

PHASE I ENVIRONMENTAL ASSESSMENT



**LAND ADJACENT TO
LONGHOPE
ROSS ROAD
LEDBURY
HR8 2LP**

PREPARED FOR MRS EILEEN FLETCHER

DOCUMENT CONTROL RECORD

Project Name: Fletcher, Ledbury

Project Reference: P18592

Report Title: Phase I Environmental Assessment


Report Reference: P18592/PI

Prepared For: Mrs Eileen Fletcher


Client Reference: N/A


Site Address: Land Adjacent to Longhope, Ross Road, Ledbury, HR8 2LP

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EXECUTIVE SUMMARY

Site Information

The site is located at approximate National Grid Reference SO 69755 36621 to the south west of Ledbury town centre and occupies an approximate area of 0.41 hectares. The site is currently an unoccupied field laid to grass used for grazing purposes.

The northern boundary of the development site cuts across the grassed field and a small unnamed stream and pond surrounded by rushes and trees is located close to the north of the development site with the pond bordering the north eastern corner of the site. The south eastern site boundary is formed of a wooden post and barbed wire and stock fence running parallel with a footpath and the A449 'Ross Road'. The eastern boundary of the development site is lined with bushes and trees including species such as ash, elder, sycamore and oak. Beyond the eastern side boundary is the neighbouring Ledbury Rugby Football Club car park and grounds, and an indoor rifle range. The western boundary of the development site again cuts across the grassed field and beyond the boundary is a small polytunnel and the residential property of Longhope.

Development Plans

Planning permission is being sought for the construction of 4 no. new dwellings on the site (Application No. 163122/CE).

Historical Development

The development site has remained unchanged since the earliest map of 1886 which shows it as an open field. The immediately surrounding land comprises of farmland, recreational grounds and residential areas to the north east.

The closest development to the site has been the indoor rifle range and Ledbury football rugby club which border the site to the east. Over the period of the historical maps reviewed, the town of Ledbury has developed significantly to the north east of the site. Potentially contaminative land uses associated with the growth of Ledbury include a sewage treatment works (~500m to the NE of the site), a gasworks (~800m from the site), a 'works' factory (~600 m to the NW of the site), an industrial estate (200m to the east of the site) and an historic landfill (~209-500m to the NE of the site).

Environmental Sensitivity

The site is shown to be underlain by solid geology of the Raglan Mudstone Formation comprising siltstone and mudstone (interbedded). There are no superficial deposits mapped below the site.

The solid geology of the Raglan Mudstone Formation is classified as a 'Secondary A Aquifer' described as a low productivity aquifer, that is highly indurated argillaceous rock with limited groundwater.

There are 2 no. water wells approximately 680 m and 750 m to the north-west of the site at Fairtree Farm. There are no groundwater source protection zones located within 1 km of the site.

The nearest surface water feature is an unnamed stream located near the northern site boundary with a small pond in the northern corner. The River Leadon is located approximately 200 m to the east of the site which flows from north to south.

**Environmental
Permits, Incidents
and Registers**

There are no records of any IPC Authorisations within 500 m of the site.

There are a total of 5 no. Licenced Discharge Consents located within 250 m of the site. There is also a recorded pollution incident situated on the River Leadon.

Landfill & Waste

There is 1 no. EA recorded Historic Landfill located approximately 209 m to the north east of the site. Landfill records indicate that the waste type at the site was classified as 'inert, commercial and household'.

**Environmental
Risk Assessment**

There are no sources of contamination identified on the development site itself.

Contaminants associated with the nearest off site sources including the landfill and industrial estate to the east/north east of the site could include heavy metals and organic contaminants including aliphatic and aromatic hydrocarbons, organolead compounds and chlorinated solvents. There is also the potential for ground gases to be generated from the landfill site and from any made ground associated with the industrial estate.

Given the distance to the off-site sources of contamination, the fact that the sites are located on the opposite side of the River Leadon to the development site, and the mudstone nature of the geology underlying the site, the probability of any impact to the development site is considered unlikely.

A preliminary qualitative risk assessment identified a very low risk to the health of site users via the direct and indirect ingestion of soil and dust. There is also considered to be a very low risk to construction workers employed during groundworks via direct and indirect soil and dust ingestion. The risk assessment also identified a low risk to site users and construction workers associated with exposure to ground gases.

Recommendations

Given the absence of any on-site contaminant sources and given the very low risk and low risks identified to future users and construction workers associated with the off-site sources of contamination, no further investigation or assessment works are considered necessary in relation to the proposed development of the site.

A copy of this Phase I Environmental Assessment report should be provided to the Local Planning Authority.

This executive summary is intended to provide an outline of the site assessment and is not intended to provide a definitive analysis of the information obtained.

1.0 INTRODUCTION

1.1 Instruction

1.1.1 Oracle Environmental Experts Ltd (OEE) were commissioned by Mrs Wendy McNally, on behalf of Mrs Eileen Fletcher, to undertake a Phase I Environmental Assessment of a site known as 'Land Adjacent to Longhope, Ross Road, Ledbury, HR8 2LP'.

1.1.2 The site is currently a grassed field grazed by ponies. The purpose of this report is to advise on any potential land contamination issues associated with the proposed development of 4 no. dwellings on the site.

1.2 Information Sources

1.2.1 Derrick Whittaker Architect (Mr D Whittaker) provided the following information:

- Herefordshire Council Pre-Application Advice – Application Number 163122/CE;
- Location & Block Plans – Drawing Reference 16_322/01;
- Proposed Site Plan – Drawing Reference 16_322/SK01;
- House Type 1 Floor Plans – Drawing Reference 16_322/SK02;
- House Type 1 Elevations – Drawing Reference 16_322/SK03;
- House Type 1 Floor Plans – Drawing Reference 16_322/SK04; and
- House Type 1 Elevations – Drawing Reference 16_322/SK05.

1.2.2 OEE have consulted the following sources of information in relation to the site. The reports are included in the Appendices to the report:

- Groundsure Enviro Insight Report GS-5316214 dated 10 August 2018.
- Groundsure Enviro Insight Report GS-5316215 dated 10 August 2018.
- Groundsure Insights dated 10 August 2018

1.2.3 This report has been prepared considering the requirements of appropriate UK guidance including the Environment Agency CLR 11¹ document and the National Planning Policy Framework (2018)².

1.3 Methodology

1.3.1 The works undertaken by OEE comprised the following:

¹ Defra and Environment Agency (2004) Model Procedures for the Management of Land Contamination. Contaminated Land Report 11.

² Ministry of Housing Communities and Local; Government (2018) National Planning Policy Framework.

- A review of the regional geological, hydrogeological and hydrological information to determine the environmental sensitivity of the site;
- A review of the historical development of the site and surrounding area to determine the potential for historic contamination issues;
- A brief site visit to obtain photographs of the site and surrounding area;
- The development of a preliminary conceptual site model and qualitative risk assessment to identify potential contaminant sources, pathways and receptors and any pollutant linkages;
- Recommendations for further works if required; and,
- Provision of a report documenting the above.

1.4 Limitations

1.4.1 Limitations to the scope of this report are presented in Appendix E.

2.0 SITE INFORMATION

2.1 Site Location

2.1.1 The site is located at approximate National Grid Reference SO 69755 36621, approximately 1.4 kilometres (km) to the south-west of Ledbury town centre, and approximately 19 km to the east of Hereford city centre in Herefordshire.

2.2 Site Description and Current Use

2.2.1 OEE attended site on 14 August 2018 to conduct a walkover of the site which included a visual inspection of the site and surrounding area. A photographic record of the site walkover is presented as Appendix A.

2.2.2 The development site is a grassed field currently grazed by two ponies. The field has a barbed wire and stock fence with wooden posts bordering the pavement and A449 Ross Road to the south.

2.3 Site Boundaries

2.3.1 The northern boundary of the development site cuts across the grassed field and a small unnamed stream and pond surrounded by rushes and trees is located close to the north of the development site with the pond bordering the north eastern corner of the site.

2.3.2 The south eastern site boundary is formed of a wooden post and barbed wire and stock fence running parallel with a footpath and the A449 'Ross Road'. On the opposite side of the A449 is an open field used for agricultural shows and car boot sales.

2.3.3 The eastern boundary of the development site is lined with bushes and trees including species such as ash, elder, sycamore and oak. Beyond the eastern side boundary is the neighbouring Ledbury Rugby Football Club car park and grounds, and an indoor rifle range.

2.3.4 The western boundary of the development site again cuts across the grassed field and beyond the boundary is a small polytunnel and the residential property of Longhope.

2.4 Surrounding Area

2.4.1 A summary of the surrounding land uses is presented in Table 1 below.

Table 1. Summary of Surrounding Land Uses		
Direction	Land Use	Distance (m)
East	Indoor Rifle Range	8
	Ledbury Rugby Football Club	10
West	Residential property (Longhope)	40
	Leadon House Hotel	120
South	Ross Road	5
North	Open fields	670

3.0 HISTORICAL DEVELOPMENT

3.1 Site

3.1.1 The earliest available historical map from 1886 shows the development site as part of managed open land considered likely to be of agricultural use, with clearly marked field boundaries.

3.1.2 The development site remains unchanged since as there are no features observed within the site on any of the later published maps (up to 2014).

3.2 Surrounding Area

3.2.1 The earliest available historical map from 1886 shows the surrounding area to be predominantly open land considered likely to be of agricultural use, with clearly marked field boundaries. There are a number of farms identified in the surrounding area including Fairtree Farm to the north, Flights Farm to the north-west, Hill House Farm to the south-west, Orlham Farm and Siddington Farm to the south, Highbridge Farm and Hazle Farm to the south-east. There is a large area of woodland to the north west encompassing Redhill Wood, and Highbridge Coppice and Upper Highbridge Coppice to the south east. Approximately 125 m to

the south west there is a small area of woodland where the 'The Holt' is located. To the east of the site, just beyond the River Leadon, the Great Western Railway Gloucester and Ledbury Branch cuts through the landscape from north to south. There are areas occupied by residential land use which includes Newtown, Happy Land and Ledbury to the north east. To the south of Newtown and Happy Land areas of industrial use have developed including a gas works (~700 m NE of the site) and a brick works (~800m NE of the site). There is also a cemetery approximately 600 m from the site. A separate Brick and Tile works is located 625 m to the north-west. Hazel Corn Mill is situated 750 m to the south east. There is a brewery shown on the outskirts of Ledbury approximately 1 km NE of the site.

- 3.2.2 The 1903 and 1905 editions show areas of the surrounding land are largely occupied by open land considered likely for agricultural use. On the 1903 edition residential properties of 'The Laurels' and 'Southlea' also appear 125 m to the south west within the wooden area adjacent to 'The Holt'. The residential areas of Ledbury, Newtown and Happy Land are still occupying a large area to the north east. A total of 2 no. gravel pits are observed approximately 500 m and 750 m to the north east of the site. Sewage tanks are also present between the locations of the gas works and the gravel pit at 500 m and approximately 100 m from the River Leadon. The Gloucester and Ledbury Railway is also still well established to the east and doesn't appear to change until the 1965 version where it is described as a 'Dismantled Railway'.
- 3.2.3 The 1926 edition shows the Brick and Tile works located 625 m to the north-west change to a 'Preserve Works'. Tanks are present approximately 625 m to the south west close to Hill House Farm on the 1926 edition.
- 3.2.4 The surrounding land appears to be unchanged until the 1938 version where the residential area in the north east has expanded and connected each area together. An electricity works has appeared within Ledbury as well as a school, a hotel, chapels and a brewery. The gravel pits are no longer present that were identified close to the sewage tanks. The gas works is no longer marked on the 1926 edition but the infrastructure of the gasworks appears to remain in place until the 2002 edition when the gasworks site appears to have been redeveloped as residential housing.
- 3.2.5 The 1971 edition shows the expansion of Ledbury Town with new roads developed such as New Street (B4216) which connects to the A449. To the right of New Street a football ground, cricket ground and a rugby football ground has established in the sport fields below the cemetery (600m to the north-east of the site). Rough grassland can be seen to the west of New Street along with the dismantled railway, tanks, sewage works and filter beds. The tanks and filter beds are associated with a sewage treatment works which remains in operation today. A scrap metal yard is now shown approximately 750 m to the south east of the site.
- 3.2.6 On the 1985 edition sewage tanks are now present close to Fairtree Farm to the north-west of the site. A factory now exists approximately 800 m to the north of the site. Ledbury itself has expanded further again to the east and continues to grow throughout the 1980's and early 1990's. On the 1998-2002 edition the development of the A417 that connects 2 no.

roundabouts from north west to south east is noted. An industrial estate has formed adjacent to the most southern roundabout approximately 300m to the east of the site.

- 3.2.7 The most recent maps display playing fields and sport fields to the north east of the site (e.g. 2002 edition). Water reclamation works also appear to the east of the River Leadon, where the filter beds and sewage works were seen in previous versions. A garden centre forms part of a number of buildings to the west of the site seen on the 2010 version. From publicly available mapping, the 'works' located approximately 600 m to the NNE of the site adjacent to Fairtree Farm is occupied by Universal Beverages.
- 3.2.8 The most recent local development, not shown on the available maps, is the development of new grounds for the Ledbury Cricket Club which is located approximately 155m to the south west of the site.

4.0 ENVIRONMENTAL SENSITIVITY

4.1 Geology

- 4.1.1 The British Geological Survey (BGS) GeoIndex resource has been consulted in conjunction with the enclosed Groundsure report to determine the geological succession beneath the site.
- 4.1.2 The site is shown to be underlain by solid geology of the Raglan Mudstone Formation comprising siltstone and mudstone (interbedded). There are no superficial deposits mapped beneath the site.
- 4.1.3 The site is classified as having very low potential for shrinking or swelling clay ground stability hazards.
- 4.1.4 The site is classified as exhibiting very low potential for collapsible ground stability hazards and no potential for compressible ground or ground dissolution stability hazards. The site is classified as having very low potential for landslide ground stability hazards and very low running sand ground stability hazard.
- 4.1.5 The site is in a radon affected area, as between 1 and 3% of properties are above the action level. No radon protective measures are necessary in the construction of new dwellings or extensions.

4.2 Hydrogeology

- 4.2.1 The Environment Agency (EA) and the enclosed Groundsure Insight report have been consulted to determine the hydrogeological regime beneath the site.

4.2.2 The solid geology of the Raglan Mudstone Formation is classified as a 'Secondary A Aquifer' described as a low productivity aquifer that is a highly indurated argillaceous rock with limited groundwater.

4.2.3 According to the desk-top information obtained, there are 2 no. water wells approximately 680 m and 750 m to the north-west of the site at Fairtree Farm.

4.2.4 There are no groundwater source protection zones located within 1 km of the site.

4.3 Hydrology

4.3.1 The nearest surface water feature is an unnamed stream located to the north of the northern site boundary which is connected to a small pond which is located adjacent to the north eastern corner of the site. The River Leadon is located approximately 200 m to the east of the site which flows in a north to south direction. There are several unnamed ponds located within a 1 km radius.

4.4 Flood Risk

4.4.1 According to the Groundsure EnviroInsight Report the development site is not located within a mapped floodplain.

4.4.2 An EA Zone 2 floodplain is located 16 m to the east of the site which is described as having an estimated annual probability of flooding between 0.1% and 1% from rivers. The Risk of Flooding from Rivers (RoFRS) is classified as high.

4.4.3 There is also an EA Zone 3 floodplain mapped approximately 62 m to the south east of the site which means that the extent of a river flood with a 1% or greater chance of occurring in any year with a 0.5% or greater chance of occurring in any year.

4.5 Ecology

4.5.1 The site is not located within a Site of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Special Area of Conservation (SAC), Special Protection Area (SPA), Ramsar site, Local Nature Reserve (LNR), World Heritage Site or National Park.

4.5.2 The Malvern Hills Area of Outstanding Natural Beauty (AONB) is located approximately 1365 m to the east of the site.

4.5.3 There are no records of ancient woodlands within 500 m of the site.

4.5.4 The site is located within a Nitrate Vulnerable Zone (NVZ).

5.0 ENVIRONMENTAL DATABASE RECORDS

5.1 Environmental Permits, Incidents and Registers

- 5.1.1 There are no records of Integrated Pollution Control (IPC) Authorisations within 500m of the site.
- 5.1.2 There are a total of 5 no. Licensed Discharge Consents located within 250m of the site. There is also a recorded pollution incident situated on the River Leadon approximately 200 m from the edge of the site. The incident occurred on 6 August 2018 and involved the pollution of sewage material described as 'Crude Sewage' which resulted in a Category 2 (significant) water impact. There was no impact reported to land or air (Category 4).
- 5.1.3 There are a further 5 no. discharge consents within 500m of the site on various locations on the River Leadon. A further 4 no. pollution incidents are recorded within 500 m of the site. Each of the spill events are classified as Category 2 (significant) events to water impact, and no impact to land and air (Category 4).

5.2 Landfill and Waste Sites

- 5.2.1 There is 1 no. EA Historic Landfill area mapped at its closest point approximately 209 m to the east north east of the site. Landfill records indicate that the waste type at the site was classified as 'inert, commercial, household'. The operator was Ledbury Rural District Council and the site's license was issued in 31 December 1978 and was surrendered in 30 April 1994. The EnviroInsight map shows that the landfill site was located on the opposite side of the River Leadon to the development site and approximately less than 1% of the site is actually located within 250m of the development site.
- 5.2.2 There is a 'historic and planned waste site' located approximately 500 m to the north east of the site. This is located beyond the site detailed above and is indicated to be a waste transfer station.
- 5.3.3 There is a record of a non-operational landfill site 530 m NE of the development site at Jubilee Meadows, Gasworks Lane.

5.3 Current Land Use

- 5.3.1 The Groundsure EnviroInsight report identifies 3 no. current potentially contaminative industrial land uses within a 250 m radius of the site.
- 5.3.2 An indoor rifle range is located 8 m to the east which has been categorized as a sport complex. Approximately 185 m to the east there is a waste, storage, processing and disposal outfall classified as an infrastructure and facilities. A distribution and haulage centre is also located 189 m to the south.

6.0 ENVIRONMENTAL RISK ASSESSMENT

6.1 Introduction

6.1.1 The technical approach presented in CLR 11 is applicable to the development or redevelopment of land under the planning regime and provides a framework for applying a risk management process to the assessment of land affected by contamination.

6.1.2 Risk is defined in CLR 11 as 'a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence. In the context of land contamination there are three elements to risk:

- Contaminant (or source) – a substance in, on or under the land with the potential to cause harm or to cause pollution of controlled waters;
- Receptor – something that could be adversely affected by a contaminant such as people, an ecological system, property or a water body; and
- Pathway – a route or means by which a receptor can be exposed to, or affected by, a contaminant.

6.1.3 Each of the three elements can exist independently but a potential risk exists when a contaminant, pathway and receptor are 'linked' together and this is termed a 'pollutant linkage'. The initial phase of the risk management process is to establish the potential for the presence of pollutant linkages and to undertake a qualitative assessment of the risk posed by each pollutant linkage.

6.2 Potential Sources

6.2.1 On-Site

6.2.1.1 There are no historic or current potential sources of contamination on the development site itself.

6.2.2 Off Site

6.2.2.1 The following potential off-site sources of contamination have been identified within 250 m of the development site:

- Historic Landfill to the east-north-east of the site
- Industrial Estate to the east of the site.

6.2.2.2 There is a potential for contaminants such as heavy metals, as well as organic contaminants including aliphatic and aromatic hydrocarbons, organolead compounds and chlorinated

solvents associated with the use of these sites. There is also the potential for the generation of ground gases associated with the historic landfill site and any made ground on the industrial estate.

6.3 Potential Pathways

6.2.1 The following are considered potential pathways for contaminants to impact identified receptors:

- Direct dermal / dust contact and ingestion associated with wind borne contaminants.
- Lateral migration in shallow groundwater.

6.4 Potential Receptors

6.4.1 The following are considered potential receptors which could be impacted by the identified sources of contamination:

- Construction workers employed during the redevelopment and construction of the dwelling.
- Site users/occupants of the new dwellings.
- Building structure of the new dwelling proposed to be built.

6.5 Preliminary Conceptual Site Model and Qualitative Risk Assessment

6.5.1 The identification of potential contaminant sources, pathways and receptors is used to formulate a conceptual site model which identify potential pollutant linkages. The qualitative risk assessment process assigns a risk rating (very low risk to very high risk) to each pollutant linkage and identifies those which are considered to require further assessment and/or investigation.

6.5.2 The qualitative risk assessment has been carried out in accordance with the methodology presented in the NHBC and EA R&D 66 publication. The preliminary conceptual site model and qualitative risk assessment are presented in Table 2.

Table 2 – Preliminary Conceptual Site Model and Qualitative Risk Assessment

Source	Pathway	Receptor	Consequence	Probability	Risk Rating
Metals, organics and inorganics associated with the Inert, commercial and household waste landfill (209-500m from site) and Industrial Estate (200-400m from site)	Direct and indirect soil / dust ingestion	Human health (site users, visitors, occupants)	Minor	Unlikely	Very Low risk There are no on-site sources of contamination. Given the existing ground cover on the off-site sources, the potential sources of contamination are deemed unlikely to result in the generation of windborne contaminants of concern. Given the distance to the third party sites, it is unlikely that off-site contaminant sources (which are on the opposite side of the River Leadon) will impact the soils / groundwater beneath the site itself.
		Human health (construction workers)	Minor	Unlikely	Very Low risk There are no on site sources of contamination and it is unlikely that off-site contaminant sources (which are on the opposite side of the River Leadon) will impact the soils / groundwater that construction workers are likely to come into contact with on site.
	Lateral migration in unsaturated and saturated zone	Human Health (site users / occupants)	Minor	Unlikely	Very Low Risk There is a low risk of contaminant migration through the unsaturated zone towards the site. This is due to the site being located over 200m from the off-site sources of contamination and on the opposite side of the River Leadon.
		Building structures	Minor	Low Likelihood	Very Low Risk There is a low risk of contaminant migration through the unsaturated zone towards the site. This is due to the site being located over 200m from the off-site sources and on the opposite side of the River Leadon.

Table 2 – Preliminary Conceptual Site Model and Qualitative Risk Assessment

Source	Pathway	Receptor	Consequence	Probability	Risk Rating
					Therefore there is considered to be a very low risk to building structures.
Ground gases associated with the former landfill site and made ground associated with industrial estate (200-500m from the site)	Lateral migration in unsaturated zone	Human Health (site users / occupants / construction workers)	Medium	Unlikely	<p>Low Risk</p> <p>The geology beneath the site is a mudstone and the landfill site and industrial estate are located over 200m from the site on the opposite side of the River Leadon. It is considered unlikely that grounds gases could migrate through the unsaturated zone to impact the development site.</p>

7.0 CONCLUSIONS AND RECOMMENDATIONS

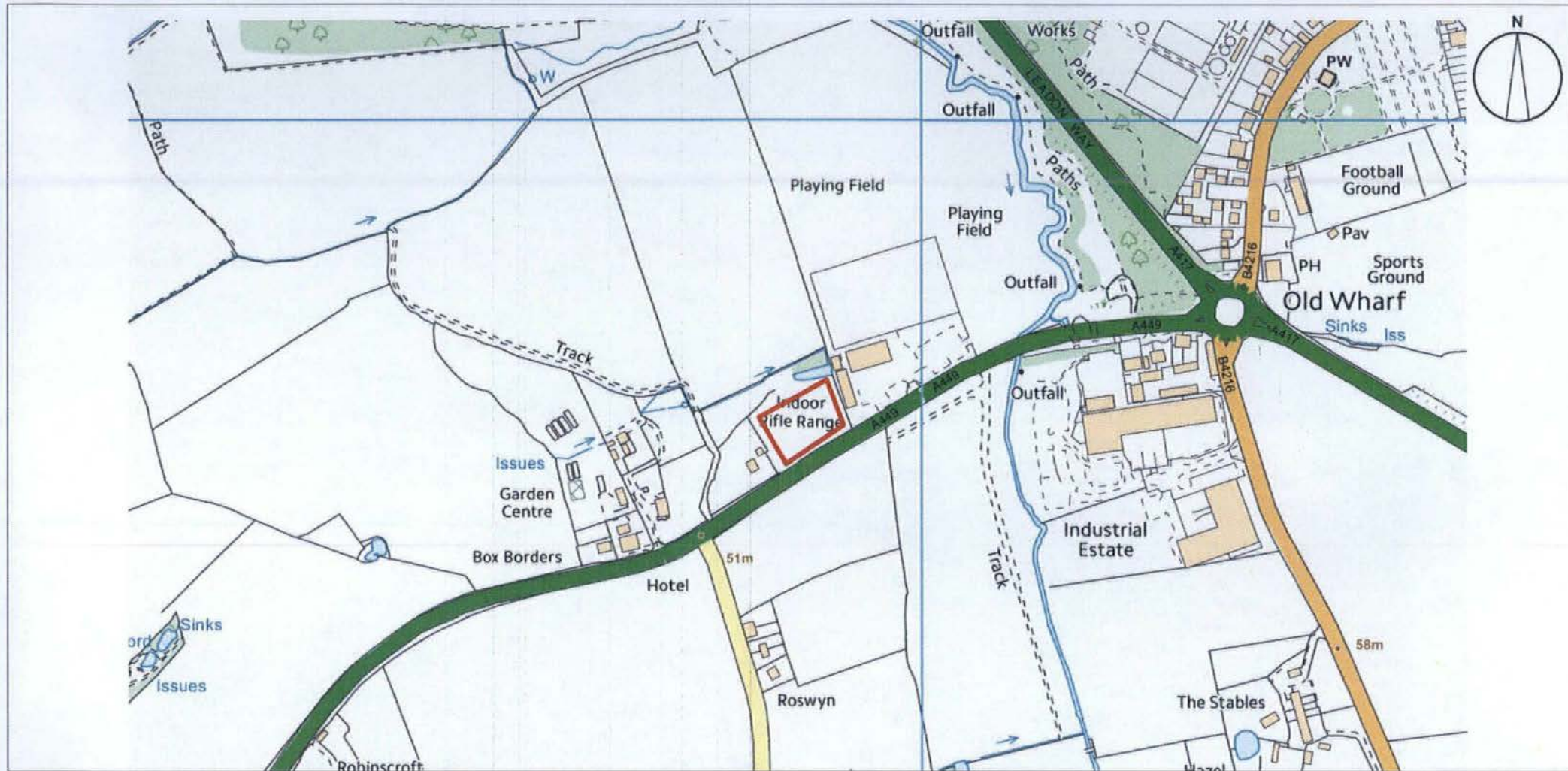
7.1 Conclusions

- 7.1.1 The development site occupies an approximate area of 0.41 hectares and is currently used for agricultural purposes. The site is a grassed field grazed by ponies and has remained unchanged since the earliest available OS map (1886). A site walkover survey did not identify any evidence of contamination at the surface.
- 7.1.2 The site is underlain by solid geology comprising the Raglan Mudstone Formation. There are no superficial deposits recorded beneath the site.
- 7.1.3 The solid geology is classified as a 'Secondary A Aquifer' described as a 'low productivity aquifer that is highly indurated argillaceous rock with limited groundwater'.
- 7.1.4 The nearest surface water feature is an unnamed stream which runs along the northern site boundary. The River Leadon is located approximately 200m to the east of the site and flows in a north-south direction.
- 7.1.5 There are considered to be no potential sources of contamination on the development site itself. The potential contaminant sources off site include those relating to a historic landfill which at its closest point is approximately 209 m to the east-north-east of the site and an industrial estate located at its closest point approximately 200 m to the east of the site. The landfill is now largely occupied by a picnic area / country park.
- 7.1.6 The potential contaminants associated with the off site sources include those associated with the landfilling of inert, commercial and household waste between 209 and 500m from the site. The license for the historic landfill site ran from 1978 to 1994. The industrial estate to the east of the site is still in operation today. Contaminants associated with these sites could include heavy metals and organic contaminants including aliphatic and aromatic hydrocarbons, organolead compounds and chlorinated solvents. There is also the potential for ground gases to be generated from the landfill site and from any made ground associated with the industrial estate.
- 7.1.7 Given the distance to the off-site sources of contamination, the fact that the sites are located on the opposite side of the River Leadon to the development site, and the mudstone nature of the geology underlying the site, the probability of any impact to the development site is considered unlikely.
- 7.1.8 A preliminary qualitative risk assessment identified a very low risk to the health of site users via the direct and indirect ingestion of soil and dust. There is also considered to be a very low risk to construction workers employed during groundworks via direct and indirect soil and dust ingestion. The risk assessment also identified a low risk to site users and construction workers associated with exposure to ground gases.

7.2 Recommendations

- 7.2.1 Given the absence of any on-site contaminant sources and given the very low risk and low risks identified to future users and construction workers associated with the off-site sources of contamination, no further investigation or assessment works are considered necessary in relation to the proposed development of the site.
- 7.2.2 A copy of this Phase I Environmental Assessment report should be provided to the Local Planning Authority.

APPENDIX A - FIGURES AND PLANS



Site Boundary

BW	AB	0
Drawn by	Checked by	Rev

PROJECT
Fletcher, Ledbury

PROJECT REF.
P18592

TITLE
Figure 1 Site Location Plan

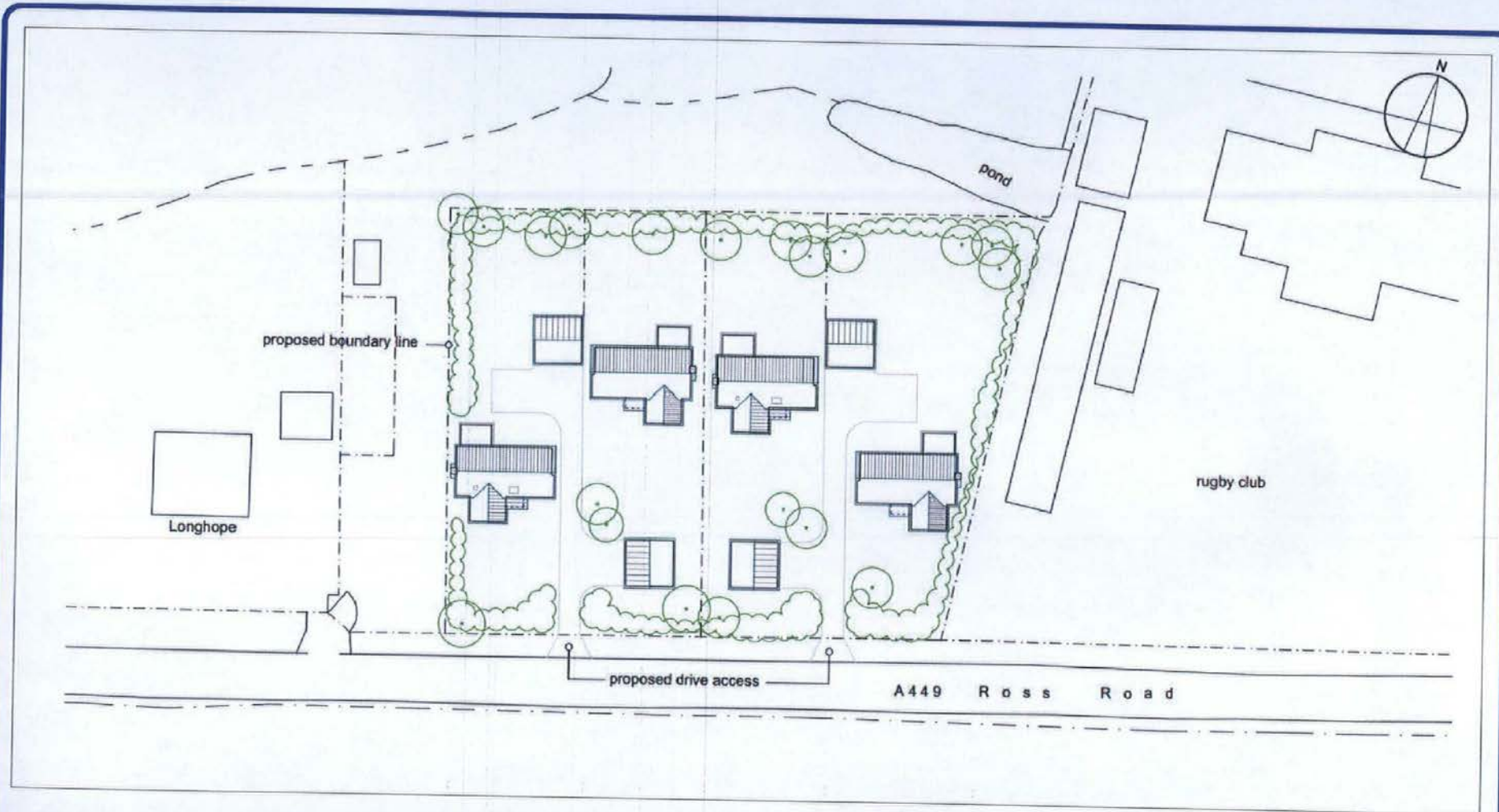
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PROJECT

Fletcher, Ledbury

PROJECT REF.

P18592

TITLE

Figure 2 Proposed Development Plan

CLIENT

Mrs Eileen Fletcher

SCALE

1:500

DATE

24/08/2018

BW	AB	0
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APPENDIX B – PHOTOGRAPHIC RECORD

PHOTOGRAPHIC RECORD



Photo 1: View of the site from the road.



Photo 2: View of the A449 along the southern site boundary.

PHOTOGRAPHIC RECORD



Photo 3: View towards the west.

Southern boundary marked by a wooden post and wire fence parallel to a path



Photo 4: View towards the east?



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APPENDIX C – GROUNDSURE INSIGHTS - HISTORICAL MAPS

Site Details:

LONGHOPE, ROSS ROAD,
LEDBURY, HR8 2LP

Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: County Series

Map date: 1882

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1882
Revised 1882
Edition N/A
Copyright N/A
Levelled N/A

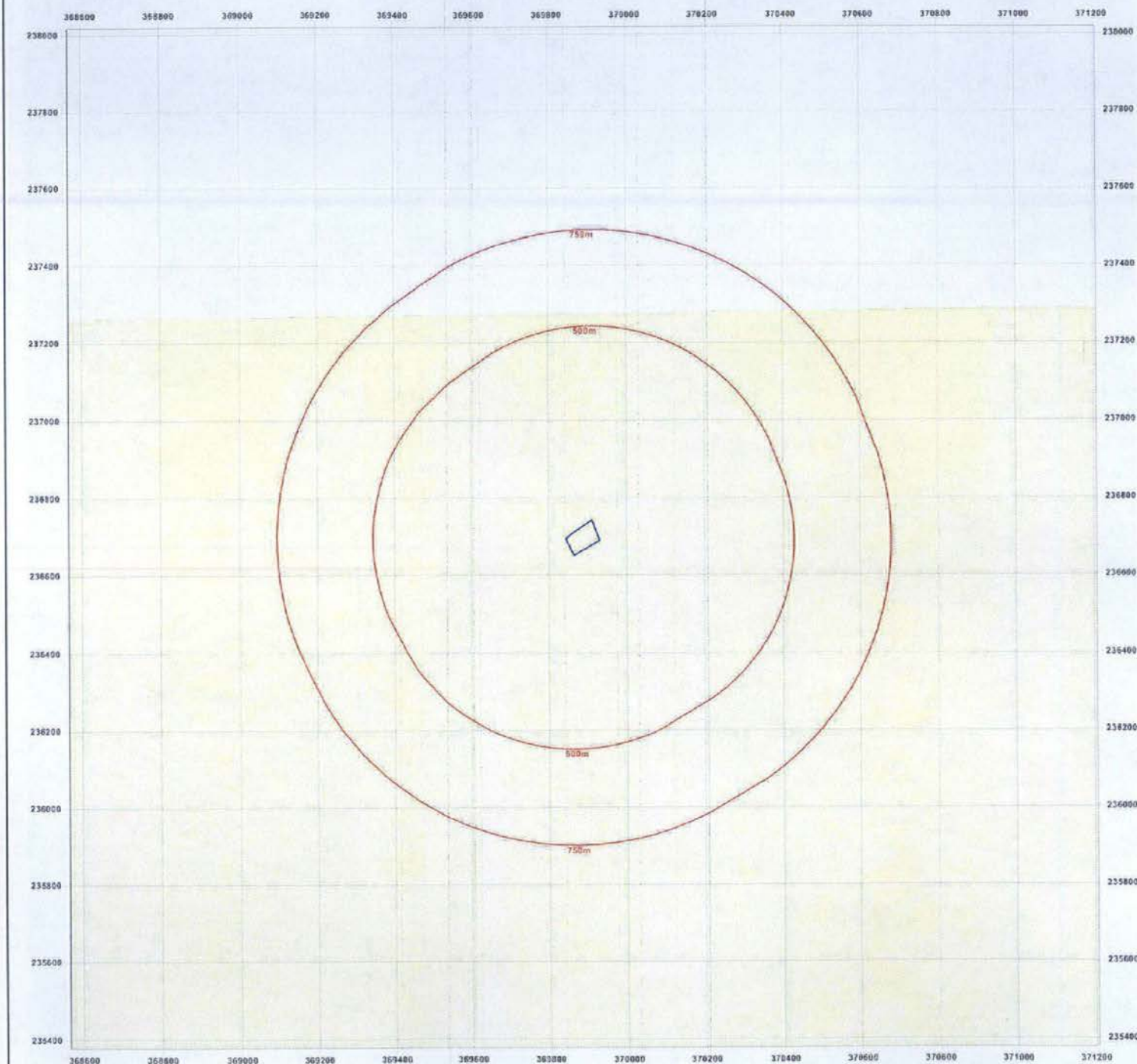


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Production date: 10 August 2018

Map legend available at:
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Site Details:

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LEDBURY, HR8 2LP

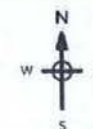
Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: County Series

Map date: 1886

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1886
Revised N/A
Edition N/A
Copyright N/A
Levelled N/A

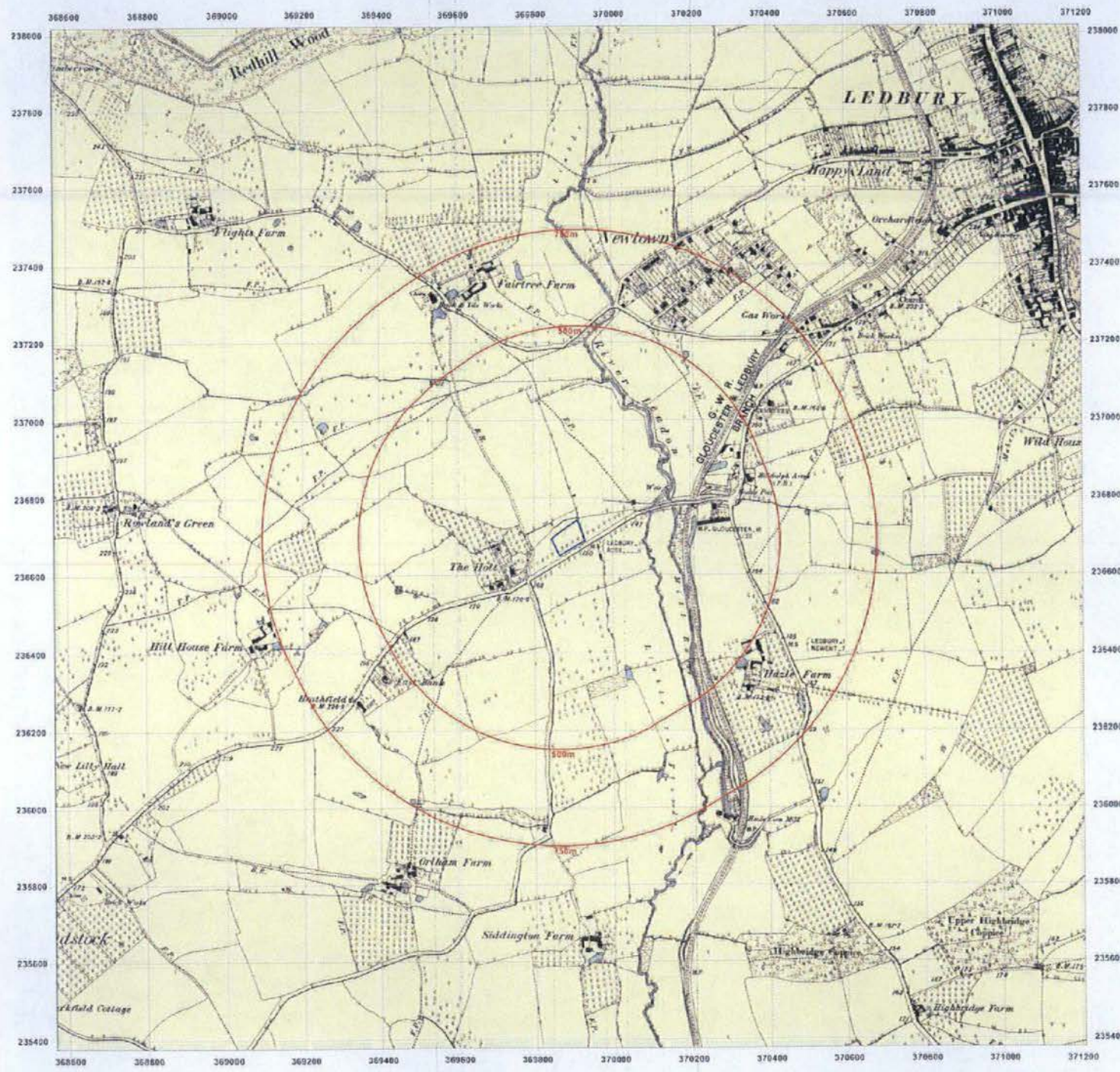


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Site Details:

LONGHOPE, ROSS ROAD,
LEDBURY, HR8 2LP

Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: County Series

Map date: 1886

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1886
Revised 1886
Edition N/A
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Site Details:

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Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: County Series

Map date: 1903

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1886
Revised 1903
Edition N/A
Copyright N/A
Levelled N/A

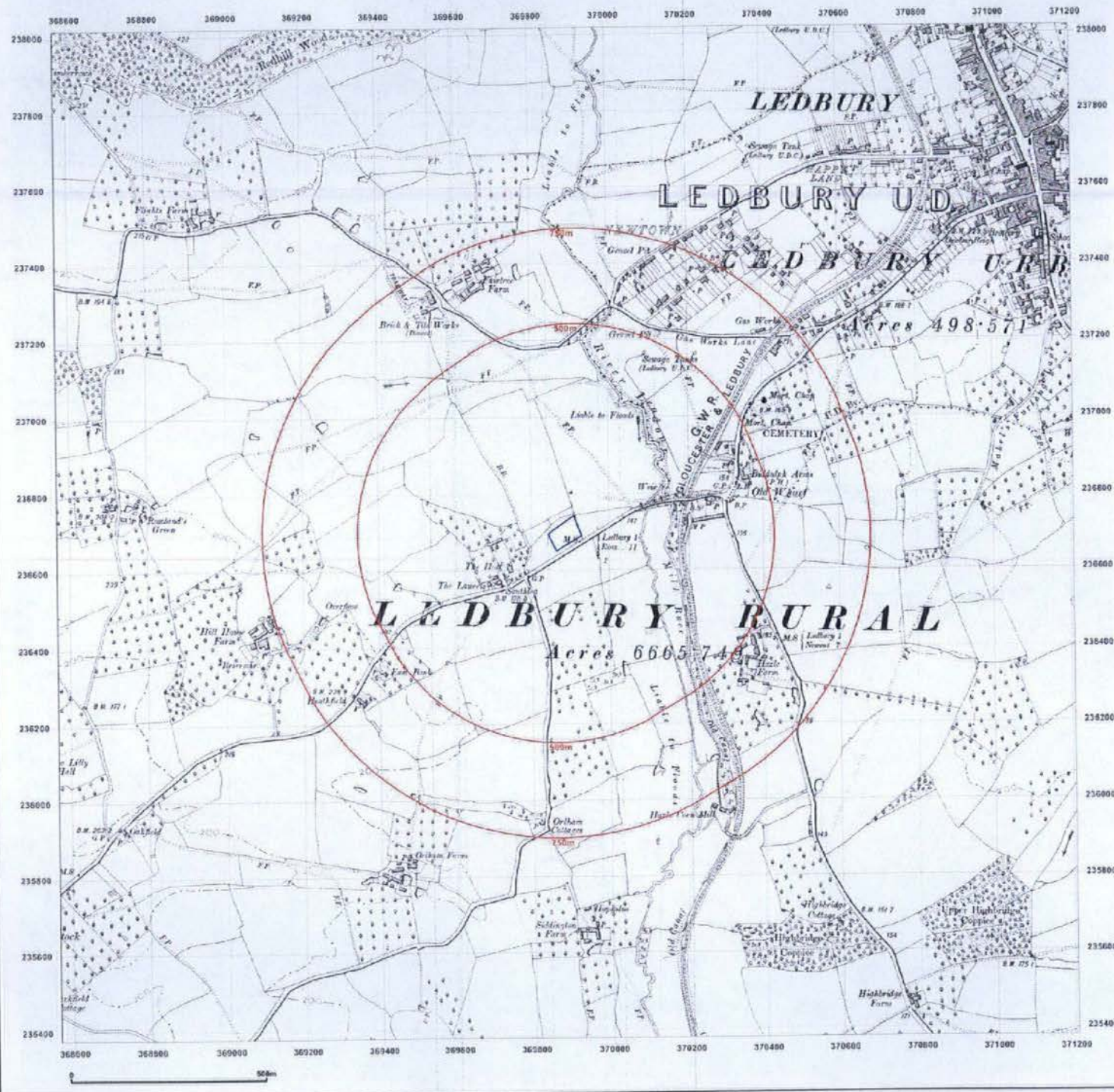


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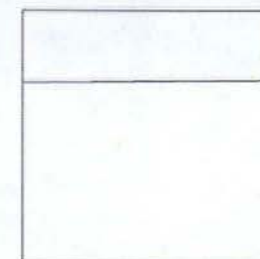
Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: County Series

Map date: 1924

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1882
Revised 1924
Edition N/A
Copyright N/A
Levelled N/A

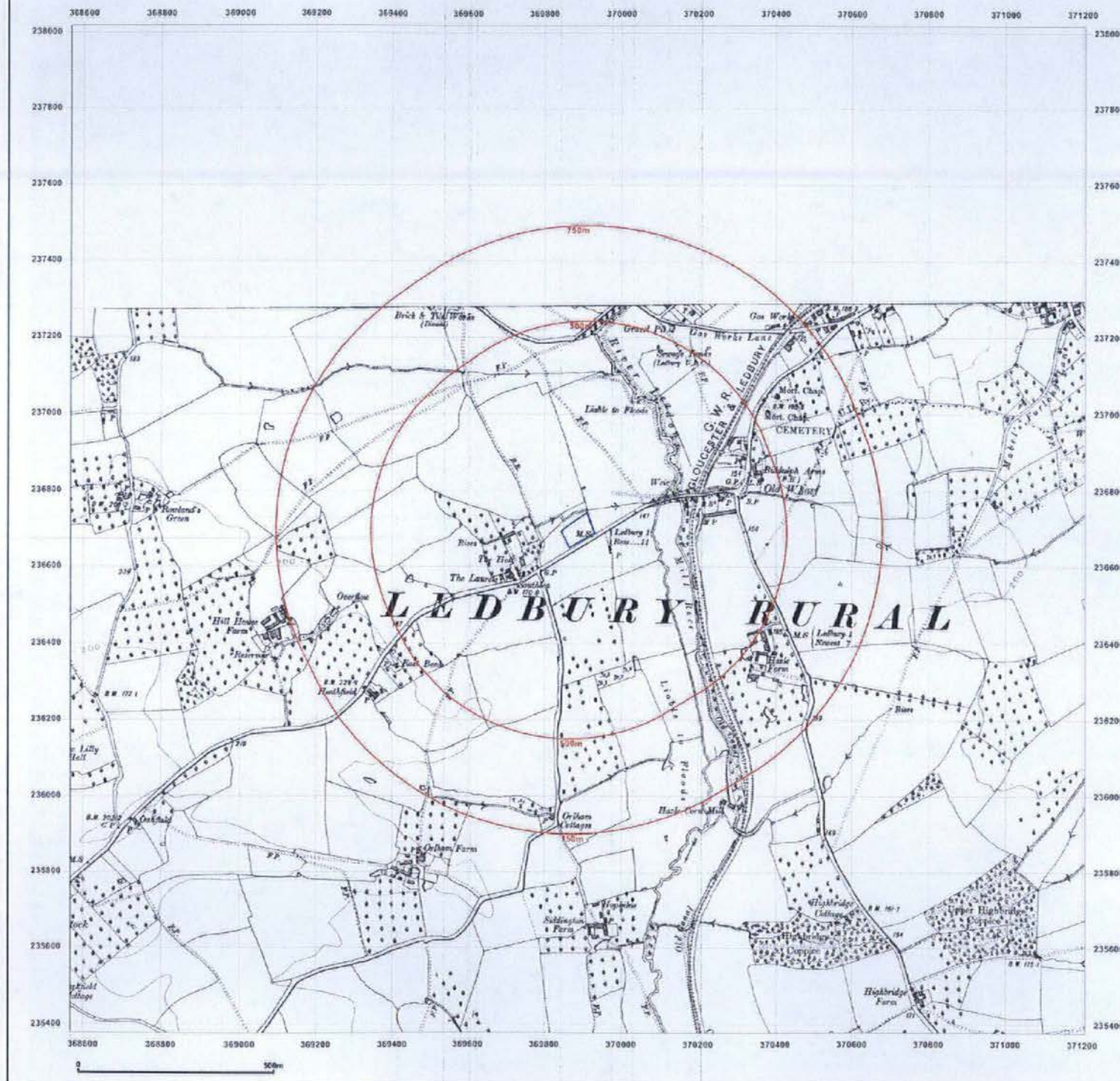


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Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: County Series

Map date: 1926

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1888
Revised 1926
Edition N/A
Copyright N/A
Levelled N/A

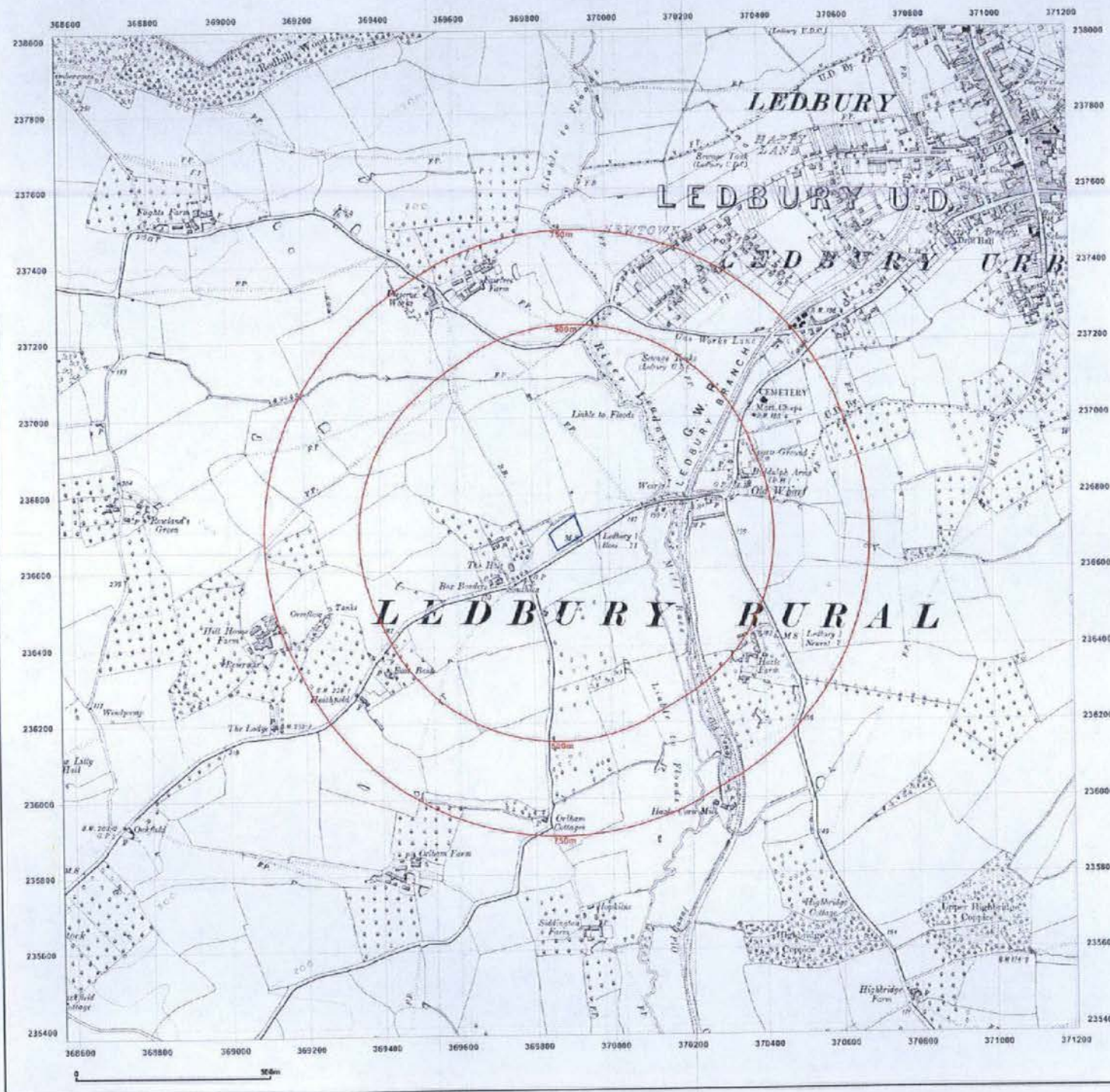


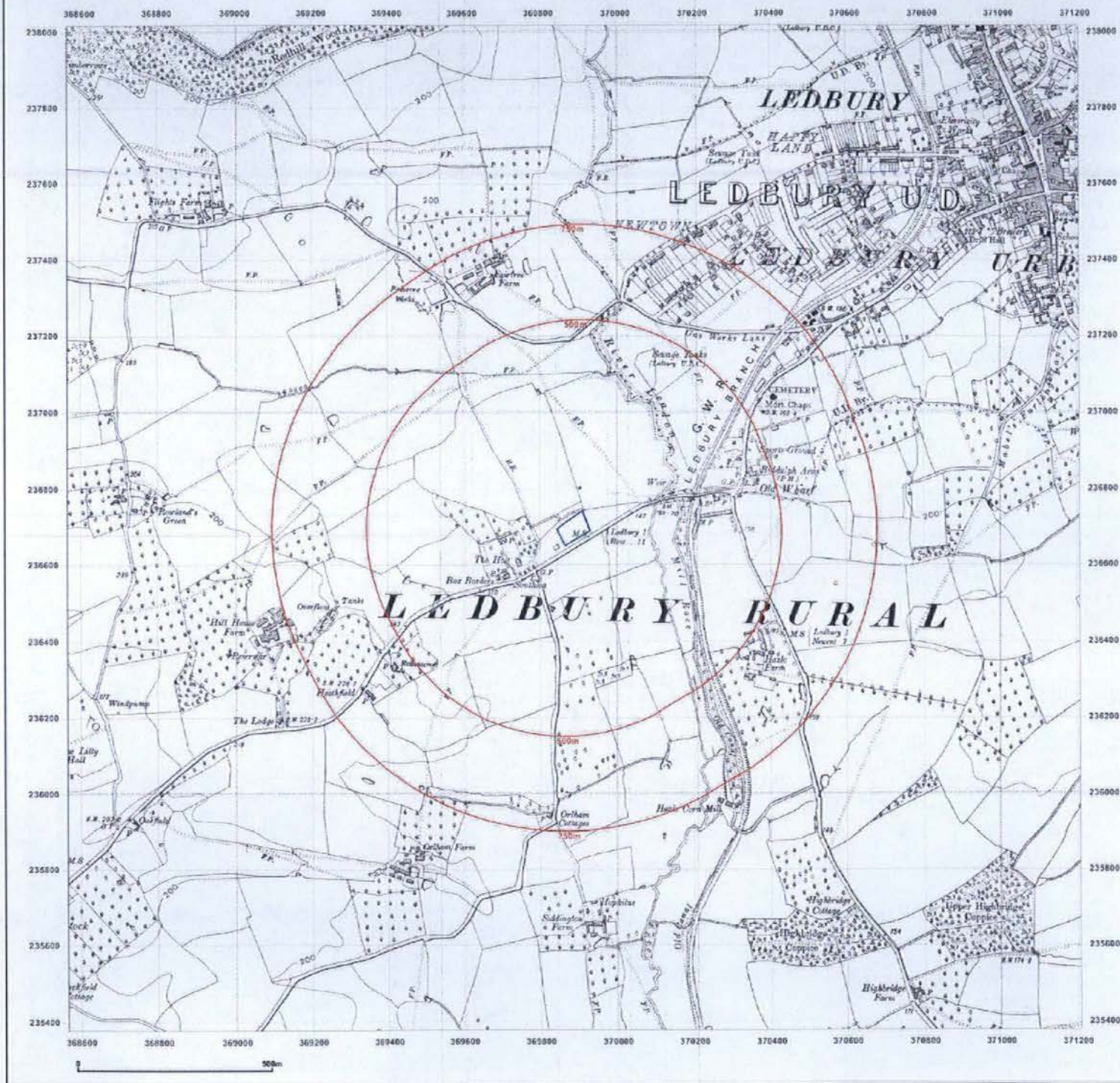
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Site Details:

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LED BURY, HR8 2LP

Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: County Series

Map date: 1938

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1886
Revised 1938
Edition 1938
Copyright N/A
Levelled N/A

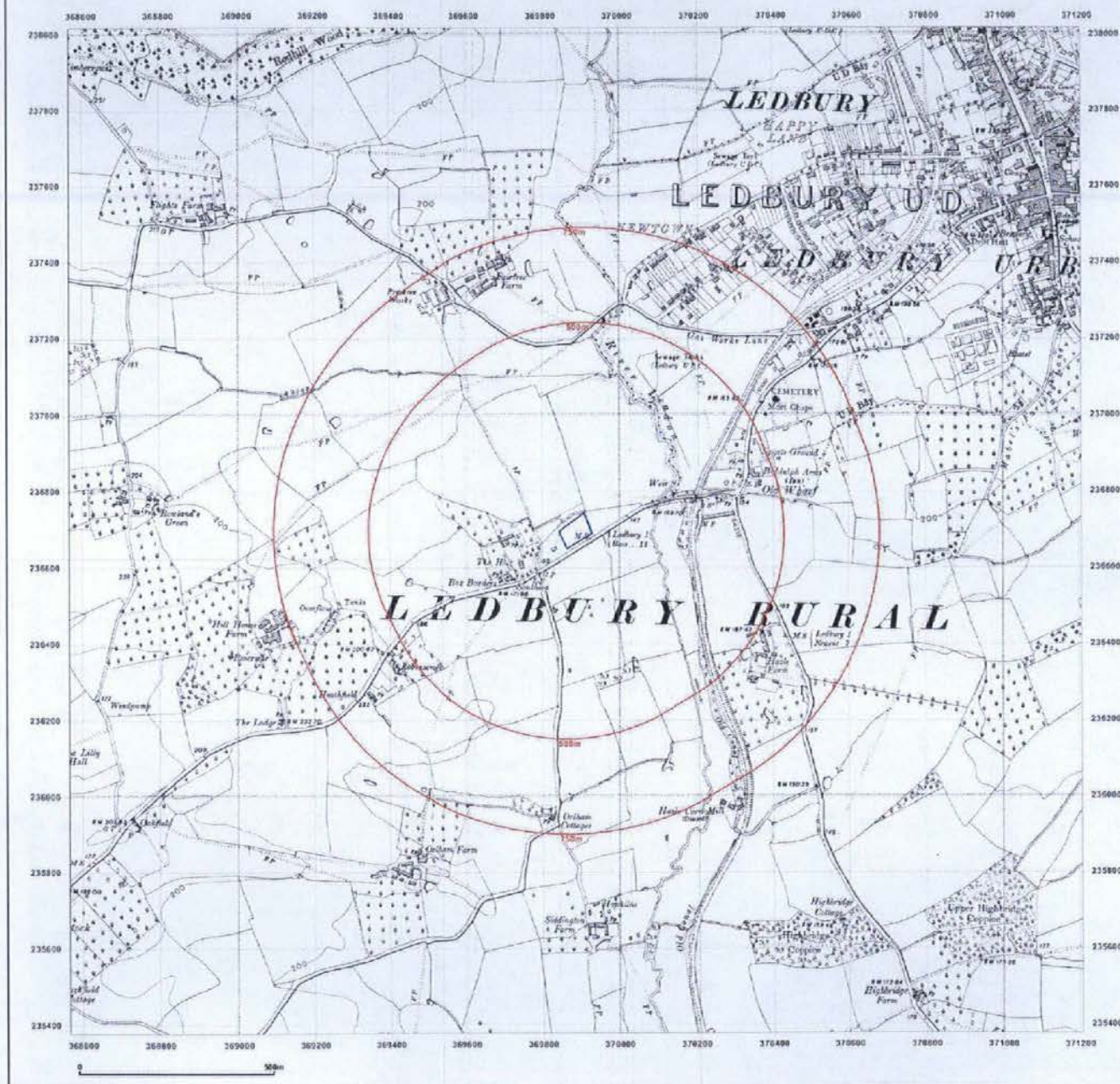


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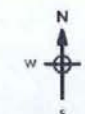
Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: County Series

Map date: 1949

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1886
Revised 1949
Edition N/A
Copyright N/A
Levelled N/A

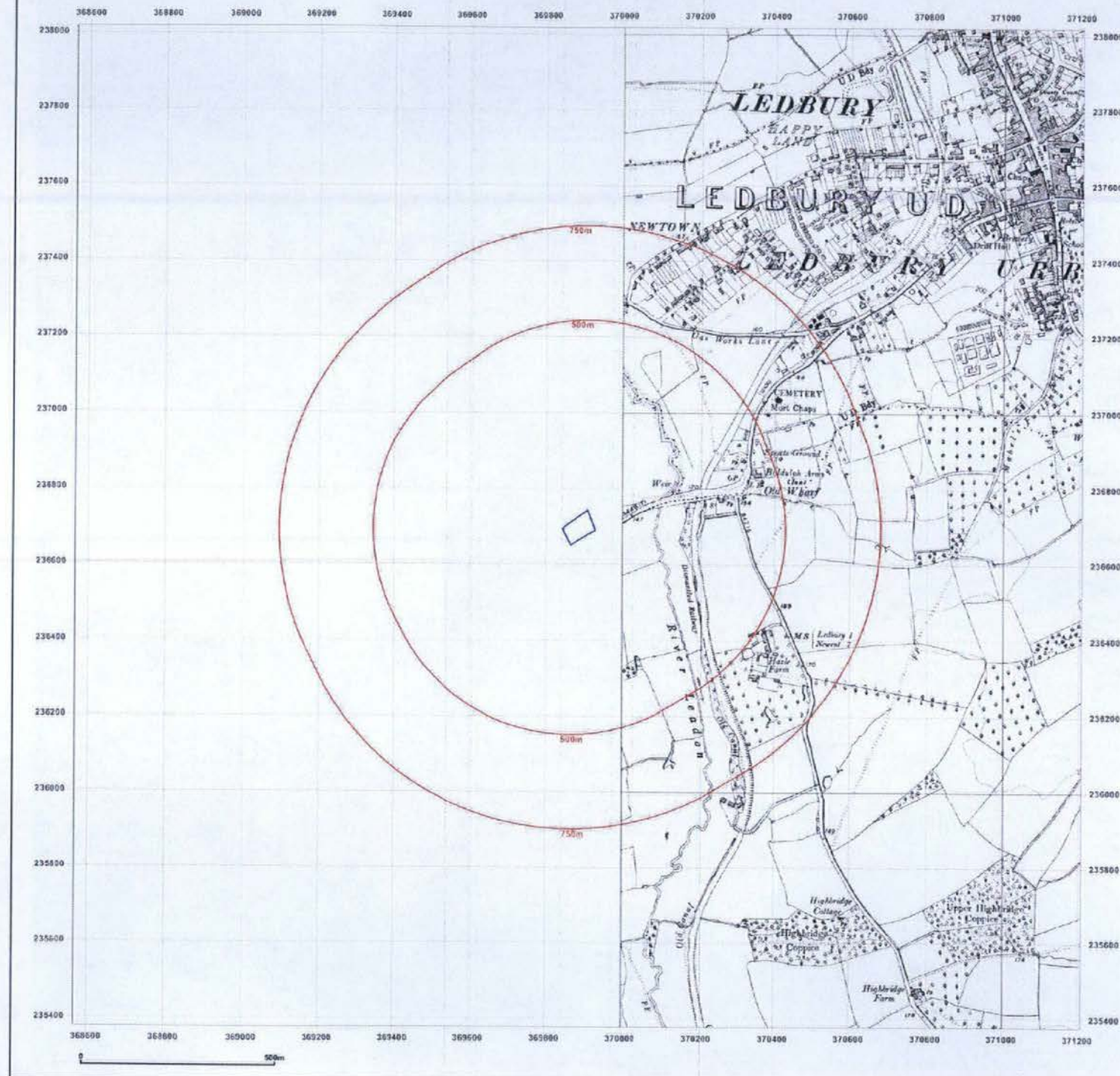


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Site Details:

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LED BURY, HR8 2LP

Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: Provisional

Map date: 1965

Scale: 1:10,560

Printed at: 1:10,560



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



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Site Details:

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LEDBURY, HR8 2LP

Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: National Grid

Map date: 1980-1985

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1973
Revised 1979
Edition N/A
Copyright 1980
Levelled 1971

Surveyed 1984
Revised 1985
Edition N/A
Copyright N/A
Levelled N/A

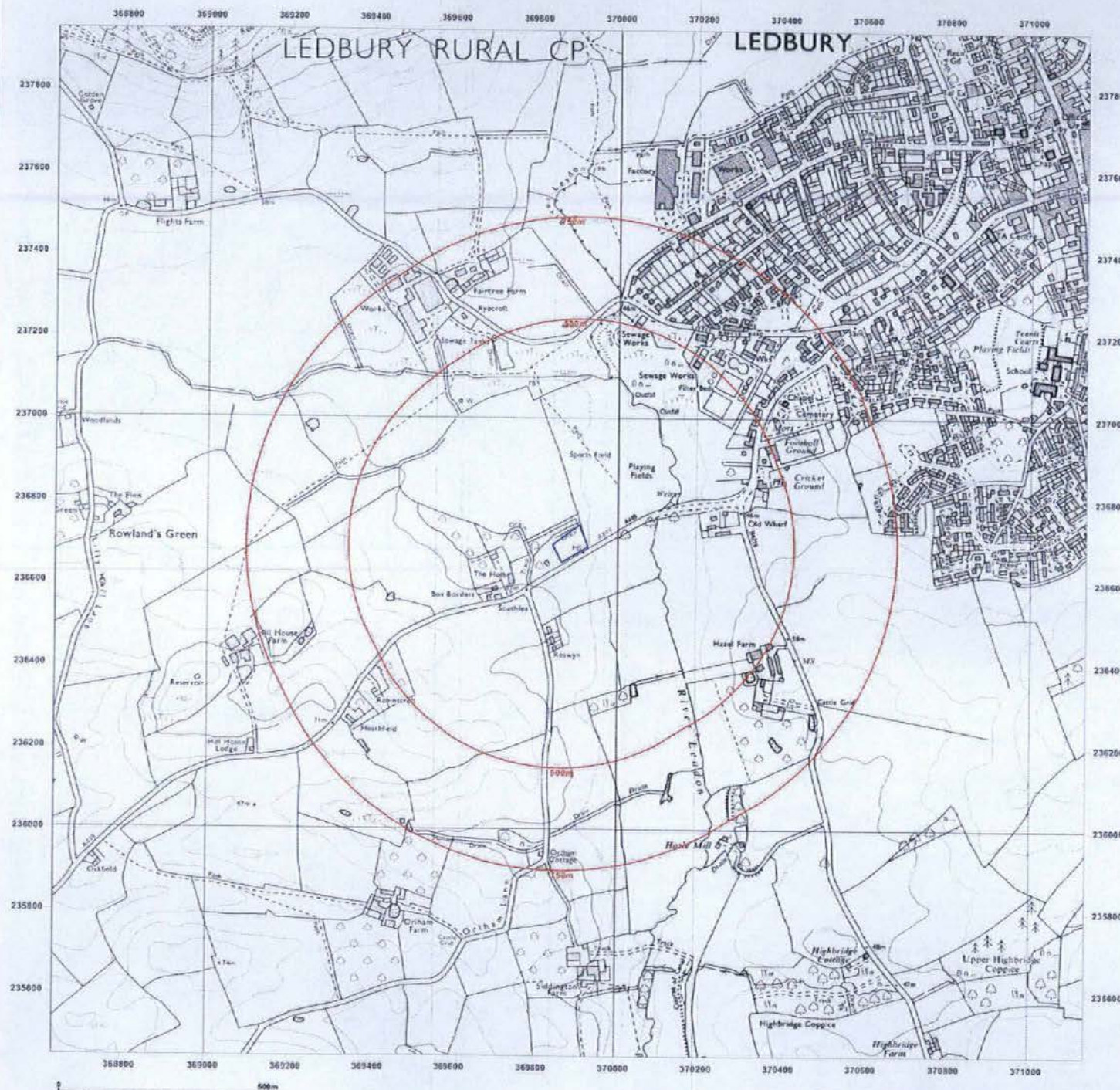


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Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: National Grid

Map date: 1988-1992

Scale: 1:10,000

Printed at: 1:10,000



Surveyed 1973
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

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



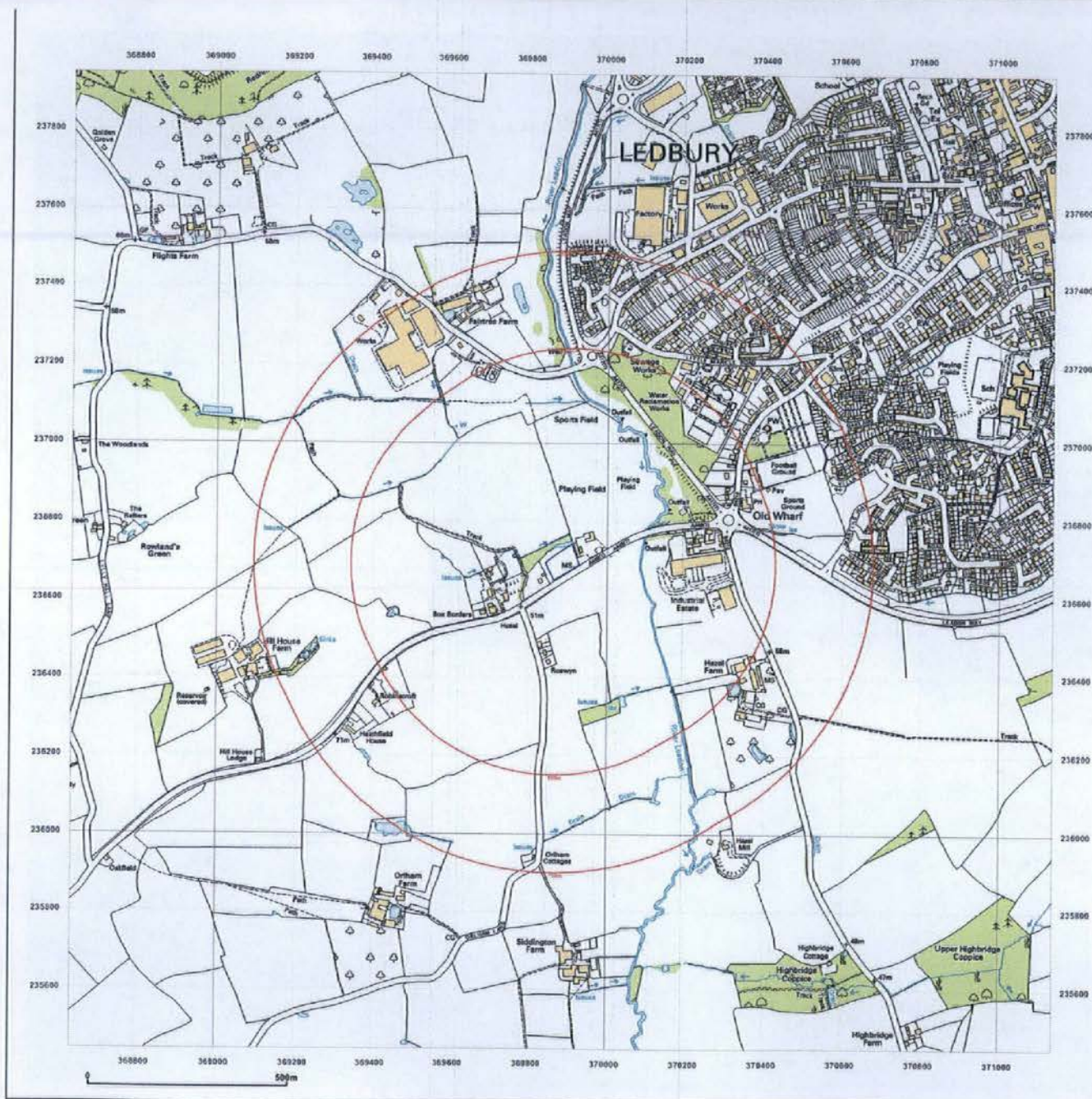
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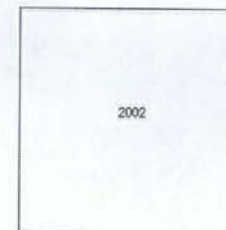
Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

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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Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000



2010



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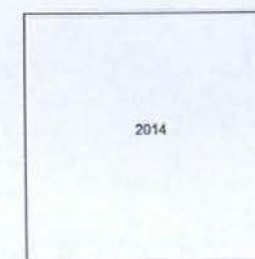
Client Ref: P18592
Report Ref: GS-5316216
Grid Ref: 369886, 236696

Map Name: National Grid

Map date: 2014

Scale: 1:10,000

Printed at: 1:10,000

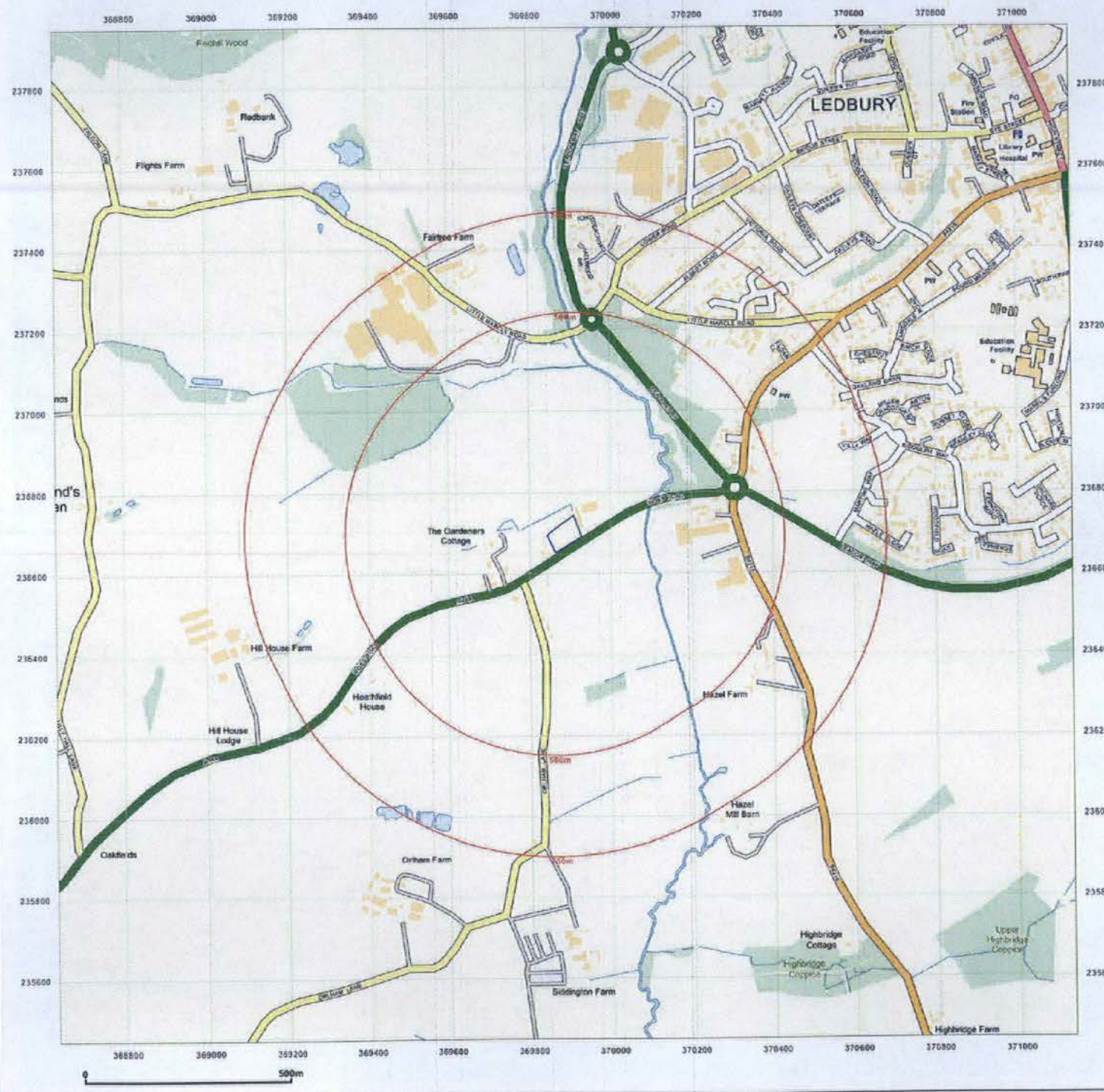


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APPENDIX D – GROUNDSURE INSIGHTS - ENVIRONMENTAL DATA REPORT
