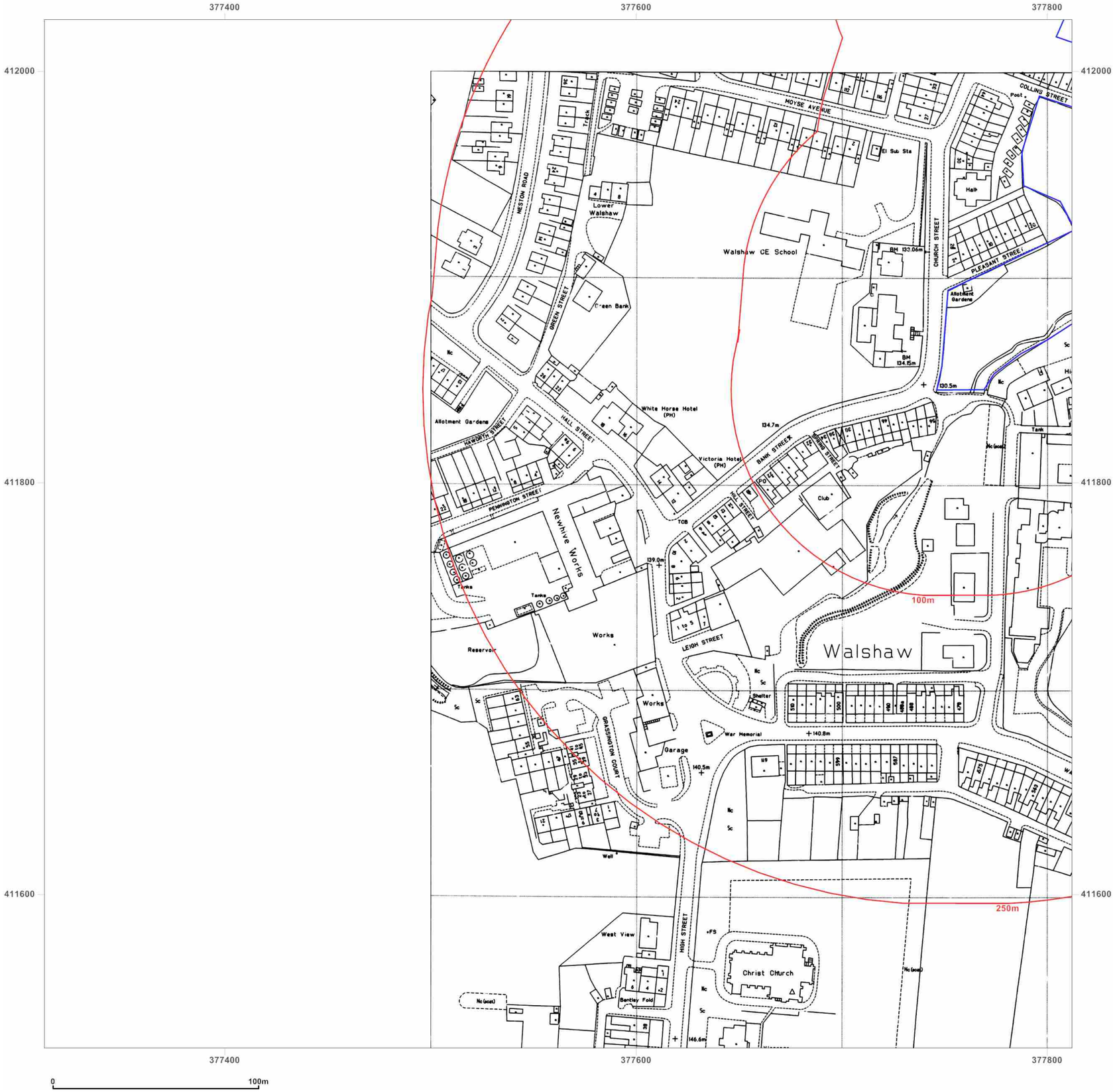
Surveyed 1962
Revised 1989
Edition N/A
Copyright 1989
Levelled 1962

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_1
Grid Ref: 377562, 411775

Map Name: National Grid

Map date: **1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_2
Grid Ref: 377562, 412275

Map Name: National Grid

Map date: **1960**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_2
Grid Ref: 377562, 412275

Map Name: National Grid

Map date: **1967-1971**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1966
Revised 1966
Edition N/A
Copyright 1967
Levelled 1963

Surveyed 1959
Revised 1966
Edition N/A
Copyright 1967
Levelled 1963

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

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

Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_2
Grid Ref: 377562, 412275

Map Name: National Grid

Map date: **1989-1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

Surveyed 1963
Revised 1989
Edition N/A
Copyright 1989
Levelled 1963

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

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

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

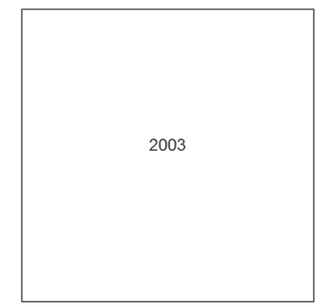
Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_2
Grid Ref: 377562, 412275

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

N
W E
S

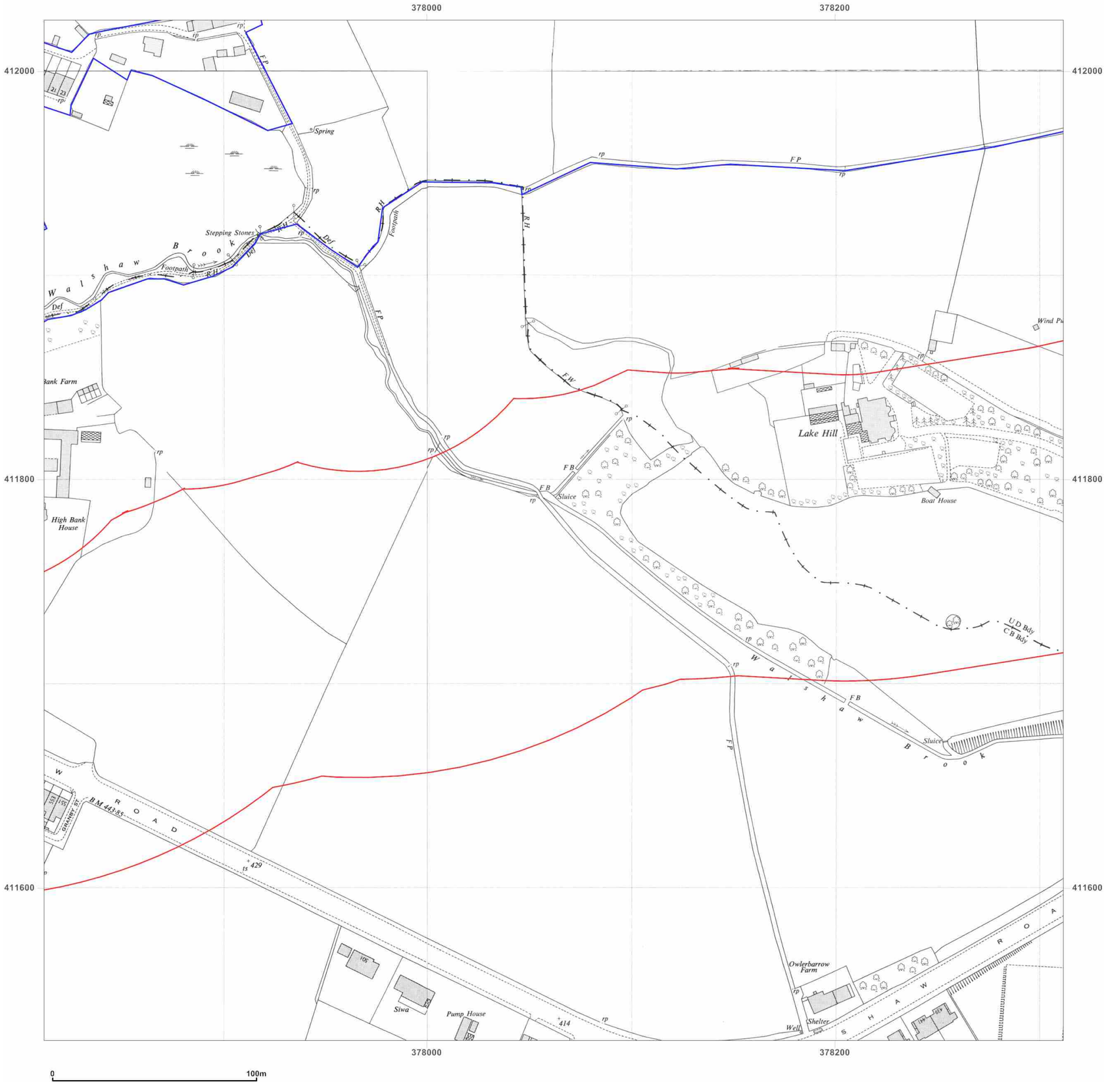


Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_1
Grid Ref: 378062, 411775

Map Name: National Grid

Map date: **1959-1960**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

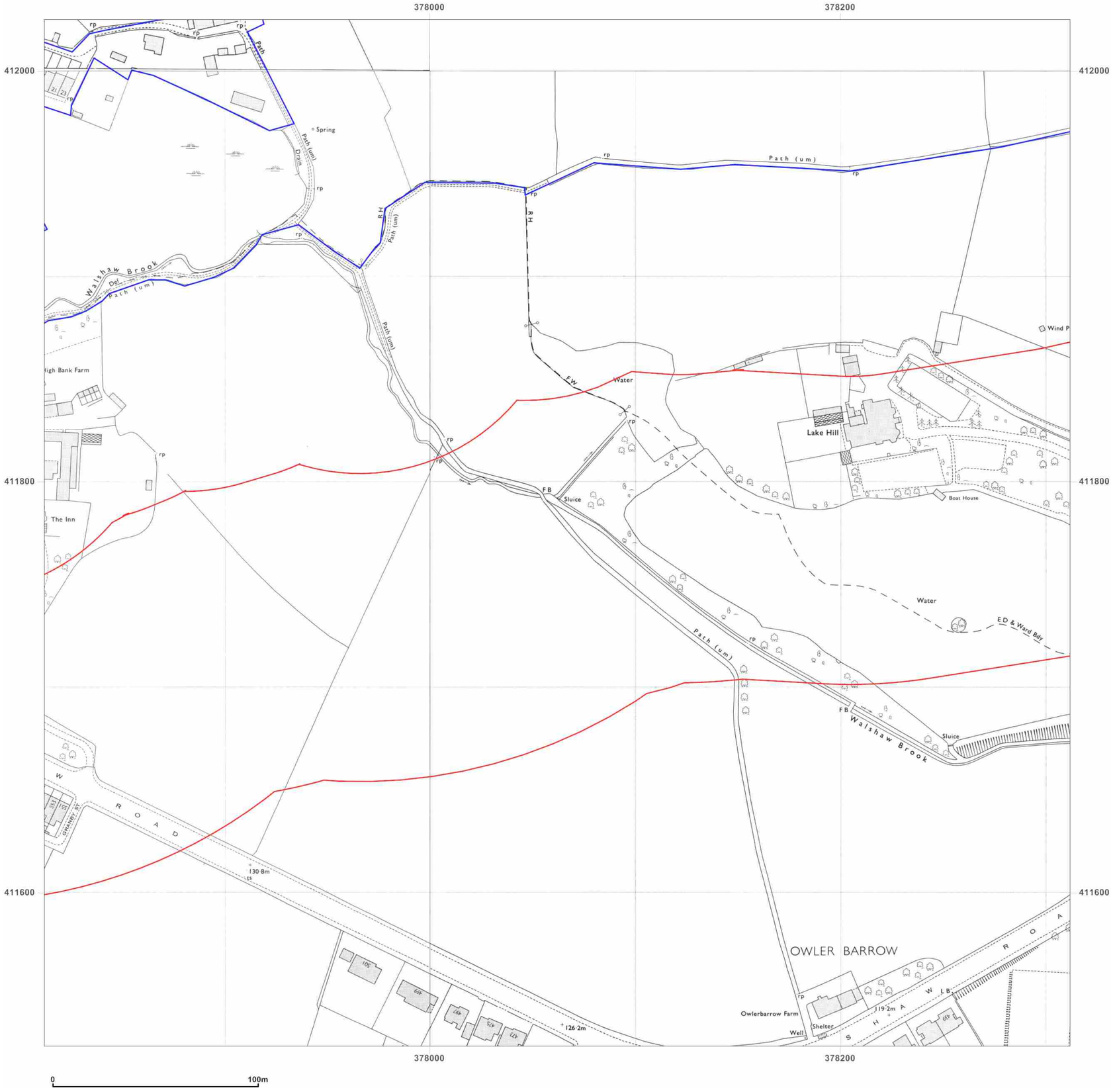
Surveyed 1959 Revised 1959 Edition N/A Copyright 1960 Levelled 1957	Surveyed 1959 Revised N/A Edition N/A Copyright 1960 Levelled 1957
Surveyed 1959 Revised 1959 Edition N/A Copyright 1959 Levelled 1957	Surveyed 1959 Revised 1959 Edition N/A Copyright 1959 Levelled 1957

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_1
Grid Ref: 378062, 411775

Map Name: National Grid

Map date: **1971-1975**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed N/A	Surveyed 1959
Revised N/A	Revised 1974
Edition N/A	Edition N/A
Copyright N/A	Copyright 1975
Levelled N/A	Levelled 1962

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_1
Grid Ref: 378062, 411775

Map Name: National Grid

Map date: **1988-1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

Surveyed 1962
Revised 1988
Edition N/A
Copyright 1988
Levelled 1962

Surveyed 1962
Revised 1989
Edition N/A
Copyright 1989
Levelled 1962

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

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_1
Grid Ref: 378062, 411775

Map Name: National Grid

Map date: **1988-1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1988
Levelled N/A

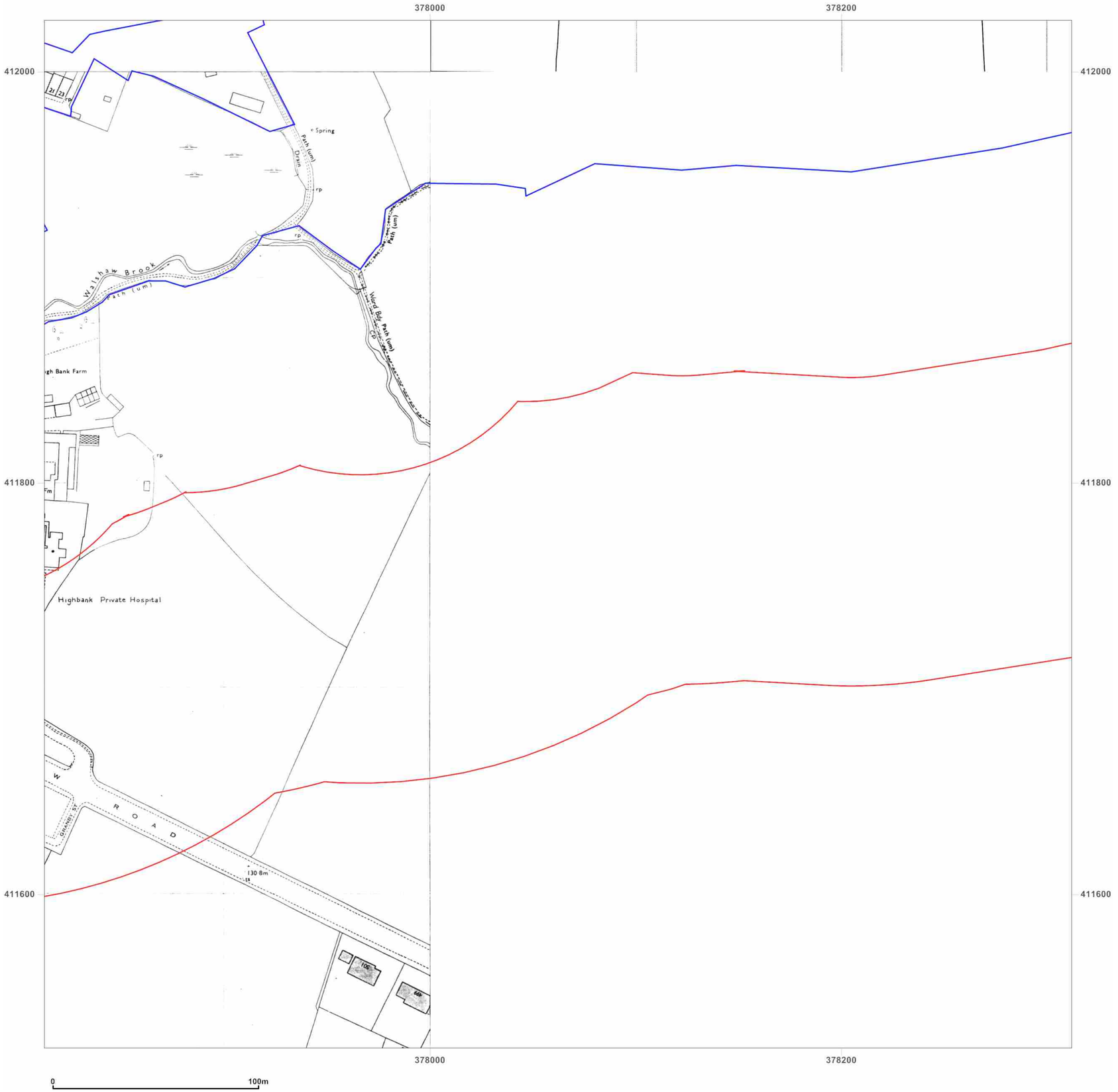
Surveyed 1962 Revised 1989 Edition N/A Copyright 1989 Levelled 1962	Surveyed N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_1
Grid Ref: 378062, 411775

Map Name: National Grid

Map date: **1989-1992**

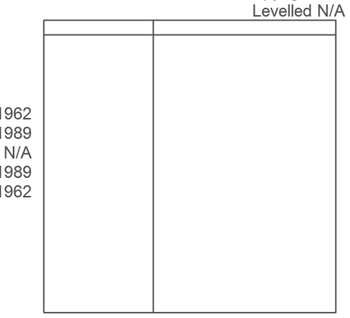
Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

Surveyed 1962
Revised 1989
Edition N/A
Copyright 1989
Levelled 1962

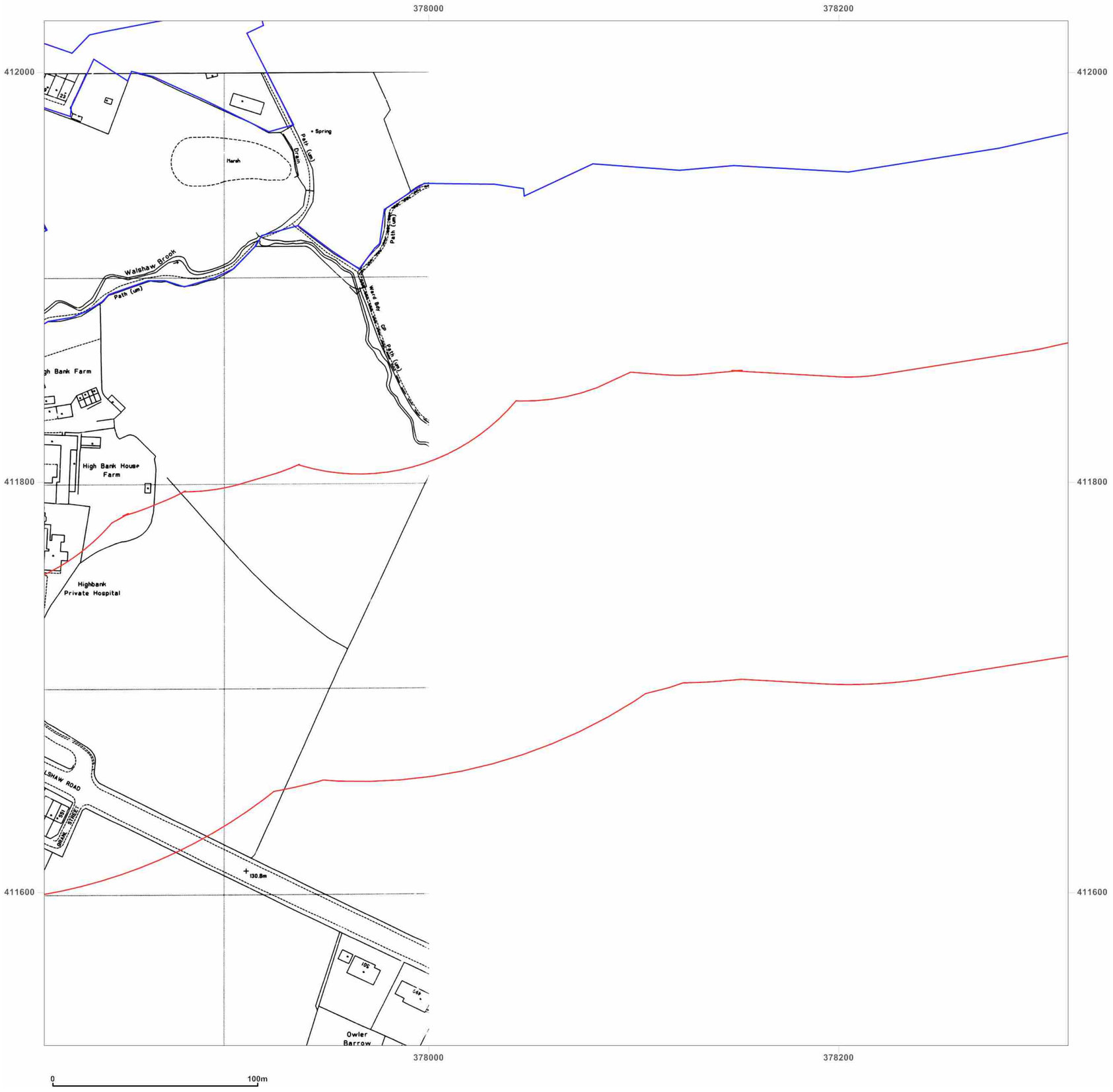


Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_1
Grid Ref: 378062, 411775

Map Name: National Grid

Map date: **1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

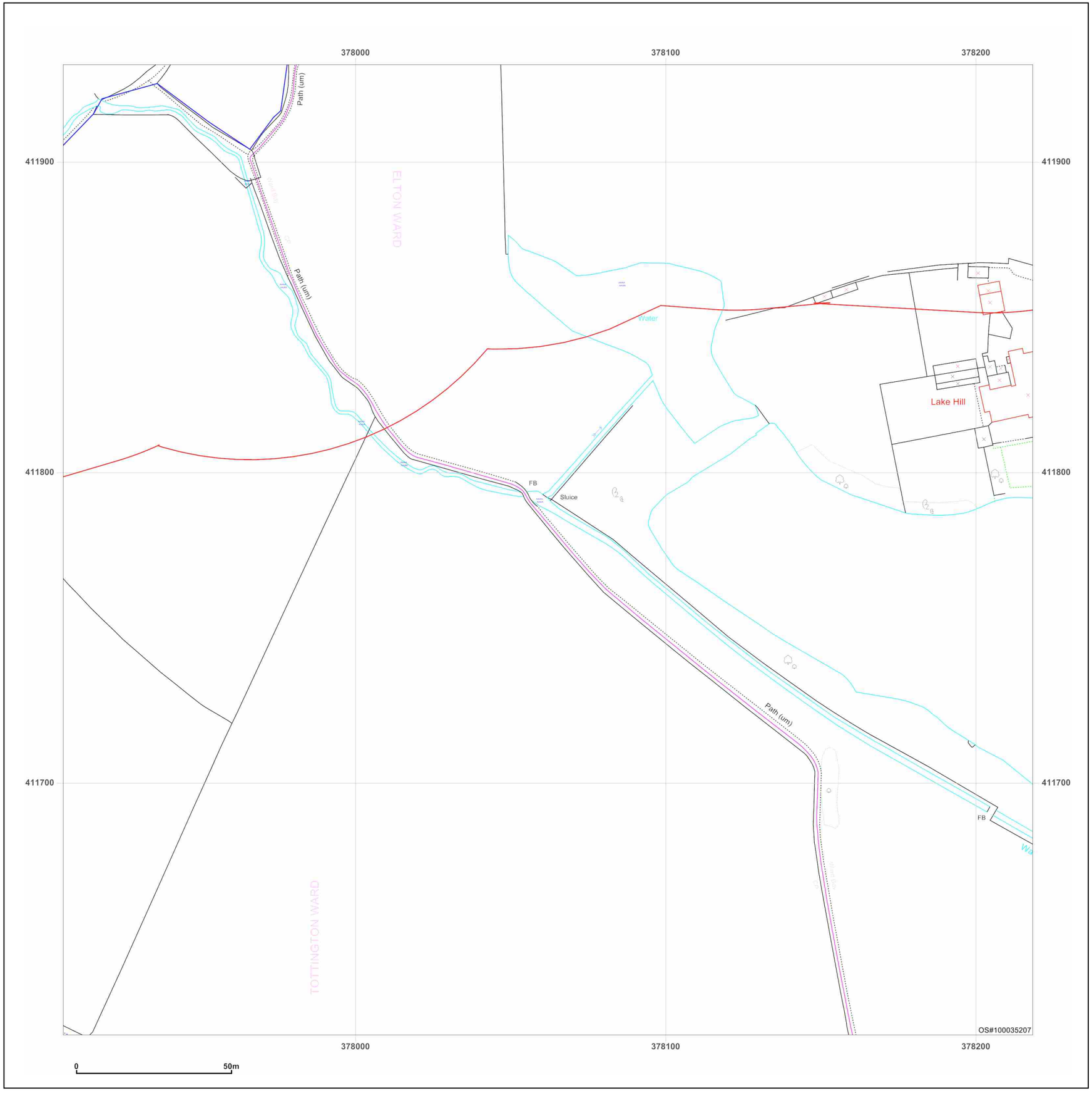
Surveyed 1992
Revised N/A
Edition N/A
Copyright 1992
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_1
Grid Ref: 378062, 411775

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

N
W E
S

2003

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_1_1
Grid Ref: 377562, 411775

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

N
W E
S

2003

Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_2
Grid Ref: 378062, 412275

Map Name: National Grid

Map date: **1960**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised N/A
Edition N/A
Copyright 1960
Levelled 1957

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_2
Grid Ref: 378062, 412275

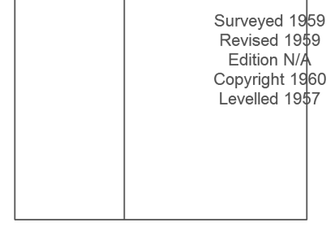
Map Name: National Grid

Map date: **1960**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

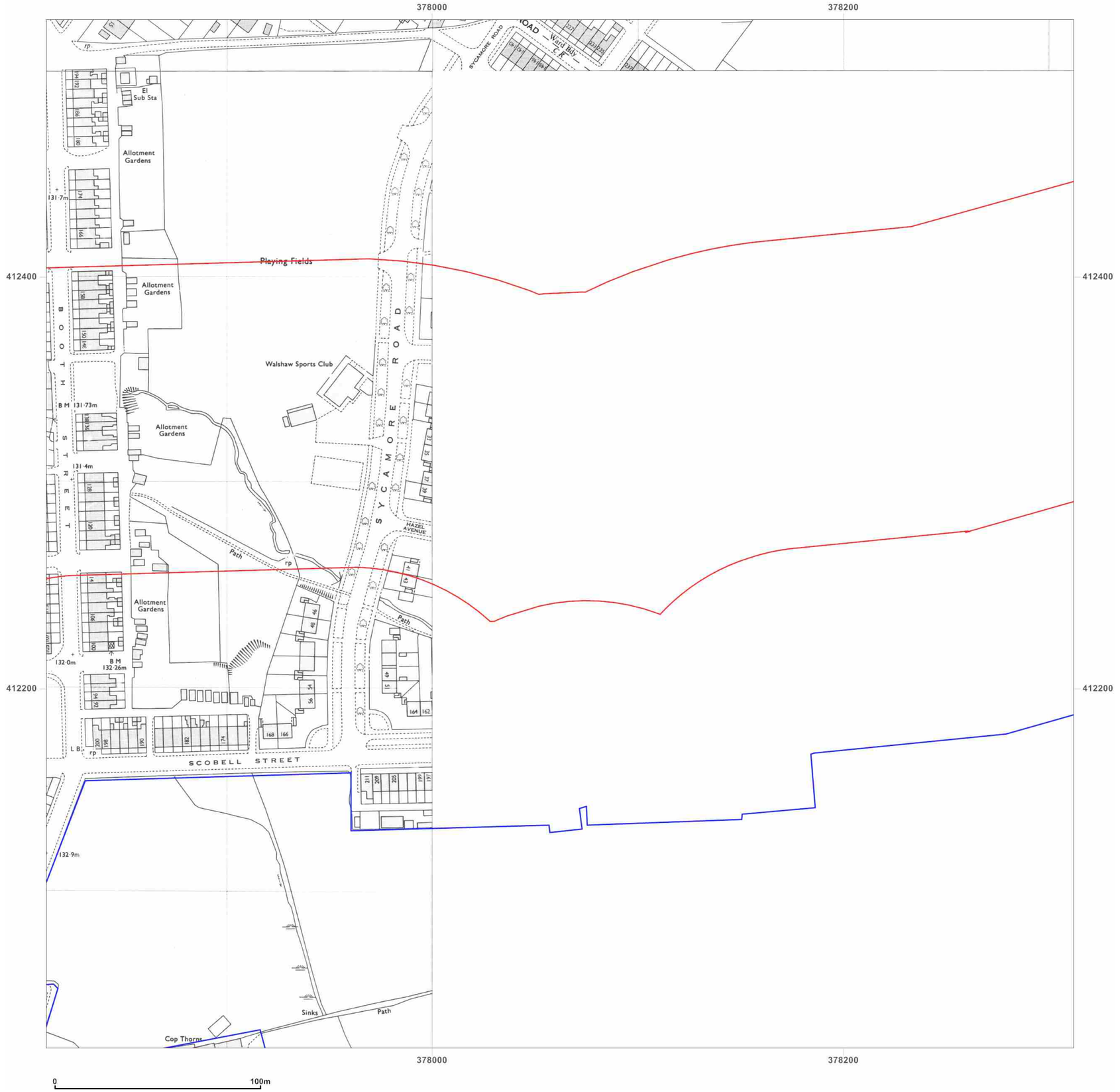


Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_2
Grid Ref: 378062, 412275

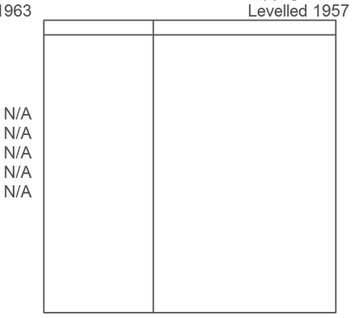
Map Name: National Grid
Map date: **1967-1971**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

Surveyed 1959
Revised 1966
Edition N/A
Copyright 1967
Levelled 1963

Surveyed 1967
Revised 1967
Edition N/A
Copyright 1967
Levelled 1957

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

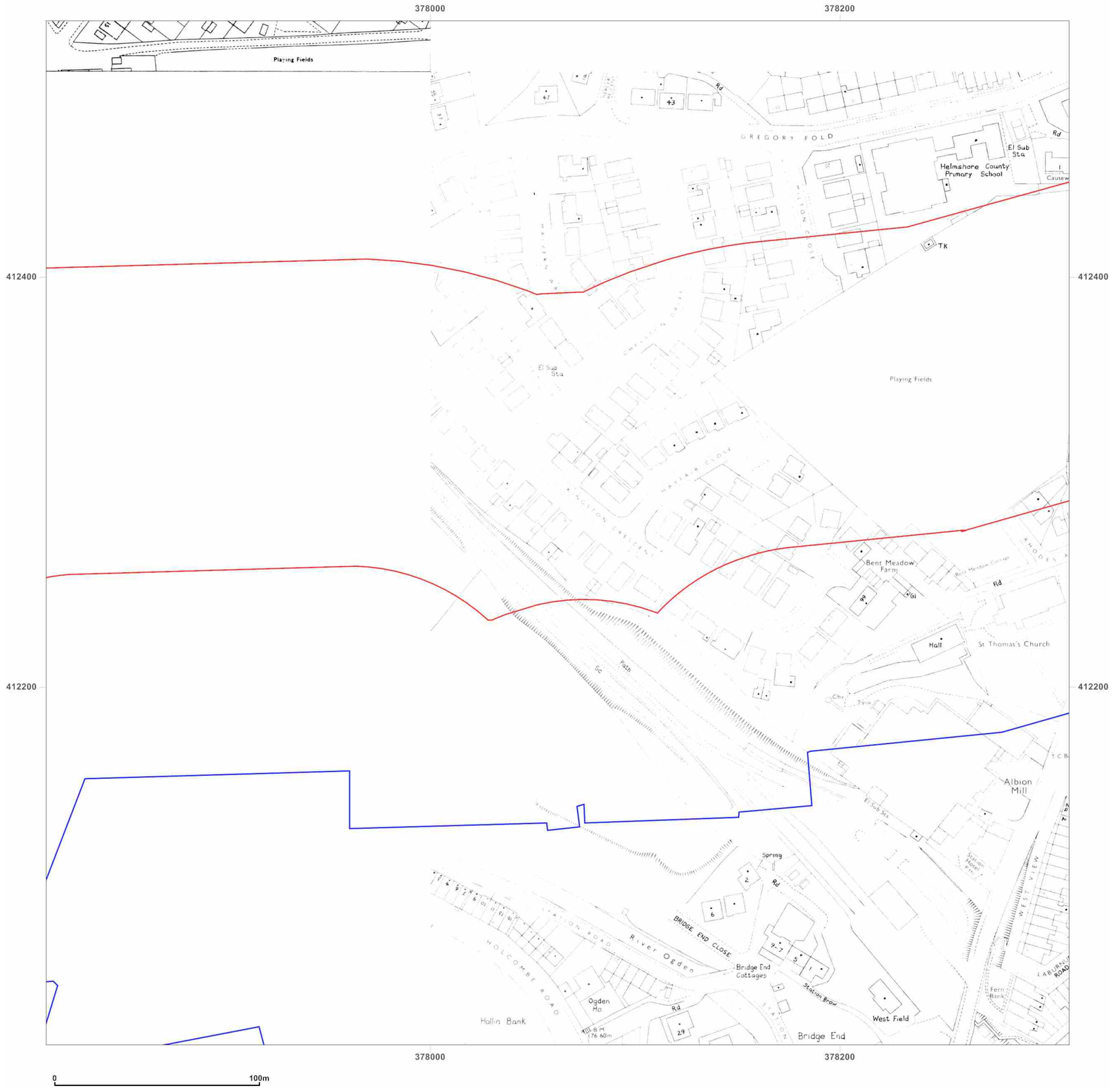


Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_2
Grid Ref: 378062, 412275

Map Name: National Grid

Map date: **1988-1989**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1963
Revised 1989
Edition N/A
Copyright 1989
Levelled 1963

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1988
Levelled N/A

Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_2
Grid Ref: 378062, 412275

Map Name: National Grid

Map date: **1988-1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1963
Revised 1989
Edition N/A
Copyright 1989
Levelled 1963

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

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

Surveyed 1962
Revised 1988
Edition N/A
Copyright 1988
Levelled 1962

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_2
Grid Ref: 378062, 412275

Map Name: National Grid

Map date: **1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

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

Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

Map Name: County Series Town Plan

Map date: **1891**

Scale: 1:500

Printed at: 1:1,000

N
W E
S

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

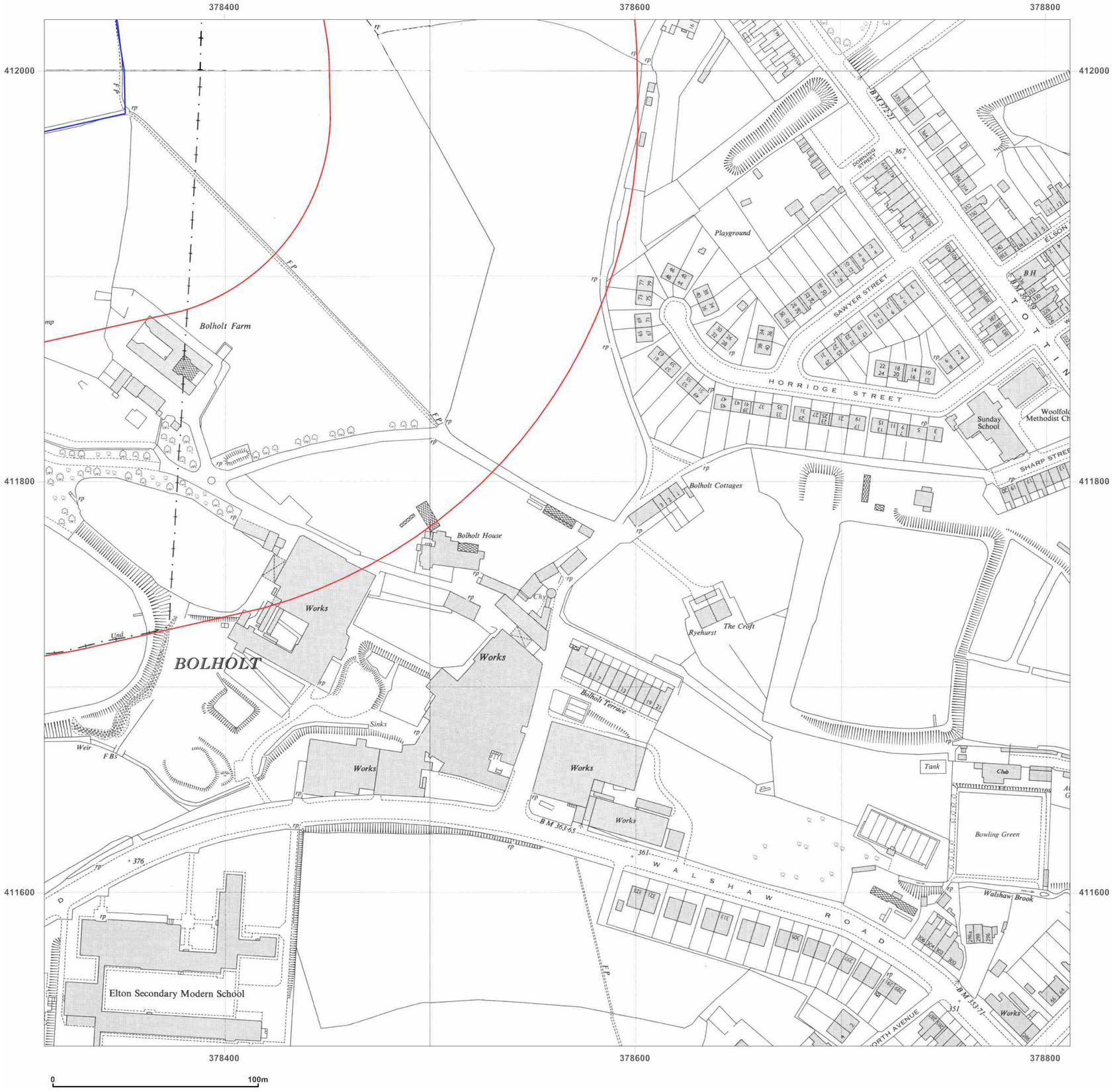
Surveyed 1891
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

Map Name: National Grid

Map date: **1959-1960**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1959
Revised N/A
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1959
Levelled 1957

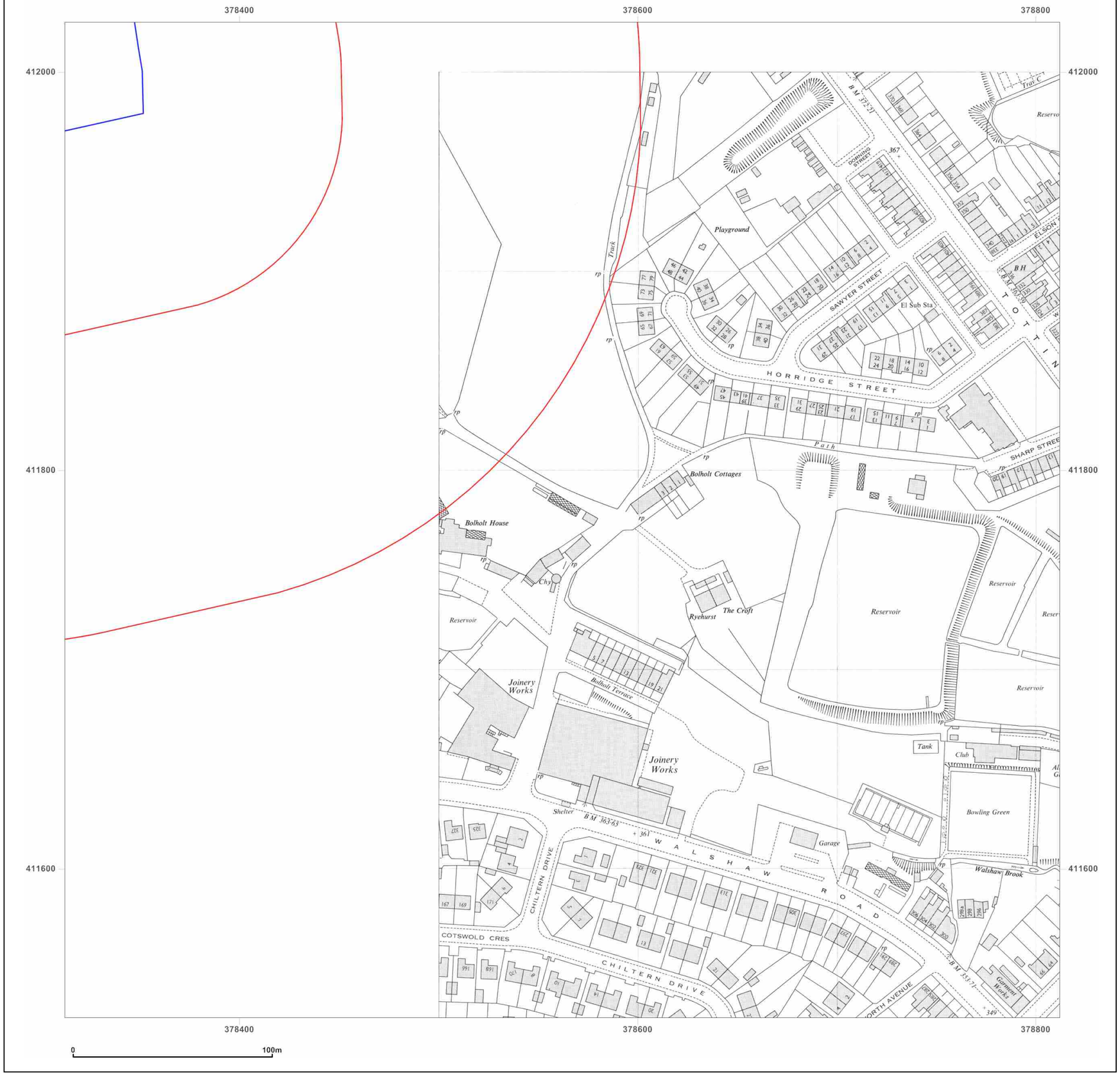
Surveyed 1959
Revised 1959
Edition N/A
Copyright 1959
Levelled 1957

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

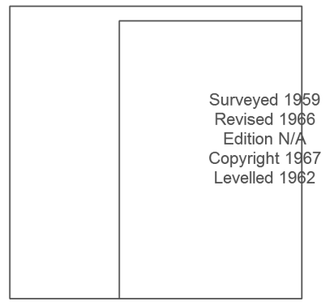
Map Name: National Grid

Map date: **1967**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

Map Name: National Grid

Map date: **1974-1978**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

Surveyed 1959
Revised 1974
Edition N/A
Copyright 1975
Levelled 1962

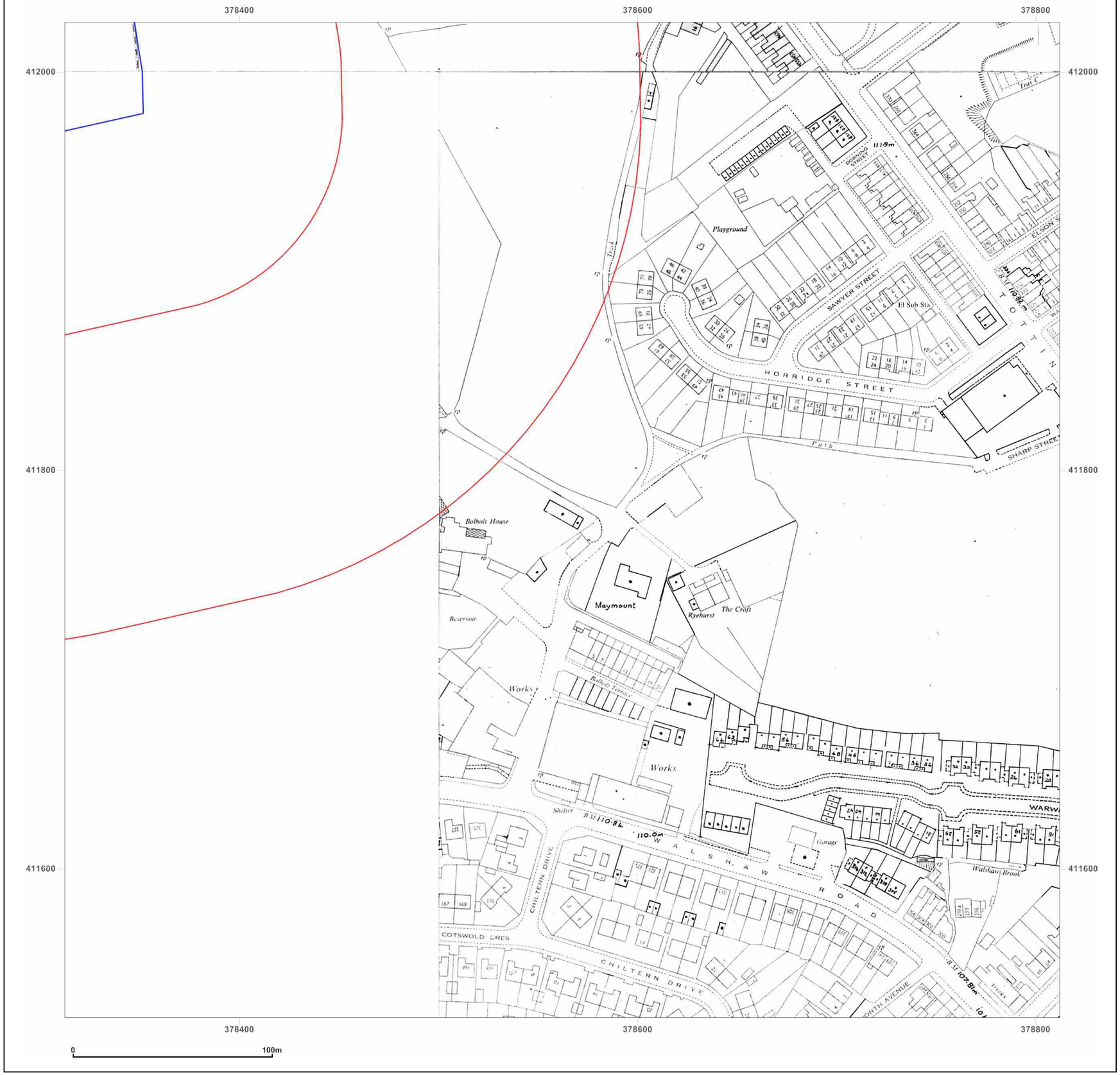
Surveyed 1978
Revised 1978
Edition N/A
Copyright 1978
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

Map Name: National Grid

Map date: **1985-1988**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1962
Revised 1988
Edition N/A
Copyright 1988
Levelled 1962

Surveyed 1957
Revised 1985
Edition N/A
Copyright 1985
Levelled 1957

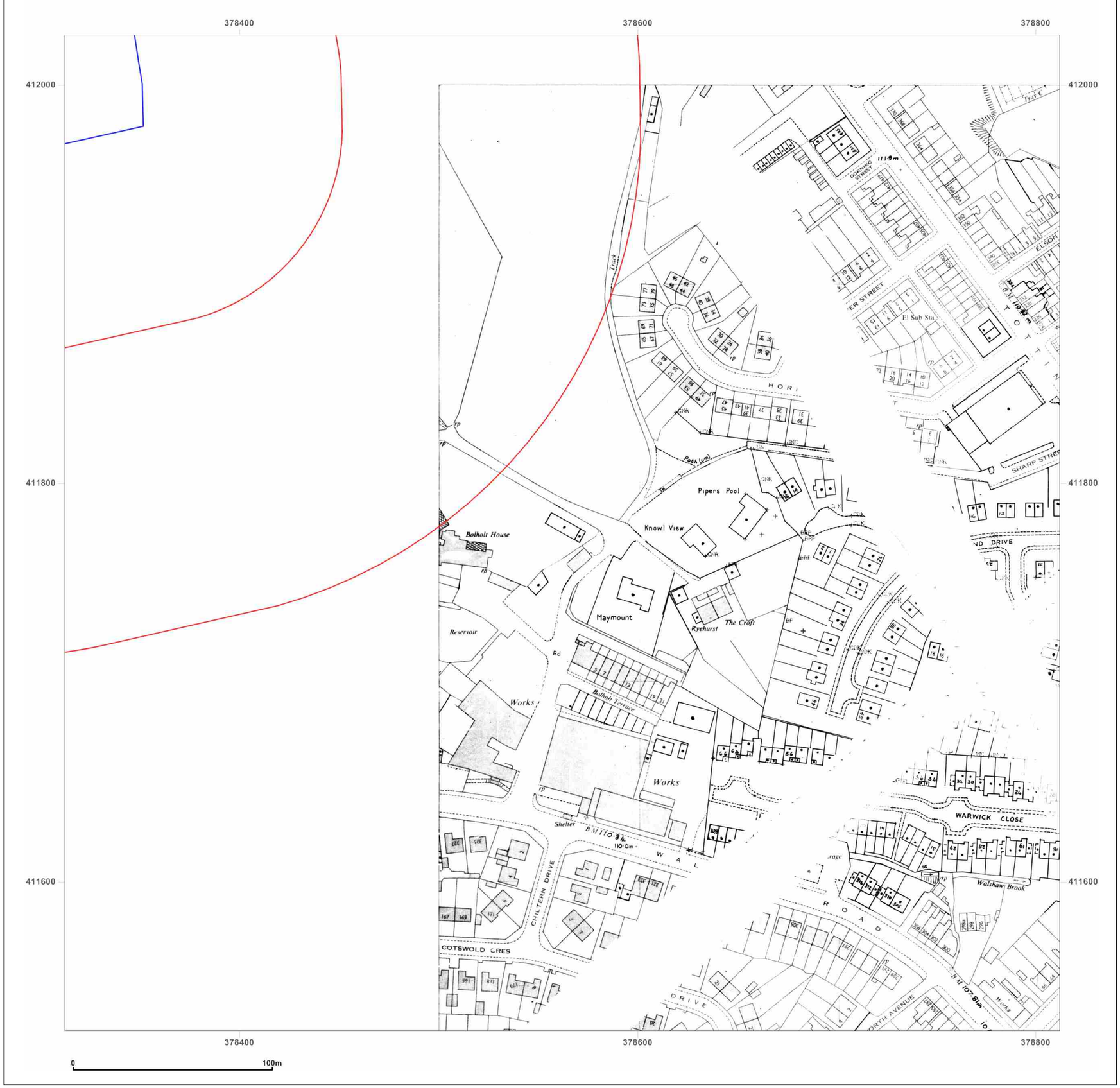
Surveyed 1962
Revised 1985
Edition N/A
Copyright 1985
Levelled 1962

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

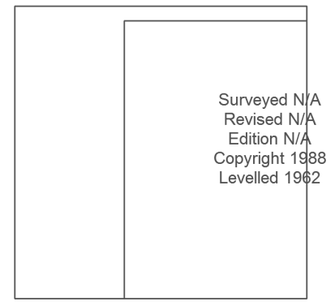
Map Name: National Grid

Map date: **1988**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

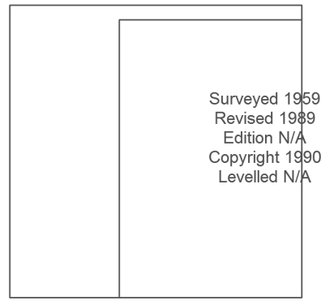
Map Name: National Grid

Map date: **1990**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

Map Name: National Grid

Map date: **1987-1991**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

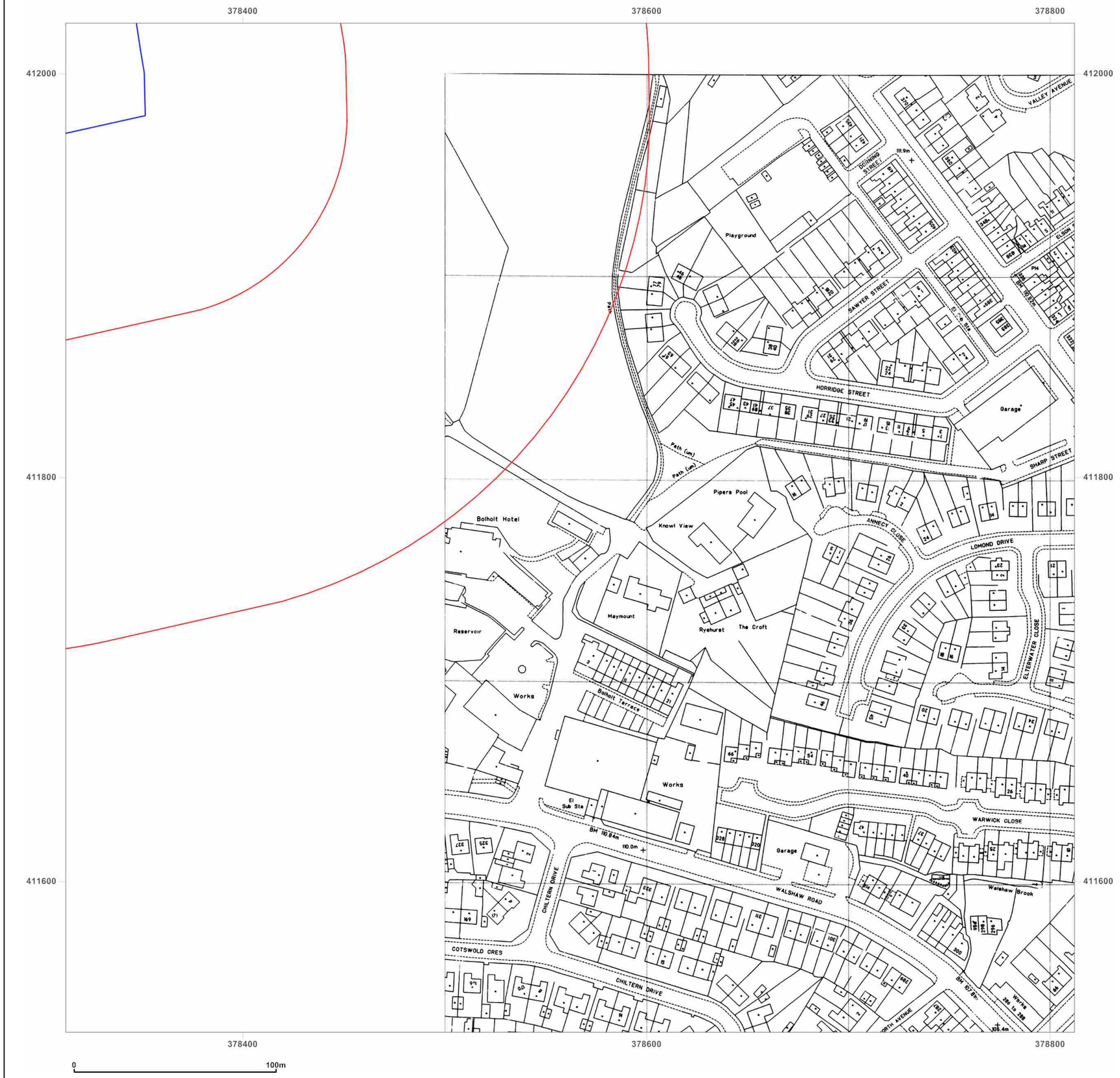
Surveyed N/A Revised N/A Edition N/A Copyright 1988 Levelled N/A	Surveyed 1957 Revised 1988 Edition N/A Copyright 1988 Levelled 1957
Surveyed 1991 Revised 1991 Edition N/A Copyright N/A Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright 1987 Levelled 1962

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

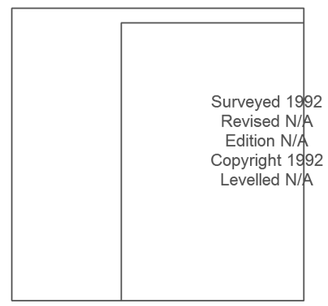
Map Name: National Grid

Map date: **1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

Map Name: National Grid
Map date: **1988-1992**
Scale: 1:1,250
Printed at: 1:2,000

N
W E
S

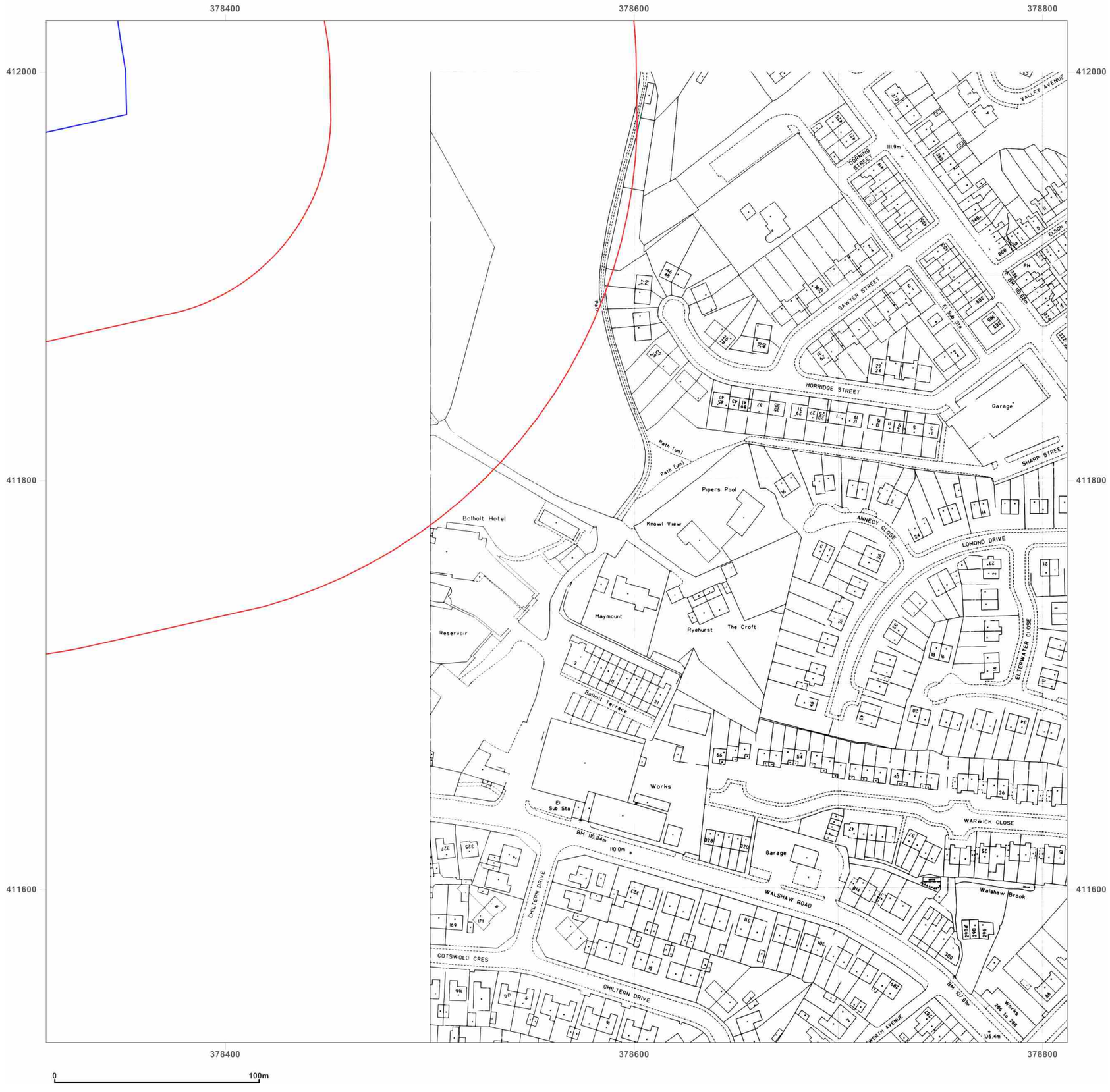
Surveyed 1992 Revised N/A Edition N/A Copyright 1992 Levelled N/A	Surveyed 1992 Revised 1992 Edition N/A Copyright N/A Levelled N/A
Surveyed N/A Revised N/A Edition N/A Copyright 1992 Levelled N/A	Surveyed 1962 Revised 1988 Edition N/A Copyright 1988 Levelled 1962

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

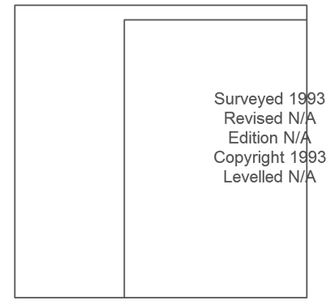
Map Name: National Grid

Map date: **1993**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

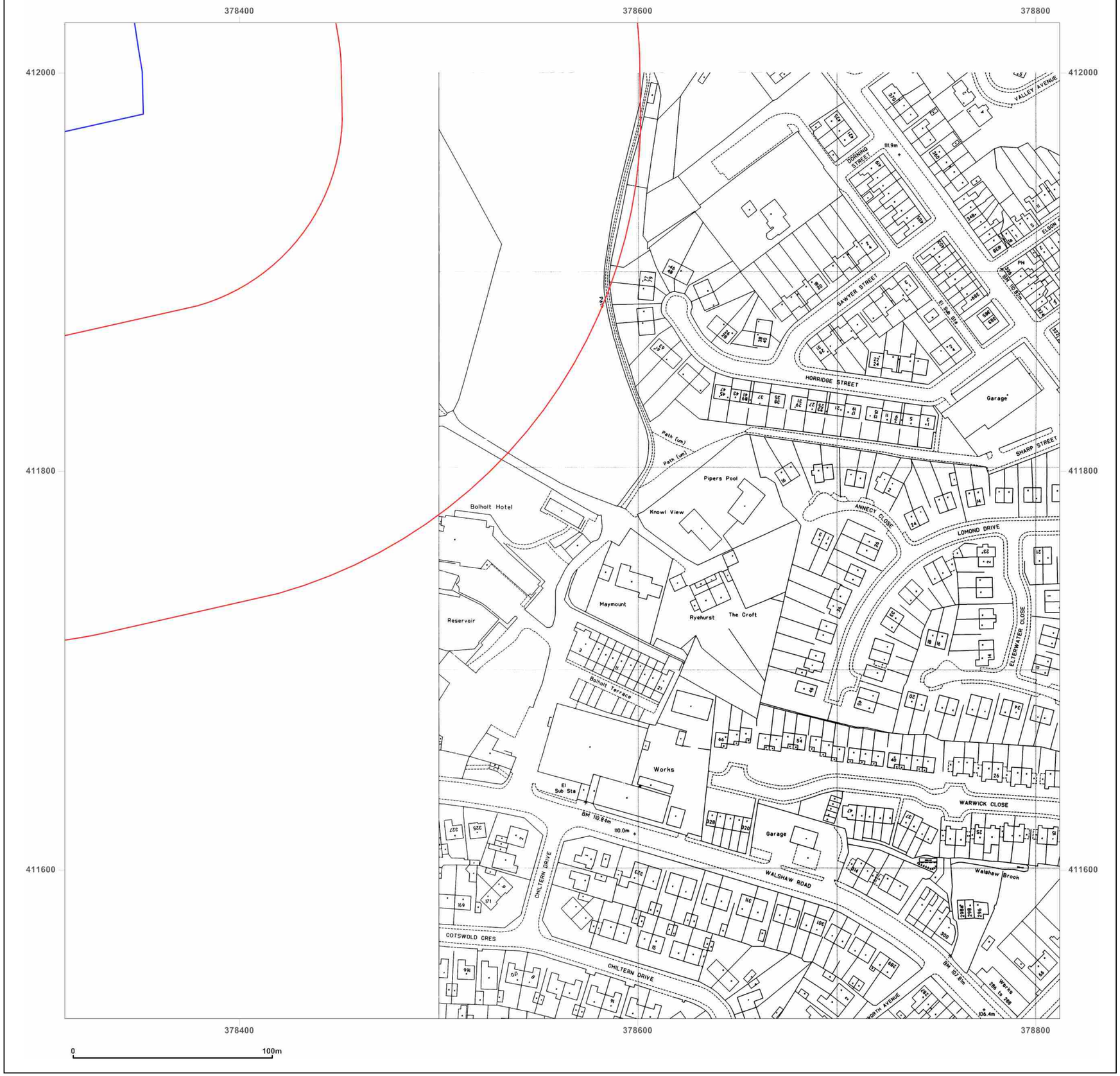


Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

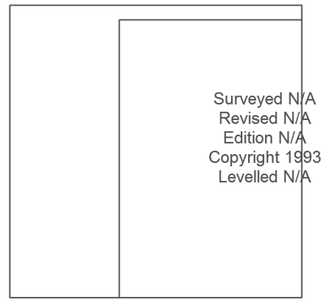
Map Name: National Grid

Map date: **1993**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_1
Grid Ref: 378562, 411775

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

N
W E
S

2003

Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

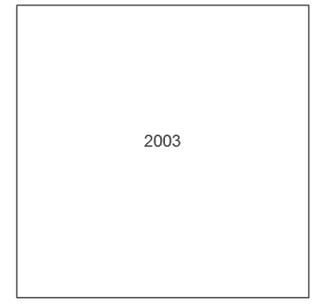
Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_2_2
Grid Ref: 378062, 412275

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

N
W E
S

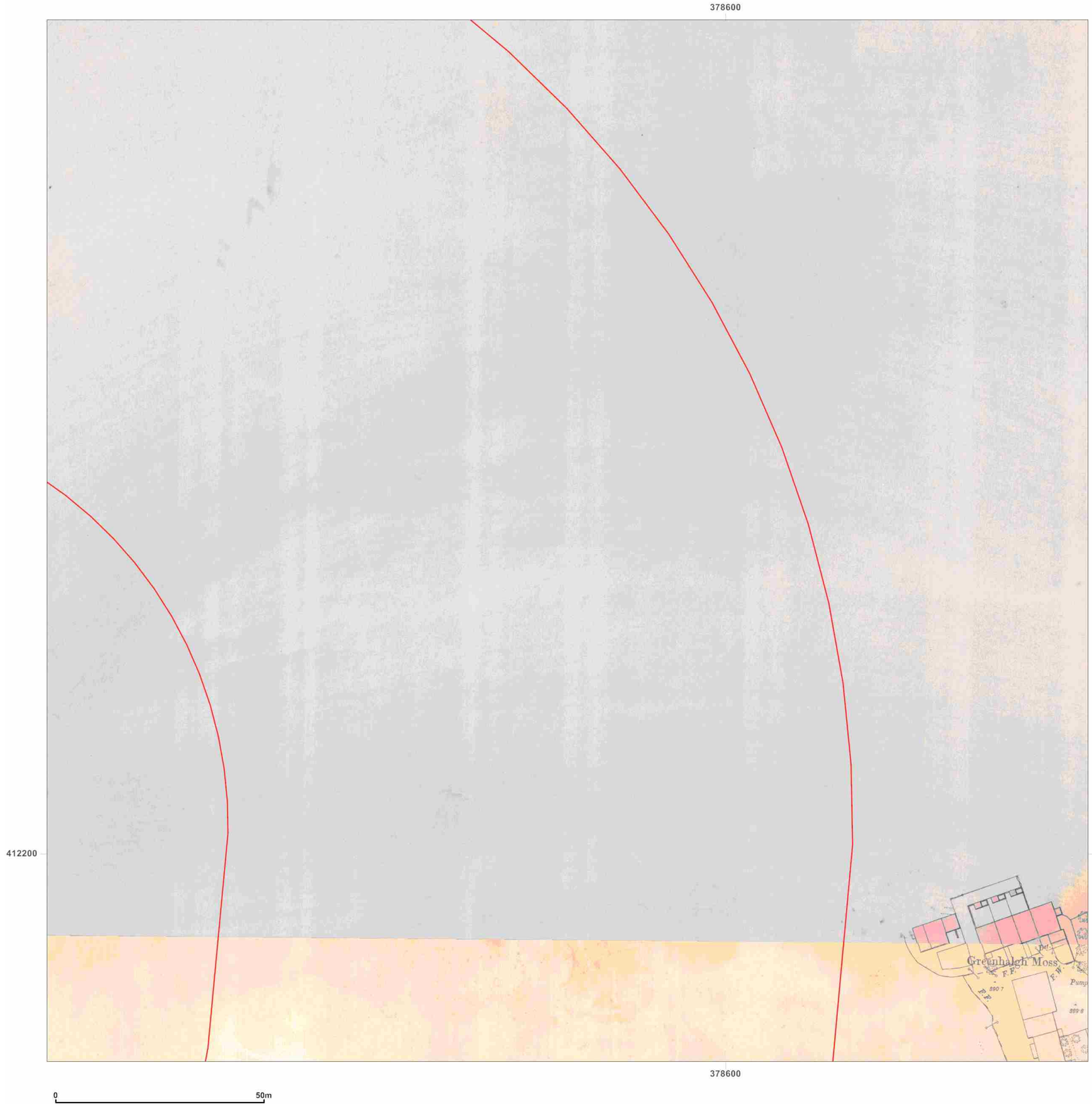


Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

Map Name: County Series Town Plan
Map date: **1891**
Scale: 1:500
Printed at: 1:1,000

N
W E
S

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

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

Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

Map Name: National Grid

Map date: **1960**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Surveyed 1959
Revised N/A
Edition N/A
Copyright 1960
Levelled 1957

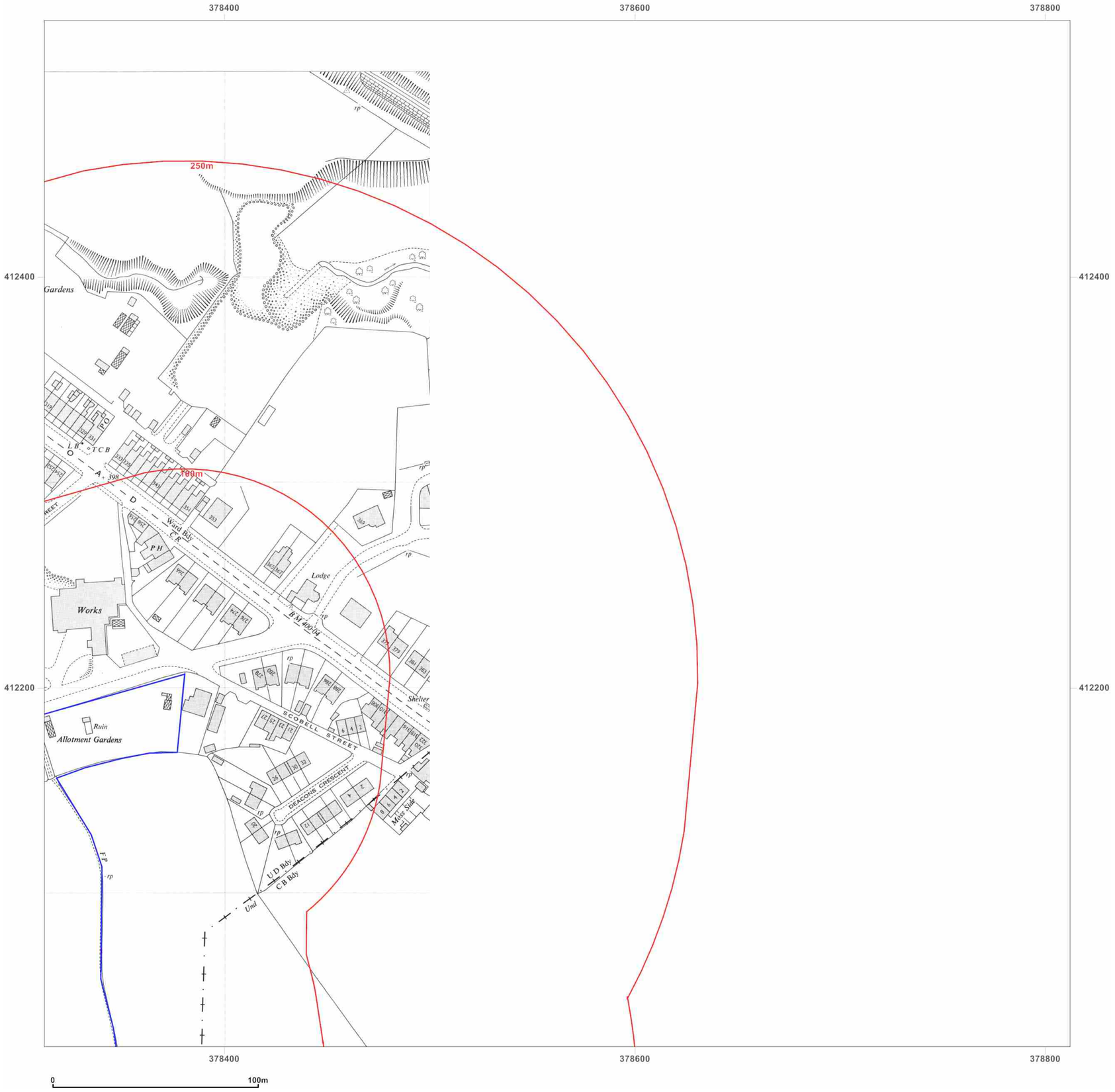
Surveyed 1959
Revised 1959
Edition N/A
Copyright 1960
Levelled 1957

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

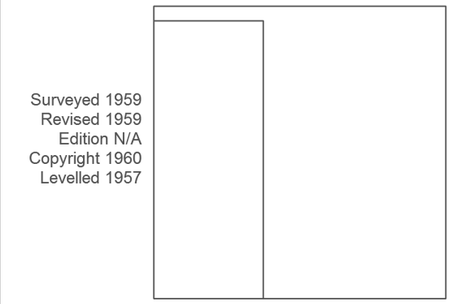
Map Name: National Grid

Map date: **1960**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

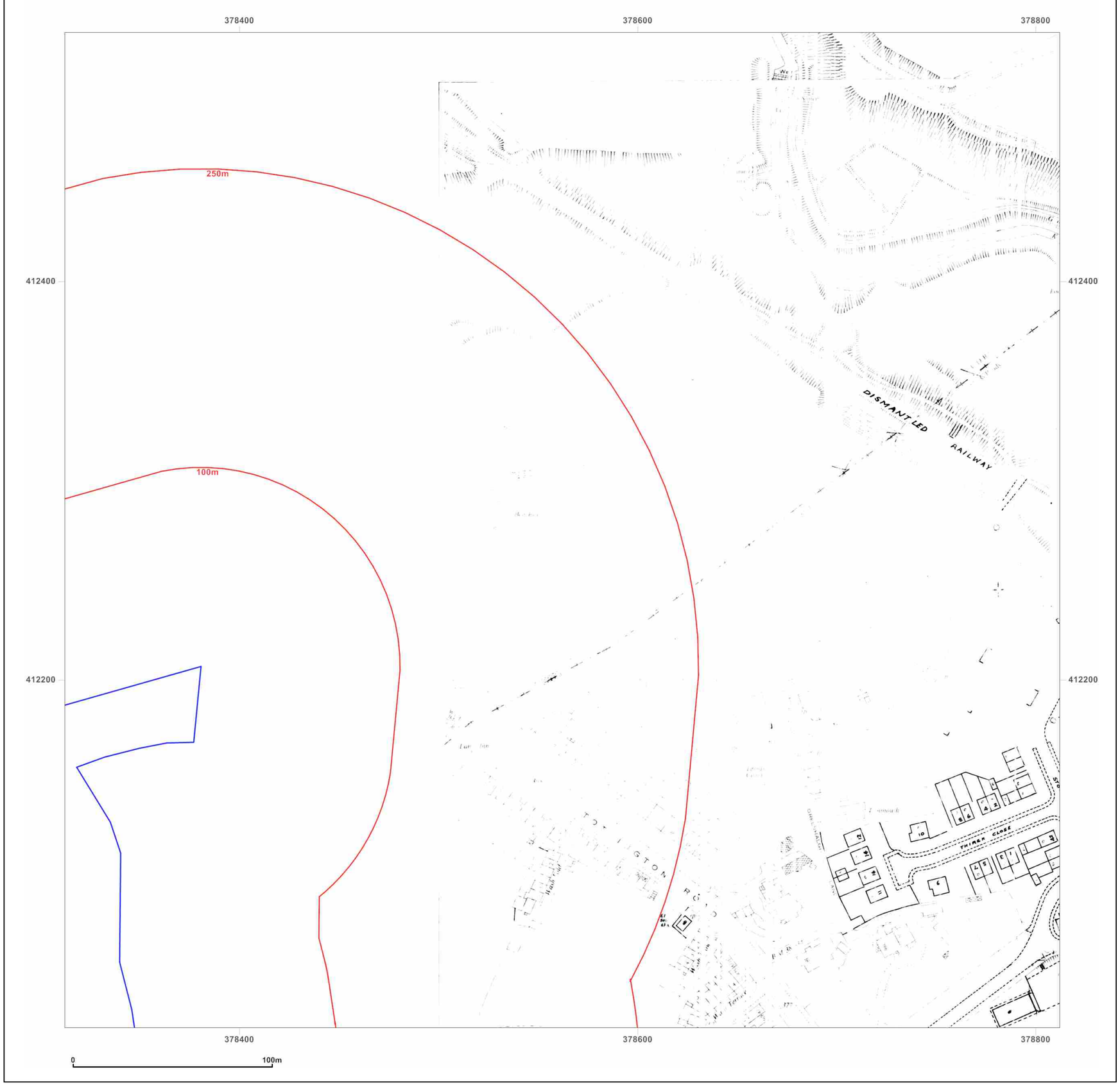


Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

Map Name: National Grid

Map date: **1974-1976**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

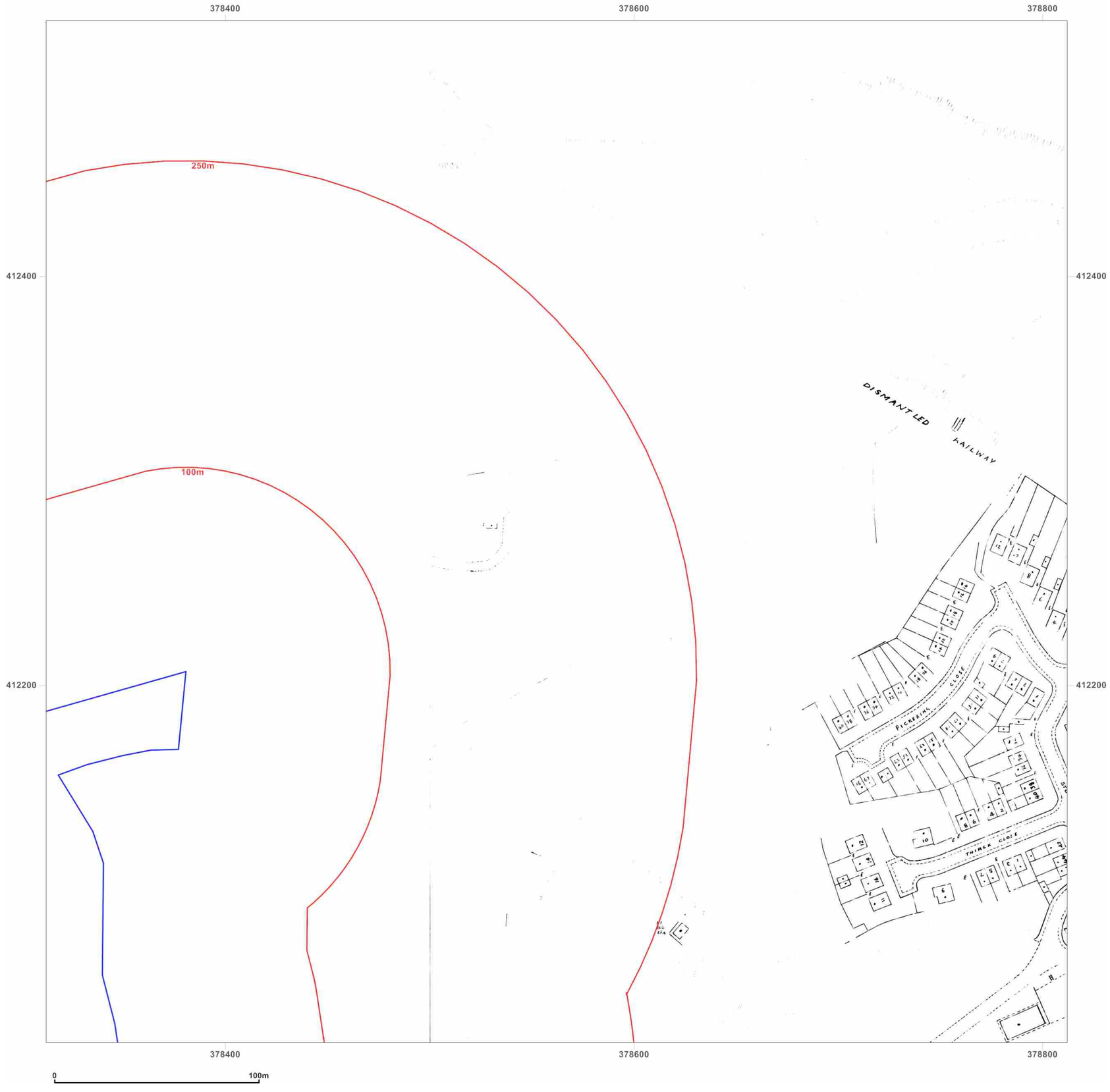
Surveyed N/A
Revised N/A
Edition N/A
Copyright 1974
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

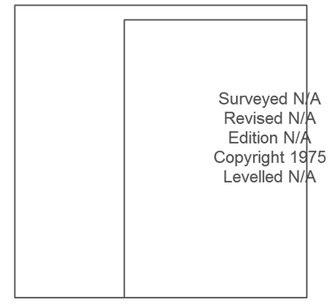
Map Name: National Grid

Map date: **1976**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

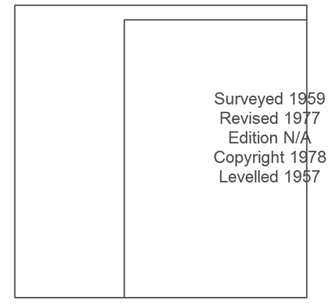
Map Name: National Grid

Map date: **1978**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by OS

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

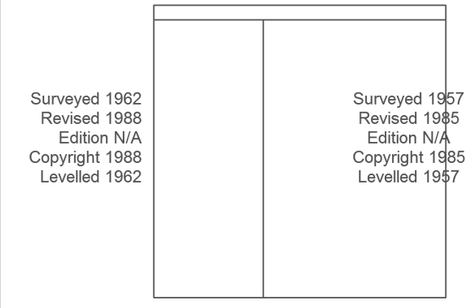
Map Name: National Grid

Map date: **1985-1988**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S



Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

Map Name: National Grid

Map date: **1988-1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

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

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

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

Surveyed 1957
Revised 1988
Edition N/A
Copyright 1988
Levelled 1957

Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

Map Name: National Grid

Map date: **1988-1992**

Scale: 1:1,250

Printed at: 1:2,000

N
W E
S

Surveyed N/A
Revised N/A
Edition N/A
Copyright 1988
Levelled N/A

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

Powered by

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

Production date: 07 November 2019

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

Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_1250scale_3_2
Grid Ref: 378562, 412275

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

N
W E
S

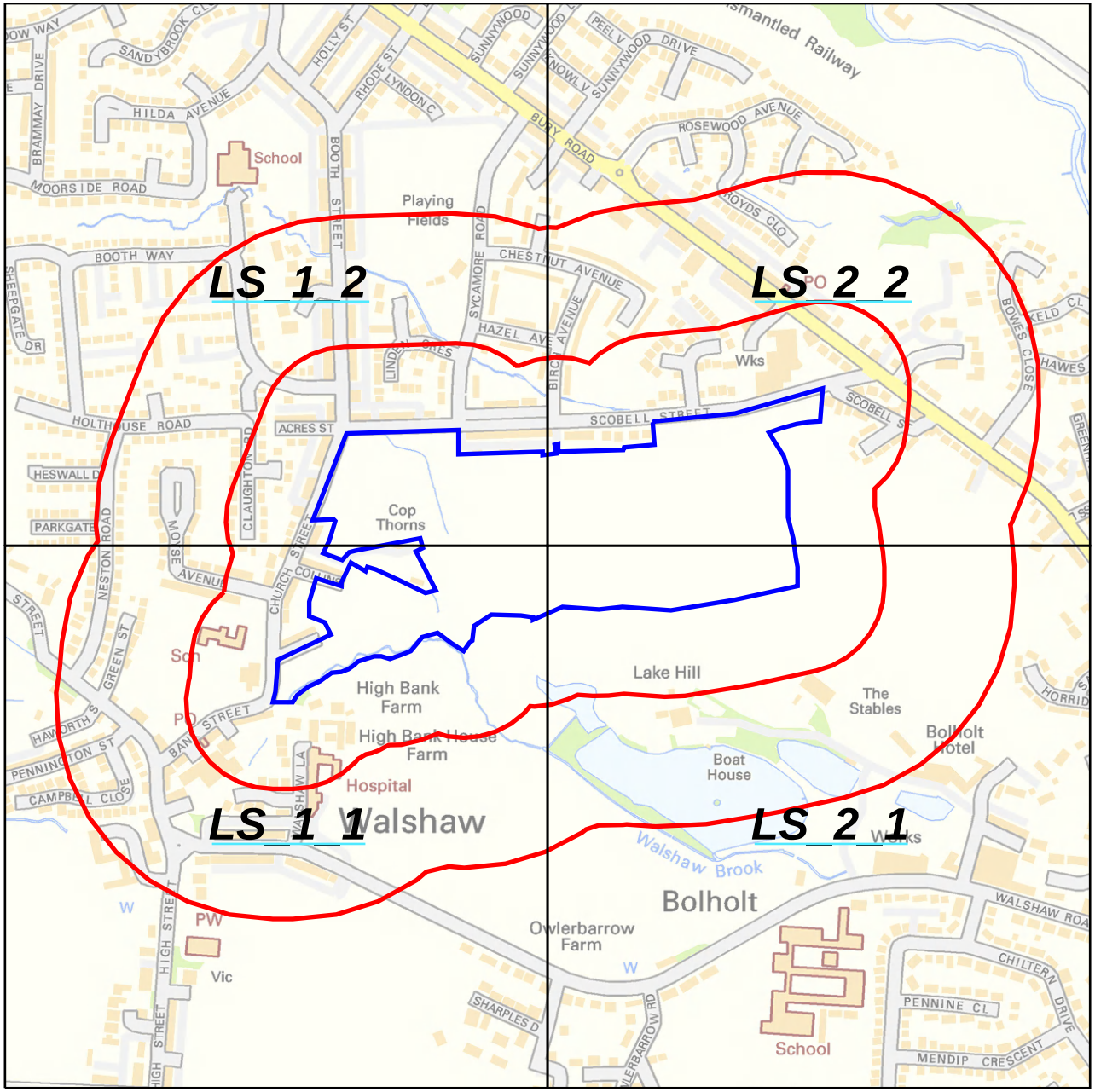
2003

Powered by OS

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

Production date: 07 November 2019

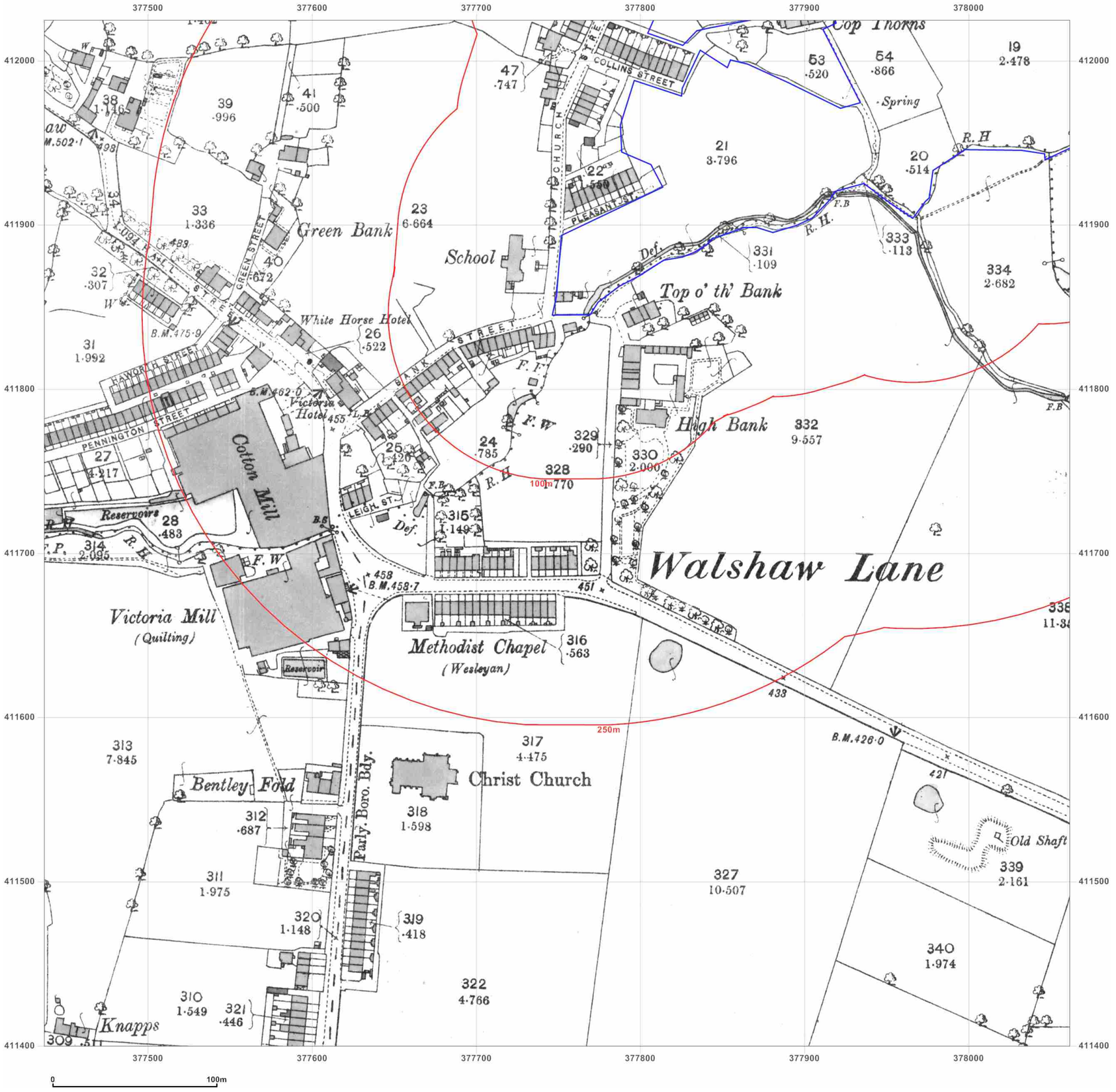
Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure
INSIGHTS

N
W E
S

1:2500 Scale Grid Index



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_1_1
Grid Ref: 377749, 411712

Map Name: County Series

Map date: **1890**

Scale: 1:2,500

Printed at: 1:2,500

N W E S

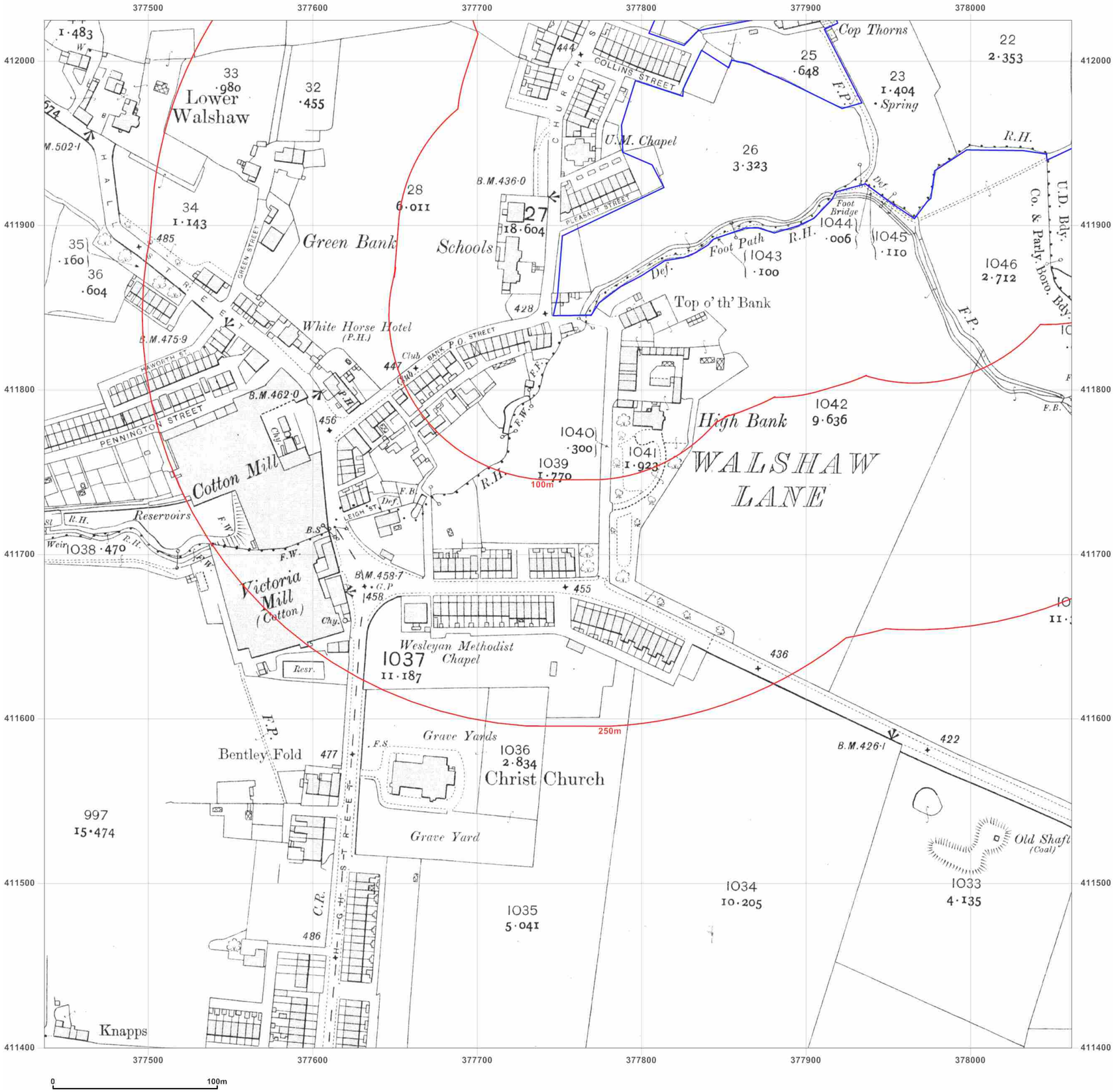
Surveyed 1890
Revised 1890
Edition N/A
Copyright N/A
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_1_1
Grid Ref: 377749, 411712

Map Name: County Series

Map date: **1910**

Scale: 1:2,500

Printed at: 1:2,500

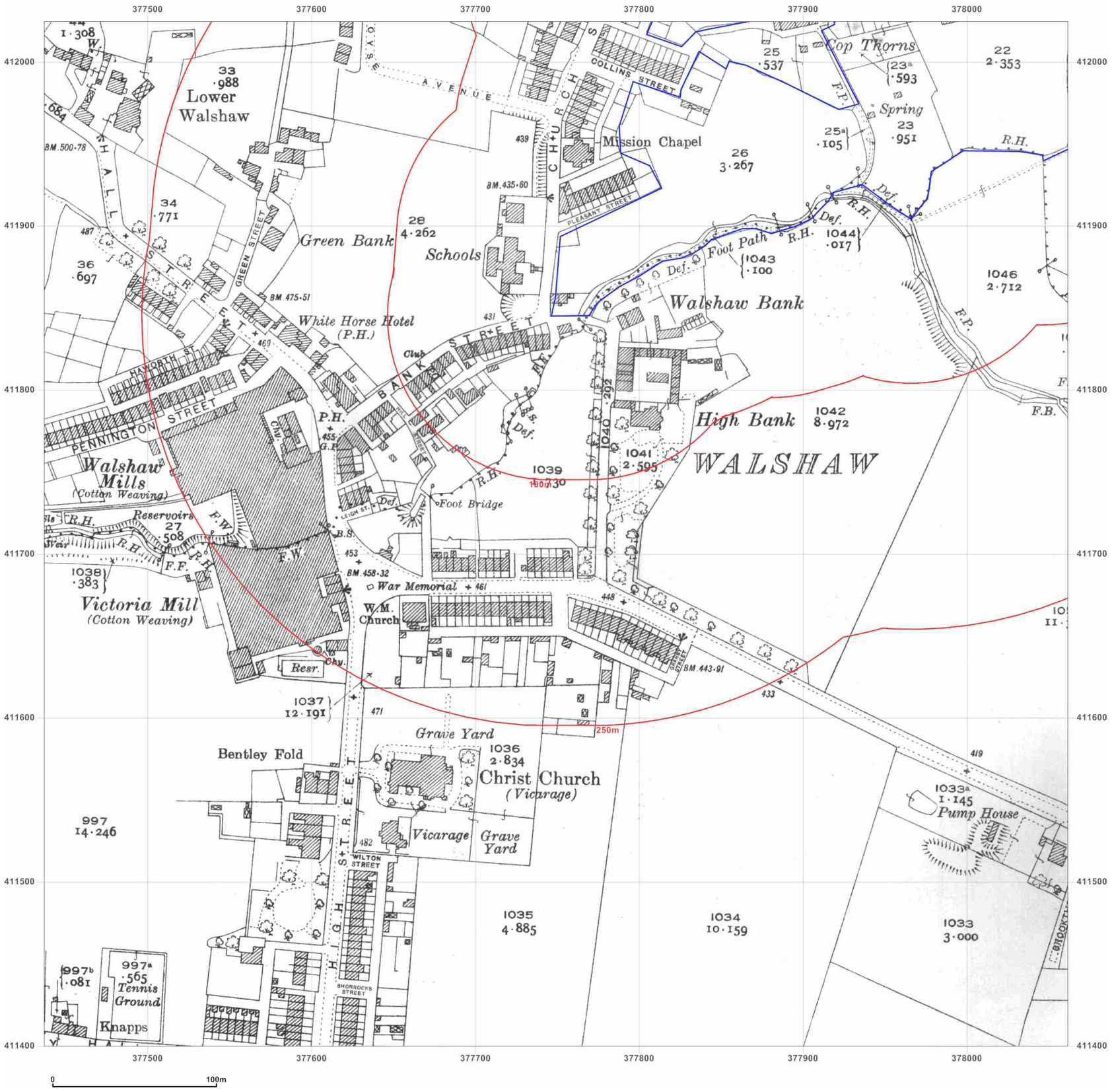
N W E S

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

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_1_1
Grid Ref: 377749, 411712

Map Name: County Series

Map date: **1930**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

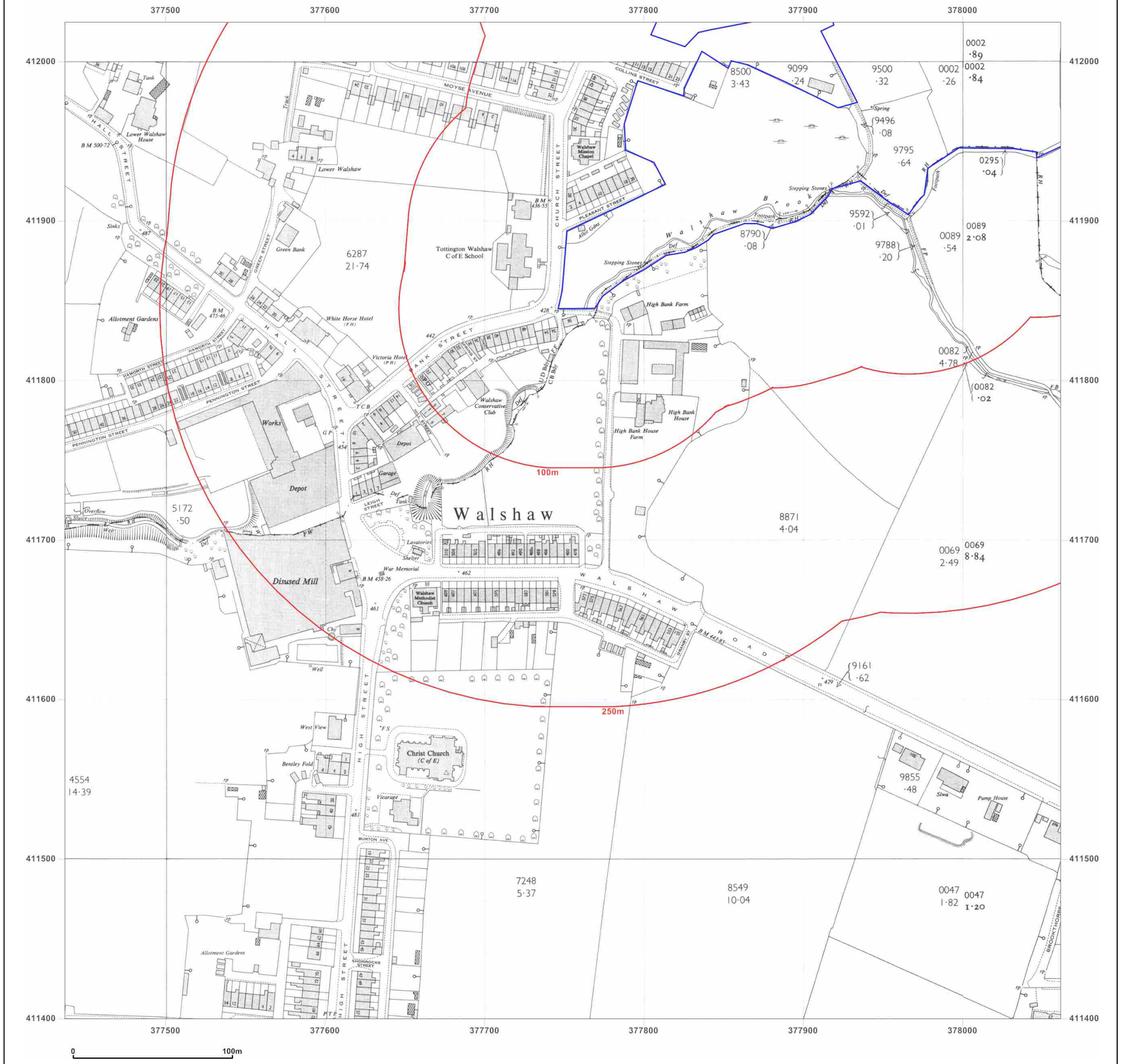
Surveyed 1930
Revised 1930
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_1_1
Grid Ref: 377749, 411712

Map Name: National Grid

Map date: **1959**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1959
Revised 1959
Edition 1961
Copyright 1961
Levelled 1961

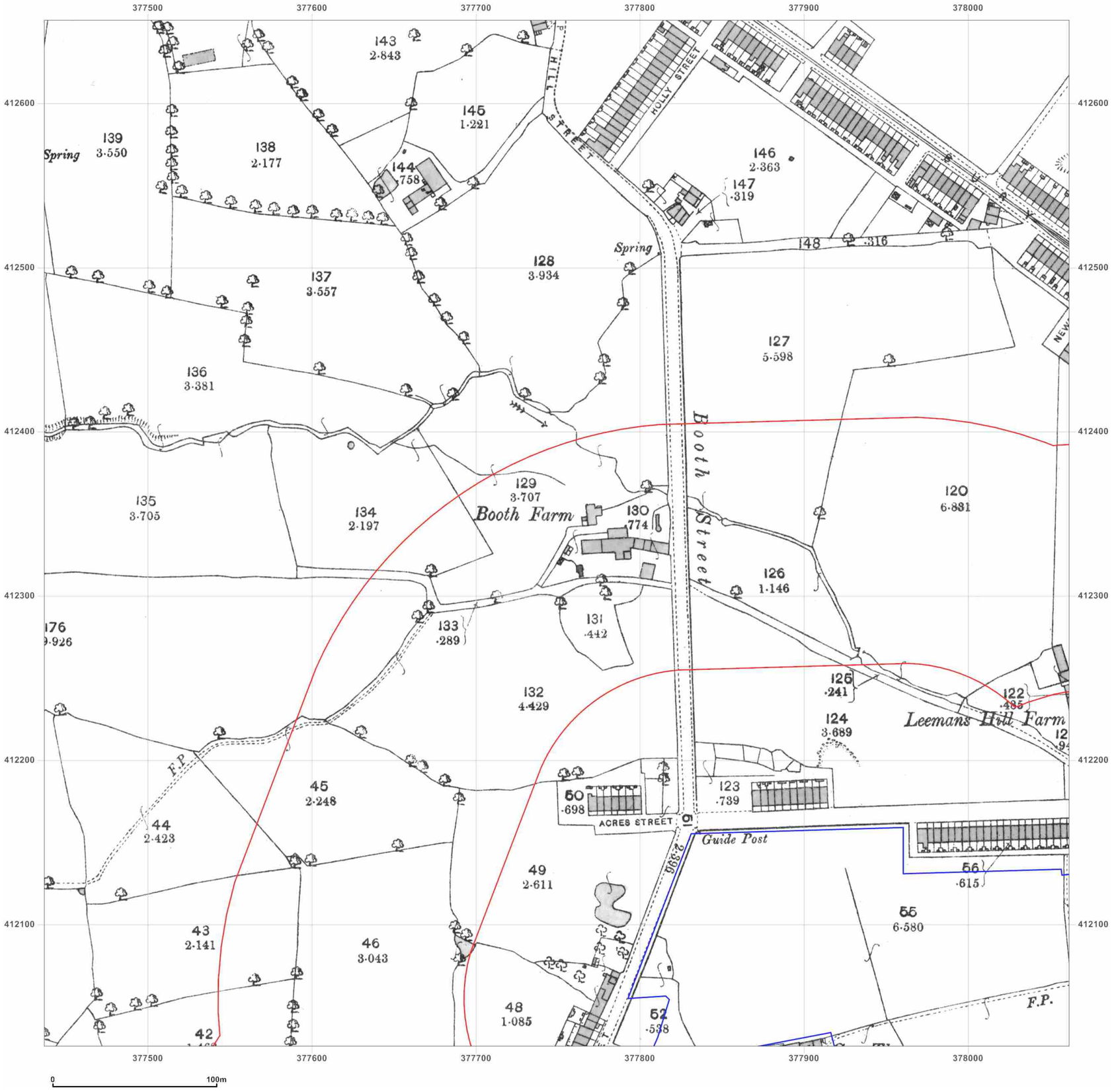
Surveyed 1959 Revised 1959 Edition N/A Copyright 1967 Levelled 1962	Surveyed 1959 Revised 1959 Edition 1960 Copyright 1960 Levelled 1957

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_1_2
Grid Ref: 377749, 412338

Map Name: County Series

Map date: **1890**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

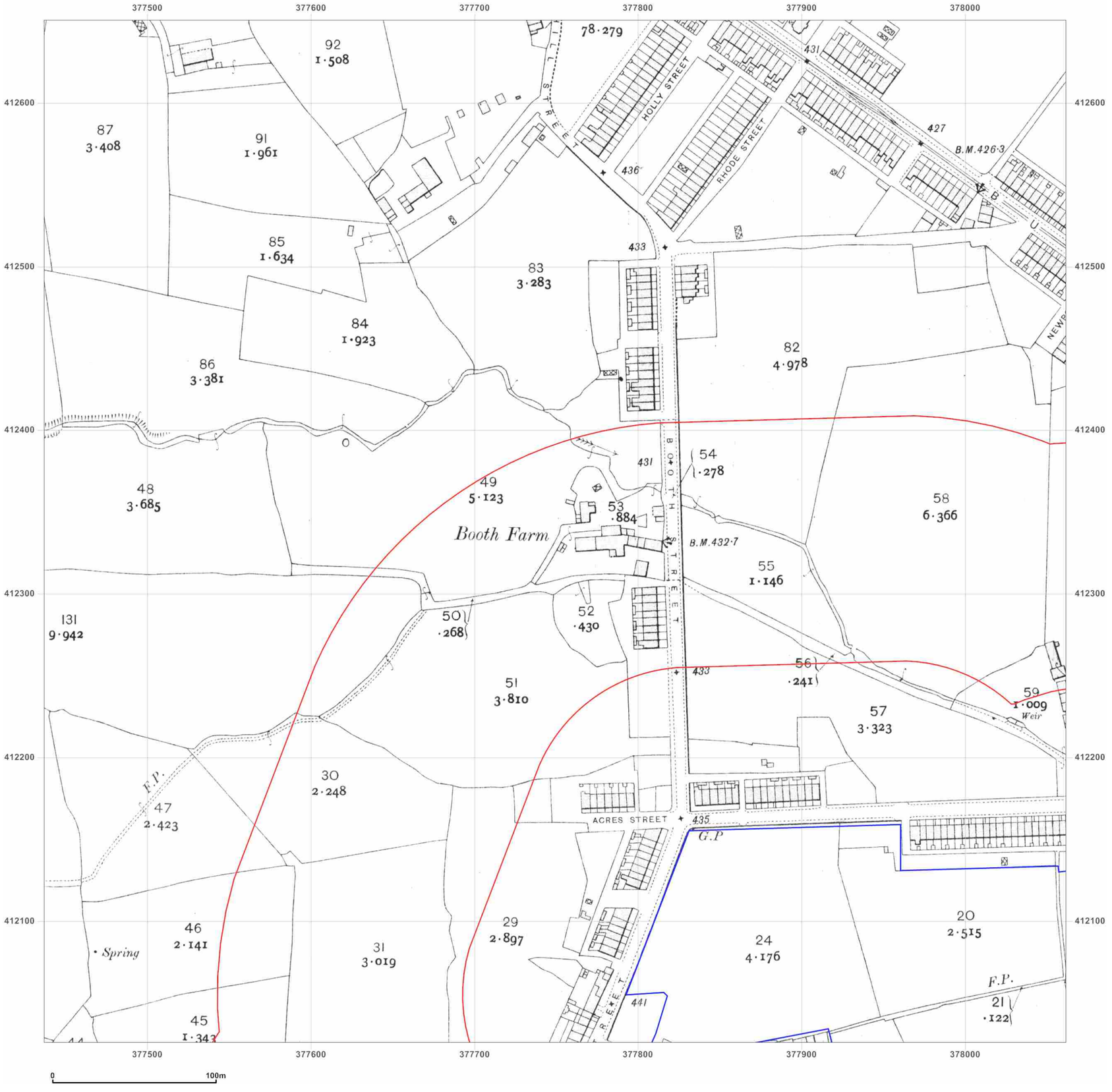
Surveyed 1890
Revised 1890
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_1_2
Grid Ref: 377749, 412338

Map Name: County Series

Map date: **1910**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

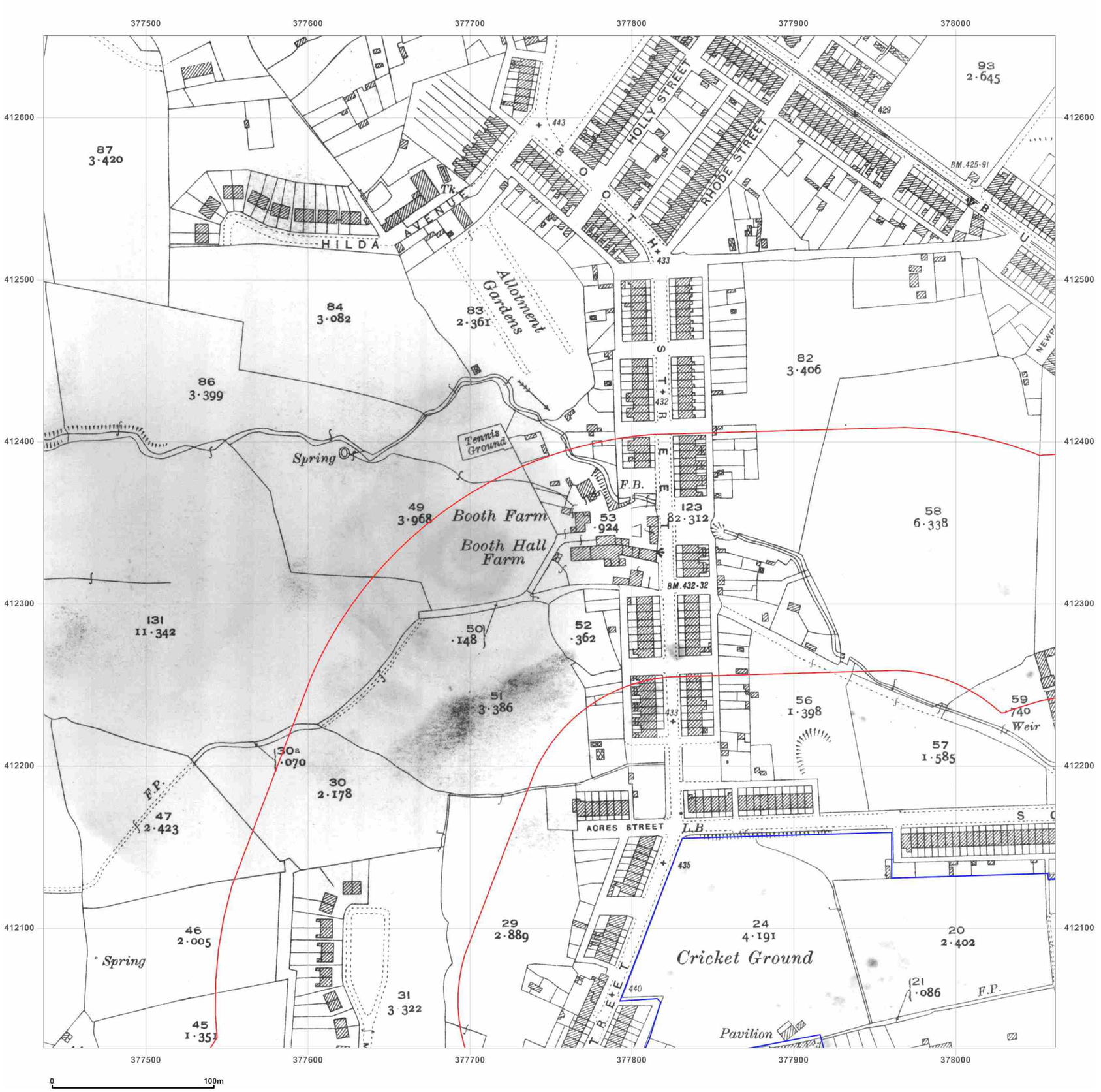
Surveyed 1910
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_1_2
Grid Ref: 377749, 412338

Map Name: County Series

Map date: **1930**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

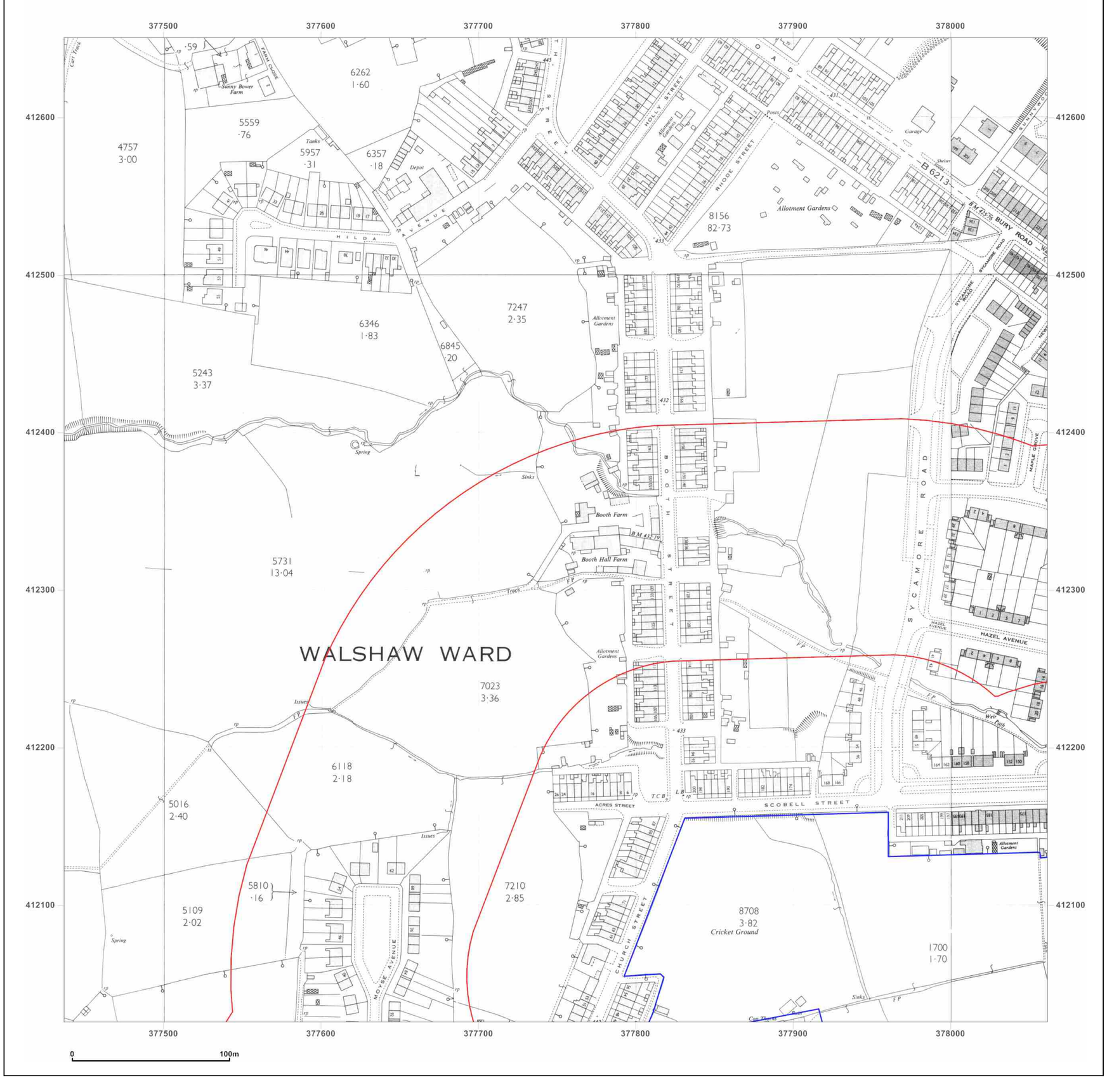
Surveyed 1930
Revised 1930
Edition N/A
Copyright N/A
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_1_2
Grid Ref: 377749, 412338

Map Name: National Grid

Map date: **1965-1968**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1965
Revised 1965
Edition N/A
Copyright 1967
Levelled 1962

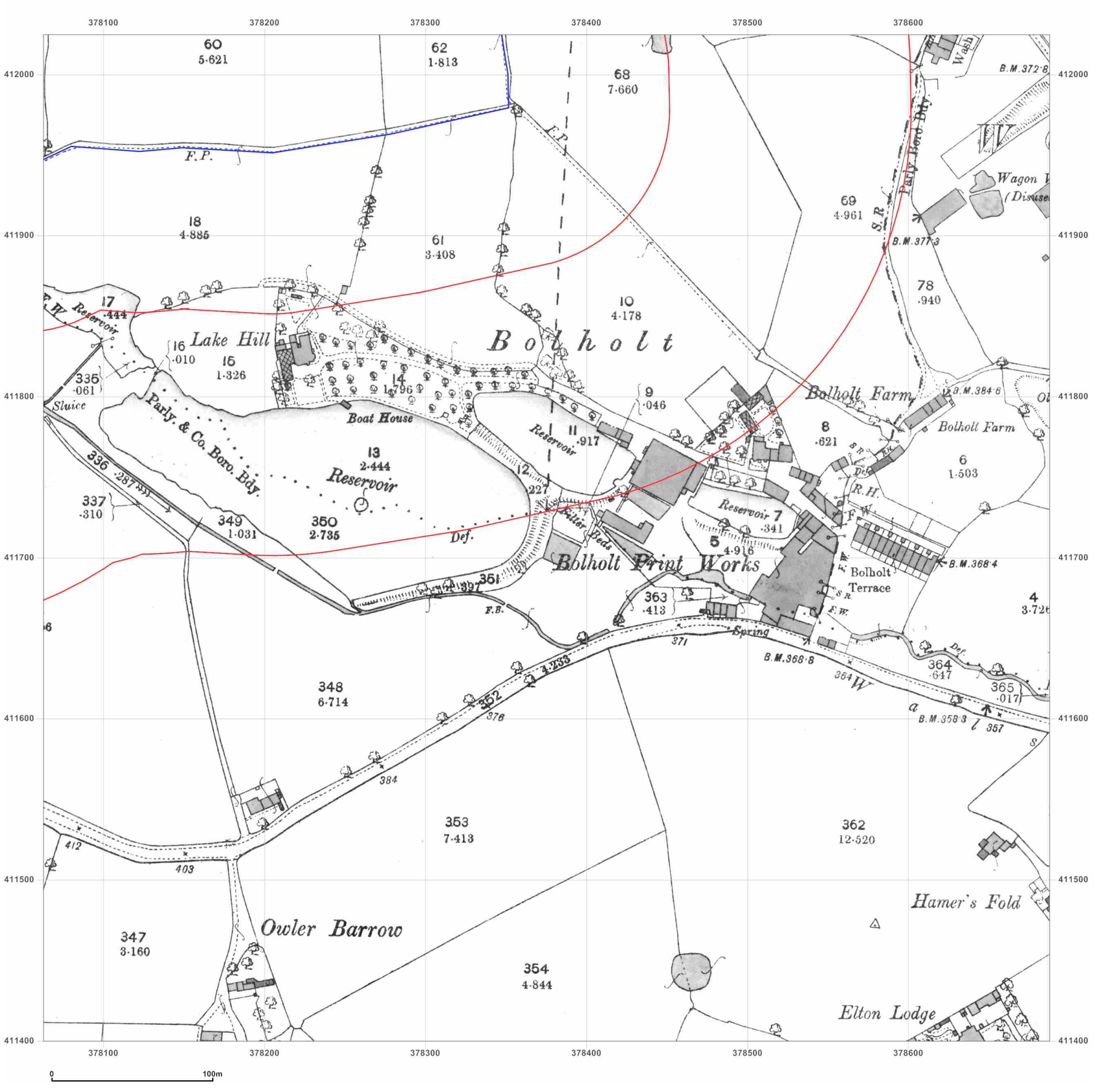
Surveyed 1968
Revised 1968
Edition N/A
Copyright 1970
Levelled 1962

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_1
Grid Ref: 378375, 411712

Map Name: County Series

Map date: **1890**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

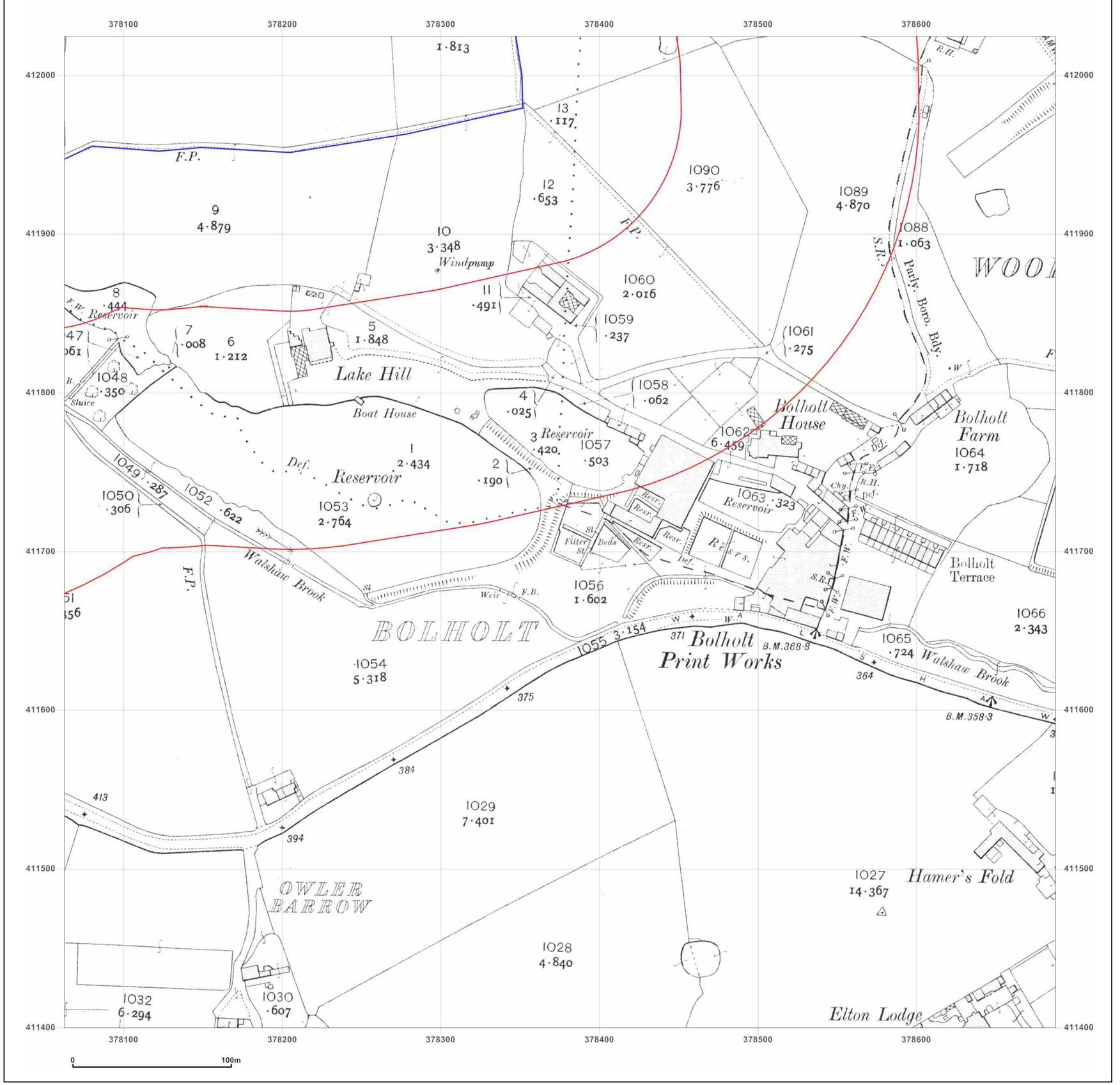
Surveyed 1890
Revised 1890
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_1
Grid Ref: 378375, 411712

Map Name: County Series

Map date: **1910**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

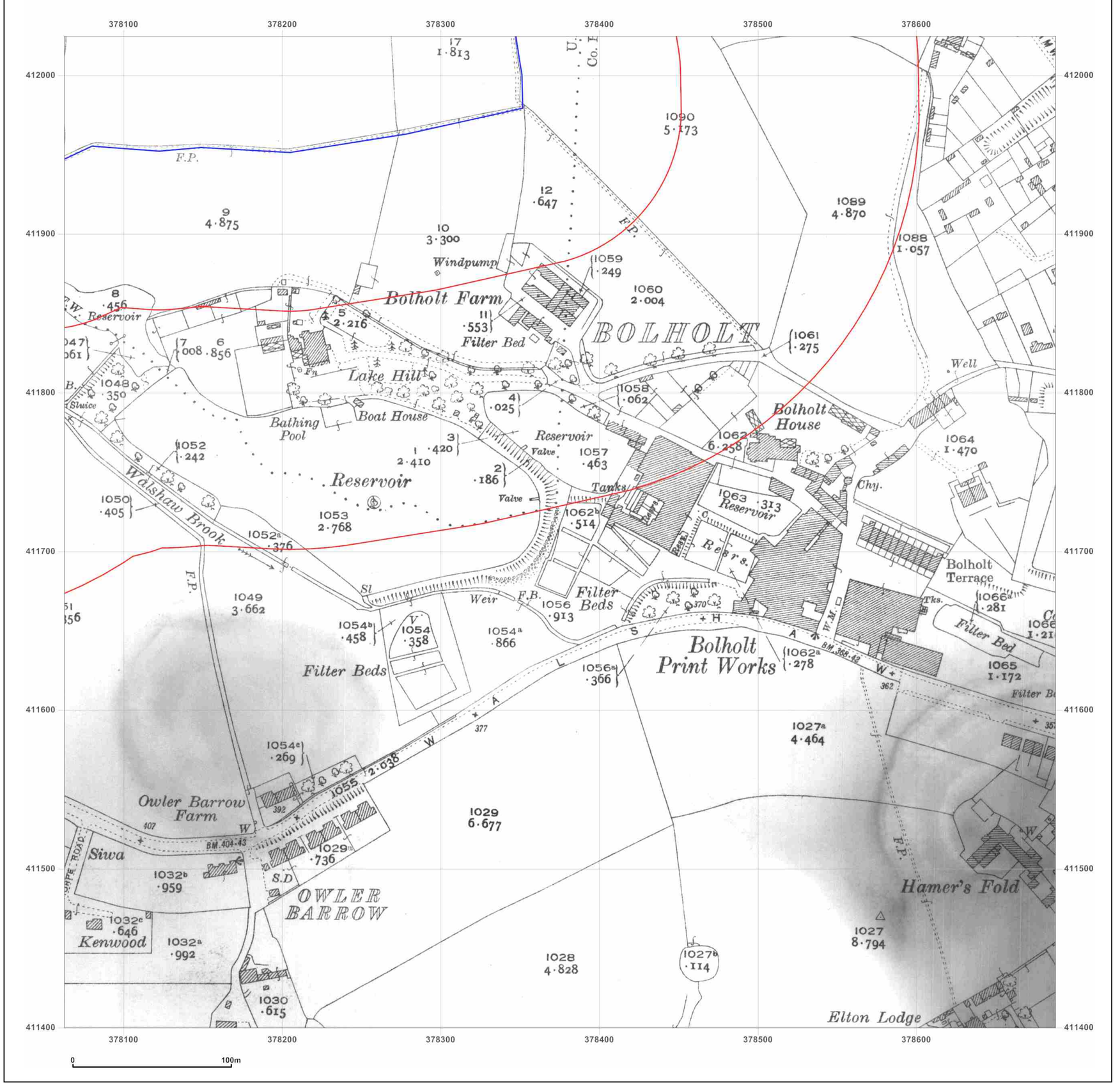
Surveyed 1910
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_1
Grid Ref: 378375, 411712

Map Name: County Series

Map date: **1930**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

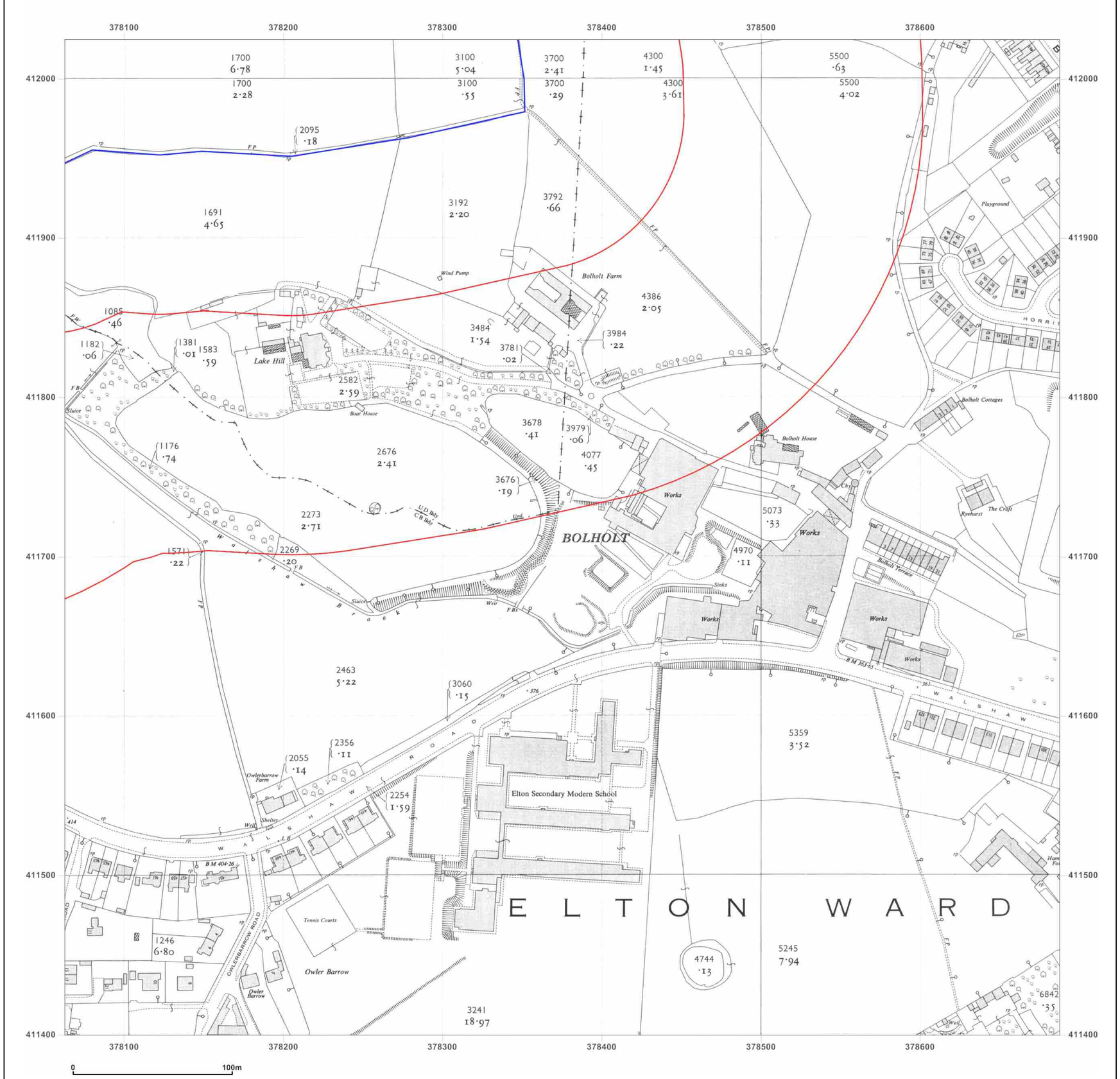
Surveyed 1930
Revised 1930
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_1
Grid Ref: 378375, 411712

Map Name: National Grid

Map date: **1959**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

Surveyed 1959
Revised 1959
Edition 1961
Copyright 1961
Levelled 1961

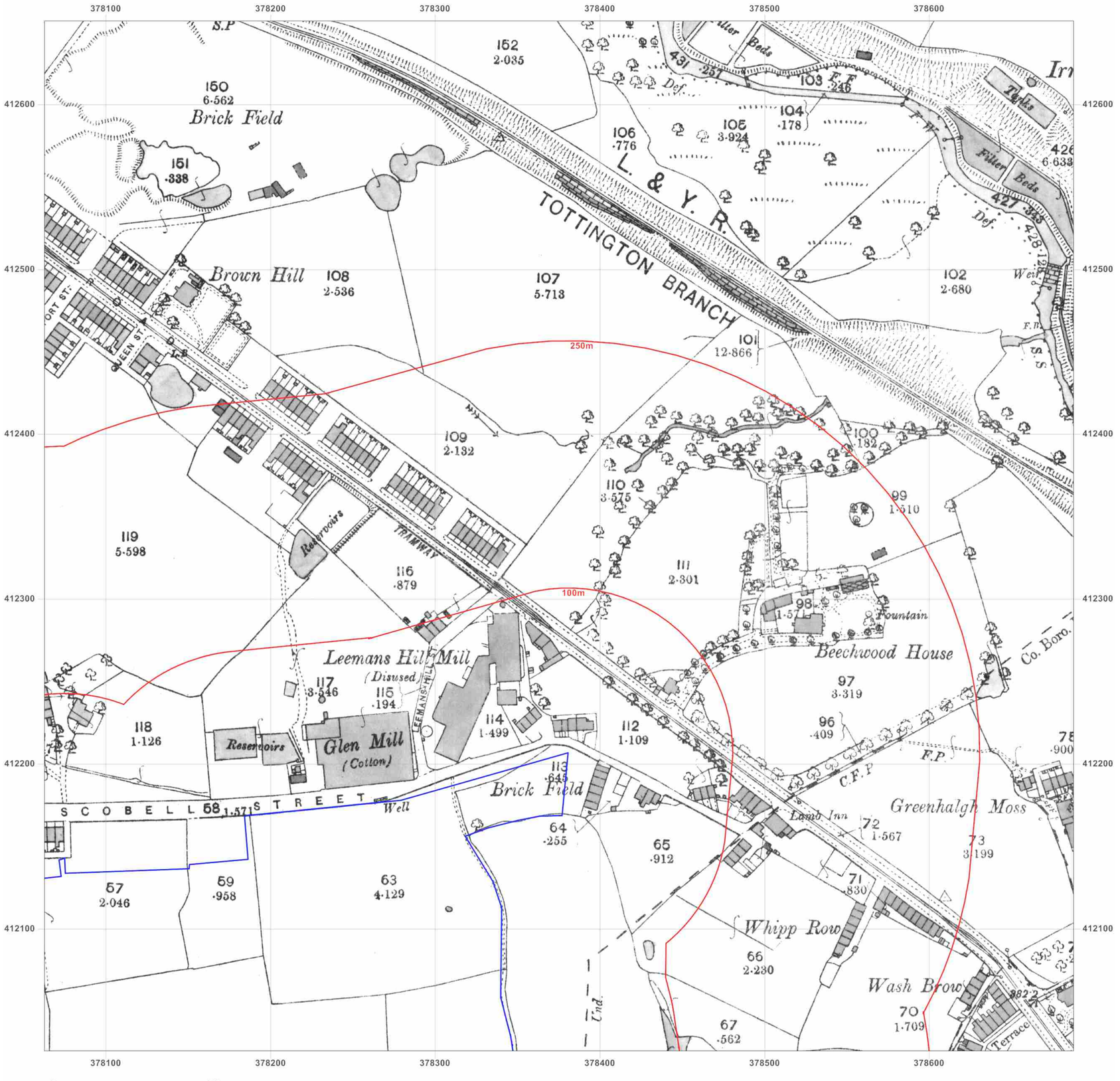
Surveyed 1959
Revised 1959
Edition 1960
Copyright 1960
Levelled 1957

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: County Series

Map date: **1890**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

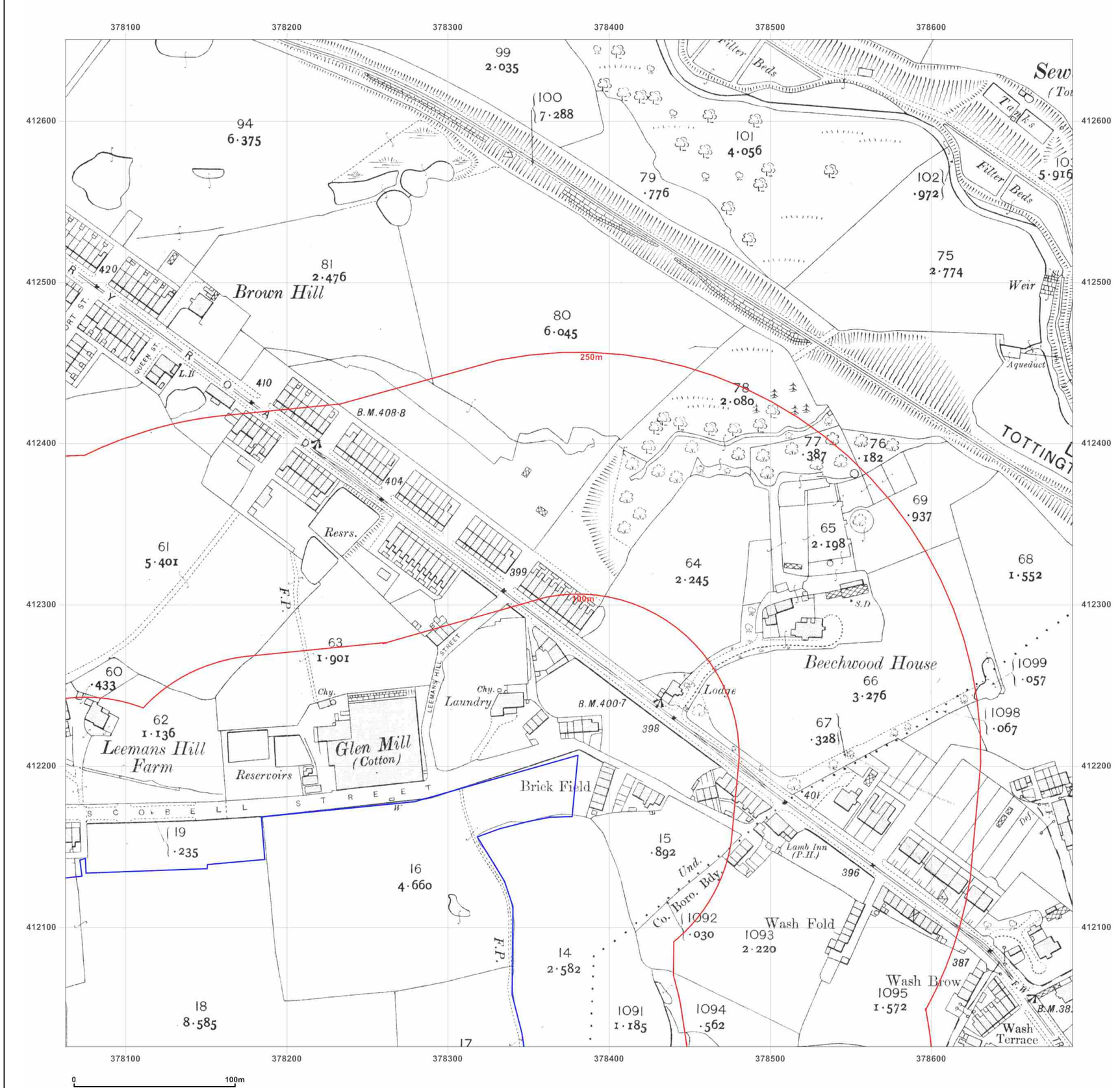
Surveyed 1890
Revised 1890
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: County Series

Map date: **1910**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

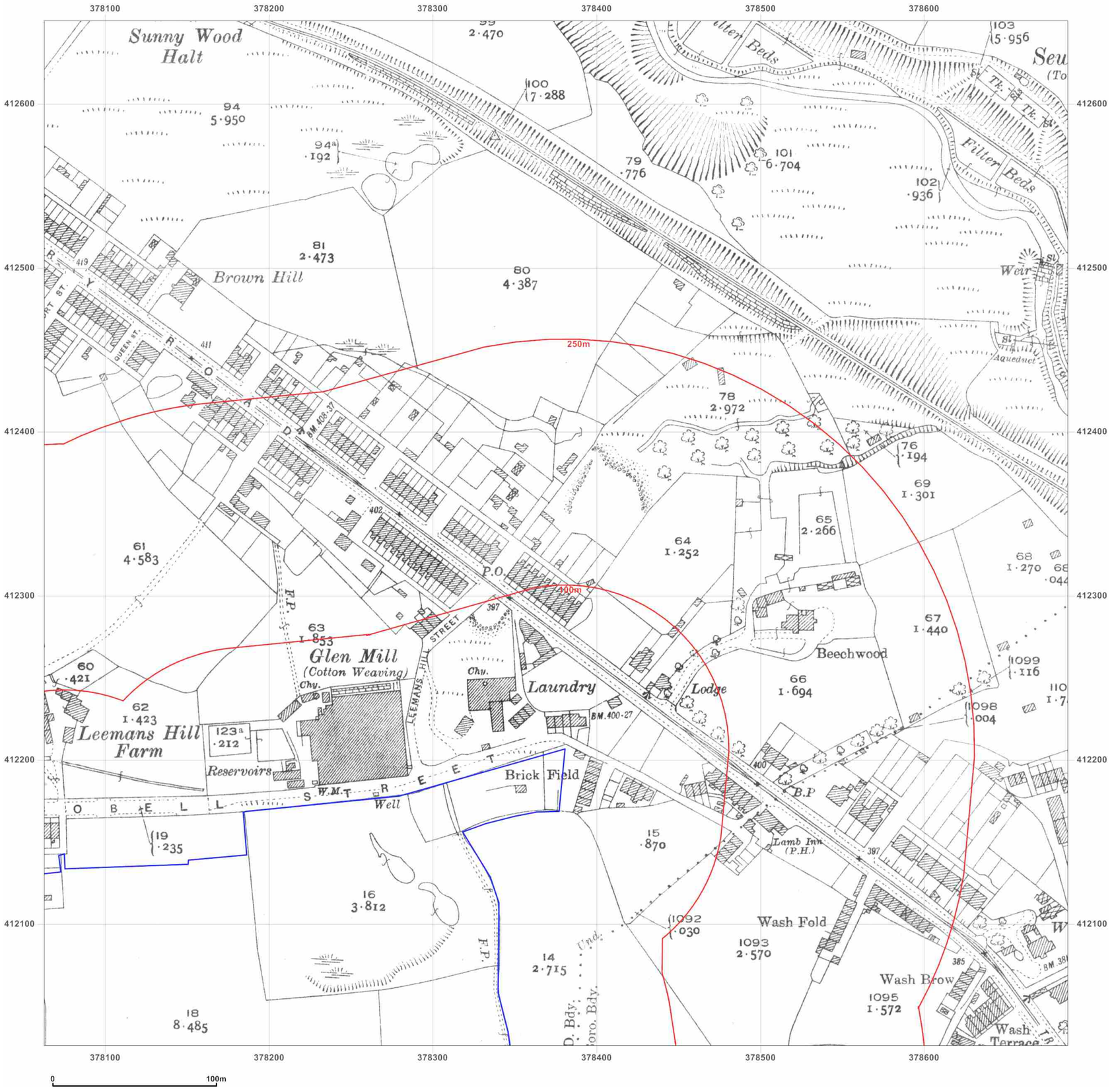
Surveyed 1910
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: County Series

Map date: **1930**

Scale: 1:2,500

Printed at: 1:2,500

N W E S

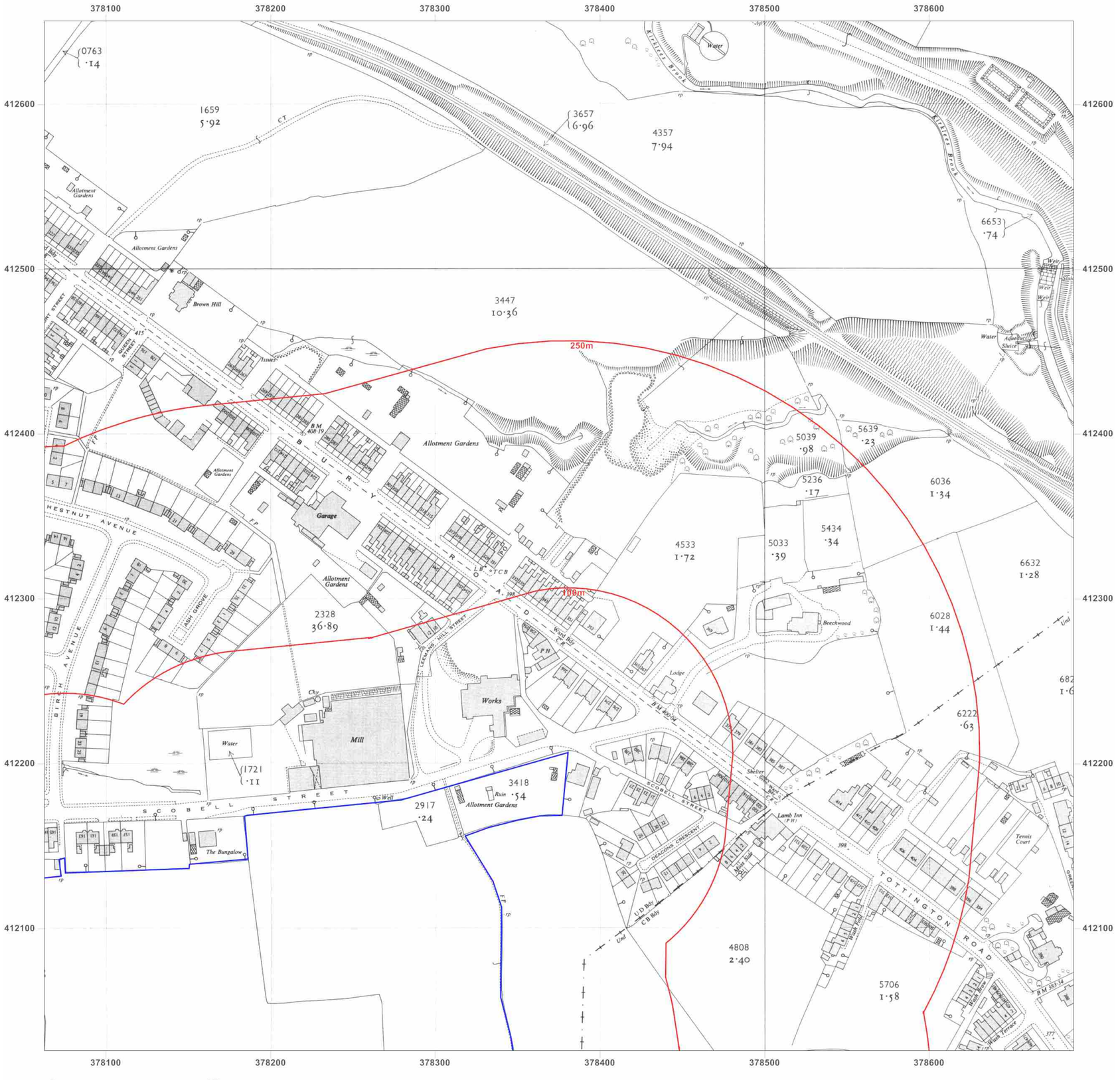
Surveyed 1930
Revised 1930
Edition N/A
Copyright N/A
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: National Grid

Map date: **1959**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

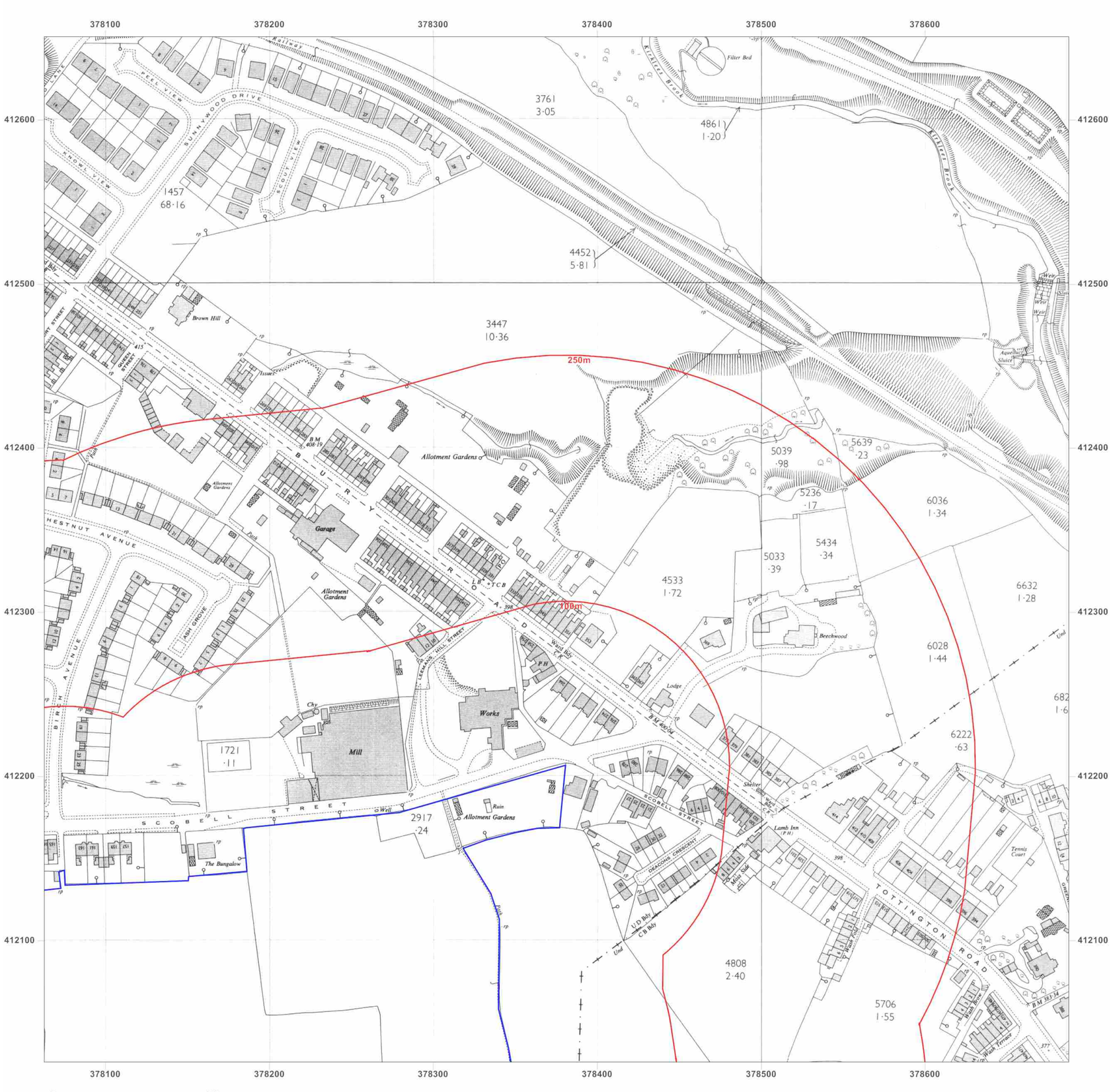
Surveyed 1959
Revised 1959
Edition 1961
Copyright 1961
Levelled 1961

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: National Grid

Map date: **1968**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

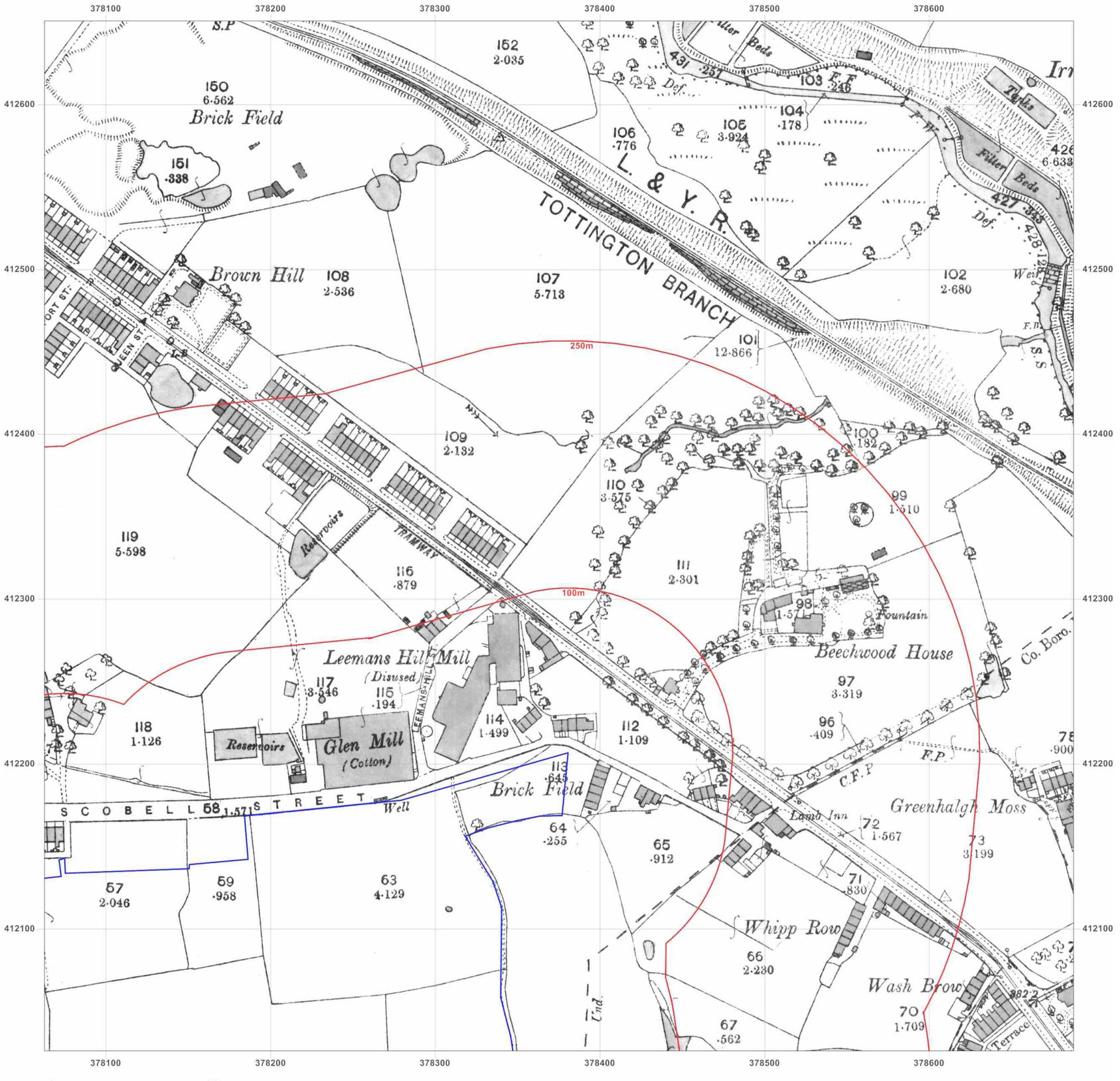
Surveyed 1968
Revised 1968
Edition N/A
Copyright 1970
Levelled 1962

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: County Series

Map date: **1890**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

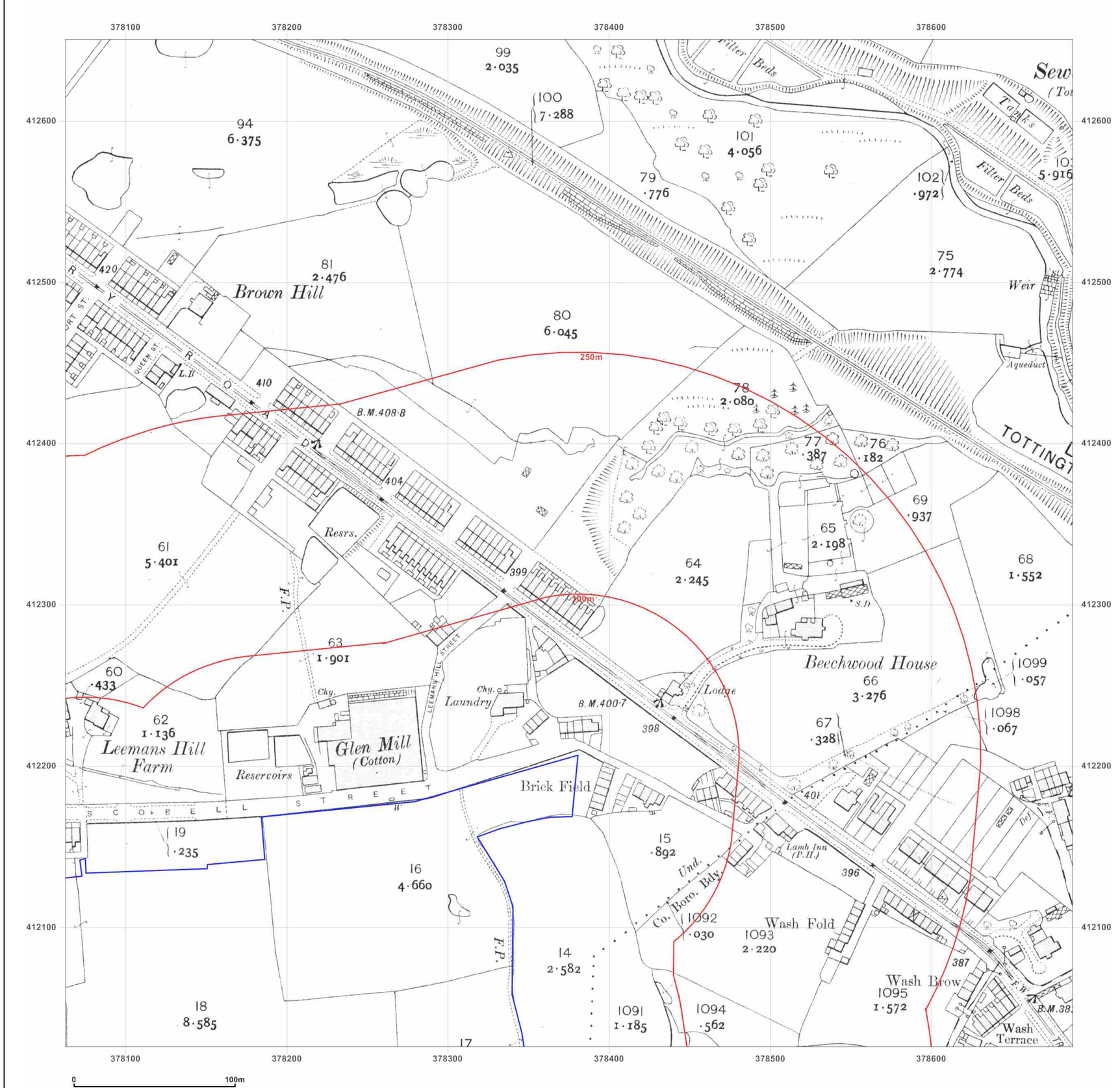
Surveyed 1890
Revised 1890
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: County Series

Map date: **1910**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

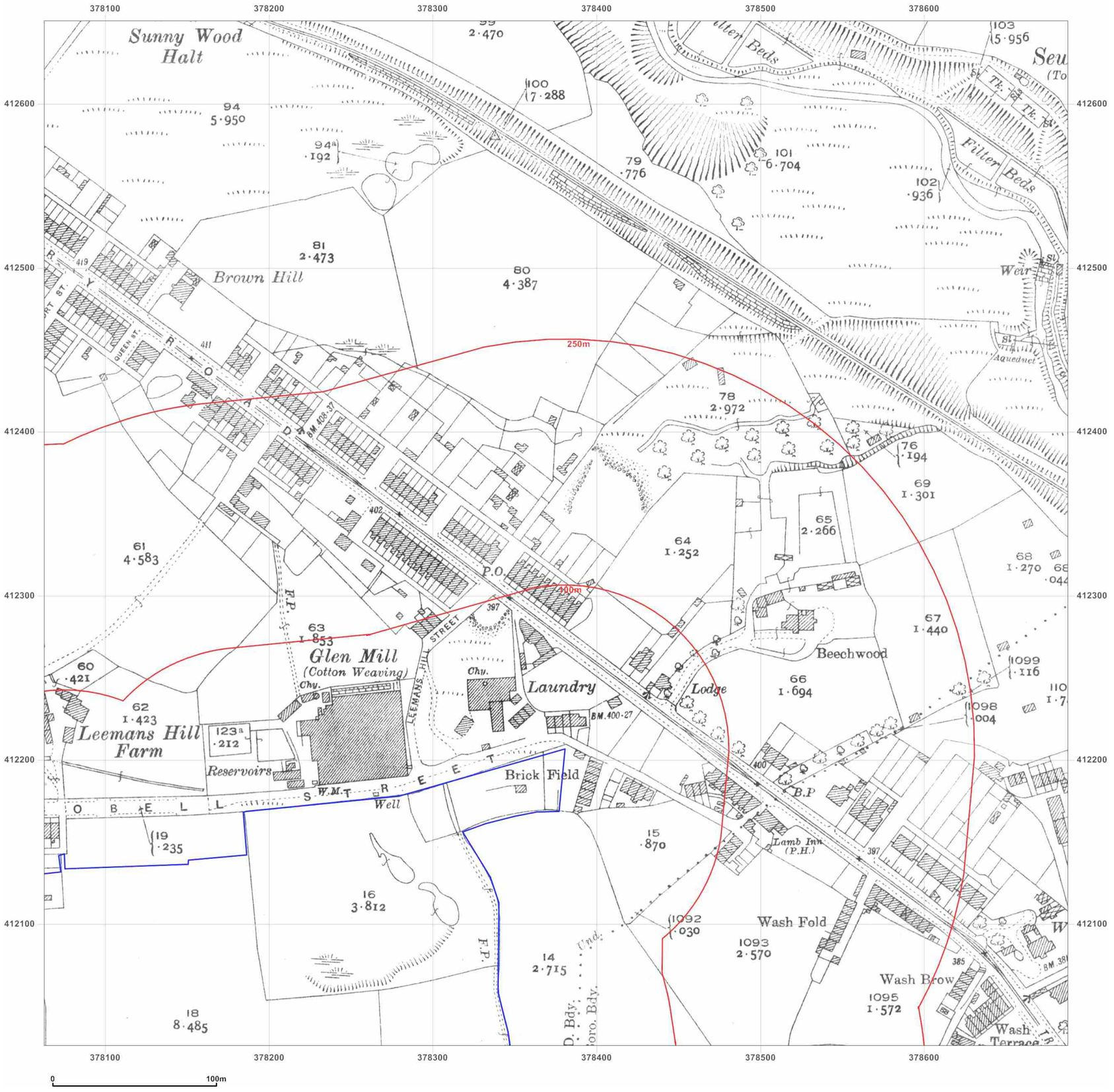
Surveyed 1910
Revised 1910
Edition N/A
Copyright N/A
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: County Series

Map date: **1930**

Scale: 1:2,500

Printed at: 1:2,500

N W E S

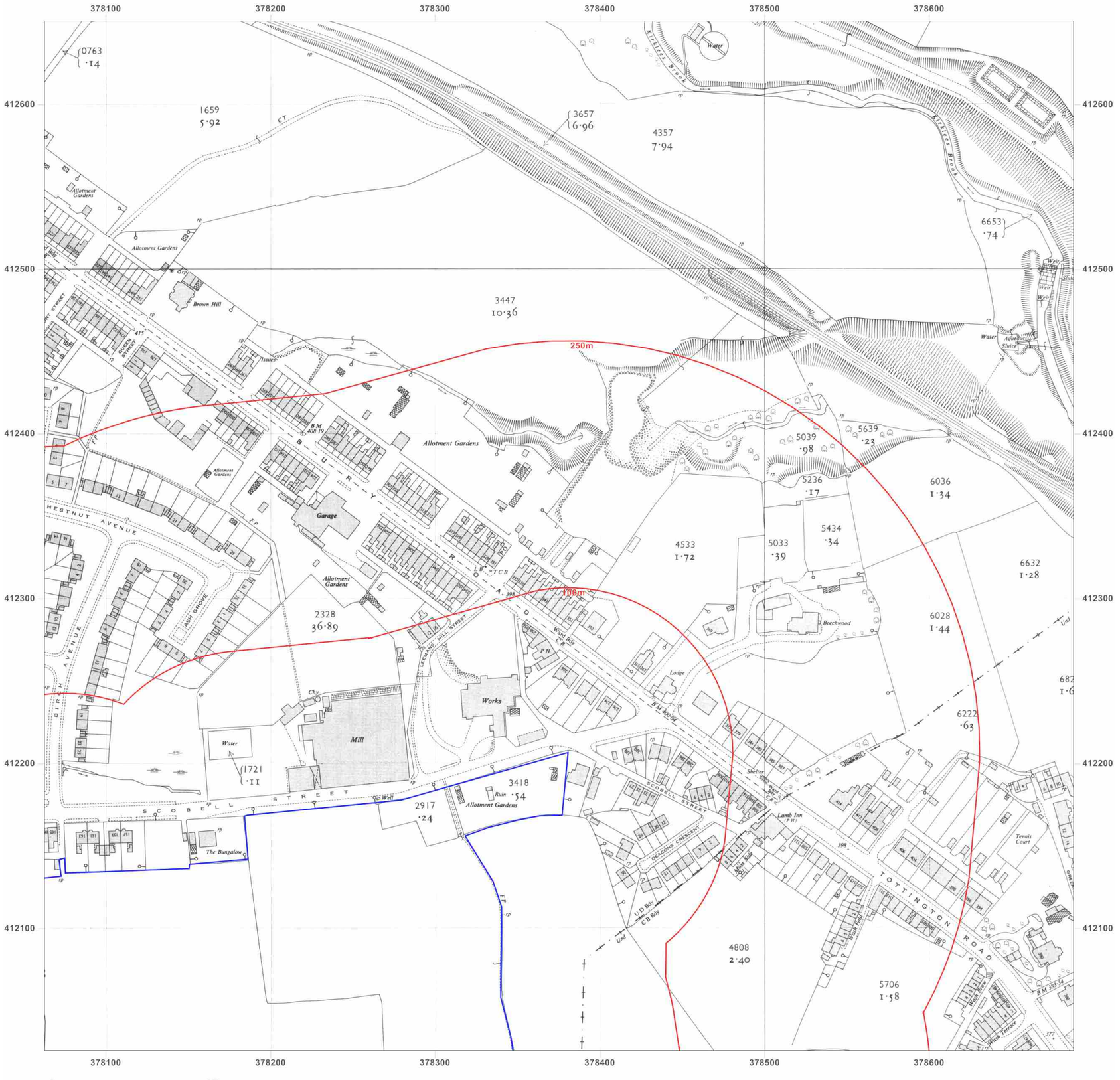
Surveyed 1930
Revised 1930
Edition N/A
Copyright N/A
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: National Grid

Map date: **1959**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

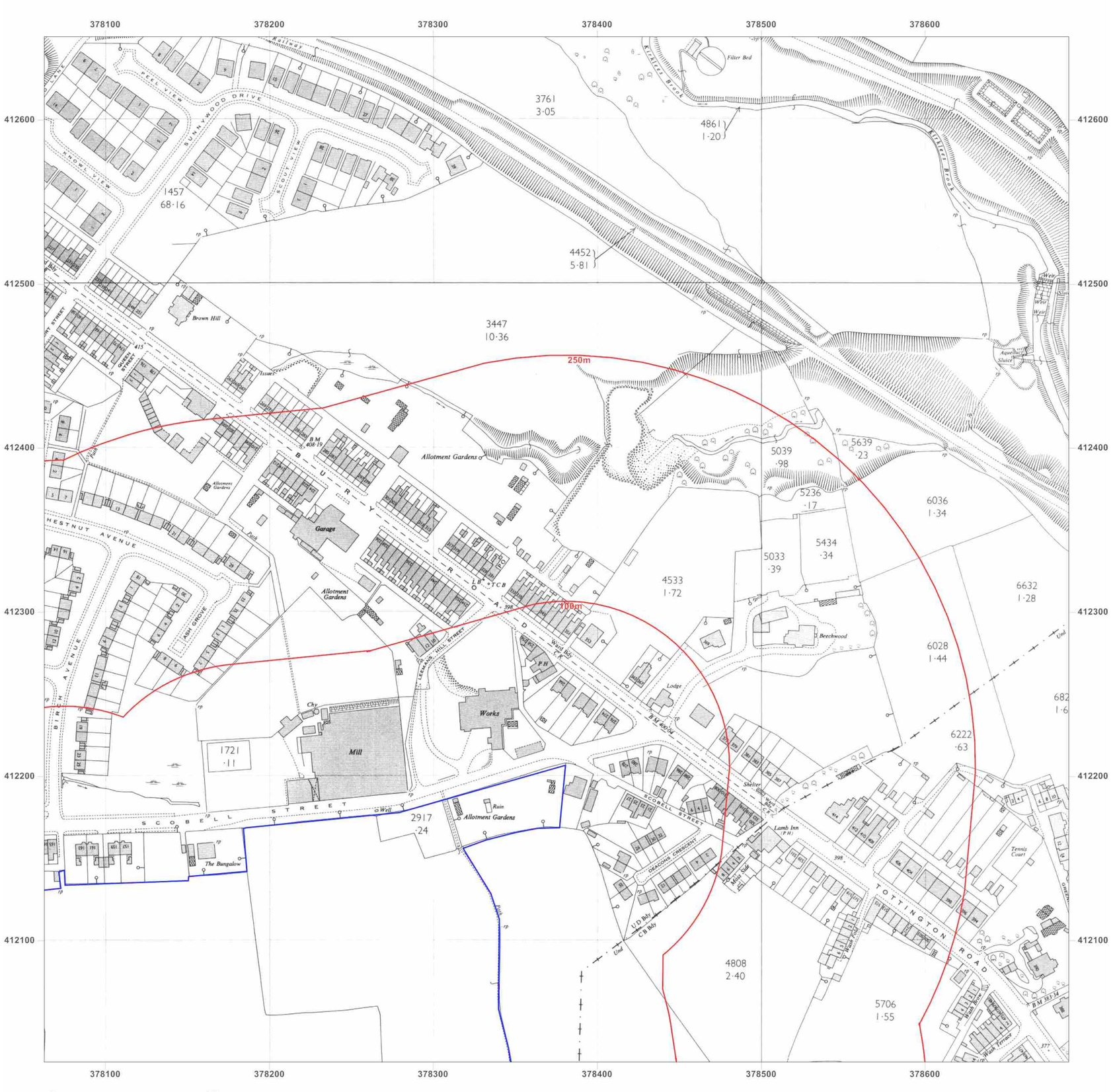
Surveyed 1959
Revised 1959
Edition 1961
Copyright 1961
Levelled 1961

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704_LS_2_2
Grid Ref: 378375, 412338

Map Name: National Grid

Map date: **1968**

Scale: 1:2,500

Printed at: 1:2,500

N
W E
S

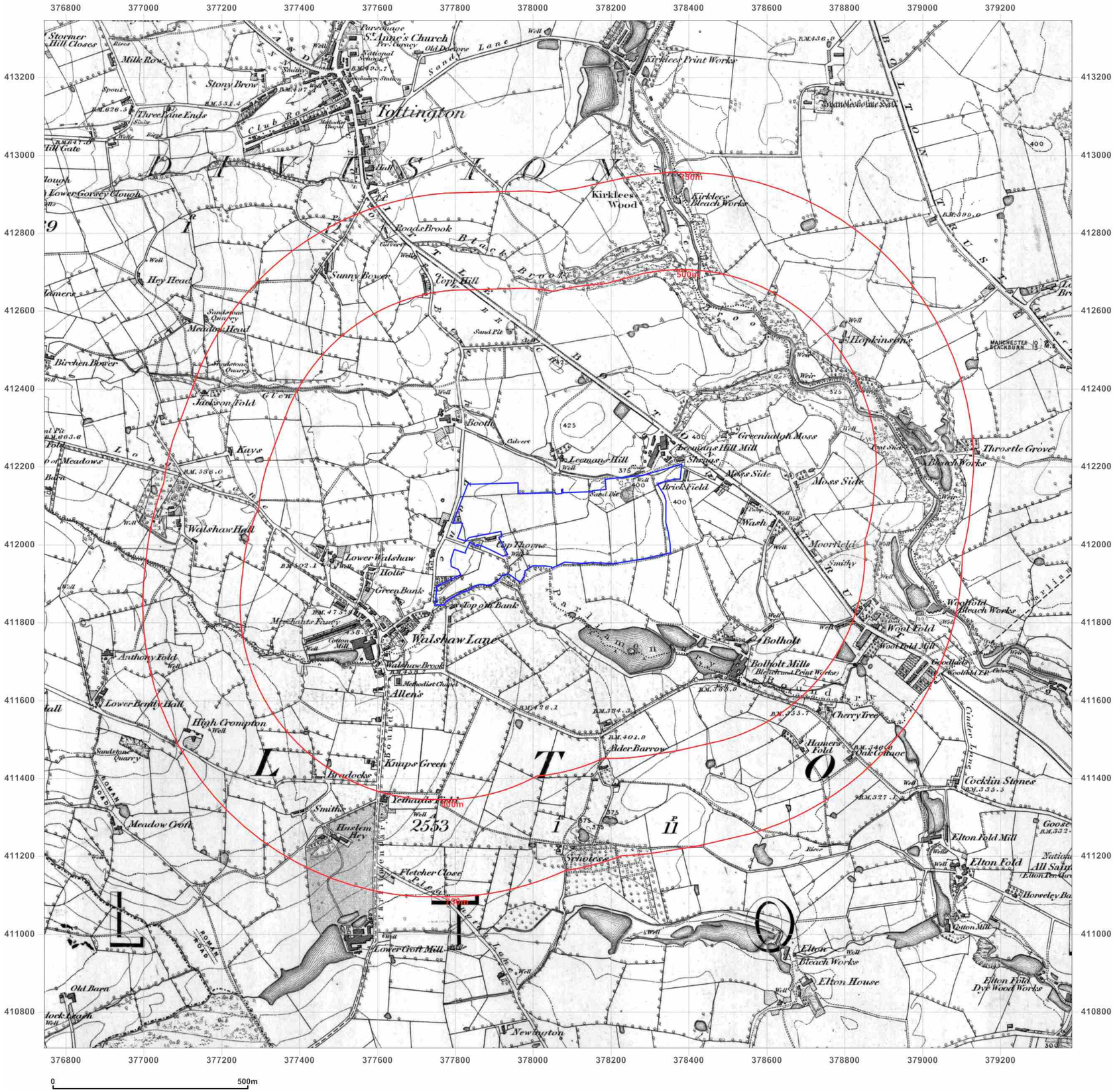
Surveyed 1968
Revised 1968
Edition N/A
Copyright 1970
Levelled 1962

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: County Series

Map date: **1850**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

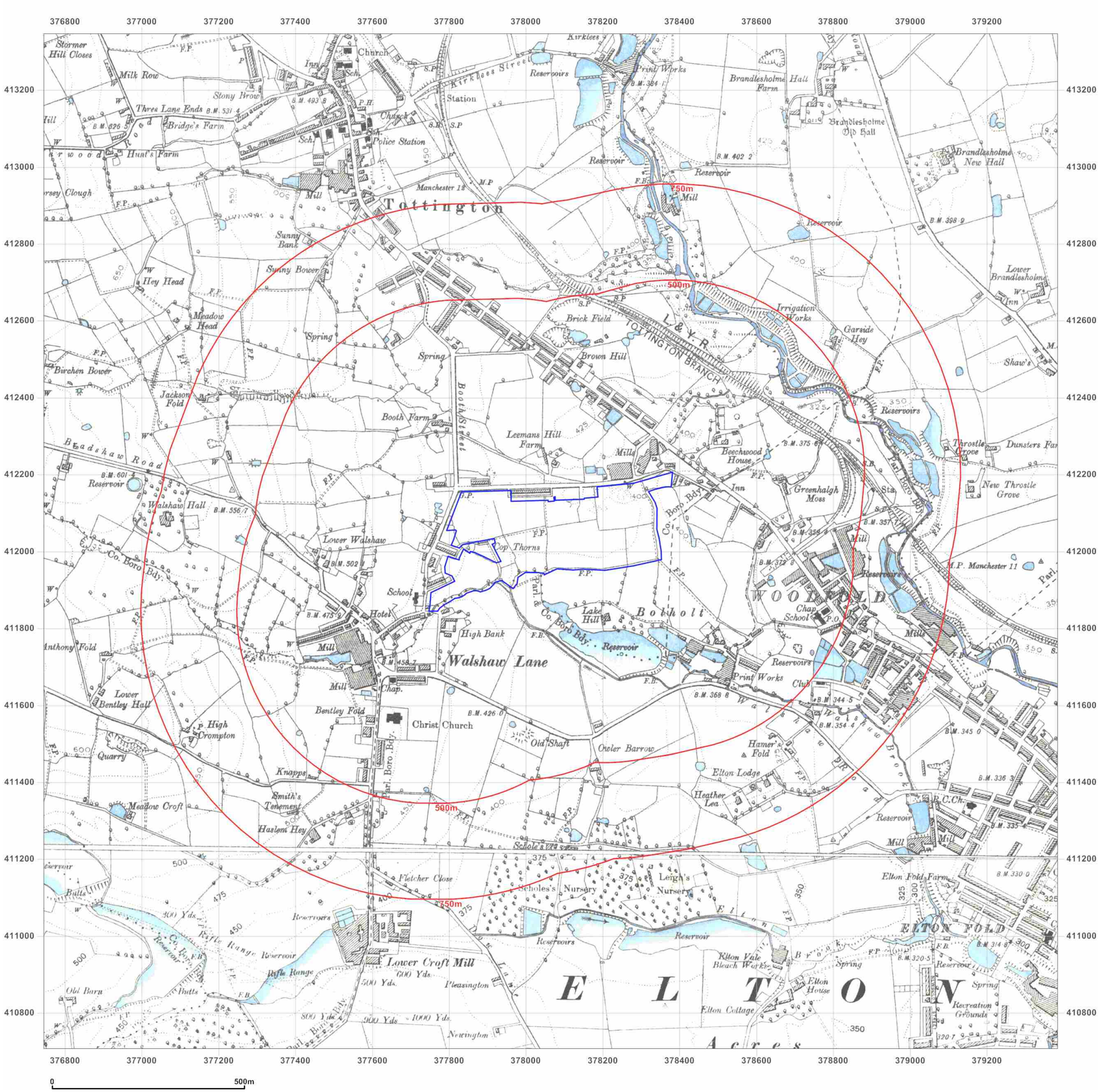
Surveyed 1847
Revised N/A
Edition 1850
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: County Series

Map date: **1890-1891**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

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

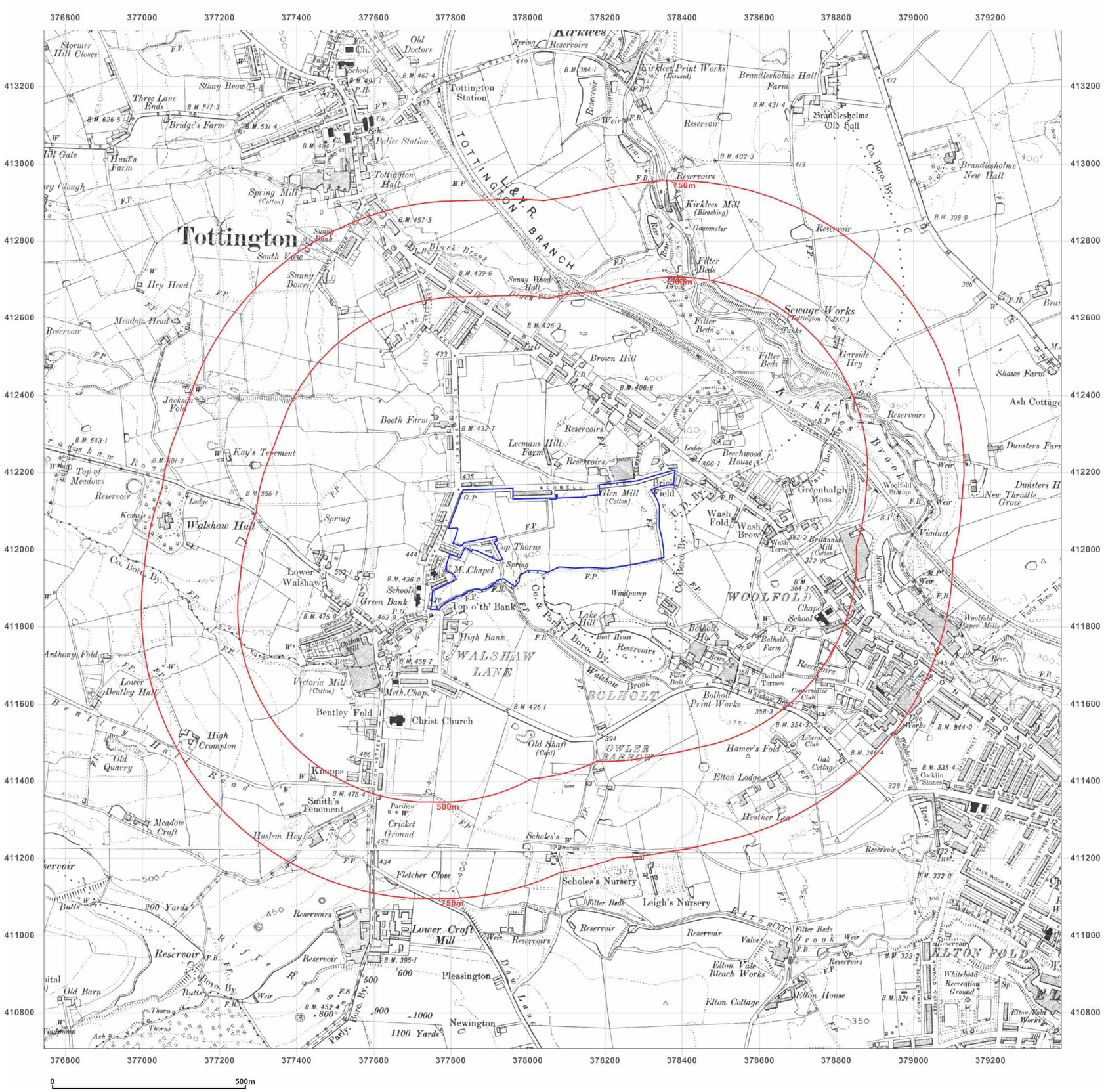
Surveyed 1890
Revised 1890
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: County Series

Map date: **1908-1909**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1844
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A

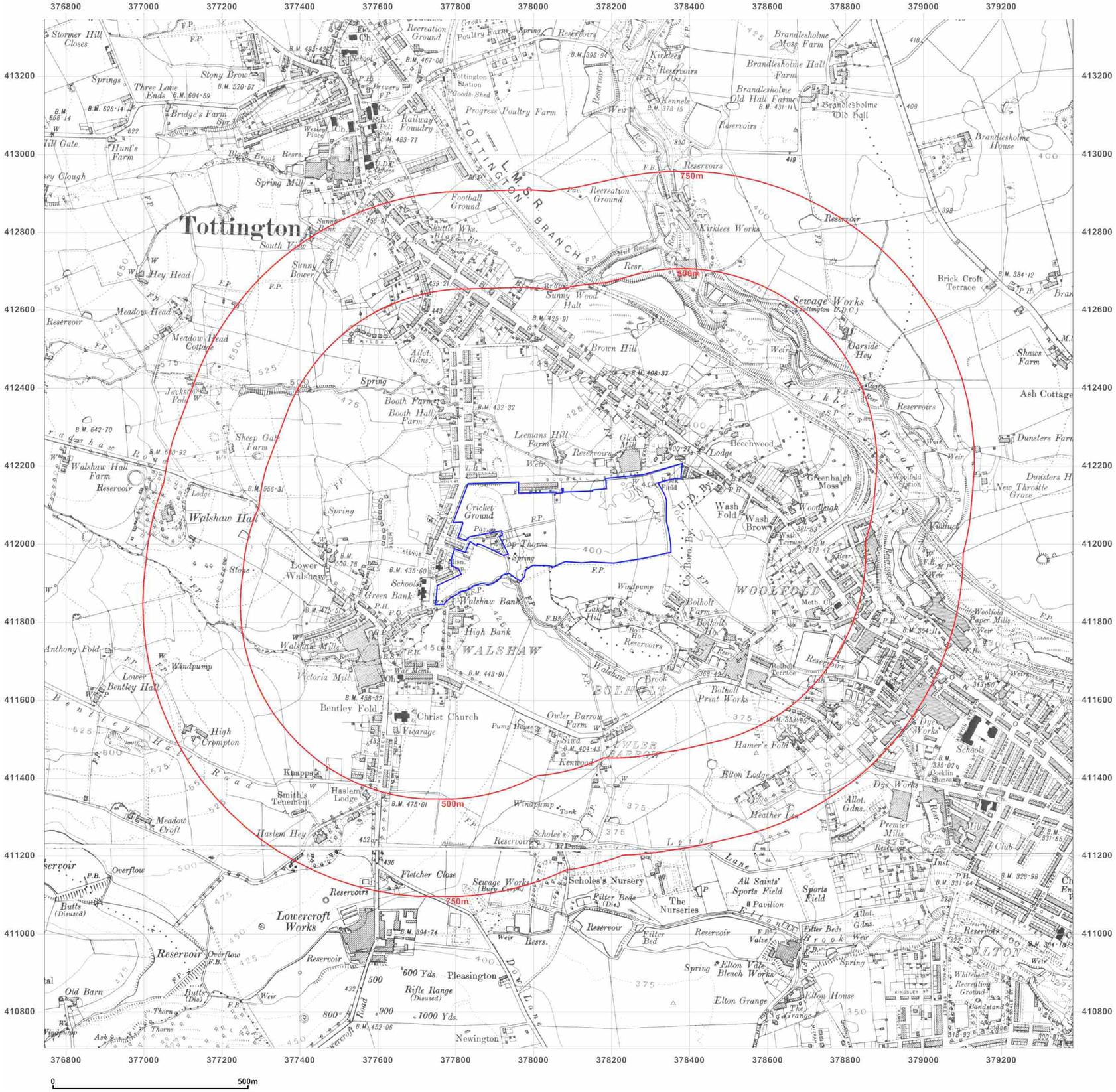
Surveyed 1844
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: County Series

Map date: **1927-1928**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

Surveyed 1844
Revised 1928
Edition N/A
Copyright N/A
Levelled N/A

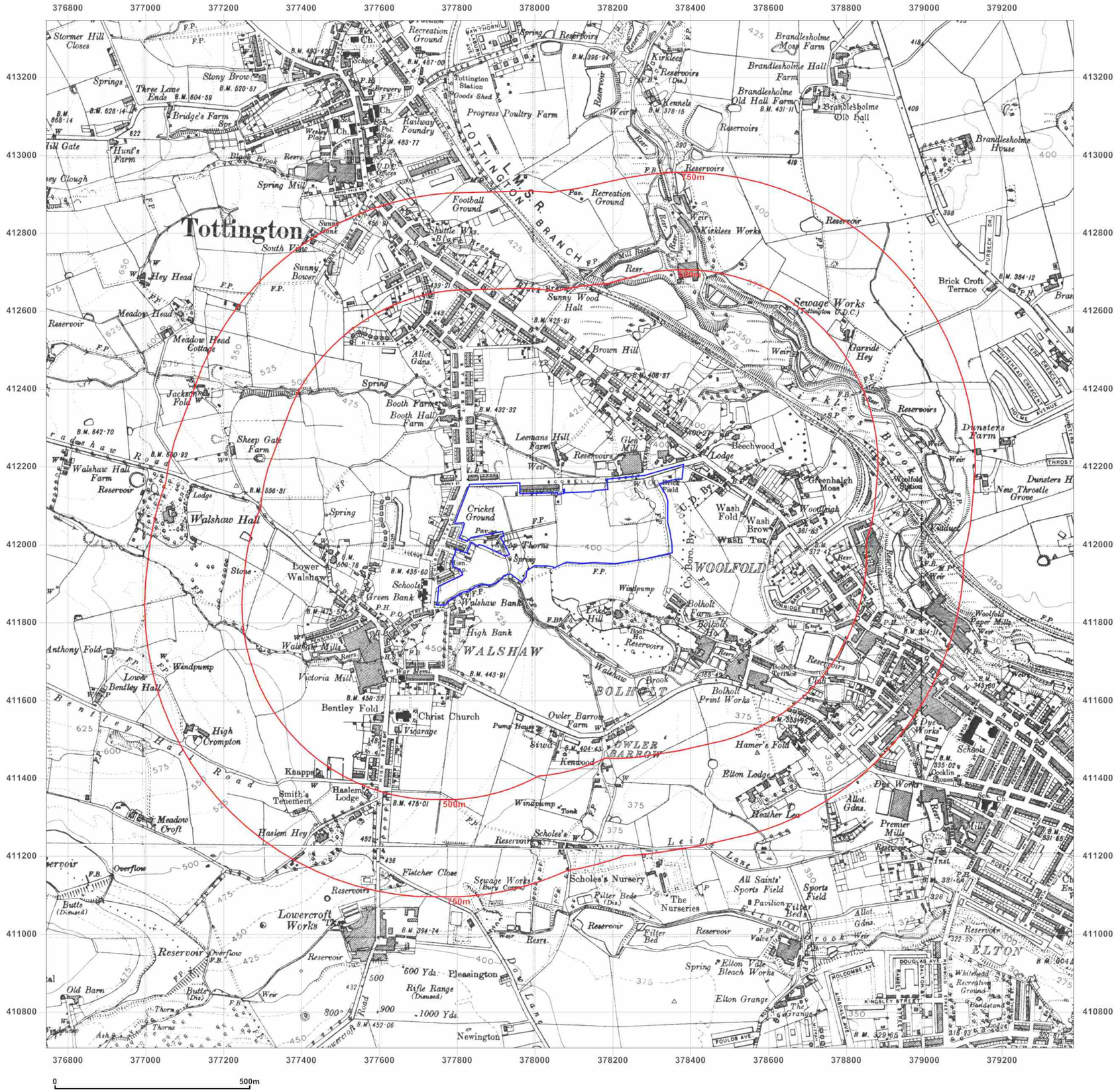
Surveyed 1844
Revised 1927
Edition N/A
Copyright N/A
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: County Series

Map date: **1938**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

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

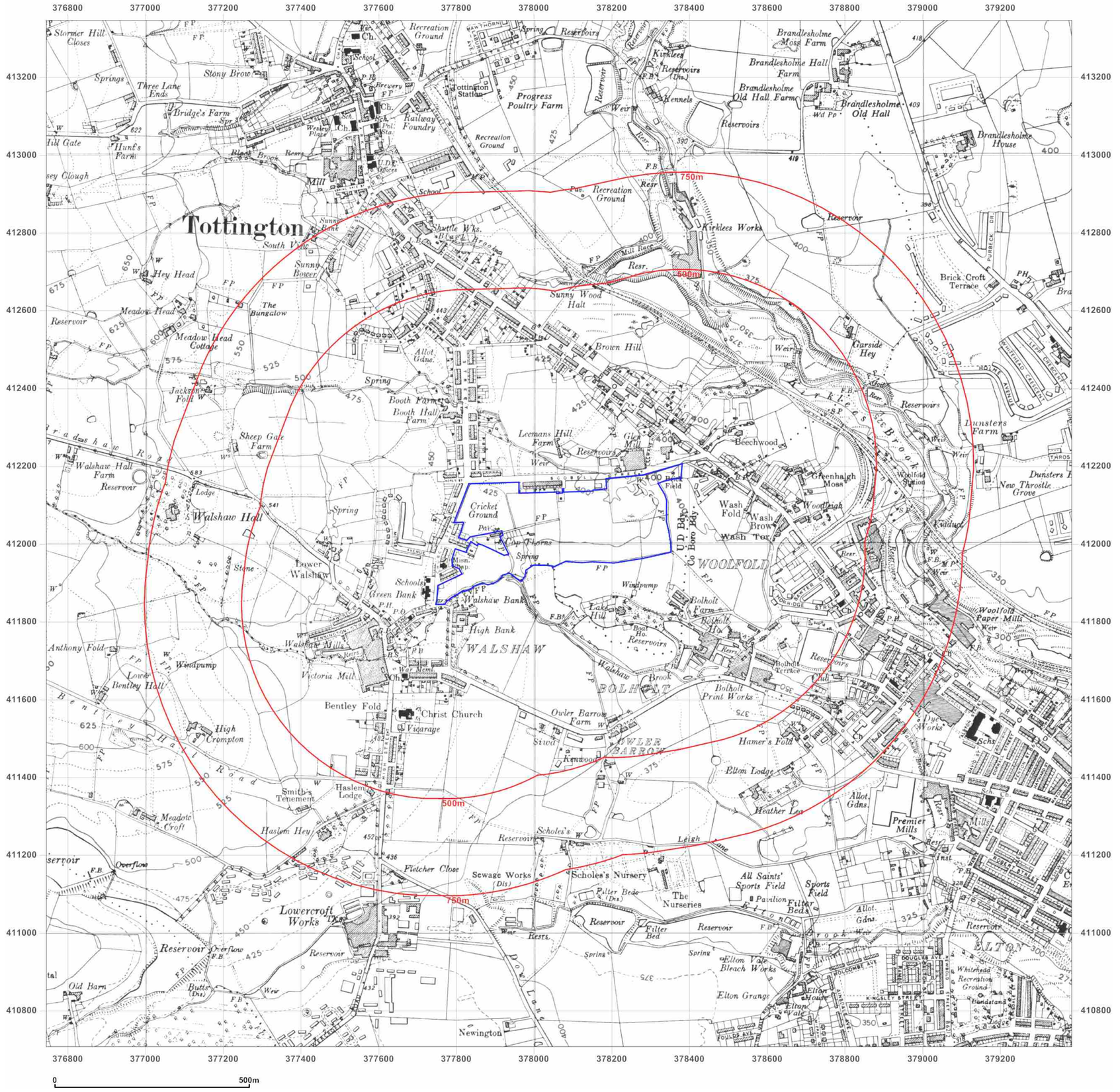
Surveyed 1844
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: Provisional

Map date: **1956**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

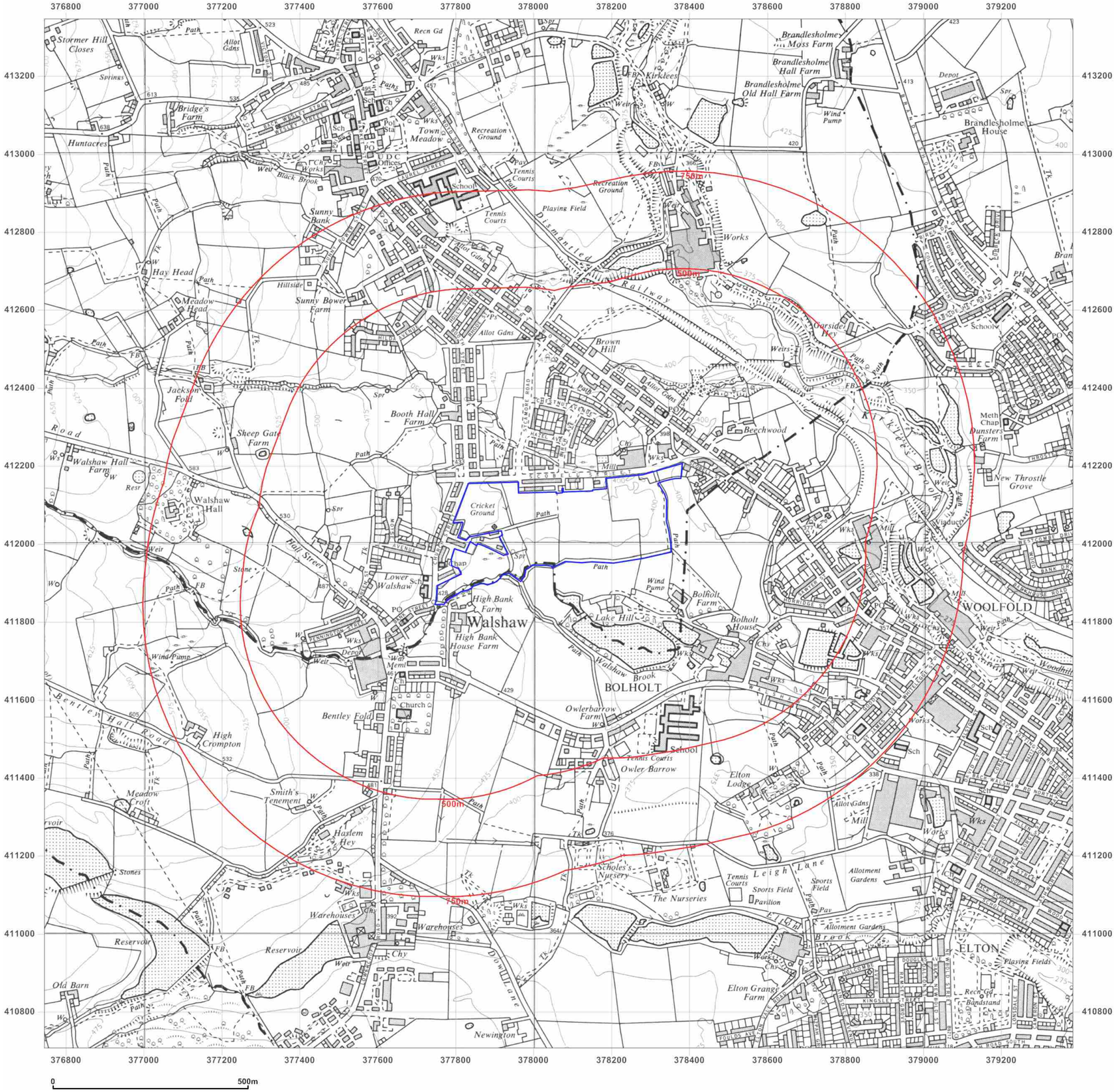
Surveyed 1949
Revised 1949
Edition N/A
Copyright 1956
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: Provisional

Map date: **1969**

Scale: 1:10,560

Printed at: 1:10,560

N
W E
S

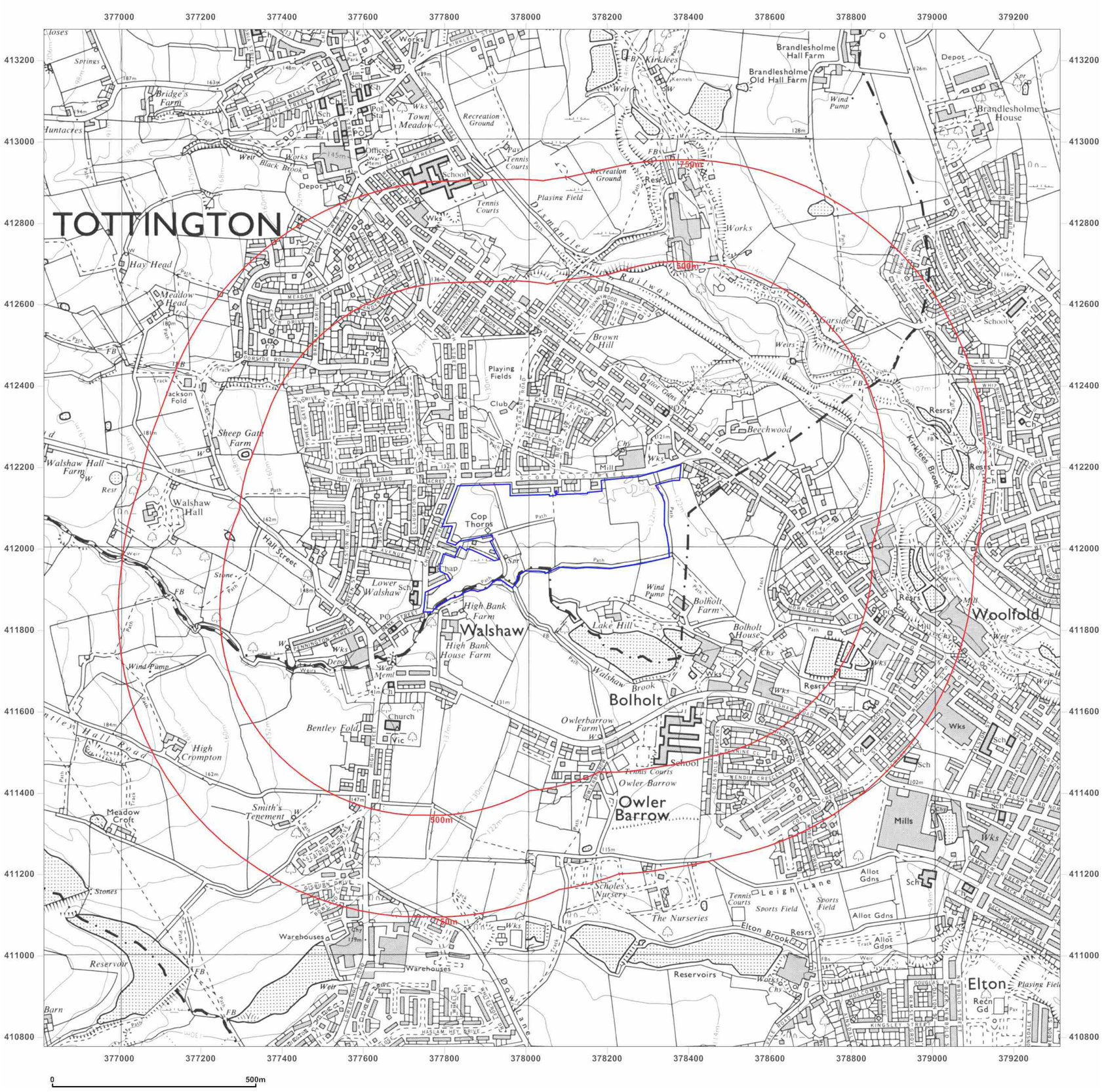
Surveyed 1969
Revised 1969
Edition N/A
Copyright N/A
Levelled N/A

Powered by

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: National Grid

Map date: **1974**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

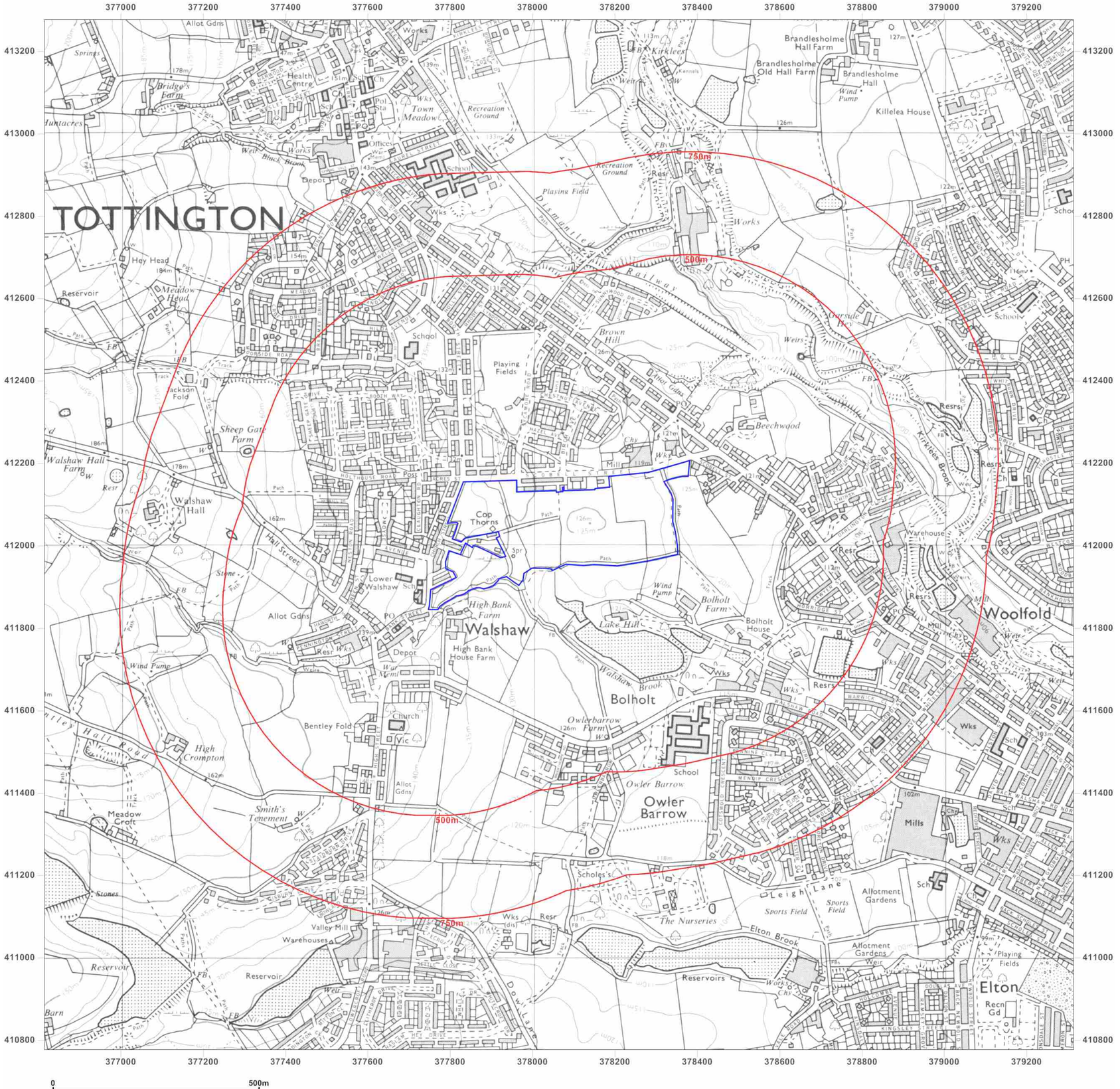
Surveyed 1974
Revised 1974
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: National Grid

Map date: **1980**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

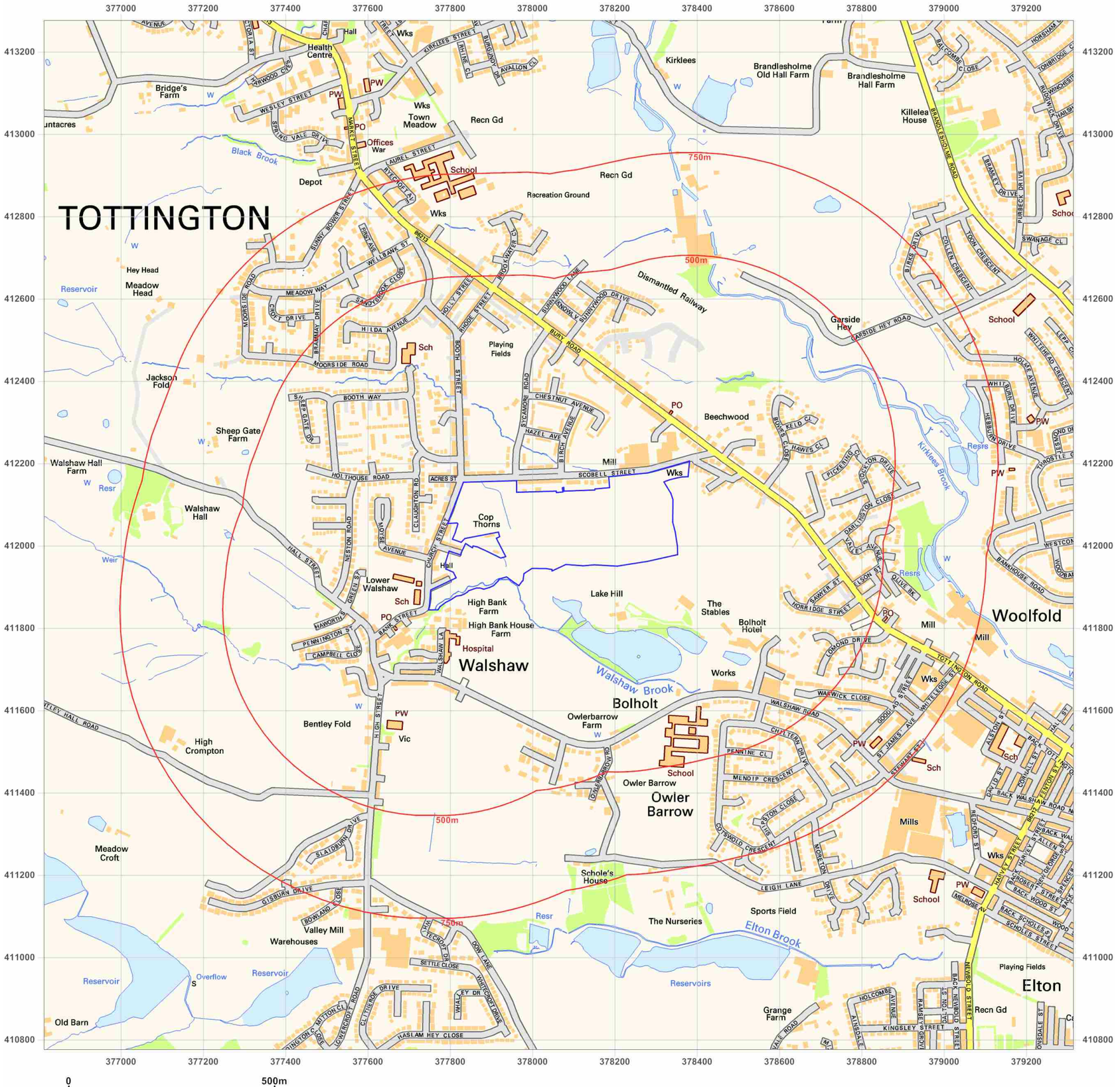
Surveyed 1978
Revised 1980
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

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

Production date: 07 November 2019

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



Groundsure INSIGHTS

Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

Printed at: 1:10,000

N W E S

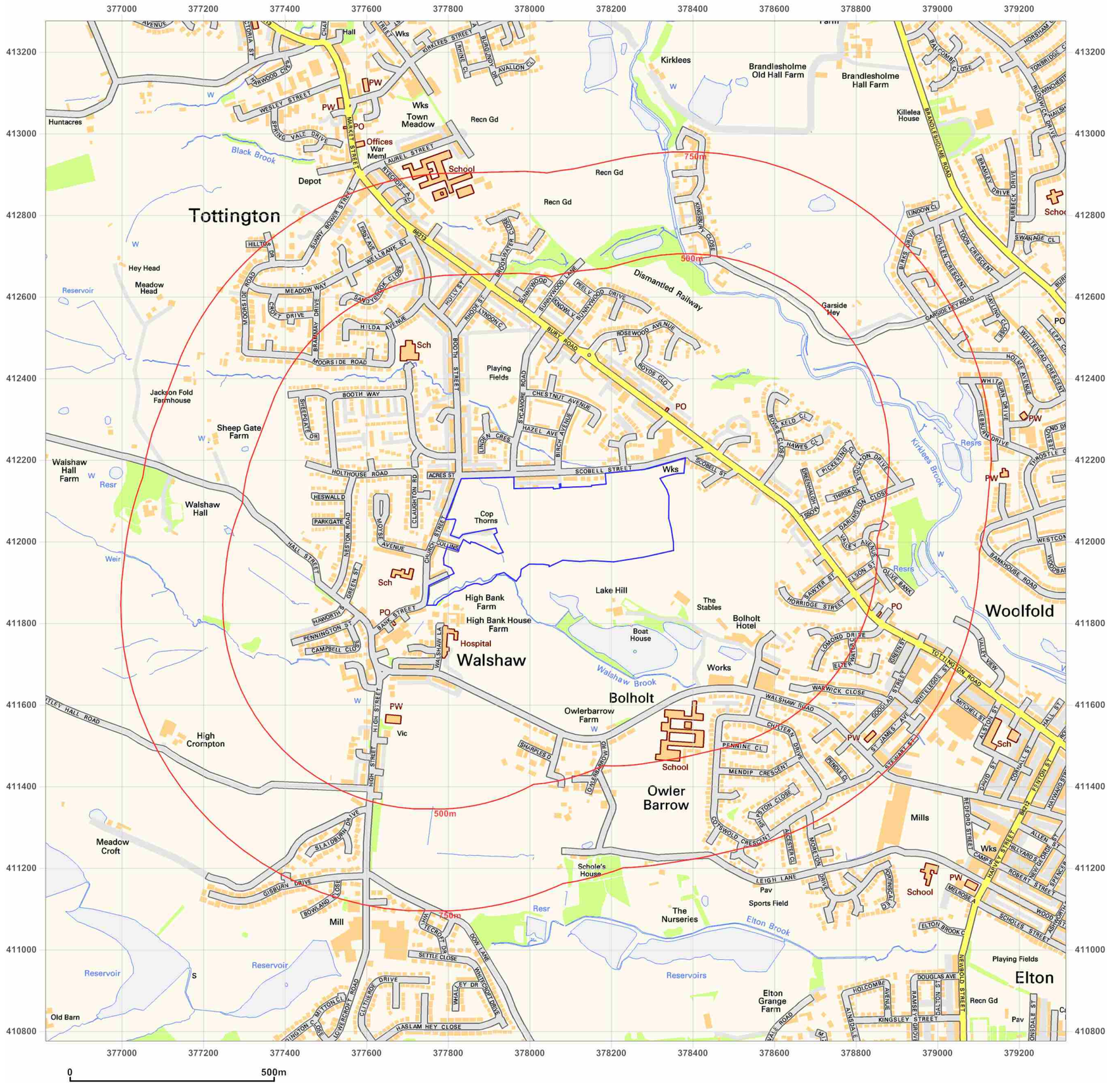
2001

Powered by

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

Production date: 07 November 2019

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



Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

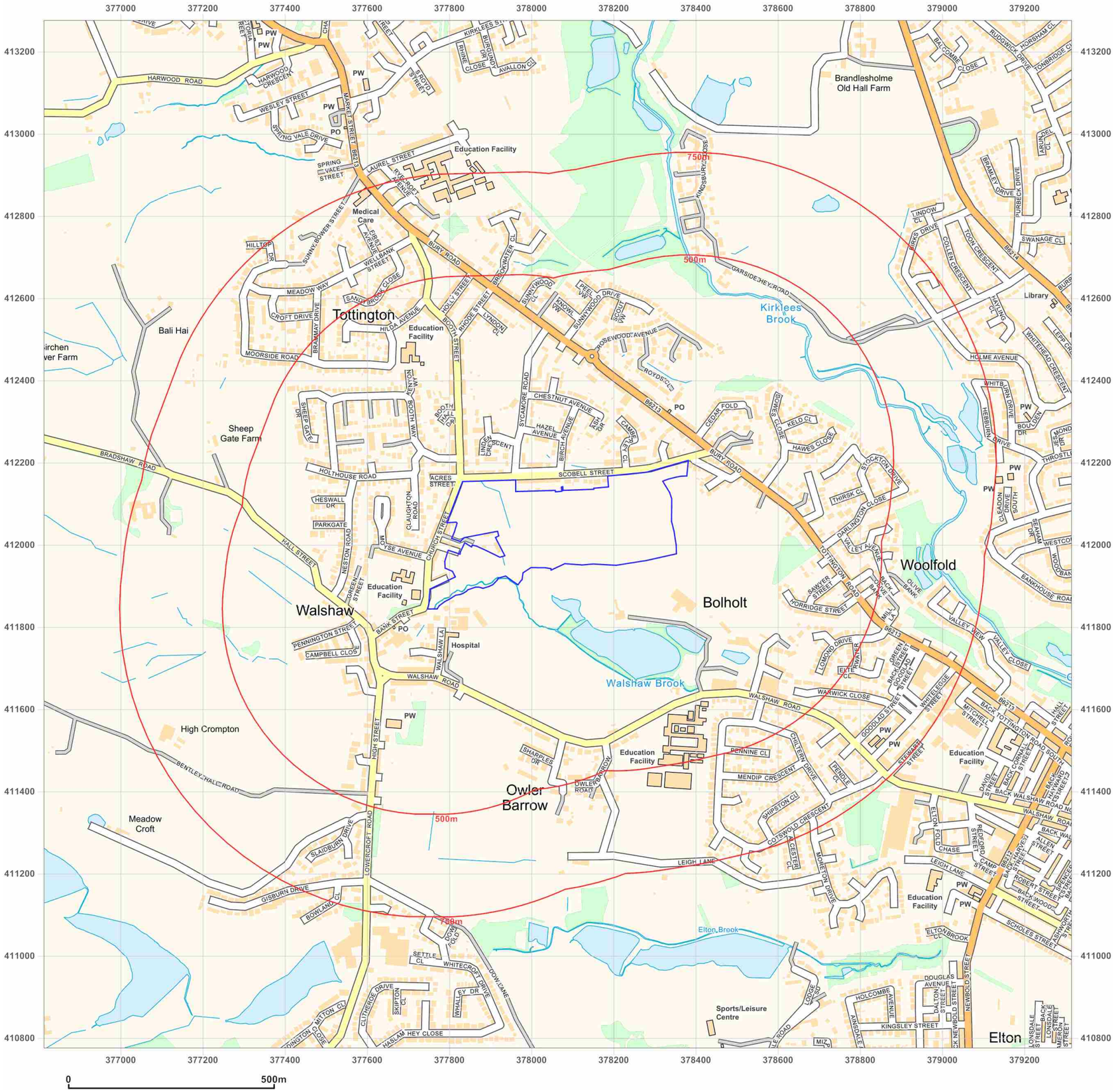
2010

Powered by

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

Production date: 07 November 2019

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



Site Details:

Walshaw Road, BL8 3DE

Client Ref: 107765_Walshaw_Road_-_Himor
Report Ref: GS-6447704
Grid Ref: 378063, 412026

Map Name: National Grid

Map date: **2019**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

2019

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

Production date: 07 November 2019

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

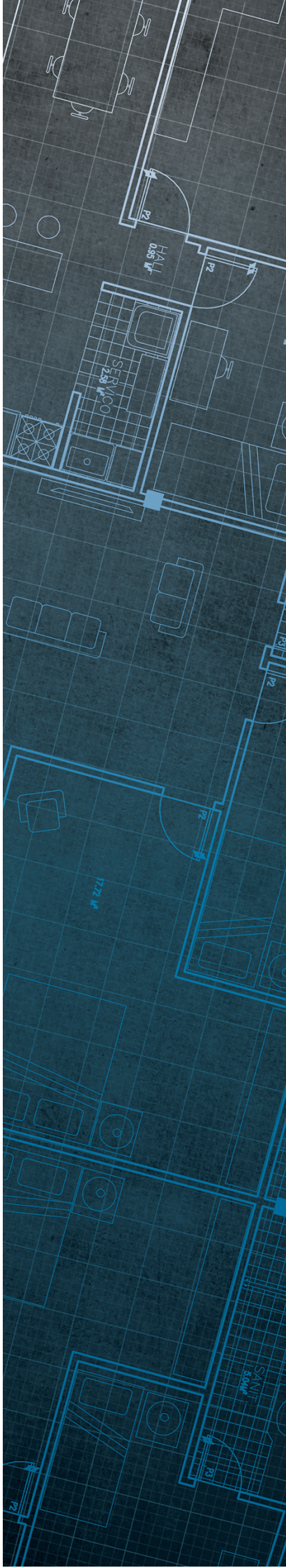
The Coal Authority

Consultants

Coal Mining Report

Walshaw Road, Bl8 3de
Greater Manchester

Date of enquiry:	**7 November 2019**
Date enquiry received:	**7 November 2019**
Issue date:	**7 November 2019**
Our reference:	**51002188555001**
Your reference:	**GS-6447705**



Consultants

Coal Mining Report

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

Client name

GROUNDSURE LIMITED

Enquiry address

Walshaw Road, Bl8 3de
Greater Manchester

Approximate position of property

How to contact us

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

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

@coalauthority
/company/the-coal-authority
/thecoalauthority
/thecoalauthority

Section 1 – Mining activity and geology

Past underground mining
No past mining recorded.

Probable unrecorded shallow workings
Yes.

Spine roadways at shallow depth
No spine roadway recorded at shallow depth.

Mine entries

Entry type	Reference	Grid reference	Treatment description	Mineral	Conveyancing details
Shaft	377411-001	377942 411908		Coal	
Shaft	377411-002	377982 411826		Coal	
Shaft	377411-003	377898 411935		Coal	

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

16820		

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

Outcrops

Seam name	Mineral	Seam workable	Distance to outcrop (m)	Direction to outcrop	Bearing of outcrop
CANNEL	Coal	Yes	Within	N/A	24
CANNEL	Coal	Yes	Within	N/A	59
CANNEL	Coal	Yes	Within	N/A	253
HALF YARD	Coal	Yes	Within	N/A	76
UPPER MOUNTAIN	Coal	Yes	13.8	North-West	110

Geological faults, fissures and breaklines

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

Faults under or close to the property recorded.

Opencast mines

None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

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

Site investigations
None recorded within 50 metres of the enquiry boundary.

Remediated sites
None recorded within 50 metres of the enquiry boundary.

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

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

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

Mine gas
None recorded within 500 metres of the enquiry boundary.

Mine water treatment schemes
None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining
None recorded.

Coal mining licensing
None recorded within 200 metres of the enquiry boundary.

Court orders
None recorded.

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

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

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

Payments to owners of former copyhold land
The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

Based on the responses in this report, no further information has been highlighted.

Section 5 – Data definitions

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

Past underground coal mining

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

Probable unrecorded shallow workings

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

Spine roadways at shallow depth

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

Mine entries

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

Abandoned mine plan catalogue numbers

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

Outcrops

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

Geological faults, fissures and breaklines

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

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

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

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

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

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

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

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

Mine gas
Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission.

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

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

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

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

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

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

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

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

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

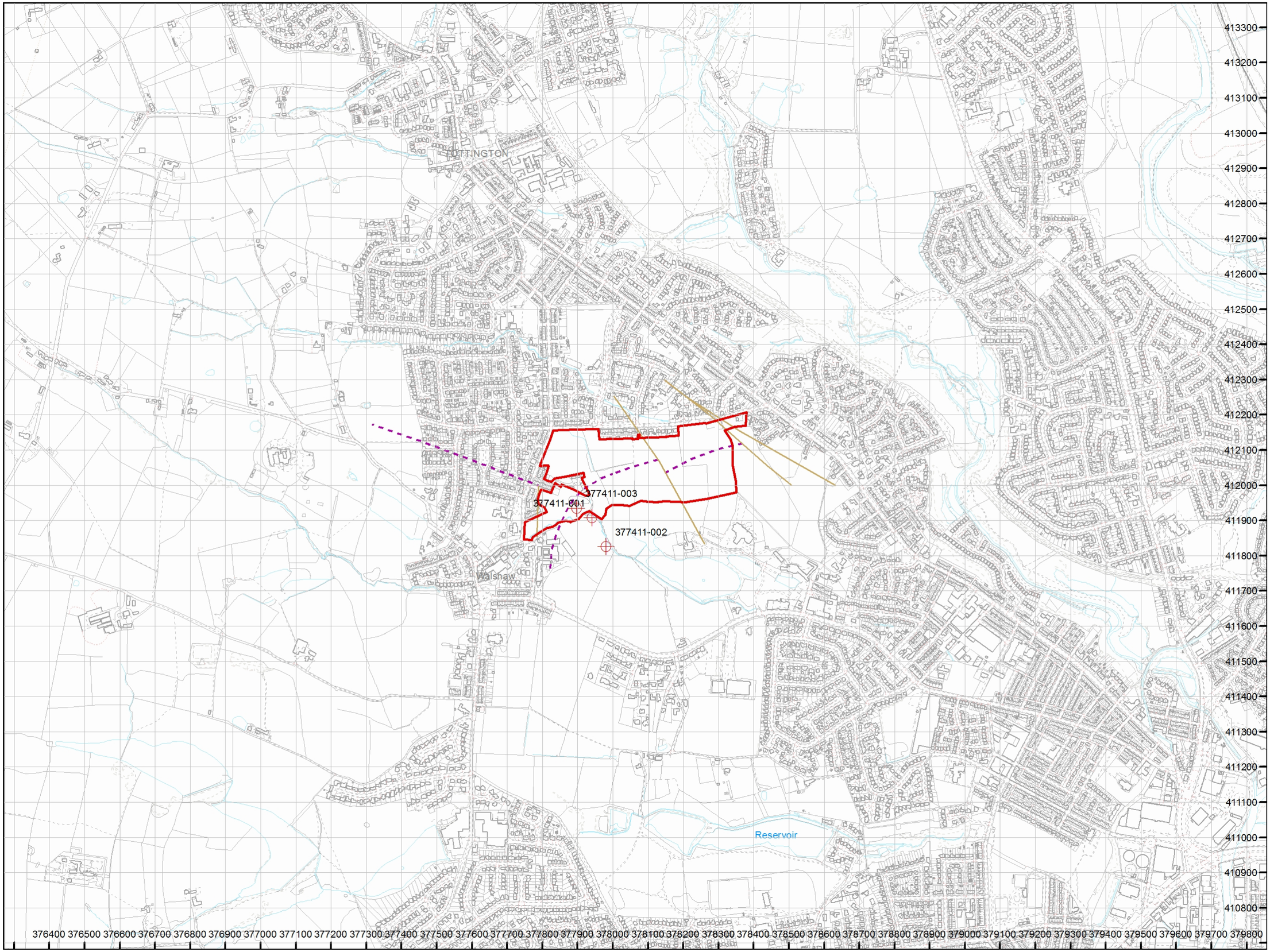
The Coal Authority

Summary of findings

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

Key

- Approximate position of the enquiry boundary shown
- Disused mine shaft
- Outcrop (Conjectured)
- Geological faults



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