

Phase 1 Site Investigation Report

Land off Upper Hoyland Road, Barnsley

Eton Construction Ltd



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Land off Upper Hoyland Road, Barnsley**

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Executive Summary

Site Location	The site is situated on land off Upper Hoyland Road, Barnsley. The National Grid Reference 436080, 401420.
Current Site Use	The site currently comprises four interconnected grassed fields, used as pasture for horses.
Previous Site Uses	The site has remained undeveloped since the earliest available historical maps.
Proposed Site Use	The site is proposed for redevelopment into residential use, comprising houses with private gardens.
Geology	Drift deposits: None. Solid strata: Carboniferous Middle Coal Measures. Faults: None.
Environmental Considerations	Landfills: No historical or current landfills within 250m. Radon: No radon protection measures are required. Pollution: No pollution incidents that could affect the site. Groundwater: The Coal Measures rocks are classified as a Secondary A aquifer. The site is not located within a Source Protection Zone. No licensed groundwater abstraction points nearby. Surface Water: No surface watercourses in the vicinity of the site.
Coal Mining	The site may be underlain by unrecorded shallow coal mine workings.
Contamination Assessment	Human Health: Low risk from exposure of future residents to soil contamination at the site. Ground Gases: If shallow coal workings are present, they could be a source of hazardous ground gases. Controlled Waters: Low risk of pollution of controlled waters associated with the site. Site Buildings: Shallow soils could contain elevated sulphate and pH, which could damage concrete foundations.
Recommendations	An intrusive site investigation should be undertaken to determine whether shallow coal mine workings are present. If identified, ground gas monitoring should be undertaken. An assessment of the sulphate content and pH of shallow soils should be undertaken. An assessment of the risk from volume change of clay soils should be undertaken. The burnt shale made ground will require a capping of clean soil within garden areas and should be removed from below any ground-bearing floor slabs.

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1 Introduction

1.1 Terms of Reference

- 1.1.1 Ecus Ltd (hereafter Ecus) was commissioned by Eton Construction Ltd to undertake a Phase 1 Site Investigation for land off Upper Hoyland Road, Hoyland, Barnsley, hereafter referred to as 'the site'.
- 1.1.2 To complete the Phase 1 Site Investigation, a site walkover and assessment of current activities has been undertaken, together with an investigation into land use history and a review of local environmental conditions.
- 1.1.3 The results of the investigation are presented in Section 2 of this report and Section 3 draws together a preliminary conceptual model and risk assessment. Section 4 presents conclusions and recommendations. Appendices A - D provide supporting information.

1.2 Objectives of the Phase 1 Site Investigation

- 1.2.1 The assessment has been carried out in general accordance with the requirements of British Standard BS10175 (2011) – *Code of Practice for the Investigation of Potentially Contaminated Sites*.
- 1.2.2 The general objectives of the assessment are as follows:
- To provide information on past and current uses of the site and surrounding area, and the nature of hazards and physical constraints;
 - To identify receptors, potential sources of contamination, likely pathways and any features of immediate concern;
 - To provide information on the geology, hydrogeology and hydrology of the site to assist in establishing the conceptual model;
 - To provide an initial conceptual model of the nature and extent of potential contamination;
 - To provide recommendations for a Phase 2 (intrusive) site investigation prior to development of the site, should this be considered necessary.

1.3 Future Site Use

- 1.3.1 The site is proposed for development for residential use, comprising houses with private gardens; an indicative site layout plan has been supplied and is included within Appendix A.
- 1.3.2 This report has been produced with this use in mind; any alterations to these proposals may require revision of this report.

1.4 Sources of Information

1.4.1 Table 1 summarises sources of information that have been consulted during this assessment.

Table 1: Sources of Information

Source	Details
Client	The client provided information about the current site and the development proposals.
Site Walkover	Information about the site was gained from visual inspection during a site walkover.
Groundsure EnviroInsight Report	Presented in Appendices C and D and containing historical mapping and records of environmental information for the surrounding area.
British Geological Survey (BGS)	BGS 1:50,000 scale Geological Map No. 87, Barnsley (Solid Geology and Superficial Deposits Edition) and the BGS Open Geoscience website were consulted for geological information relating to the site and surrounding area.
Ecus Ltd	Further information relating to historical coal mining the site was obtained from a Coal Mining Risk Assessment report prepared by Ecus (ref. AG-7586-160307-EC-E).

2 Findings of the Phase 1 Site Investigation

2.1 Site Location and Current Condition

- 2.1.1 The site is approximately 0.61 hectares in area, and is situated off Upper Hoyland Road, Hoyland, Barnsley. Figure A1, Appendix A shows the location of the site, which centres on National Grid Reference 436080, 401420.
- 2.1.2 A site walkover was carried out on 4th May 2016. Figure A2, Appendix A, shows the current layout of the site and Figure A3 shows the proposed site layout. Photographs of the site are presented in Appendix B.

2.2 Site Description

- 2.2.1 The site is a parcel of land which consists of four connected fields. The fields are grassed and currently in use as pasture for horses.
- 2.2.2 Hedgerows are present between the fields, and also on the western and southern site boundaries, and are generally around 1.5m in height and predominantly composed of hawthorn, with some holly and elder. A gateway in the site's southeastern corner provides the main access onto the site.
- 2.2.3 The northern and eastern boundaries are formed by a wooden post and rail fence, which is around 1.5m high, beyond which are areas of planted trees, with the trees comprising semi-mature willow, hawthorn, cherry, etc.
- 2.2.4 Soils were generally not visible at the site, however a number of molehills were present on the site which appeared to consist of natural topsoil. A small area near to the main gate was observed to have many fragments of burnt shale at surface. This material appeared to have been imported to provide a hard surface at the site entrance.

2.3 Topography

- 2.3.1 The site slopes gently down towards the northwest and lies at an elevation of between approximately 145m and 139m above Ordnance Datum (AOD) with a gradient across the site of around 1 in 11.

2.4 Underground Structures and Services

- 2.4.1 An inspection chamber, with no cover present, is located on the site's western boundary. This was observed to be approximately 0.6m deep, with vitreous clay pipes entering at the northern and southern sides; no flow was present at the time of the survey.

2.5 Potential Contaminant Sources Noted During the Site Walkover

- 2.5.1 No potential sources of contamination were noted during the site walkover.

2.6 Visual Evidence of Contamination Noted During the Site Walkover

- 2.6.1 Made ground materials were noted near the site entrance, mostly consisting of burnt shale.

2.7 Current Surrounding Land Use

2.7.1 Current land use directly surrounding the site is outlined in Table 2.

Table 2: Current Surrounding Land Use

Direction	Land Use
North	Wooded embankment down to main road (Dearne Valley Parkway) with Shortwood Business Park beyond.
East	Wooded embankment up to continuation of Upper Hoyland Road, with fields beyond.
South	Upper Hoyland Road, with houses beyond.
West	Upper Hoyland Road with grassed field beyond.

2.8 Historical Land Use

2.8.1 Historical Ordnance Survey mapping was obtained by commissioning a Groundsure EnviroInsight report for the site.

2.8.2 The historical maps are presented in Appendix C. A description of the historical use of the site is presented in Table 3. Table 3 also describes surrounding land uses where it is considered that these may influence the potential for contamination at the site.

Table 3: Historical Use of the Site (all distances are approximate)

Map Date(s)	Land Use within the Site Boundary	Significant Uses of Surrounding Area
1850-55	The site comprises four fields, with dividing boundaries running in a NNW-SSE direction. A road bounds the site to the south and west.	High Royd Colliery and a Tannery are located 400m north-west of the site. A railway is located 450m north-west of the site. Old Sandstone Quarries are shown 650m south-west and 700m north-east of the site. Coal Shafts and Pits are shown 850m east of the site.
1891-3	No changes visible.	Back Side Well is located 80m south-west of the site. Rockingham Colliery is located 750m south-west of the site and Hoyland Silkstone Collieries, including a branch railway, are shown 750m east of the site. High Royd Colliery is shown as a Brick Works and the Tannery is no longer shown.
1901-06	No changes visible.	Tanks are labelled 550m north of the site and a Clay Pit, shown as part of Hoyland Brickworks, is located 350m west of the site.
1929-31	No changes visible.	Back Side Well is no longer shown. The Clay Pit west of the site has expanded and a spoil tip is shown 600m south-west of the site. Sewage Tanks are located 950m south-west of the site.
1931-38	No changes visible.	No significant changes visible.

Map Date(s)	Land Use within the Site Boundary	Significant Uses of Surrounding Area
1948	No changes visible.	The spoil tip south-west of the site has expanded significantly and is situated 450m south-west of the site.
1951	No changes visible.	No significant changes visible.
1960-66	No changes visible.	Hoyland Silkstone Collieries are no longer shown.
1970-79	No changes visible.	The spoil tip south-west of the site has expanded significantly and is located within 150m of the site. Disused quarries are shown 200m and 350m west of the site. The railway 450m north-west of the site is labelled as dismantled. Active Workings are labelled 1,150m north-east of the site.
1987	No changes visible.	A Works is shown 400m north-west of the site. The land 150m south-west of the site is labelled as a disused tip. The active workings north-east of the site are no longer shown.
1993	No changes visible.	No significant changes visible.
2002	No changes visible.	A large road has been constructed along the northern boundary of the site.
2010	No changes visible.	A large building has been constructed 180m east of the site and Shortwood Business Park has been constructed 200m west of the site. A Tip is labelled 750m north of the site.
2014	No changes visible.	No significant changes visible.

2.8.3 The Groundsure report also contains a map which illustrates historical industrial land uses, historic energy features, fuel stations, garages, tanks and potentially infilled land. None of these land uses are shown on site; with the nearest being potentially infilled land at the Brick Works mentioned above.

2.9 Geology, Hydrogeology and Hydrology

Geology

2.9.1 The geological map for the area has been studied to infer the likely geology of the site and surrounding area.

2.9.2 The site is shown on the map to be underlain by solid strata of the Carboniferous Middle Coal Measures Formation, which are described as undifferentiated mudstone and siltstone with sandstones, coal seams, seatearth beds and marine bands. An un-named sandstone unit within the Middle Coal Measures may be present in the north-western corner of the site.

2.9.3 No drift deposits or made ground are shown to underlie the site.

2.9.4 A large area of made ground is shown c.200m west of the site.

2.9.5 No faults are shown to affect the site.

Hydrogeology

- 2.9.6 According to the Groundsure report, the solid strata underlying the site are classified by the Environment Agency (EA) as a Secondary A Aquifer. The EA describe these aquifers as, '*permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers*'.
- 2.9.7 The Groundsure report shows that the site is not located within a Source Protection Zone, set by the Environment Agency for the protection of potable groundwater resources.
- 2.9.8 The Groundsure report indicates that there are no registered active groundwater abstractions within 2,000m of the site.
- 2.9.9 The Groundsure report shows that there are no licensed discharge consents to groundwater within 500m of the site.

Hydrology

- 2.9.10 The Groundsure report indicates that the nearest surface water feature to the site is an unnamed watercourse (drain) located approximately 88m south-west of the site.
- 2.9.11 The Groundsure report indicates that there are no licensed surface water abstractions within 2,000m of the site.
- 2.9.12 The Groundsure report states that there are no registered discharge consents to surface water within 500m of the site.

2.10 Pollution Incidents

- 2.10.1 The Groundsure report states that there is a single recorded pollution incident within 500m of the site. This is located 493m south-east of the site, occurred in November 2001 involving firefighting run-off and was a Category 3 (Minor) Incident to land, air and water.

2.11 Landfill Sites and Waste Management Licences

- 2.11.1 The Groundsure report shows that there are no recorded landfill sites within 250m of the site.
- 2.11.2 The Groundsure report shows that there are no other waster management facilities within 250m of the site.

2.12 Sensitive Land Uses

- 2.12.1 According to the Groundsure report, the land directly north and west of the site is shown as greenbelt.

2.13 Radon

- 2.13.1 The Groundsure report states that the site is not within a radon affected area and no radon protective measures are necessary in the construction of new dwellings.

2.14 Flood Risk

- 2.14.1 According to the Groundsure report the site lies within Flood Zone 1, the lowest risk category defined by the Environment Agency.

2.15 Geological Hazards

- 2.15.1 The Groundsure report contains details of BGS data relating to natural geological hazards. For all of the categories, the maximum hazard rating for the site is Negligible to Low.
- 2.15.2 The Groundsure report states that the site is within a specified distance of an identified coal mining area.
- 2.15.3 The Groundsure report also shows that the site is not within a brine affected area.

2.16 Coal Mining

2.16.1 A coal mining risk assessment was produced by Ecus, report reference AG-7586-160307-EC-E, to assess the stability and risk of shallow coal mining beneath the site. This report should be referred to for detailed information on coal mining hazards; however, the report concluded with the following:

- The site is potentially at risk from unrecorded shallow coal mine workings and from coal mine gas emissions from shallow mine workings.
- Intrusive investigation should be undertaken to determine whether shallow coal mine workings are present, and whether stabilisation works are required.
- Ground gas monitoring should be carried out to determine whether ground gas protection measures are required within new houses at the site.

3 Preliminary Conceptual Model and Risk Assessment

3.1 Potential Contaminants and Sources

3.1.1 The following sections provide an indication of the potentially contaminative activities that have been carried out throughout the historical use of the site and the surrounding land. Likely associated contaminants are also identified. It should be noted that the activities identified may not necessarily have resulted in contamination of the ground.

On-Site

3.1.2 The Phase 1 Site Investigation has indicated that the site has remained undeveloped since the earliest available map, dated 1850. There is a distinctive pattern of field boundaries on the site that have not altered during this period, indicating that it has not been disturbed, e.g., by opencast coal mining, spoil tipping, etc.

3.1.3 A small area of made ground materials was noted to be present in the southeast of the site, which included gravel of burnt shale.

Off-Site

3.1.4 A Coal Mining Risk Assessment, carried out for the site by Ecus in March 2016, identified that shallow coal workings may be present beneath the site, and that mine gases are known to be associated with coal seams in the local area; therefore, there is a risk to the site from mine gas emissions, should shallow workings be present.

3.2 Potential Pathways and Receptors

3.2.1 Table 4 details and discusses the potential pathways and receptors identified during the Phase 1 investigation for any contaminants that may be present in the ground at the site following the proposed redevelopment.

3.2.2 Some source-pathway-receptor linkages mentioned in the table are not considered likely to be active at the site for the reasons specified in the Comments column.

Table 4: Potential Pathways and Receptors

Potential Pathway	Potential Receptor	Comments
Exposure via dermal contact with soil.	Future residents.	The site is to be redeveloped with residential housing. No evidence for past contaminative land uses, or on-site contamination has been identified, therefore these linkages are not considered to be active at the site. A small area of burnt shale has been identified, which would not be considered suitable to remain at surface in garden areas, or directly beneath ground-bearing floor slabs, due to its potentially expansive nature.
Exposure via direct ingestion of soil and contaminated dusts indoors and outdoors.	Future residents.	
Exposure via inhalation of contaminated dusts outdoors and tracked indoors.	Future residents.	
Exposure via consumption of fruit and vegetables grown on the site, and attached soils.	Future residents.	
Exposure via inhalation of soil vapours and ground gases indoors and outdoors. Explosion of methane.	Future residents.	The site may be underlain by shallow coal mine workings, which could be a source of hazardous mine gases.
Direct contact with site soils.	Foundations of proposed buildings.	Soils derived from Coal Measures strata can be acidic and contain sulphates that adversely affect concrete foundations. In addition, the previous industrial uses of the site may have resulted in soil contamination by acids and sulphates.
Migration through soil / groundwater.	Controlled waters; groundwater.	Underlying strata are a Secondary A aquifer and the site are not in a SPZ. No nearby watercourses which could be fed by groundwater beneath the site. Therefore groundwater resources at the site area considered to be of moderate sensitivity. No evidence for significant contamination on the site.
	Controlled waters; surface water.	No watercourses are located in proximity to the site.
	Off-site residents.	Significant amounts of contamination which could migrate off site are considered unlikely to be present on the site.

3.3 Conceptual Model

3.3.1 The conceptual model for the site identifies all of the potential pollutant linkages based on the information collated in this desk study and an understanding of the way that the potential contaminants at the site are likely to behave in the soil, rock and groundwater environment.

3.3.2 For the purpose of the conceptual model, groups of contaminants that (in most circumstances) behave in a similar way in the environment have been chosen and linked to potential pathways and receptors, as summarised in Tables 5 and 6. It should be noted that not all the potential contaminants have been included in the conceptual model, only those that are considered potentially significant at this stage.

3.3.3 The key for Tables 5 and 6 is as follows:

KEY: LOW – potential risks associated with the presence of the contaminant linkage are low and further assessment or remediation is not considered necessary.

MOD – potential risks associated with the presence of the contaminant linkage are moderate and further assessment or remediation should be considered.

HIGH – potential risks associated with the presence of the contaminant linkage are high and further assessment or remediation is considered necessary.

N/A – The contaminant has no potential to affect the receptor via this exposure pathway.

Table 5: Summary Preliminary Conceptual Model and Risk Assessment – Organic Contaminants

Receptors and Pathways	PAH	Petroleum Hydrocarbons	Ground Gases	Notes
<p>Human Health On-site</p> <p>Exposure via dermal contact with soil</p> <p>Exposure via direct ingestion of contaminated soil and dusts indoors and outdoors.</p> <p>Exposure via inhalation of contaminated dusts outdoors and tracked indoors.</p> <p>Exposure via consumption of fruit and vegetables grown on the site, and attached soils.</p> <p>Inhalation of soil vapours and ground gases, indoors and outdoors. Methane explosion.</p>	<p>LOW</p> <p>LOW</p> <p>LOW</p> <p>LOW</p> <p>LOW</p>	<p>LOW</p> <p>LOW</p> <p>LOW</p> <p>LOW</p> <p>LOW</p>	<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>N/A</p> <p>MOD</p>	<p>No significant sources of shallow contamination have been identified on the site.</p> <p>The site may be underlain by shallow coal mine workings, which could be a source of hazardous mine gases.</p>
<p>Human Health Off-site</p> <p>Migration of contaminants and vapours off-site, followed by exposure via the pathways described above.</p>	<p>LOW</p>	<p>LOW</p>	<p>LOW</p>	<p>Significant contamination is considered unlikely to be present on the site.</p> <p>The underlying coal seam which could be a source of mine gases will also be present off site, including beneath the nearby housing; therefore the site itself is not considered to be a specific source of mine gases.</p>
<p>Site Buildings</p> <p>Concrete Foundations</p>	<p>LOW</p>	<p>LOW</p>	<p>N/A</p>	<p>Significant quantities of organic compounds not anticipated.</p>
<p>Controlled Waters</p> <p>Migration to groundwater</p> <p>Migration to surface water</p>	<p>LOW</p> <p>LOW</p>	<p>LOW</p> <p>LOW</p>	<p>N/A</p> <p>N/A</p>	<p>Underlying strata are a Secondary A aquifer and the site are not in a SPZ. No nearby watercourses which could be fed by groundwater. Therefore groundwater considered to be of moderate sensitivity.</p> <p>No evidence for significant contamination on the site.</p> <p>No watercourses are located in proximity to the site.</p>

Table 6: Summary Preliminary Conceptual Model and Risk Assessment - Inorganic Contaminants

Receptors and Pathways	Heavy Metals	Asbestos	Acids	Sulphates	Notes
<p>Human Health On-site</p> <p>Exposure via dermal contact with soil</p> <p>Exposure via direct ingestion of contaminated soil and dusts indoors and outdoors.</p> <p>Exposure via inhalation of contaminated dusts outdoors and tracked indoors.</p> <p>Exposure via consumption of fruit and vegetables grown on the site, and attached soils.</p> <p>Inhalation of soil vapours and gases, indoors and outdoors.</p>	<p>LOW</p> <p>LOW</p> <p>LOW</p> <p>LOW</p> <p>LOW</p>	<p>N/A</p> <p>N/A</p> <p>LOW</p> <p>N/A</p> <p>N/A</p>	<p>LOW</p> <p>LOW</p> <p>LOW</p> <p>LOW</p> <p>LOW</p>	<p>LOW</p> <p>LOW</p> <p>LOW</p> <p>LOW</p> <p>N/A</p>	<p>No significant sources of shallow contamination have been identified on the site.</p> <p>Most inorganic contaminants have little potential to generate vapours or gases.</p>
<p>Human Health Off-site</p> <p>Migration of contaminants and vapours off-site, followed by exposure via the pathways described above.</p>	<p>LOW</p>	<p>LOW</p>	<p>LOW</p>	<p>LOW</p>	<p>Significant amounts of contamination are considered unlikely to be present on the site.</p>
<p>Site Buildings</p> <p>Concrete Foundations</p>	<p>N/A</p>	<p>N/A</p>	<p>MOD</p>	<p>MOD</p>	<p>Sulphates and acids in soil can damage sub-surface concrete.</p>
<p>Controlled Waters</p> <p>Migration to groundwater</p> <p>Migration to surface water</p>	<p>LOW</p> <p>LOW</p>	<p>N/A</p> <p>N/A</p>	<p>LOW</p> <p>LOW</p>	<p>LOW</p> <p>LOW</p>	<p>Underlying strata are a Secondary A aquifer and the site are not in a SPZ. No nearby watercourses which could be fed by groundwater beneath the site. Therefore groundwater considered to be of moderate sensitivity.</p> <p>No evidence for significant contamination on the site.</p> <p>No watercourses are located in proximity to the site.</p>

3.4 Risk Assessment Summary

Human Health

3.4.1 No significant historical or current sources of shallow soil contamination have been identified at the site and therefore the risk to human health from exposure to soil contamination at the site is considered to be low.

3.4.2 A small amount of made ground was noted near to the site entrance. However, potentially contaminative materials were not observed within this material.

Hazardous Ground Gases

3.4.3 The site may be underlain by unrecorded shallow coal mine workings, which could be a source of hazardous mine gases.

Controlled Waters

3.4.4 Groundwater resources in the vicinity of the site are considered to be of moderate sensitivity. However, contaminants that are mobile or leachable in significant quantities are considered unlikely to be present on the site. Therefore, the risk from pollution of groundwater resources associated with the site is considered to be low.

3.4.5 No surface watercourses are present in proximity to the site.

Site Buildings

3.4.6 The entire site is underlain by natural Coal Measures soils. Reference to guidance produced by the BRE¹ indicates that such materials have potential to contain elevated concentrations of sulphide and sulphate minerals, with potential to react with and damage concrete foundations.

¹ BRE, 2005. Special Digest 1 – *Concrete in Aggressive Ground*, Third Edition.

4 Conclusions and Recommendations

4.1 Conclusions

- 4.1.1 The site has remained undeveloped throughout the history recorded on Ordnance Survey maps; therefore, there is little potential for soil contamination to be present on the site and the risk to human health from exposure to soil contamination following development is considered to be low.
- 4.1.2 One small area of burnt shale made ground was identified near to the site entrance.
- 4.1.3 There is the potential for shallow coal mine workings to be present beneath the site, which could be a source of hazardous mine gases; these gases could enter new buildings and pose a risk to future site residents.
- 4.1.4 The risk from pollution of controlled waters is considered to be low.
- 4.1.5 Foundations of future buildings may be at risk from attack by high concentrations of sulphides and sulphates within natural weathered Coal Measures strata.
- 4.1.6 The potential for volume change within clay soils, due to seasonal effects and the effects of trees, should be considered when calculating required founding depths.

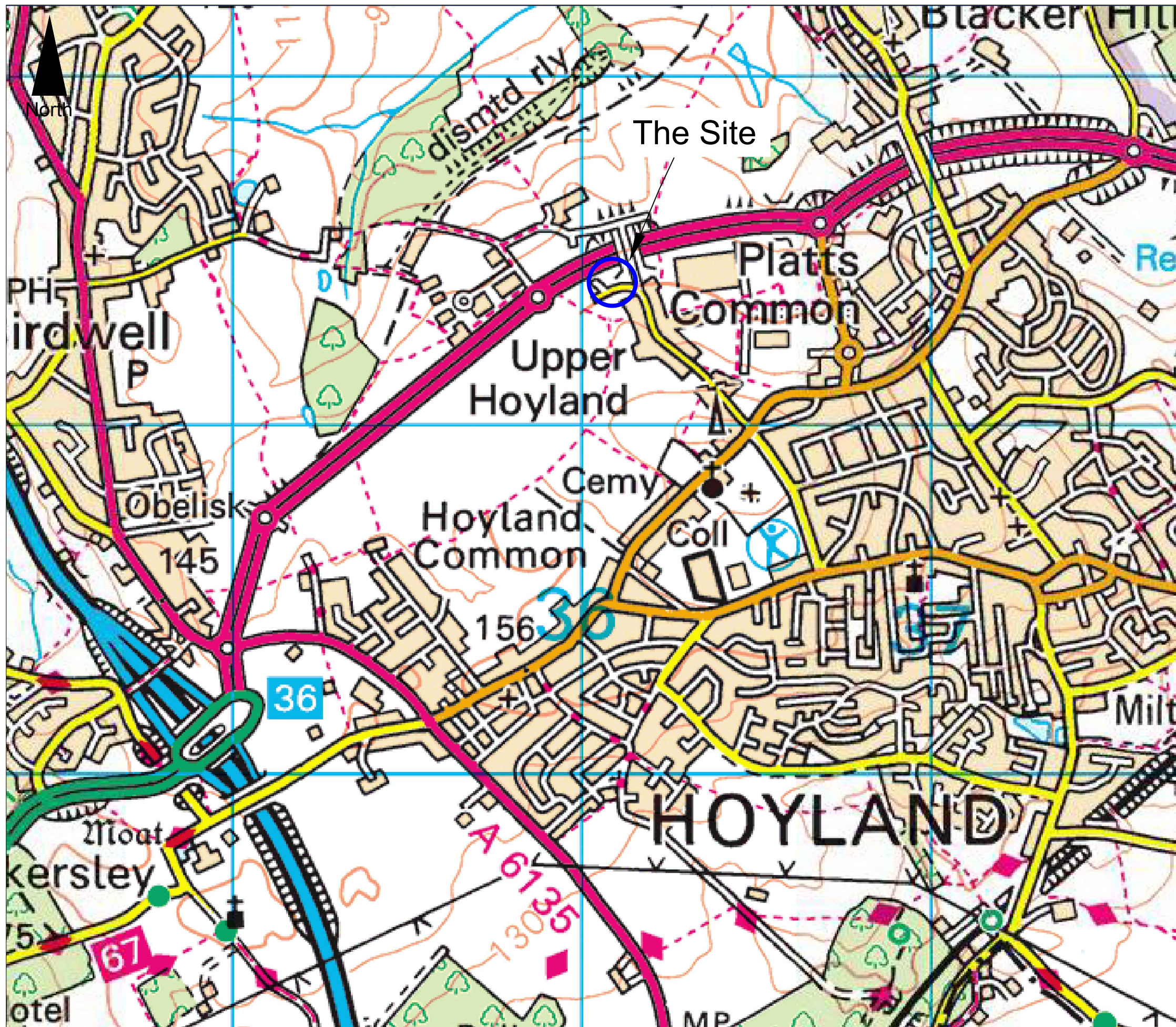
4.2 Recommendations

- 4.2.1 An intrusive site investigation will be required to determine whether shallow coal mine workings are present beneath the site. During this investigation, if coal mine workings are identified, ground gas monitoring should be undertaken to determine the risk from mine gas emissions and, if necessary, gas protection measures should be provided for the proposed housing.
- 4.2.2 Shallow clay soils should be sampled and analysed for pH, water-soluble sulphate, acid-soluble sulphate and total sulphur in accordance with guidance from BRE Special Digest 1, in order to specify protection measures for concrete against chemically aggressive ground.
- 4.2.3 Clay soil samples should also be analysed at a UKAS accredited testing laboratory for geotechnical parameters including Atterberg limits and moisture content, in order to inform an assessment of the risks posed by clay soil volume change, in line with NHBC Standards, Chapter 4.2.
- 4.2.4 The burnt shale made ground identified near to the site's entrance would be considered unsuitable to remain at surface in garden areas, and would therefore require capping with clean topsoil if identified within a garden.
- 4.2.5 Burnt shale can potentially be expansive, and is unsuitable for placement below ground-bearing floor slabs to buildings.

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Appendix A: Site Location and Layout Plans

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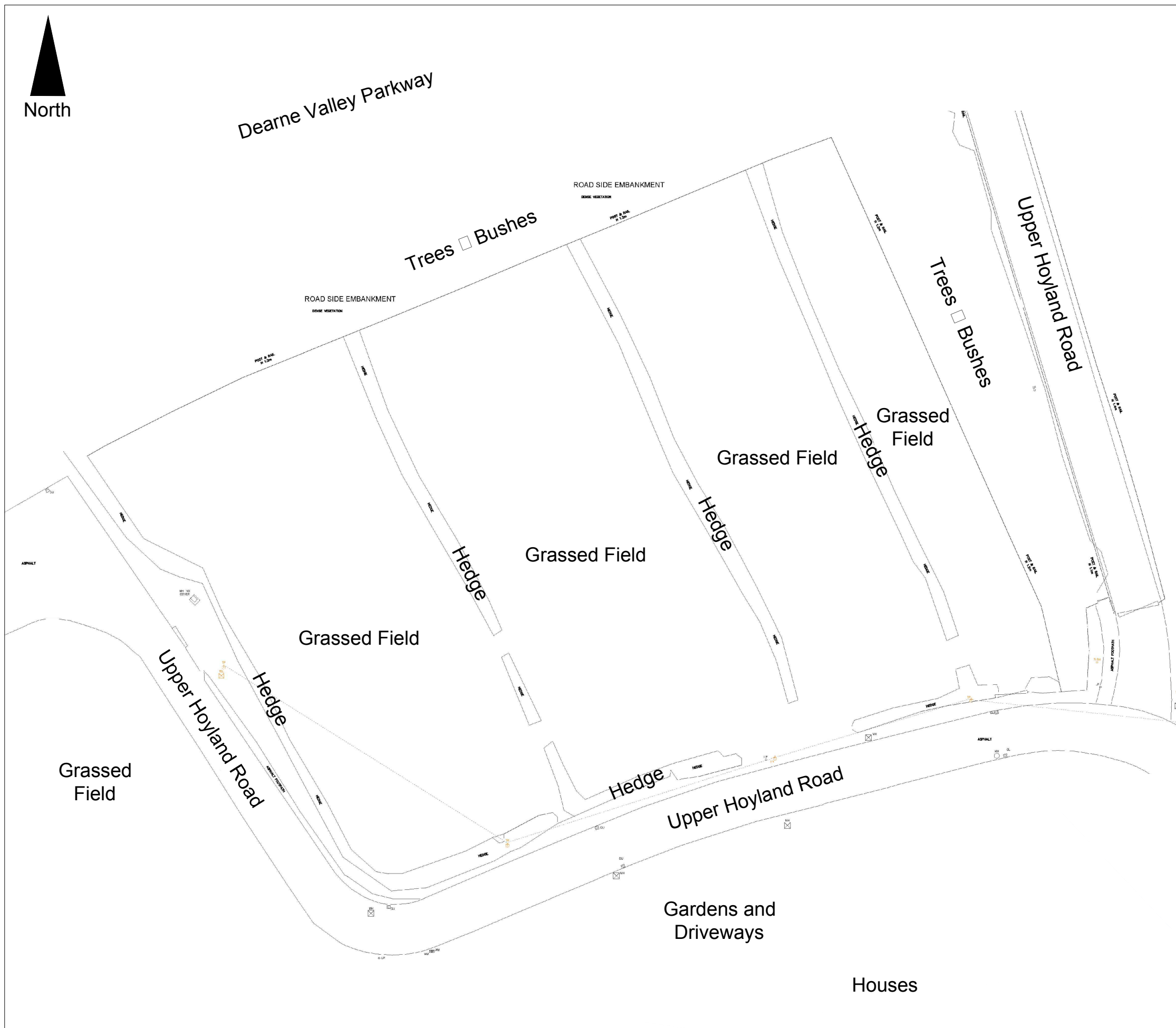
Phase 1 Site Investigation

Land off Upper Hoyland Road,
Barnsley

Job No. 7918

Site Location Plan

Brook Holt ■ Blackburn Road ■ Sheffield ■ S61 2DW
tel: 0114 266 9292 ■ www.ecusltd.co.uk



Phase 1 Site Investigation

Land off Upper Hoyland Road,
Barnsley

Job No. 7918

Site Features Plan

Brook Holt ■ Blackburn Road ■ Sheffield ■ S61 2DW
tel: 0114 266 9292 ■ www.ecusltd.co.uk



Phase 1 Site Investigation Report

Land off Upper Hoyland Road,
Barnsley

Job No. 7918

Proposed Site Layout Plan

Brook Holt ■ Blackburn Road ■ Sheffield ■ S61 2DW
tel: 0114 266 9292 ■ www.ecusltd.co.uk

Appendix B: Site Photographs

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Job: Phase 1 Site Investigation
Site: Land off Upper Hoyland Road, Barnsley
Ref: 7918

View south along site's western boundary.



Job: Phase 1 Site Investigation
Site: Land off Upper Hoyland Road, Barnsley
Ref: 7918

View east across the site, from the site's western boundary.

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Sheffield. S61 2DW

Tel : (0114) 2669292
www.ecusltd.co.uk





Job: Phase 1 Site Investigation
Site: Land off Upper Hoyland Road, Barnsley
Ref: 7918

View northeast across the site from the site's western boundary.



Job: Phase 1 Site Investigation
Site: Land off Upper Hoyland Road, Barnsley
Ref: 7918

View north across the site, from the site's southern boundary.

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Sheffield. S61 2DW

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Job: Phase 1 Site Investigation
Site: Land off Upper Hoyland Road, Barnsley
Ref: 7918

View north across the east of the site; showing area of made ground near site entrance.



Job: Phase 1 Site Investigation
Site: Land off Upper Hoyland Road, Barnsley
Ref: 7918

View east along the site's northern boundary.

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Appendix C: Historical Maps

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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: County Series

Map date: 1893

Scale: 1:2,500

Printed at: 1:2,500



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

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

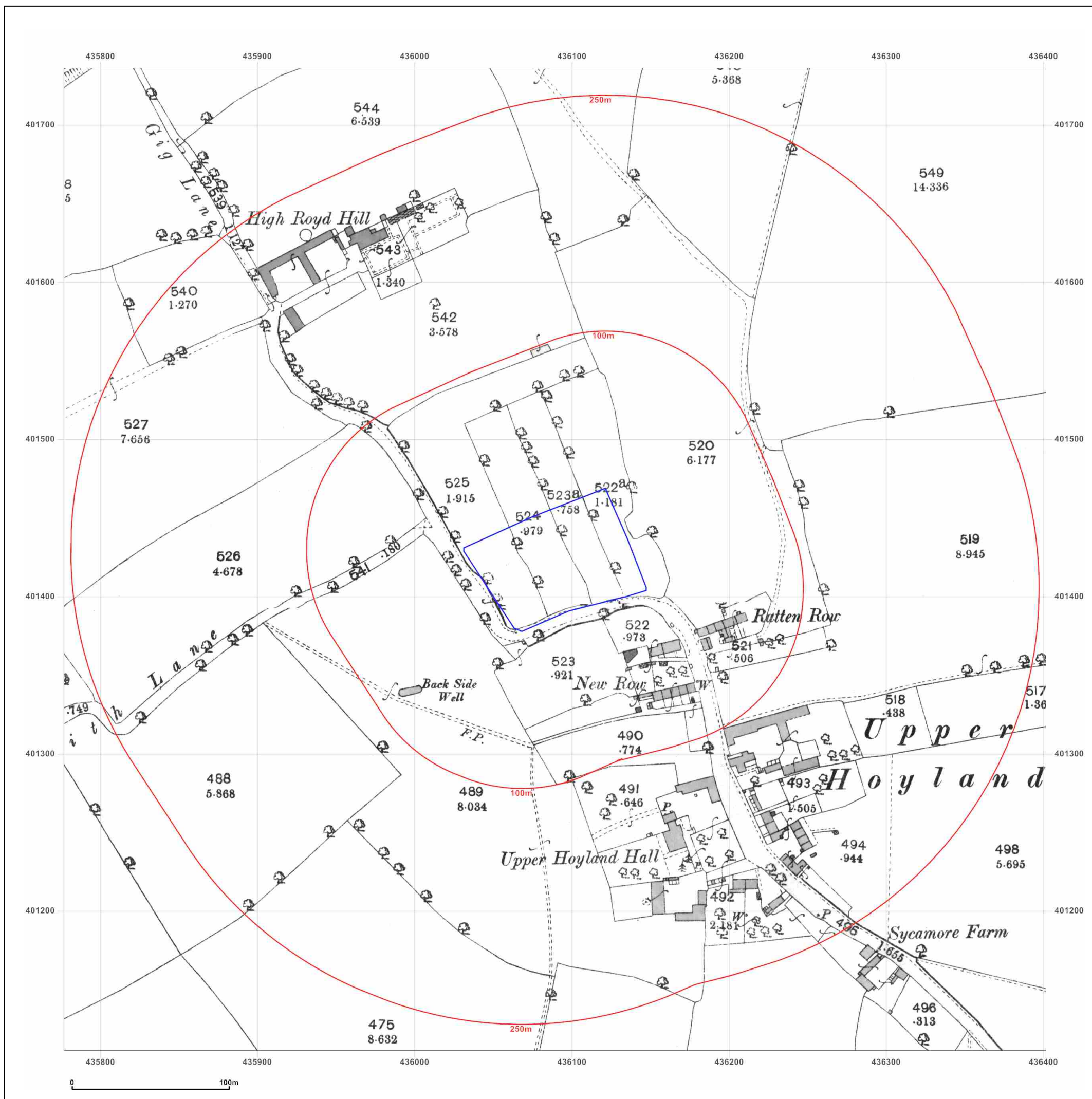


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Production date: 14 April 2016

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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: County Series

Map date: 1905-1906

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1905
Revised 1905
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1906
Revised 1906
Edition N/A
Copyright N/A
Levelled N/A

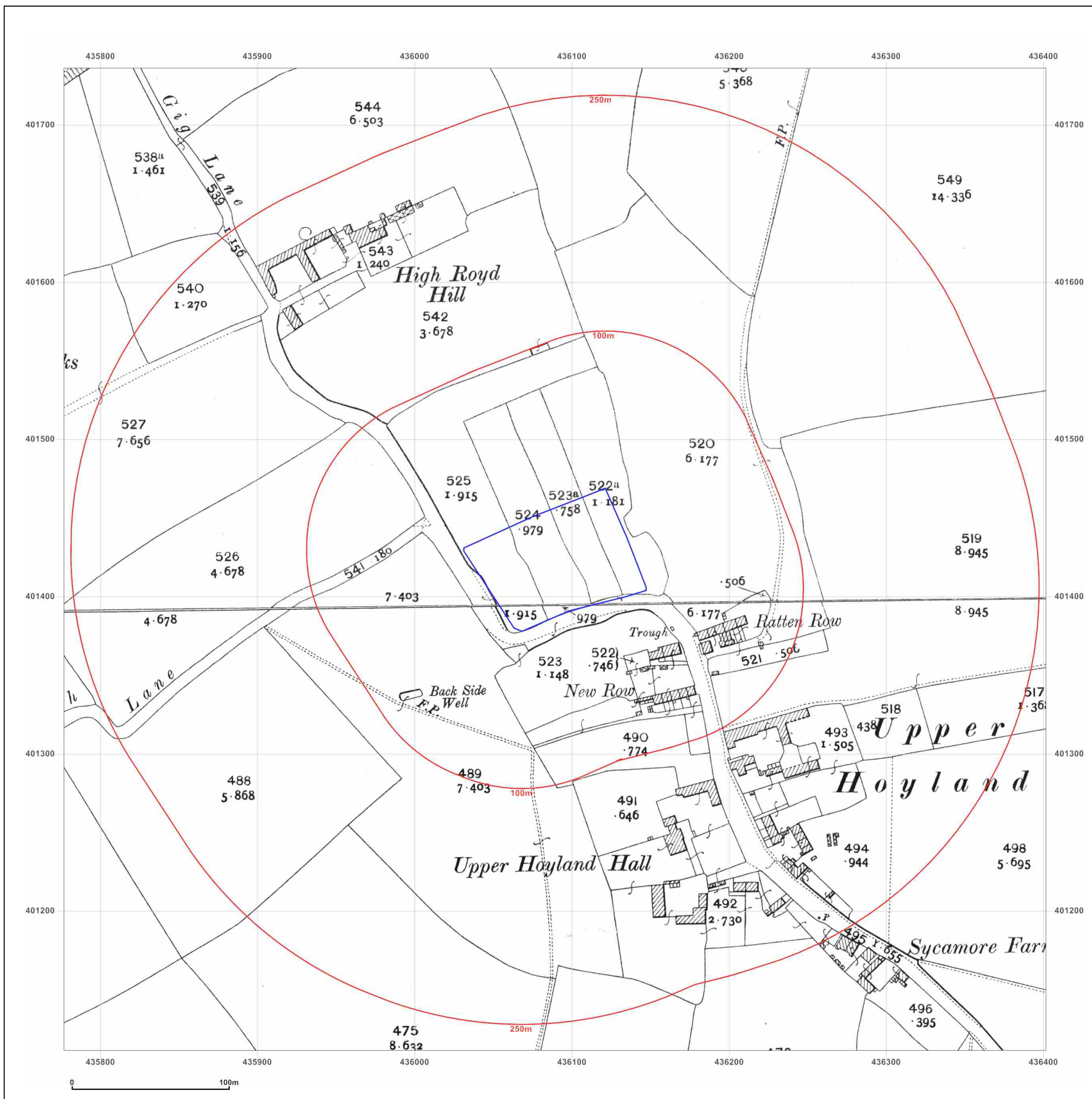


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Site Details:

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BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: County Series

Map date: 1931

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1931
Revised 1931
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1931
Revised 1931
Edition N/A
Copyright N/A
Levelled N/A

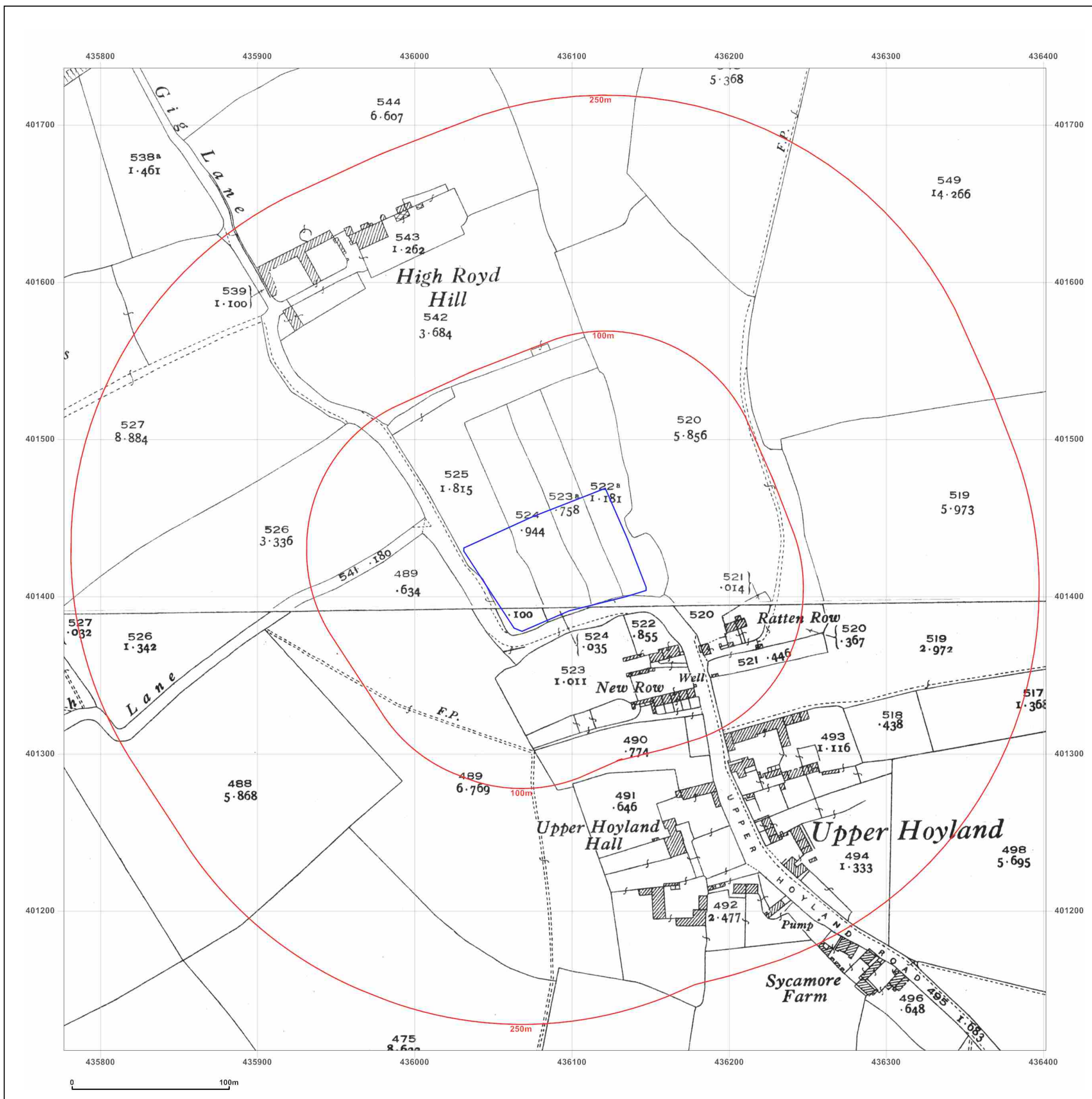


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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: National Grid

Map date: 1960

Scale: 1:2,500

Printed at: 1:2,500



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

Surveyed 1960
Revised 1960
Edition 1962
Copyright 1962
Levelled 1959

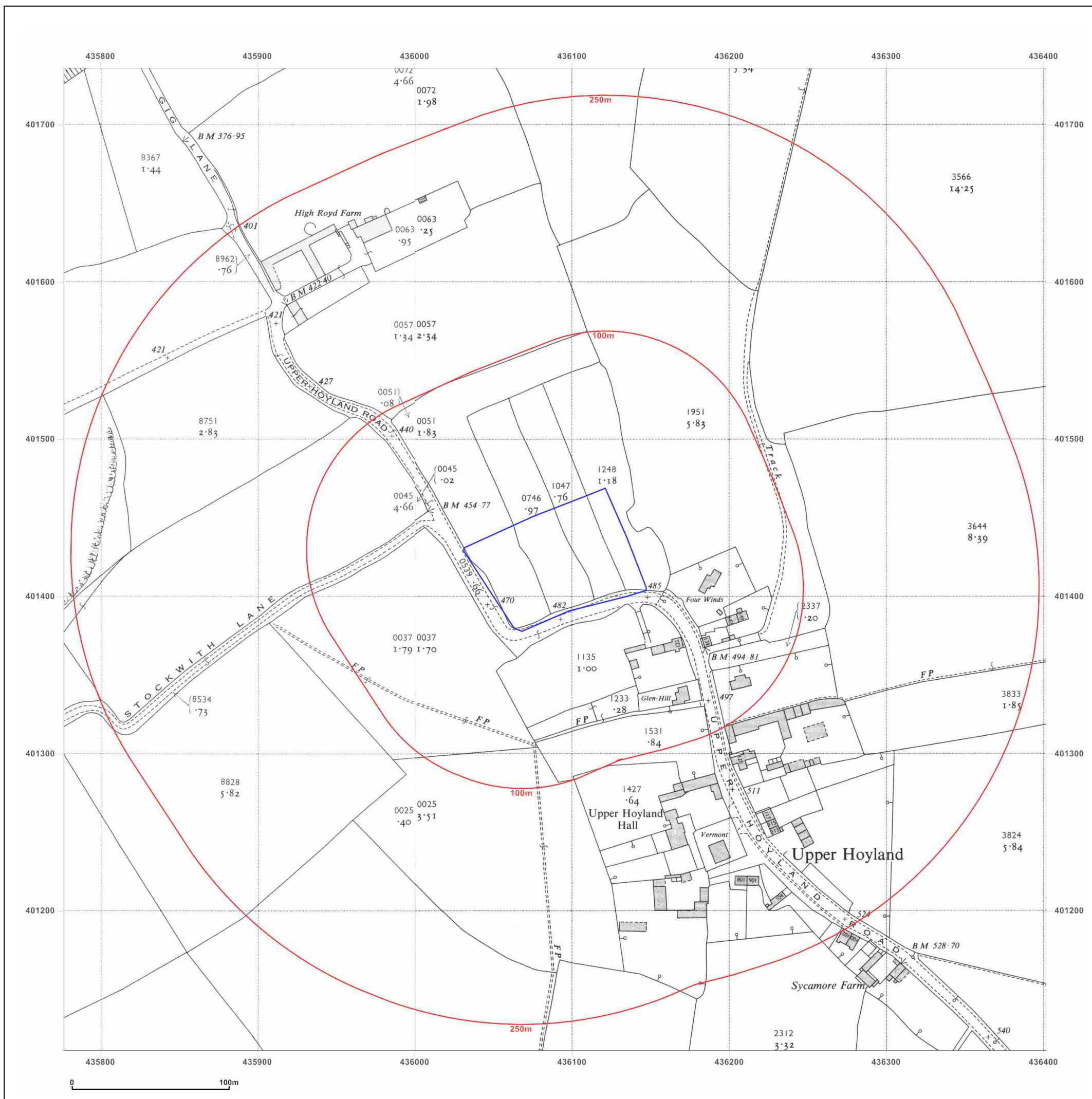


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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: National Grid

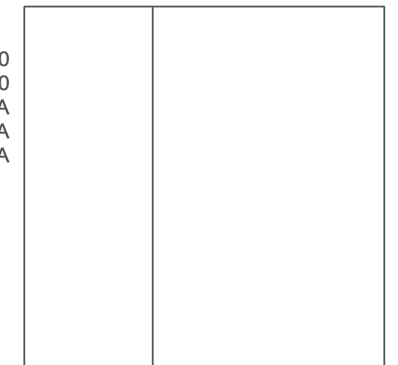
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Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1960
Revised 1970
Edition N/A
Copyright N/A
Levelled N/A

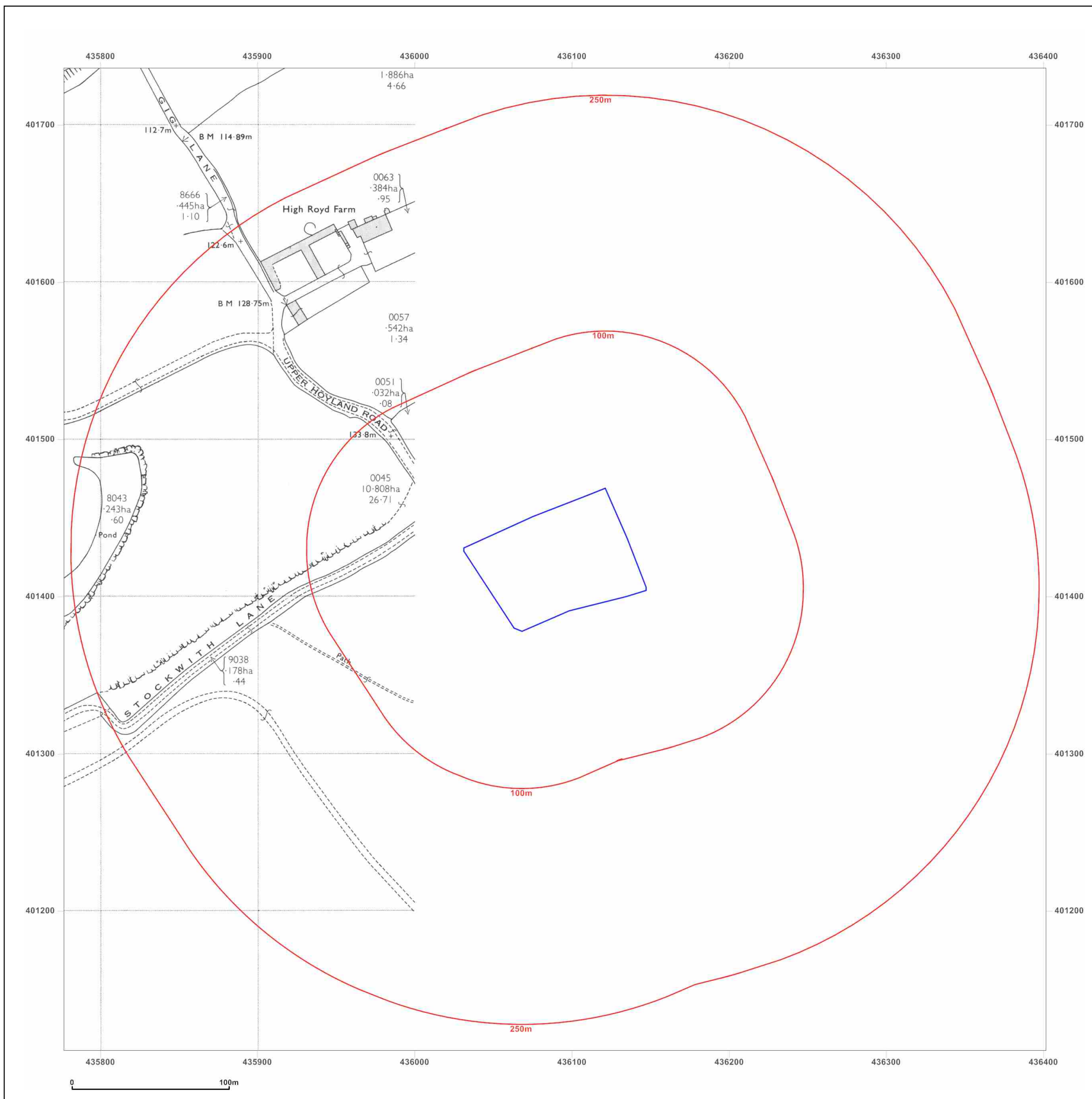


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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

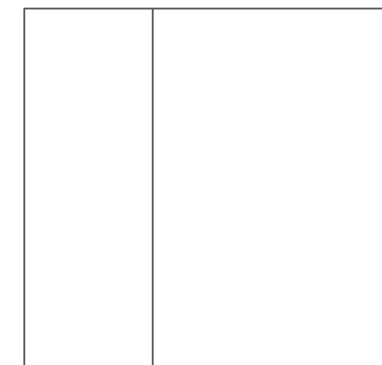
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Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: National Grid

Map date: 1979

Scale: 1:2,500

Printed at: 1:2,500



Surveyed N/A
Revised N/A
Edition N/A
Copyright 1979
Levelled 1963

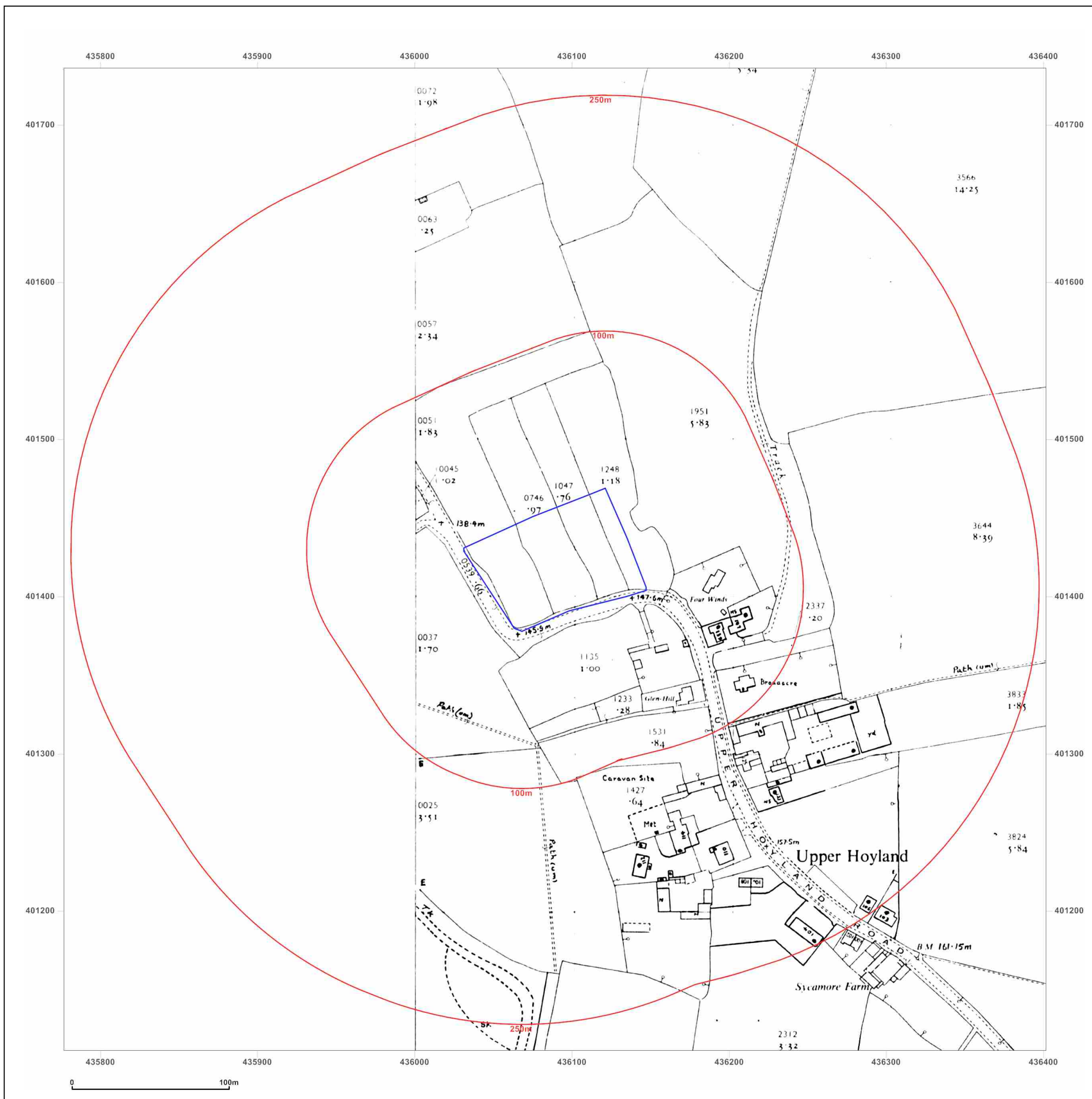


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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: National Grid

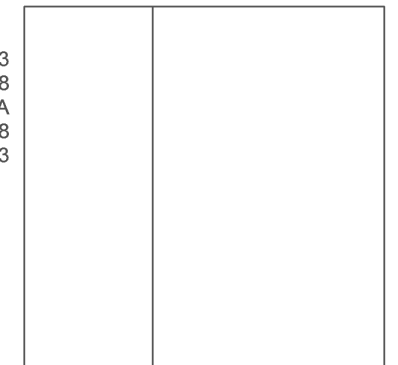
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Surveyed 1963
Revised 1988
Edition N/A
Copyright 1988
Levelled 1963

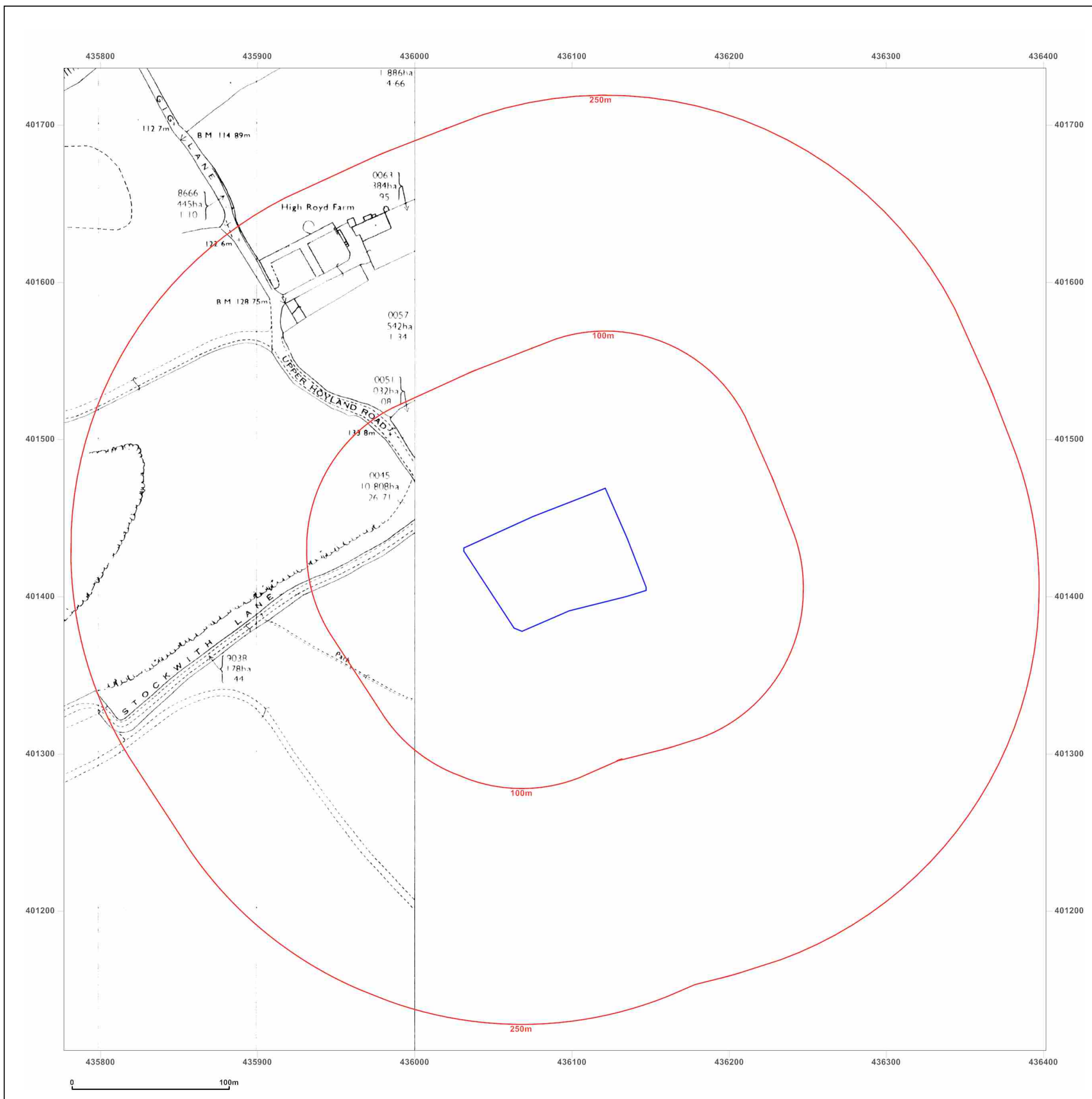


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Site Details:

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BARNSELY, S74 9NJ

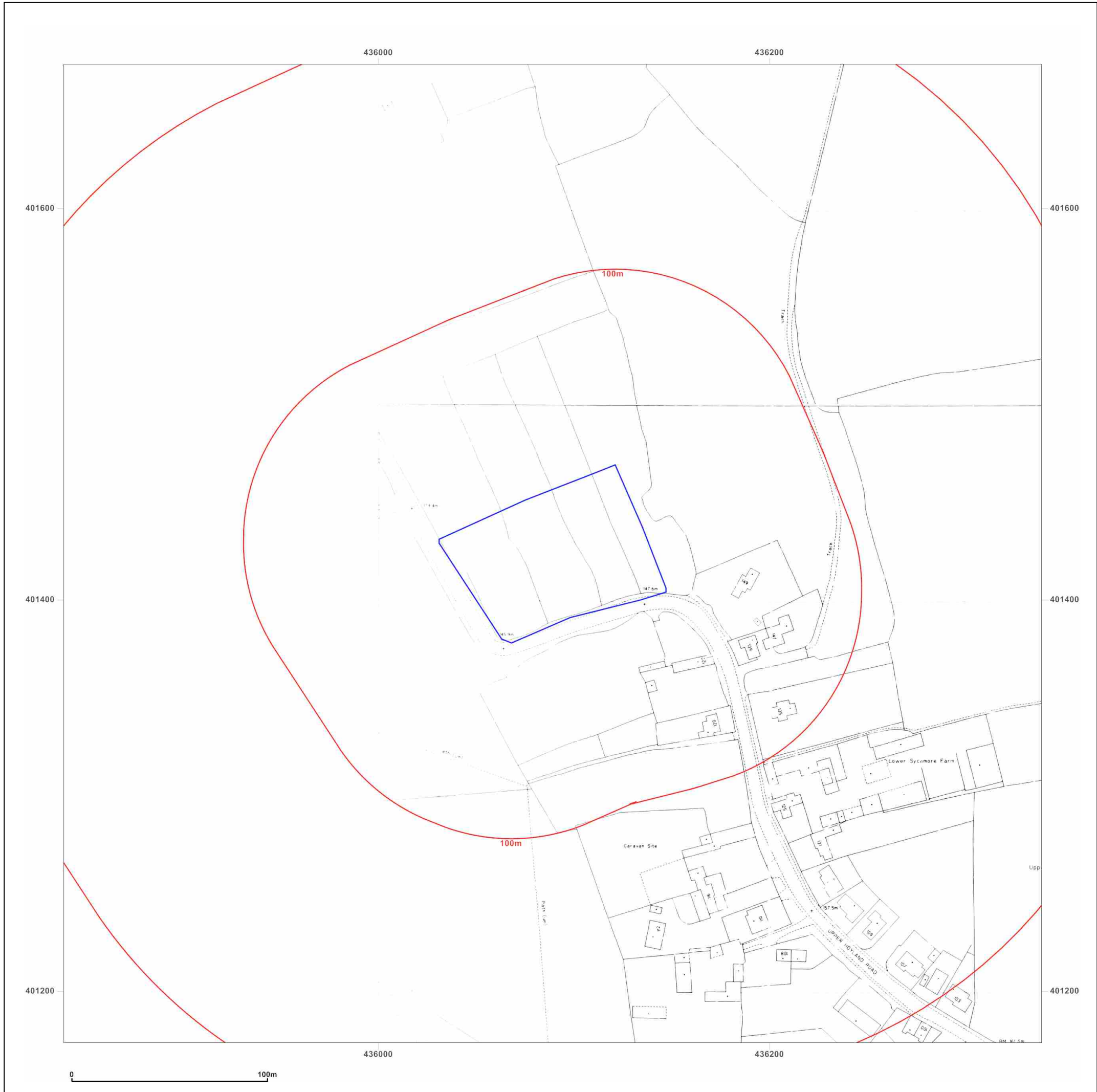
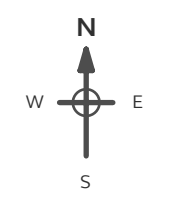
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Map Name: National Grid

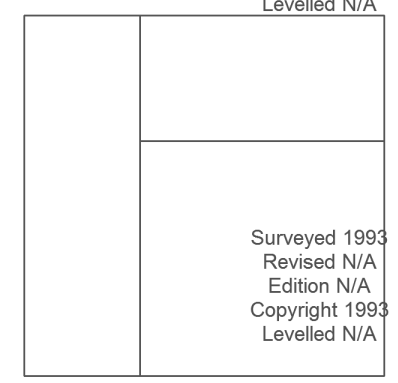
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Scale: 1:1,250

Printed at: 1:2,000



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



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



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Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: National Grid

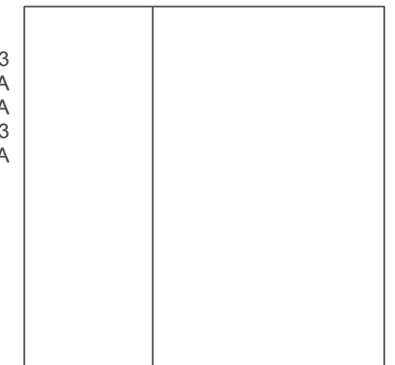
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Revised N/A
Edition N/A
Copyright 1993
Levelled N/A

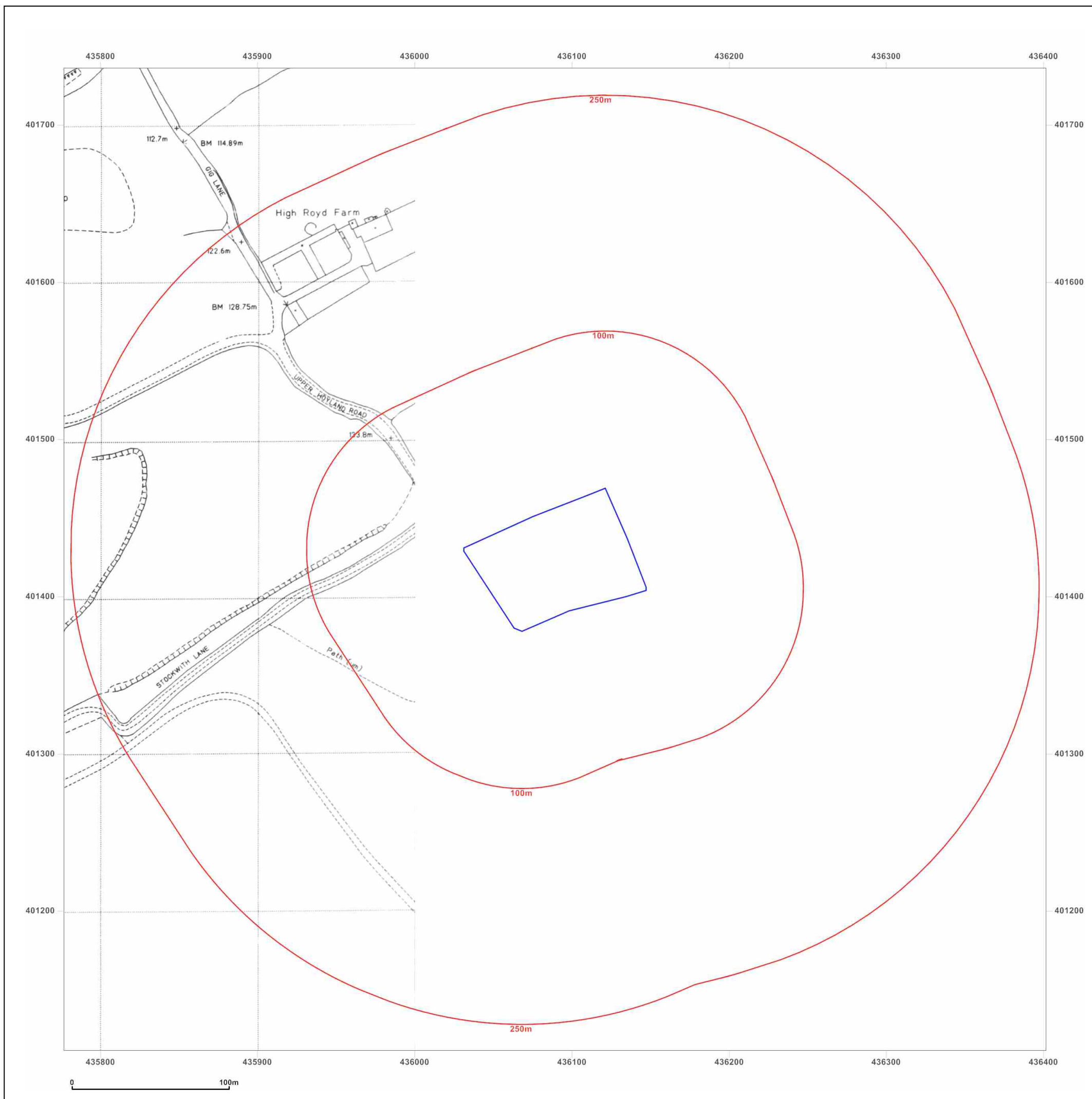


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Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: County Series

Map date: 1850-1855

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1851
Revised N/A
Edition 1855
Copyright N/A
Levelled N/A

Surveyed 1850
Revised N/A
Edition 1855
Copyright N/A
Levelled N/A

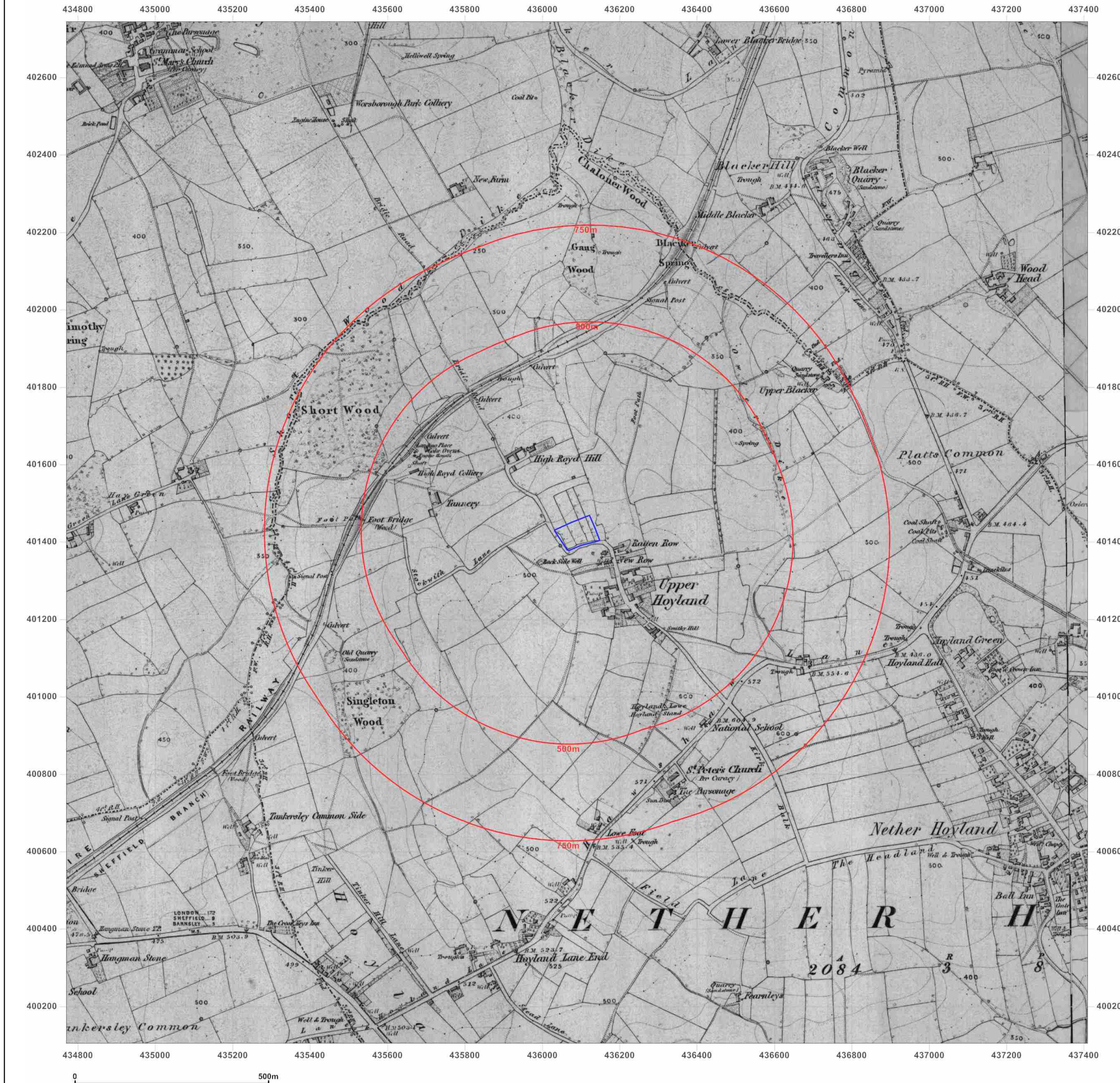


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Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: County Series

Map date: 1891

Scale: 1:10,560

Printed at: 1:10,560



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

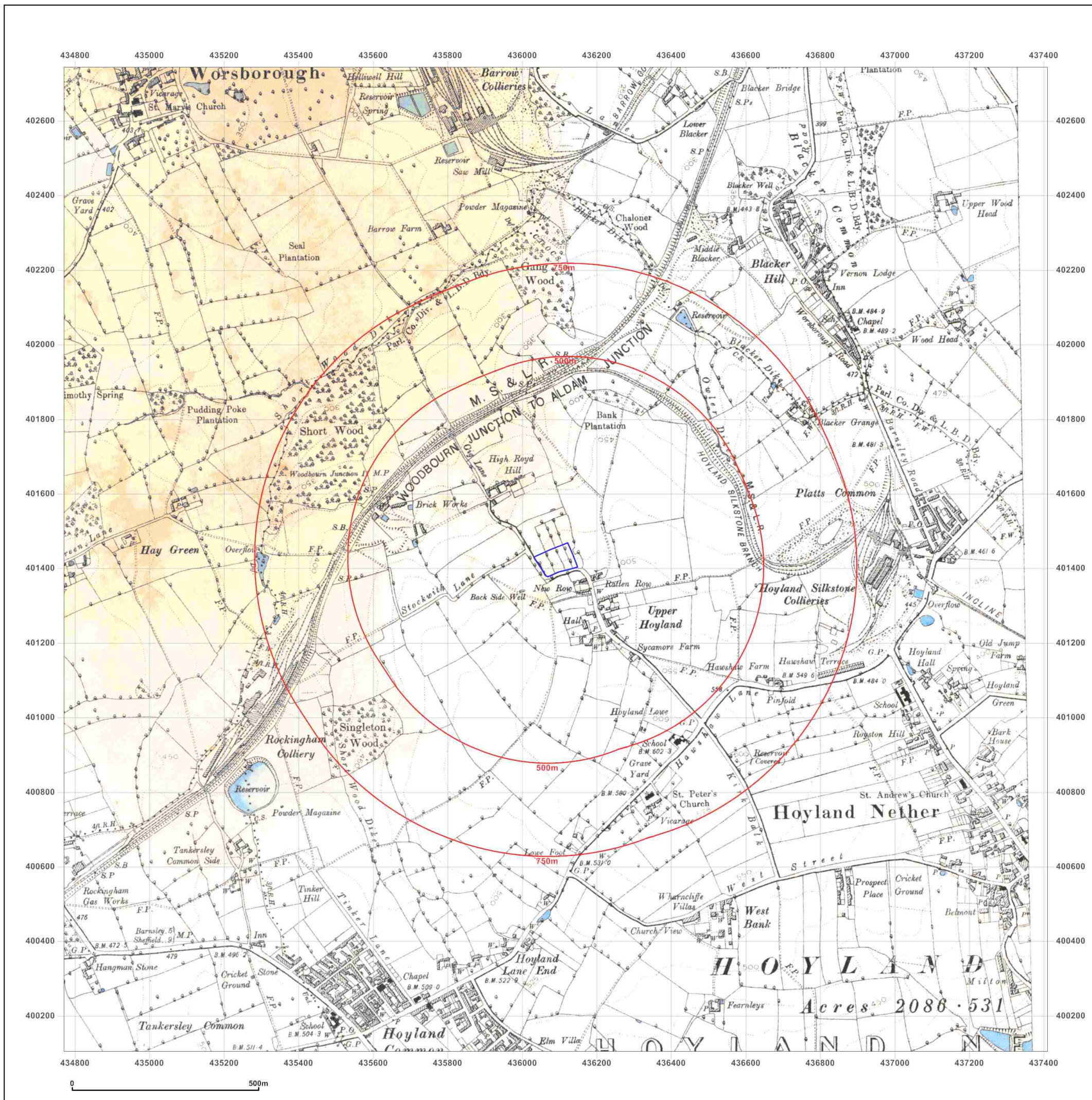


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Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: County Series

Map date: 1901-1903

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1891
Revised 1903
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1890
Revised 1901
Edition N/A
Copyright N/A
Levelled N/A

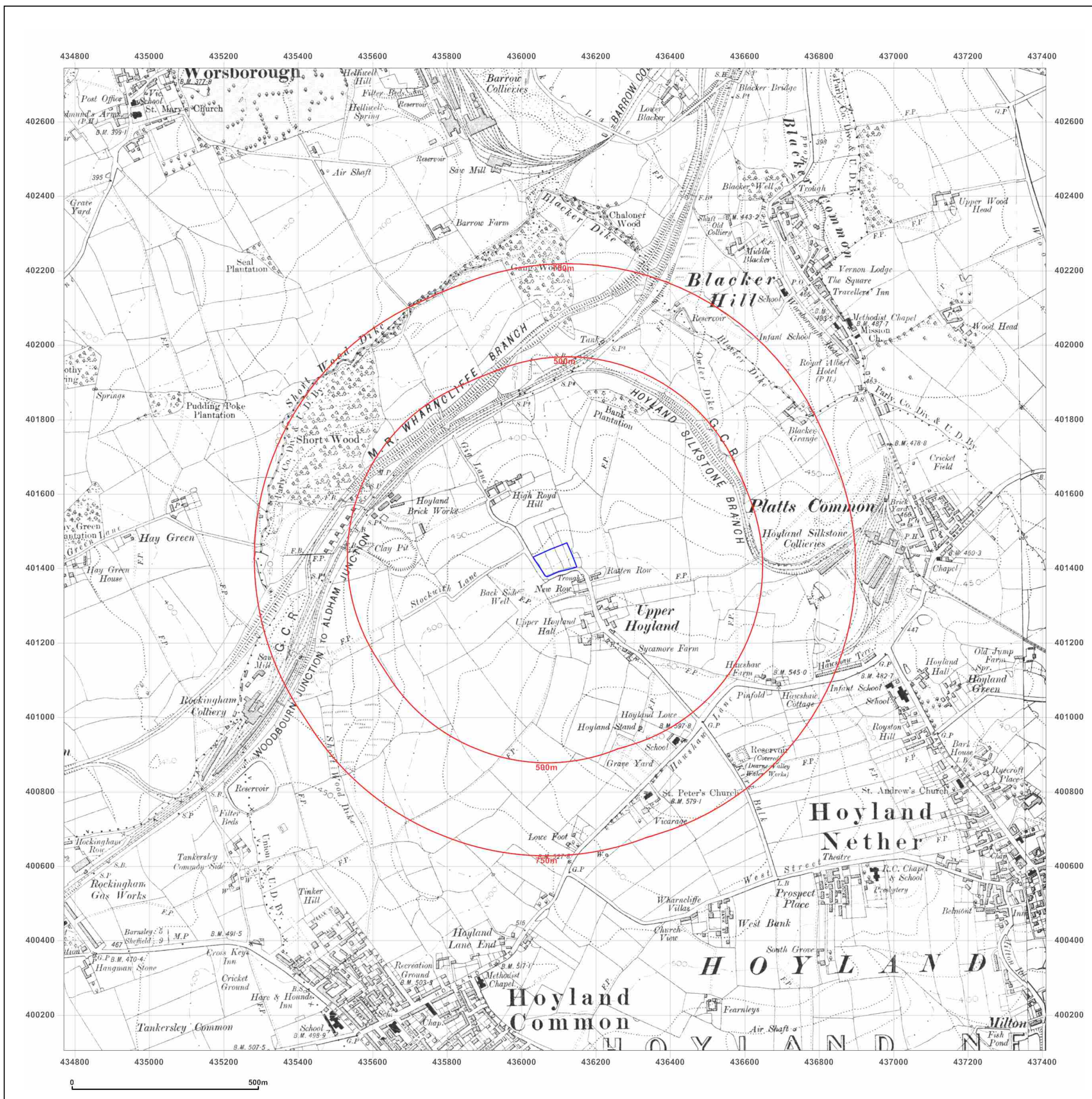


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UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: County Series

Map date: 1929

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1851
Revised 1929
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1850
Revised 1929
Edition N/A
Copyright N/A
Levelled N/A

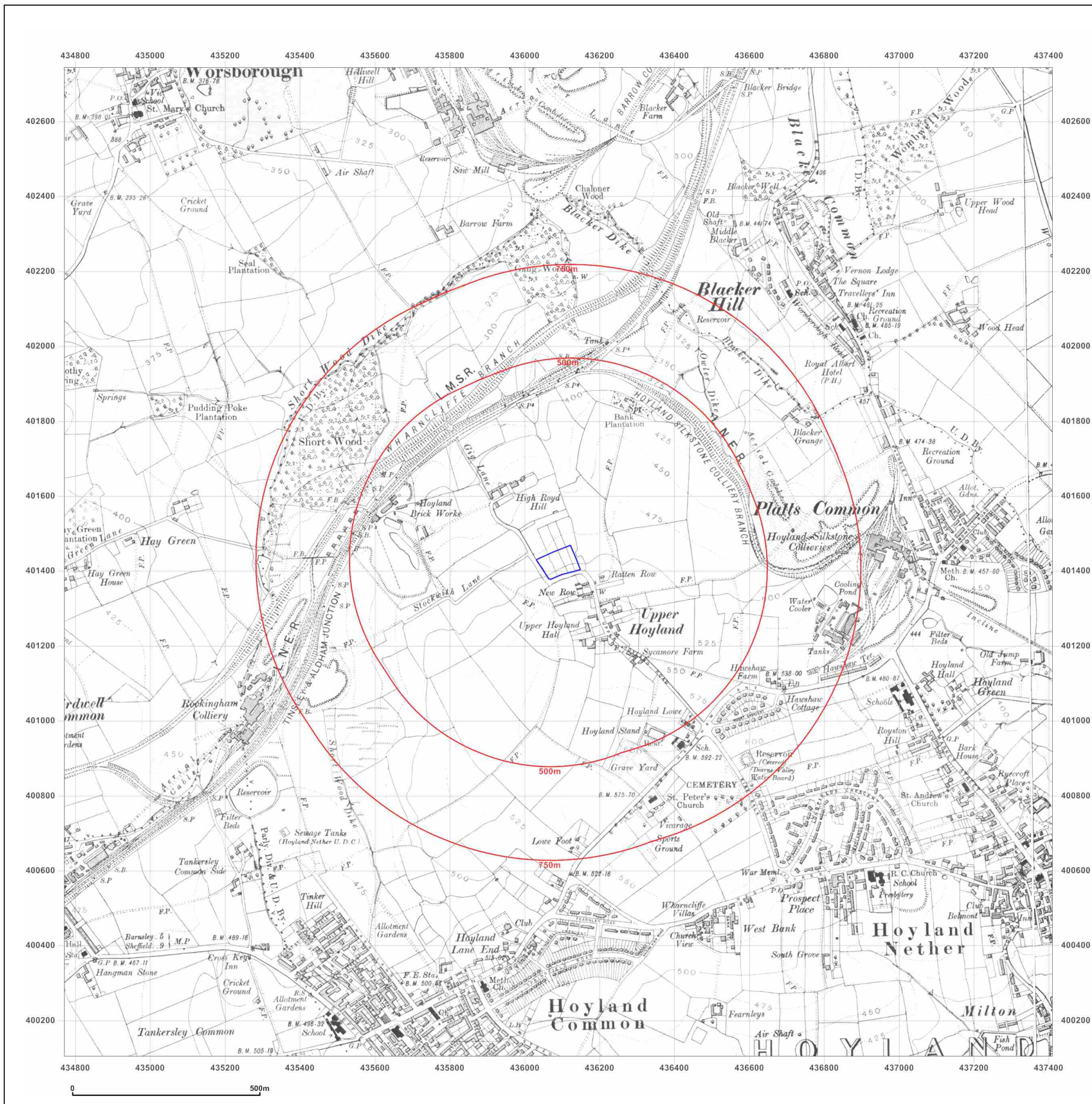


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UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1851
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1850
Revised 1938
Edition 1938
Copyright N/A
Levelled N/A

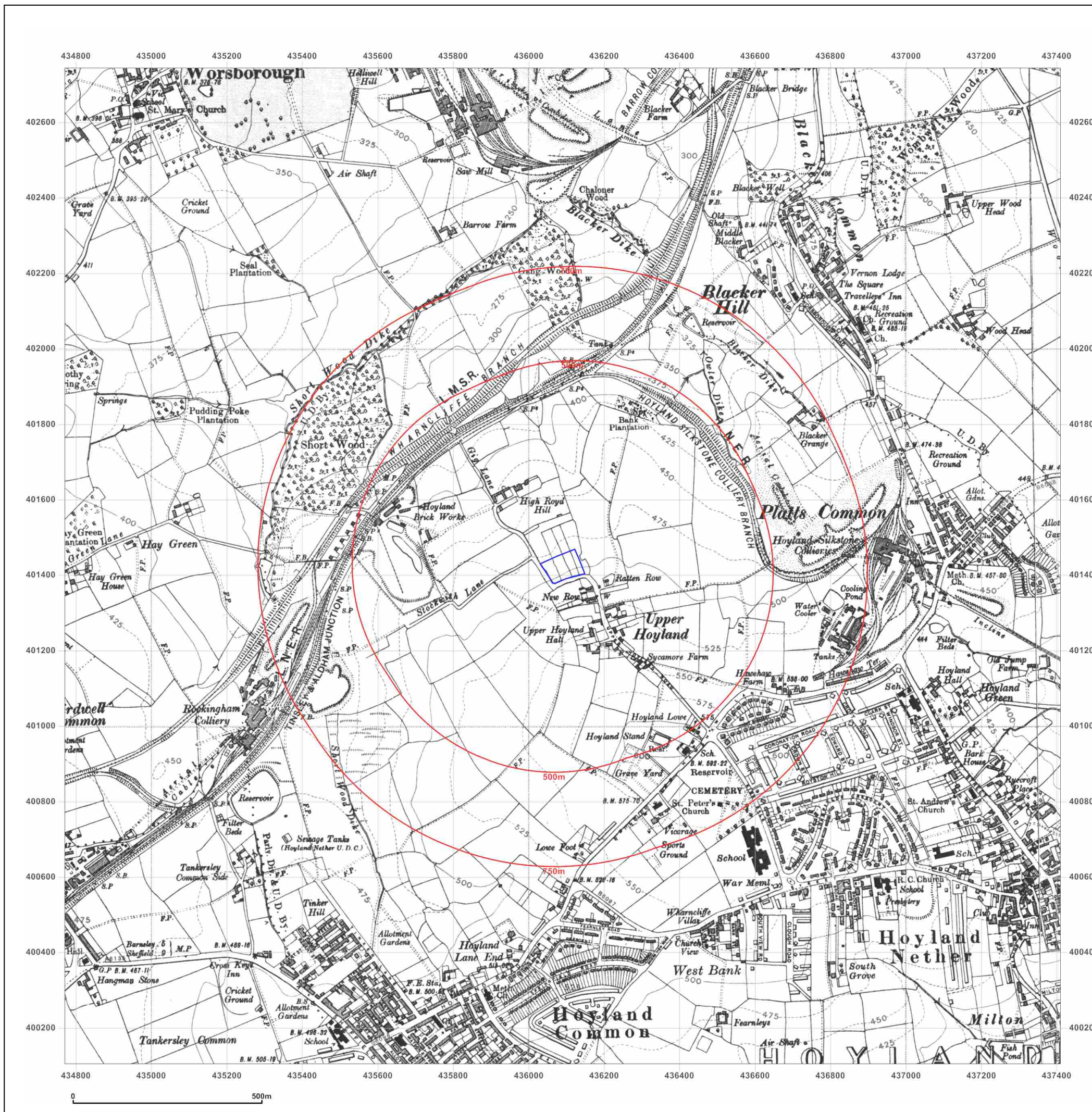


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Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: County Series

Map date: 1948

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1851
Revised 1948
Edition 1948
Copyright N/A
Levelled N/A

Surveyed 1850
Revised 1948
Edition N/A
Copyright N/A
Levelled N/A

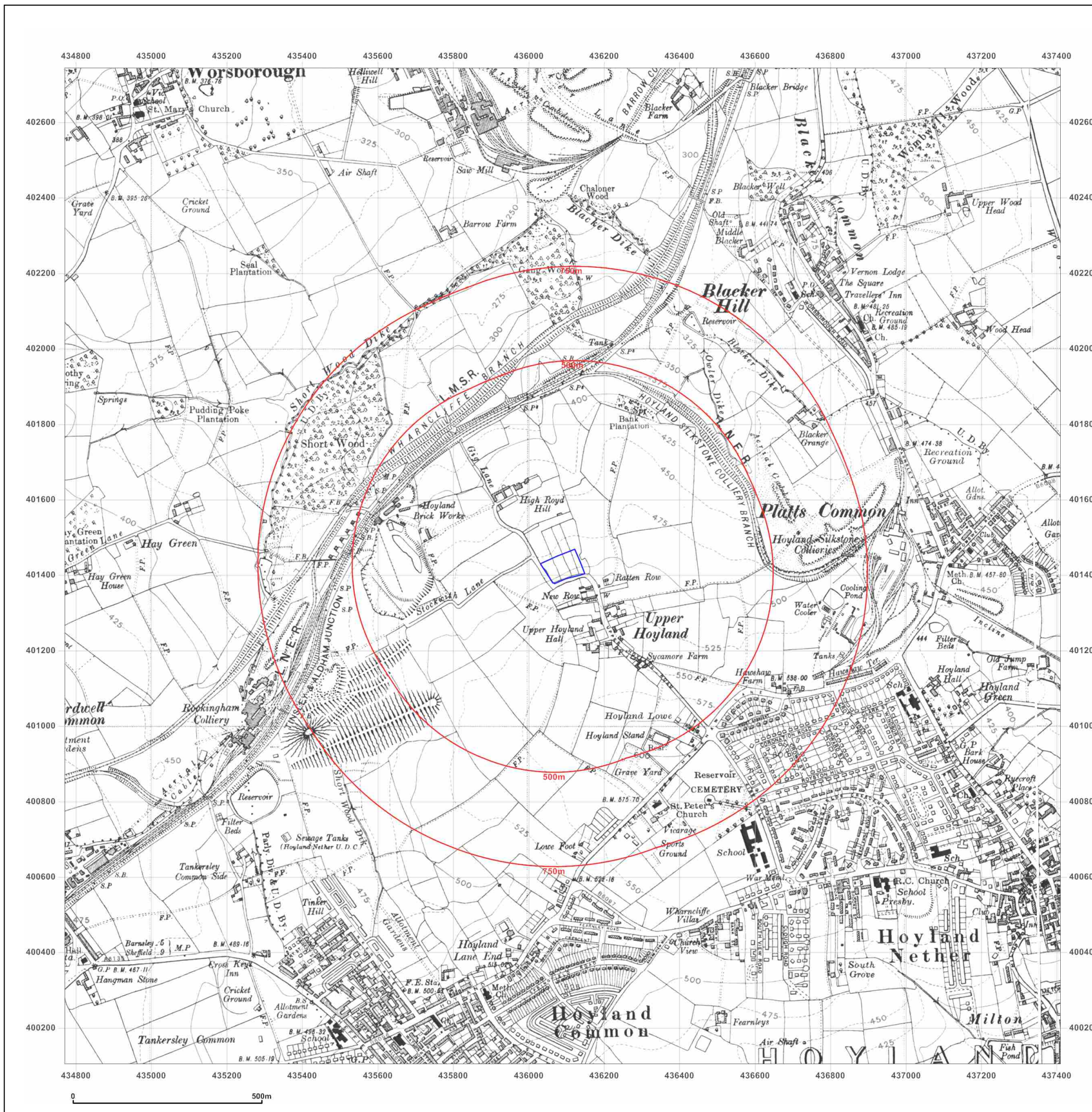


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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: Provisional

Map date: 1951

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1951
Revised 1951
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1951
Revised 1951
Edition N/A
Copyright N/A
Levelled N/A

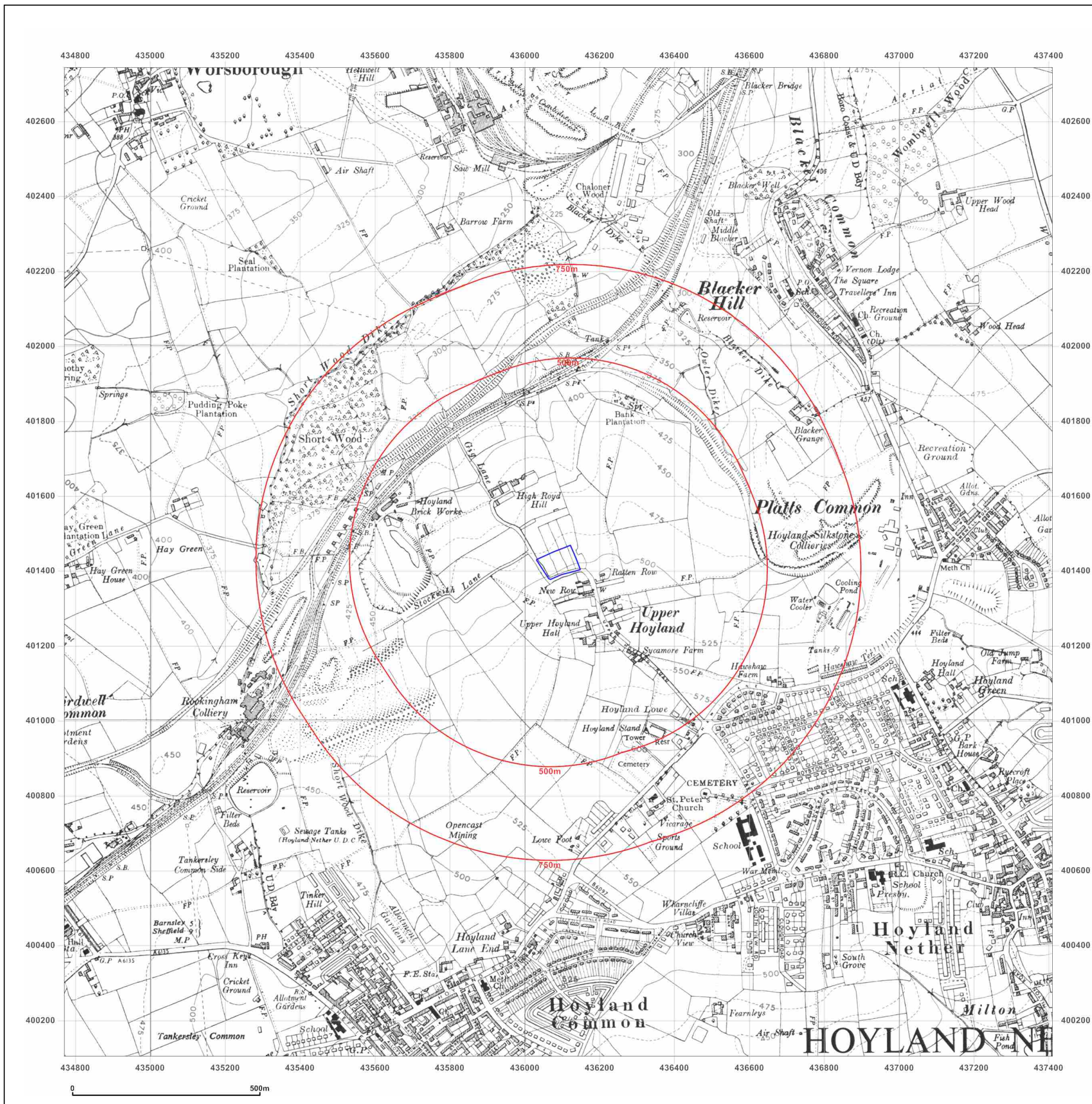


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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: Provisional

Map date: 1965-1966

Scale: 1:10,560

Printed at: 1:10,560



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

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

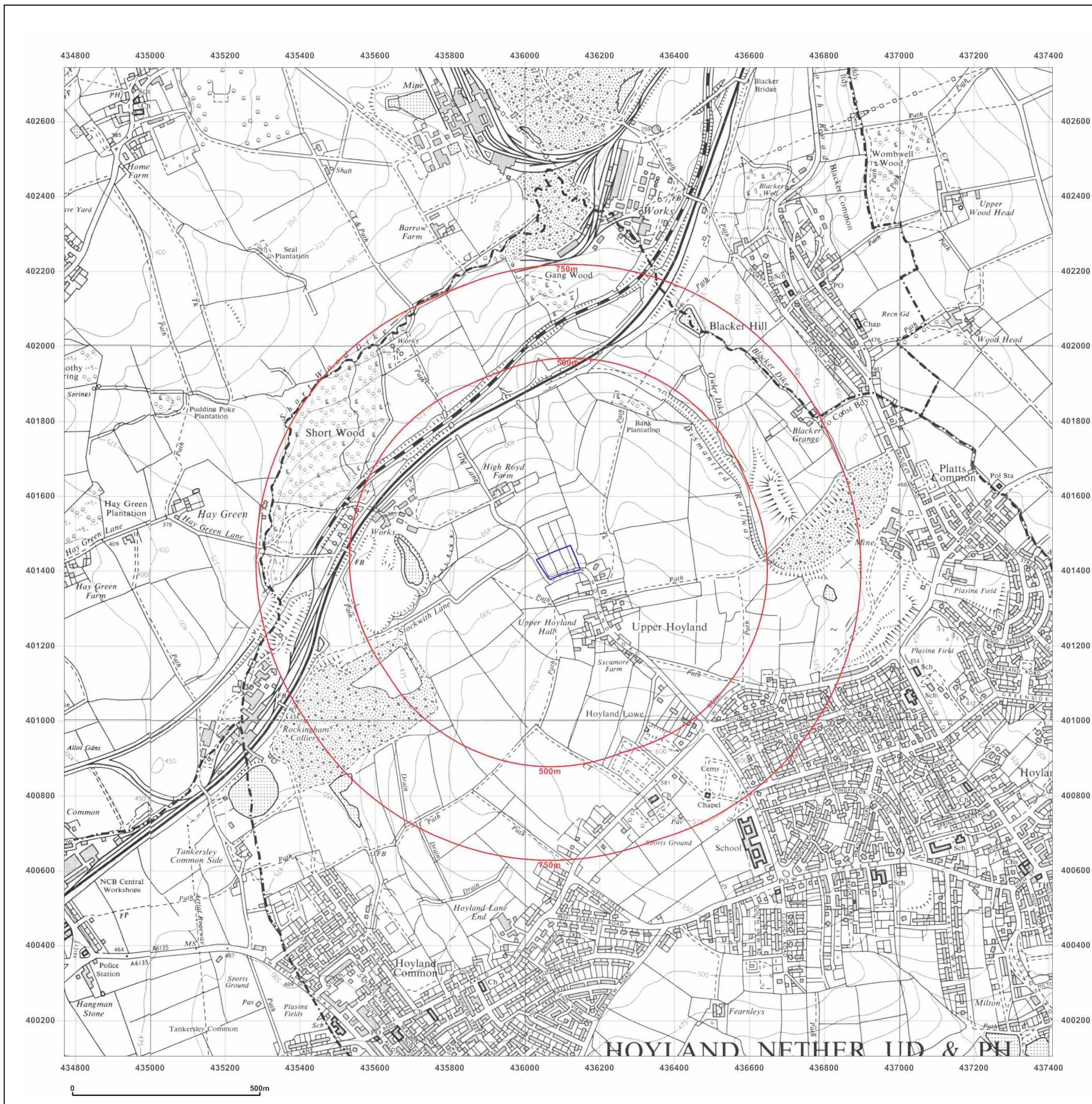


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HOYLAND NETHER LD & PH



Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: National Grid

Map date: 1977

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1973
Revised 1977
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1976
Revised 1977
Edition N/A
Copyright N/A
Levelled N/A

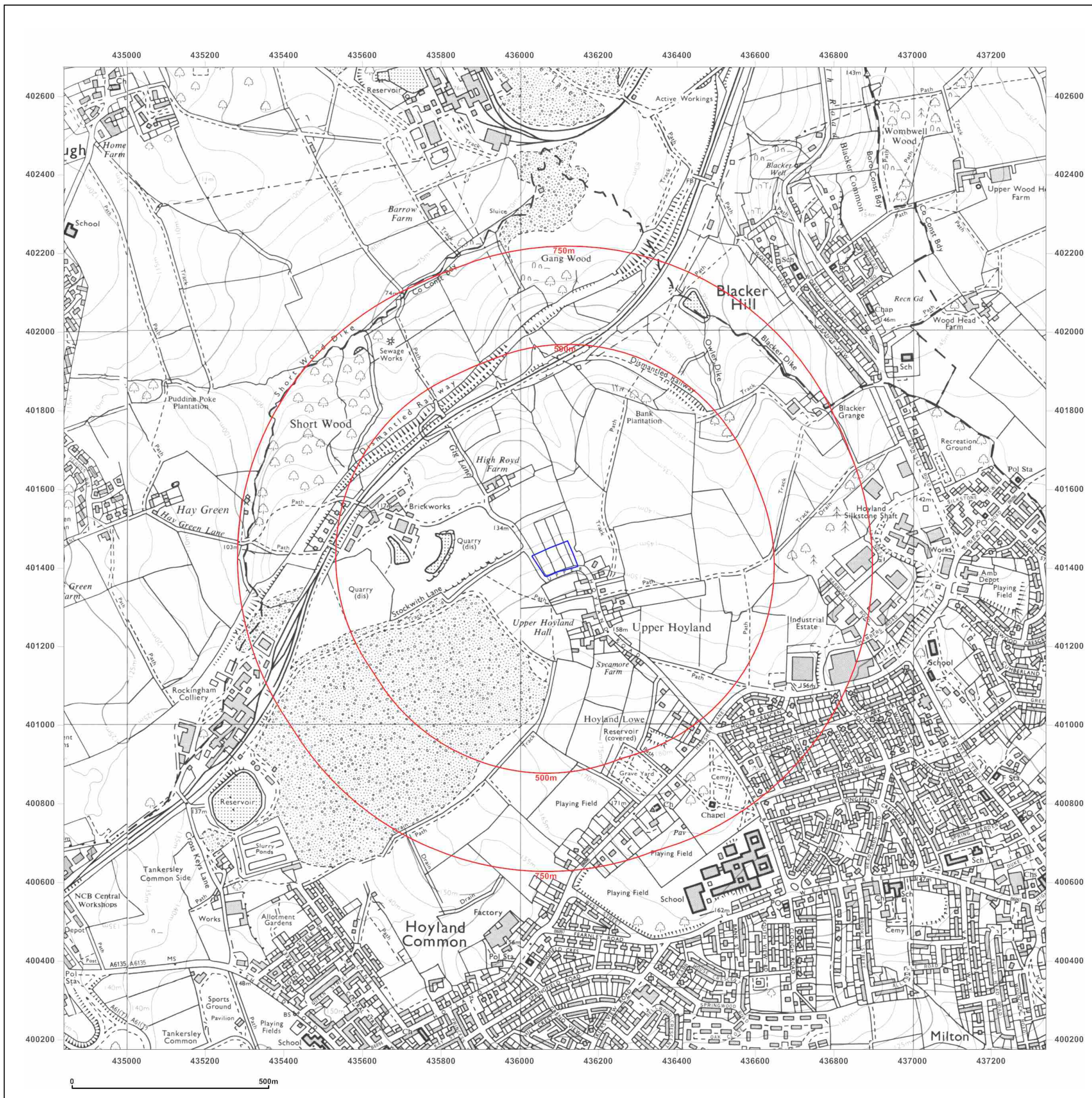


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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

Client Ref: 11856
Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: National Grid

Map date: 1987

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1986
Revised 1987
Edition N/A
Copyright N/A
Levelled N/A

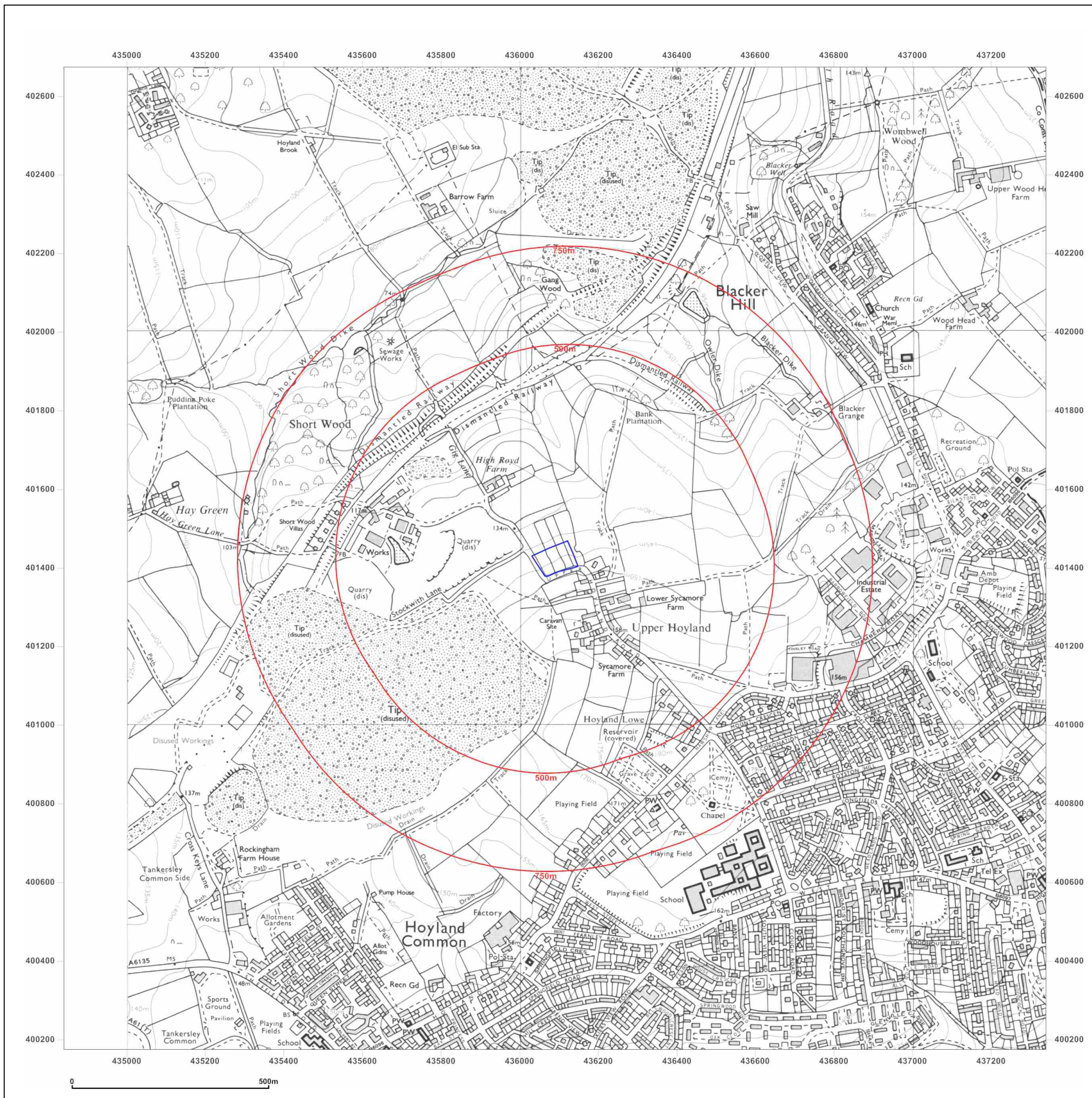


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Site Details:

UPPER HOYLAND ROAD,
BARNSELY, S74 9NJ

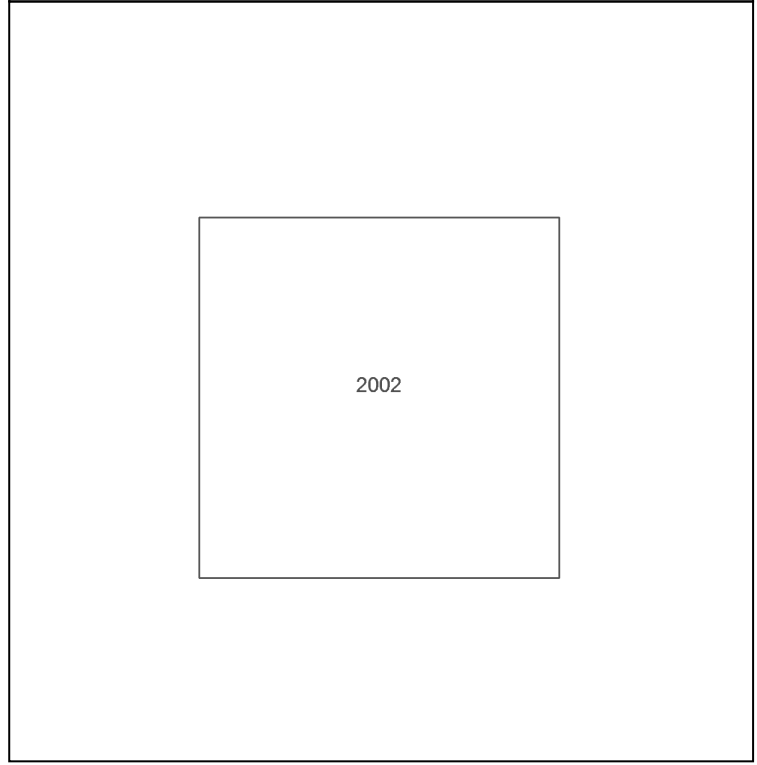
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Grid Ref: 436089, 401424

Map Name: 1:10,000 Raster

Map date: 2002

Scale: 1:10,000

Printed at: 1:10,000

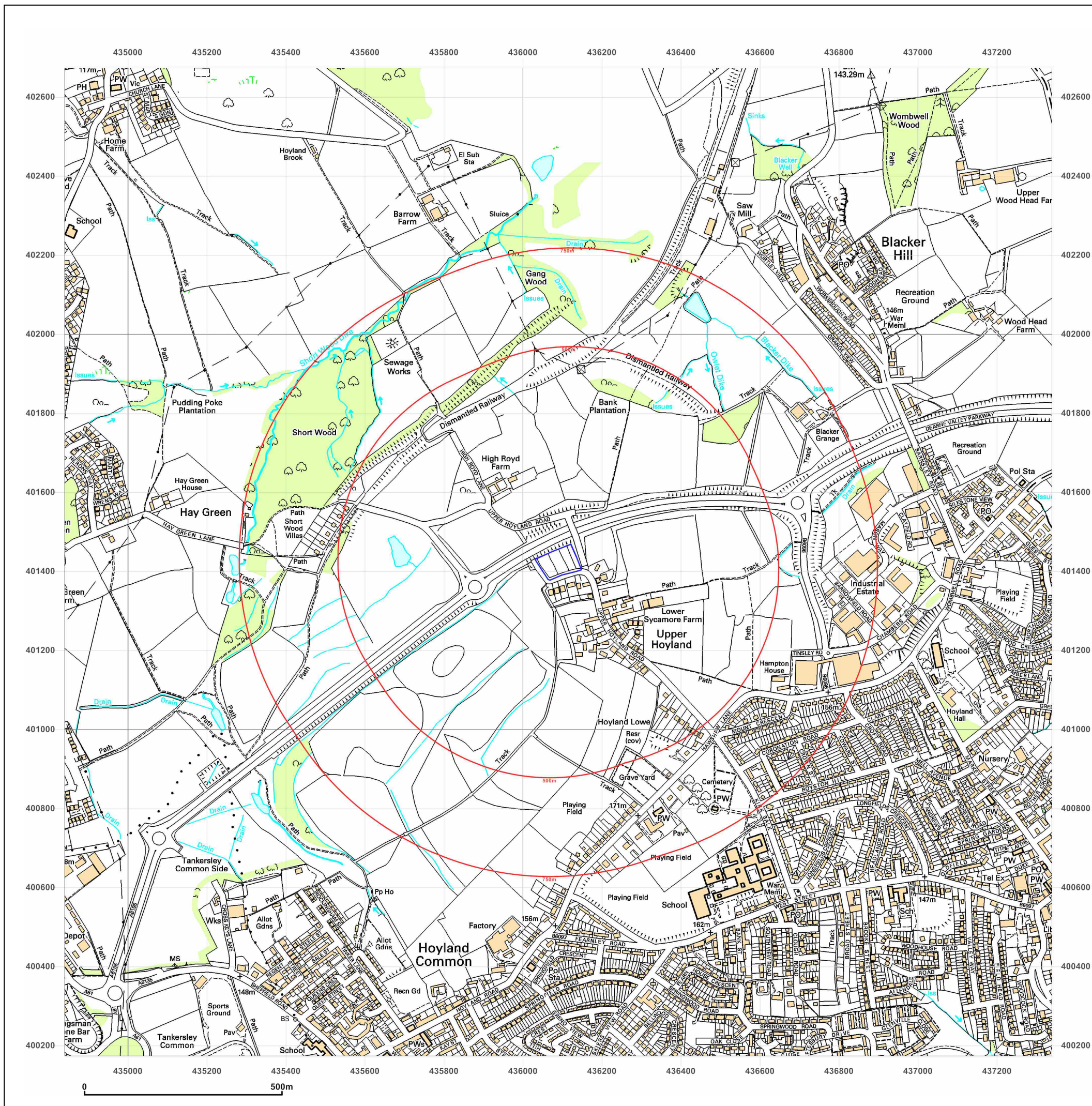


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Site Details:

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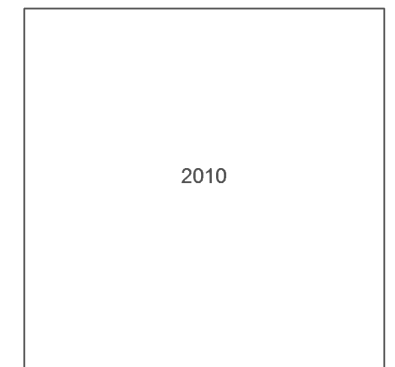
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Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

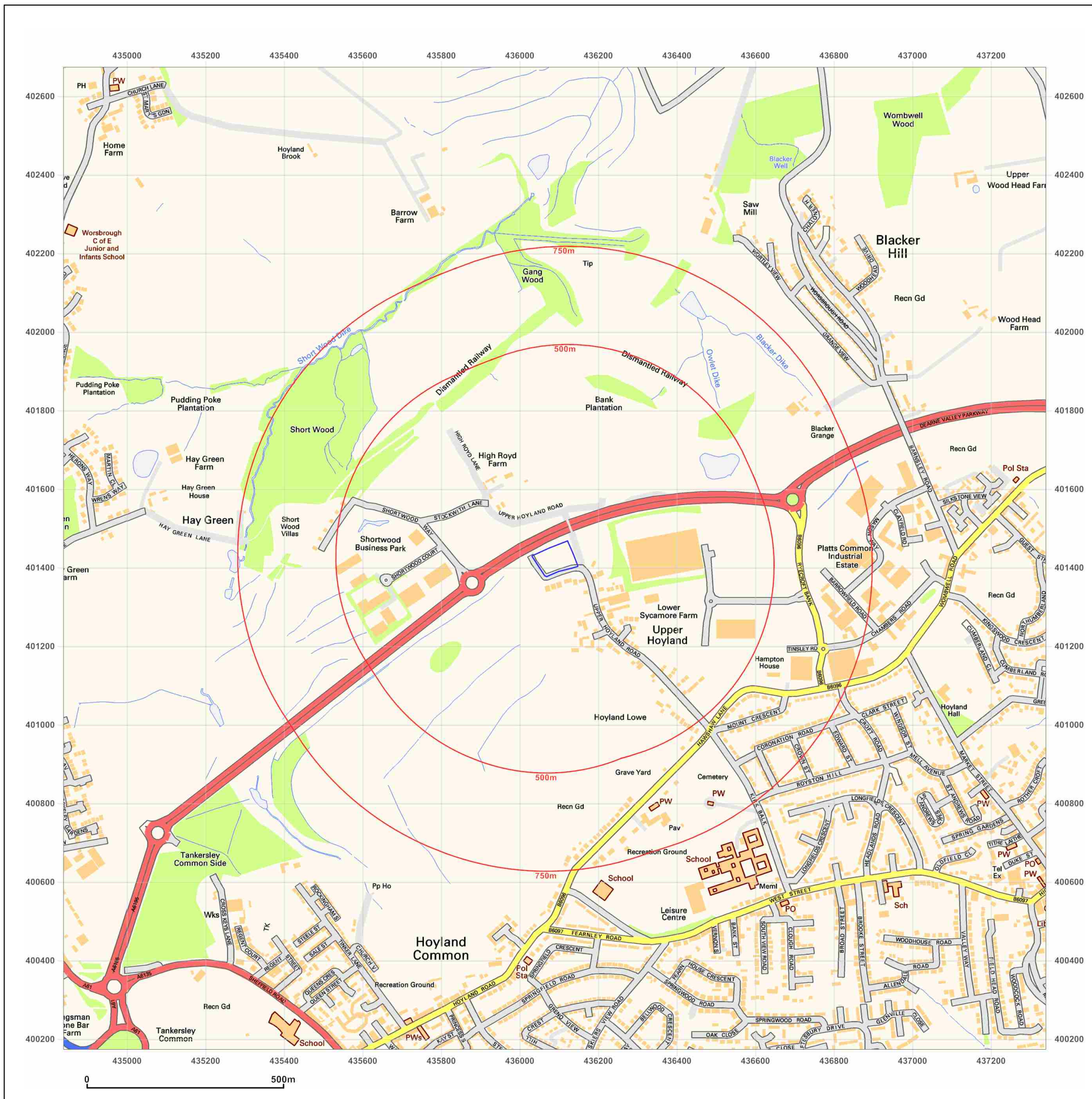


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Site Details:

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BARNSELY, S74 9NJ

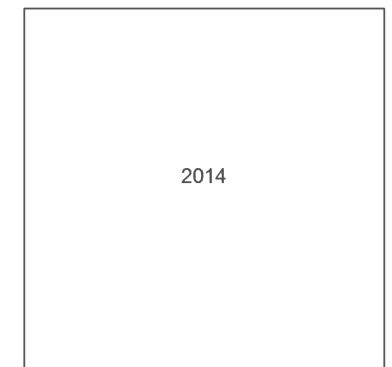
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Report Ref: GS-2901506
Grid Ref: 436089, 401424

Map Name: National Grid

Map date: 2014

Scale: 1:10,000

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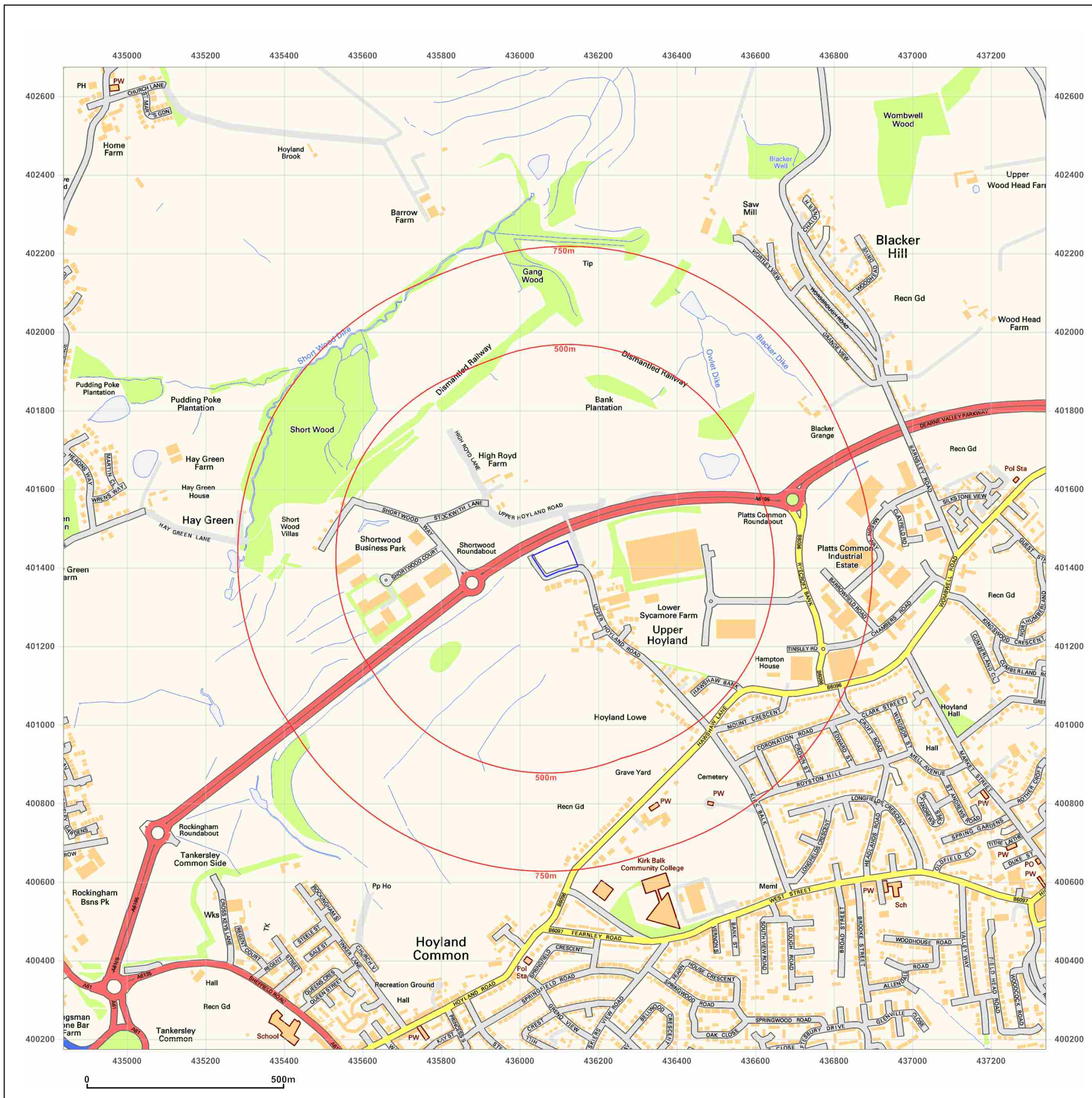


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Appendix D: Groundsure Report

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Groundsure

LOCATION INTELLIGENCE

Ecus Ltd

3 ECUS LTD, BLACKBURN ROAD,
ROTHERHAM, S61 2DW

Groundsure Reference: GS-2901505

Your Reference: 11856

Report Date 14 Apr 2016

Report Delivery Method: Email - pdf

Groundsure Enviroinsight

Address: UPPER HOYLAND ROAD, BARNSELY, S74 9NJ

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviroinsight** 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

Groundsure Enviroinsight

Address: UPPER HOYLAND ROAD, BARNSELY, S74 9NJ
Date: 14 Apr 2016
Reference: GS-2901505
Client: Ecus Ltd

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 07-Jun-2013
Grid Reference: 436085,401424
Site Size: 0.61ha

Report Reference: GS-2901505
Client Reference: 11856

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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	0	1	8	86
1.2 Additional Information – Historical Tank Database	0	0	2	0
1.3 Additional Information – Historical Energy Features Database	0	0	0	1
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	0	0
1.6 Potentially Infilled Land	0	1	9	84
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	0
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 Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	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 Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency Historic Landfill Sites	0	0	0	1	0	3
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	1	Not searched	Not searched
3.2.2 Environment Agency Licensed Waste Sites	0	0	0	0	1	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	0	4	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	0
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 Are there any records of Artificial Ground and Made Ground present beneath the study site?	No
5.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?	None
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 Are there any records of Strata Classification in the Superficial Geology within 500m of the study site?	No					
6.2 Are there any records of Strata Classification in the Bedrock Geology within 500m of the study site?	Yes					
	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	0	0	0	5
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
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	1	0	0	Not searched	Not searched
	On-site	0-50m	51-250	251-500	501-1000	1000-1500

Section 6: Hydrogeology and Hydrology

0-500m

6.9 Is there any Environment Agency information on river quality within 1500m of the study site?	No	No	No	No	No	No
6.10 Detailed River Network entries within 500m of the site	0	0	0	1	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Are there any Environment Agency Zone 2 floodplains within 250m of the study site?	No
7.2 Are there any Environment Agency Zone 3 floodplains within 250m of the study site	No
7.3 What is the Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site?	Very Low
7.4 Are there any Flood Defences within 250m of the study site?	No
7.5 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
7.6 Are there any areas used for Flood Storage within 250m of the study site?	No
7.7 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Limited potential
7.8 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	High

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	1	13
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	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
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.11 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	1	0	0	0	0	1
8.14 Records of Green Belt land	0	1	0	0	0	2

Section 9: Natural Hazards

9.1 What is the maximum risk of natural ground subsidence?	Low
9.1.1 What is the maximum Shrink-Swell hazard rating identified on the study site?	Very Low
9.1.2 What is the maximum Landslides hazard rating identified on the study site?	Low
9.1.3 What is the maximum Soluble Rocks hazard rating identified on the study site?	Negligible
9.1.4 What is the maximum Compressible Ground hazard rating identified on the study site?	Negligible
9.1.5 What is the maximum Collapsible Rocks hazard rating identified on the study site?	Very Low
9.1.6 What is the maximum Running Sand hazard rating identified on the study site?	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 property is in a Radon Affected Area, as between 1 and 3% 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 Are there any coal mining areas within 75m of the study site?	Yes
10.2 Are there any Non-Coal Mining areas within 50m of the study site boundary?	Yes
10.3 Are there any brine affected areas within 75m of the study site?	No

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 licenses, 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.

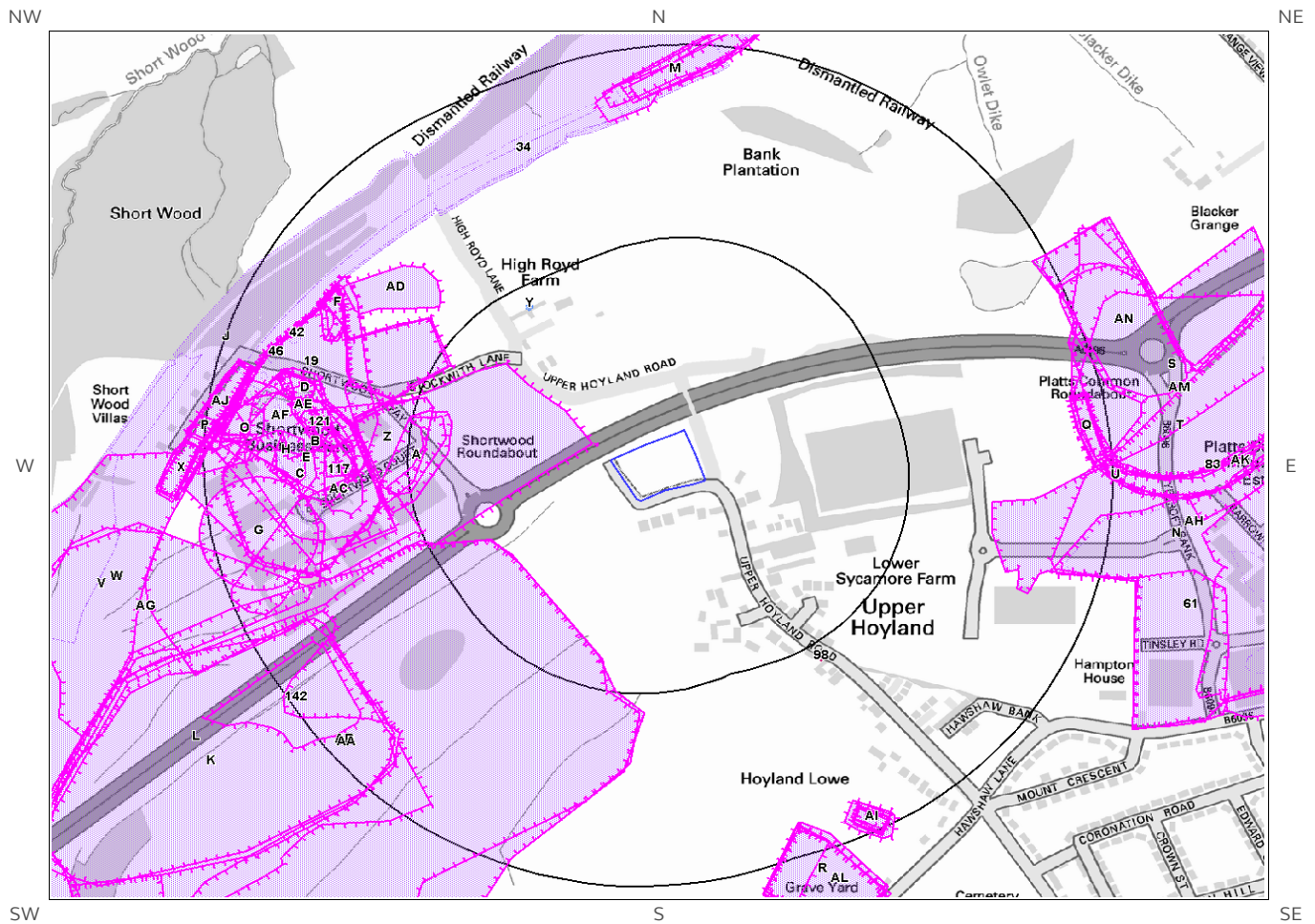
Note: Maps

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).

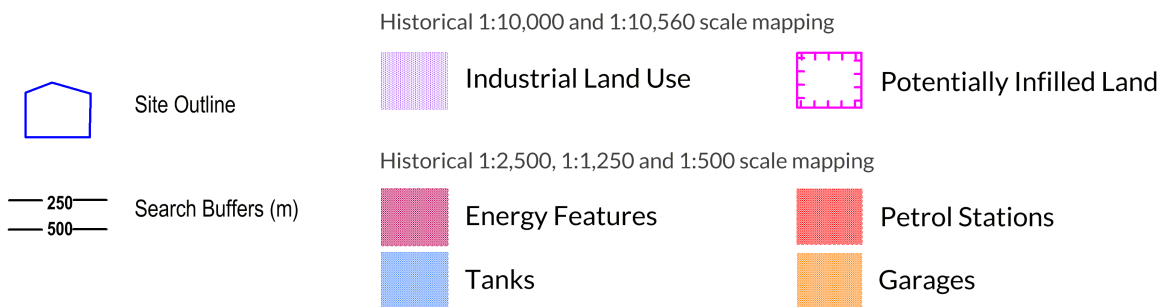
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

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



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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: 95

ID	Distance [m]	Direction	Use	Date
1Z	31	NW	Brick Works	1977
2AA	164	SW	Unspecified Disused Tip	1987
3AB	164	SW	Refuse Heap	1977
4A	200	W	Unspecified Disused Quarry	1977
5A	200	W	Unspecified Disused Quarry	1987
6AC	227	W	Unspecified Pit	1966
7B	232	NW	Brick Works	1951
8B	233	NW	Brick Works	1948
9B	233	NW	Brick Works	1948
10B	268	W	Brick Works	1938
11D	277	W	Brick Works	1891
12C	284	W	Unspecified Pit	1951
13E	287	W	Unspecified Pit	1938
14C	289	W	Unspecified Quarry	1948
15AD	289	NW	Refuse Heap	1987
16D	291	W	Unspecified Workings	1987
17AE	299	W	Brick Works	1903
18B	314	W	Clay Pit	1903
19	324	W	Unspecified Works	1966
20AF	344	W	Unspecified Pit	1891
21N	353	E	Colliery	1938
22E	359	W	Railway Sidings	1951
23H	362	W	Railway Sidings	1948
24F	368	NW	Refuse Heap	1966
25F	368	NW	Refuse Heap	1948
26F	368	NW	Refuse Heap	1948
27F	368	NW	Refuse Heap	1938
28G	370	W	Unspecified Disused Quarry	1977
29G	370	W	Unspecified Disused Quarry	1987
30F	371	NW	Refuse Heap	1951
31H	377	W	Unspecified Ground Workings	1966

32I	379	NW	Railway Sidings	1903
33I	379	NW	Railway Sidings	1938
34	381	NW	Railway Sidings	1948
35J	383	NW	Railway Sidings	1951
36J	383	NW	Railway Sidings	1966
37K	399	SW	Unspecified Ground Workings	1948
38K	399	SW	Unspecified Ground Workings	1948
39L	399	SW	Colliery	1948
40L	399	SW	Colliery	1948
41AG	402	SW	Unspecified Disused Tip	1987
42	410	NW	Unspecified Tanks	1891
43M	410	N	Cuttings	1948
44K	410	SW	Refuse Heap	1951
45K	414	SW	Refuse Heap	1966
46	424	W	Unspecified Tanks	1891
47M	428	N	Cuttings	1951
48O	428	W	Unspecified Heap	1966
49M	429	N	Cuttings	1977
50M	429	N	Cuttings	1987
51M	429	N	Cuttings	1966
52M	432	N	Cuttings	1891
53M	432	N	Cuttings	1903
54M	432	N	Cuttings	1938
55AH	437	E	Collieries	1891
56N	442	E	Colliery	1903
57O	445	W	Unspecified Pit	1951
58P	452	W	Cuttings	1938
59AI	452	SE	Unspecified Heap	1966
60AJ	454	W	Cuttings	1891
61	455	E	Industrial Estate	1977
62P	457	W	Cuttings	1951
63R	458	S	Cemetery	1951
64P	459	W	Cuttings	1948
65AK	459	E	Cuttings	1903
66Q	460	E	Cuttings	1948
67Q	460	E	Cuttings	1891
68R	461	S	Grave Yard	1948
69R	462	S	Grave Yard	1987
70R	462	S	Grave Yard	1977
71AM	463	E	Refuse Heap	1951
72S	463	E	Collieries	1951
73R	463	S	Grave Yard	1903
74R	463	S	Grave Yard	1938
75Q	465	E	Cuttings	1966

76T	478	E	Collieries	1948
77S	478	E	Refuse Heap	1948
78T	478	E	Collieries	1948
79S	478	E	Refuse Heap	1948
80P	481	W	Cuttings	1966
81P	481	W	Cuttings	1987
82P	481	W	Cuttings	1977
83	486	E	Railway Sidings	1891
84U	486	E	Cuttings	1891
85U	488	E	Cuttings	1966
86S	490	NE	Refuse Heap	1938
87AL	493	S	Grave Yard	1891
88V	496	W	Colliery	1903
89V	496	W	Colliery	1938
90W	496	W	Railway Sidings	1903
91W	496	W	Railway Sidings	1938
92X	499	W	Cuttings	1966
93X	499	W	Cuttings	1977
94X	499	W	Cuttings	1987
95AN	499	E	Unspecified Heap	1966

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:

2

ID	Distance (m)	Direction	Use	Date
96Y	218	NW	Unspecified Tank	1893
97Y	218	NW	Unspecified Tank	1905

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:

1

ID	Distance (m)	Direction	Use	Date
98	269	SE	Electricity Substation	1999

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: 0

Database searched and no data found.

1.6 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 94

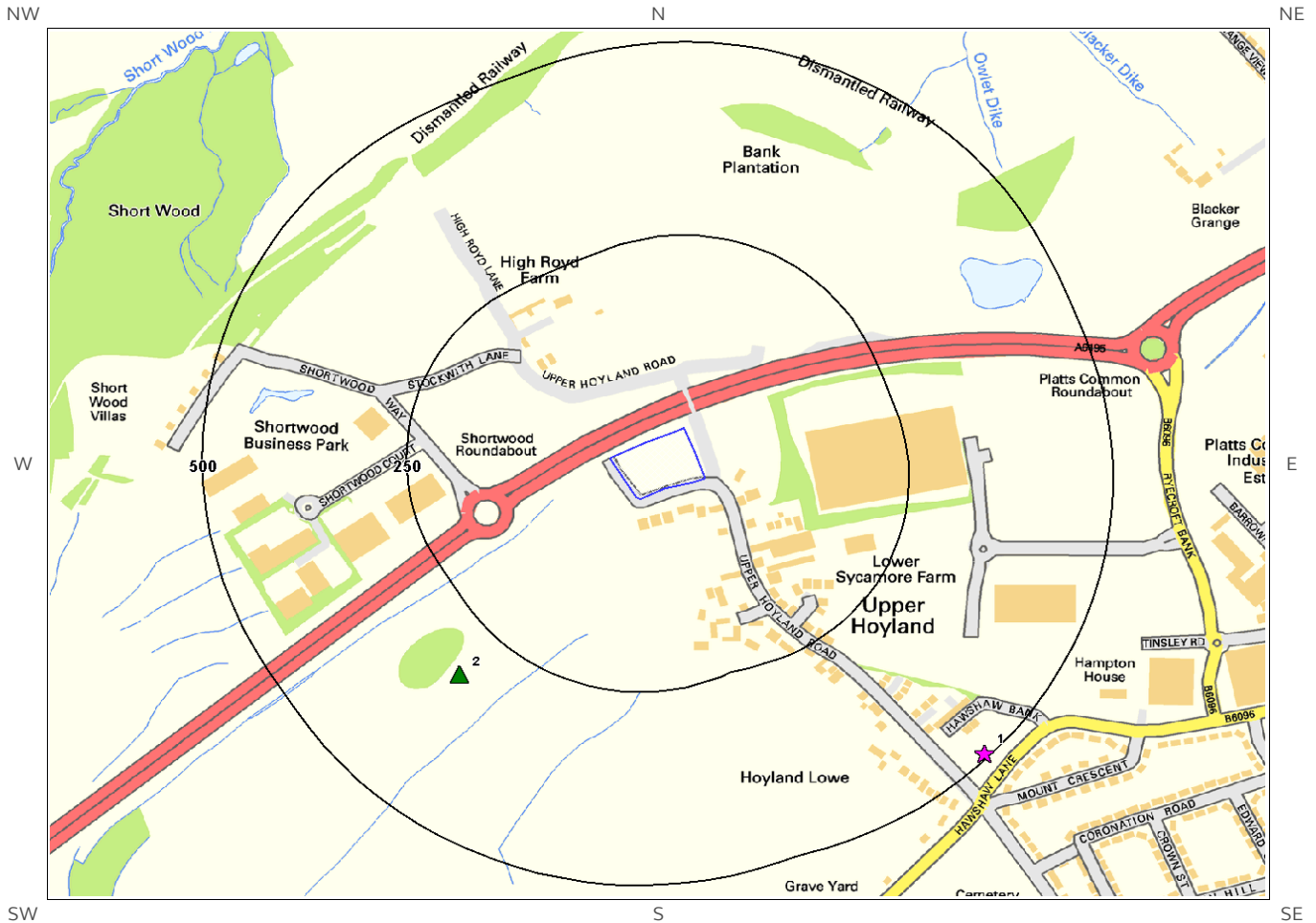
The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
99Z	31	NW	Brick Works	1977
100AA	164	SW	Unspecified Disused Tip	1987
101AB	164	SW	Refuse Heap	1977
102A	200	W	Unspecified Disused Quarry	1987
103A	200	W	Unspecified Disused Quarry	1977
104A	204	W	Pond	1977
105AC	227	W	Unspecified Pit	1966
106B	232	NW	Brick Works	1951
107B	233	NW	Brick Works	1948
108B	233	NW	Brick Works	1948
109B	268	W	Brick Works	1938
110D	277	W	Brick Works	1891
111C	284	W	Unspecified Pit	1951
112E	287	W	Unspecified Pit	1938
113C	289	W	Unspecified Quarry	1948
114AD	289	NW	Refuse Heap	1987
115AE	291	W	Unspecified Workings	1987
116AF	299	W	Brick Works	1903
117	307	W	Pond	1966
















118B	312	W	Pond	1977
119B	312	W	Pond	1987
120H	314	W	Clay Pit	1903
121	314	W	Ponds	1948
122AE	314	W	Ponds	1951
123AE	315	W	Ponds	1938
124AE	344	W	Unspecified Pit	1891
125N	353	E	Colliery	1938
126F	368	NW	Refuse Heap	1966
127F	368	NW	Refuse Heap	1948
128F	368	NW	Refuse Heap	1948
129F	368	NW	Refuse Heap	1938
130G	370	W	Unspecified Disused Quarry	1977
131G	370	W	Unspecified Disused Quarry	1987
132F	371	NW	Refuse Heap	1951
133E	377	W	Unspecified Ground Workings	1966
134L	399	SW	Colliery	1948
135K	399	SW	Unspecified Ground Workings	1948
136L	399	SW	Colliery	1948
137K	399	SW	Unspecified Ground Workings	1948
138AG	402	SW	Unspecified Disused Tip	1987
139M	410	N	Cuttings	1948
140K	410	SW	Refuse Heap	1951
141K	414	SW	Refuse Heap	1966
142	427	SW	Pond	1966
143M	428	N	Cuttings	1951
144O	428	W	Unspecified Heap	1966
145M	429	N	Cuttings	1987
146M	429	N	Cuttings	1977
147M	429	N	Cuttings	1966
148M	432	N	Cuttings	1891
149M	432	N	Cuttings	1938
150M	432	N	Cuttings	1903
151AH	437	E	Collieries	1891
152N	442	E	Colliery	1903
153O	445	W	Unspecified Pit	1951
154P	452	W	Cuttings	1938
155AI	452	SE	Unspecified Heap	1966
156AJ	454	W	Cuttings	1891
157P	457	W	Cuttings	1951
158AI	458	SE	Reservoir	1951
159R	458	S	Cemetery	1951

160P	459	W	Cuttings	1948
161AK	459	E	Cuttings	1903
162Q	460	E	Cuttings	1948
163Q	460	E	Cuttings	1891
164AL	461	S	Grave Yard	1948
165AL	462	S	Grave Yard	1987
166AL	462	S	Grave Yard	1977
167AI	462	SE	Reservoir	1948
168AI	462	SE	Covered Reservoir	1987
169AI	462	SE	Covered Reservoir	1977
170S	463	E	Collieries	1951
171AM	463	E	Refuse Heap	1951
172AL	463	S	Grave Yard	1903
173AL	463	S	Grave Yard	1938
174Q	465	E	Cuttings	1966
175AI	466	SE	Reservoir	1938
176T	478	E	Collieries	1948
177S	478	E	Refuse Heap	1948
178S	478	E	Refuse Heap	1948
179T	478	E	Collieries	1948
180P	481	W	Cuttings	1977
181P	481	W	Cuttings	1987
182P	481	W	Cuttings	1966
183U	486	E	Cuttings	1891
184U	488	E	Cuttings	1966
185S	490	NE	Refuse Heap	1938
186AL	493	S	Grave Yard	1891
187V	496	W	Colliery	1938
188V	496	W	Colliery	1903
189X	499	W	Cuttings	1987
190X	499	W	Cuttings	1966
191X	499	W	Cuttings	1977
192AN	499	E	Unspecified Heap	1966

2. Environmental Permits, Incidents and Registers Map



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- | | | | | | |
|---|-------------------------------|---|--|---|---|
|  | Site Outline |  | Recorded Pollution Incident |  | RAS 3 & 4 Authorisations |
|  | Dangerous Substances (List 1) |  | Part A(1) Authorised Processes and Historic IPC Authorisations |  | Part A(2) and Part B Authorised Processes |
|  | Dangerous Substances (List 2) |  | Water Industry Referrals |  | COMAH / NIHHS Sites |
|  | Search Buffers (m) |  | Licensed Discharge Consents |  | Sites Determined as Contaminated Land |
|  | 500 |  | Red List Discharge Consents |  | 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 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
2	318	SW	435845 401149	Address: Metaliform Holdings Ltd, Chambers Road, Hoyland, Barnsley, S74 0EZ Process: Powder Coating Process Status: Current Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement 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:

0

Database searched and no data found.

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 Recorded Pollution Incidents

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

1

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	493	SE	436488 401048	Incident Date: 06-Nov-2001 Incident Identification: 41390 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)

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

0

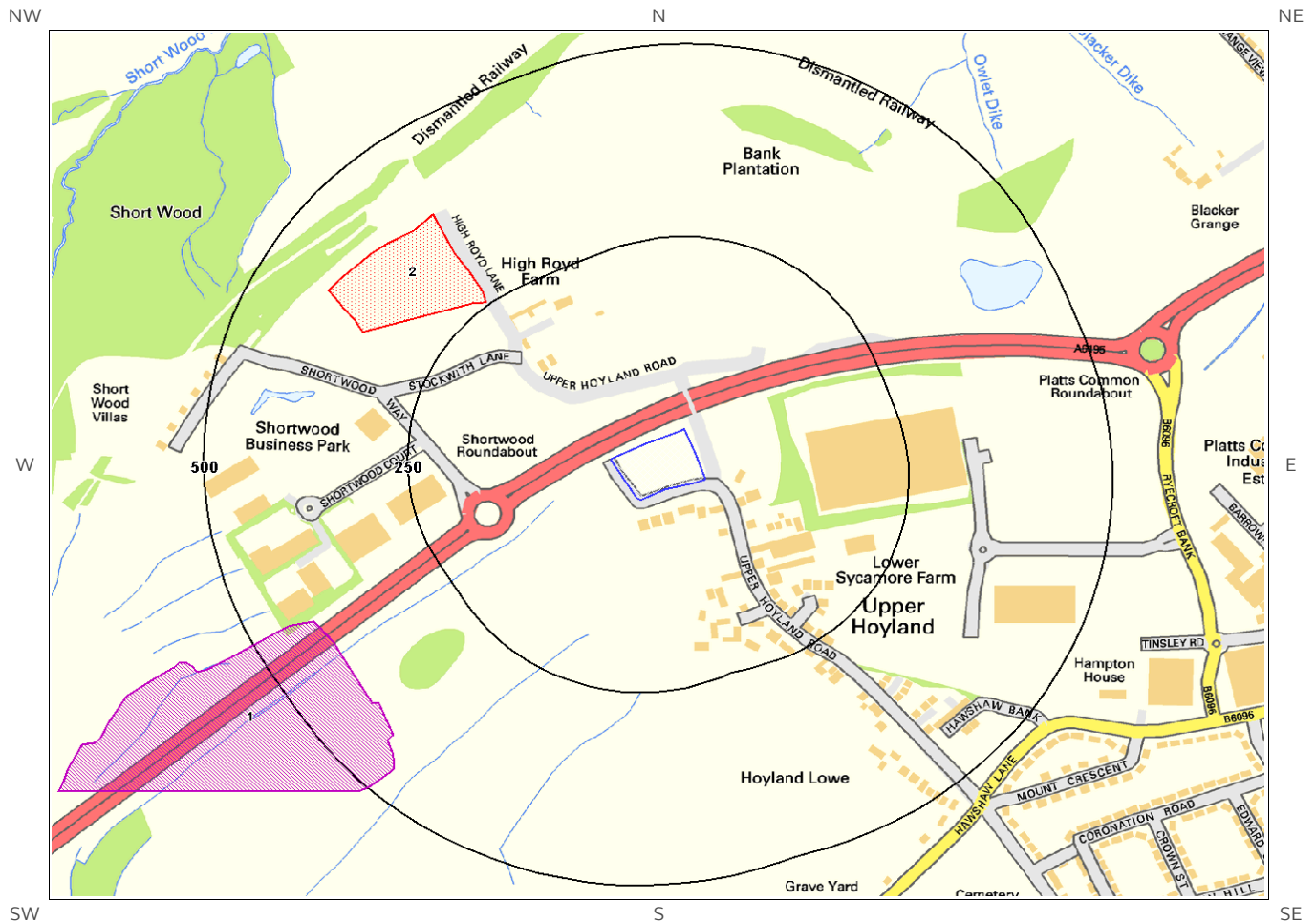
Database searched and no data found.

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










How many 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



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- | | | | | | |
|---|------------------------|---|---------------------------|---|---|
|  | Site Outline |  | E.A. Active Landfill |  | Historic and Planned Waste Sites |
|  | 250 Search Buffers (m) |  | E.A. Historic Landfill |  | E.A. Licensed Waste Site |
|  | 500 Search Buffers (m) |  | BGS / DoE Survey Landfill |  | Local Authority/Historical Mapping Landfill Records |

3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:

4

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	255	NW	435700 401600	<p>Site Address: Shortwood, Upper Hoyland Road, Hoyland, Barnsley Waste Licence: Yes Site Reference: 20B76(21), 4400/B76, WD20 B76 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: 04-Oct-1979 Licence Surrendered: 21-Feb-1992 Licence Hold Address: Shortwood, Hoyland, Barnsley Operator: Hoyland Marshall Limited First Recorded: 31-Dec-1962 Last Recorded: 31-Dec-1990</p>
Not shown	1108	SE	437100 400900	<p>Site Address: Land adjacent to 65 Market Street, Market Street, Hoyland, Barnsley Waste Licence: Yes Site Reference: 20B465(39), WD20 B465, 4400/B465 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: 17-May-1985 Licence Surrendered: 12-Feb-1993 Licence Hold Address: - Operator: Messrs T and W Brown First Recorded: 31-May-1985 Last Recorded: 12-Feb-1993</p>
Not shown	1297	SW	434800 400500	<p>Site Address: British Rail Railway Cutting, Adjoining premises of Hartwood Exports (Machinery) Limited, Sheffield Road, Birdwell, Barnsley Waste Licence: Yes Site Reference: WD20 B378, 4400/B378, 20B378(53), (36)B, 4400/(36), 4400/0439 Waste Type: Inert, Commercial Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: 10-May-1983 Licence Surrendered: 21-Jan-1992 Licence Hold Address: - Operator: Hartwood Exports Machinery Limited First Recorded: 31-May-1983 Last Recorded: 31-Dec-1989</p>
Not shown	1411	E	437500 401000	<p>Site Address: Greenside Lane, Hoyland, Barnsley Waste Licence: Yes Site Reference: 4400/(150), 55/19/93/3 Waste Type: Commercial, Household Environmental Permitting Regulations (Waste) Reference: -</p> <p>Licence Issue: 11-Jun-1980 Licence Surrendered: 24-Nov-1992 Licence Hold Address: North Ferriby, North Humberside Operator: Hoyland Nether Urban District Council First Recorded: 31-Dec-1971 Last Recorded: -</p>

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

0

Database searched and no data found.

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

0

Database searched and no data found.

3.2 Other Waste Sites

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

1

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		
1	414	SW	435558 401109	Type of Site: Ground Workings and Refuse Heap Site Address: N/A	Planning Application Reference: N/A Date: 1960	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon

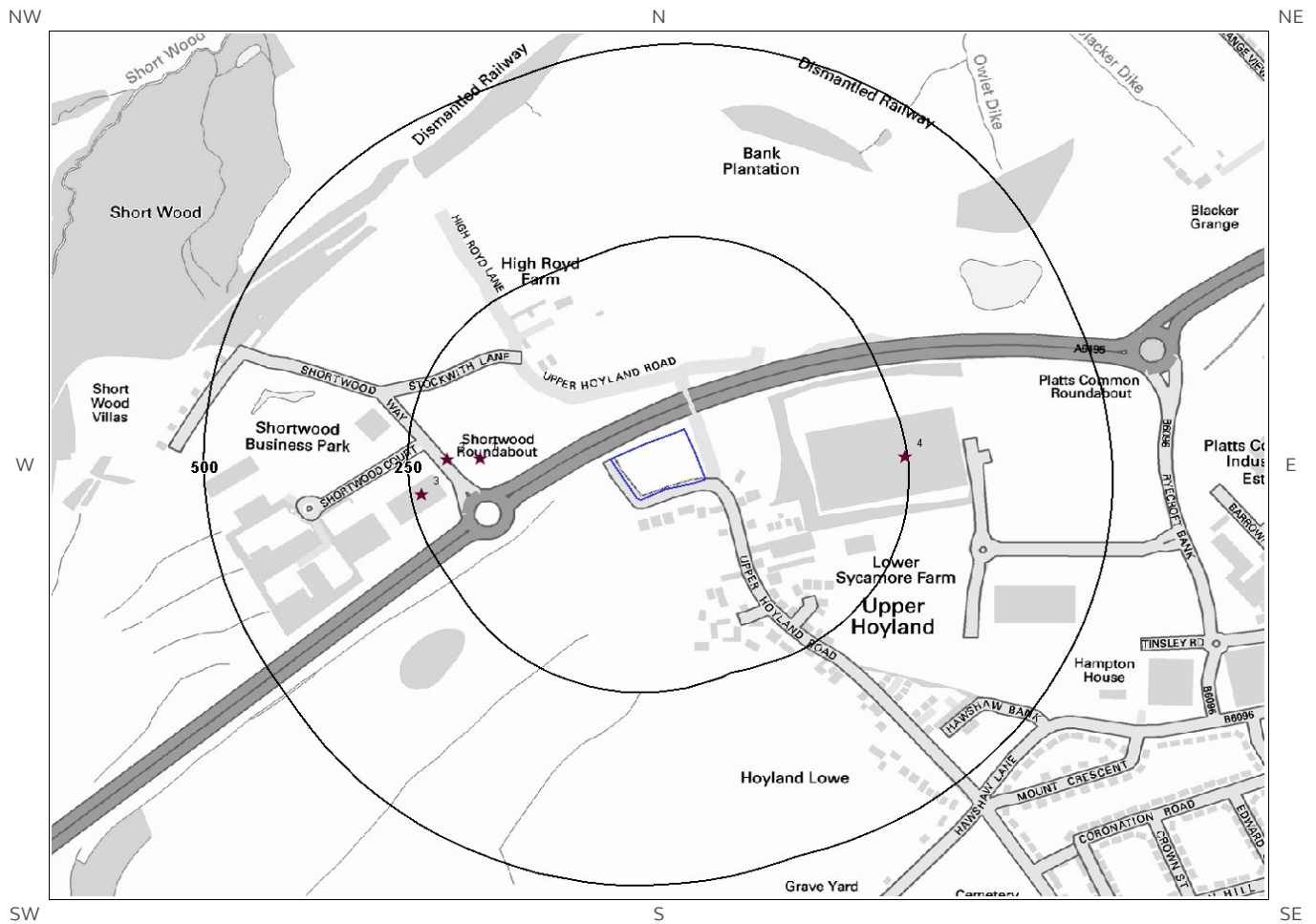
3.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:

1

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	545	N	436000 402000	Site Address: Land / Premises At, Blacker Hill Sidings, Blacker Hill, Barnsley, South Yorkshire, S74 ORE Type: Metal Recycling Site (Vehicle Dismantler) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAR001 EPR reference: EA/EPR/JP3790ZN/A001 Operator: Warwick Ward Machinery Ltd Waste Management licence No: 60613 Annual Tonnage: 5000.0	Issue Date: 09/09/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued	Site Name: Warwick Ward (machinery) Ltd Correspondence Address: -, -

4. Current Land Use Map



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-  Site Outline
-  Current Industrial Sites
-  Electricity Transmission Cables
-  Search Buffers (m)
-  Petrol & Fuel Sites
-  Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 4

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	161	W	Prolyte Sales	435869 401431	Unit 1a Shortwood Court, Shortwood Business Park, Hoyland, Barnsley, S74 9LH	Metals Manufacturers, Fabricators and Stockholders	Industrial Products
2	202	W	Electricity Sub Station	435829 401431	S74	Electrical Features	Infrastructure and Facilities
3	237	W	Majestic Showers	435798 401386	Unit 2c Shortwood Court, Hoyland, Barnsley, S74 9NW	Bathroom Fixtures, Fittings and Sanitary Equipment	Consumer Products
4	247	E	Store First	436392 401435	Ashroyd Business Park, Ashroyds Way, Barnsley, S74 9SB	Container and Storage	Transport, Storage and Delivery

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 0

Database searched and no data found.

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

Database searched and no data found.

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

5.3 Bedrock and Solid Geology

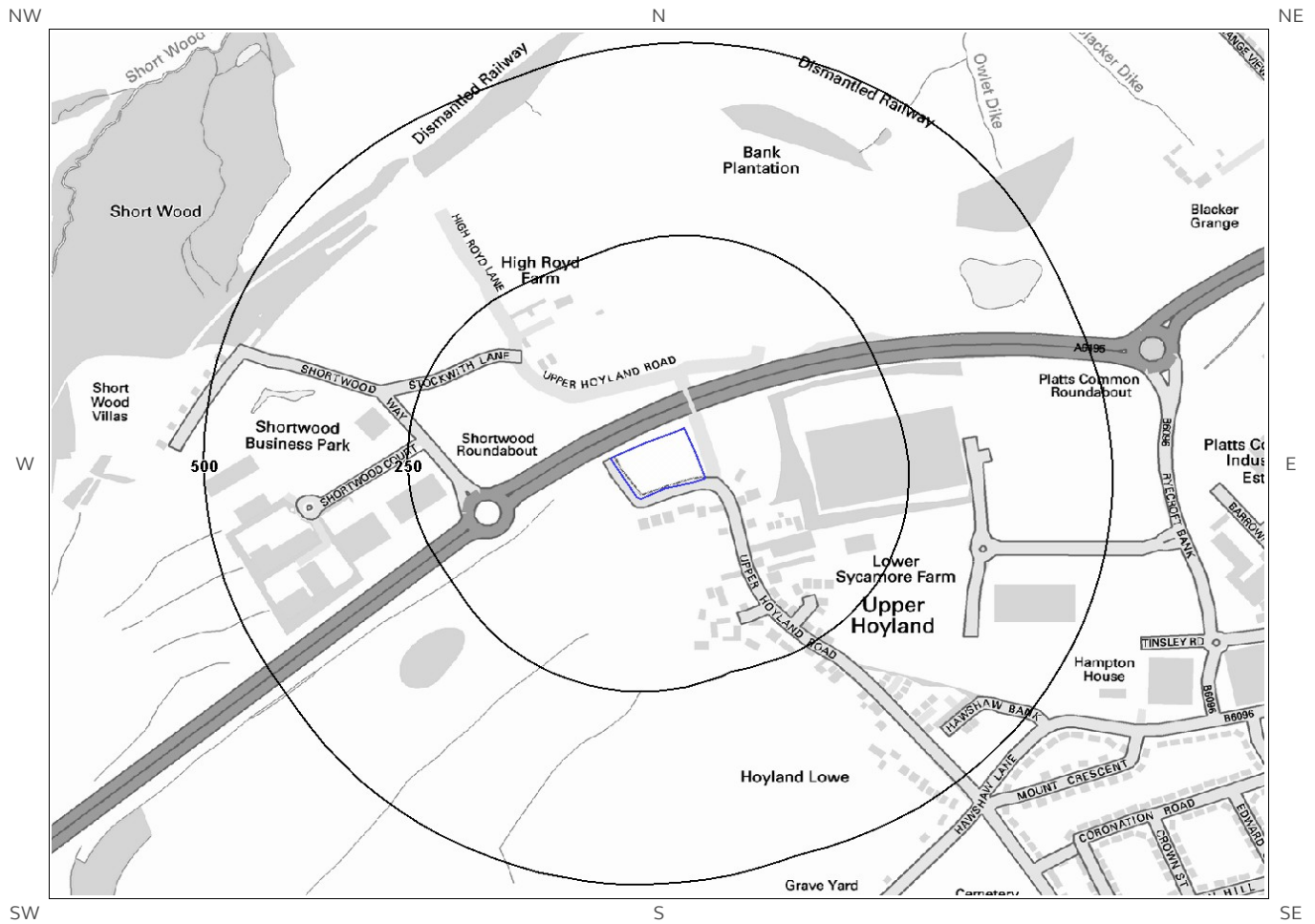
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
PMCM-MDSS	PENNINE MIDDLE COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION	SANDSTONE
PMCM-SDST	PENNINE MIDDLE COAL MEASURES FORMATION	SANDSTONE
KNR-SDST	KENT'S ROCK	SANDSTONE

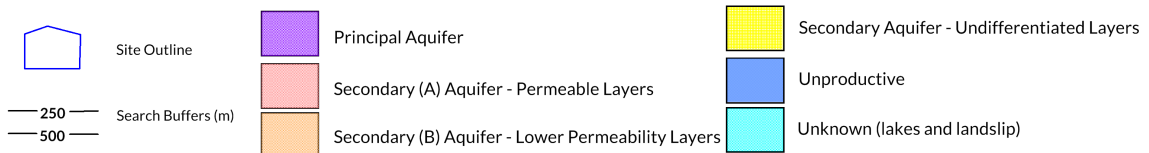
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



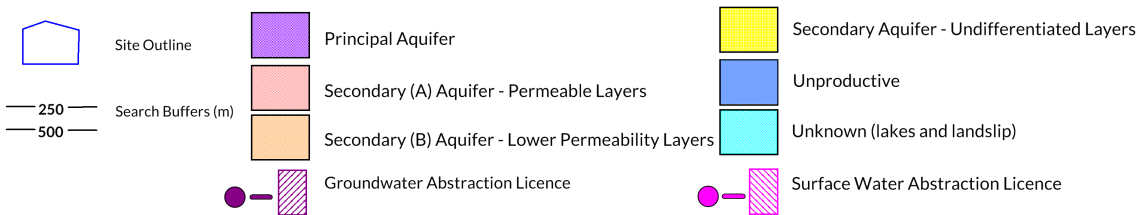
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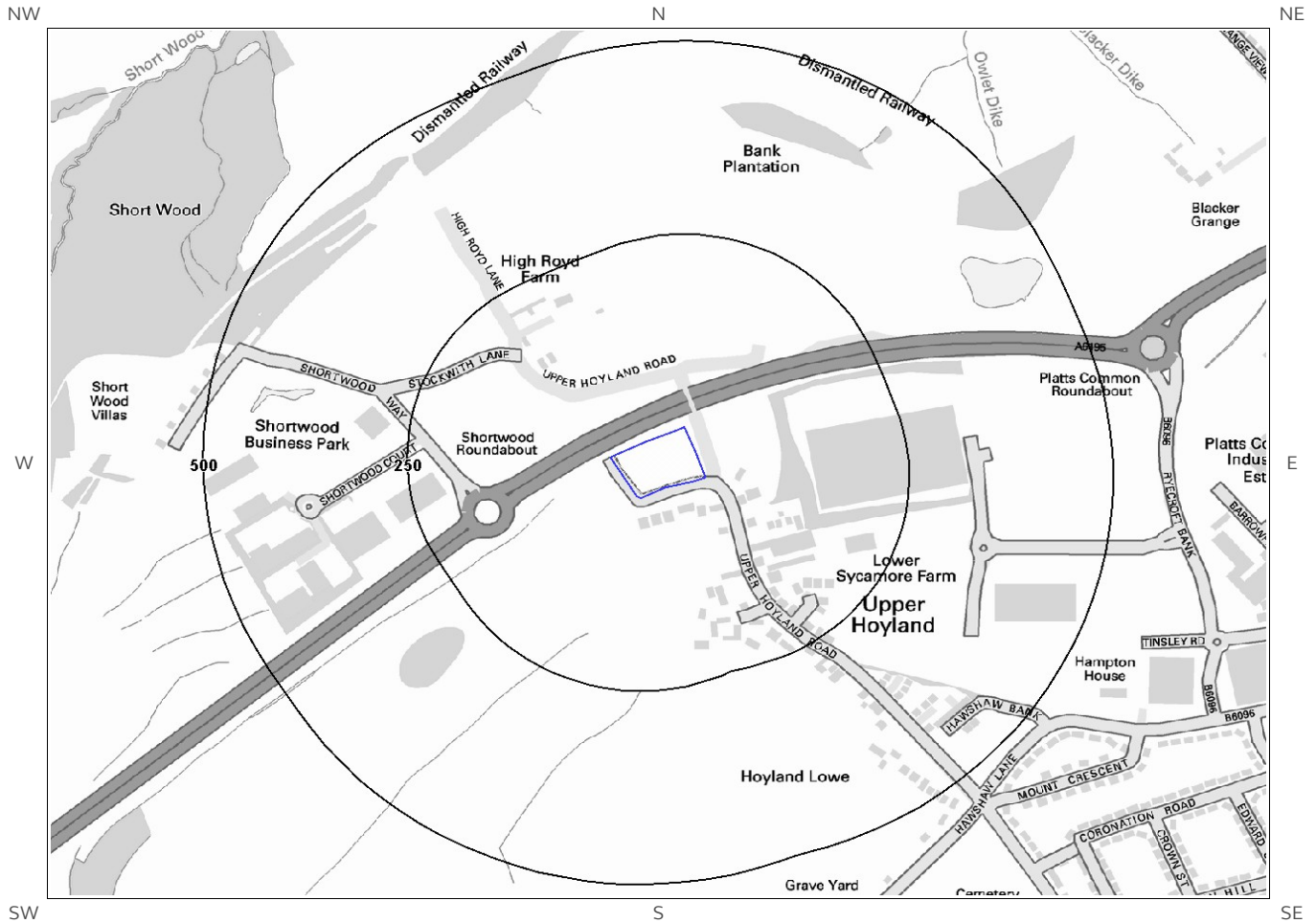
6b. Aquifer Within Bedrock Geology and Abstraction Licenses



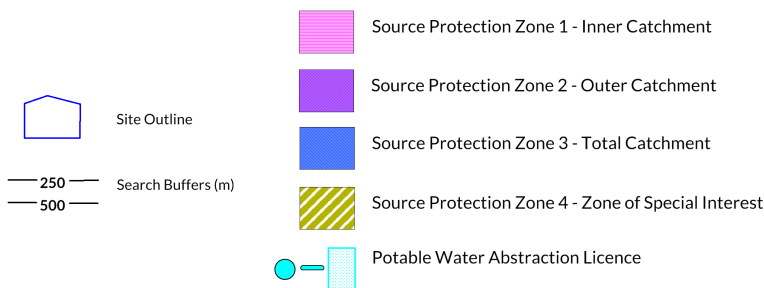
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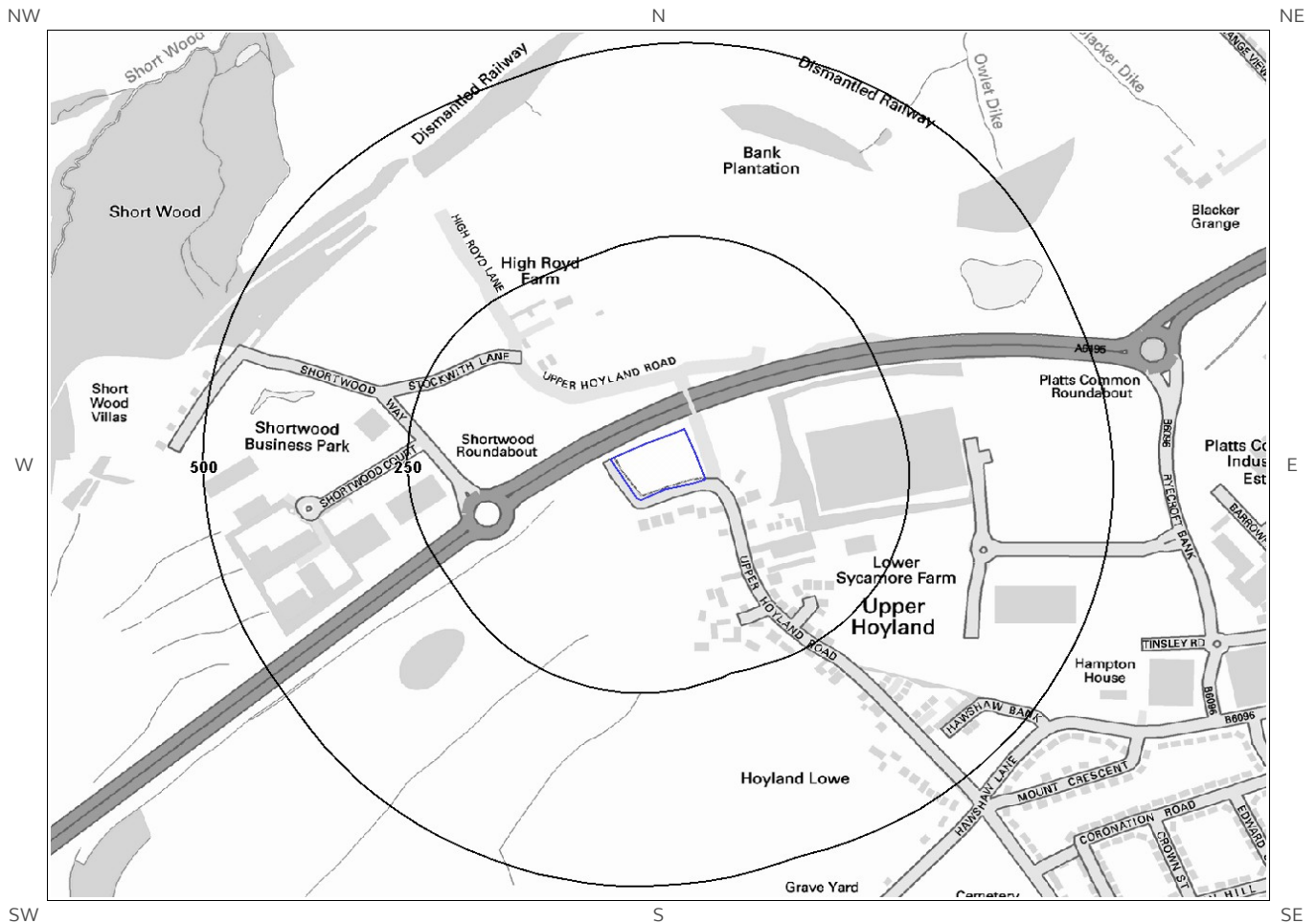
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses



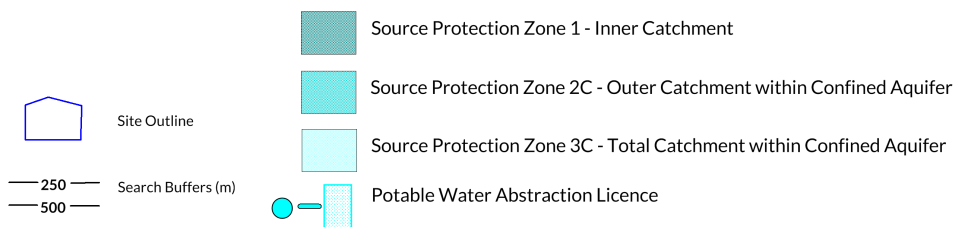
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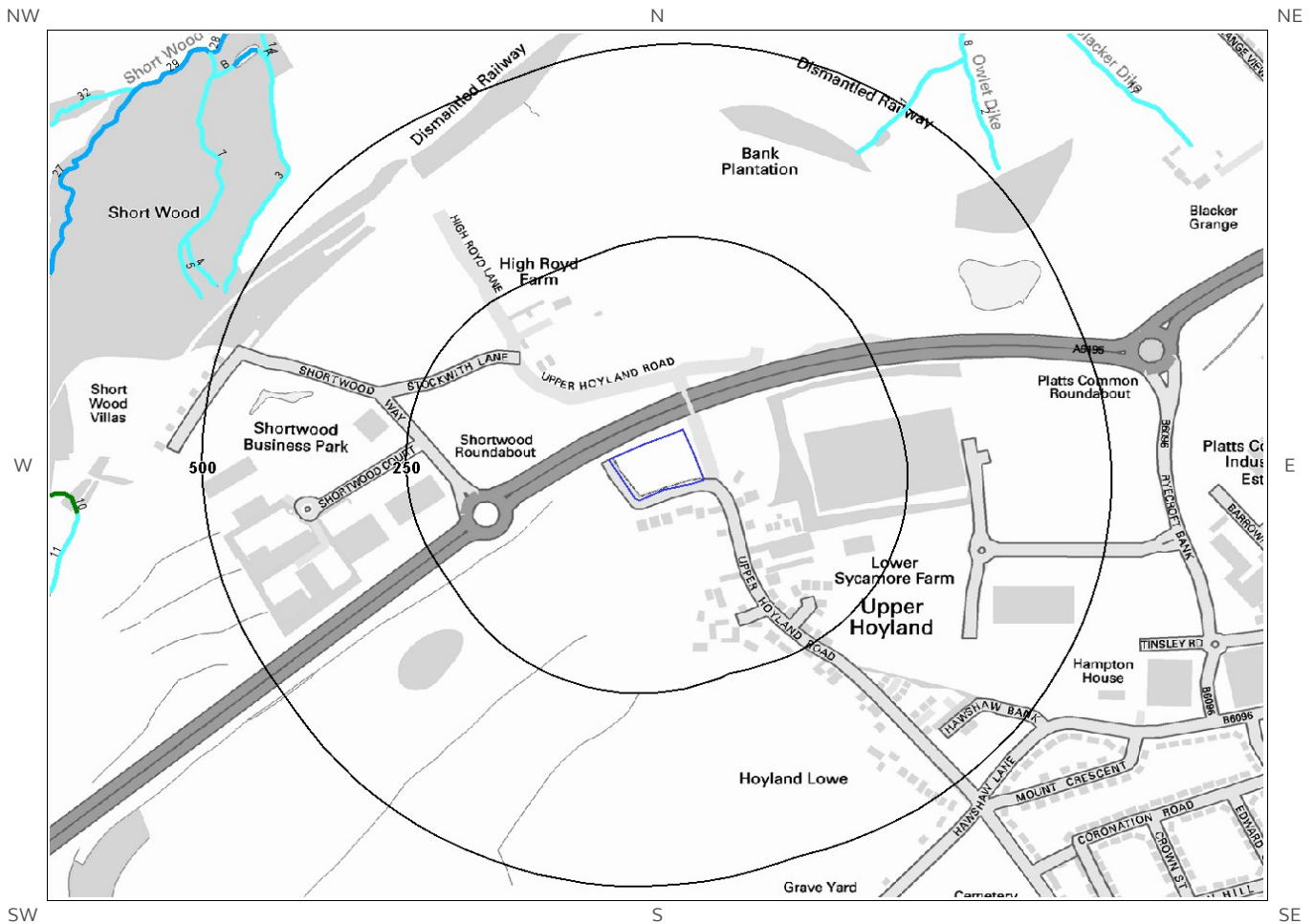
6d. Hydrogeology – Source Protection Zones within confined aquifer



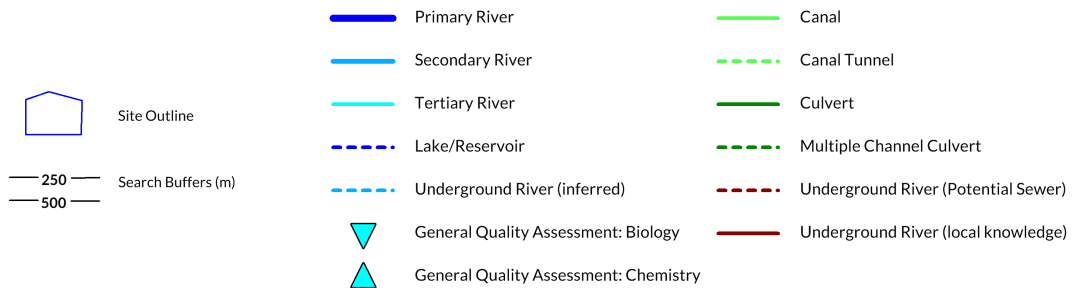
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6e. Hydrology – Detailed River Network and River Quality



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Are there records of strata classification within the superficial geology at or in proximity to the property? No

Database searched and no data found.

From 1 April 2010, the Environment Agency'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 Enviroinsight User Guide.

6.2 Aquifer within Bedrock Deposits

Are there records of strata classification within the bedrock geology at or in proximity to the property? Yes

From 1 April 2010, the Environment Agency'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 Enviroinsight 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

Are there any Groundwater Abstraction Licences within 2000m of the study site? Yes

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
Not shown	1662	E	437710 401970	Status: Historical Licence No: 2/27/08/130 Details: Lake & Pond Throughflow Direct Source: Groundwaters Point: Borehole-coal Measures-wombwell Data Type: Point Name: H J BANKS & COMPANY LIMITED Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 08033 Original Start Date: 28/11/2002 Expiry Date: 31/12/2004 Issue No: 1 Version Start Date: 28/11/2002 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1662	E	437710 401970	Status: Historical Licence No: 2/27/08/130 Details: Dust suppression Direct Source: Groundwaters Point: Borehole-coal Measures-wombwell Data Type: Point Name: H J BANKS & COMPANY LIMITED Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 08033 Original Start Date: 28/11/2002 Expiry Date: 31/12/2004 Issue No: 1 Version Start Date: 28/11/2002 Version End Date:
Not shown	1662	E	437710 401970	Status: Historical Licence No: 2/27/08/136 Details: Lake & Pond Throughflow Direct Source: Groundwaters Point: Borehole-coal Measures-wombwell Data Type: Point Name: H J BANKS (MINING) LTD Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 08147 Original Start Date: 25/5/2005 Expiry Date: 31/10/2005 Issue No: 1 Version Start Date: 25/5/2005 Version End Date:
Not shown	1662	E	437710 401970	Status: Historical Licence No: 2/27/08/136 Details: Dust suppression Direct Source: Groundwaters Point: Borehole-coal Measures-wombwell Data Type: Point Name: H J BANKS (MINING) LTD Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 08147 Original Start Date: 25/5/2005 Expiry Date: 31/10/2005 Issue No: 1 Version Start Date: 25/5/2005 Version End Date:
Not shown	1698	NW	434800 402600	Status: Historical Licence No: 2/27/08/040 Details: General Farming & Domestic Direct Source: Groundwaters Point: Well - Coal Measures - Worsborough Data Type: Point Name: BROWN Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: 03403 Original Start Date: 27/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 27/1/1966 Version End Date:

6.4 Surface Water Abstraction Licences

Are there any Surface Water Abstraction Licences within 2000m of the study site? No

Database searched and no data found.

6.5 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site? No

Database searched and no data found.

6.6 Source Protection Zones

Are there any Source Protection Zones within 500m of the study site?

No

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site?

No

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

Is there any Environment Agency information on groundwater vulnerability and soil leaching potential within 500m of the study site?

Yes

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	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.
19	SE	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.

6.9 River Quality

Is there any Environment Agency information on river quality within 1500m of the study site?

No

6.9.1 Biological Quality:

Database searched and no data found.

6.9.2 Chemical Quality:

Database searched and no data found.

6.10 Detailed River Network

Are there any Detailed River Network entries within 500m of the study site?

Yes

The following Detailed River Network records are represented on the Hydrology Map (6e):

ID	Distance (m)	Direction	Details
1	417	NE	River Name: - Welsh River Name: - Alternative Name: - River Type: Tertiary River Main River Status: Currently Undefined

6.11 Surface Water Features

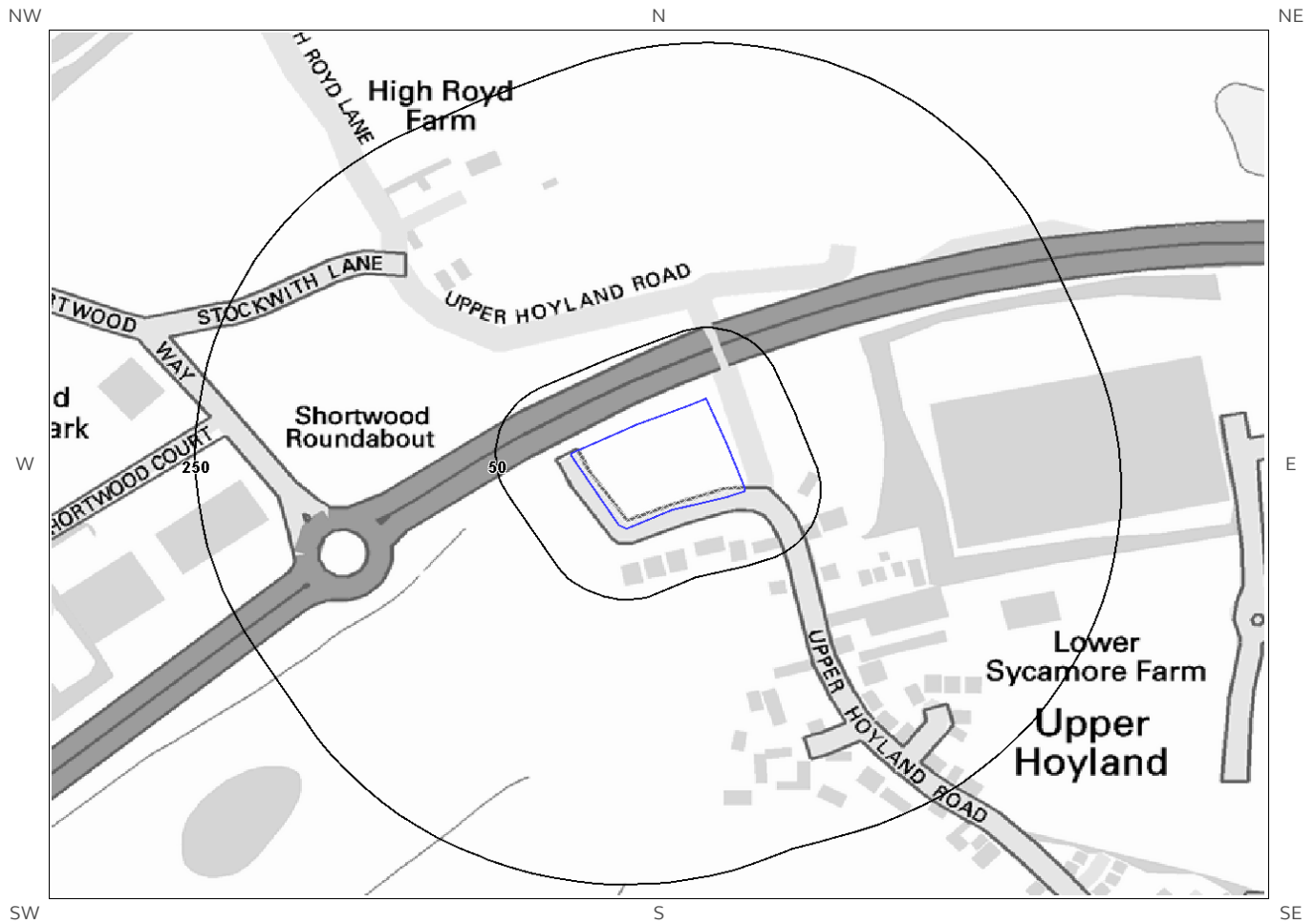
Are there any surface water features within 250m of the study site?

Yes

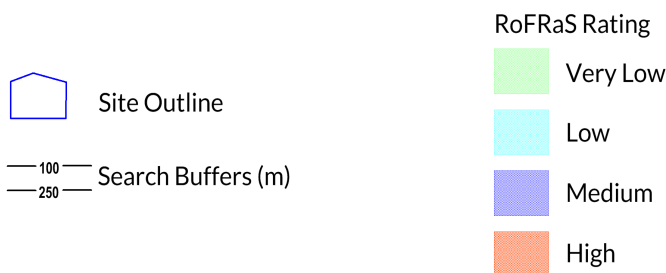
The following surface water records are not represented on mapping:

Distance (m)	Direction
88	SW
132	SW
187	S
249	S

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



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency Zone 2 floodplain? No

Environment Agency 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

Is the site within 250m of an Environment Agency Zone 3 floodplain? No

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

What is the highest risk of flooding onsite? Very Low

The Environment Agency 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

Are there any Flood Defences within 250m of the study site? No
Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site? No

7.6 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site?

No

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site? Yes

Does this relate to Clearwater Flooding or Superficial Deposits Flooding?

Clearwater 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 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?

Limited potential

Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard.

7.8 Groundwater Flooding Confidence Areas

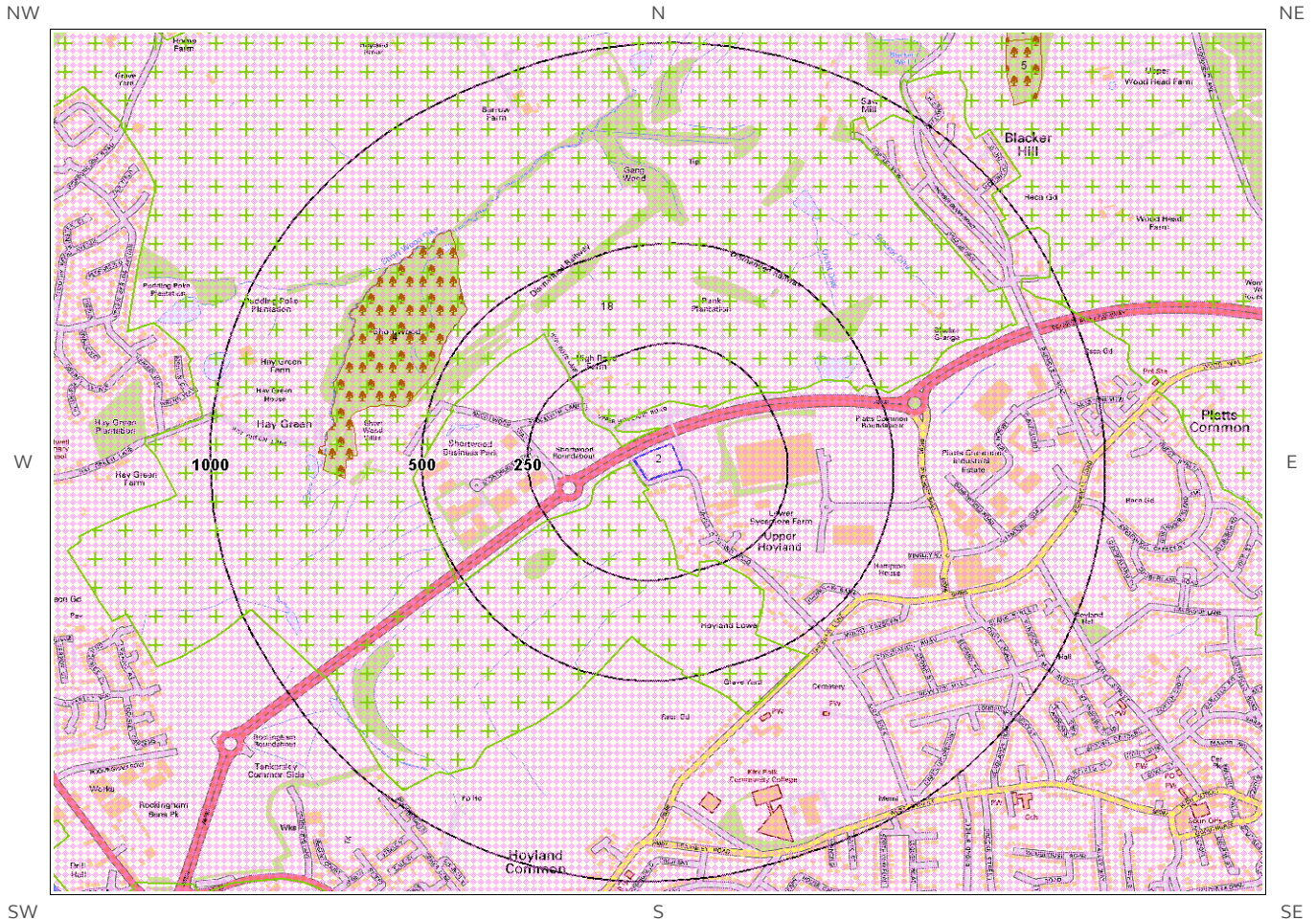
What is the British Geological Survey confidence rating in this result?

High

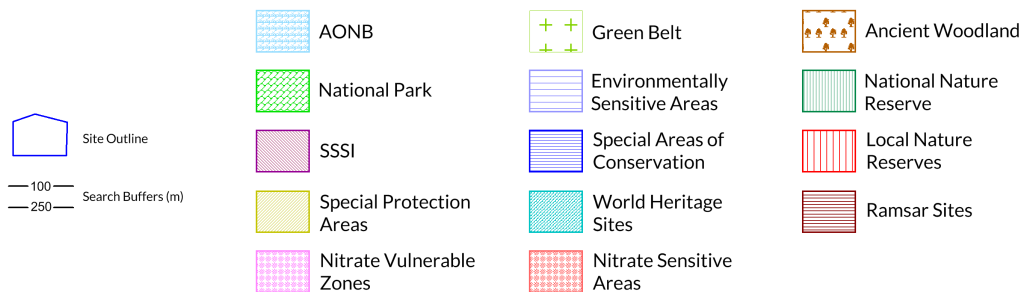
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

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



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8. Designated Environmentally Sensitive Sites

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site? Yes

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:

14

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
4	518	NW	UNKNOWN	Ancient and Semi-Natural Woodland
5	1170	NE	UNKNOWN	Ancient and Semi-Natural Woodland
6	1279	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1569	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1705	NE	UNKNOWN	Ancient Replanted Woodland
Not shown	1735	NW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1755	NE	UNKNOWN	Ancient Replanted Woodland
Not shown	1828	NE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1850	NW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1880	W	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1886	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1936	W	UNKNOWN	Ancient Replanted Woodland
Not shown	1954	W	UNKNOWN	Ancient Replanted Woodland
Not shown	1968	W	UNKNOWN	Ancient and Semi-Natural Woodland

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

1

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
Not shown	1712	NW	Worsborough Country Park	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:

2

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NVZ Name	Data Source
2	0	On Site	Existing	DEFRA
Not shown	1378	S	Existing	DEFRA

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

3

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

ID	Distance	Direction	Green Belt Name	Local Authority Name
18	11	SW	Liverpool, Manchester and West Yorks Greenbelt	Barnsley District (B)
Not shown	1419	S	Liverpool, Manchester and West Yorks Greenbelt	Barnsley District (B)
Not shown	1431	S	Liverpool, Manchester and West Yorks Greenbelt	Barnsley 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 GeoInsight, available from our [website](#). The following information has been found:

9.1.1 Shrink Swell

What is the 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

What is the maximum Landslide* hazard rating identified on the study site? Low

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

Hazard
Possibility of slope instability problems after major changes in ground conditions. Consideration should be given to stability if changes to drainage or excavations take place. Possible increase in construction cost to reduce potential slope stability problems. Existing property Ö no significant increase in insurance risk due to natural slope instability problems.

9.1.3 Soluble Rocks

What is the 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

What is the 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

What is the 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

What is the maximum Running Sand** hazard rating identified on the study site? Low

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

Hazard

Possibility of running sand problems after major changes in ground conditions. Normal maintenance to avoid leakage of water-bearing services or water bodies (ponds, swimming pools) should reduce likelihood of problems due to running sand. For new build Ö consider possibility of running sand into trenches or excavations if water table is high or sandy strata are exposed to water. Avoid concentrated water inputs to site. Unlikely to be an increase in construction costs due to potential for running sand. For existing property Ö no significant increase in insurance risk due to running sand problems is likely.

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 property is in a Radon Affected Area, as between 1 and 3% of properties are above the Action Level.

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

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

Are there any coal mining areas within 75m of the study site? Yes

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

Distance (m)	Direction	Details
0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

10.2 Non-Coal Mining

Are there any Non-Coal Mining areas within 50m of the study site boundary? Yes

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Iron Ore (Bedded)	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

Past underground mine workings may occur. The rock types present in these areas are such that small mineral veins may be present on which it is possible that small scale mining has been undertaken and/or it is possible that limited underground extraction of other materials may have occurred. All such occurrences are likely to be of minor localised extent and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Are there any brine affected areas within 75m of the study site? No
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: 08708 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: Barnsley Metropolitan Borough Council
Phone: 01226 770770

Web: <http://www.barnsley.gov.uk/>

Address: PO Box 634, Barnsley, South Yorkshir, S70 9GG

Gemapping PLC

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



**Public Health
England**



**The Coal
Authority**



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England who retain the Copyright and Intellectual Property Rights for the data.

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This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

Standard Terms and Conditions

1 Definitions

In these terms and conditions unless the context otherwise requires:

“Beneficiary” means the person or entity for whose benefit the Client has obtained the Services.

“Client” means the party or parties entering into a Contract with Groundsure.

“Commercial” means any building or property which is not Residential.

“Confidential Information” means the contents of this Contract and all information received from the Client as a result of, or in connection with, this Contract other than

(i) information which the Client can prove was rightfully in its possession prior to disclosure by Groundsure and

(ii) any information which is in the public domain (other than by virtue of a breach of this Contract).

“Support Services” means Support Services provided by Groundsure including, without limitation, interpreting third party and in-house environmental data, providing environmental support advice, undertaking environmental audits and assessments, Site investigation, Site monitoring and related items.

“Contract” means the contract between Groundsure and the Client for the provision of the Services, and which shall incorporate these terms and conditions, the Order, and the relevant User Guide.

“Third Party Data Provider” means any third party providing Third Party Content to Groundsure.

“Data Reports” means reports comprising factual data with no accompanying interpretation.

“Fees” has the meaning set out in clause 5.1.

“Groundsure” means Groundsure Limited, a company registered in England and Wales under number 03421028.

“Groundsure Materials” means all materials prepared by Groundsure and provided as part of the Services, including but not limited to Third Party Content, Data Reports, Mapping, and Risk Screening Reports.

“Intellectual Property” means any patent, copyright, design rights, trade or service mark, moral rights, data protection rights, know-how or trade mark in each case whether registered or not and including applications for the same or any other rights of a similar nature anywhere in the world.

“Mapping” means a map, map data or a combination of historical maps of various ages, time periods and scales.

“Order” means an electronic, written or other order form submitted by the Client requesting Services from Groundsure in respect of a specified Site.

“Ordnance Survey” means the Secretary of State for Business, Innovation and Skills, acting through Ordnance Survey, Adanac Drive, Southampton, SO16 0AS, UK.

“Order Website” means the online platform through which Orders may be placed by the Client and accepted by Groundsure.

“Report” means a Risk Screening Report or Data Report for Commercial or Residential property.

“Residential” means any building or property used as or intended to be used as a single dwelling.

“Risk Screening Report” means a risk screening report comprising factual data with an accompanying interpretation by Groundsure.

“Services” means any Report, Mapping and/or Support Services which Groundsure has agreed to provide by accepting an Order pursuant to clause 2.6.

“Site” means the area of land in respect of which the Client has requested Groundsure to provide the Services.

“Third Party Content” means data, database information or other information which is provided to Groundsure by a Third Party Data Provider.

“User Guide” means the user guide, as amended from time to time, available upon request from Groundsure and on the website (www.Groundsure.com) and forming part of this Contract.

2 Scope of Services, terms and conditions, requests for insurance and quotations

2.1 Groundsure agrees to provide the Services in accordance with the Contract.

2.2 Groundsure shall exercise reasonable skill and care in the provision of the Services.

2.3 Subject to clause 7.3 the Client acknowledges that it has not relied on any statement or representation made by or on behalf of Groundsure which is not set out and expressly agreed in writing in the Contract and all such statements and representations are hereby excluded to the fullest extent permitted by law.

2.4 The Client acknowledges that terms and conditions appearing on a Client’s order form, printed stationery or other communication, or any terms or conditions implied by custom, practice or course of dealing shall be of no effect, and that this Contract shall prevail over all others in relation to the Order.

2.5 If the Client or Beneficiary requests insurance in conjunction with or as a result of the Services, Groundsure shall use reasonable endeavours to recommend such insurance, but makes no warranty that such insurance shall be available from insurers or that it will be offered on reasonable terms. Any insurance purchased by the Client or Beneficiary shall be subject solely to the terms of the policy issued by insurers and Groundsure will have no liability therefor. In addition you acknowledge and agree that Groundsure does not act as an agent or broker for any insurance providers. The Client should take (and ensure that the Beneficiary takes) independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.

2.6 Groundsure’s quotations or proposals are valid for a period of 30 days only unless an alternative period of time is explicitly stipulated by Groundsure. Groundsure reserves the right to withdraw any quotation or proposal at any time before an Order is accepted by Groundsure. Groundsure’s acceptance of an Order shall be binding only when made in writing and signed by Groundsure’s authorised representative or when accepted through the Order Website.

3 The Client’s obligations

3.1 The Client shall comply with the terms of this Contract and

(i) procure that the Beneficiary or any third party relying on the Services complies with and acts as if it is bound by the Contract and

(ii) be liable to Groundsure for the acts and omissions of the Beneficiary or any third party relying on the Services as if such acts and omissions were those of the Client.

3.2 The Client shall be solely responsible for ensuring that the Services are appropriate and suitable for its and/or the Beneficiary’s needs.

3.3 The Client shall supply to Groundsure as soon as practicable and without charge all requisite information (and the Client warrants that such information is accurate, complete and appropriate), including without limitation any environmental information relating to the Site and shall give such assistance as Groundsure shall reasonably require in the provision of the Services including, without limitation, access to the Site, facilities and equipment.

3.4 Where the Client’s approval or decision is required to enable Groundsure to carry out work in order to provide the Services, such approval or decision shall be given or procured in reasonable time and so as not to delay or disrupt the performance of the Services.

3.5 Save as expressly permitted by this Contract the Client shall not, and shall procure that the Beneficiary shall not, re-sell, alter, add to, or amend the Groundsure Materials, or use the Groundsure Materials in a manner for which they were not intended. The Client may make the Groundsure Materials available to a third party who is considering acquiring some or all of, or providing funding in relation to, the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

3.6 The Client is responsible for maintaining the confidentiality of its user name and password if using the Order Website and the Client acknowledges that Groundsure accepts no liability of any kind for any loss or damage suffered by the Client as a consequence of using the Order Website.

4 Reliance

4.1 The Client acknowledges that the Services provided by Groundsure consist of the presentation and analysis of Third Party Content and other content and that information obtained from a Third Party Data Provider cannot be guaranteed or warranted by Groundsure to be reliable.

4.2 In respect of Data Reports, Mapping and Risk Screening Reports, the following classes of person and no other are entitled to rely on their contents;

(i) the Beneficiary,

(ii) the Beneficiary’s professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate),

(iv) the first purchaser or first tenant of the Site, and

(v) the professional advisers and lenders of the first purchaser or tenant of the Site.

4.3 In respect of Support Services, only the Client, Beneficiary and parties expressly named in a Report and no other parties are entitled to rely on its contents.

4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise expressly agreed in writing, no other person or entity of any kind is entitled to rely on any Services or Report issued or provided by Groundsure. Any party considering such Reports and Services does so at their own risk.

5 Fees and Disbursements

5.1 Groundsure shall charge and the Client shall pay fees at the rate and

frequency specified in the written proposal, Order Website or Order acknowledgement form, plus (in the case of Support Services) all proper disbursements incurred by Groundsure. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services (together "Fees").

5.2 The Client shall pay all outstanding Fees to Groundsure in full without deduction, counterclaim or set off within 30 days of the date of Groundsure's invoice or such other period as may be agreed in writing between Groundsure and the Client ("Payment Date"). Interest on late payments will accrue on a daily basis from the Payment Date until the date of payment (whether before or after judgment) at the rate of 8% per annum.

5.3 The Client shall be deemed to have agreed the amount of any invoice unless an objection is made in writing within 28 days of the date of the invoice. As soon as reasonably practicable after being notified of an objection, without prejudice to clause 5.2 a member of Groundsure's management team will contact the Client and the parties shall then use all reasonable endeavours to resolve the dispute within 15 days.

6 Intellectual Property and Confidentiality

6.1 Subject to

(i) full payment of all relevant Fees and

(ii) compliance with this Contract, the Client is granted (and is permitted to sub-licence to the Beneficiary) a royalty-free, worldwide, non-assignable and (save to the extent set out in this Contract) non-transferable licence to make use of the Groundsure Materials.

6.2 All Intellectual Property in the Groundsure Materials are and shall remain owned by Groundsure or Groundsure's licensors (including without limitation the Third Party Data Providers) the Client acknowledges, and shall procure acknowledgement by the Beneficiary of, such ownership. Nothing in this Contract purports to transfer or assign any rights to the Client or the Beneficiary in respect of such Intellectual Property.

6.3 Third Party Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.

6.4 The Client shall, and shall procure that any recipients of the Groundsure Materials shall:

(i) not remove, suppress or modify any trade mark, copyright or other proprietary marking belonging to Groundsure or any third party from the Services;

(ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;

(iii) not create any product or report which is derived directly or indirectly from the Services (save that those acting in a professional capacity to the Beneficiary may provide advice based upon the Services);

(iv) not combine the Services with or incorporate such Services into any other information data or service;

(v) not reformat or otherwise change (whether by modification, addition or enhancement), the Services (save that those acting for the Beneficiary in a professional capacity shall not be in breach of this clause 6.4(v) where such reformatting is in the normal course of providing advice based upon the Services);

(vi) where a Report and/or Mapping contains material belonging to Ordnance Survey, acknowledge and agree that such content is protected by Crown Copyright and shall not use such content for any purpose outside of receiving the Services; and

(vii) not copy in whole or in part by any means any map prints or run-on copies containing content belonging to Ordnance Survey (other than that contained within Ordnance Survey's OS Street Map) without first being in possession of a valid Paper Map Copying Licence from Ordnance Survey,

6.5 Notwithstanding clause 6.4, the Client may make reasonable use of the Groundsure Materials in order to advise the Beneficiary in a professional capacity. However, Groundsure shall have no liability in respect of any advice, opinion or report given or provided to Beneficiaries by the Client.

6.6 The Client shall procure that any person to whom the Services are made available shall notify Groundsure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

7.Liability: Particular Attention Should Be Paid To This Clause

7.1 This Clause 7 sets out the entire liability of Groundsure, including any liability for the acts or omissions of its employees, agents, consultants, subcontractors and Third Party Content, in respect of:

(i) any breach of contract, including any deliberate breach of the Contract by Groundsure or its employees, agents or

subcontractors;

(ii) any use made of the Reports, Services, Materials or any part of them; and

(iii) any representation, statement or tortious act or omission (including negligence) arising under or in connection with the Contract.

7.2 All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.

7.3 Nothing in the Contract limits or excludes the liability of the Supplier for death or personal injury resulting from negligence, or for any damage or liability incurred by the Client or Beneficiary as a result of fraud or fraudulent misrepresentation.

7.4 Groundsure shall not be liable for

(i) loss of profits;

(ii) loss of business;

(iii) depletion of goodwill and/or similar losses;

(iv) loss of anticipated savings;

(v) loss of goods;

(vi) loss of contract;

(vii) loss of use;

(viii) loss or corruption of data or information;

(ix) business interruption;

(x) any kind of special, indirect, consequential or pure economic loss, costs, damages, charges or expenses;

(xi) loss or damage that arise as a result of the use of all or part of the Groundsure Materials in breach of the Contract;

(xii) loss or damage arising as a result of any error, omission or inaccuracy in any part of the Groundsure Materials where such error, omission or inaccuracy is caused by any Third Party Content or any reasonable interpretation of Third Party Content;

(xiii) loss or damage to a computer, software, modem, telephone or other property; and

(xiv) loss or damage caused by a delay or loss of use of Groundsure's internet ordering service.

7.5 Groundsure's total liability in relation to or under the Contract shall be limited to £10 million for any claim or claims.

7.6 Groundsure shall procure that the Beneficiary shall be bound by limitations and exclusions of liability in favour of Groundsure which accord with those detailed in clauses 7.4 and 7.5 (subject to clause 7.3) in respect of all claims which the Beneficiary may bring against Groundsure in relation to the Services or other matters arising pursuant to the Contract.

8 Groundsure's right to suspend or terminate

8.1 If Groundsure reasonably believes that the Client or Beneficiary has not provided the information or assistance required to enable the proper provision of the Services, Groundsure shall be entitled to suspend all further performance of the Services until such time as any such deficiency has been made good.

8.2 Groundsure shall be entitled to terminate the Contract immediately on written notice in the event that:

(i) the Client fails to pay any sum due to Groundsure within 30 days of the Payment Date; or

(ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an administration order made against it or if a receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved; or

(iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or

(iv) the Client or the Beneficiary breaches any term of the Contract (including, but not limited to, the obligations in clause 4) which is incapable of remedy or if remediable, is not remedied within five days of notice of the breach.

9. Client's Right to Terminate and Suspend

9.1 Subject to clause 10.1, the Client may at any time upon written notice terminate or suspend the provision of all or any of the Services.

9.2 In any event, where the Client is a consumer (and not a business) he/she hereby expressly acknowledges and agrees that:

(i) the supply of Services under this Contract (and therefore the performance of this Contract) commences immediately upon Groundsure's acceptance of the Order; and

(ii) the Reports and/or Mapping provided under this Contract are

- (a) supplied to the Client's specification(s) and in any event
- (b) by their nature cannot be returned.

10 Consequences of Withdrawal, Termination or Suspension

10.1 Upon termination of the Contract:

(i) Groundsure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client and/or Beneficiary any property of the Client and/or Beneficiary in Groundsure's possession or control; and

(ii) the Client shall pay to Groundsure all and any Fees payable in respect of the performance of the Services up to the date of termination or suspension. In respect of any Support Services provided, the Client shall also pay Groundsure any additional costs incurred in relation to the termination or suspension of the Contract.

11 Anti-Bribery

11.1 The Client warrants that it shall:

(i) comply with all applicable laws, statutes and regulations relating to anti-bribery and anti-corruption including but not limited to the Bribery Act 2010;

(ii) comply with such of Groundsure's anti-bribery and anti-corruption policies as are notified to the Client from time to time; and

(iii) promptly report to Groundsure any request or demand for any undue financial or other advantage of any kind received by or on behalf of the Client in connection with the performance of this Contract.

11.2 Breach of this Clause 11 shall be deemed a material breach of this Contract.

12 General

12.1 The Mapping contained in the Services is protected by Crown copyright and must not be used for any purpose other than as part of the Services or as specifically provided in the Contract.

12.2 The Client shall be permitted to make one copy only of each Report or Mapping Order. Thereafter the Client shall be entitled to make unlimited copies of the Report or Mapping Order only in accordance with an Ordnance Survey paper map copy license available through Groundsure.

12.3 Groundsure reserves the right to amend or vary this Contract. No amendment or variation to this Contract shall be valid unless signed by an authorised representative of Groundsure.

12.4 No failure on the part of Groundsure to exercise, and no delay in exercising, any right, power or provision under this Contract shall operate as a waiver thereof.

12.5 Save as expressly provided in this Contract, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.

12.6 The Secretary of State for Business, Innovation and Skills ("BIS") or BIS' successor body, as the case may be, acting through Ordnance Survey may enforce a breach of clause 6.4(vi) and clause 6.4(vii) of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.

12.7 Groundsure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:

(i) the Client or Beneficiary's failure to provide facilities, access or information;

(ii) fire, storm, flood, tempest or epidemic;

(iii) Acts of God or the public enemy;

(iv) riot, civil commotion or war;

(v) strikes, labour disputes or industrial action;

(vi) acts or regulations of any governmental or other agency;

(vii) suspension or delay of services at public registries by Third Party Data Providers;

(viii) changes in law; or

(ix) any other reason beyond Groundsure's reasonable control.

In the event that Groundsure is prevented from performing the Services (or any part thereof) in accordance with this clause 12.6 for a period of not less than 30 days then Groundsure shall be entitled to terminate this Contract immediately on written notice to the Client.

12.8 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

12.9 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email (save to the extent such day is not a working day where it shall be deemed to have been delivered on the next working day) and on the second working day after the day of posting if sent by first class post.

12.10 The Contract constitutes the entire agreement between the parties and shall supersede all previous arrangements between the parties relating to the subject matter hereof.

12.11 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.

12.12 This Contract shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with this Contract shall be subject to the exclusive jurisdiction of the English courts.

12.13 Groundsure is an executive member of the Council of Property Search Organisation (CoPSO) and has signed up to the Search Code administered by the Property Codes Compliance Board (PCCB). All Risk Screening Reports shall be supplied in accordance with the provisions of the Search Code.

12.14 If the Client or Beneficiary has a complaint about the Services, written notice should be given to the Compliance Officer at Groundsure who will respond in a timely manner. In the event you are not satisfied with Groundsure's complaints handling process or you are unable to resolve the complaint, at your discretion you may refer the complaint to The Property Ombudsman Scheme at the following URL/email: website www.tpos.co.uk or email: admin@tpos.co.uk

12.15 The Client agrees that it shall, and shall procure that each Beneficiary shall, treat in confidence all Confidential Information and shall not, and shall procure that each Beneficiary shall not (i) disclose any Confidential Information to any third party other than in accordance with the terms of this Contract; and (ii) use Confidential Information for a purpose other than the exercise of its rights and obligations under this Contract. Subject to clause 6.6, nothing shall prevent the Client or any Beneficiary from disclosing Confidential Information to the extent required by law. © Groundsure Limited June 2013