Geo-Environmental

DESK STUDY REPORT

for land at

LOT 1 AND LOT 2,

DELSPRIDE, KENT STREET,

COWFOLD RH13 8BB

on behalf of

REMOON FRANCIS



Report:	**DESK STUDY REPORT**
Site:	**LOT 1 AND LOT 2, DELSPRIDE, KENT STREET, COWFOLD RH13 8BB**
Client:	**REMOON FRANCIS**
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1.0 INTRODUCTION

Geo-Environmental Services Limited (Geo-Environmental) was instructed by Remoon Francis (the Client) via architecture, planning and design consultants OArchitecture, to undertake a Phase 1 assessment of the geotechnical and geo-environmental factors pertaining to the proposed change of use of agricultural buildings to residential dwellings at development site Lot 1 and Lot 2, Delspride, Kent Street, Cowfold, RH13 8BB, (herein referred to as 'the site'). The site's location is presented in Figure 1.

1.1 Proposed Development

The site is currently understood to comprise 2No. agricultural buildings with the proposed development to comprise conversion from this agricultural use to residential dwellings to form 5No. residential dwellings under Prior Notification from Horsham District Council, ref: DC/24/0560, dated 5th June 2024.

1.2 Objectives

The investigation was to comprise a desk study of geotechnical and geo-environmental factors pertaining to the site, including a review of available historical maps, site walkover and an examination of other available sources of readily available geo-environmental information.

A Preliminary Risk Assessment (PRA) was to be undertaken as part of the desk study in accordance with Land Contamination Risk Management (LCRM). The objective of the risk assessment was to evaluate plausible contamination linkages with respect to the proposed development, adjacent land uses, and the wider environment, in the context of planning, immediate liabilities under the Environmental Protection Act 1990, and risks posed to Controlled Waters under the Water Resources Act 1991.

1.3 Standards

Where practicable, the desk study was undertaken in accordance with the following documents and guidance:

- National Planning Policy Framework – December 2023;
- Land Contamination Risk Management (LCRM), Environment Agency, updated July 2023;
- Model Procedures for the Management of Contaminated Land, CLR11, DEFRA and Environment Agency 2004 (withdrawn 2020);
- Environment Agency Guidance on Requirements for Land Contamination Reports, Version 1 dated July 2005;
- BS10175:2011+A2:2017 - Investigation of Potentially Contaminated Sites - Code of Practice, BSI 2017;
- BS5930: 2015+A1:2020 - Code of Practice for Site Investigations, BSI 2020;
- EN ISO 14688 Geotechnical Investigation and Testing Part 1-2002 and Part 2-2004;
- BS1377: 1990 - Soils for Civil Engineering Purposes, BSI1990;
- NHBC Standards Chapter 4.1 Land Quality - Managing Ground Conditions;
- NHBC Standards Chapter 4.2 Building Near Trees;
- CIRIA C665 – Assessing risks posed by hazardous ground gases to buildings (2007);
- NHBC N94 - Hazardous Ground Gas - An essential guide for housebuilders, May 2023;
- BS8485:2015+A1:2019 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings;
  Department of Environment - Industry Profiles (1995 - 1996).

1.4 Conditions

The desk study data obtained for the site is assumed to be factually correct and up to date at the point of their acquisition. No liability is taken for any omissions or inaccuracies in the data acquired. It should also be noted that

changes to the desk study data may occur following the production of this report, Geo-Environmental accepts no liability where this subsequently affects the assessment presented herein.

The information collected from the desk study and site walkover has been used to provide an interpretation of the geotechnical and environmental conditions pertaining to the site. The recommendations and opinions expressed in this report are based on the data obtained. Geo-Environmental takes no responsibility for conditions that have either not been revealed in the available records or that occur between or under points of any physical investigation. Whilst every effort has been made to interpret the conditions, such information is only indicative and liability cannot be accepted for its accuracy.

It must be noted that in particular the concentrations and levels of mobile liquid and gaseous materials are likely to vary with time. The results obtained may therefore only be representative of the conditions at the time of sampling. The absence of asbestos within soil samples analysed does not guarantee the absence of asbestos within buildings, within or bonded to concrete, as discrete burials, or within the soil mass elsewhere within a site. This report must not be taken as, or assumed to imply any guarantee that a site is free of hazardous or potentially contaminative materials.

Information contained in this report is intended for the use of the Client, and Geo-Environmental can take no responsibility for the use of this information by any party for uses other than that described in this report. Geo-Environmental makes no warranty or representation whatsoever expressed or implied with respect to the use of this information by any third party. Geo-Environmental does not indemnify the Client or any third parties against any dispute or claim arising from any finding or other result of this investigation report or any consequential losses.

This report remains the property of Geo-Environmental and the Client has no rights to, or reliance upon this document or supporting documents until such time as payment has been received in full for all invoices for works undertaken in connection with this report.

Assessment criteria or other parameters developed for the evaluation of contamination on this site are based on a number of assumptions regarding exposure and toxicology. Exposure to contaminants and levels of adverse effects may therefore vary. Whilst reasonable care and expertise has been employed in the development of such criteria, no liability is accepted in this respect. Other criteria or guidance on the development of assessment criteria may be published in the future and no liability is accepted in this respect.

2.0 DESK STUDY

The findings of the Phase I desk study are presented in the following section. A copy of the historical maps and other information obtained as part of the desk study are presented in Appendix A. Comments made in the following section regarding possible ground conditions on the site are based purely on the desk study and associated site walkover.

2.1 Site Description

A walkover inspection was undertaken on 29th July 2024 by an engineer from Geo-Environmental. The walkover included inspection of the existing agricultural buildings along with the immediate surrounding land for completeness. A photographic record from the site walkover is presented in Appendix B.

The site is located to the east of Kent Street, about 2.4 km to the east-southeast of Cowfold, West Sussex. Lot 1 was located at NGR 523557, 121679, Lot 2 at NGR 52305, 121651. The combined area of Lot 1 and Lot 2 is ~0.16ha.

The site comprised former poultry sheds with Lot 1 ~500m^2 in plan and Lot 2 ~750m^2 in plan. The site was located in a rural area and was one of three former poultry sheds within the same farm complex.

For Lot 1 the existing structure on site comprised a former steel-framed poultry barn, with an additional side extension of similar construction. At the time of visit, access was not possible to the inside of the main barn, but it was possible to see into the side extension. The side extension was noted to be vacant. The barn appeared to have been constructed on a concrete slab.

For Lot 2 at the time of our visit the metal cladding and internal structures had mostly been removed from the building, with only the steel framework and concrete slab of the poultry barn remaining. A room at the eastern end of the former barn was noted to contain assorted building materials.

The plans provided by the Client indicate a tank being present on the eastern elevation of Lot 1. The tank was not present at the time of our site walkover. No obvious signs of spillages or leakages were noted in the area underneath where the tank was recorded to have been located on the plan provided and on historical maps.

The land immediately to the east of Lot 1 comprised a yard area, land east of Lot 2 comprising a driveway. A wire fence ran along the northern side of the Lot 2 barn, forming a boundary between the site and the adjacent barn. The western boundary of Lot 2 was formed by a wire fence that subdivides the grass field in which the Lot was located. A further former poultry barn was located adjacent to the northwest of Lot2

An area of woodland was present c. 20 m to the east of Lot 1. The woods were noted to be ~ 50m in width east to west, with fields located to the east of the woods. The land to the west and south of Lot 2 and south of Lot 1 comprises grass fields in use for horse grazing in proximity to Lot 1 at the time of the site walkover.

A concrete yard area and driveway was present to the north of the Lot 1. A parking area, formed by tarmacadam road plannings, was present to the southeast of Lot 2.

The land within the site boundary (i.e. the former poultry barns, Lot 1 and 2 and immediate surroundings) was noted to be generally flat and level.

The site was noted to be located on the northern flank of a shallow valley; the valley axis runs east to west, falling westwards at an angle of about 1 degree. The valley's northern flank, where the site is located, slopes down to the south and southwest at about 2 degrees. No visible signs of slope instability were noted during the walkover.

No surface water features were present within the site boundary of Lot 1 or Lot 2. However, a small pond was present c. 20 m to the north of Lot 1 and 60m northeast of Lot 2. Another small pond was present at the northern end of the woods to the east of the site; this pond was c. 50m to the north and northeast of Lots 1 and 2. A stream was present at the base of the valley, about 130m to the south of Lot 1 and 90m south of Lot 2.

With respect to Lot 1, no vegetation was present within the site boundary. Mature trees, including oak were noted to be present within the woodlands to the east of the site, and around the pond to the north of the site. The field to the south of the site was laid to grass.

With respect to Lot 2, there were no trees close to the former poultry barn; the nearest trees were in an area of woods about 50 m to the east of the site with Lot 2 located within grass fields.

The site is located in a rural area, and the majority of the surrounding land comprises agricultural fields.

The yard in which Lot 1 was located was noted to contain several temporary buildings, including wooden storage sheds, a caravan, and two temporary office-type buildings along with parked vehicles. Access was generally not possible to these buildings, although it was possible to see inside the wooden sheds to the east of the Lot 1 building. The sheds contained assorted horse tack, gardening equipment, and horse wagons.

Several cars were parked to the east, south and north of Lot 1 in an area of gravel surfacing. A small lorry, horsebox, old tractor and caravan were also present to the south of the site. The area to the southeast of the site appeared to be in use as a vehicle servicing area.

Several disused fridges / freezers were stored within the parking area to the southeast of Lot 2, along with mixed building materials. A small bonfire site was present close to the southern elevation of the Lot 2 barn. Scrap metal, including some of the former metal barn cladding, was also evident at the western end of the Lot 2 former poultry barn.

The land to the west of the site comprised another former poultry barn. Several caravans and stored building materials were present.

2.2 Geology

With reference to British Geological Survey (BGS) mapping, the geology of the site was anticipated to comprise the Horsham Stone Member (sandstone) overlying the Weald Clay Formation (mudstone). Given that barns have previously been developed on the site it is considered possible that, in addition to these natural strata, Made Ground may be present in the vicinity of this barns.

BS5930:2015+A1:2019 defines **Made Ground** as anthropogenic ground in which the material has been placed without engineering control and/or manufactured by man in some way, such as through crushing or washing, or arising from an industrial process. Great variations in material type, thickness and degree of compaction invariably occur and there can be deleterious or harmful matter, as well as potentially methanogenic organic material. In addition, on sites which have undergone several phases of historic development it is not uncommon for asbestos to be present within Made Ground soils.

The **Horsham Stone Member** comprise Sandstone, calcareous, generally fine-grained, micaceous, locally well laminated, pale grey to greenish/olive grey and can contains clayey partings and lignite fragments and rootlet traces.

The **Weald Clay Formation** comprises dark grey thinly-bedded mudstones (shales) and mudstones with subordinate siltstones, fine- to medium-grained sandstones, including calcareous sandstone (e.g. Horsham Stone Member), shelly limestones (the so called "Paludina Limestones") and clay ironstones.

A search was undertaken for BGS borehole records on or proximal to the site. No borehole records were identified within 250m of the site area.

2.3 Hydrogeology

With reference to the Groundsure dataset, the bedrock Horsham Stone Member was recorded as a Secondary A Aquifer, high vulnerability overlying the Weald Clay Formation (Mudstone) which is classified as Unproductive Strata.

Secondary A Aquifers comprise 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

Unproductive Strata comprise rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.

High vulnerability soils are defined as areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.

No Source Protection Zones (SPZ) were identified on or in proximity to the site and no groundwater abstractions were recorded within 2km of the site.

The Groundsure dataset identified one discharge consent to land within 500m of the site as outlined in Table 2.1.

Location (m)	Site	Effluent Type	Receiving Water	Dates
275m NW	Land off Kent Street, Cowfold, West Sussex	Sewage discharges – final/treated effluent (Not Water Company)	Onto Land	Issued date: 05/06/1997

Table 2.1 Summary of discharge consents to land/soakaway within 500m

The Groundsure dataset identified one pollution incident to land/water within 500m of the site details of which are provided below:

- 395m East, Incident date: 23/02/2021 Comprising oils and fuel (diesel). Category 2 (Significant) impact to water and land.

The site was indicated to be located in an area with a negligible risk of groundwater flooding to occur.

2.4 Hydrology

With reference to the Groundsure dataset, the nearest surface water feature was situated 85m southwest of the site comprising an inland river not influenced by normal tide action, noted to contain water year round (in normal circumstances). Two further inland rivers were recorded 127m southwest and 148m west of the site.

The site was identified as being located in the Water Framework Direction (WFD) Surface Water Body Catchment for the Cowfold Stream, located within the Adur Upper operational Catchment and Adur and Ouse Management Catchment. The closest surface water monitoring point for the Cowfold Stream in proximity to the site was recorded as 1.3km west of the stie with the overall rating as Poor (2019). The Groundsure dataset indicated that the risk of river and coastal flooding to be negligible on site. The site was not located in an area recorded as benefiting from flood defences.

The Groundsure dataset did not identify any surface/potable water abstractions within a 1km radius of the site. The closest recorded surface water abstraction was located 1.9km to the south east of the site and comprised a historical abstraction for spray irrigation (direct) from the River Asur and Herrings Stream at Twineham (abstraction license version dated 03/04/2021, with original start date of 19/08/1985).

Three discharge consents surface water were identified within a radius of 500m of the site boundary, details of which are provided in Table 2.2 below:

Location (m)	Site	Effluent Type	Receiving Water	Dates
374m W	Kings Barn, Kent Street, Cowfold, West Sussex RH13 8BB	Sewage discharges – final/treated effluent (Not Water Company)	Freshwater river	Issue date: 11/07/94 Effective Date: 11/07/94 Revocation Date: -
415m NE	Eastridge Manor, Wineham Lane, Bolney, Haywards Heath, West Sussex	Sewage discharges – final/treated effluent (Not Water Company)	Freshwater stream or river	Issue date: 09/08/90 Effective Date: 09/08/90 Revocation Date: -
493m SE	Old Doctors Cottage, Wineham, Henfield, West Sussex	Sewage discharges – final/treated effluent (Not Water Company)	Freshwater river	Issue date: 11/01/91 Effective Date: 11/01/91 Revocation Date: 31/03/97

Table 2.2 Summary of discharge consents to surface water within 500m

Given the distance from the site it is considered that these are unlikely to have resulted in a detrimental impact on the subject site.

2.5 Sensitive Land Uses

A search was made of environmentally sensitive areas, including areas of green belt, scenic or natural beauty, parks, reserves, nitrate zones, protected conservation and scientific areas.

Seven areas of Ancient Woodland were identified within 1km of the site, however no such sites were identified within 250m of the subject site, with the closest recorded being location 529m east of the stie, details of those identified are provided in the Groundsure data in Appendix B, Section 10.7.

The Groundsure dataset indicated that the site is located within an existing surface water Nitrate Vulnerable Zone (NVZ) for Adur East (Sakeham).

The site was identified as being located in an area within 20m of a priority habitat inventory comprising areas of deciduous woodland with the closest areas recorded 20m east, 39m northeast, 48m east, and 120m south of the site. A further seven entries were recorded between 150m and 250m from the site details of which are presented in the Groundsure dataset Section 13.1.

The site as also identified in an area which has been given an agricultural classification of Grade 3 – good to moderate quality. Good to moderate quality is defined as land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

2.6 Environmental Data

Searches of other various environmental databases were made as part of the desk study, including air pollution control sites, Part IIA contaminated land, Integrated Pollution Control (IPC) and Integrated Pollution Prevention and Control (IPPC) site, registered radioactive substances, COMAH sites, explosives sites, Notification of Installations Handling Hazardous Substances (NIHHS) sites, planning permissions for sites involving hazardous substances, contemporary trade directories and fuel station registers.

Four recent industrial land uses were identified within 250m of the site as detailed in Table 2.3.

Location	Company	Address	Activity	Category
8m E	Tank	West Sussex RH13	Tanks (Generic)	Industrial features
80m NW	Pylon	West Sussex RH13	Electrical Features	Infrastructure and Facilities
130m SW	Pylon	West Sussex RH13	Electrical Features	Infrastructure and Facilities
181m SE	Pylon	West Sussex RH17	Electrical Features	Infrastructure and Facilities

Table 2.3 Summary of Recent Industrial Land Use Identified within 250m of the Site

Seven historical Industrial Land Uses were identified within 500m of the site as detailed in Table 2.4.

Location	Land Use	Date
280m NW	Unspecified pit	1896 & 1912
475m NE	Unspecified pit	1962 & 1978
476m NE	Unspecified pit	1909 & 1947
477m NE	Unspecified pit	1896

Table 2.4 Summary of historical Industrial Land Uses Identified within 500m of the Site

No historical tanks, energy features, petrol stations or historical garages were identified within 500m of the site.

Given the location of the unspecified pits, in relation to the site it is considered that these are unlikely to have resulted in a detrimental impact on the subject site.

2.7 Geotechnical Data

The Groundsure dataset identified one record on the site for non coal mining activities for Iron Ore for Class B underground mine working that may have occurred in the past or current mines that may be working at significant depth to modern engineering standards. However, it noted that the potential for difficult ground conditions is unlikely and are at a level where they need note be considered.

National databases for a number of geological hazards have been compiled by the BGS, and a summary of the hazard data pertaining to the site is presented in Table 2.5.

Hazard	Hazard Rating
Collapsible ground	Very Low
Compressible ground	Negligible
Ground dissolution	Negligible

Hazard	Hazard Rating
Landslide	Very Low
Running sand	Negligible
Shrink swell clay	Low
BGS Recorded Mineral Sites (within 500m)	- 488m NE – Eastridge Pits, Bolney, Haywards Heath, West Sussex. Ceased surface mineral working (quarry, sand pit, claypit, or opencast site). Commodity: Ironstone
Surface Ground Workings (within 250m)	- 29m NE – Ponds (1896 and 1912 mapping) - 31m NE – Ponds (1632 & 1978 mapping) - 34m NE – Ponds (1975 mapping) - 50m NW – Ponds (1962 mapping) - 51m NW – Ponds (1975 mapping) - 53m NW – Ponds (1896 mapping) - 201m NE – Ponds (1896 & 1912 mapping) - 204m NE – Ponds (1962 & 1978 mapping) - 208m NE – Ponds (1875 mapping)

Table 2.5 Summary of BGS Geological Hazards

No natural cavities or karsts were identified within 1km of the site boundary.

2.8 Landfill and Ground Workings

A search of BGS recorded landfill sites, IPC registered waste sites, licensed waste management facilities, local authority recorded landfill sites, other registered landfill sites, waste transfer stations, and other waste treatment or disposal sites was undertaken as part of the desk study. Such sites may form an artificial source of ground gases, such as carbon dioxide and methane, where wastes are buried or disposed of to landfill.

With reference to the Groundsure dataset, one historical waste site was recorded within 500m of the site, details of which are provided in Table 2.6 below:

Location	Site	Type of Site	Date	Description
160m N	Delspride, Kent Street, Cowfold, Horsham, West Sussex rh13 8bb	Landfill Works	06/02/2015 (Planning application DC/13/2445)	Scheme comprises formation of earth works and landfill to import 1616sqm of earth to level ground to enable chicken units to be relocated for cleaning.

Table 2.6 Historical Waste Sites within 500m of the Site

With reference to the Groundsure dataset, fourteen Waste Exemptions were identified within 500m of the site and were noted to be associated with five different sites. Details are provided in Table 2.7.

Location	Site	Category	Sub-category	Description
20m W	Westridge Kent Street Horsham West Sussex RH13 8BB	Using Waste Exemption	Non-agricultural waste only	Use of waste in construction.

Location	Site	Category	Sub-category	Description
183m - 186m N	Delspride, Kent Street, Cowfold, Horsham, RH13 8BB	Using waste exemption	On a farm	Use of waste in construction.
		Using waste exemption	Not on a farm	Use of waste in construction.
		Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction.
298m NW	Westridge Kent Street Horsham West Sussex RH13 8BB	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction.
466m – 469m W	Kings Barn Farm, Kent Street, Cowfold, Horsham, RH13 8BB	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising.
		Disposing of waste exemption	On a farm	Burning waste in the open.
		Using waste exemption	On a farm	Use of mulch.
		Treating waste exemption	Agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising.
		Using waste exemption	Agricultural waste only	Use of waste in construction.
		Using waste exemption	Agricultural waste only	Use of mulch.
		Disposing of waste exemption	Agricultural waste only	Burning waste in the open.
495m SE	Sparrows, Wineham Lane, Wineham, Henfield, BN5 9AZ	Using waste exemption	On a farm	Use of waste in construction.
		Using waste exemption	On a farm	Use of waste in construction.

Table 2.7 Summary of Waste Exemptions

With reference to the Groundsure report, four records of unspecified pits were recorded within 500m of the site and are detailed in Table 2.4.

2.9 Radon

The Groundsure data report indicated that the site lies within a low probability radon area (Less than 1% of homes are estimated to be at or above the Action Level). No radon protection measures are reportedly necessary in the construction of new dwellings or extensions.

2.10 Geochemistry

Data obtained as part of the Groundsure report provides details on the estimated soil chemistry for natural soils in the vicinity of the site. The estimated quality of natural soils beneath the subject site is presented in Table 2.8.

Determinand	Estimated Concentration (mg/kg)
Arsenic	15 - 25
Cadmium	1.8
Chromium	60 – 90
Lead	100 (60 – Bioaccessible)
Nickel	15 – 45

Table 2.8 Summary of Site Geochemistry

The natural background concentrations for the determinands in Table 2.8 were noted to be below respective published Suitable for Use Levels (S4UL) and Category 4 Screening Levels (C4SL) for the protection of human health under a residential land use with plant uptake.

However, these values are not necessarily representative of the site's soil chemistry, nor do they account for a site's historic uses, nor the presence or condition of any Made Ground soils. Therefore, concentrations of specific determinands and the utilised S4UL/C4SL cannot be determined without site specific investigation and analysis.

2.11 Historical Data

A summary of site history dating back to 1875 is presented in Table 2.9 and has been determined through examination of historical maps obtained as part of the desk study.

Date	On Site	Off Site
1875 (1:10,560 and 1:2,500)	The site constituted a portion of an agricultural field (labelled 912) within a wider field network. A footpath appeared to cross the centre of the field in a north westerly to south easterly direction and cross the left had section of the site boundary.	The surrounding area comprised agricultural fields. Ridgeland Farm was shown c.250m to the northwest of the site. A number of what appeared to be pits were evident c. 90m northwest, and c. 240m north, northeast, with features that appeared to be possible ponds located c.60m northeast, c. 150, east and c. 360m south. A road was shown to run along the southern boundary of the wider field within which the field was located.
1896 (1:10,560)	No significant changes noted.	No significant changes noted.
1897 (1:2,500)	No significant changes noted.	No significant changes noted.
1909-1912 (1:10,560) & 1911 (1:2,500)	No significant changes noted.	A road was shown to have been developed running east to west c. 200m to the north of the site to the north of Ridgeland Farm. Kings Farm was labelled c.500m southwest, with further farms c.750m to the southwest. Taintfield Wood was evident c.750m northwest and Twineham Court c. 1km to the southeast.
1956 (1:2,500)	The footpath was no longer shown running across the centre of the site.	The former pits identified in the vicinity of the site were now labelled as ponds.
1962	No significant changes noted.	Ridgeland Farm was shown to have been renamed

Date	On Site	Off Site
(1:10,560)		as Westridge Farm and Eastridge Farm was evident c. 300m north east of the site.
1977 (1:2,500)	No significant changes noted.	No significant changes noted.
1978 (1:10,000)	No significant changes noted.	Bolney Electricity Transforming Station was shown c. 600m to the southeast of the site.
1993 (1:2,500)	A driveway and rectangular building were shown to have been developed on the eastern portion of the site.	Further small building and structures were shown to have been developed c. 90m to 200m to the north of the site. One of the buildings c. 200m to the north was labelled as Delspride and the access road to the site was located to the east of this plot. Westridge Place was also shown to have been developed c. 200m to the southeast of the site.
2003 (1:2,500)	No significant changes noted.	A tank was marked immediately to the east of the rectangular structure on the eastern portion of the site.
2001 (1:10,000)	No significant changes noted.	No significant changes noted.
2010 (1:10,000)	No significant changes noted.	A formal road was shown to have been constructed from the road to the north running south towards the site.
2024 (1:10,000)	A further rectangular structure was shown to have been developed on the western portion of the site.	Further square and rectangular structures were shown in proximity to the site to the north and east.

Table 2.9 Summary of Site History

The site was shown from the historical mapping to comprise open fields until 1993 when a structure was shown to have been developed on Lot 1 and at some point between 2010 and 2024 when a further structure (Lot 2) was shown to have been developed. The subject buildings are more recently located within a cluster of three buildings.

A review of planning history as presented in the delegate report for the permitted development application suggests that these structures have previously been in use for agricultural purposes. It is also noted that the building immediately to the west of the subject building at Lot 2 is subject of a prior approval for change of use to flexible commercial use(s) to form an assembly workshop to be used for design, production and assembly of handmade cabinetry under reference DC/22/0468 and since then, Prior Notification for the Change of Use of an existing poultry shed to a car storage facility DC/24/0425. This has been implemented for car storage. It is noted that new private stables have recently been built to the southeast of Lot 2 (subject to current retrospective planning application) together with further fields.

Surrounding land uses have primarily comprised agricultural land over the mapping period.

2.12 Previous Ground Investigations

Geo-Environmental was not made aware of any previous ground investigations undertaken within the boundary of the site.

2.13 Asbestos

While Asbestos Containing Materials (ACM) were not positively identified as part of the site walkover undertaken it should be noted that internal access to the barns on Lot 1 and Lot 2 was not possible during the site walkover and

the presence of asbestos cannot be ruled out on the site.

As at all sites, consideration for the potential for asbestos to be present within the shallow soils, within stockpiles/Made Ground or entrained within or below any concrete on the site should be given when designing any site investigations, therefore asbestos identification should be included within the suite of testing of contaminants on site. The absence of asbestos in soil samples analysed is not a guarantee of the absence of asbestos elsewhere on a site.

2.14 Potential Contamination

The site was shown from the historical mapping to comprise open fields until 1993 when a structure was shown to have been developed on Lot 1 and at some point between 2010 and 2024 when a future structure (Lot 2) was shown to have been developed. The subject buildings are more recently located within a cluster of three buildings main buildings with several smaller structures also evident. The remainder of the site has remained as agricultural land over the mapping period.

A review of the land uses covered by the National House Building Council (NHBC), Environment Agency (EA) and Chartered Institute of Environmental Health (CIEH) publication 'Guidance for the Safe Development of Housing on Land Affected by Contamination' (2008), which provides a summary of industrial profiles (1995 - 1996) published by the former Department of the Environment (DoE) (now part of the Department for Environment, Food and Rural Affairs [DEFRA]) has been undertaken. No profiles relating to the previous and current land use of the site have been identified.

It is considered likely that areas of Made Ground or reworked ground could exist across the site given the on-site development of agricultural buildings. Made Ground or shallow soils may contain contaminants of concern, including metals, non-metal, inorganic pollutants, organic pollutants (including such as poly-aromatic hydrocarbons (PAH), petroleum hydrocarbons/oils) and asbestos (potentially introduced in any Made Ground if present). Asbestos containing materials could be present within the near surface soils on site.

In addition, it is possible that the surrounding land uses may have resulted in the deposition of airborne contaminants, (although not specific source of potential pollution have been identified), on the surface and shallow soils on site including heavy metals, organic pollutants such as polyromantic hydrocarbons (PAH), petroleum hydrocarbons/oils, inorganic compounds.

2.15 Ground Gas Summary

The desk study for the site has not identified any potential sources of ground gases on the subject site itself. However, if Made Ground was identified and contained a significant amount of organic matter or organic contamination, it could have the potential to represent a source of ground gases/vapours.

Ground gas monitoring would only be recommended if a source of organic rich Made Ground or organic contamination was encountered on the site in sufficient volume that it could present a source in its own right. No other plausible source of ground gases and or vapours have currently been identified in relation to the site.

2.16 Unexploded Ordnance

An initial assessment for Unexploded Ordnance (UXO) risk was undertaken and based on accessing Zetica's on-line screening tool (accessed 08/08/2024). This indicated the site to be within a 'low risk' area. A copy of the initial assessment is presented in Appendix C.

2.17 Climate Change

Climate change is a factor for consideration under LCRM. Current climate models are showing an increase in extreme weather patterns, with extended periods of warm dry weather and/or extreme wet weather and flooding.

The effect of extreme and/or extended dry weather and extreme wet weather and flooding should be considered further as part of the proposed works. Extended periods of low flow or reduced rainfall would reduce dilution and potential for mobilisation of any mobile contaminants present. Extended periods of heavy rainfall or prolonged rainfall and flooding which would increase the volumes and duration of saturated soils at the site and increase the potential for leaching of contaminants and contaminant migration. However, the risks associated which such periods would only apply where contamination has been identified/is present which would be considered as part of the wider contamination assessment of the site.

3.0 PRELIMINARY ASSESSMENT

Based on the findings of the desk study, the following sections summarise the anticipated geotechnical and environmental factors likely to impact the site.

3.1 Geotechnical Risk Assessment

3.1.1 Potential Geotechnical Issues

The following factors that might impact the geotechnical condition of the site were identified as part of the desk study:

- The possible presence of Made Ground which if encountered may affect the foundation design and construction.
- The presence of laterally and vertically variable strata and the impact these could have on further construction.
- The suitability of shallow soils as a bearing stratum for conventional foundations.
- Consideration of the volume change potential of any cohesive soils and the affect this could have on foundations.
- The possible presence of aggressive ground conditions (sulphates) which may affect the foundation design and construction.
- The possible presence of perched and shallow groundwater beneath the site and implications for excavation stability and constructability of foundations and other in-ground elements.
- The presence of any trees or hedgerows on the site, which may have a significant impact on foundation design and construction if/where shrinkable soils are present.

3.2 Preliminary Environmental Conceptual Site Model & Risk Assessment

3.2.1 Methodology

A Preliminary Risk Assessment (PRA) and Conceptual Site Model (CSM) has been prepared in accordance with Land Contamination Risk Management (LCRM) based on information obtained as part of the desk study. Possible risks associated with potential sources of contamination and sensitive receptors identified have been assessed following a source-pathway-receptor (SPR) approach in accordance with current UK protocols. The Conceptual Site Model is shown in Figure 3.

A risk may only exist where a plausible SPR linkage is present, and where the quantity or concentration of a contaminant is sufficient so as to cause harm. Under the statutory definition, "Contamination" may only strictly exist where contaminants pose a risk of harm to a receptor. Risk may be defined as a function of the likelihood and severity of any adverse effects arising from contamination. The risk classification has been assessed in accordance with CIRIA C552 (Rudland et al., 2001). A summary of how the risks is derived and their definitions are presented in Tables 3.1 & 3.2 below.

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very high risk	High risk	Moderate risk	Moderate/low risk
	Likely	High risk	Moderate risk	Moderate/low risk	Low risk
	Low Likelihood	Moderate risk	Moderate/low risk	Low risk	Very low risk
	Unlikely	Moderate/low risk	Low risk	Very low risk	Very low risk

Table 3.1 Risk Ratings Matrix

Risk Rating	Definitions
Very high risk	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not already undertaken) and remediation are likely to be required.
High risk	Harm is likely to arise to a designated receptor from an identified hazard Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not already undertaken) is required and remediation works may be necessary in the short term and are likely over the longer term.
Moderate risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild.
Moderate to low risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is unlikely that any such harm would be severe, or if any harm were to occur it is probable that the harm would be relatively mild.
Low risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very low risk	There is low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

Table 3.2 Risk Ratings Definition

3.2.2 Summary of Plausible Sources

Possible sources of contamination identified or discounted as part of the desk study are summarised in Table 3.3.

Source	Description	Comments
On site Shallow Soils and Made Ground	General chemical quality of the near surface soils including impact of land use as agricultural land (including potential storage of machinery equipment fuels or other chemicals)	Possible elevated concentrations of metals, organic (including PAH and TPH), pesticides, inorganic contaminants, asbestos and pesticides.
Asbestos	Potential presence of asbestos within the existing agricultural building.	Possible presence of asbestos and ACM within the existing barn buildings and within underlying soils.
Former Tanks (shown on mapping located to the east of Lot 1)	Presence of former tanks shown on plans in the vicinity of the site.	Possible presence of organic contaminants (including PAH and TPH).
Ground gases/vapours	Possible presence of Made Ground beneath the site. This is only considered a viable source of ground gas if significant proportions of organic material are present.	Methane, carbon dioxide, depleted oxygen, trace gases.
Naturally occurring aggressive ground conditions	Naturally occurring compounds in the ground which could damage buried concrete.	Possible elevated sulphate concentrations.

Table 3.3 Possible Sources of Contamination

3.2.3 Summary of Plausible Pathways

The plausible pathways are summarised in Table 3.4. These pathways are based on the proposed residential end use.

Pathway	Description
Direct Contact	Ingestion of soil particles, inhalation of soil derived dust (including tracked back dust), dermal contact. Bioaccumulation and home grown produce consumption.
Inhalation	Inhalation of soil dust both inside and outside of buildings.
	Inhalation of ground gas/vapours within buildings.
Vertical & Lateral Migration	Contaminant movement both vertically through leaching/gravity and horizontally along preferential pathways, e.g. services trenches, more permeable bedded strata or within groundwater. Migration of infiltrating water or contaminants through preferential pathways such as shallow secondary A Aquifer (Horsham Stone Member).
Shallow Groundwater	Shallow groundwater or perched water may be present within shallow soils and, if encountered, could result in the vertical and lateral migration of contaminants.
Chemical Attack	Attack of buried plastics and concrete by aggressive ground conditions.
Flooding	The site was not located within a Flood Zone or an area at risk of flooding from rivers, the sea or groundwater.

Table 3.4 Possible Contaminant Pathways

3.2.4 Summary of Plausible Receptors

Potential receptors associated with the site and its development, identified or otherwise discounted, are

summarised in Table 3.5.

Receptor	Description	Comments
End Users	Future users of the proposed development.	The existing agricultural barns are proposed to be converted into residential dwellings under permitted development (these residential dwellings are assumed to include garden areas).
Adjacent Land Users	Sensitive land uses identified within the immediate vicinity.	Adjacent land users are generally residential and agricultural.
Built Environment	Buried concrete for foundations and plastics for potable water supply pipes may be laid in contact with contaminated soils.	Made Ground may be present in isolated areas of the site. Aggressive ground conditions may be present beneath parts of the site
Groundwater	Controlled Waters contained within the aquifer(s) beneath the site.	The site consists of a Secondary A Aquifer overlying Unproductive Strata.
Surface Water	Controlled Waters within lakes, rivers, ponds, etc., or coastal waters.	The nearest surface water feature comprised a watercourse located c.85m southwest of the site.

Table 3.5 Possible Receptors of Contamination

Site workers involved in the preparation and construction of the development have not been considered in this assessment as the principal contractor is duty bound under the current CDM Regulations to undertake their own risk assessments with respect to their employees.

Whilst the above sources and receptors have been identified, Table 3.6 summarises the identified plausible pollution linkages and a qualitative assessment of the risks based on the desk study research.

Potential Source/Media	Potential Receptors	Possible Pathways	Probability	Consequence	Risk & Justification
Onsite Shallow Soils and Made Ground	End Users	Direct contact and inhalation of soil derived dust	Likely	Mild	**Moderate to Low** Future occupiers may come into direct contact with soils where/if soft landscaping is present.
	Adjacent Land Users	Direct contact and inhalation of soil derived dust	Unlikely	Minor	**Very Low** Adjacent site users are unlikely to come into contact with the soils at the site.
	Soft Landscaping	Root uptake	Likely	Minor	**Low** Where soft landscaping is proposed on the site, root uptake is possible. However, no clear evidence of harm to existing vegetation was noted during the site walkover.
	Water Supply Pipes	Direct contact	Likely	Minor	**Low** Water supply pipes are likely to come into contact with impacted soils depending upon depth of installation and extent of soil impact.
	Buildings and Infrastructure	Direct contact	Likely	Minor	**Low** Foundations and utilities will be placed within potentially aggressive soils (e.g. sulphate). However, the consequence is anticipated to be minor.
	Groundwater	Vertical Migration	Low Likelihood	Minor	**Very Low** The site overlies a Secondary A Aquifer and Unproductive Strata and is not located within an Source Protection Zone (SPZ). Significant potentially mobile contamination is not anticipated to be present on site.
Former Tanks	End Users	Direct contact and inhalation of soil derived dust and vapours	Likely	Mild	**Moderate to Low** Future occupiers may come into direct contact with impacted soils where/if soft landscaping is present. Vapours from impacted soils may also be inhaled.

Potential Source/Media	Potential Receptors	Possible Pathways	Probability	Consequence	Risk & Justification
	Adjacent Land Users	Direct contact and inhalation of soil derived dust and vapours	Unlikely	Minor	**Very Low** Adjacent site users are unlikely to come into contact with the soils at the site.
	Soft Landscaping	Root uptake	Likely Likelihood	Minor	**Low** Where soft landscaping is proposed on the site, root uptake is possible. However, no clear evidence of harm to existing vegetation was noted during the site walkover.
	Water Supply Pipes	Direct contact	Likely	Mild	**Moderate to Low** Water supply pipes are likely to come into contact with impacted soils depending upon depth of installation and extent of soil impact.
	Buildings and Infrastructure	Direct contact	Likely	Minor	**Low** Foundations and utilities will be placed within potentially aggressive soils (e.g. sulphate). However, the consequence is anticipated to be minor.
	Groundwater	Vertical Migration	Low Likelihood	Minor	**Very Low** The site overlies a Secondary A Aquifer over Unproductive Strata and is not located within an Source Protection Zone (SPZ). Significant potentially mobile contamination is not anticipated to be present on site.
Asbestos	End Users	Direct contact and inhalation of soil derived dust	Low Likelihood	Mild	**Low** Future occupiers may come into direct contact with asbestos if it is entrained within the soils where/if soft landscaping is present.
	Adjacent Land Users	Inhalation of free fibres and soil derived dust	Low Likelihood	Mild	**Low** Adjacent site users are unlikely to come into contact with the soils at the site. If asbestos is identified as being present within the existing barn structure, then it will need to be suitably remove by appropriately qualified contractors with the appropriate control measure in place to adequately control the release of any fibres that may impact adjacent site users.

Potential Source/Media	Potential Receptors	Possible Pathways	Probability	Consequence	Risk & Justification
Ground gases and vapours from any Made Ground	End Users	Inhalation	Low Likelihood	Mild	**Low** Future occupiers may inhale potential ground gases produced by this source. Extensive or deep Made Ground with sufficient organic content for significant ground gas generation is not anticipated.
	Buildings and infrastructure	Gas accumulation and potential explosion of flammable gases	Unlikely	Minor	**Very Low** Extensive putrescible material sufficient for significant methane production is not anticipated at the site.
	Adjacent land users	Inhalation	Low	Minor	**Very Low** The potential sources of ground gases beneath the site are commensurate with those in the surrounding area. Adjacent land users may be at risk from off-site ground gases. However, this was beyond the remit of this investigation.
Naturally occurring aggressive ground conditions	End users	Direct contact and inhalation / ingestion of soil derived dust	Low	Minor	**Very low** No naturally occurring potential sources which could harm human health have been identified. The consequence is likely to be minor.
	Adjacent land users	Direct contact	Unlikely	Minor	**Very low** No naturally occurring potential sources which could harm human health have been identified. The consequence is likely to be minor.
	Water supply pipes	Direct contact	Likely	Minor	**Low** No naturally occurring potential sources which could harm human health have been identified. The consequence is likely to be minor.
	Buildings and Infrastructure	Direct contact	Likely	Minor	**Low** Foundations may be placed within soils which may be an aggressive environment for concrete.

Potential Source/Media	Potential Receptors	Possible Pathways	Probability	Consequence	Risk & Justification
Radon	End Users	Inhalation	Unlikely	Minor	**Very Low** Radon is denser than atmospheric air and will accumulate in the lowest available room. Future occupiers may inhale radon gas. The desk study indicates that radon protection measures are not required.

Table 3.6 Plausible Pollution Linkages

3.3 Preliminary Risk Assessment Summary

The Preliminary Risk Assessment (PRA) and Conceptual Site Model (CSM) developed from the information gathered as part of the desk study process have identified several plausible contamination linkages that exist in relation to the proposed redevelopment/change of use of the site.

The potential contamination linkages established within this desk study are not considered to prevent a change of use or development on the subject site but could require investigation and assessment to support further characterisation, calibration of the CSM and where/if necessary, determine a remedial strategy to reduce, remove or otherwise control any risk within the site to key receptors.

Based on these proposals the desk study has identified potential plausible contamination linkages should areas of soft landscaping or gardens be proposed associated with the barn conversion works. It is not considered that these would impede this change of use but, may require an element of investigation if/where areas of proposed soft landscaping are proposed. In terms of the barn conversion itself it is assumed that minimal disturbance to the underlying ground is proposed.

At present the proposals for the site are for the conversion of the existing barns (Lot 1 and Lot 2) to residential dwellings under permitted development. At this stage it has been assumed that some element of soft landscaping (with plant uptake) **may** be proposed as part of the conversion works in conjunction with the proposed residential units.

If/where areas of soft landscaping is proposed as part of the proposed conversion works on site it is recommended that intrusive investigation works are undertaken to assess the potential presence of Made Ground and the former tank associated with the site. However, if the inclusion of gardens and soft landscaping is specially excluded from the proposal, geochemical assessment may not be required.

In order to progress this assessment in line with the National Planning Policy Framework, to provide further characterisation of the site and refinement of the PRA and CSM, it is recommended that geotechnical (and geochemical if areas of soft landscaping are proposed) investigation will be required in due course to assess the existing foundation and floor construction in relation to the proposed conversion works and to inform detailed design.

Should the site be proposed to be redeveloped i.e. the current barn structure demolished and a subsequent building put in its place, rather than converted (with limited ground disturbance), then intrusive investigation and associated testing is recommended to confirm the findings of the desk study report and to provide a robust risk assessment for the site and proposed redevelopment from a geotechnical and geochemical perspective to refine the Conceptual Site Model (CSM).

As such, it is recommended, that if redevelopment works include demolition of the current barn structures and subsequent removal of the existing floor slab and/or foundations, then geochemical and geotechnical investigation be carried out on the site to include analysis of soil and groundwater (if encountered) samples for the range of potential contaminants identified within the desk study. It should be noted that geotechnical investigations may still be required to support the proposed conversion works.

3.4 Preliminary Geotechnical Assessment Summary

The site is anticipated to be underlain by Horsham Stone Member (sandstone) over the Weald Clay Formation (mudstone). A thickness of Made Ground may also be present on site as a result of former development of the barns. The bedrock geology has the potential to include cohesive soils so development/redevelopment of the

existing barn on the site will need to take account of the potential for shrinkable soils to be present and the influence of shrubs and trees (existing or proposed).

It is possible that where new/additional foundations are proposed as part of the conversion conventional strip or pad foundations could be suitable for the proposed development assuming foundations terminate wholly within the Horsham Stone Member of Weald Clay Formation. The foundation design would also need to account for the presence and vegetation in proximity to the buildings and these could require the localised deepening of foundations. If shallow groundwater is present this might impact on the constructability of conventional foundations, e.g. sacrificial shuttering and groundwater control may be required.

Should redevelopment, rather than conversion with minimal ground disturbance of the site, be proposed an geotechnical intrusive investigation will be required in due course in order to inform the design process.

Whilst ground bearing floor slabs may be suitable if non-shrinkable soil are not present, suspended floor slabs are recommended at this stage due to the anticipated presence of cohesive soils at shallow depth.

It is possible that soakaways may function on this site within the Horsham Stone Member, although this would be subject to testing to inform design, the absence of shallow groundwater and the absence of gross contamination within soils and groundwater beneath the site. It may also be necessary (subject to testing) to utilise on-site storage and attenuation of peak storm flow, through systems such as porous paving and cellular storage crates.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

At present the proposals for the site are for the conversion of the existing barns into residential dwellings under permitted development. Based on these proposals the desk study has not identified any plausible contamination linkages that would impede this change of use or require any further investigations at this stage, unless areas of proposed soft landscaping and gardens are proposed as part of the conversion/development work. The individual risk ratings for the potential contamination linkages identified ranged from low to moderate to low. This is based on the assumption that minimal disturbance to the underlying ground is proposed, and that an appropriately building survey is undertaken to identify whether asbestos is present within the existing barn building. If so, this asbestos material would need to be appropriately removed from the site under the relevant control measures.

If, however, the development proposals include the removal of the current floor slab, creation of gardens or soft landscaping, and/or intrusive works which expose the underlying Made Ground and shallow soils then further assessment is likely to be required to better characterise contamination on site, as a result of current and historical land uses and the associated risk to identified receptors. If/where areas of soft landscaping and/or gardens are proposed as part of the development/conversion works then geochemical investigation should be undertaken.

It is concluded that based on the current proposals for the conversion of the existing barn that geotechnical investigation works will be required, in due course, to inform the detailed design and assess the existing foundations. However, if the proposal changes and redevelopment works include the removal of the current floor slab and/or foundations or intrusive works exposing underlying Made Ground and shallow soils, then, in this situation, it is recommend that investigation be undertaken to include geotechnical and geochemical assessment.

It is possible that where additional/amended foundations are required conventional foundations would be suitable for the proposed development, although this is subject to confirmation following intrusive investigation.

4.2 Recommendations

At this stage, based on the findings of the desk study, the preliminary risk assessment, and the fact that the current proposals for the site are only for a change of use and conversion of a barn from an agricultural use to residential dwellings, with limited ground disturbance/intrusive works proposed as part of the works, it is considered that limited investigation works would be required with respect to contamination if area of soft landscaping or private gardens are proposed, although some testing for geotechnical design is recommended.

However, should conversion/development/redevelopment works be proposed at the site that would result in intrusive works (i.e. removal of the existing floor slab, exposure of underlying Made Ground/ shallow soils, creation of gardens etc.), rather than a conversion with limited ground disturbance, then it is recommended that intrusive investigation works include a geochemical and geotechnical assessment.

Subject to the proposed design the following investigation elements may be required on site to inform/refine the preliminary risk assessment undertaken and to inform the detailed design for the development:

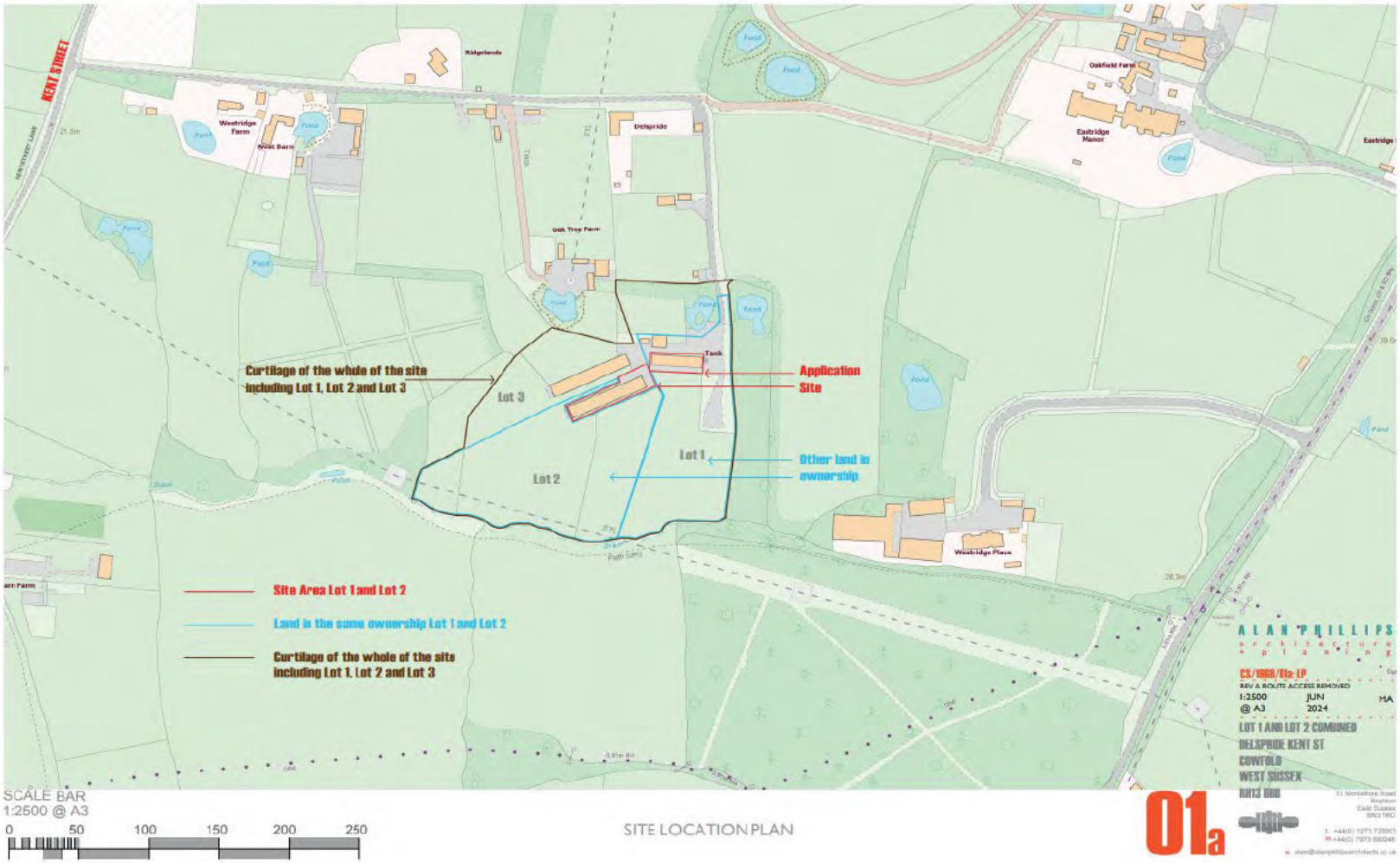
- Intrusive investigation works including targeted investigation in order to clarify the geotechnical and geo-environmental issues pertaining to redevelopment of the site.
- In-situ testing to assess the potential for the use of soakaways, e.g. trial pit soakage tests if required.
- Soil and groundwater (if encountered) sampling and analysis should be undertaken to inform subsequent geotechnical and geo-environmental risk assessment.

- Laboratory analysis, on soil samples recovered from the exploratory holes for a range of geotechnical parameters to support foundation design and the like.
- Laboratory analysis, on shallow soil samples and groundwater samples recovered from the exploratory holes, for an analytical suite to include the potential contaminants identified within the desk study and encountered during any intrusive investigation. The suite should include commonly occurring metals, non-metals, asbestos, TPH, and PAH compounds, and pesticides.
- Waste Classification and Waste Acceptance Criteria testing may be required if surplus spoil is to be disposed of to landfill from the development.

FIGURES

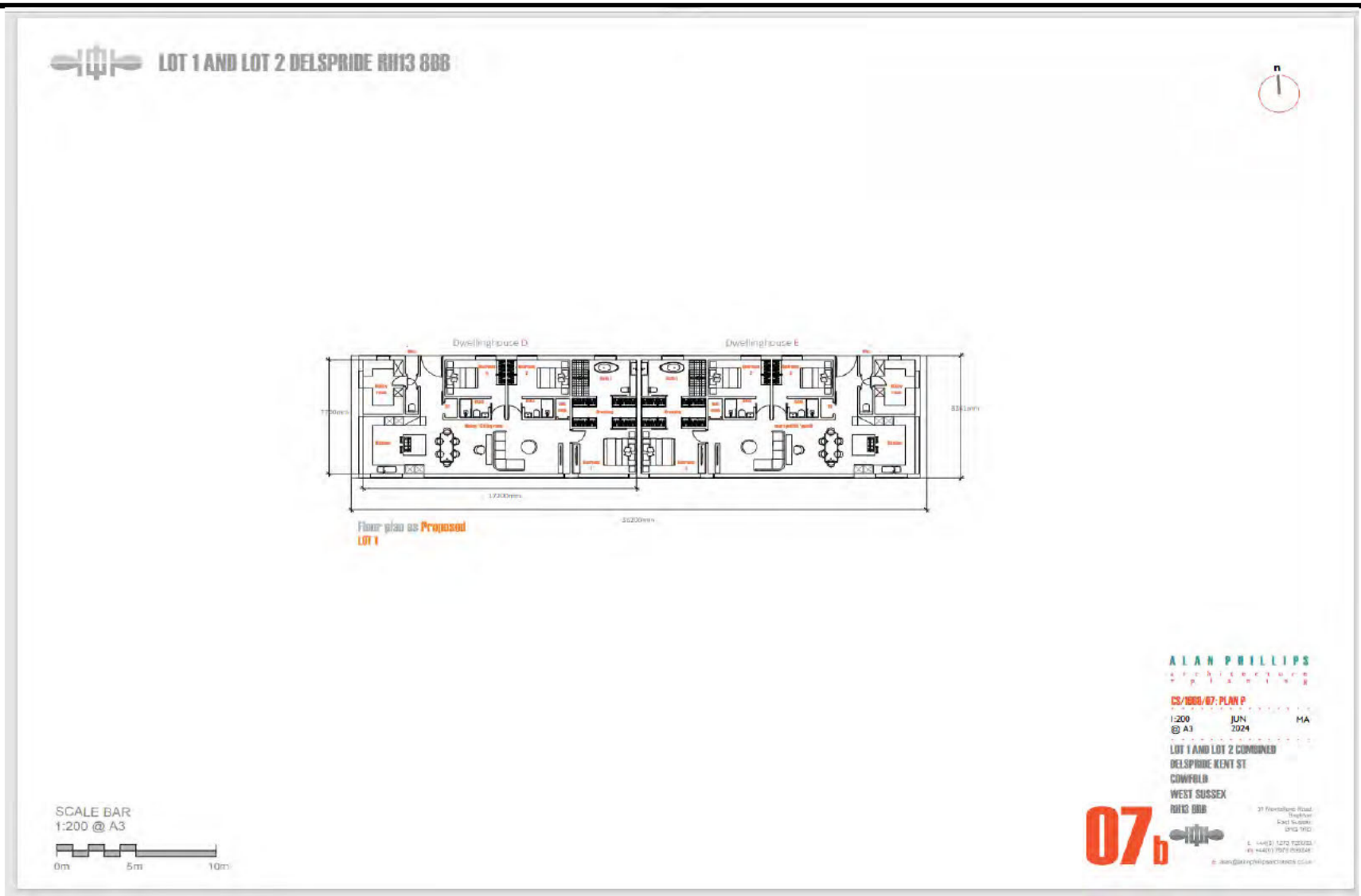


LOT 1 AND LOT 2 DELSPRIDE RH13 8BB

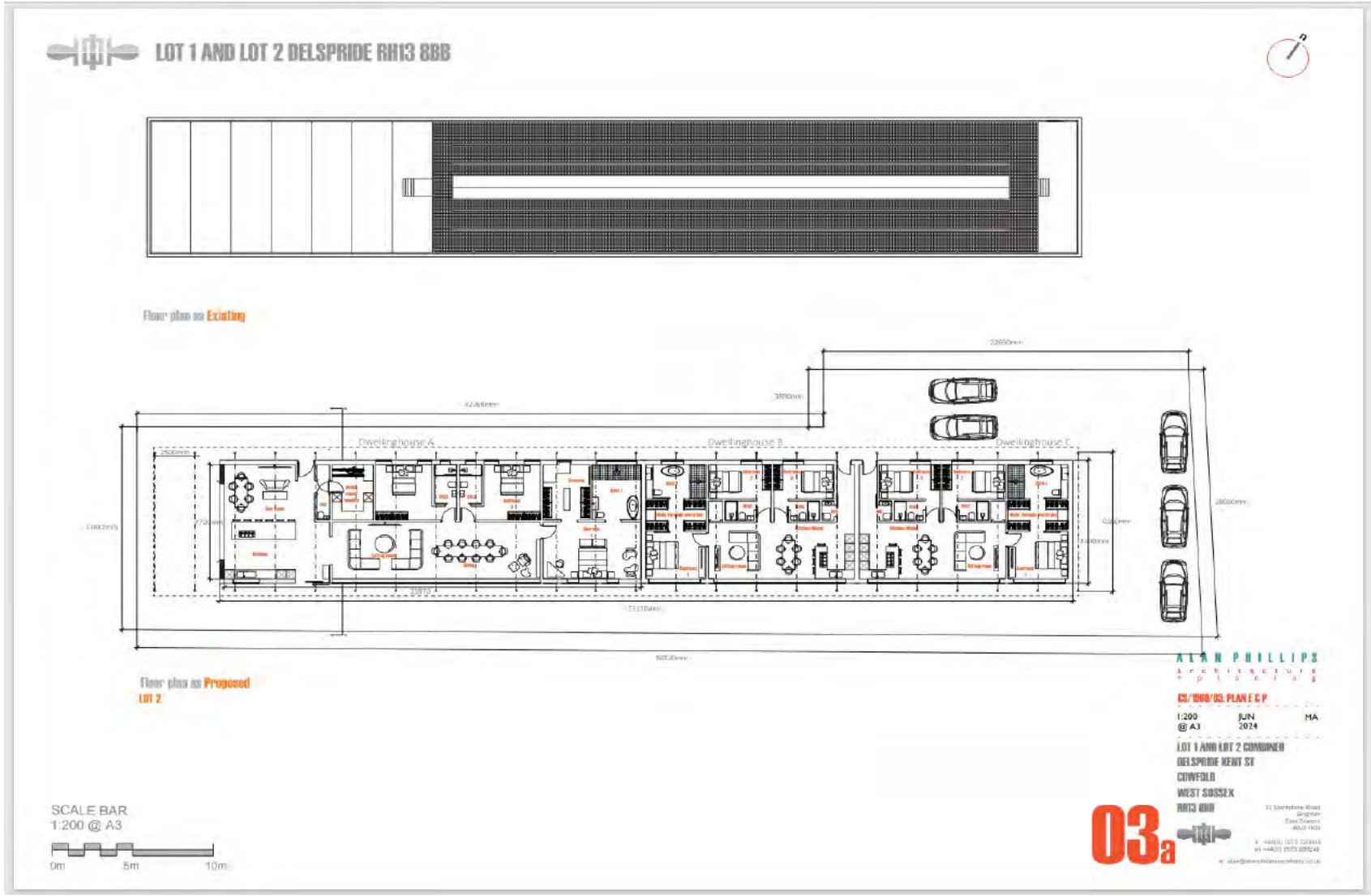


N

Project:	Lot 1 and Lot 2 Delspride, Kent Street, Cowfold, RH13 8BB			**Title**	Site Location Plan
Client:	Remoon Francis			**Geo-Environmental Services Ltd** **Unit 7 Danworth Farm, Cuckfield Road** **Hurstpierpoint, West Sussex BN6 9GL** **+44(0)1273 832972 www.gesl.net**	Geo-Environmental
Ref No:	GE22619	**Revision:**	0		
Drawn:	LL	**Date:**	08/08/2024		
Figure:	1	**Scale:**	Not To Scale		



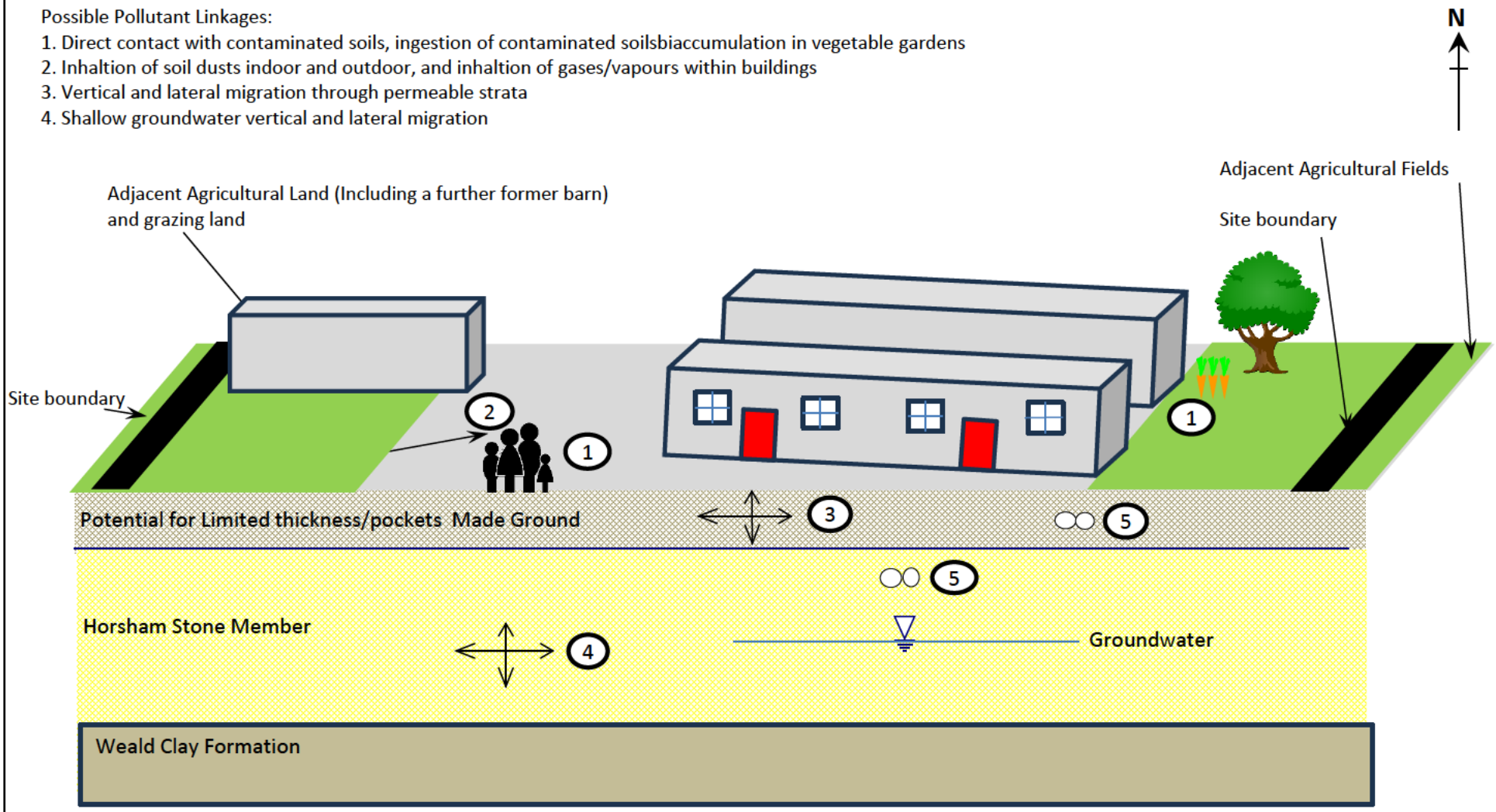
Project:	Lot 1 and Lot 2 Delspride, Kent Street, Cowfold, RH13 8BB			**Title**	Proposed Development Plans (Lot 1)
Client:	Remoon Francis			**Geo-Environmental Services Ltd** **Unit 7 Danworth Farm, Cuckfield Road** **Hurstpierpoint, West Sussex BN6 9GL** **+44(0)1273 832972 www.gesl.net**	Geo-Environmental
Ref No:	GE22619	**Revision:**	0		
Drawn:	LL	**Date:**	08/08/2024		
Figure:	2	**Scale:**	Not to Scale		



Project:	Lot 1 and Lot 2 Delspride, Kent Street, Cowfold, RH13 8BB			**Title**	Proposed Development Plans (Lot 2)
Client:	Remoon Francis			**Geo-Environmental Services Ltd** **Unit 7 Danworth Farm, Cuckfield Road** **Hurstpierpoint, West Sussex BN6 9GL** **+44(0)1273 832972 www.gesl.net**	Geo-Environmental
Ref No:	GE22619	**Revision:**	0		
Drawn:	LL	**Date:**	08/08/2024		
Figure:	3	**Scale:**	Not to Scale		

Possible Pollutant Linkages:

1. Direct contact with contaminated soils, ingestion of contaminated soilsbiaccumulation in vegetable gardens
2. Inhaltion of soil dusts indoor and outdoor, and inhaltion of gases/vapours within buildings
3. Vertical and lateral migration through permeable strata
4. Shallow groundwater vertical and lateral migration



Project:	Lot 1 and Lot 2 Delspride, Kent Street, Cowfold, RH13 8BB			**Title**	Conceptual Site Model (Proposed Development)
Client:	Remoon Francis				
Ref No:	GE22619	**Revision:**	0		
Drawn:	LL	**Date:**	08/08/2024		
Figure:	4	**Scale:**	Not To Scale		

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Geo-Environmental

APPENDIX A

Desk Study Information



Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Lot 1 and Lot 2 Combined, Delspride Kent Street, Cowfold, West Sussex, RH13 8BB

Order Details

Date: 25/07/2024

Your ref: GE22619/PO7637

Our Ref: GS-F1E-4F8-BGS-COG

Site Details

Location: 523524 121663

Area: 0.16 ha

Authority: Horsham District Council ↗



Summary of findings p. 2 >

Aerial image p. 9 >

OS MasterMap site plan p.14 >

Insight User Guide ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	0	0	0	4	-
16	1.2	Historical tanks	0	0	0	0	-
16	1.3	Historical energy features	0	0	0	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
17	1.5	Historical garages	0	0	0	0	-
17	1.6	Historical military land	0	0	0	0	-
Page	Section	Past land use - un-grouped >	On site	0-50m	50-250m	250-500m	500-2000m
18 >	2.1 >	Historical industrial land uses >	0	0	0	7	-
19	2.2	Historical tanks	0	0	0	0	-
19	2.3	Historical energy features	0	0	0	0	-
19	2.4	Historical petrol stations	0	0	0	0	-
20	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22 >	3.5 >	Historical waste sites >	0	0	1	0	-
22	3.6	Licensed waste sites	0	0	0	0	-
23 >	3.7 >	Waste exemptions >	0	1	3	10	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
25 >	4.1 >	Recent industrial land uses >	0	1	3	-	-
26	4.2	Current or recent petrol stations	0	0	0	0	-
26	4.3	Electricity cables	0	0	0	0	-
26	4.4	Gas pipelines	0	0	0	0	-
26	4.5	Sites determined as Contaminated Land	0	0	0	0	-

26	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
27	4.7	Regulated explosive sites	0	0	0	0	-
27	4.8	Hazardous substance storage/usage	0	0	0	0	-
27	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
27	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
27	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
28	4.12	Radioactive Substance Authorisations	0	0	0	0	-
28 >	4.13 >	Licensed Discharges to controlled waters >	0	0	0	4	-
29	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
29	4.15	Pollutant release to public sewer	0	0	0	0	-
29	4.16	List 1 Dangerous Substances	0	0	0	0	-
29	4.17	List 2 Dangerous Substances	0	0	0	0	-
29 >	4.18 >	Pollution Incidents (EA/NRW) >	0	0	0	1	-
30	4.19	Pollution inventory substances	0	0	0	0	-
30	4.20	Pollution inventory waste transfers	0	0	0	0	-
30	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
31	5.1	Superficial aquifer	None (within 500m)				
32 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
33 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
34	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
34	5.5	Groundwater vulnerability- local information	None (within 0m)				
35	5.6	Groundwater abstractions	0	0	0	0	0
36 >	5.7 >	Surface water abstractions >	0	0	0	0	1
36	5.8	Potable abstractions	0	0	0	0	0
36	5.9	Source Protection Zones	0	0	0	0	-
37	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
38 >	6.1 >	Water Network (OS MasterMap) >	0	0	3	-	-

39 >	6.2 >	Surface water features >	0	2	4	-	-
39 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
40 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
40	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
41	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
41	7.2	Historical Flood Events	0	0	0	-	-
41	7.3	Flood Defences	0	0	0	-	-
42	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
42	7.5	Flood Storage Areas	0	0	0	-	-
43	7.6	Flood Zone 2	None (within 50m)				
43	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
44	8.1	Surface water flooding	Negligible (within 50m)				
Page	Section	Groundwater flooding >					
45 >	9.1 >	Groundwater flooding >	Negligible (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
46	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
47	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
47	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
47	10.4	Special Protection Areas (SPA)	0	0	0	0	0
47	10.5	National Nature Reserves (NNR)	0	0	0	0	0
48	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
48 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	25
49	10.8	Biosphere Reserves	0	0	0	0	0
49	10.9	Forest Parks	0	0	0	0	0
49	10.10	Marine Conservation Zones	0	0	0	0	0
50	10.11	Green Belt	0	0	0	0	0
50	10.12	Proposed Ramsar sites	0	0	0	0	0

50	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
50	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
50	10.15	Nitrate Sensitive Areas	0	0	0	0	0
51 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	1
52 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
53	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
54	11.1	World Heritage Sites	0	0	0	-	-
54	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
54	11.3	National Parks	0	0	0	-	-
54	11.4	Listed Buildings	0	0	0	-	-
55	11.5	Conservation Areas	0	0	0	-	-
55	11.6	Scheduled Ancient Monuments	0	0	0	-	-
55	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
56 >	12.1 >	Agricultural Land Classification >	Grade 3 (within 250m)				
57	12.2	Open Access Land	0	0	0	-	-
57	12.3	Tree Felling Licences	0	0	0	-	-
57	12.4	Environmental Stewardship Schemes	0	0	0	-	-
57	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
58 >	13.1 >	Priority Habitat Inventory >	0	3	8	-	-
59	13.2	Habitat Networks	0	0	0	-	-
59	13.3	Open Mosaic Habitat	0	0	0	-	-
59	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
61 >	14.1 >	10k Availability >	Identified (within 500m)				
62	14.2	Artificial and made ground (10k)	0	0	0	0	-
63	14.3	Superficial geology (10k)	0	0	0	0	-

63	14.4	Landslip (10k)	0	0	0	0	-
64 >	14.5 >	Bedrock geology (10k) >	1	1	1	0	-
65	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
66 >	15.1 >	50k Availability >	Identified (within 500m)				
67	15.2	Artificial and made ground (50k)	0	0	0	0	-
67	15.3	Artificial ground permeability (50k)	0	0	-	-	-
68	15.4	Superficial geology (50k)	0	0	0	0	-
68	15.5	Superficial permeability (50k)	None (within 50m)				
68	15.6	Landslip (50k)	0	0	0	0	-
68	15.7	Landslip permeability (50k)	None (within 50m)				
69 >	15.8 >	Bedrock geology (50k) >	2	0	0	0	-
70 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
70	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
71	16.1	BGS Boreholes	0	0	0	-	-
Page	Section	Natural ground subsidence >					
72 >	17.1 >	Shrink swell clays >	Low (within 50m)				
73 >	17.2 >	Running sands >	Negligible (within 50m)				
74 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
75 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
76 >	17.5 >	Landslides >	Very low (within 50m)				
77 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
79 >	18.1 >	BritPits >	0	0	0	1	-
80 >	18.2 >	Surface ground workings >	0	5	9	-	-
81	18.3	Underground workings	0	0	0	0	0
81	18.4	Underground mining extents	0	0	0	0	-
81	18.5	Historical Mineral Planning Areas	0	0	0	0	-

81 >	18.6 >	Non-coal mining >	1	0	0	0	0
82	18.7	JPB mining areas	None (within 0m)				
82	18.8	The Coal Authority non-coal mining	0	0	0	0	-
82	18.9	Researched mining	0	0	0	0	-
82	18.10	Mining record office plans	0	0	0	0	-
83	18.11	BGS mine plans	0	0	0	0	-
83	18.12	Coal mining	None (within 0m)				
83	18.13	Brine areas	None (within 0m)				
83	18.14	Gypsum areas	None (within 0m)				
83	18.15	Tin mining	None (within 0m)				
84	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
85	19.1	Natural cavities	0	0	0	0	-
85	19.2	Mining cavities	0	0	0	0	0
85	19.3	Reported recent incidents	0	0	0	0	-
85	19.4	Historical incidents	0	0	0	0	-
86	19.5	National karst database	0	0	0	0	-
Page	Section	Radon >					
87 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
89 >	21.1 >	BGS Estimated Background Soil Chemistry >	3	3	-	-	-
89	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
90	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
91	22.1	Underground railways (London)	0	0	0	-	-
91	22.2	Underground railways (Non-London)	0	0	0	-	-
91	22.3	Railway tunnels	0	0	0	-	-
91	22.4	Historical railway and tunnel features	0	0	0	-	-
91	22.5	Royal Mail tunnels	0	0	0	-	-

92	22.6	Historical railways	0	0	0	-	-
92	22.7	Railways	0	0	0	-	-
92	22.8	Crossrail 1	0	0	0	0	-
92	22.9	Crossrail 2	0	0	0	0	-
92	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 24/04/2021

Site Area: 0.16ha

Recent site history - 2018 aerial photograph



Capture Date: 14/05/2018

Site Area: 0.16ha

Recent site history - 2012 aerial photograph



Capture Date: 13/09/2012

Site Area: 0.16ha

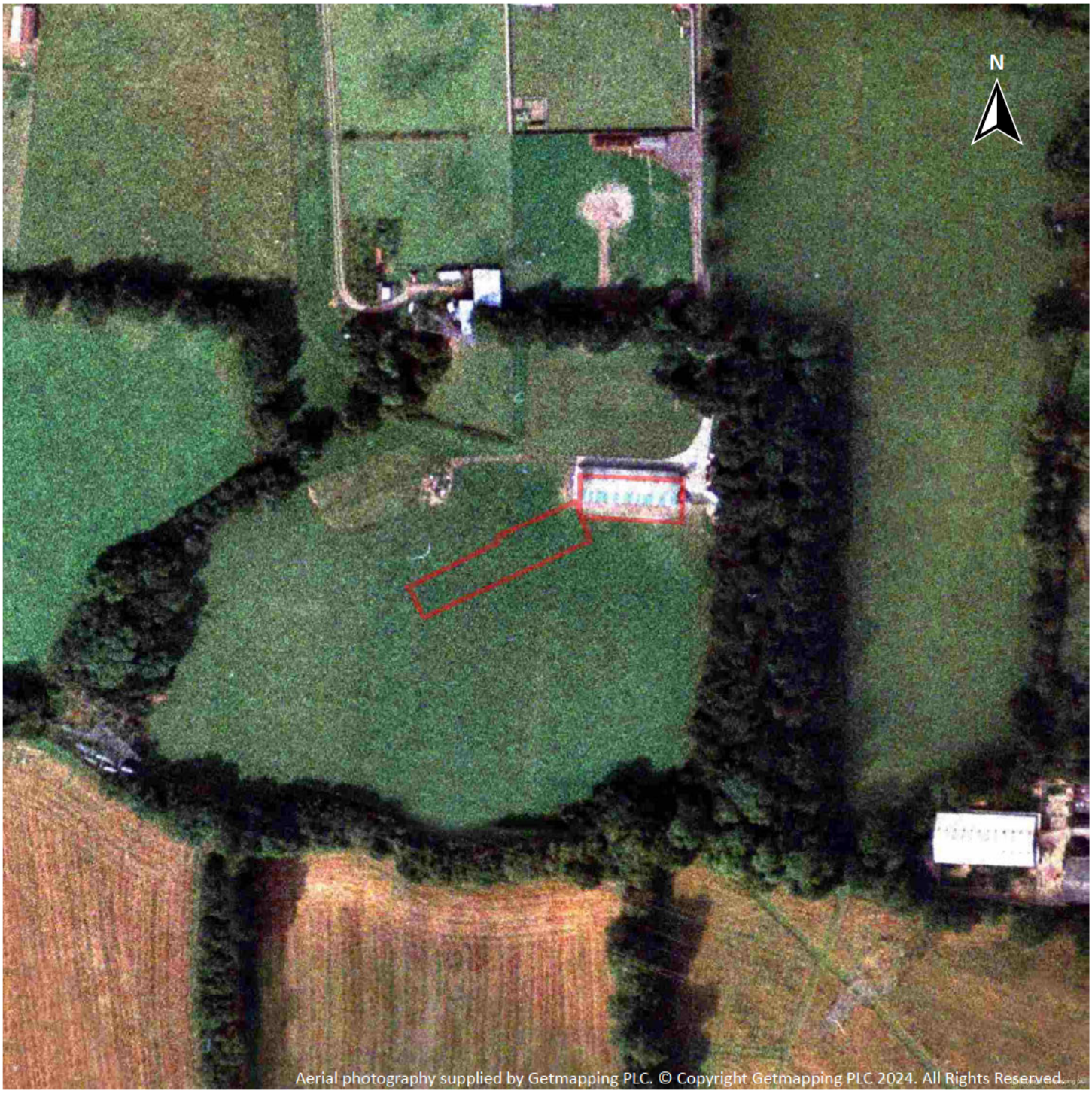
Recent site history - 2005 aerial photograph



Capture Date: 17/04/2005

Site Area: 0.16ha

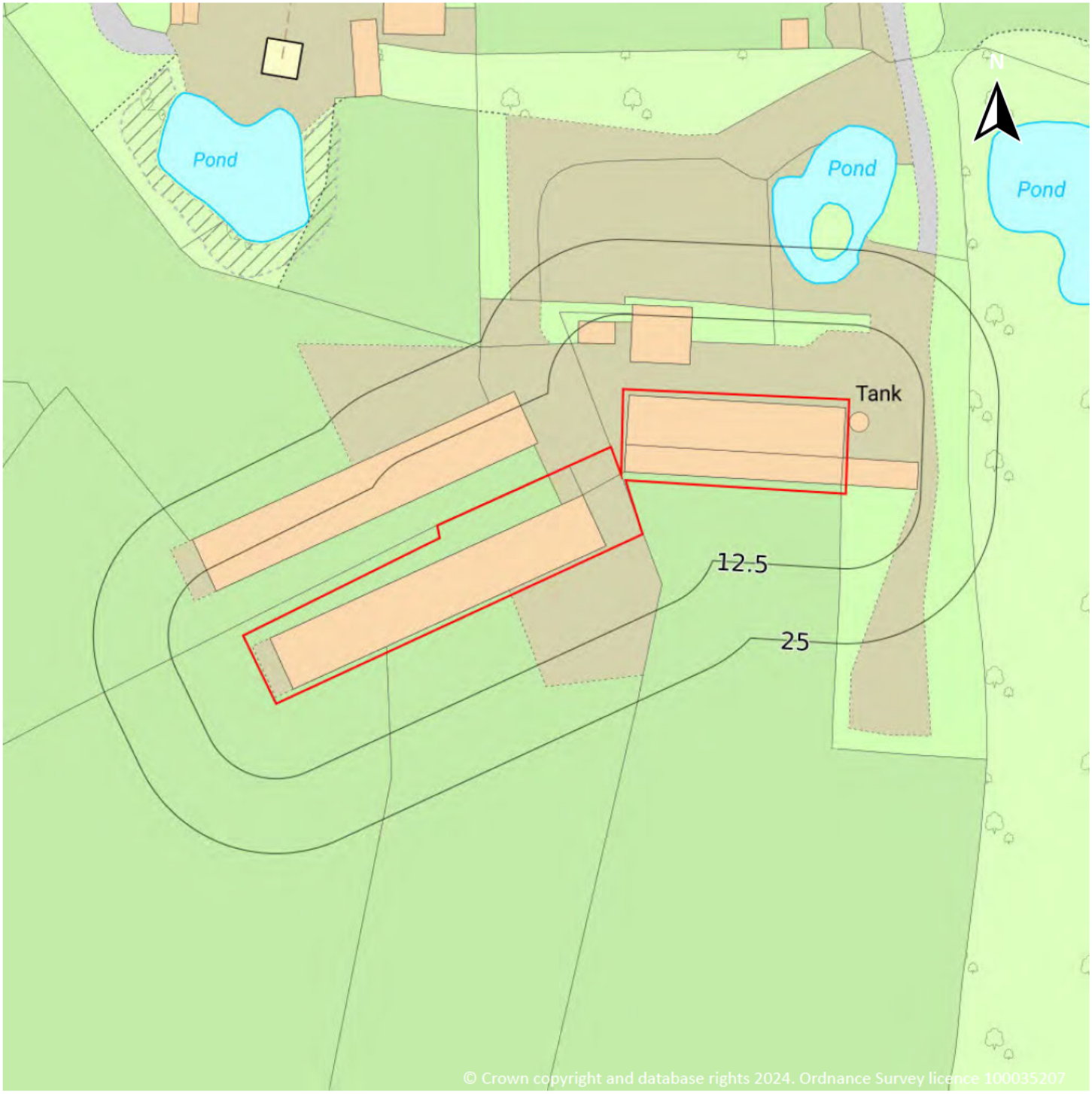
Recent site history - 1999 aerial photograph



Capture Date: 06/09/1999

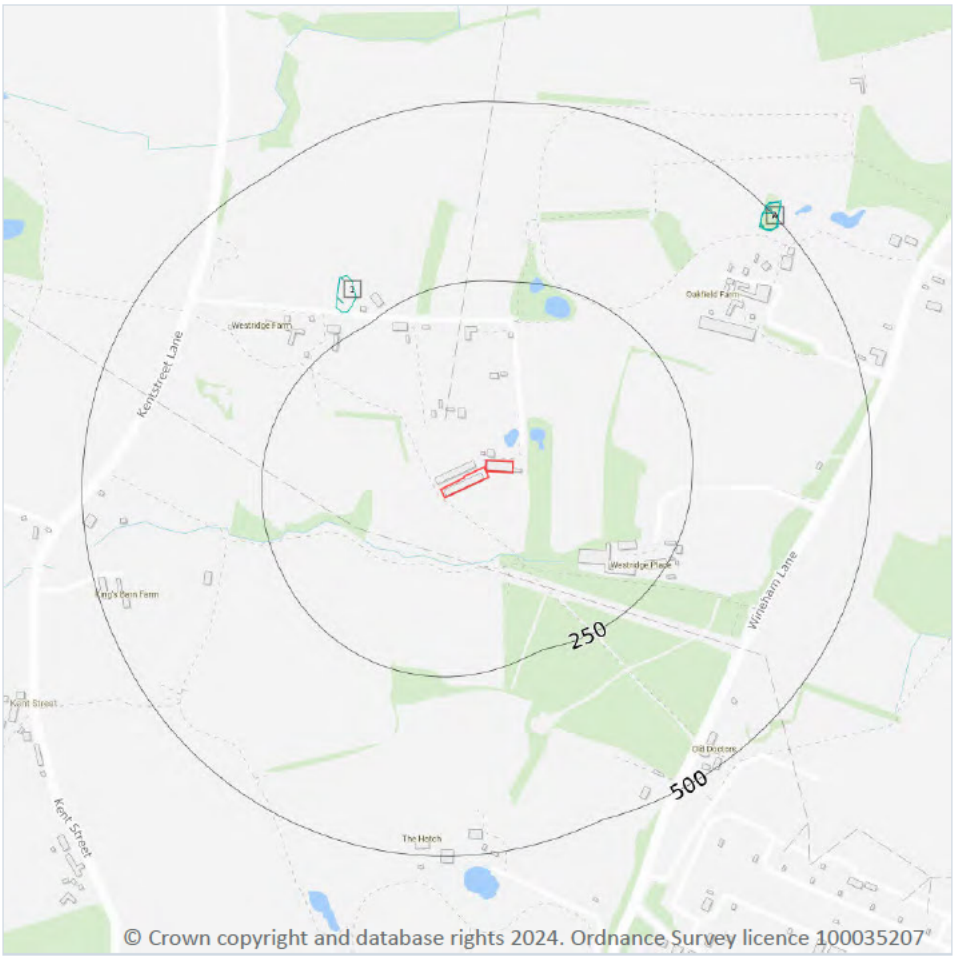
Site Area: 0.16ha

OS MasterMap site plan



Site Area: 0.16ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	4

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

Features are displayed on the Past land use map on page 15 >

ID	Location	Land use	Dates present	Group ID
1	280m NW	Unspecified Pit	1896 - 1912	2240945

ID	Location	Land use	Dates present	Group ID
A	475m NE	Unspecified Pit	1962 - 1978	2205159
A	476m NE	Unspecified Pit	1909 - 1947	2247688
A	477m NE	Unspecified Pit	1896	2227308

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

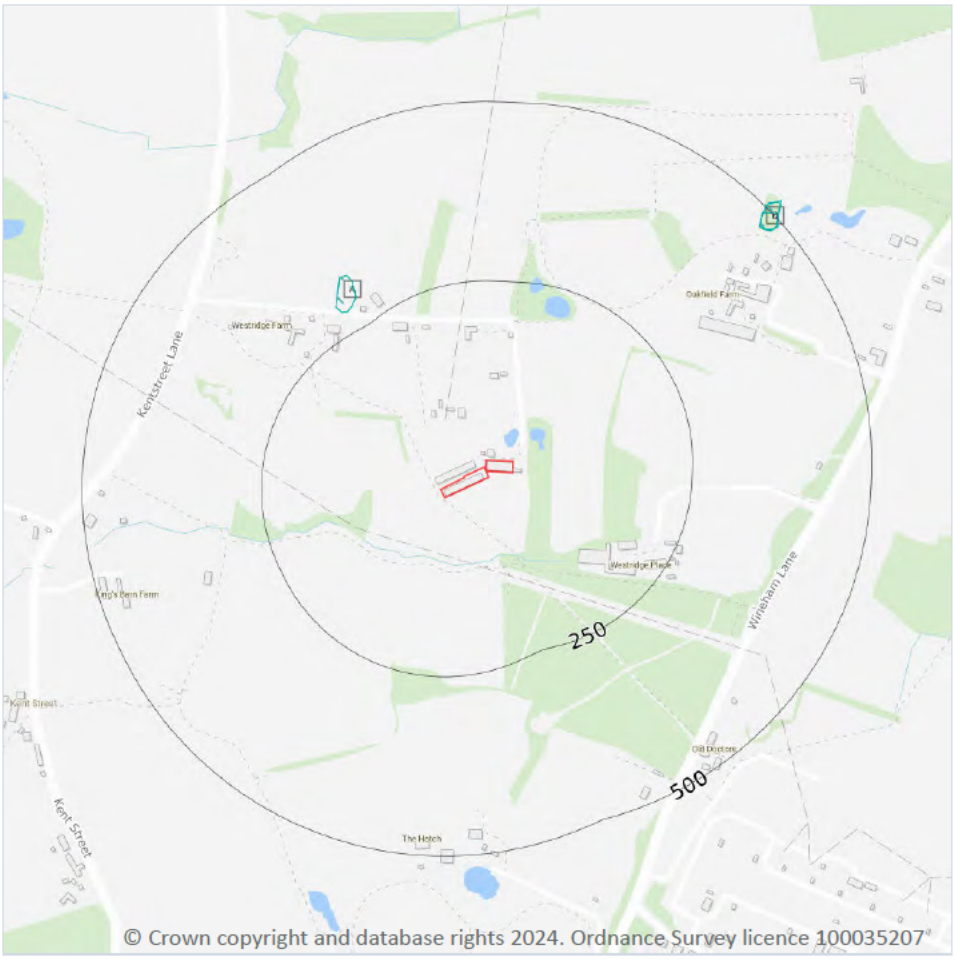
1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

2.1 Historical industrial land uses

Records within 500m	7

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

Features are displayed on the Past land use - un-grouped map on page 18 >

ID	Location	Land Use	Date	Group ID
A	280m NW	Unspecified Pit	1912	2240945
A	280m NW	Unspecified Pit	1896	2240945
B	475m NE	Unspecified Pit	1978	2205159

ID	Location	Land Use	Date	Group ID
B	475m NE	Unspecified Pit	1962	2205159
B	476m NE	Unspecified Pit	1947	2247688
B	476m NE	Unspecified Pit	1909	2247688
B	477m NE	Unspecified Pit	1896	2227308

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

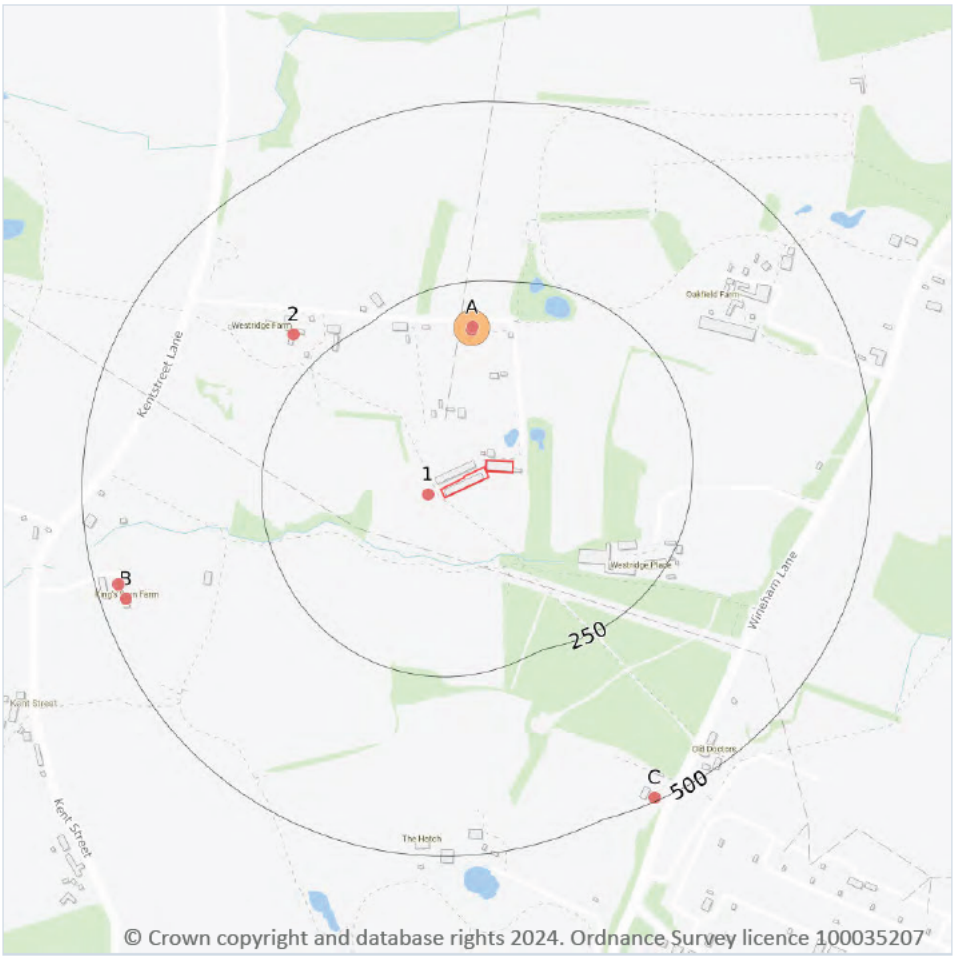
2.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Historical waste sites

Waste exemptions

3.1 Active or recent landfill

Records within 500m	0

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

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

3.2 Historical landfill (BGS records)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m	0

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

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

3.5 Historical waste sites

Records within 500m	1

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

Features are displayed on the Waste and landfill map on **page 21 >**

ID	Location	Address	Further Details	Date
A	160m N	Site Address: Delspride, Kent Street, Cowfold, Horsham, West Sussex, RH13 8BB	Type of Site: Landfill Works Planning application reference: DC/13/2445 Description: Scheme comprises formation of earth works and landfill to import 1616sqm of earth to level ground to enable chicken units to be relocated for cleaning. Data source: Historic Planning Application Data Type: Point	06/02/2015

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

3.6 Licensed waste sites

Records within 500m	0

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

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

3.7 Waste exemptions

Records within 500m	14

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

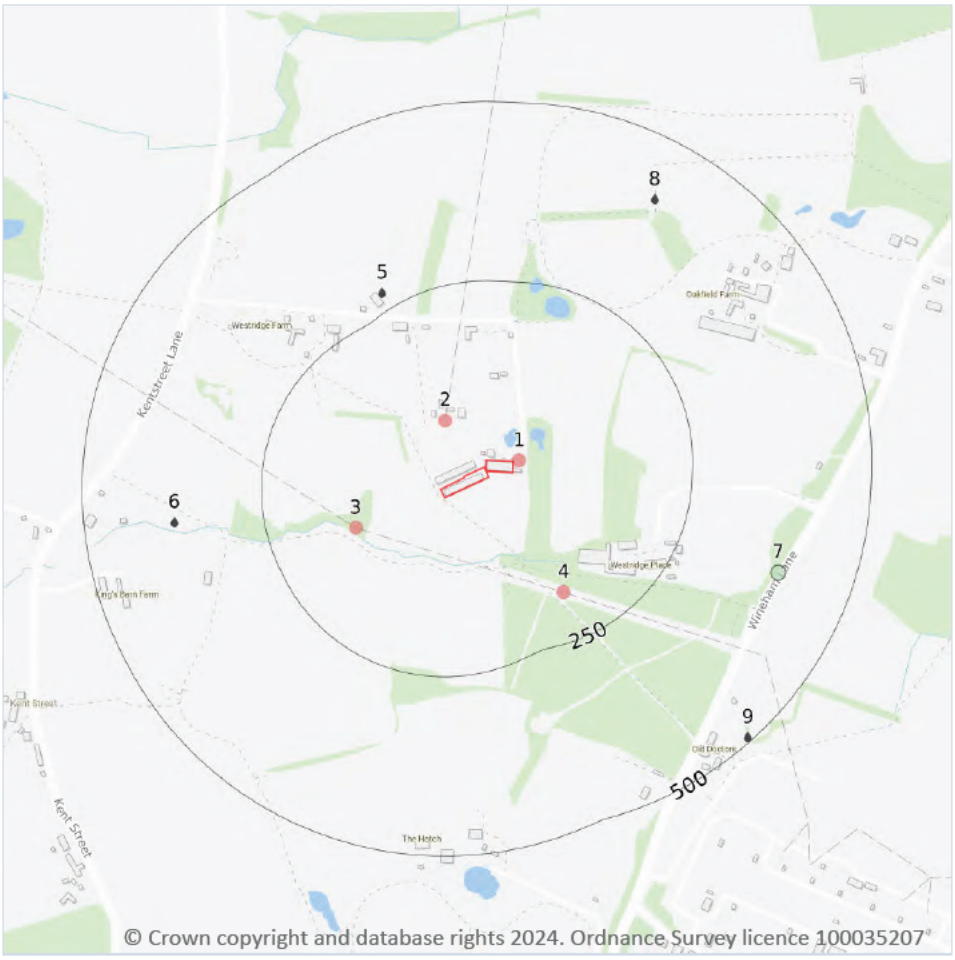
Features are displayed on the Waste and landfill map on page 21 >

ID	Location	Site	Reference	Category	Sub-Category	Description
1	20m W	Westridge Kent Street Horsham West Sussex Rh13 8bb	EPR/TH0411YV/A001	Using waste exemption	Non-agricultural waste only	Use of waste in construction
A	183m N	Delspride, Kent Street, Cowfold, Horsham, Rh13 8bb	WEX288612	Using waste exemption	On a farm	Use of waste in construction
A	183m N	-	WEX267324	Using waste exemption	Not on a farm	Use of waste in construction
A	186m N	Delspride Kent Street Horsham West Sussex Rh13 8bb	EPR/KE5240ZM/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
2	298m NW	Westridge Kent Street Horsham West Sussex Rh13 8bb	EPR/RE5556NA/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
B	466m W	Kings Barn Farm, Kent Street, Cowfold, Horsham, Rh13 8bb	WEX030232	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	466m W	Kings Barn Farm, Kent Street, Cowfold, Horsham, Rh13 8bb	WEX030234	Disposing of waste exemption	On a farm	Burning waste in the open
B	466m W	Kings Barn Farm, Kent Street, Cowfold, Horsham, Rh13 8bb	WEX030231	Using waste exemption	On a farm	Use of mulch
B	469m W	Kings Barn Farm Kent Street Horsham West Sussex Rh13 8bb	EPR/RH0971ZG/A001	Treating waste exemption	Agricultural waste only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	469m W	Kings Barn Farm Kent Street Horsham West Sussex Rh13 8bb	EPR/RH0971ZG/A001	Using waste exemption	Agricultural waste only	Use of waste in construction

ID	Location	Site	Reference	Category	Sub-Category	Description
B	469m W	Kings Barn Farm Kent Street Horsham West Sussex Rh13 8bb	EPR/RH0971ZG/A001	Using waste exemption	Agricultural waste only	Use of mulch
B	469m W	Kings Barn Farm Kent Street Horsham West Sussex Rh13 8bb	EPR/RH0971ZG/A001	Disposing of waste exemption	Agricultural waste only	Burning waste in the open
C	495m SE	Sparrows, Wineham Lane, Wineham, Henfield, Bn5 9az	WEX317009	Using waste exemption	On a farm	Use of waste in construction
C	495m SE	Sparrows, Wineham Lane, Wineham, Henfield, Bn5 9az	WEX180302	Using waste exemption	On a farm	Use of waste in construction

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	4

Current potentially contaminative industrial sites.

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

ID	Location	Company	Address	Activity	Category
1	8m E	Tank	West Sussex, RH13	Tanks (Generic)	Industrial Features
2	80m NW	Pylon	West Sussex, RH13	Electrical Features	Infrastructure and Facilities
3	130m SW	Pylon	West Sussex, RH13	Electrical Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
4	181m SE	Pylon	West Sussex, RH17	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	4

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

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

ID	Location	Address	Details	
5	275m NW	LAND OFF KENT STREET, LAND OFF KENT STREET, COWFOLD, WEST SUSSEX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: P06731 Permit Version: 1 Receiving Water: INTO LAND	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 05/06/1997 Effective Date: 05/06/1997 Revocation Date: -
6	374m W	KINGS BARN FARM, KINGS BARN FARM, KENT STREET, COWFOLD, WEST SUSSEX, RH13 8BB	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: P05419 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 11/07/1994 Effective Date: 11/07/1994 Revocation Date: -
8	415m NE	EASTRIDGE MANOR, EASTRIDGE MANOR, WINEHAM LANE, BOLNEY, HAYWARDS HEATH, WEST SUSSEX	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: P03008 Permit Version: 1 Receiving Water: FRESHWATER STREAM OR RIVER	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 09/08/1990 Effective Date: 09/08/1990 Revocation Date: -
9	493m SE	OLD DOCTORS COTTAGE, OLD DOCTORS COTTAGE, WINEHAM, HENFIELD WEST SUSSEX	Effluent Type: SEWAGE DISCHARGES - UNSPECIFIED - NOT WATER COMPANY Permit Number: P03245 Permit Version: 1 Receiving Water: FRESHWATER RIVER	Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995 Issue date: 11/01/1991 Effective Date: 11/01/1991 Revocation Date: 31/03/1997

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1

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

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

ID	Location	Details	
7	395m E	Incident Date: 23/02/2021 Incident Identification: 1894876 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 2 (Significant) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer

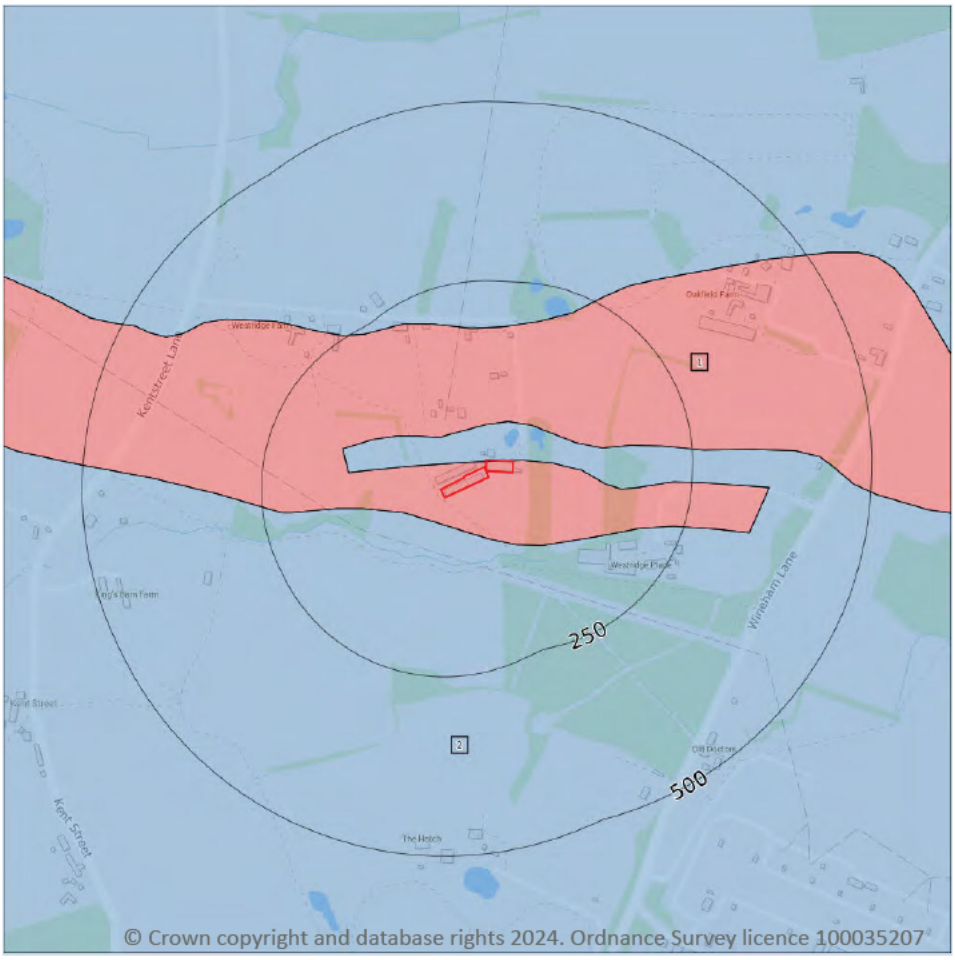
5.1 Superficial aquifer

Records within 500m	0

Aquifer status of groundwater held within superficial geology.

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

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	2

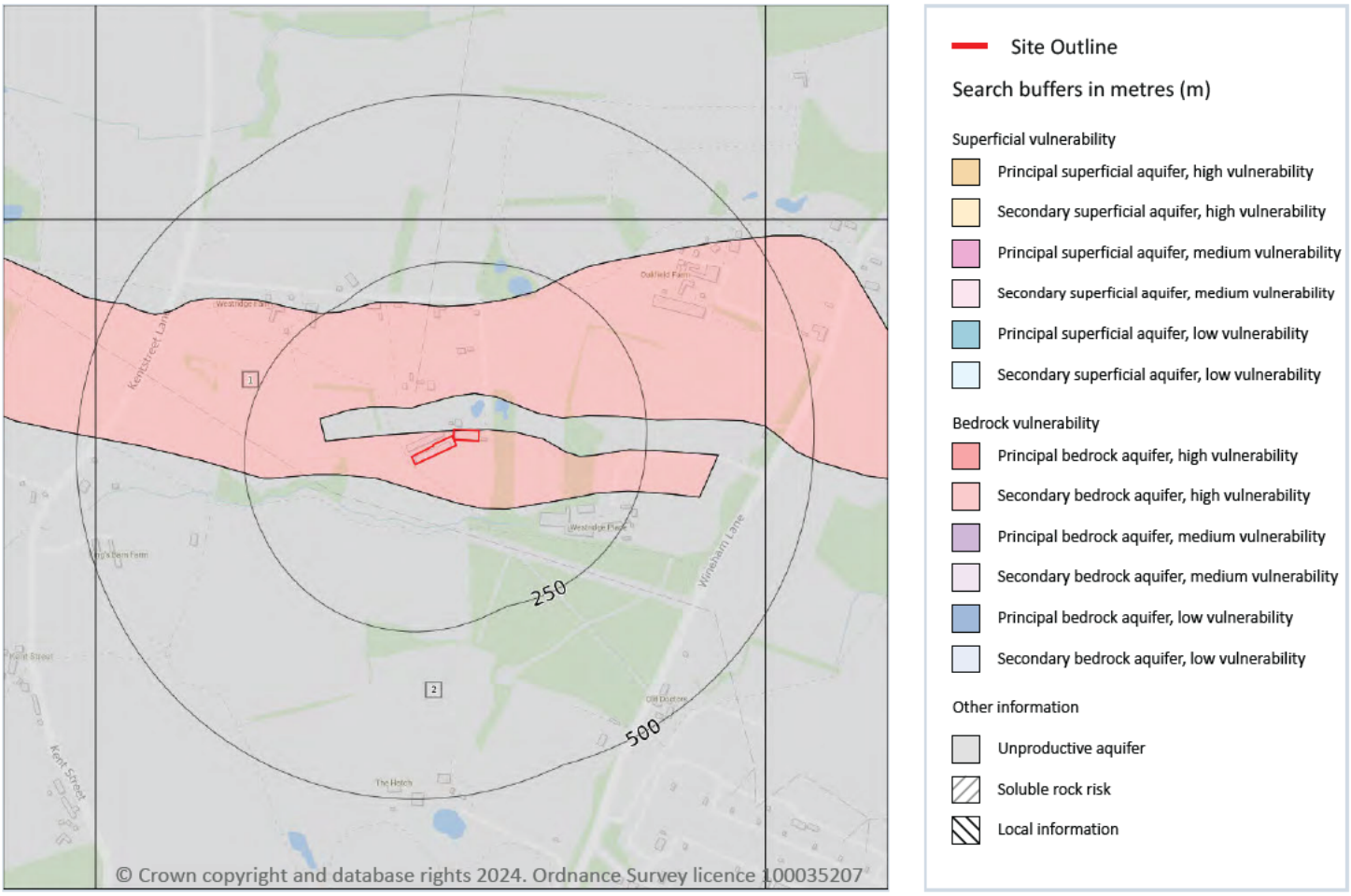
Aquifer status of groundwater held within bedrock geology.

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

ID	Location	Designation	Description
1	On site	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
2	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m	2

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on page 33 >

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

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

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

5.5 Groundwater vulnerability- local information

Records on site	0

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

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	0

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

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

5.7 Surface water abstractions

Records within 2000m	1

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 35 >**

ID	Location	Details	
-	1923m SE	Status: Historical Licence No: 10/41/322002 Details: Spray Irrigation - Direct Direct Source: Southern Region Surface Waters Point: RIVER ADUR & HERRINGS STREAM AT TWINEHAM Data Type: Poly4 Name: Worsley Easting: 524000 Northing: 119670	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 19/08/1985 Expiry Date: - Issue No: 101 Version Start Date: 03/04/2001 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	0

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

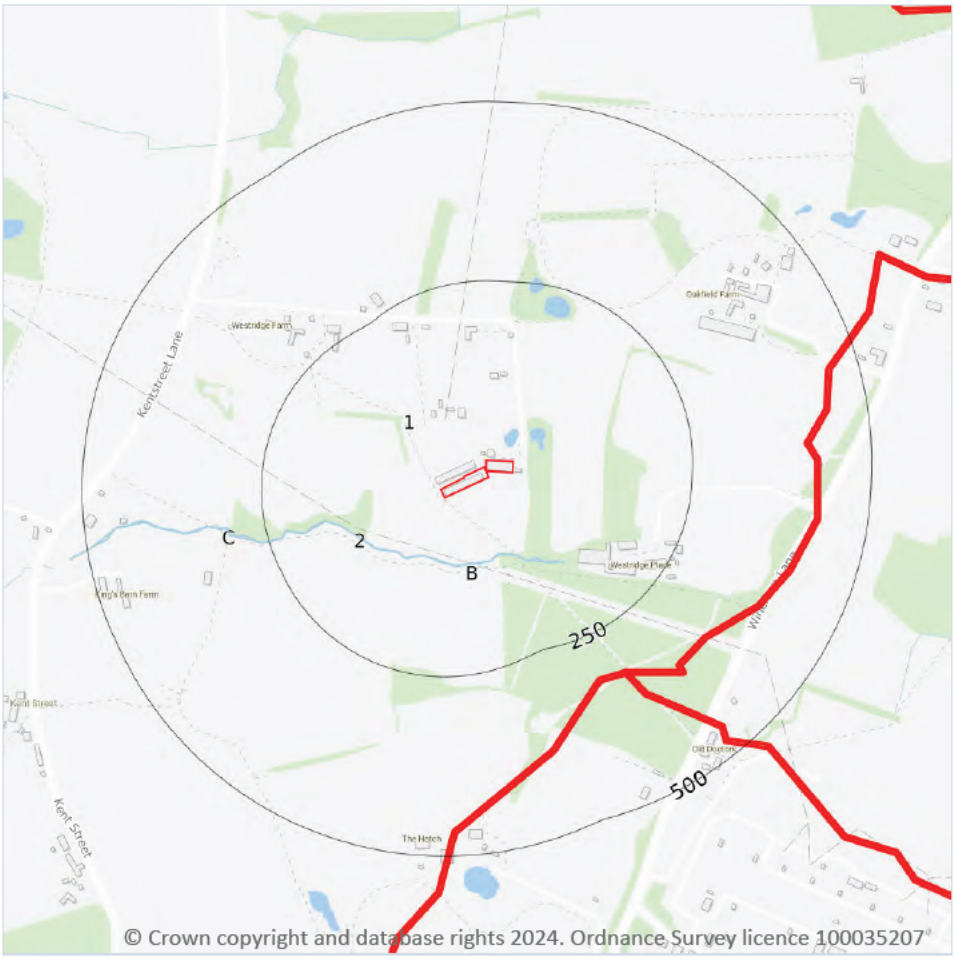
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	3

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on page 38 >

ID	Location	Type of water feature	Ground level	Permanence	Name
B	85m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
2	127m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	148m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	6

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

Features are displayed on the Hydrology map on page 38 >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on page 38 >

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Cowfold Stream**	**GB107041012260**	**Adur Upper**	**Adur and Ouse**

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

6.4 WFD Surface water bodies

Records identified	1

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

Features are displayed on the Hydrology map on **page 38 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1334m W	River	Cowfold Stream	GB107041012260 ↗	Poor	Fail	Poor	2019

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

6.5 WFD Groundwater bodies

Records on site	0

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

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m	0

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

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

7.2 Historical Flood Events

Records within 250m	0

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

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

7.3 Flood Defences

Records within 250m	0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

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

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

7.5 Flood Storage Areas

Records within 250m	0

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

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

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0

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

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

7.7 Flood Zone 3

Records within 50m	0

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

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

8 Surface water flooding

8.1 Surface water flooding

Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

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

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

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

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

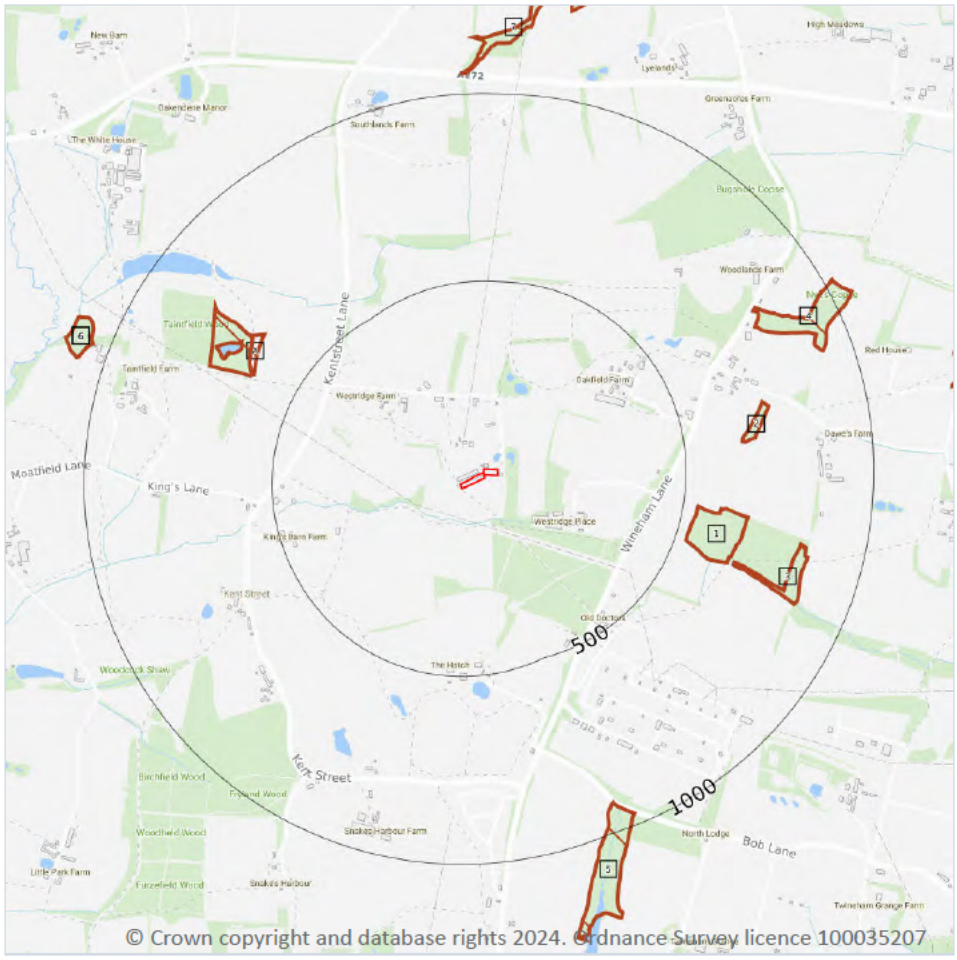
Highest risk on site	**Negligible**
Highest risk within 50m	**Negligible**

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

Features are displayed on the Groundwater flooding map on **page 45 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

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

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

10.7 Designated Ancient Woodland

Records within 2000m	25

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

Features are displayed on the Environmental designations map on page 46 >

ID	Location	Name	Woodland Type
1	529m E	Priorsbush	Ancient & Semi-Natural Woodland
A	621m NW	Unknown	Ancient & Semi-Natural Woodland
A	626m NW	Unknown	Ancient & Semi-Natural Woodland
2	655m E	Nyeshill Farm Shaw	Ancient & Semi-Natural Woodland
3	670m E	Priorsbush_E	Ancient & Semi-Natural Woodland
4	782m NE	Nyes Copse	Ancient & Semi-Natural Woodland
5	923m S	The Gill	Ancient & Semi-Natural Woodland
6	1046m W	Unknown	Ancient & Semi-Natural Woodland
7	1053m N	Upper Barn Shaw	Ancient & Semi-Natural Woodland
8	1229m E	Purveys Pit Shaw	Ancient & Semi-Natural Woodland
9	1236m N	Barnfield Park Wood	Ancient & Semi-Natural Woodland
-	1274m E	Purveys Pit Wood	Ancient & Semi-Natural Woodland
-	1377m E	Toll Copse	Ancient & Semi-Natural Woodland
-	1413m E	Coombe House Shaw	Ancient & Semi-Natural Woodland
-	1460m E	Coombe House_E	Ancient & Semi-Natural Woodland
-	1575m N	Barnfield Park Shaw	Ancient & Semi-Natural Woodland

ID	Location	Name	Woodland Type
-	1638m NE	Kings Hill Wood	Ancient & Semi-Natural Woodland
-	1700m N	Homefields Farm Shaw	Ancient & Semi-Natural Woodland
-	1839m SE	East Lodge Shaw	Ancient & Semi-Natural Woodland
-	1850m NW	Unknown	Ancient & Semi-Natural Woodland
-	1867m NE	Westlands Corner Shaw	Ancient & Semi-Natural Woodland
-	1886m N	Wabblegate Wood	Ancient Replanted Woodland
-	1959m N	Spronketts Wood	Ancient Replanted Woodland
-	1969m N	Spronketts Wood	Ancient Replanted Woodland
-	1996m N	Unknown	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was

closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	2

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

Location	Name	Type	NVZ ID	Status
On site	**Adur East (Sakeham) NVZ**	**Surface Water**	**522**	**Existing**
519m E	Adur East (Sakeham) NVZ	Surface Water	522	Existing

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

SSSI Impact Zones and Units



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10.17 SSSI Impact Risk Zones

Records on site	1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on page 52 >

ID	Location	Type of developments requiring consultation
1	On site	**Infrastructure - Airports, helipads and other aviation proposals.** **Minerals, Oil and Gas - Oil & gas exploration/extraction.** **Notes: SUSSEX NORTH WATER SUPPLY ZONE. All new development that requires a public water supply requires an HRA to assess the impacts of groundwater abstraction on Arun Valley SPA/SAC/Ramsar. LPAs to refer to Natural England's Statement and Advice Note.**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

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

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

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	0

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

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

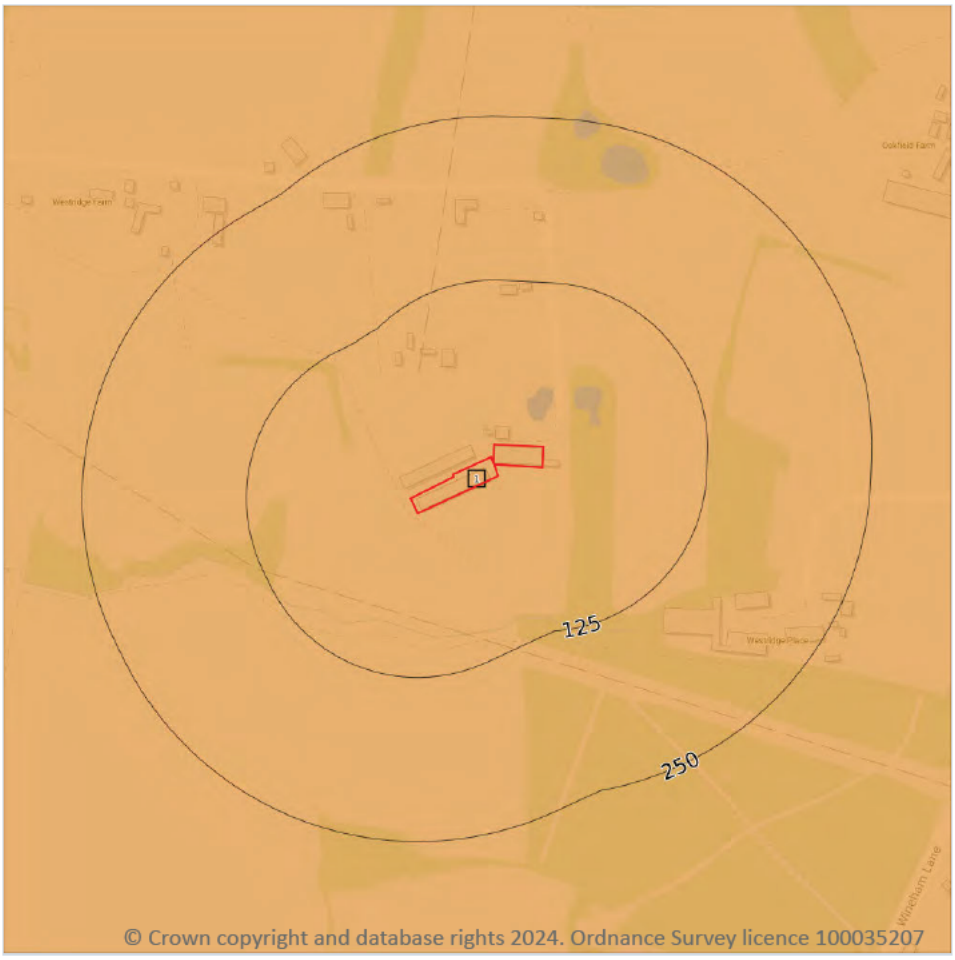
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	1

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

Features are displayed on the Agricultural designations map on page 56 >

ID	Location	Classification	Description
1	On site	Grade 3	**Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.**

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

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

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

12.3 Tree Felling Licences

Records within 250m	0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

13 Habitat designations



Site Outline

Search buffers in metres (m)

Priority Habitat Inventory
Open Mosaic Habitat
Limestone Pavement Orders

Habitat Networks
Primary Habitat
Restorable Habitat
Associated Habitats
Habitat Restoration-Creation
Network Enhancement Zone 1
Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	11

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

Features are displayed on the Habitat designations map on page 58 >

ID	Location	Main Habitat	Other habitats
1	20m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	39m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	48m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	120m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	139m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	177m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	195m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	196m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	200m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	209m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	236m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0

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

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m	0

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

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



Site Outline

Search buffers in metres (m)

Full coverage

Partial coverage

No coverage

14.1 10k Availability

Records within 500m	1

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

Features are displayed on the Geology 1:10,000 scale - Availability map on page 61 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	TQ22SW

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

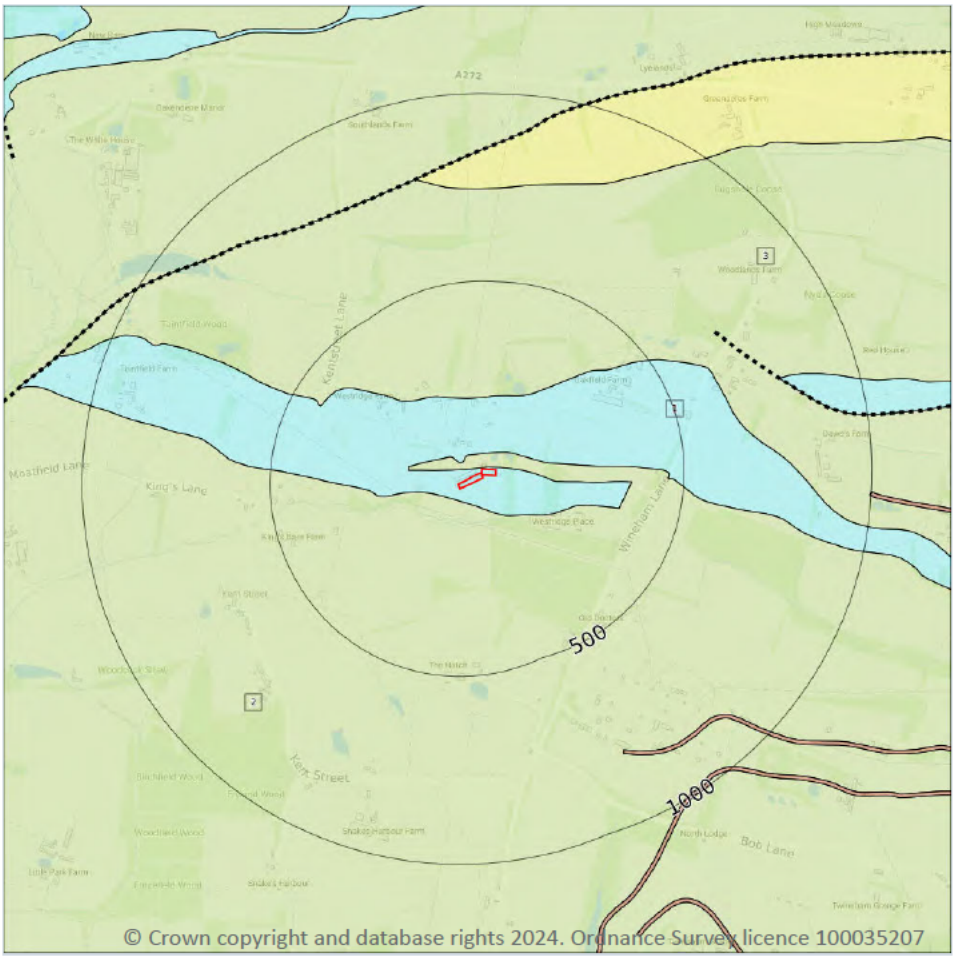
14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m **3**

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

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

ID	Location	LEX Code	Description	Rock age
1	**On site**	**HST-SDST**	**Horsham Stone Member - Sandstone**	**Hauterivian Age**
2	4m N	WC-MDST	Weald Clay Formation - Mudstone	Barremian Age - Hauterivian Age
3	190m N	WC-MDST	Weald Clay Formation - Mudstone	Barremian Age - Hauterivian Age

This data is sourced from the British Geological Survey.

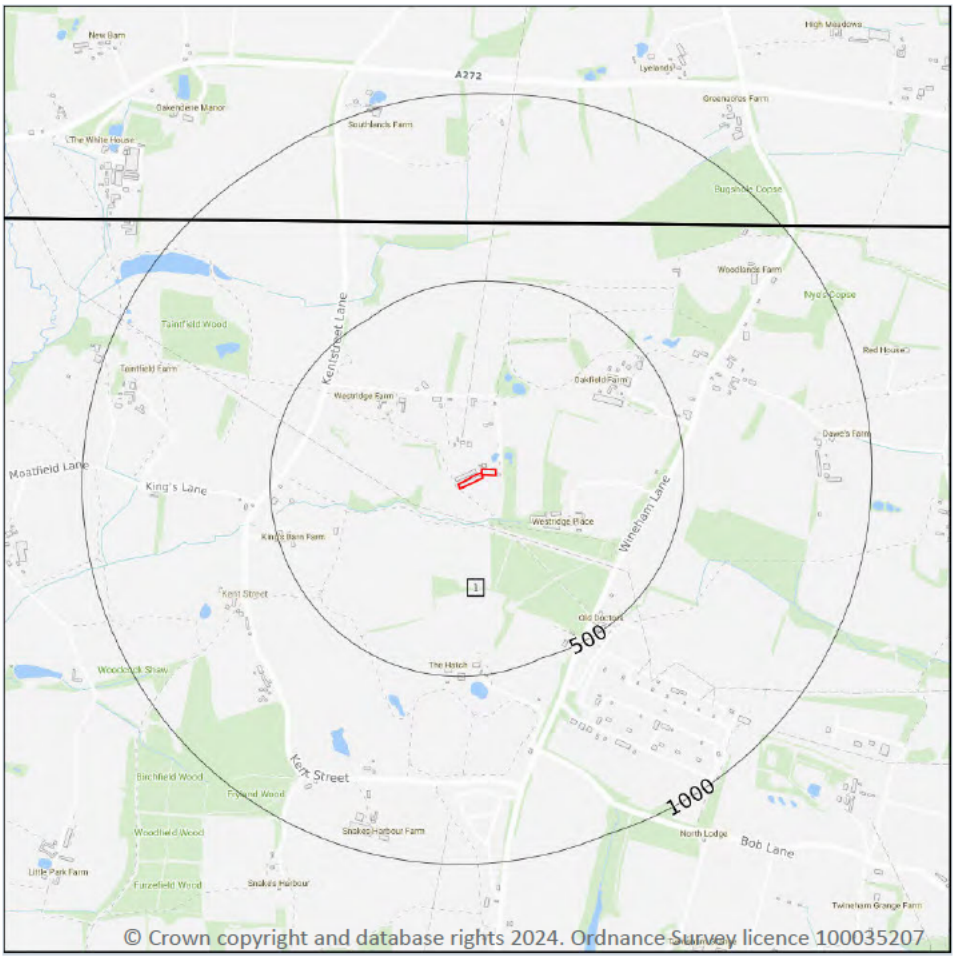
14.6 Bedrock faults and other linear features (10k)

Records within 500m	0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.

15 Geology 1:50,000 scale - Availability



Site Outline

Search buffers in metres (m)

Geological map tile

15.1 50k Availability

Records within 500m	1

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

Features are displayed on the Geology 1:50,000 scale - Availability map on page 66 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW318_333_brighton_and_worthing_v4

This data is sourced from the British Geological Survey.

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

15.2 Artificial and made ground (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial

15.4 Superficial geology (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

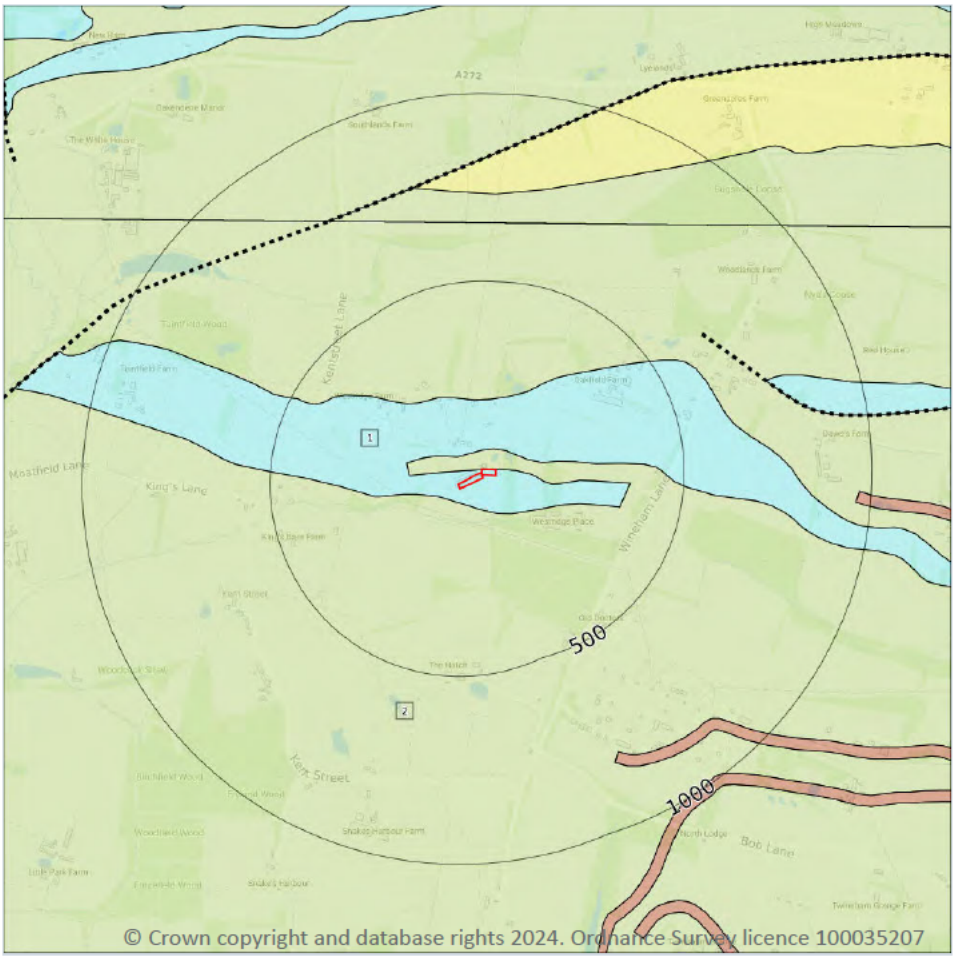
15.7 Landslip permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



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Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m	2

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on page 69 >

ID	Location	LEX Code	Description	Rock age
1	On site	HST-SDST	HORSHAM STONE MEMBER - SANDSTONE	HAUTERIVIAN
2	On site	WC-MDST	WEALD CLAY FORMATION - MUDSTONE	HAUTERIVIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	2

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Very Low
On site	Mixed	High	Moderate

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

16 Boreholes

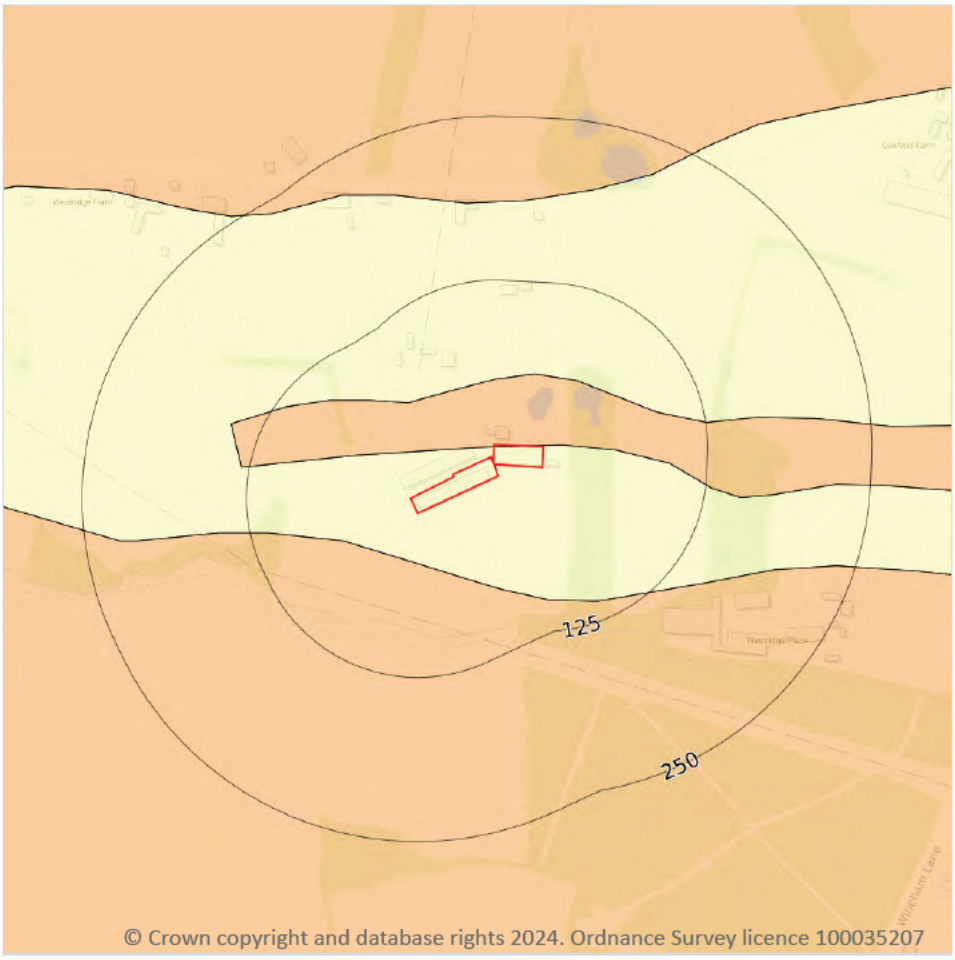
16.1 BGS Boreholes

Records within 250m	0

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

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	2

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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on page 72 >

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Low**	**Ground conditions predominantly medium plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	1

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

Features are displayed on the Natural ground subsidence - Running sands map on page 73 >

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	1

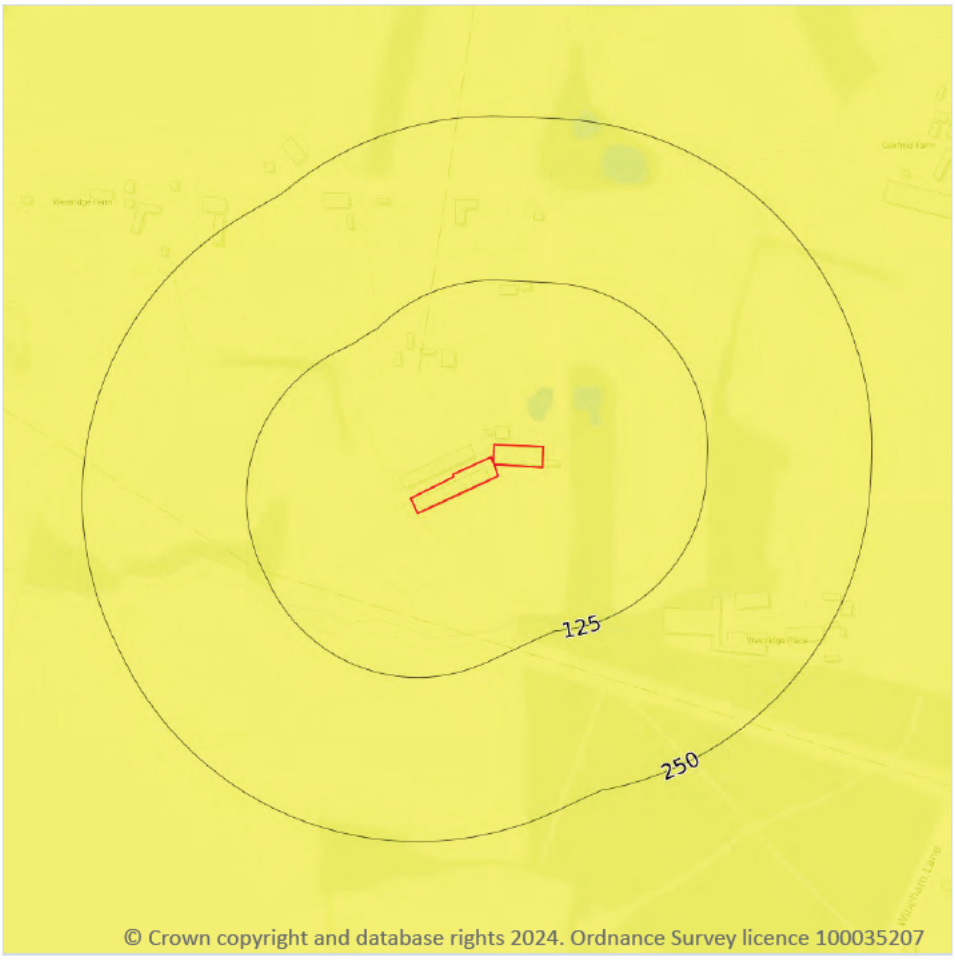
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on page 74 >

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Collapsible deposits



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	1

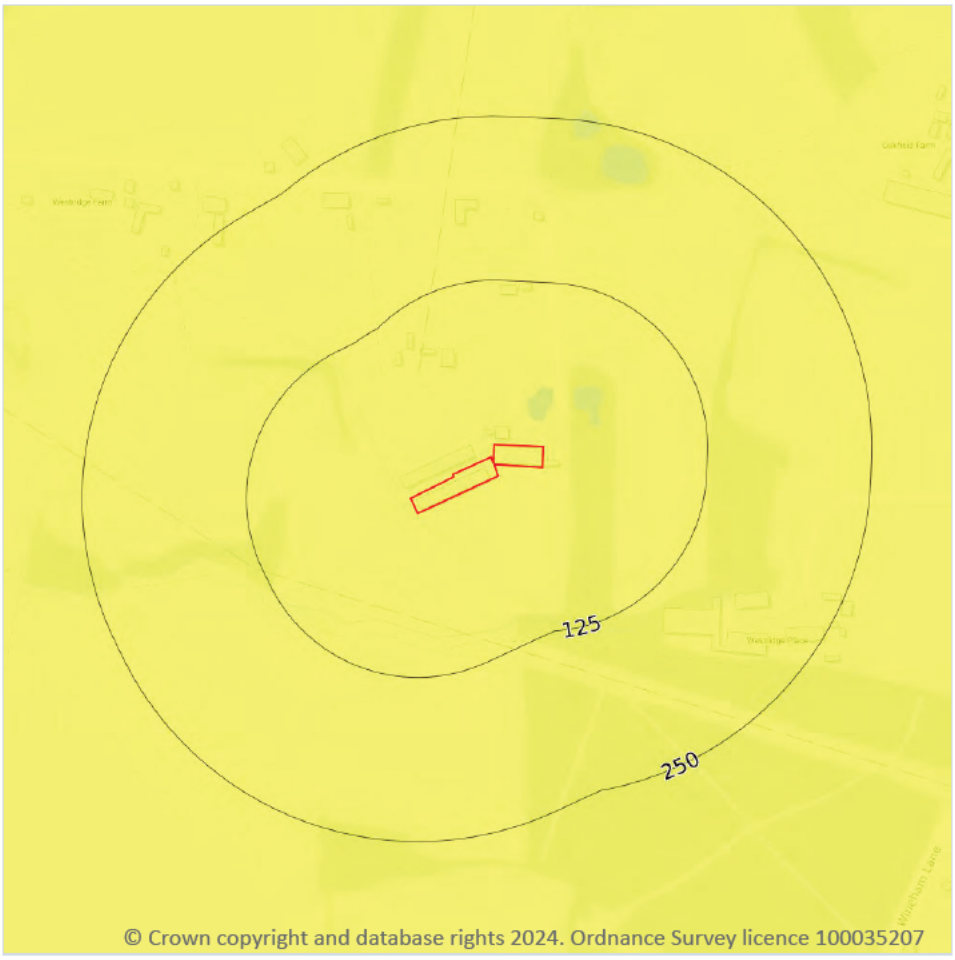
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on page 75 >

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Landslides



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	1

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

Features are displayed on the Natural ground subsidence - Landslides map on page 76 >

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

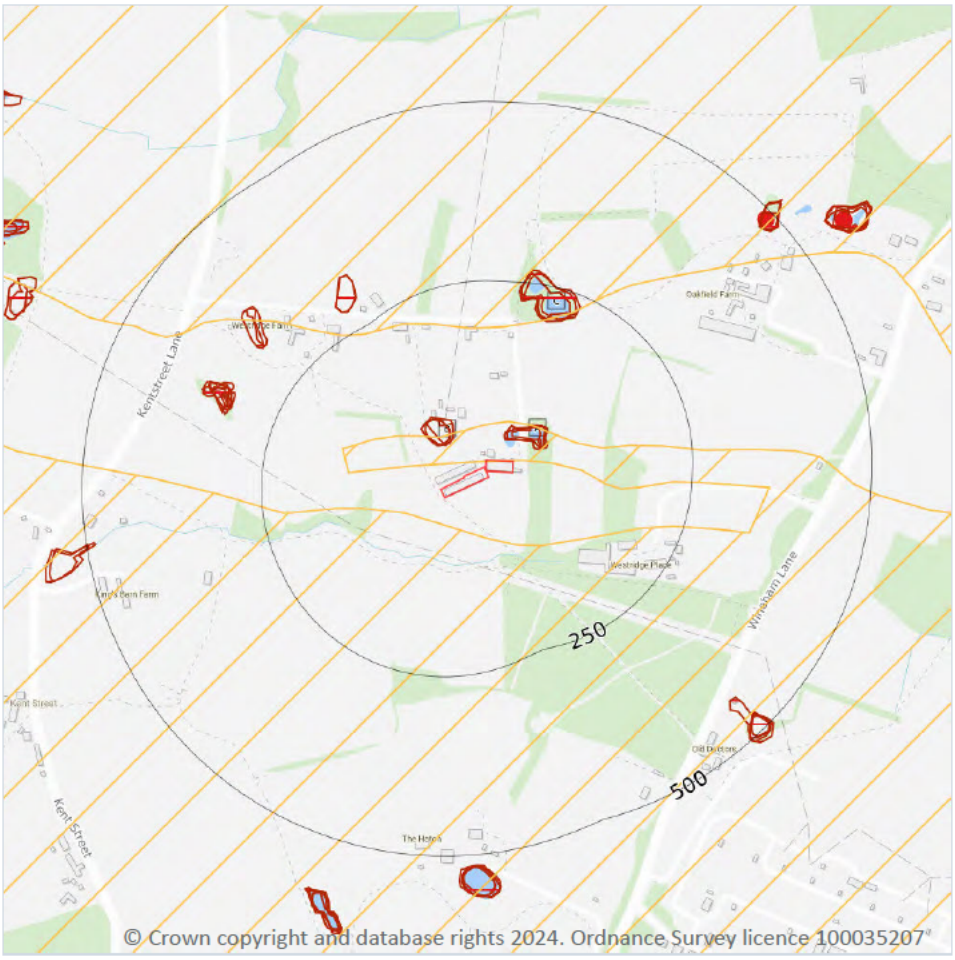
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on page 77 >

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

BritPits

Surface ground workings

Underground workings

Underground mining extents

Historical mineral planning areas

TCA non-coal mining

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	1

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

Features are displayed on the Mining and ground workings map on page 79 >

ID	Location	Details	Description
H	488m NE	Name: Eastridge Pits Address: Bolney, HAYWARDS HEATH, West Sussex Commodity: Ironstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m **14**

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

Features are displayed on the Mining and ground workings map on page 79 >

ID	Location	Land Use	Year of mapping	Mapping scale
A	29m NE	Ponds	1912	1:10560
A	29m NE	Ponds	1896	1:10560
A	31m NE	Ponds	1978	1:10000
A	31m NE	Ponds	1962	1:10560
A	34m NE	Ponds	1875	1:10560
B	50m NW	Pond	1962	1:10560
B	51m NW	Pond	1875	1:10560
B	53m NW	Pond	1912	1:10560
B	53m NW	Pond	1896	1:10560
C	201m NE	Ponds	1912	1:10560
C	201m NE	Ponds	1896	1:10560
C	204m NE	Ponds	1978	1:10000
C	204m NE	Ponds	1962	1:10560
C	208m NE	Ponds	1875	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	0

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

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m	0

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

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	1

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

Features are displayed on the Mining and ground workings map on page 79 >

ID	Location	Name	Commodity	Class	Likelihood
1	On site	Not available	Iron Ore	B	**Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.**

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

20.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on page 87 >

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

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

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	6

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
19m NW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
37m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
48m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

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

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

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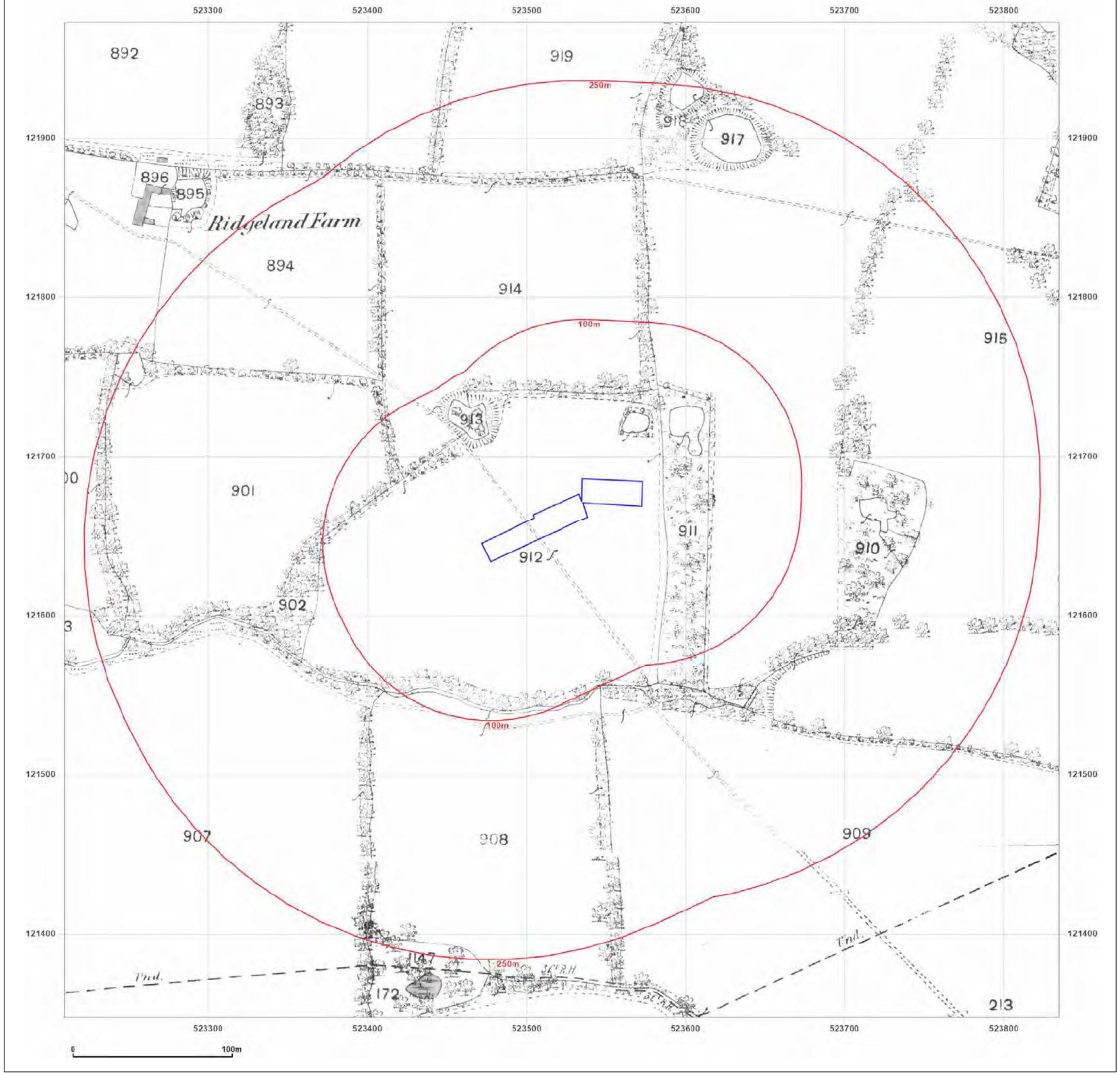

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Site Details:

Lot 1 and Lot 2 Combined,
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Client Ref: GE22619/PO7637
Report Ref: GS-IS9-N6E-1YS-I4N
Grid Ref: 523522, 121660

Map Name: County Series
Map date: **1875**
Scale: 1:2,500
Printed at: 1:2,500

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Surveyed 1875
Revised 1875
Edition N/A
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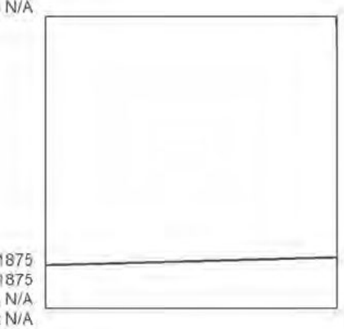
Levelled N/A



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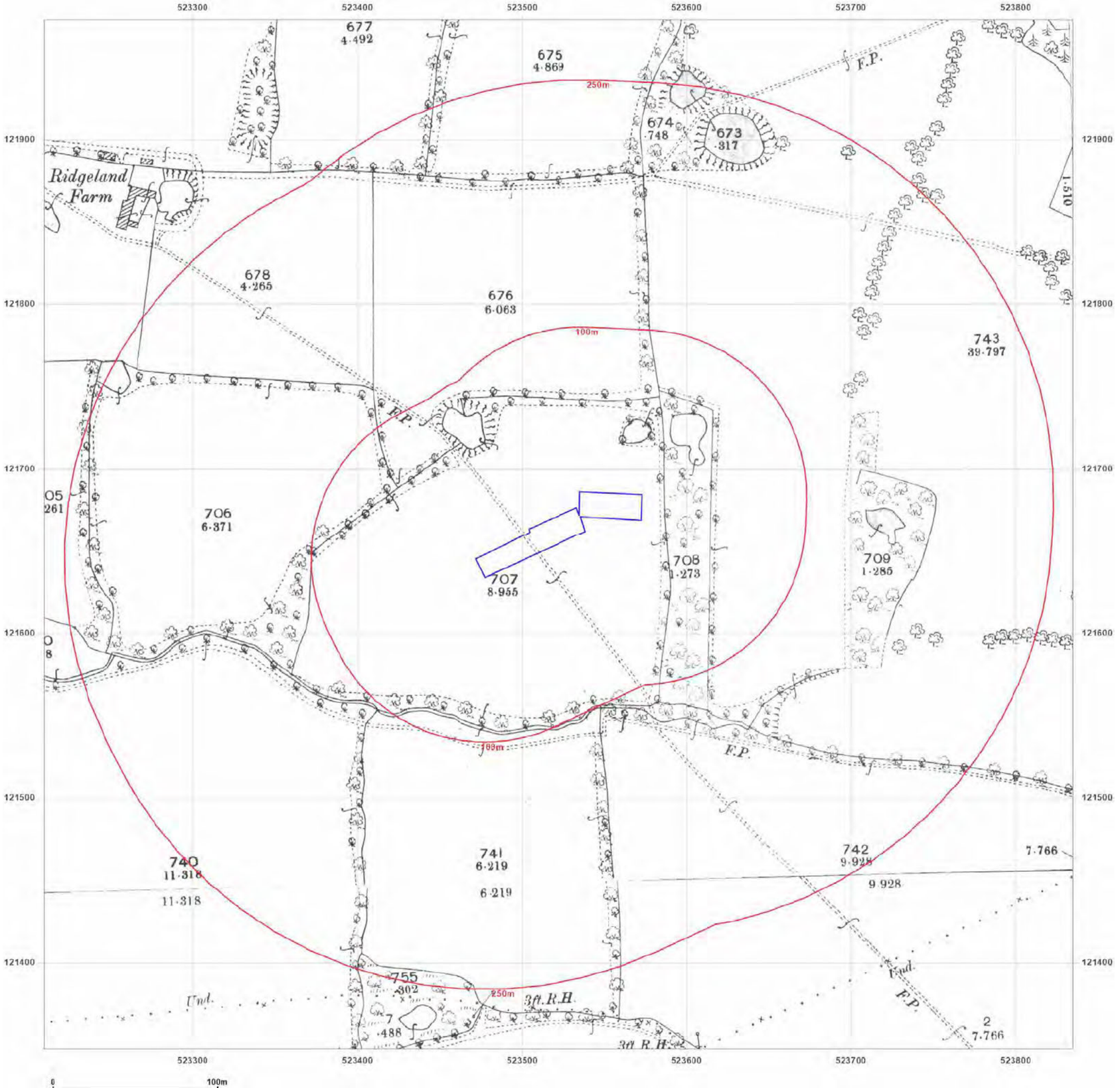

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Map Name: County Series
Map date: **1897**
Scale: 1:2,500
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Edition N/A
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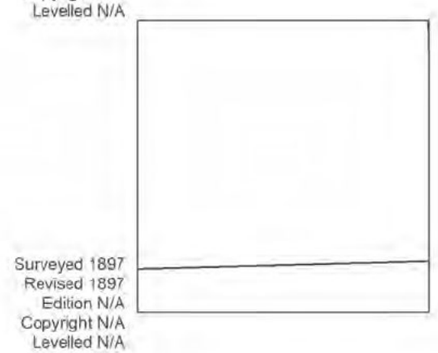

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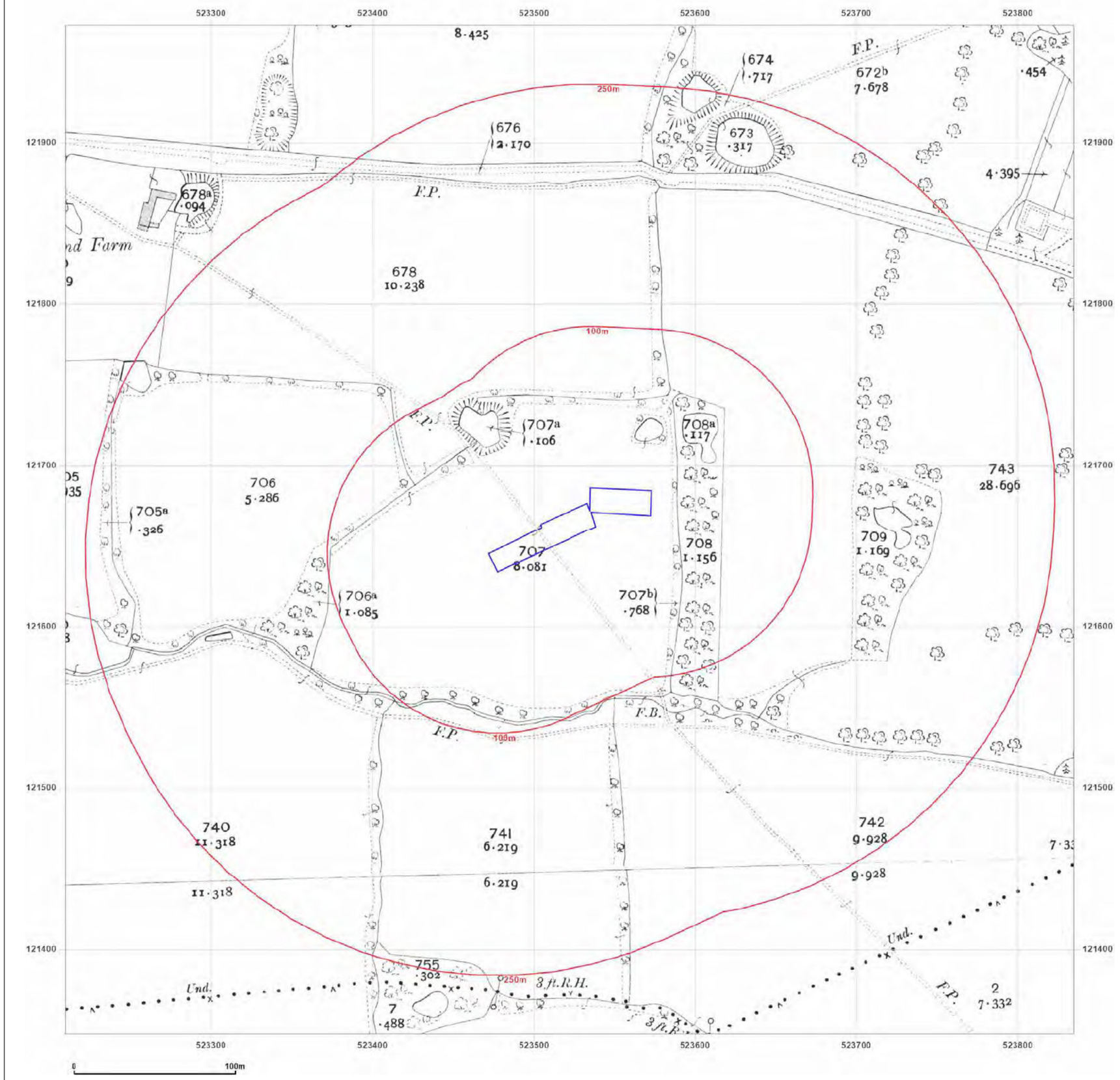

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Report Ref: GS-IS9-N6E-1YS-I4N
Grid Ref: 523522, 121660

Map Name: County Series
Map date: **1911**
Scale: 1:2,500
Printed at: 1:2,500

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Revised 1911
Edition N/A
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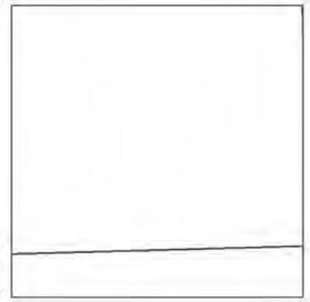

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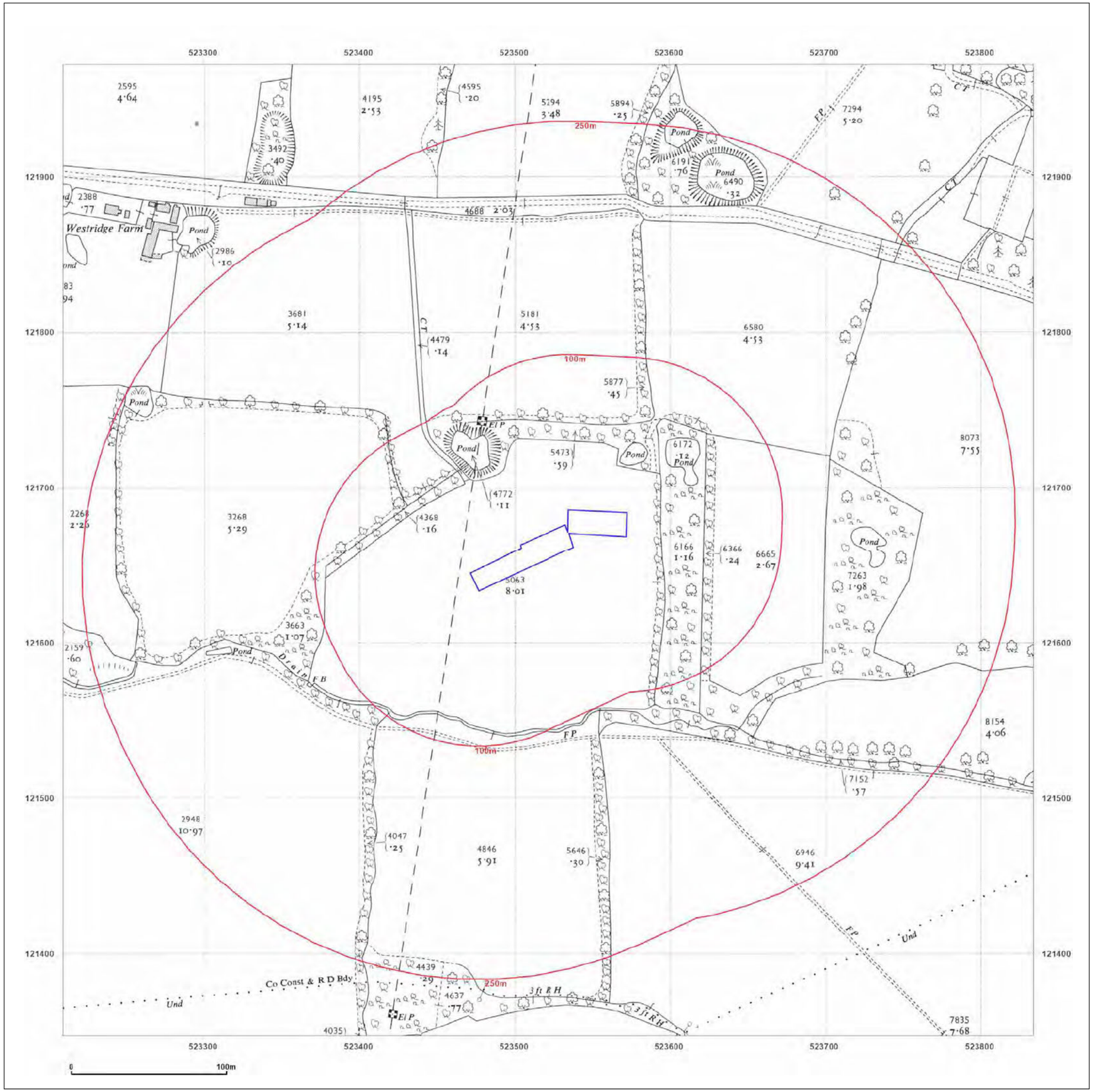

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Grid Ref: 523522, 121660

Map Name: National Grid

Map date: **1956**

Scale: 1:2,500

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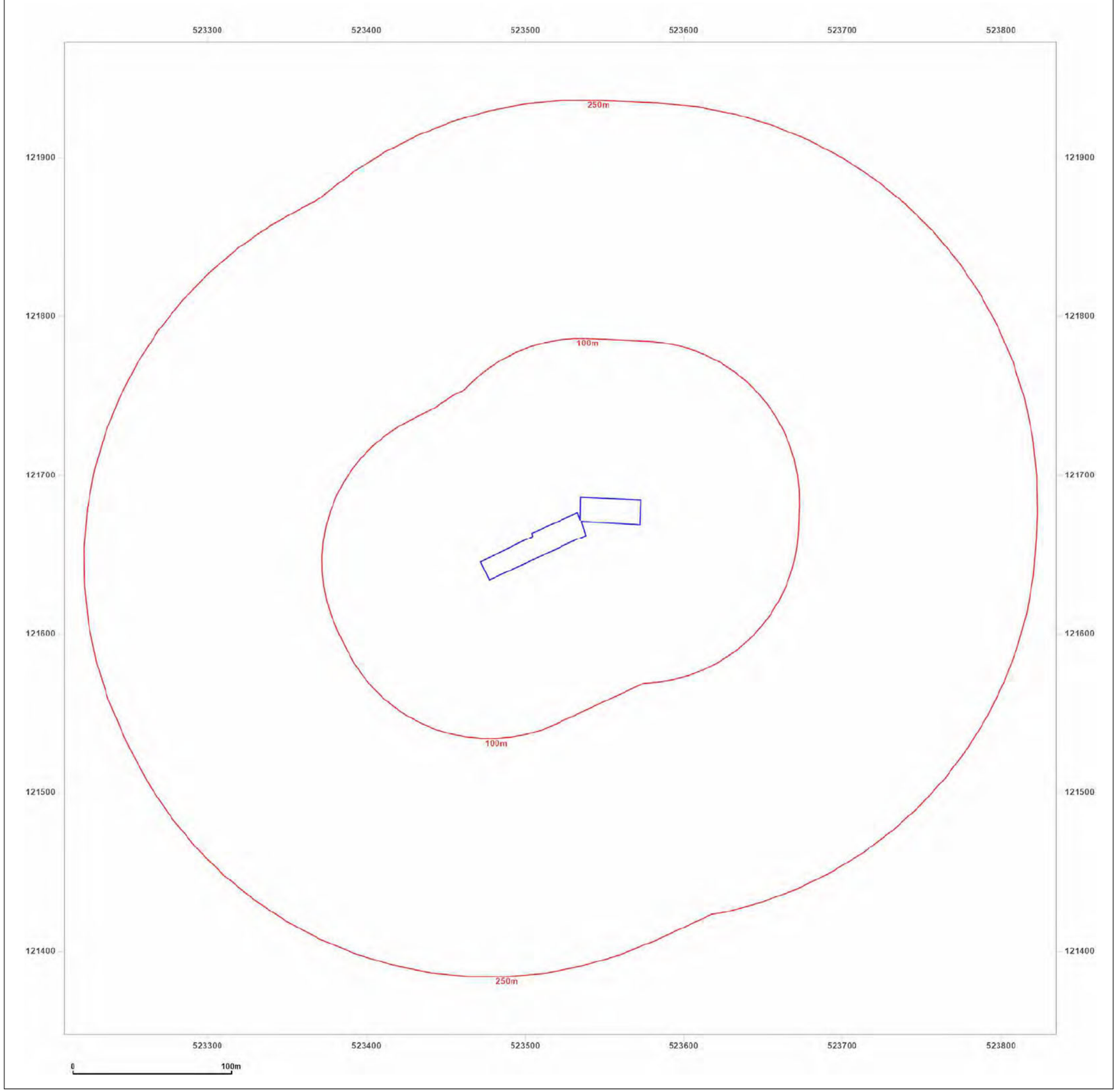

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Grid Ref: 523522, 121660

Map Name: National Grid
Map date: **1977**
Scale: 1:2,500
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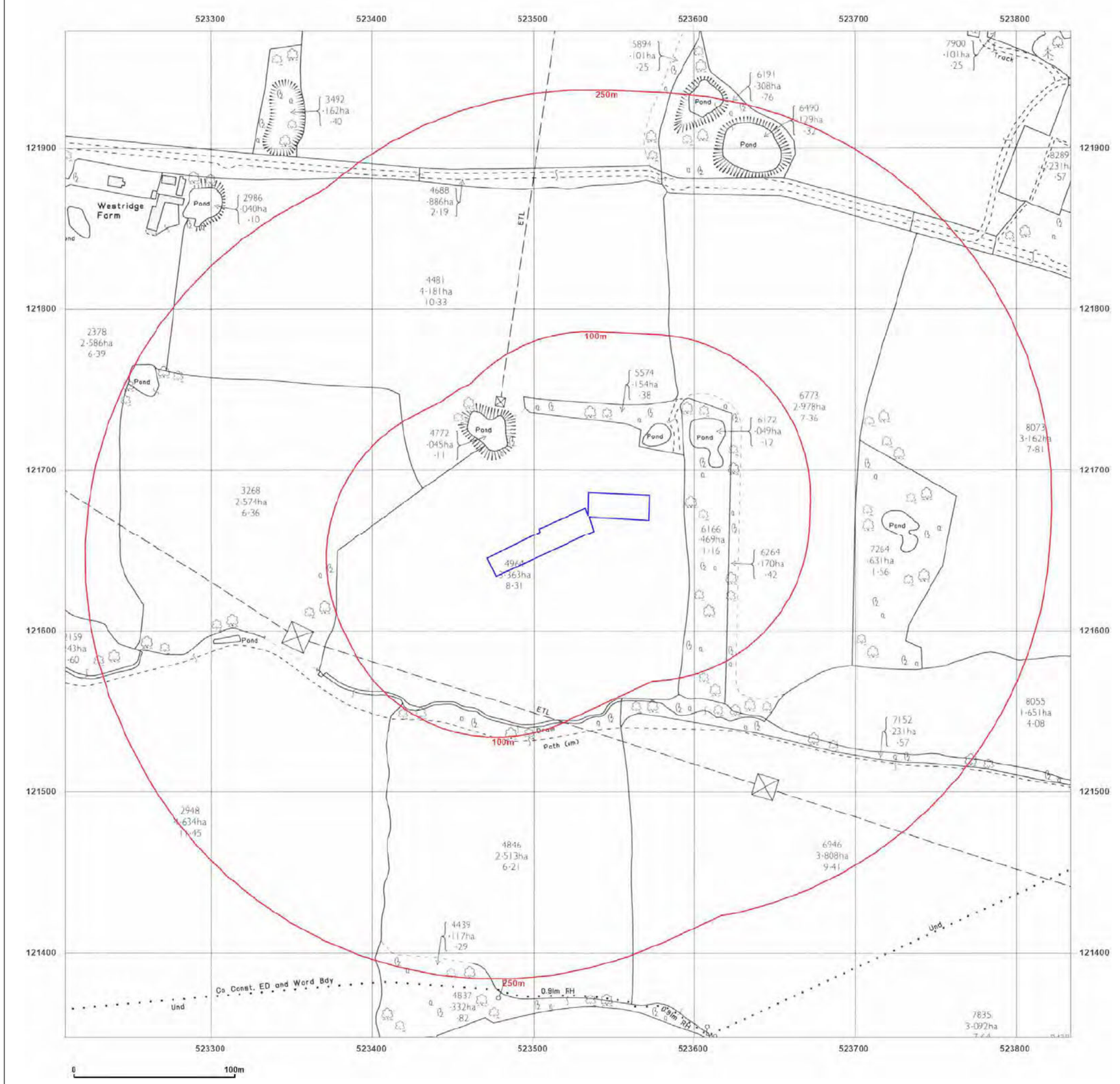

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Grid Ref: 523522, 121660

Map Name: National Grid
Map date: **1977**
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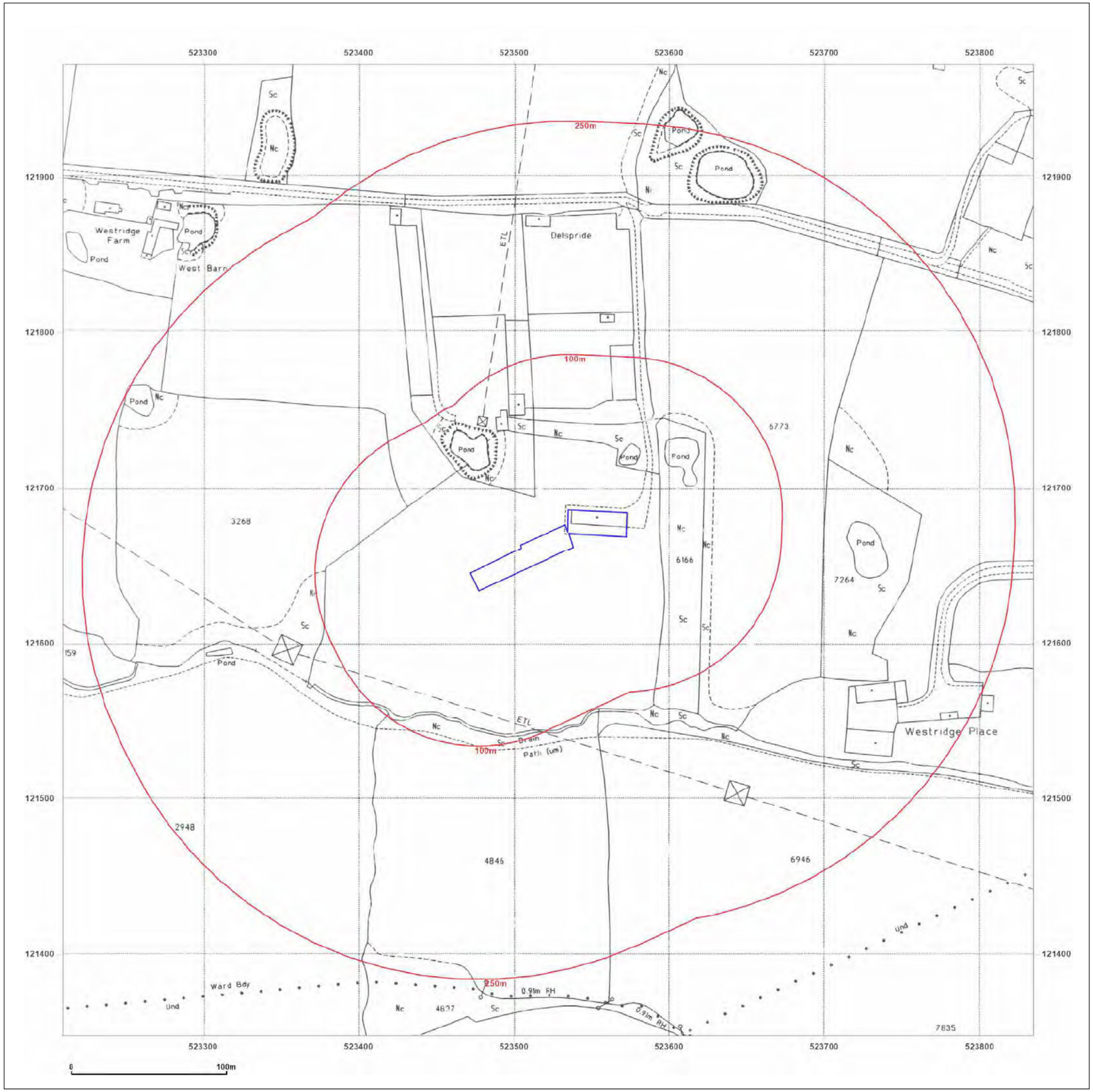

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Report Ref: GS-IS9-N6E-1YS-I4N
Grid Ref: 523522, 121660

Map Name: National Grid
Map date: **1993**
Scale: 1:2,500
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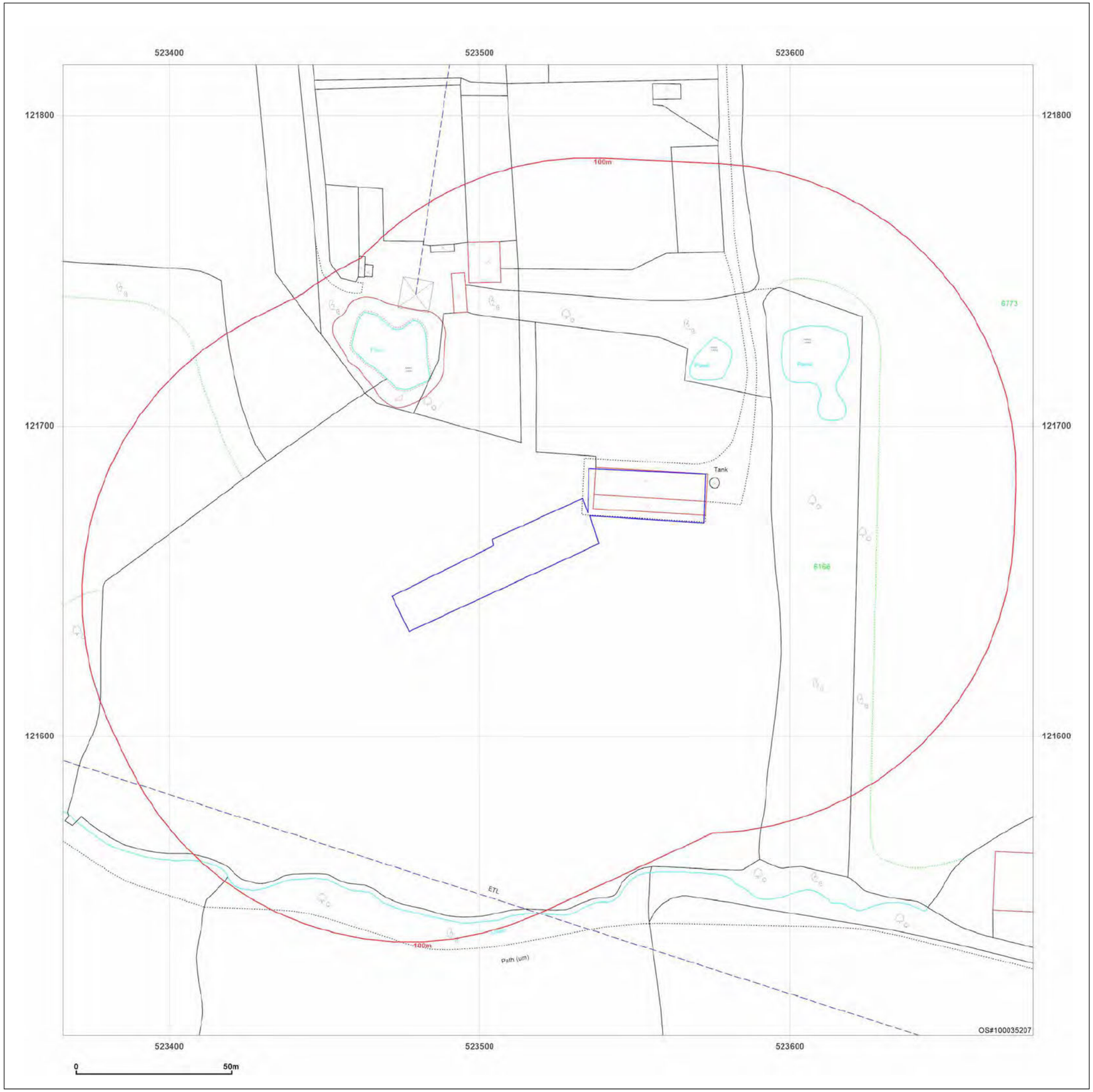

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Report Ref: GS-IS9-N6E-1YS-I4N
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Map Name: LandLine
Map date: 2003
Scale: 1:1,250
Printed at: 1:1,250

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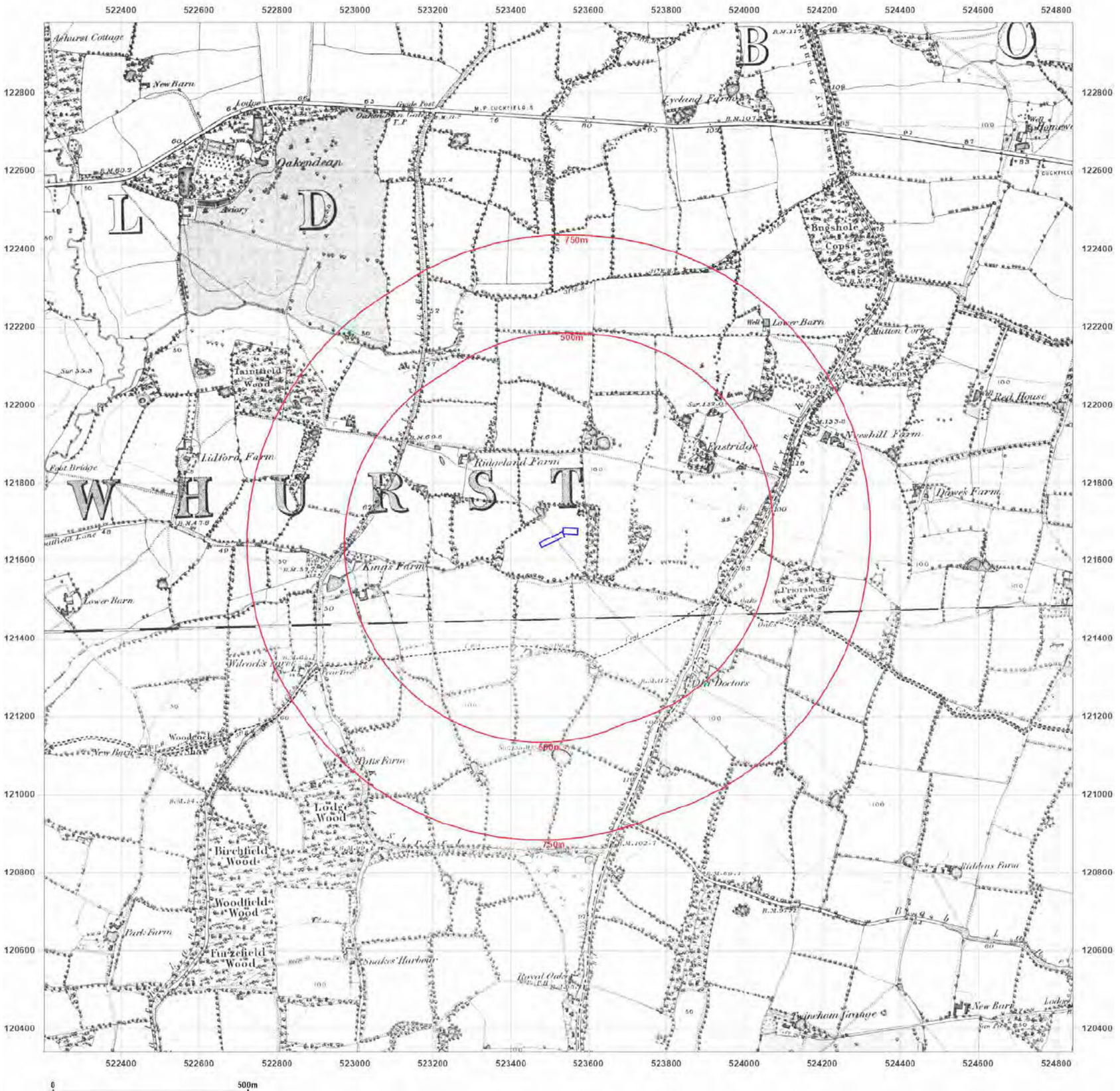

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Client Ref: GE22619/PO7637
Report Ref: GS-IS9-N6E-1YS-I4N
Grid Ref: 523522, 121660

Map Name: County Series
Map date: **1875**
Scale: 1:10,560
Printed at: 1:10,560

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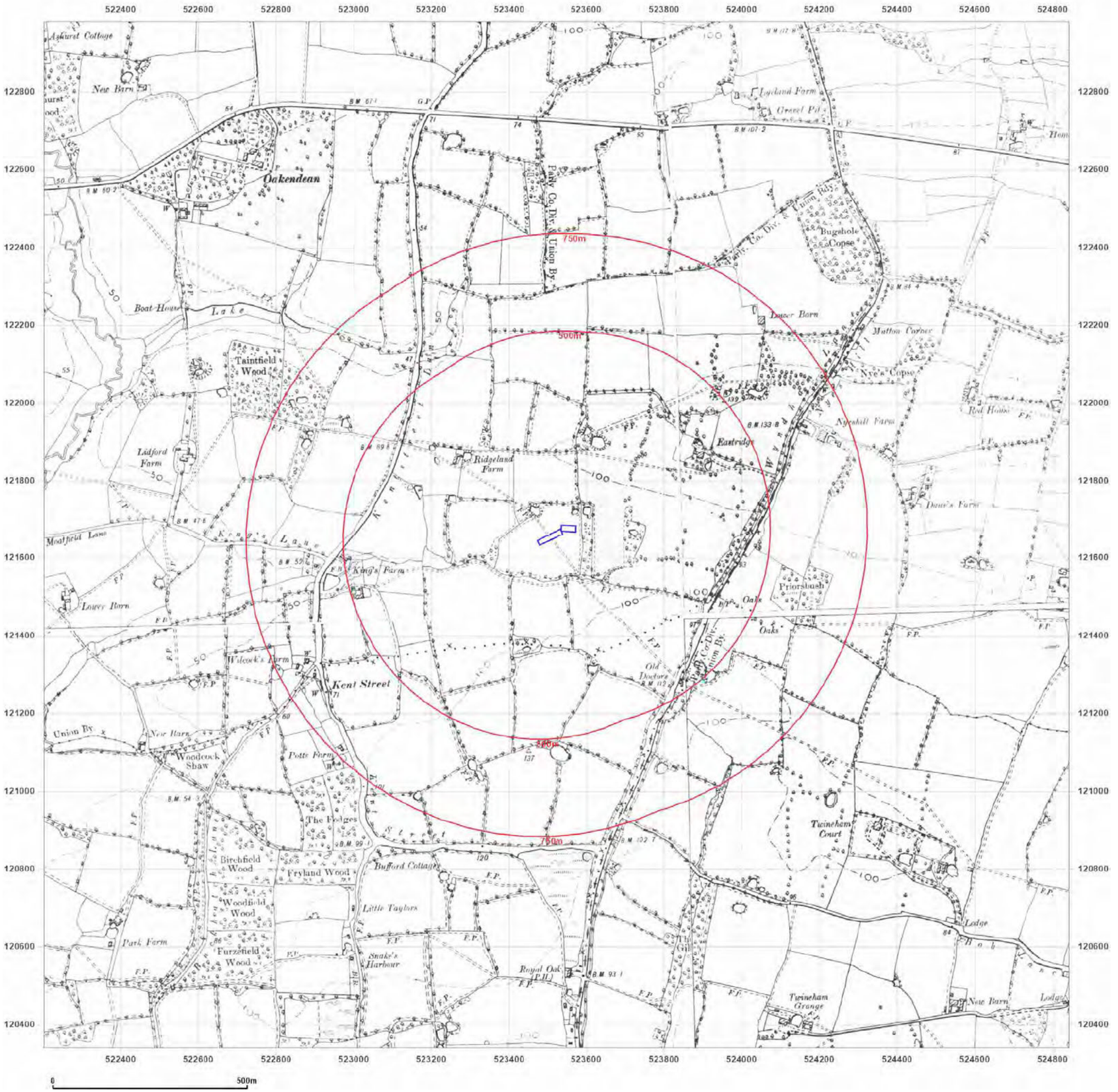

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Client Ref: GE22619/PO7637
Report Ref: GS-IS9-N6E-1YS-I4N
Grid Ref: 523522, 121660

Map Name: County Series
Map date: **1896**
Scale: 1:10,560
Printed at: 1:10,560

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Surveyed 1876
Revised 1896
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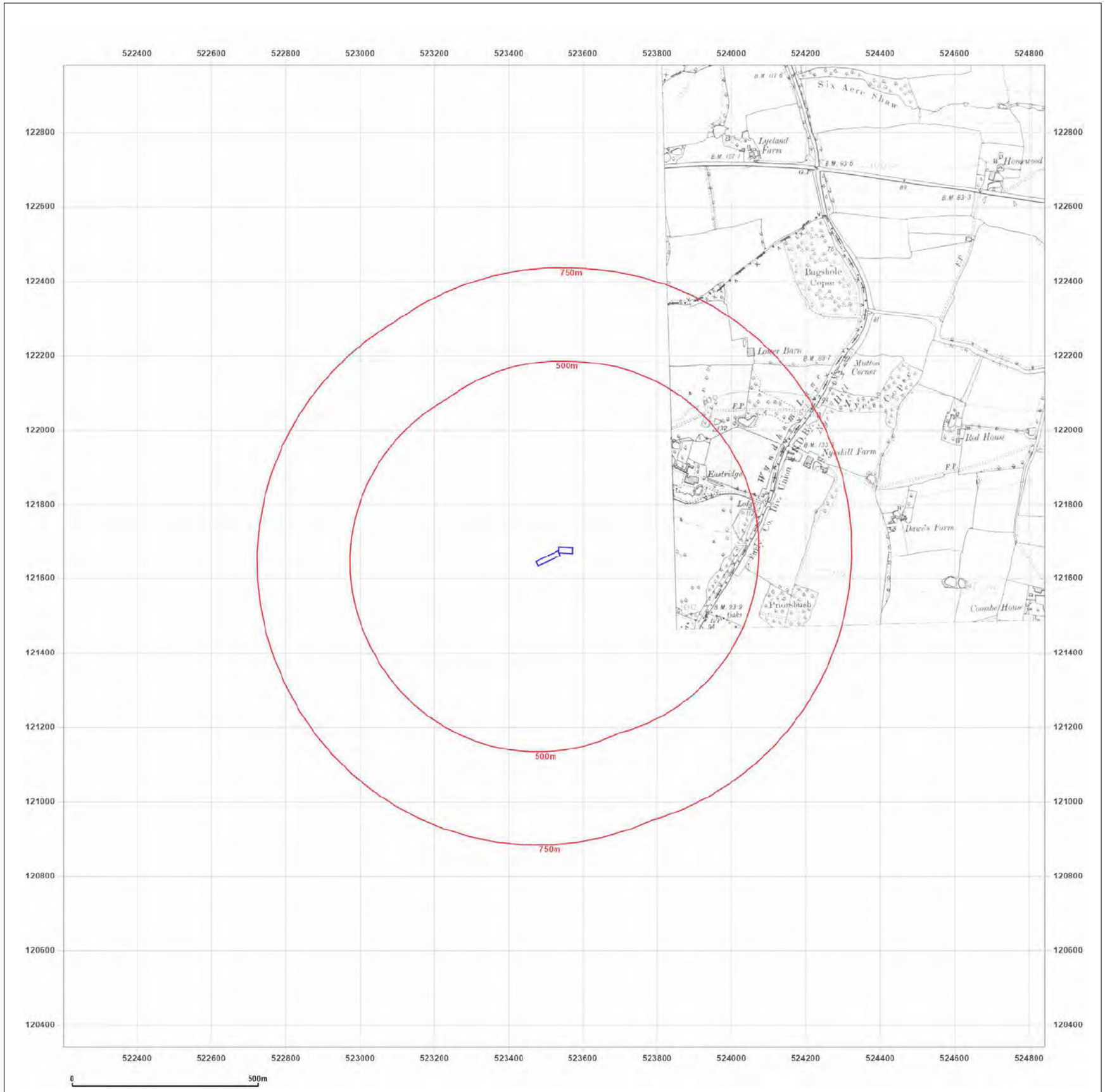

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Report Ref: GS-IS9-N6E-1YS-I4N
Grid Ref: 523522, 121660

Map Name: County Series
Map date: **1909**
Scale: 1:10,560
Printed at: 1:10,560

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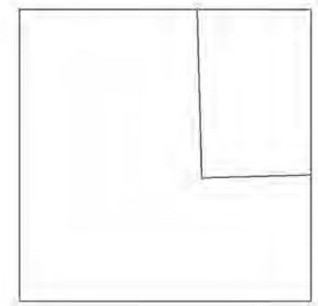
Surveyed 1874
Revised 1909
Edition N/A
Copyright N/A
Levelled N/A



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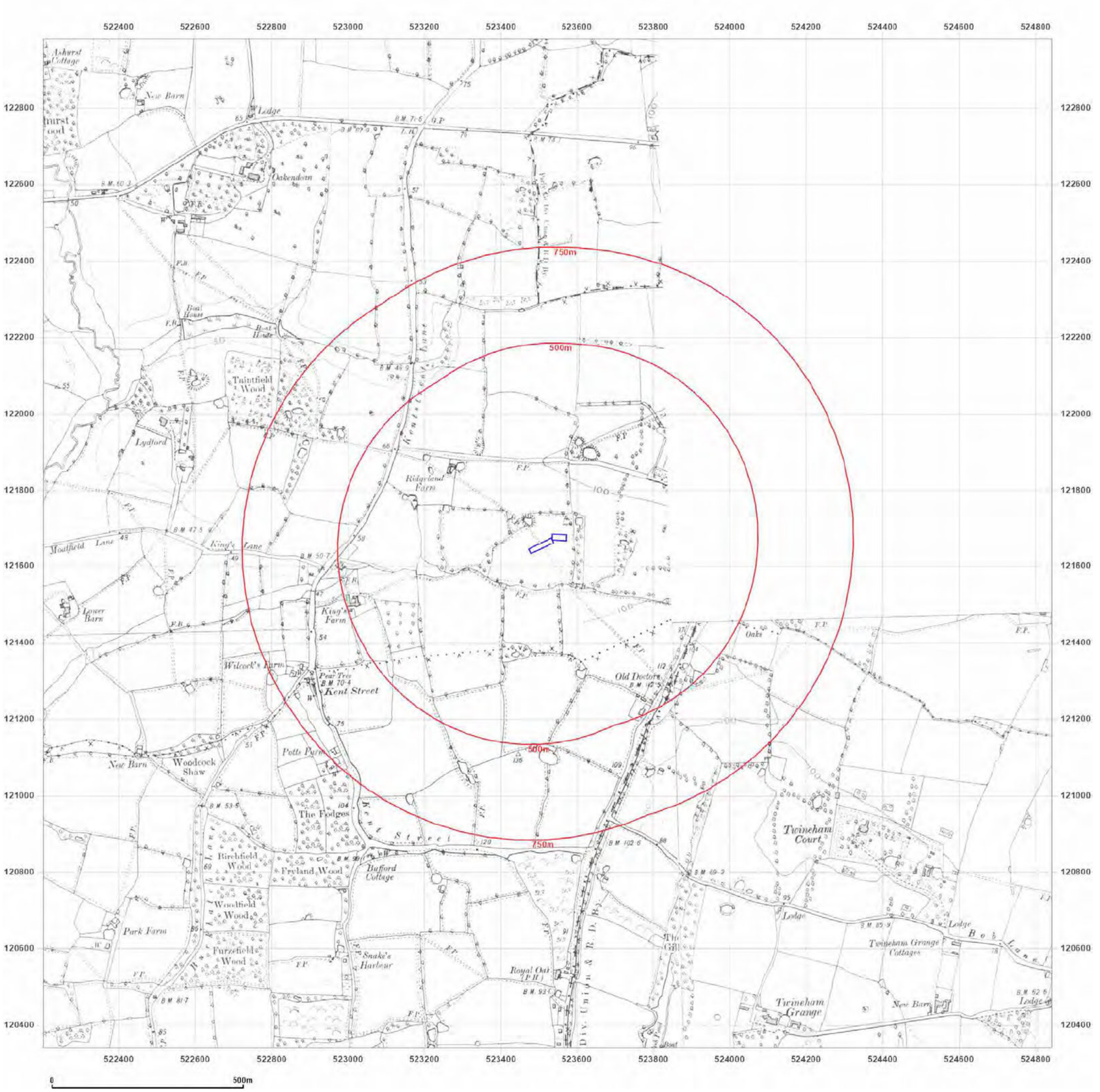

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Site Details:

Lot 1 and Lot 2 Combined,
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West Sussex, RH13 8BB

Client Ref: GE22619/PO7637
Report Ref: GS-IS9-N6E-1YS-I4N
Grid Ref: 523522, 121660

Map Name: County Series

Map date: **1909-1912**

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Surveyed 1875
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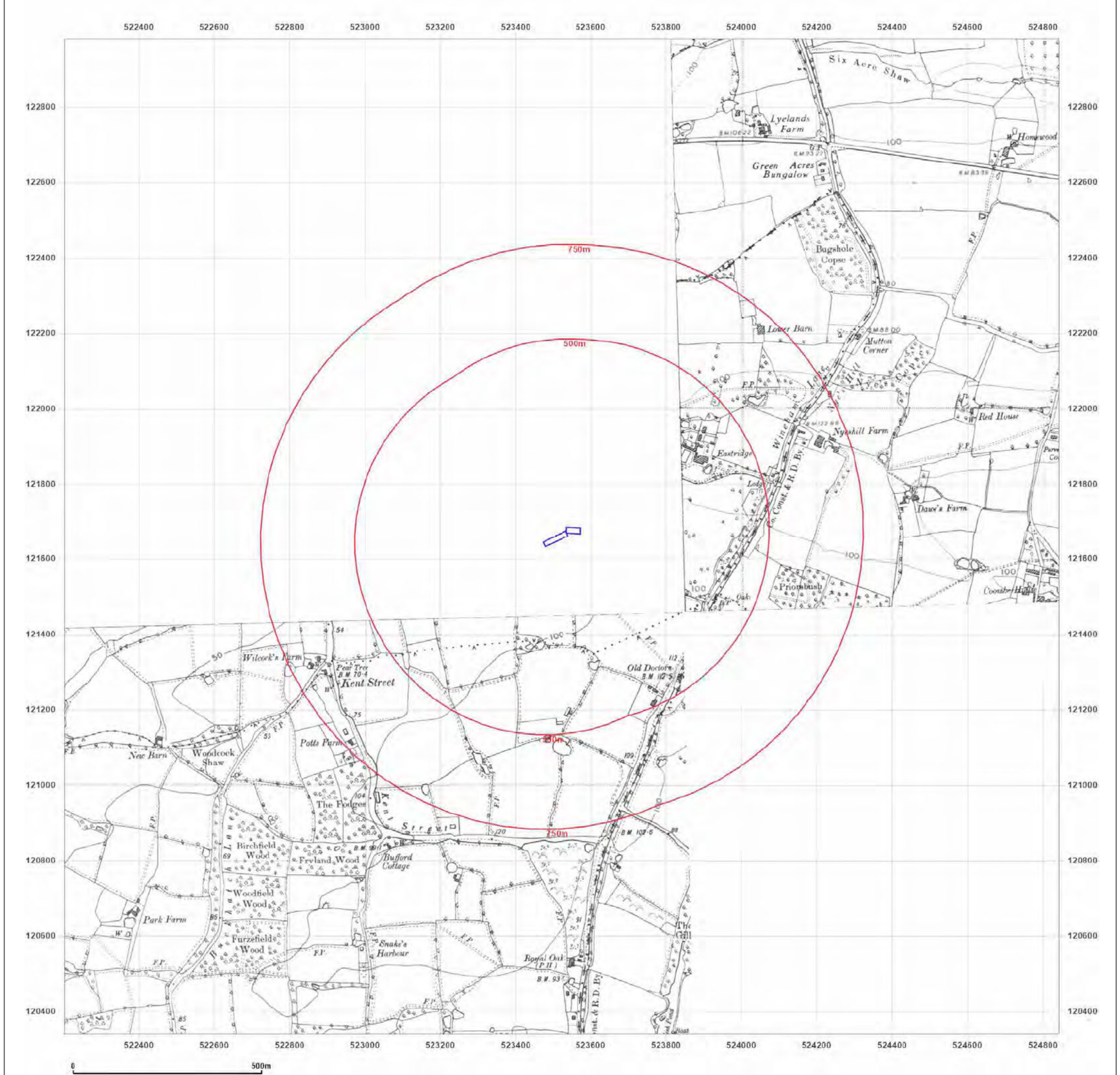

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West Sussex, RH13 8BB

Client Ref: GE22619/PO7637
Report Ref: GS-IS9-N6E-1YS-I4N
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Map Name: County Series
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Revised 1947
Edition N/A
Copyright N/A
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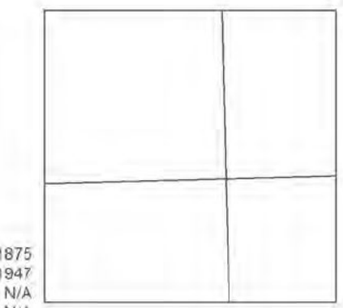

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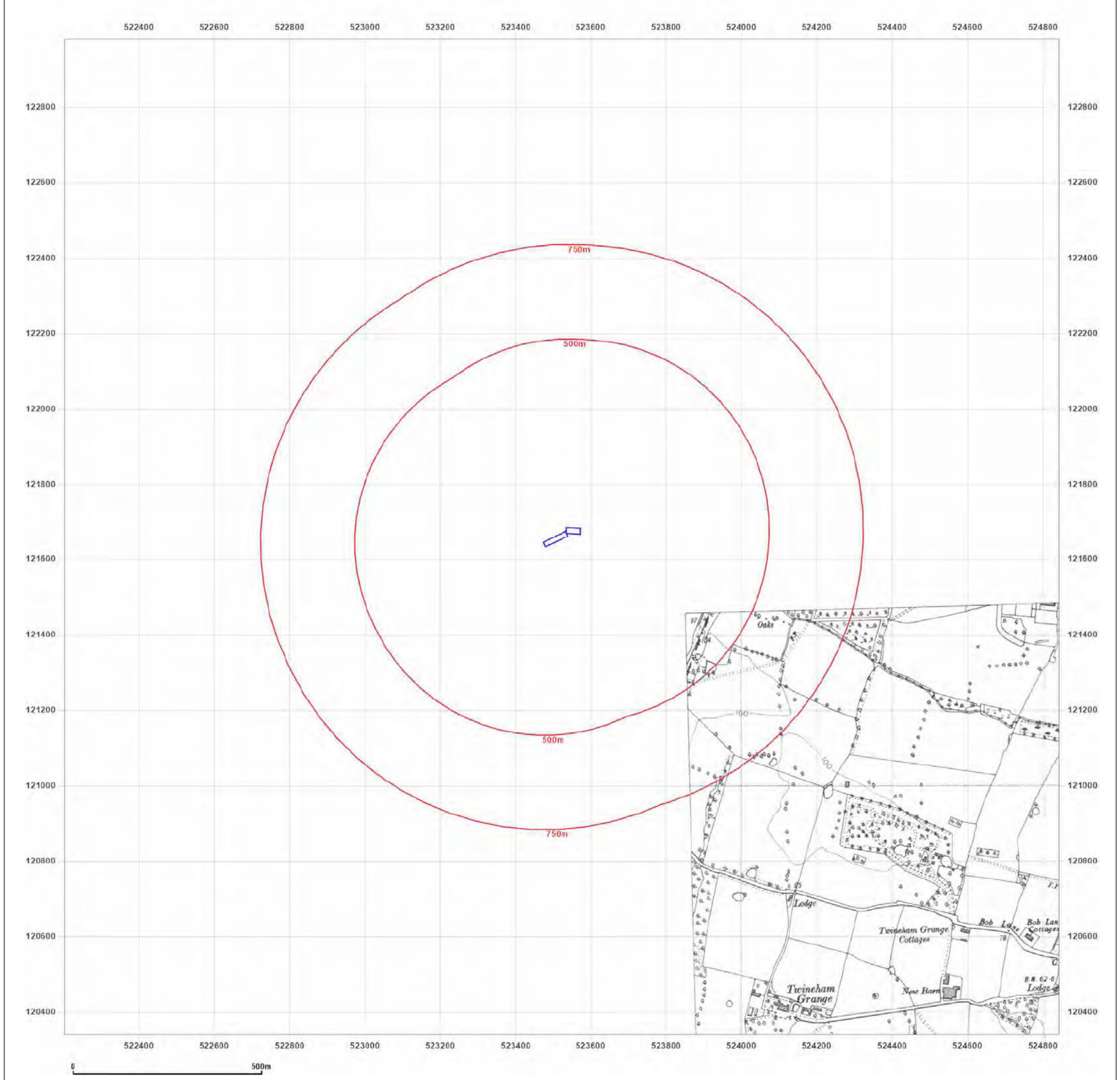

Groundsure INSIGHTS

Site Details:

Lot 1 and Lot 2 Combined,
Delspride Kent Street, Cowfold,
West Sussex, RH13 8BB

Client Ref: GE22619/PO7637
Report Ref: GS-IS9-N6E-1YS-I4N
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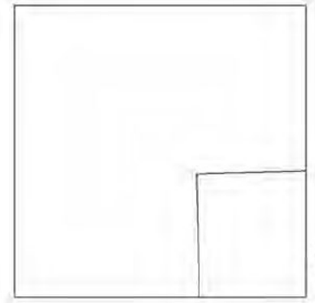

Surveyed 1874
Revised 1947
Edition N/A
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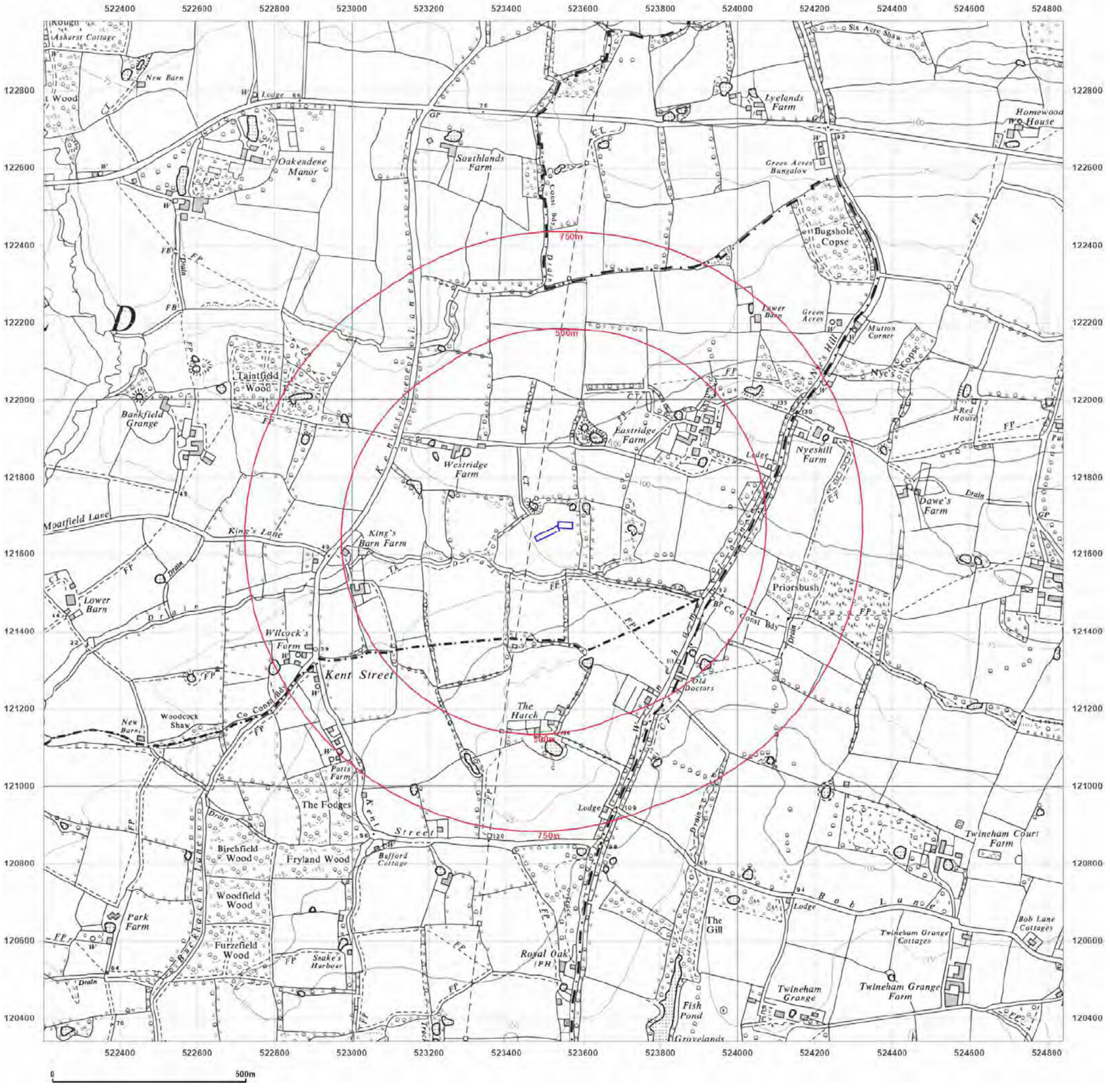

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Site Details:

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Revised 1962
Edition N/A
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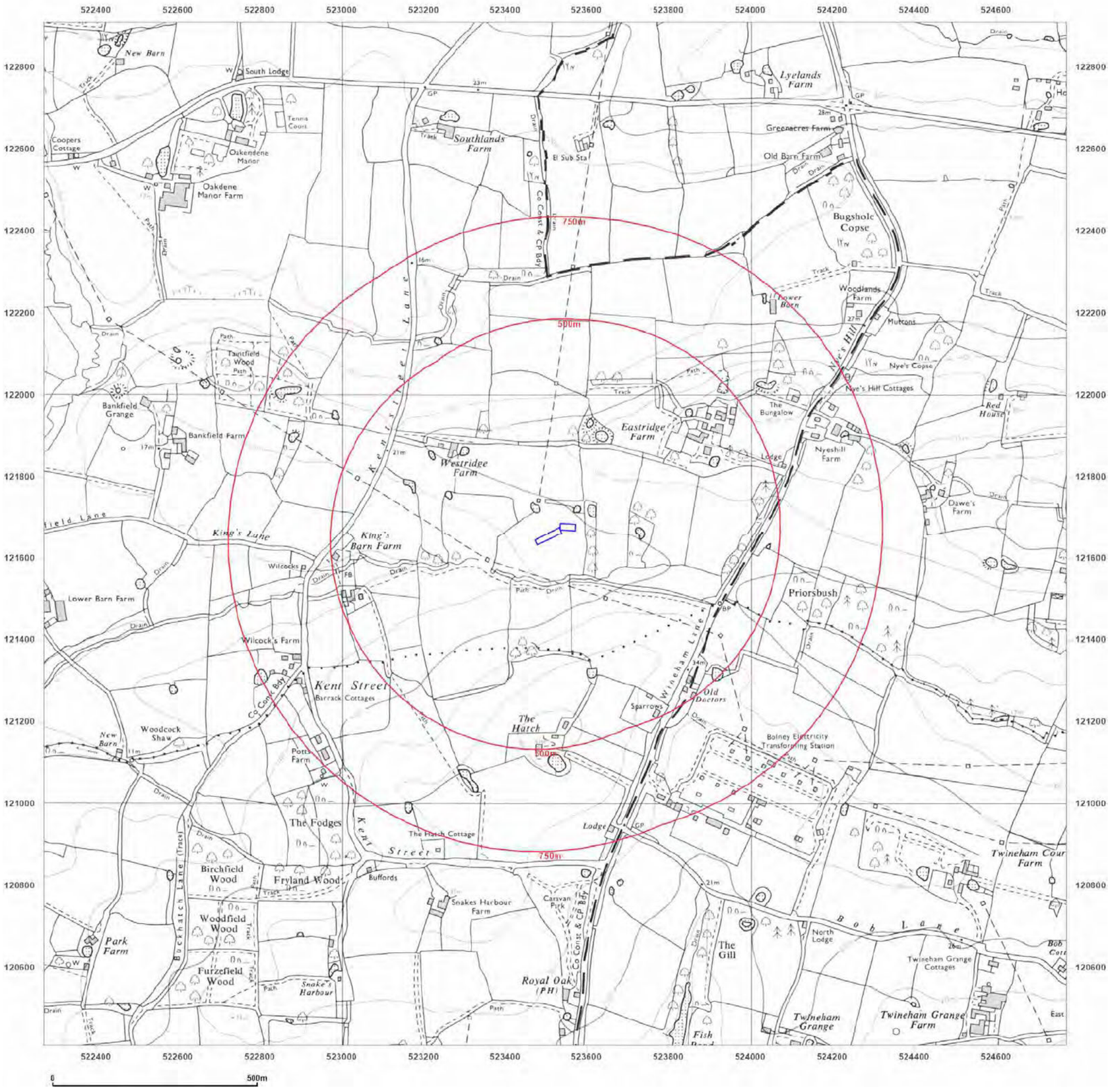

Groundsure INSIGHTS

Site Details:

Lot 1 and Lot 2 Combined,
Delspride Kent Street, Cowfold,
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Client Ref: GE22619/PO7637
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Grid Ref: 523522, 121660

Map Name: National Grid

Map date: **1978**

Scale: 1:10,000

Printed at: 1:10,000

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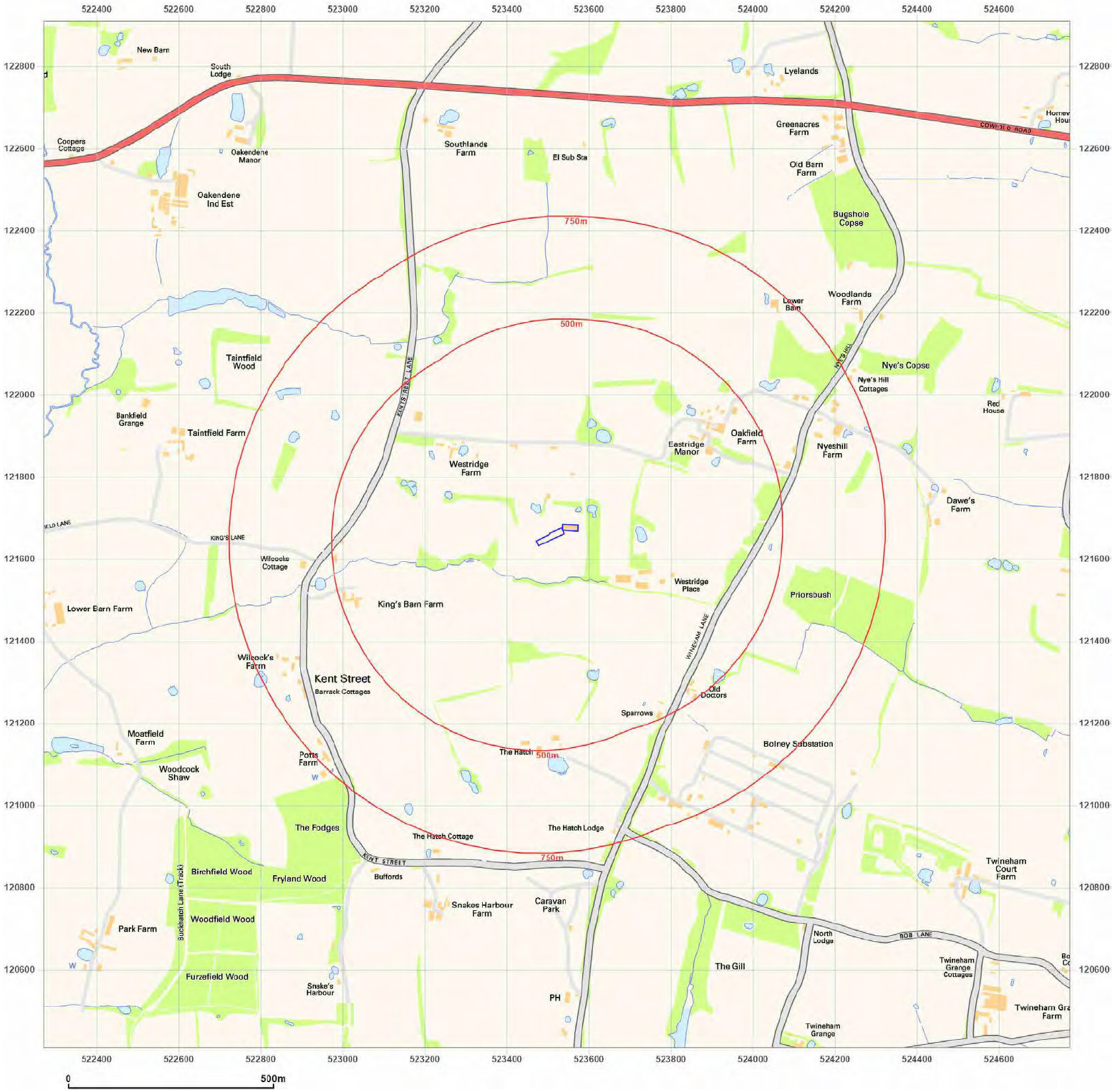

Groundsure INSIGHTS

Site Details:

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Delspride Kent Street, Cowfold,
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Grid Ref: 523522, 121660

Map Name: National Grid

Map date: **2001**

Scale: 1:10,000

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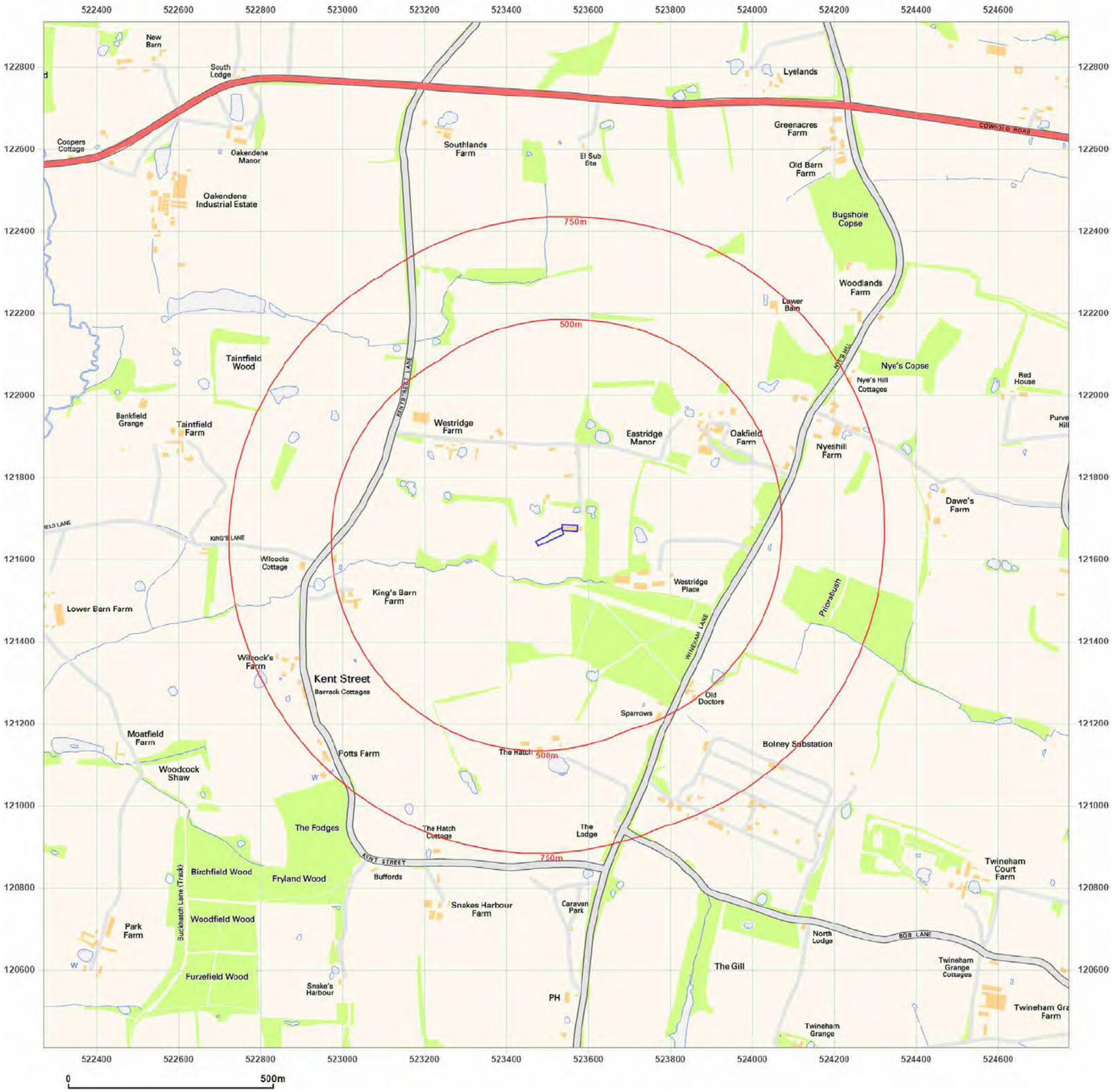

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West Sussex, RH13 8BB

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Grid Ref: 523522, 121660

Map Name: National Grid
Map date: 2010
Scale: 1:10,000
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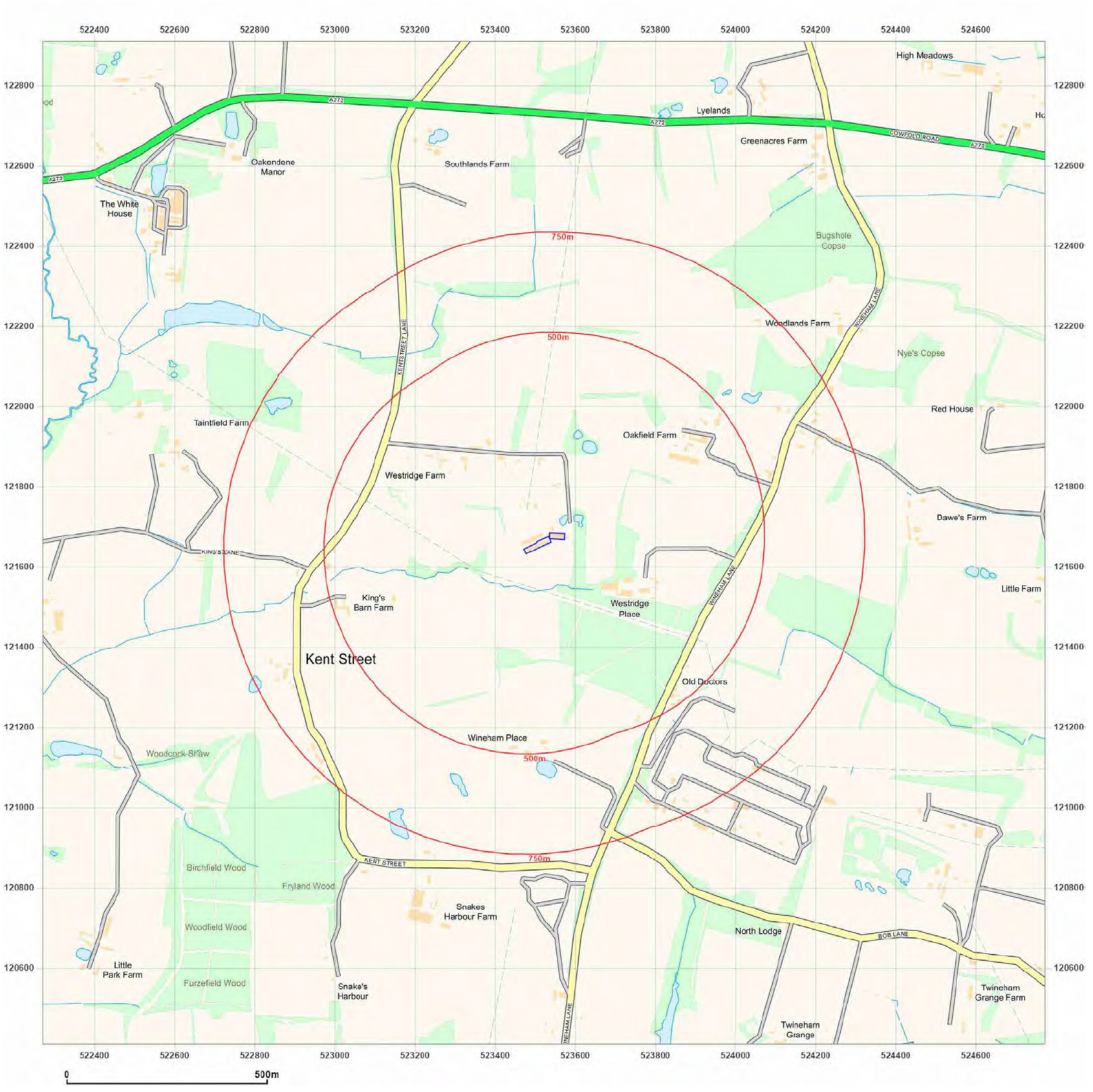

Groundsure INSIGHTS

Site Details:

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Delspride Kent Street, Cowfold,
West Sussex, RH13 8BB

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Grid Ref: 523522, 121660

Map Name: National Grid
Map date: **2024**
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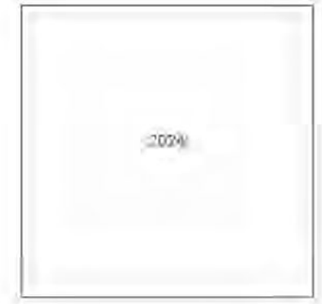

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APPENDIX B

Photographic Record



29th July 2024 – Lot 1



Plate 1 - Pond to north of site.



Plate 2 - Overview of site. View looking southwest from northeast of former poultry barn



Plate 3 - Dog kennel and small barn to east of former poultry barn. The plans for the site indicate that a tank was present adjoining the eastern elevation of the former poultry barn - the tank was not currently present.



Plate 4 - Vehicle storage and yard area to southeast of former poultry barn.



Plate 5 - Vehicles stored adjacent (southeast) of southeastern corner of former poultry barn.

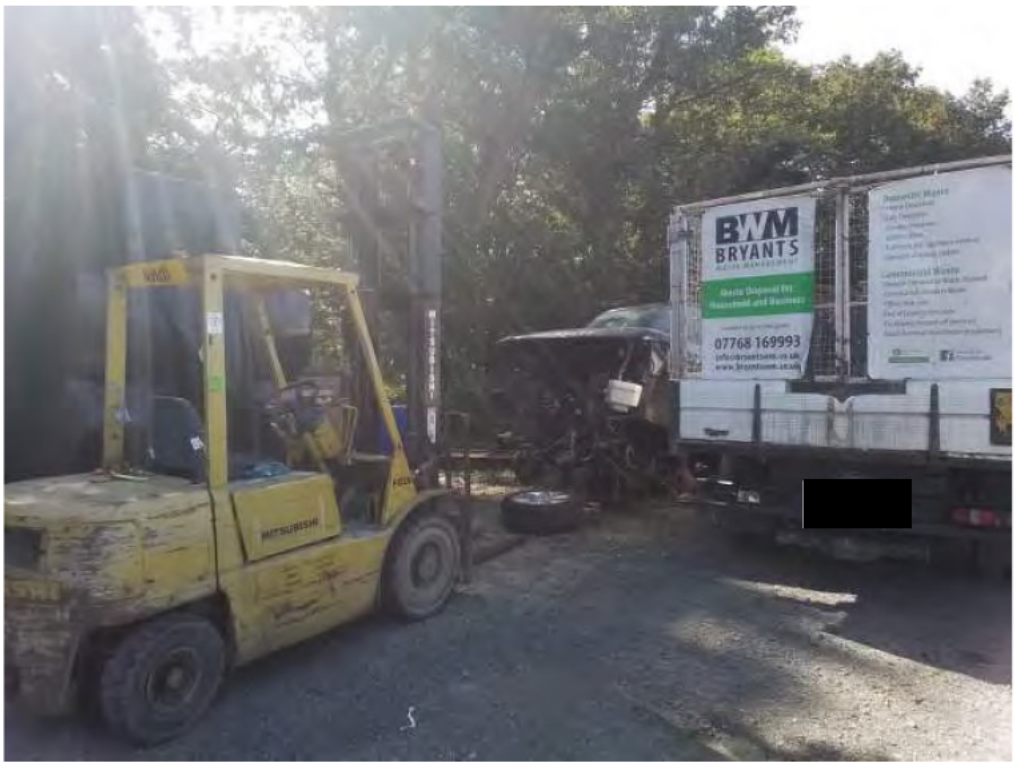

Plate 6 - Vehicle servicing area to southeast of main site.



Plate 7 - Southern elevation of former poultry barn.



Plate 8 - Inside of former poultry barn side lean-to (a)



Plate 9 - Inside of former poultry barn side lean-to (b)



Plate 10 - View inside small wooden barn to east of main poultry barn. The small barn contained assorted carriages.



Plate 11 - View inside timber storage shed to east of main poultry barn. The shed contained assorted garden maintenance equipment, and tack for horses.



Plate 12 - Eastern elevation of former poultry barn. A tank was shown in this location on site plans, but was not present on site.



Plate 13 - Western elevation of former poultry barn.



Plate 14 - View east along northern elevation of former poultry barn.

29th July 2024 – Lot 2



Plate 15 - View north along western boundary, from the southwest corner of the site.



Plate 16 - View northeast across site from southwest corner.



Plate 17 - View east across former poultry shed. Shed is currently only the framework and concrete slab. Stockpiled scrap metal at western end of former shed.



Plate 18 - Cladding materials from former poultry shed.



Plate 19 - View east along northern boundary. Former poultry shed to right of photo.



Plate 20 - Sceptic tank (not in use) stored above ground off southern side of former poultry barn.



Plate 21 - Bonfire site off southern boundary of former poultry barn.



Plate 22- Disused fridge/freezers stored off southern boundary of former poultry barn, behind temporary caravans.



Plate 23 - Stockpiled building materials close to southeastern corner of former poultry barn.



Plate 24 - Eastern elevation of former poultry barn.



Plate 25 - Building materials stored in eastern end of former poultry shed.

Geo-Environmental

APPENDIX C

Zetica UXO Risk Map



UNEXPLODED BOMB RISK MAP

zeticaUXO

SITE LOCATION

Location: RH13 8BB,
Map Centre: 523264,121856



This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

- **High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- **Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- **Low:** Areas indicated as having 15 bombs per 1000acre or less.

Miltary | **Industry** | **UXO find** | **Other**
Transport | **Docks** | **Luftwaffe targets**
Utilities | **Bombing decoy** | **Airfields**

How to use your Unexploded Bomb (UXB) risk map?

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density.
Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then additional detailed research is recommended.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirm that there is a low potential for UXO to be present on your site, then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

If you are unsure whether other sources of UXO may be present, you can request one of our pre-desk study assessments (PDSA) by emailing a site boundary and location to pdsa@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682 **email:** uxo@zetica.com **web:** www.zeticauxo.com

The information in this UXB risk map is derived from a range of sources and should be used with the accompanying notes on our website.

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