



Tier 1 Contamination Assessment

The Old Grainstore, Southern Green Farm, Rushden

26295-XPL-501

June 2026

Revision History

Rev.	Date	Purpose	Prepared	Checked	Approved
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Executive Summary

Details	Summary of Main Text
Introduction	This Tier 1 Contamination Risk Assessment report has been prepared for the client, Mr M Dingemans. The assessment relates to a residential development, entailing the replacement of an agricultural building (grain store) with three new dwellings and garden land.
Site description	The site comprised a former grainstore building, yard, copse or orchard and grassed land, including a small garden shed and electricity transformer compound.
Site history	The site was within the Southern Green Farm unit in 1845 (then known as Southendgreen Farm) and has remained in agricultural use up to the present time. Two small buildings were on site by 1877 but were demolished and replaced by the present grainstore building by 1976.
Geology and hydrogeology	Lowestoft Formation diamicton is overlying a bedrock of Lewes Nodular Chalk Formation (chalk). The Lowestoft Formation is a Secondary Undifferentiated aquifer. The Chalk is a Principal aquifer, which confined at this location by a significant thickness of diamicton. The site is in an SPZ3 and there are no sensitive groundwater abstractions within 2km.
Hydrology	The site is mostly level and surrounded by permeable surfaces of agricultural and garden land. The nearest surface water feature is a pond 65m west. There are no sensitive surface water abstractions within 2km.
Potential contamination sources	Potential sources of contamination have been carried through to risk estimation as follows: • Construction and demolition fills (made ground) from previous and existing buildings and yard make up – on site. • Agricultural use, generally – on site. • Electricity transformer – on site. • Heating oil tank - adjacent west, off site. • Farm tank - 32m west, off site. • Infilled ponds - adjacent west and 32m west, off site. Potential contaminants included in the assessment were metals, PAHs, asbestos cement, hydrocarbons, PCBs, organic vapour and ground gas.
Risk estimation	Risks to human health are Low to Moderate. Risks to controlled waters (groundwater and surface water) are Very Low to Low.
Recommendations	A site maximum risk of Moderate implies that investigation is required. A basic level of intrusive investigation is required across only the future garden areas. This may need to be undertaken post-demolition if there is insufficient access to the necessary exploratory hole locations. The investigation could comprise sampling and testing from shallow boreholes.

1 Introduction

1.1 General

This Tier 1 Contamination Risk Assessment report has been prepared by Xplor Environmental Ltd (Xplor) for the client, Mr M Dingemans.

1.2 Scope of Work

The terms of reference for the work were set out in the Xplor fee proposal reference 26295-XPL-101 dated 20 April 2026 and was for a Tier 1 contamination assessment.

1.3 Technical Approach

The report has been prepared from a desk-based review of published information, historical mapping, an environmental search report, and site walkover.

The process of assessment satisfies the Environment Agency guidance, Land Contamination Risk Management (LCRM, 2020) for a Tier 1 contamination risk assessment. Competent persons have been involved in the preparation and checking of the report.

1.4 Future Development

The assessment relates to a residential development, entailing the replacement of an agricultural building (grain store) with three new dwellings and garden land.

2 Site Information and Setting

2.1 Site Location

The site is at Southern Green Farm, Bennett's Lane, Rushden, Hertfordshire, SG9 0SX.

The National Grid Reference for the site is 531310 231793. A location plan is presented as Figure 1.

2.2 Site Description

A site walkover was undertaken on 12 May 2026 when weather conditions were dry. Figure 2 presents a photographic record.

The site comprised a former grain store building, including a concrete surfaced yard, small garden shed and electricity transformer compound.

2.2.1 Grain Store

The grain store was a large agricultural building of steel frame construction, with sheet steel cladding to the northern and eastern elevations and corrugated cement sheet cladding to the southern elevation and upper gable ends.

The visible roof area was of corrugated cement sheets. The visible floor space was a concrete slab.

The building was used for general storage including a pickup truck, farm implements, grain drying equipment, redundant or scrap items and a refrigeration unit attached to a small standby generator. The generator was positioned inside a steel structure suspended above the grainstore slab, with 2nr 'jerry' cans. There was some minor oil-staining of the timber floor beside the generator but not on the slab beneath.

2.2.2 External Space

North of the grainstore building was grassed land, a small orchard or copse, a redundant smallholding-type plots and a fenced electricity transformer. A small, wooden garden shed contained rolls of chicken wire.

South of the grainstore was grassed land with several trees and an area overgrown with bramble etc.

West and northwest of the grainstore was a concrete surfaced yard. Two large ro-ro skips were in this area.

2.3 Surrounding Land Use

Bordering the site were the following land uses:

- North: meadow land.
- East: meadow land.
- South: Bennett's Lane, beyond which was woodland.
- West: dwellings and garden land (Southern Green Farm and The Haybarn).

2.4 Site History

2.4.1 Tithe Records

The tithe record for 1845 indicates that the site straddled three plots of land: Black Croft in the north (plot 81) in arable use, Rickyard Orchard in the south (plot 85) and a house and yard in the west (plot 86).

The map and transcript are presented in Figure 3.

2.4.2 Ordnance Survey Mapping

Historical maps for the site have been reviewed and a summary of findings is presented in Table 2.1. Copies of the maps are presented in Appendix A.

The geolocation of the site boundary is based on modern digital mapping and may not match historical mapping, which are from scanned hard copies. This is accounted for in the descriptions below.

Table 2.1 Historical Map Summary

Year	On Site	0-100m
1877-1883	Mostly open land in the north, associated with Southendgreen [sic] Farm. A small building was mid-distance on the eastern boundary and an open-sided structure straddled the western boundary. Orchard land was in the south.	Open land, probably agricultural, was to the north, east and south. Bennett's Lane ran along the southern boundary. Southendgreen Farm buildings were from adjacent west. Three ponds were adjacent west, 32m west and 61m west.
1896-1898	No significant change.	Water pump 39m west.
1923-1950	Building on the eastern boundary extended west with an open-fronted structure, creating an L-shape. Orchard in the southwest not shown, probably cleared. Farm unit renamed Southern Green Farm.	Water well 54m west.
1951	Building on eastern boundary not shown, probably demolished. Building on western boundary extended towards the centre of the site.	Water pump 39m west not shown.
1976-2003	Present day grainstore building constructed on the eastern boundary. Building on western boundary not shown, probably demolished.	Tank in farm yard 32m west of the northern end of the site. Ponds adjacent west and 32m west not shown, probably infilled.
2010-2025	No significant change.	No significant change.

2.4.3 Historical Aerial Images

Available aerial images were viewed on Google Earth Pro, and in the appended Groundsure report. Relevant images are presented in Figure 3.

The grainstore, concrete surfaced yard and transformer compound were all constructed prior to the first available aerial image in 1999.

Smallholding-type enclosures were visible in the north from 2008.

Limited open storage was visible across the concrete surfaced yard from 2017, consistent with agricultural use.

2.4.4 British Newspaper Archive

The earliest mention of Southern Green Farm was in 1893 (Herts & Cambs Reporter & Royston Crow, 27 October 1893).

2.5 Geology

British Geological Survey (BGS) mapping at 1:10,000 scale identifies a superficial deposit of Lowestoft diamicton across the site.

This superficial deposit is overlying a bedrock of Lewes Nodular Chalk Formation (chalk).

There is a BGS record of a borehole drilled 28m west at Southern Green Farm in 1948. The encountered geology was 76m of boulder clay over chalk. The depth to groundwater was 54m. The borehole was disused by 1964.

2.6 Hydrogeology

The Lowestoft Formation diamicton is a Secondary Undifferentiated aquifer. The Chalk bedrock is a Principal aquifer.

The site is within a total catchment Source Protection Zone (SPZ3).

There are 6nr groundwater abstraction record entries within 2km. The nearest active groundwater abstraction is recorded 1237m west for general farming and domestic use.

There are no potable abstraction record entries within 2km.

2.7 Hydrology

The site is mostly level, but slopes down to Bennett's Lane along the southern boundary. Surrounding land is permeable surfaces of agricultural and garden land. Highways drainage systems may be present in Bennett's Lane.

The nearest OS mapped surface water feature is a pond 65m west.

There are 2nr surface water abstraction record entries within 2km. Both are listed as historical and may not be active.

2.8 Environmental Data Searches

A Groundsure Enviro Insight report was purchased for the site and is presented in Appendix C. The following record entries are potentially relevant to the site condition and, except where stated, are generally limited to a maximum search distance of 100m.

2.8.1 Past Land Use

There is 1nr record entry of a historical tank within 100m. It relates to an unspecified tank and features on OS mapping 32m west in 1976.

2.8.2 Waste and Landfill

There are no record entries of historical or recent landfills within 250m.

There is 1nr record entry of a historical waste site within 100m. It was registered at Southern Green Farm 4m west in 2012, as part of a planning application to create an earth bund. The location of the earth bund works is unknown but in this instance is unlikely to be at the applicant's address or in proximity to the site.

There are 2nr record entries of waste exemptions within 100m. Both are registered to Southern Green Farm but are 90m south and unlikely to impact on the site condition.

2.8.3 Current Industrial Land Use

There are no record entries of current industrial land use within 100m.

2.8.4 Environmental Designations

The site is within the Beane (Source to Stevenage Brook) WFD surface water catchment and both the Upper Lee Chalk and Upper Bedford Chalk WFD groundwater catchments. The development is not of a type or scale likely to be affected by the designations.

The site is in Nitrate Vulnerable Zones (NVZ) for surface water and groundwater. They relate to rules that farmers should follow to tackle nitrate loss and are not applicable to the development.

The site is in a SSSI Impact Risk Zone, but the development is not of a type to be affected by the designation.

2.8.5 Natural Ground Subsidence

Risks from natural ground hazards are Negligible to Low.

2.8.6 Mining, Ground Working, Cavities and Sinkholes

There are 4nr record entries of surface ground workings on site. They relate to an OS mapped pond in 1883-1951. A manual check against historical mapping indicates this may be a georeferencing error and the pond was off site, adjacent to the western boundary.

There is 1nr non-coal mining record entry on site. It relates the chalk and is described as "Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered".

2.8.7 Radon

The site is in an area where less than 1% of homes are affected by radon, for which radon protection is not required.

2.9 **Unexploded Ordnance (UXO)**

Zetica UXO risk maps were accessed online. These show the site is in an area at Low risk from UXO.

3 Contaminated Land Risk Assessment

3.1 General

A qualitative risk assessment has been undertaken for the site based on an evaluation of the information collected during the desk study and site reconnaissance.

The process involves the identification of sources of potential contamination based on historical mapping, data searches and a site walkover, together with the identification of associated exposure pathways and human or environmental receptors.

A preliminary conceptual site model (CSM) has been developed and is described below.

3.2 Conceptual Site Model

3.2.1 Contamination Sources

The potential contaminant sources that could impact on receptors are identified in Table 3.1.

Table 3.1 Potential Contaminant Sources

Sources	Contaminants / comments
On site	
Construction and demolition fills (made ground) from previous and existing buildings and yard make up	Metals, polycyclic aromatic hydrocarbons (PAHs) and asbestos cement.
Agricultural use, generally	Metals, PAHs, hydrocarbons and organic vapour.
Grainstore	Excluded as a source. Pesticides (fungicide and insecticide) may have been used to treat stored grain. However, this would have been applied inside the building and at controlled rates.
Electricity transformer	Transformer oils can contain mineral oils and PCBs (polychlorinated biphenyls).
Standby generator and fuel cans inside a container in the grainstore building	Hydrocarbons, BTEX and organic vapour.
Off site (potentially mobile contaminants)	
Infilled ponds, adjacent west and 32m west	Ground gas.
Heating oil tank, adjacent west	Hydrocarbons and organic vapour.
Farm tank, 32m west	Hydrocarbons and organic vapour.

3.2.2 Contaminant Pathways

Table 3.2 presents a review of potential exposure pathways that could exist at the site.

Table 3.2 Potential Contaminant Pathways

<i>Pathways</i>	<i>Description</i>
Direct contact with soil or shallow groundwater (dermal, ingestion or dust/fibre inhalation) including plant uptake – operational phase	Future residents could be exposed to contaminated soils outdoors and ground gas/vapour indoors.
Direct contact with soil or groundwater (dermal, ingestion or dust/fibre inhalation) – construction phase	New construction is proposed.
Leaching from soil down to groundwater	Lowestoft Formation diamicton is a low permeability, clay matrix soil.
Migration in groundwater	Low permeability, clay matrix soil.
Migration in surface runoff	Site is mostly level but with a gradient down to Bennett's Lane on the southern boundary. It is surrounded by permeable surfaces of agricultural and garden land.
Migration of ground gas and organic vapour	Low permeability, clay matrix soil.
Contact with new infrastructure and construction	New construction is proposed.

3.2.3 Contaminant Receptors

Table 3.3 lists the receptors on and off the site that could be affected by contaminants during the construction and operational phases of development.

Table 3.3 Potential Contaminant Receptors

<i>Receptors</i>	<i>Description</i>
Future site users	Residents inside dwellings and using garden land.
Neighbouring property	Dwellings and garden land are adjacent to the west.
Construction and maintenance workers	New construction is proposed.
Surface water	Pond 65m west. There are no sensitive surface water abstractions within 2km.
Groundwater	Lowestoft Formation diamicton is a Secondary Undifferentiated aquifer. The Chalk bedrock is a Principal aquifer and confined at this location by a significant thickness of diamicton. Site is in an SPZ3 and there are no sensitive groundwater abstractions within 2km.

3.3 Risk Evaluation

Based on the sources, pathways and receptors identified above, Table 3.4 provides an estimation risks for all potential sources, regardless of whether a pathway is present or not, and identifies the level of risk to receptors from each.

In accordance with the adopted methodology, the estimation of risk reflects both the probability of an event occurring (likelihood) and the potential consequence (magnitude) of possible effects. Risk definitions are provided in Appendix C.

A very low or low overall risk indicates remediation is unlikely to be required for development or will be limited. A moderate to high overall risk indicates further investigation or remediation could be required.

Table 3.4 Risk Estimation

Sources	Pathway	Receptor	Probability	Justification / Mitigation	Magnitude	Justification / Mitigation	Overall risk
<u>On site</u> Construction and demolition fills (made ground) from previous and existing buildings and yard make up Agricultural use, generally Electricity transformer Standby generator and fuel cans inside grainstore <u>Contaminants</u> Metals, PAHs, asbestos cement, PCBs, hydrocarbons, BTEX and organic vapour	Direct contact with soil (dermal, ingestion or dust/fibre inhalation), including plant uptake	Future site users (residential)	Likely	Garden land proposed.	Medium	Contaminants could exceed assessment criteria but at low levels.	MODERATE
		Construction and maintenance workers	Likely	New construction is proposed.	Mild	As above, but short term exposure during construction phase.	LOW
		Neighbouring property (residential)	Low	Site is generally level.	Mild	As above, but short term exposure during construction phase.	LOW
	Soil leaching down to shallow groundwater	Shallow groundwater (Lowestoft Formation diamicton)	Low	Diamicton is a low permeability, clay matrix soil.	Mild	Secondary Undifferentiated aquifer and SPZ3. Leachable or mobile contaminants unlikely to exceed assessment criteria.	LOW
	Migration in shallow groundwater		Low	Diamicton is a low permeability, clay matrix soil.	Mild	Secondary Undifferentiated aquifer, SPZ3 and no active sensitive abstractions within 2km. Leachable or mobile contaminants unlikely to exceed assessment criteria.	LOW
	Migration down to deeper groundwater	Deep groundwater (Chalk)	Unlikely	Chalk aquifer is confined by a significant thickness of diamicton.	Medium	Chalk is a Principal aquifer but location is in an SPZ3 and no active sensitive abstractions within 2km. Leachable or mobile contaminants unlikely to exceed assessment criteria.	LOW
	Surface runoff	Pond 65m southwest	Low	Site is mostly level and surrounded by permeable surfaces of agricultural and garden land.	Mild	Isolated pond is low sensitivity to contamination. Leachable or mobile contaminants unlikely to exceed assessment criteria.	VERY LOW
	Migration in groundwater		Low	Diamicton is a low permeability, clay matrix soil.			
	Migration in soil (organic vapour)	Future site users (residential)	Low	Diamicton is a low permeability, clay matrix soil.	Mild	Minor fuel/oil-staining of the suspended timber floor around the standby generator.	LOW
	Migration in soil (ground gas)	Future site users (residential)	Low	Diamicton is a low permeability, clay matrix soil.	Mild	Ground gas source not identified on site.	LOW

Sources	Pathway	Receptor	Probability	Justification / Mitigation	Magnitude	Justification / Mitigation	Overall risk
<u>Off site</u> Heating oil tank, adjacent west Farm tank, 32m west <u>Potentially mobile contaminants</u> Hydrocarbons and organic vapour	Migration in soil (organic vapour)	Future site users (residential)	Low	Diamicton is a low permeability, clay matrix soil.	Medium	Farm tank not visible from site and presence of bunding not established. Adjacent heating oil tank was relatively new and of modern, internally bunded construction.	LOW
<u>Off site</u> Infilled ponds, adjacent west and 32m west <u>Potentially mobile contaminants</u> Ground gas	Migration in soil (ground gas)	Future site users (residential)	Low	Diamicton is a low permeability, clay matrix soil.	Mild	Significant ground gas generation not expected, based on the following lines of evidence: • Ponds infilled 1951-1976 (50-75 years ago). • Relatively small and probably shallow. • Located beneath or adjacent off-site dwelling (no history of a ground gas impact).	LOW

4 Conclusions

The site comprised a former grainstore building, yard, copse or orchard and grassed land, including a wooden garden shed and electricity transformer compound.

The site was within the Southern Green Farm unit in 1845 and has remained in agricultural use up to the present time. Previously an orchard and arable land, two small buildings were on site by 1877 but were demolished and replaced by the present grainstore building by 1976.

The published geology is Lowestoft Formation diamicton overlying a bedrock of Lewes Nodular Chalk Formation (chalk).

The Lowestoft Formation is an Undifferentiated aquifer. The Chalk is a Principal aquifer, which is confined at this location by a significant thickness of diamicton. The site is in an SPZ3 and there are no active, sensitive groundwater abstractions within 2km.

The site is mostly level and surrounded by permeable surfaces of agricultural and garden land. The nearest surface water feature is a pond 65m west. There are no active, sensitive surface water abstractions within 2km.

Potential sources of contamination were identified and the following were carried through to risk estimation:

- Construction and demolition fills (made ground) from previous and existing buildings and yard make up – on site.
- Agricultural use, generally – on site.
- Electricity transformer – on site.
- Standby generator and fuel cans – inside grainstore, on site.
- Heating oil tank - adjacent west, off site.
- Farm tank - 32m west, off site.
- Infilled ponds - adjacent west and 32m west, off site.

Potential contaminants included in the assessment were metals, PAHs, asbestos cement, hydrocarbons, BTEX, PCBs, organic vapour and ground gas.

Risks to human health are Low to Moderate.

Risks to controlled waters (groundwater and surface water) are Very Low to Low.

5 Recommendations

A site maximum risk of Moderate implies that investigation is required.

A basic level of intrusive investigation is proposed across only the future garden areas. The investigation could comprise sampling and testing from shallow boreholes.

Ground gas and groundwater monitoring are not considered to be required.

Investigation for PCBs in the area surrounding the transformer compound is not required given that it is located away from future garden land (albeit within the application area). Notwithstanding, intrusive investigation would not be possible next to live electrical apparatus.

The investigation may need to be carried out post-demolition, when there will be better access to exploratory hole locations.

Advisories

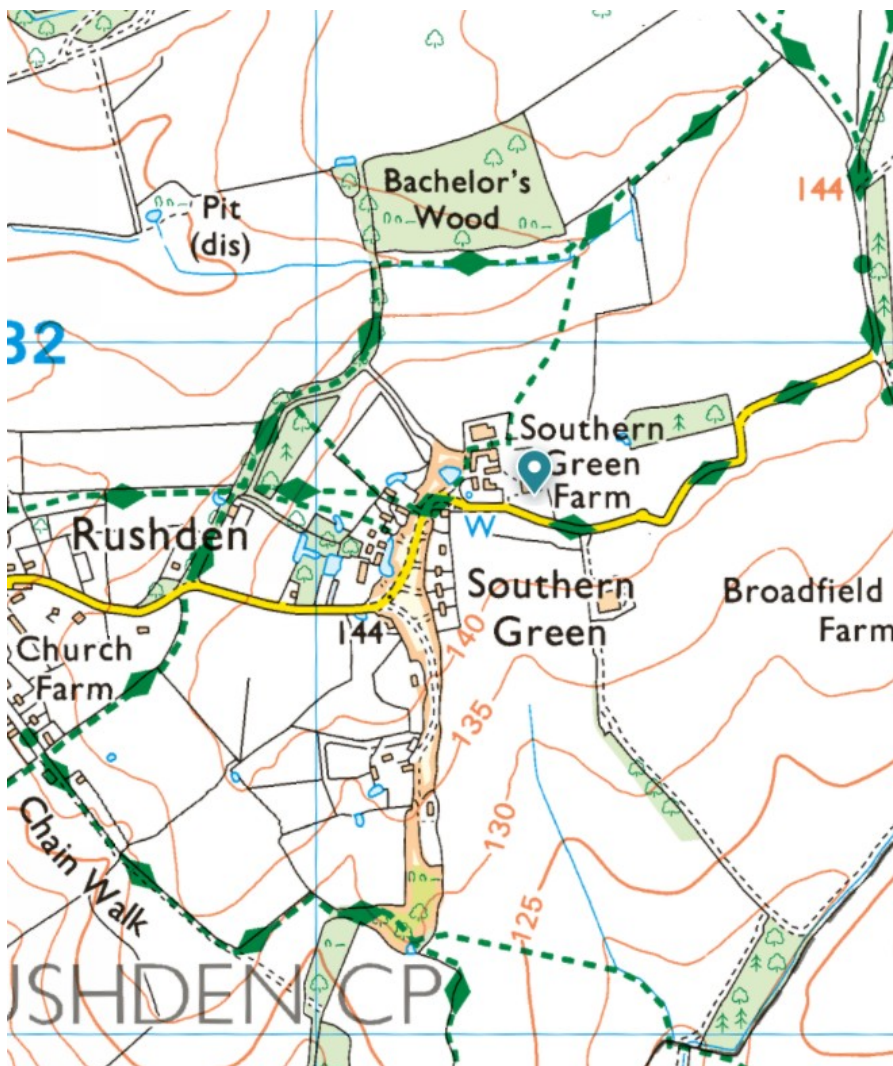
The report provides no guidance or advice on asbestos in buildings or other structures on site. The client should seek their own advice or surveys before undertaking activities that could disturb asbestos containing materials.

Figures

Figure 1 – Location Plan

Figure 2 – Site Walkover

Figure 3 – 1845 Tithe Record





HEATING OIL TANK OFF SITE



COPSE NORTH OF GRAINSTORE



TRANSFORMER COMPOUND



VIEW SOUTH OF YARD



VIEW SOUTHWEST OF GRAINSTORE



VIEW NORTHEAST OF GRAINSTORE



GRASSED LAND SOUTH OF GRAINSTORE



STANDBY GENERATOR INSIDE GRAINSTORE



CLIENT
MR M DINGEMANS

PROJECT
SOUTHERN GREEN FARM,
RUSHDEN

TITLE
SITE WALKOVER (26.05.26)

SCALE: NTS
PREPARED BY:
MH

JOB NR.: 26295
REVISION: -

DATE: 28.05.26
DRAWING NR.
FIGURE 2



81	Black croft	Arable
82	Sheep crofts	Ditto
83	Four close	Pasture
84	Orchard	
85	Pickyard orchard &c.	
86	House yard &c	

Appendix A – Historical Maps

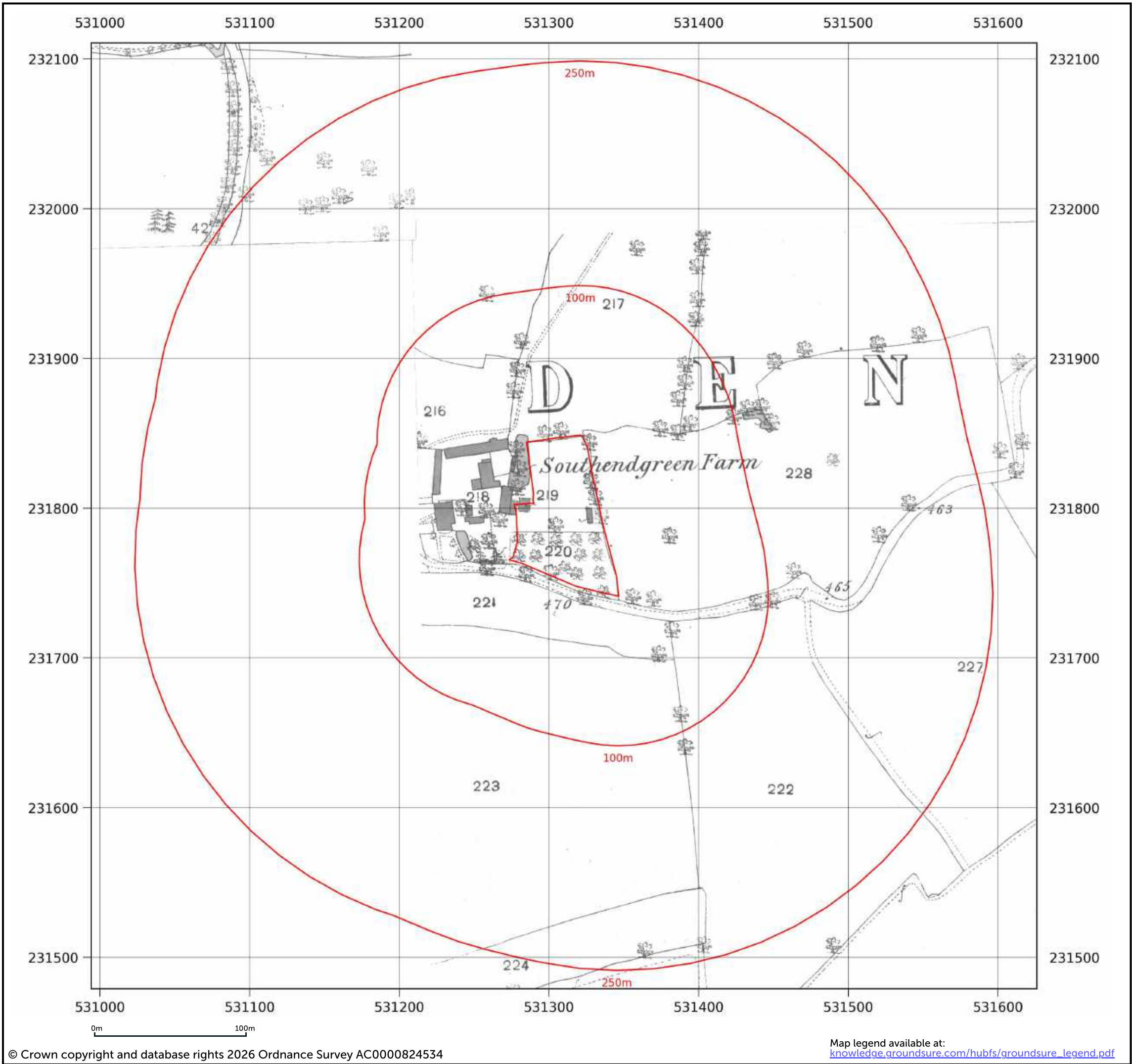
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Report ref:	GS-97G-VMO-NTC-8SY
Grid ref:	531310.43, 231793.3
Production date:	11 May 2026

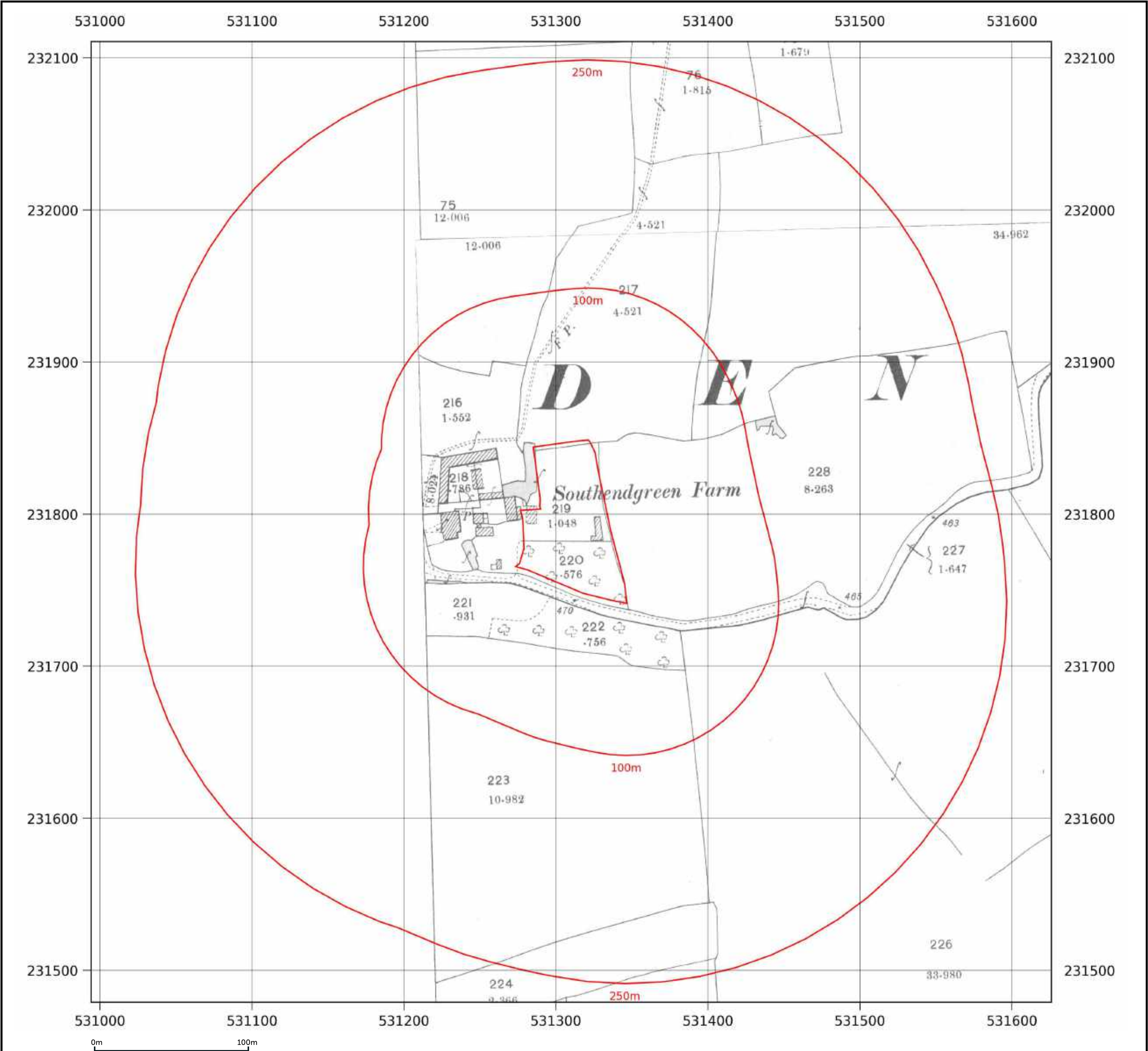
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Map date:	1877
Scale:	1:2,500
Printed at:	1:2,500



Date: 1877 Surveyed: 1877 Revised: 1877	Date: 1877 Surveyed: 1877 Revised: 1877
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Contact us with any questions at:
info@groundsure.com
01273 257 755





Site details:	SOUTHERN GREEN FARM, BENNETT'S LANE, RUSHDEN, HERTFORDSHIRE, SG9 0SX
Client ref:	26295 Southern Green
Report ref:	GS-97G-VMO-NTC-8SY
Grid ref:	531310.43, 231793.3
Production date:	11 May 2026

Map name:	County Series
Map date:	1898
Scale:	1:2,500
Printed at:	1:2,500



Date: 1898 Surveyed: 1898 Revised: 1898
Date: 1898 Surveyed: 1898 Revised: 1898

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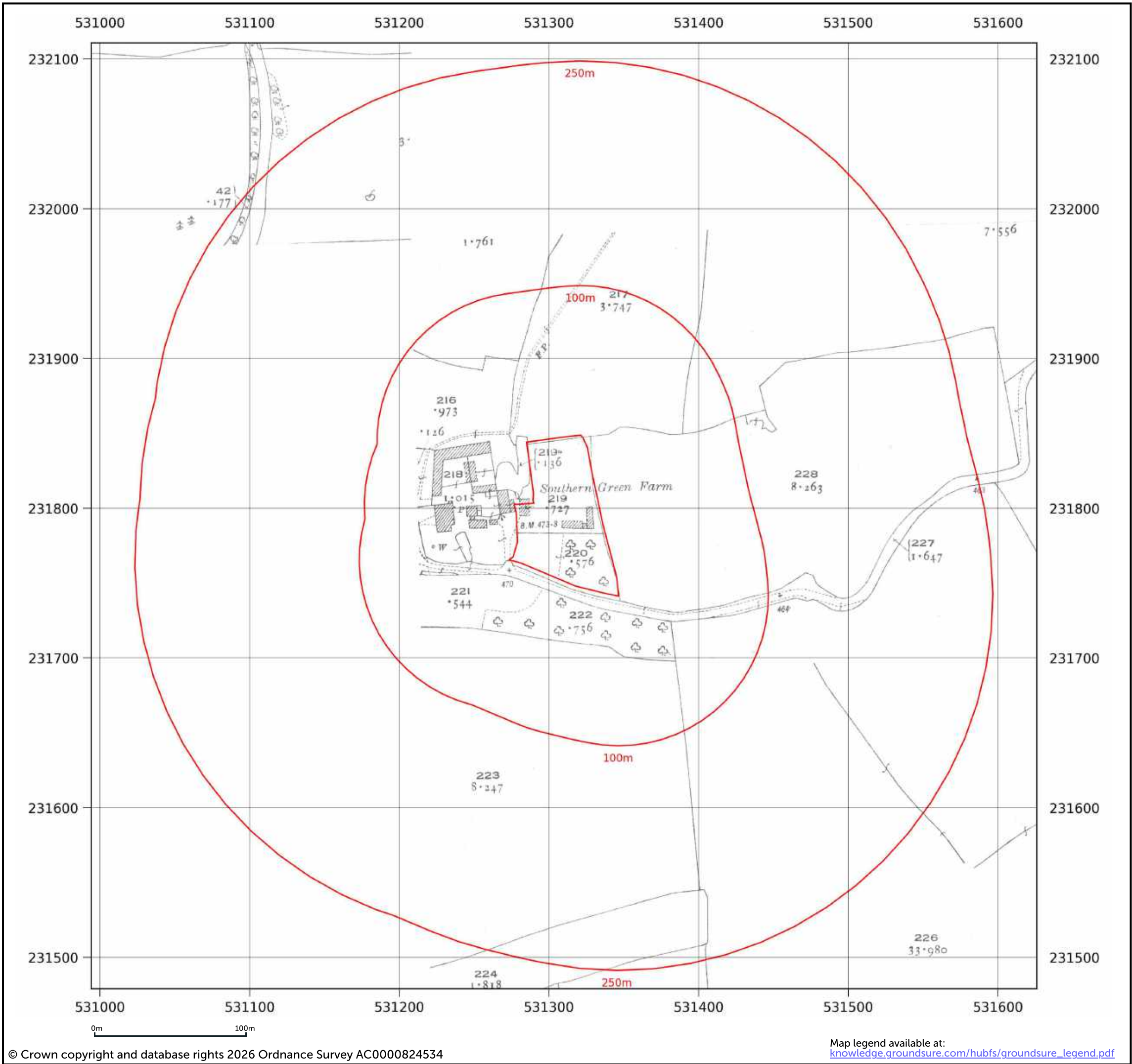
Site details:	SOUTHERN GREEN FARM, BENNETT'S LANE, RUSHDEN, HERTFORDSHIRE, SG9 0SX
Client ref:	26295 Southern Green
Report ref:	GS-97G-VMO-NTC-8SY
Grid ref:	531310.43, 231793.3
Production date:	11 May 2026

Map name:	County Series
Map date:	1923
Scale:	1:2,500
Printed at:	1:2,500



Date: 1923 Surveyed: 1923 Revised: 1923	Date: 1923 Surveyed: 1923 Revised: 1923
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Site details: SOUTHERN GREEN FARM,
BENNETT'S LANE, RUSHDEN,
HERTFORDSHIRE, SG9 0SX

Client ref: 26295 Southern Green

Report ref: GS-97G-VMO-NTC-8SY

Grid ref: 531310.43, 231793.3

Production date: 11 May 2026

Map name: National Grid

Map date: 1976-1977

Scale: 1:2,500

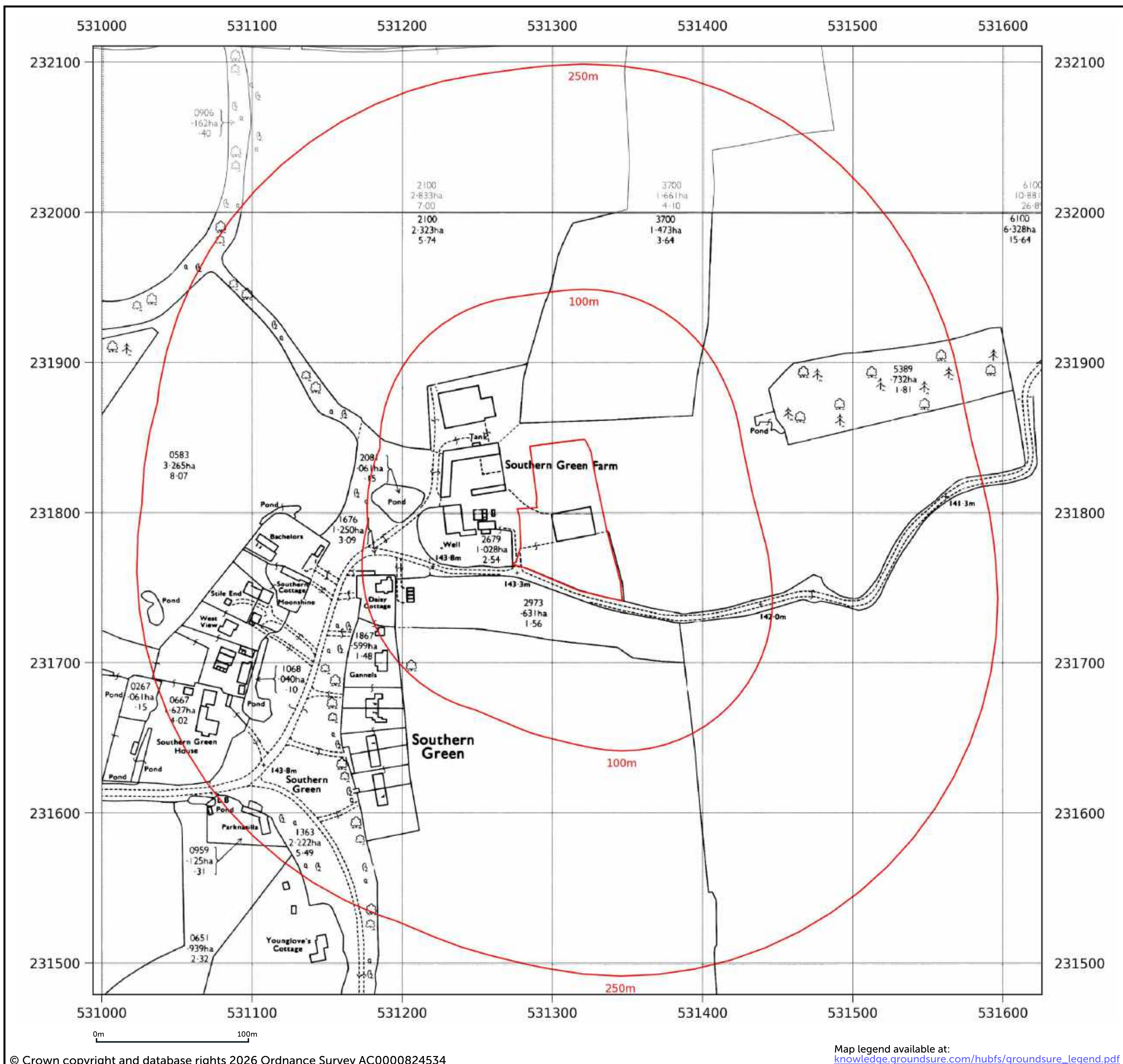
Printed at: 1:2,500



Date: 1977
Surveyed: 1975
Revised: 1975
Copyright: 1977
Levelled: 1968

Date: 1976

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



Site details: SOUTHERN GREEN FARM,
BENNETT'S LANE, RUSHDEN,
HERTFORDSHIRE, SG9 0SX
Client ref: 26295 Southern Green
Report ref: GS-97G-VMO-NTC-8SY
Grid ref: 531310.43, 231793.3
Production date: 11 May 2026

Map name: LandLine
Map date: 2003
Scale: 1:1,250
Printed at: 1:1,250



Date: 2003

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



Site details: SOUTHERN GREEN FARM,
BENNETT'S LANE, RUSHDEN,
HERTFORDSHIRE, SG9 0SX

Client ref: 26295 Southern Green

Report ref: GS-97G-VMO-NTC-8SY

Grid ref: 531310.43, 231793.3

Production date: 11 May 2026

Map name: County Series

Map date: 1883

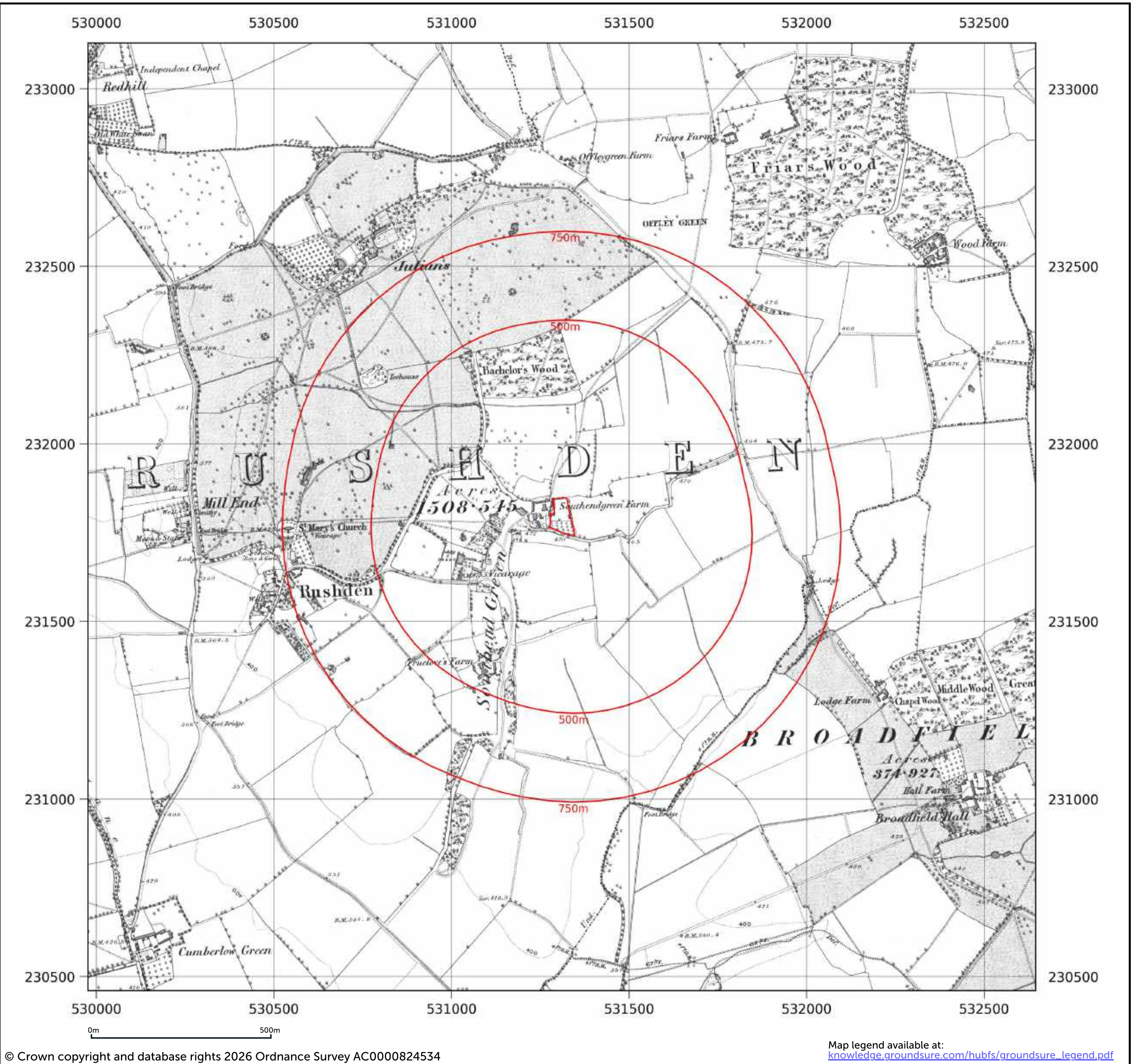
Scale: 1:10,560

Printed at: 1:10,560



Date: 1883
Surveyed: 1877
Edition: 1883

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



Site details: SOUTHERN GREEN FARM,
BENNETT'S LANE, RUSHDEN,
HERTFORDSHIRE, SG9 0SX

Client ref: 26295 Southern Green

Report ref: GS-97G-VMO-NTC-8SY

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Production date: 11 May 2026

Map name: County Series

Map date: 1896

Scale: 1:10,560

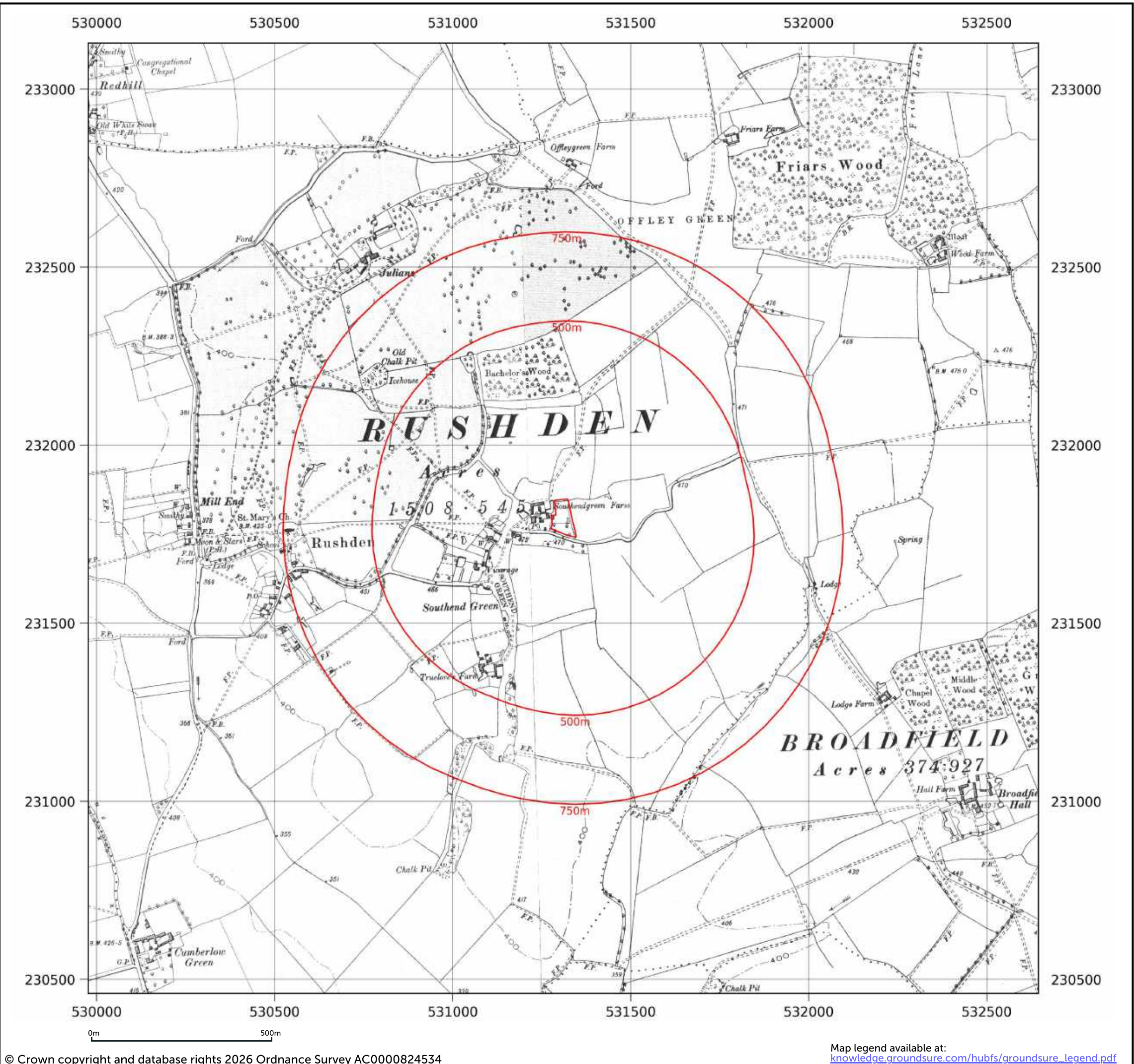
Printed at: 1:10,560



Date: 1896
Surveyed: 1878
Revised: 1896

Date: 1896
Surveyed: 1877
Revised: 1896

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



Site details: SOUTHERN GREEN FARM,
BENNETT'S LANE, RUSHDEN,
HERTFORDSHIRE, SG9 0SX

Client ref: 26295 Southern Green

Report ref: GS-97G-VMO-NTC-8SY

Grid ref: 531310.43, 231793.3

Production date: 11 May 2026

Map name: County Series

Map date: 1922-1925

Scale: 1:10,560

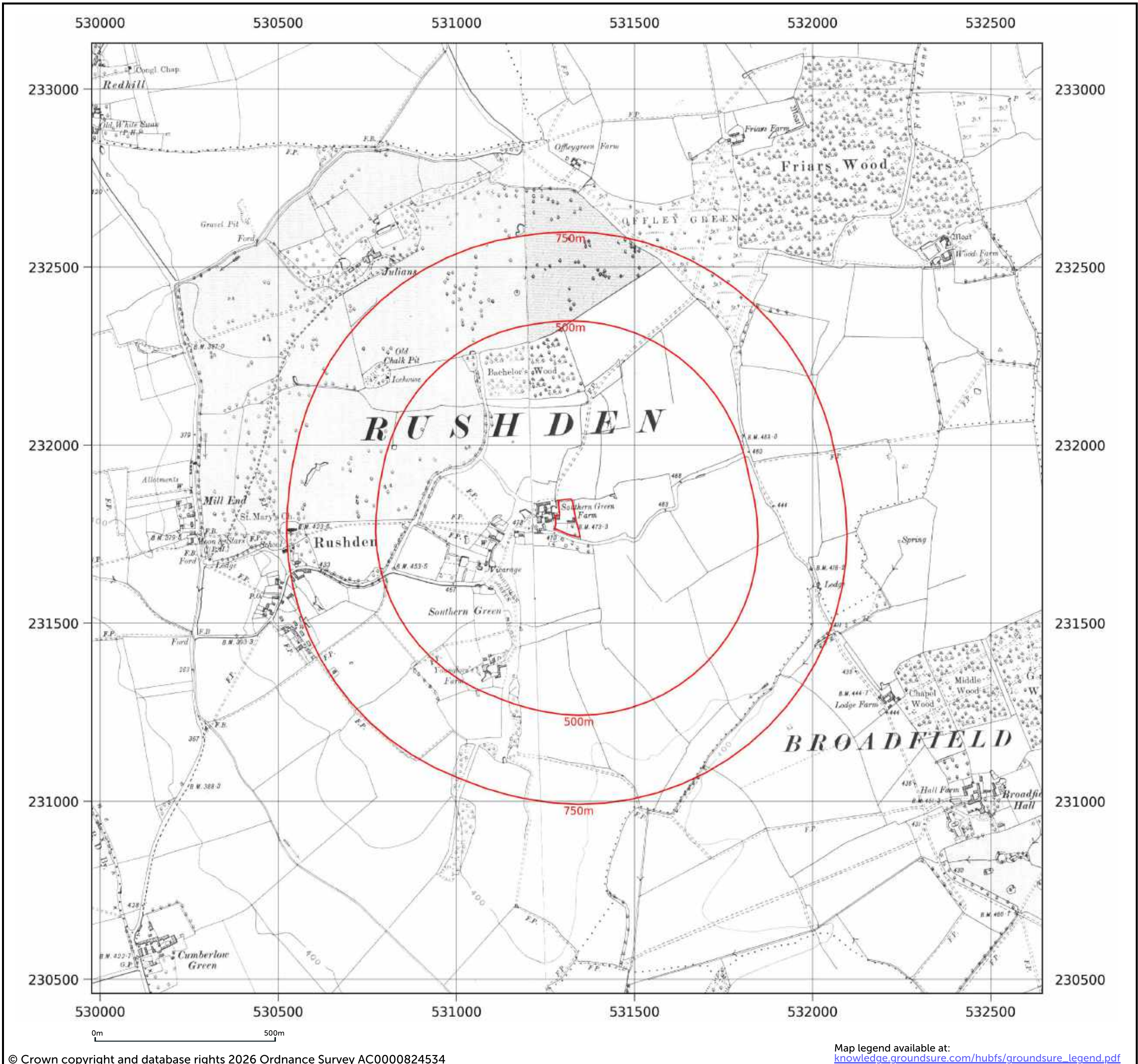
Printed at: 1:10,560



Date: 1922
Surveyed: 1877
Revised: 1922

Date: 1925
Surveyed: 1876
Revised: 1925

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Site details: SOUTHERN GREEN FARM,
BENNETT'S LANE, RUSHDEN,
HERTFORDSHIRE, SG9 0SX

Client ref: 26295 Southern Green

Report ref: GS-97G-VMO-NTC-8SY

Grid ref: 531310.43, 231793.3

Production date: 11 May 2026

Map name: County Series

Map date: 1947-1950

Scale: 1:10,560

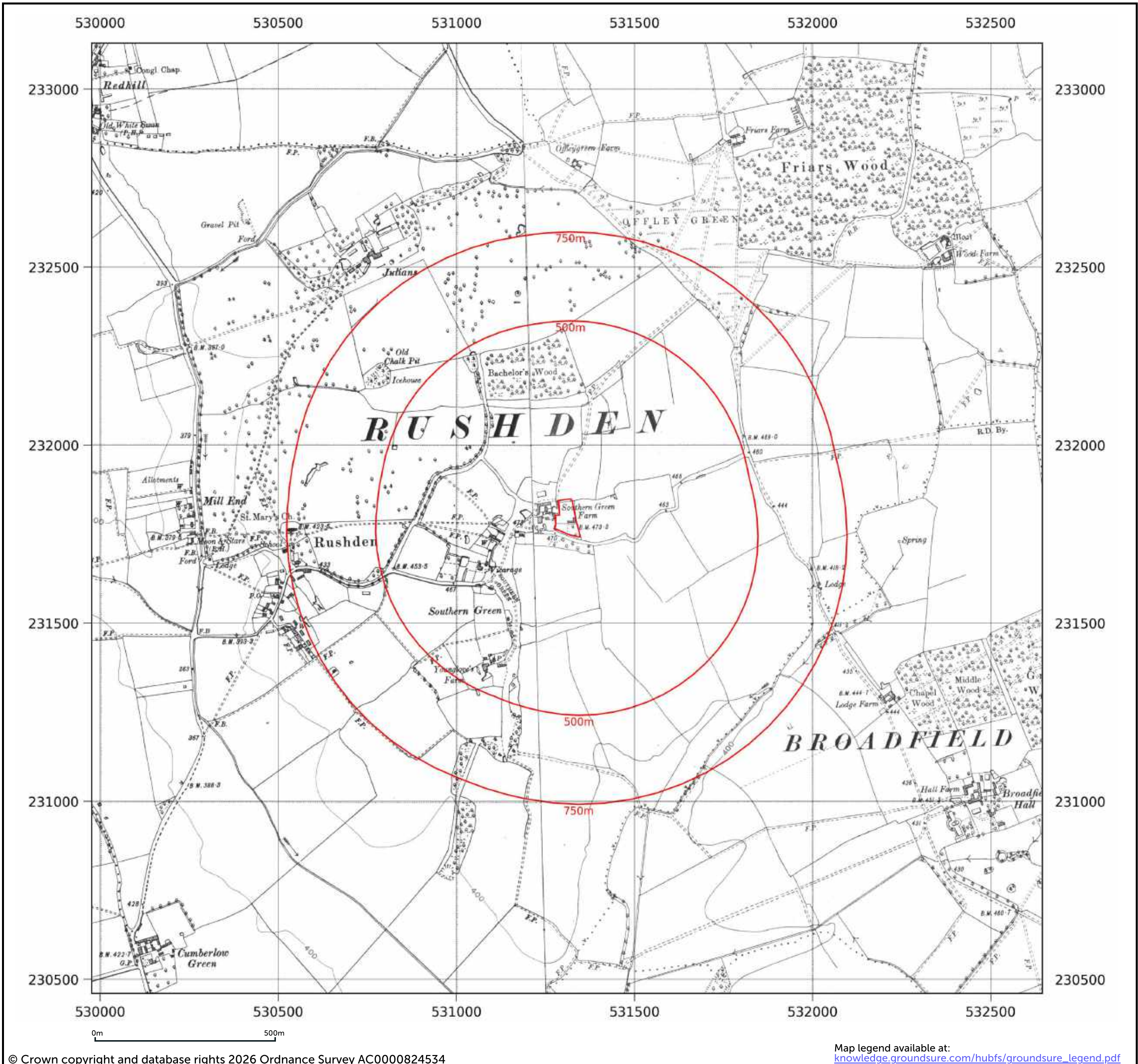
Printed at: 1:10,560



Date: 1947
Surveyed: 1877
Revised: 1947

Date: 1950
Surveyed: 1876
Revised: 1949
Edition: 1950
Levelled: 1922

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Map name:	Provisional
Map date:	1951
Scale:	1:10,560
Printed at:	1:10,560

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

Site details: SOUTHERN GREEN FARM,
BENNETT'S LANE, RUSHDEN,
HERTFORDSHIRE, SG9 0SX

Client ref: 26295 Southern Green

Report ref: GS-97G-VMO-NTC-8SY

Grid ref: 531310.43, 231793.3

Production date: 11 May 2026

Map name: National Grid

Map date: 1981

Scale: 1:10,000

Printed at: 1:10,000

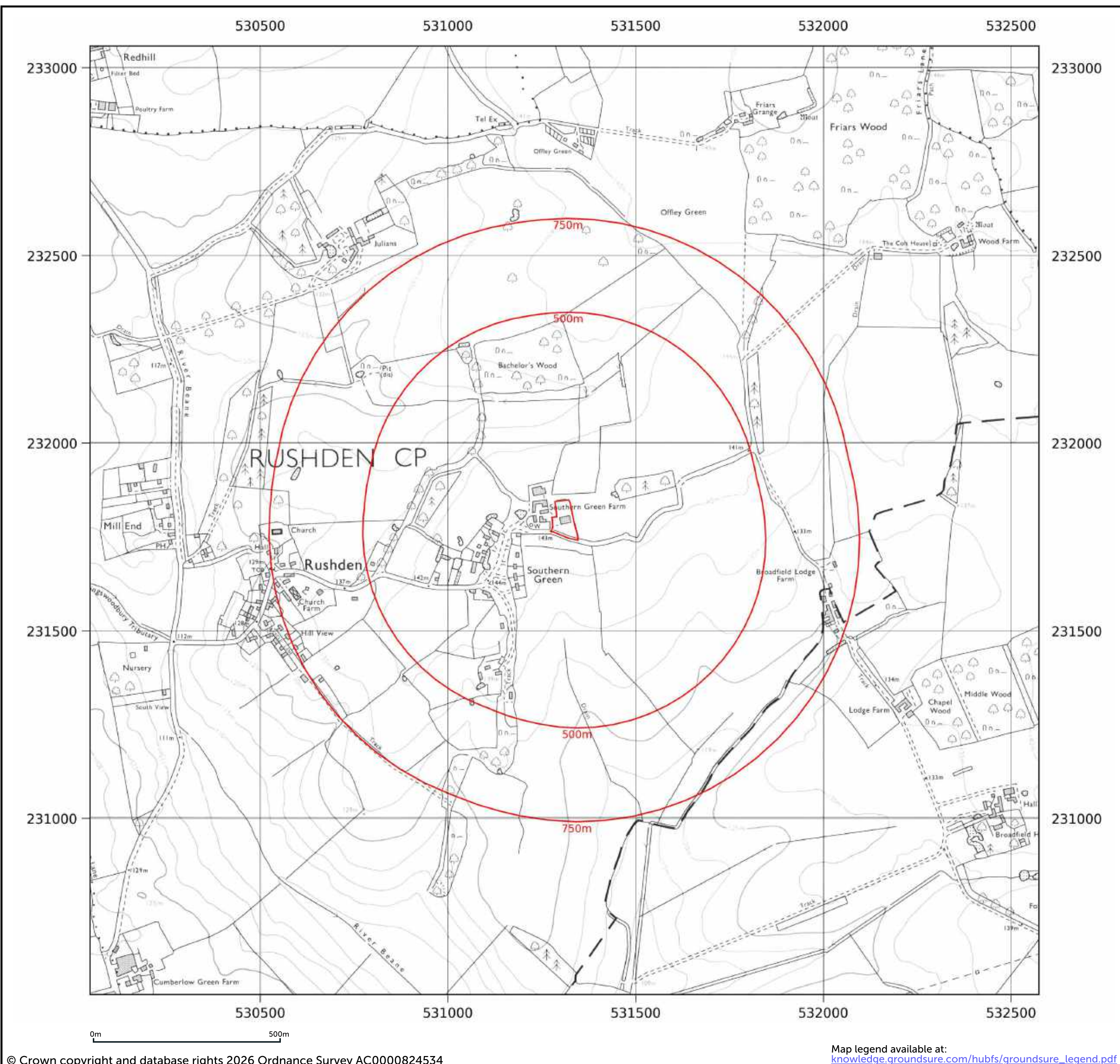


Date: 1981
Surveyed: 1975
Revised: 1981

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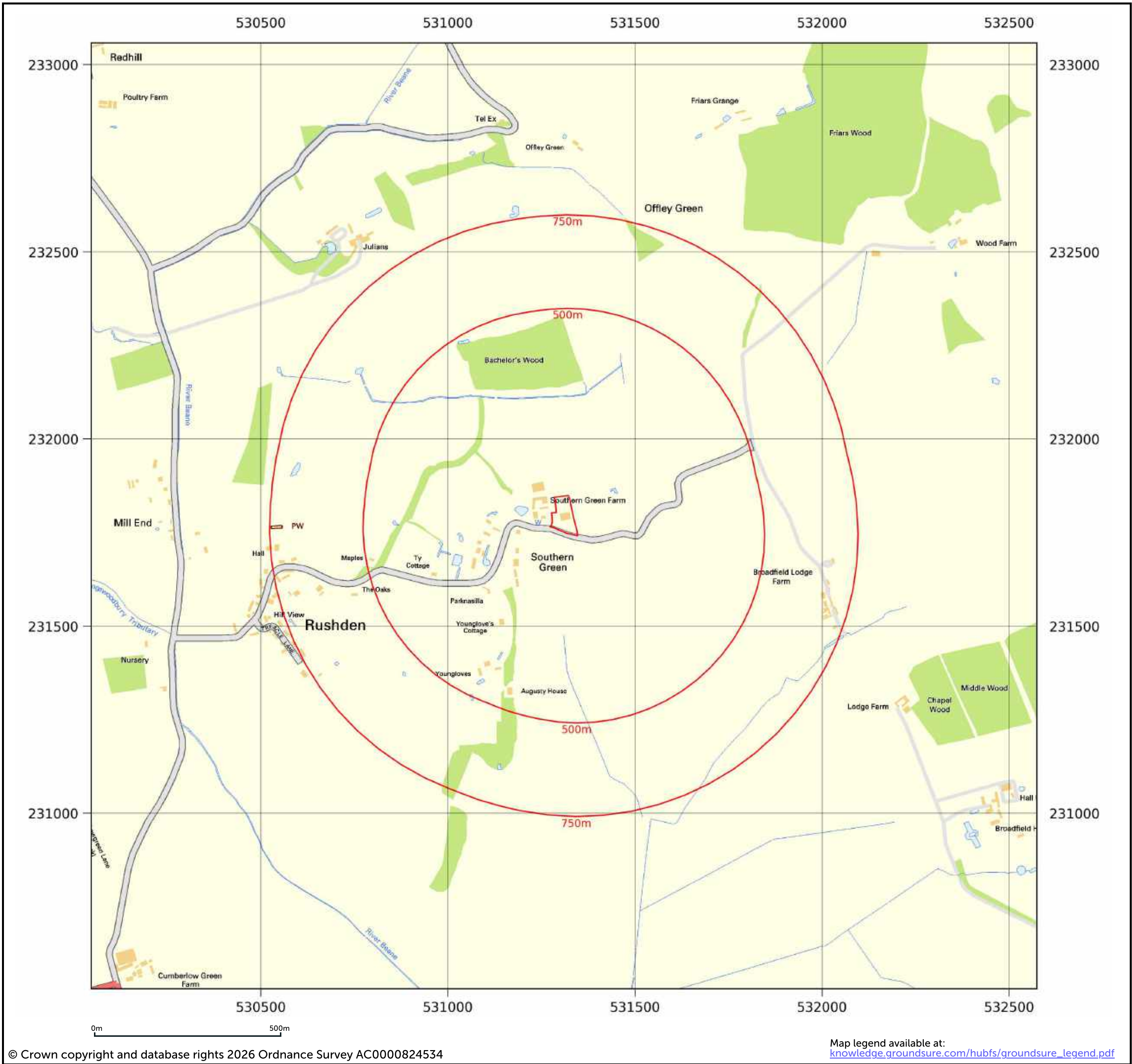


Site details:	SOUTHERN GREEN FARM, BENNETT'S LANE, RUSHDEN, HERTFORDSHIRE, SG9 0SX
Client ref:	26295 Southern Green
Report ref:	GS-97G-VMO-NTC-8SY
Grid ref:	531310.43, 231793.3
Production date:	11 May 2026

Map name:	National Grid
Map date:	2001
Scale:	1:10,000
Printed at:	1:10,000



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info@groundsure.com
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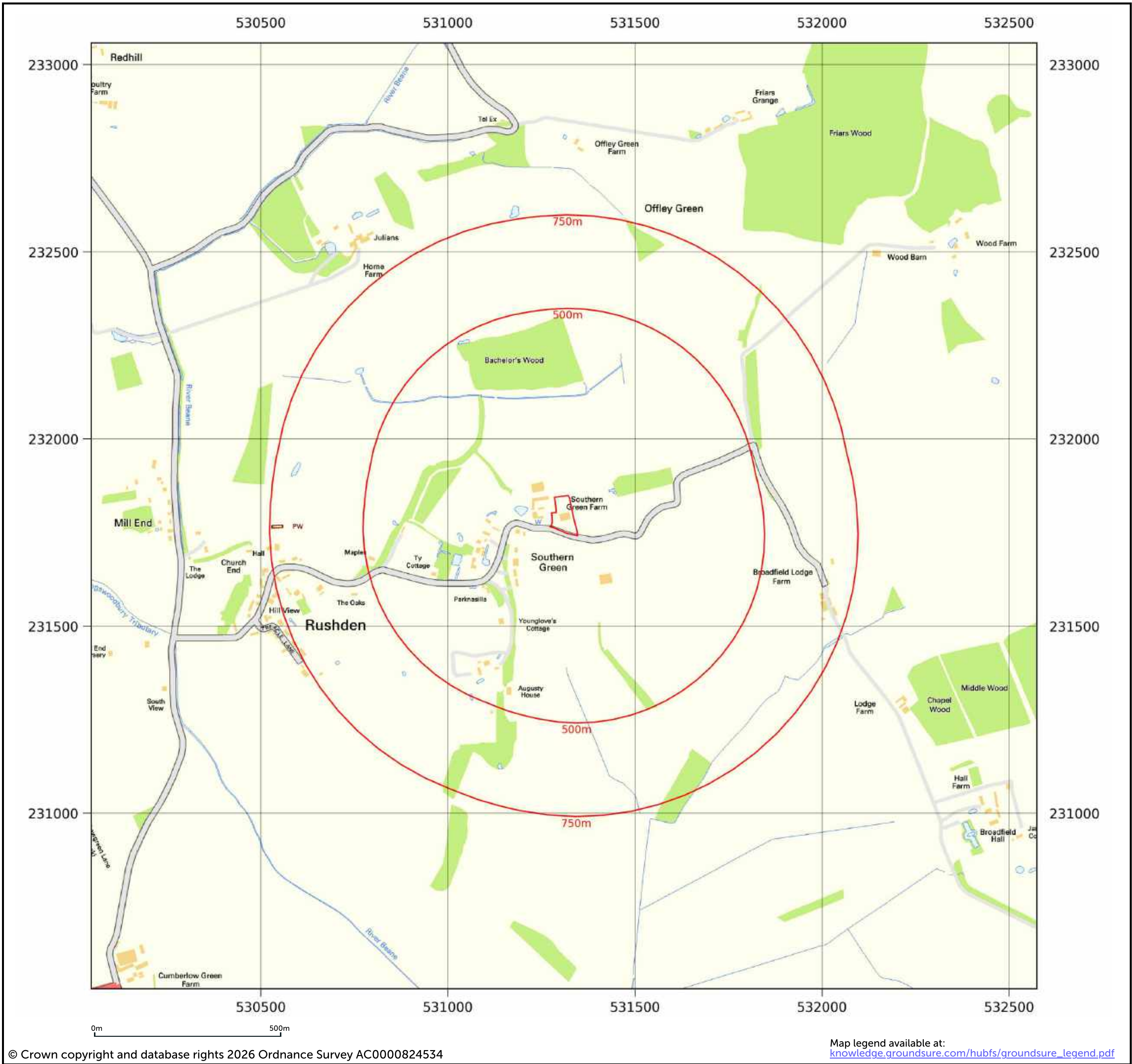
Map legend available at:
knowledge.groundsure.com/hubfs/groundsure_legend.pdf

Site details:	SOUTHERN GREEN FARM, BENNETT'S LANE, RUSHDEN, HERTFORDSHIRE, SG9 0SX
Client ref:	26295 Southern Green
Report ref:	GS-97G-VMO-NTC-8SY
Grid ref:	531310.43, 231793.3
Production date:	11 May 2026

Map name:	National Grid
Map date:	2010
Scale:	1:10,000
Printed at:	1:10,000



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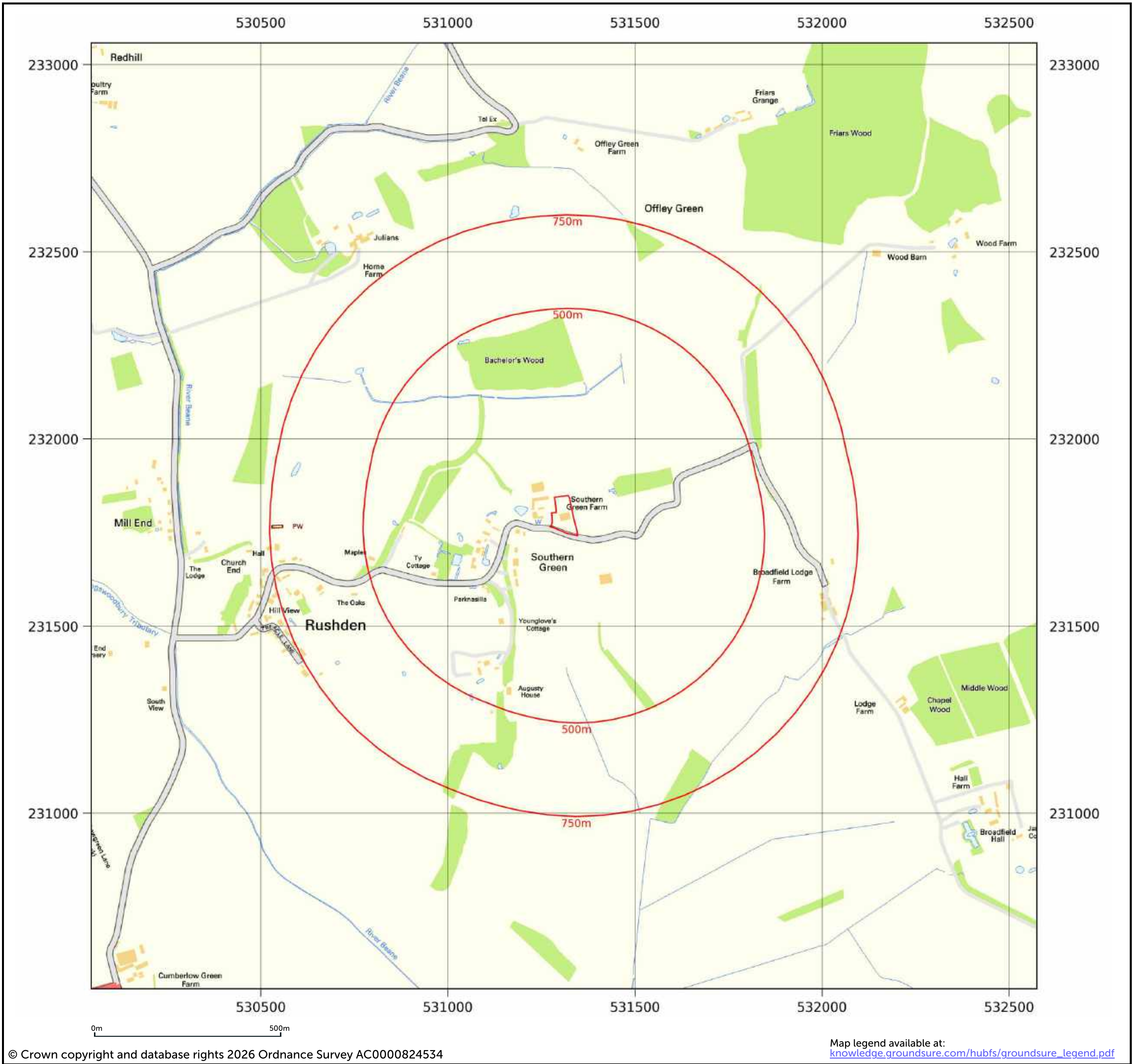


Site details:	SOUTHERN GREEN FARM, BENNETT'S LANE, RUSHDEN, HERTFORDSHIRE, SG9 0SX
Client ref:	26295 Southern Green
Report ref:	GS-97G-VMO-NTC-8SY
Grid ref:	531310.43, 231793.3
Production date:	11 May 2026

Map name:	National Grid
Map date:	2015
Scale:	1:10,000
Printed at:	1:10,000



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01273 257 755

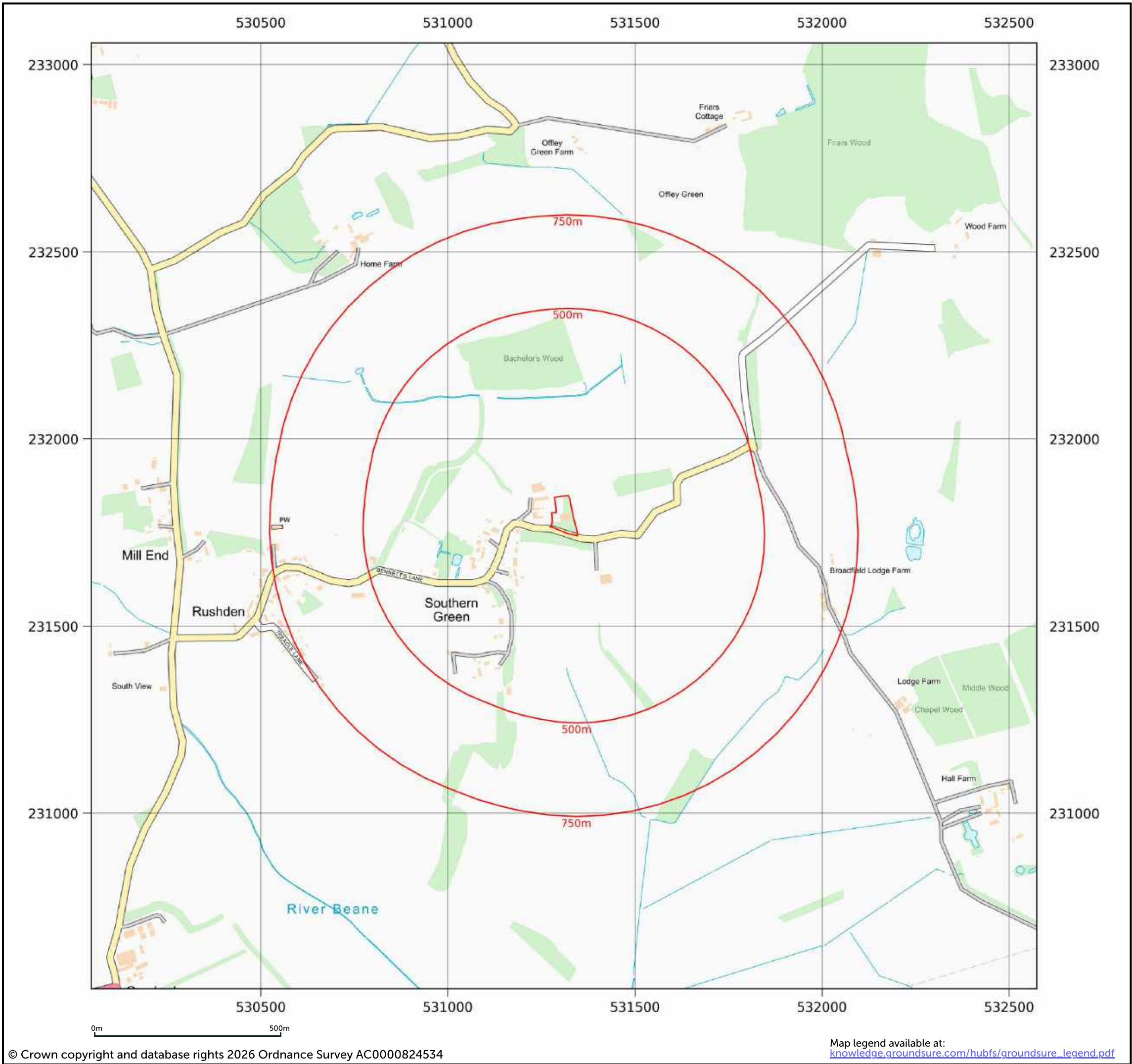


Site details:	SOUTHERN GREEN FARM, BENNETT'S LANE, RUSHDEN, HERTFORDSHIRE, SG9 0SX
Client ref:	26295 Southern Green
Report ref:	GS-97G-VMO-NTC-8SY
Grid ref:	531310.43, 231793.3
Production date:	11 May 2026

Map name:	National Grid
Map date:	2025
Scale:	1:10,000
Printed at:	1:10,000



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





Appendix B – Groundsure Report

SOUTHERN GREEN FARM, BENNETT'S LANE, RUSHDEN, HERTFORDSHIRE, SG9 0SX

Order Details

Date: 11/05/2026
Your ref: 26295 Southern Green
Our Ref: GS-IG2-VL4-QUE-S8W

Site Details

Location: 531310 231793
Area: 0.5 ha
Authority: [North Hertfordshire District Council](#) ↗

Site plan



Quick Links

[Summary of findings](#) [p. 2](#) >
[OS MasterMap site plan](#) [p.14](#) >
[Aerial image](#) [p. 9](#) >

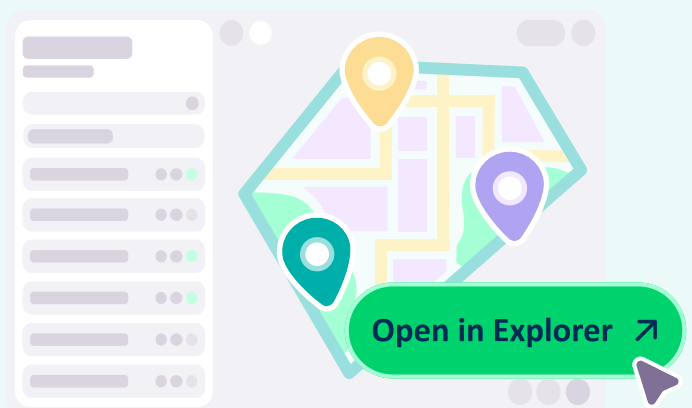
[Insight User Guide](#) ↗

Open this site in Explorer!

Access the data now in our interactive workspace.

- Map and interpret 130+ datasets across 170 years
- Generate insights and visuals quickly
- Revisit and collaborate with your team

Access to Groundsure Explorer requires an Insights account.
12 months access begins at purchase.



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	0	-
16 >	1.2 >	Historical tanks >	0	1	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	0	-
19 >	2.2 >	Historical tanks >	0	1	0	0	-
19	2.3	Historical energy features	0	0	0	0	-
19	2.4	Historical petrol stations	0	0	0	0	-
19	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
20	3.1	Active or recent landfill	0	0	0	0	-
20	3.2	Historical landfill (BGS records)	0	0	0	0	-
21	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
21	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
21 >	3.5 >	Historical waste sites >	0	1	0	0	-
22	3.6	Licensed waste sites	0	0	0	0	-
22 >	3.7 >	Waste exemptions >	0	0	16	1	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
24 >	4.1 >	Recent industrial land uses >	0	0	1	-	-
25	4.2	National Geographic Database (NGD) - Current or recent tanks	0	0	0	-	-
25	4.3	Current or recent petrol stations	0	0	0	0	-
25	4.4	Electricity cables	0	0	0	0	-
25	4.5	Gas pipelines	0	0	0	0	-



25	4.6	Sites determined as Contaminated Land	0	0	0	0	-
25	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
26	4.8	Regulated explosive sites	0	0	0	0	-
26	4.9	Hazardous substance storage/usage	0	0	0	0	-
26	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
26	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
26	4.12	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
27	4.13	Radioactive Substance Authorisations	0	0	0	0	-
27 >	4.14 >	<u>Licensed Discharges to controlled waters ></u>	0	0	0	1	-
27	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
27	4.16	Pollutant release to public sewer	0	0	0	0	-
28	4.17	List 1 Dangerous Substances	0	0	0	0	-
28	4.18	List 2 Dangerous Substances	0	0	0	0	-
28	4.19	Pollution Incidents (EA/NRW)	0	0	0	0	-
28	4.20	Pollution inventory substances	0	0	0	0	-
28	4.21	Pollution inventory waste transfers	0	0	0	0	-
29	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
30 >	5.1 >	<u>Superficial aquifer ></u>	Identified (within 500m)				
32 >	5.2 >	<u>Bedrock aquifer ></u>	Identified (within 500m)				
33 >	5.3 >	<u>Groundwater vulnerability ></u>	Identified (within 50m)				
34 >	5.4 >	<u>Groundwater vulnerability- soluble rock risk ></u>	Identified (within 0m)				
34	5.5	Groundwater vulnerability- local information	None (within 0m)				
35 >	5.6 >	<u>Groundwater abstractions ></u>	0	0	0	0	6
37 >	5.7 >	<u>Surface water abstractions ></u>	0	0	0	0	2
38	5.8	Potable abstractions	0	0	0	0	0
38 >	5.9 >	<u>Source Protection Zones ></u>	1	0	0	0	-
38	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<u>Hydrology ></u>	On site	0-50m	50-250m	250-500m	500-2000m

39	6.1	Water Network (OS NGD)	0	0	0	-	-
39 >	6.2 >	Surface water features >	0	0	1	-	-
40 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
40 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
41 >	6.5 >	WFD Groundwater bodies >	2	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
42	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
42	7.2	Historical Flood Events	0	0	0	-	-
42	7.3	Flood Defences	0	0	0	-	-
43	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
43	7.5	Flood Storage Areas	0	0	0	-	-
44	7.6	Flood Zone 2	None (within 50m)				
44	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
45 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
47 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
48	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
49	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
49	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
49	10.4	Special Protection Areas (SPA)	0	0	0	0	0
49	10.5	National Nature Reserves (NNR)	0	0	0	0	0
50	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
50 >	10.7 >	Designated Ancient Woodland >	0	0	0	1	5
50	10.8	Biosphere Reserves	0	0	0	0	0
51	10.9	Forest Parks	0	0	0	0	0
51	10.10	Marine Conservation Zones	0	0	0	0	0
51 >	10.11 >	Green Belt >	0	0	0	0	1



51	10.12	Proposed Ramsar sites	0	0	0	0	0
52	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
52	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
52 >	10.15 >	Nitrate Sensitive Areas >	0	0	0	0	2
53 >	10.16 >	Nitrate Vulnerable Zones >	3	0	0	0	1
54 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
55	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
56	11.1	World Heritage Sites	0	0	0	-	-
57	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
57	11.3	National Parks	0	0	0	-	-
57 >	11.4 >	Listed Buildings >	0	1	4	-	-
58 >	11.5 >	Conservation Areas >	1	0	0	-	-
58	11.6	Scheduled Ancient Monuments	0	0	0	-	-
58	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
59 >	12.1 >	Agricultural Land Classification >	Grade 3 (within 250m)				
60 >	12.2 >	Open Access Land >	0	0	3	-	-
60	12.3	Tree Felling Licences	0	0	0	-	-
61 >	12.4 >	Environmental Stewardship Schemes >	1	1	0	-	-
61 >	12.5 >	Countryside Stewardship Schemes >	1	1	1	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
62 >	13.1 >	Priority Habitat Inventory >	1	0	2	-	-
63	13.2	Habitat Networks	0	0	0	-	-
63	13.3	Open Mosaic Habitat	0	0	0	-	-
63	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
64 >	14.1 >	10k Availability >	Identified (within 500m)				
65	14.2	Artificial and made ground (10k)	0	0	0	0	-

66 >	14.3 >	Superficial geology (10k) >	1	0	2	4	-
67	14.4	Landslip (10k)	0	0	0	0	-
68 >	14.5 >	Bedrock geology (10k) >	1	0	0	0	-
69	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
70 >	15.1 >	50k Availability >	Identified (within 500m)				
71	15.2	Artificial and made ground (50k)	0	0	0	0	-
71	15.3	Artificial ground permeability (50k)	0	0	-	-	-
72 >	15.4 >	Superficial geology (50k) >	1	0	2	4	-
73 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
73	15.6	Landslip (50k)	0	0	0	0	-
73	15.7	Landslip permeability (50k)	None (within 50m)				
74 >	15.8 >	Bedrock geology (50k) >	1	0	0	0	-
75 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
75	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
76 >	16.1 >	BGS Boreholes >	0	1	0	-	-
Page	Section	Natural ground subsidence >					
77 >	17.1 >	Shrink swell clays >	Low (within 50m)				
78 >	17.2 >	Running sands >	Very low (within 50m)				
79 >	17.3 >	Compressible deposits >	Negligible (within 50m)				
80 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
81 >	17.5 >	Landslides >	Very low (within 50m)				
82 >	17.6 >	Ground dissolution of soluble rocks >	Very low (within 50m)				
Page	Section	Mining and ground workings >	On site	0-50m	50-250m	250-500m	500-2000m
84	18.1	BritPits	0	0	0	0	-
85 >	18.2 >	Surface ground workings >	4	1	10	-	-
85	18.3	Underground workings	0	0	0	0	0
86	18.4	Underground mining extents	0	0	0	0	-



86	18.5	Historical Mineral Planning Areas	0	0	0	0	-
86 >	18.6 >	Non-coal mining >	1	0	0	0	0
86	18.7	JPB mining areas	None (within 0m)				
87	18.8	The Coal Authority non-coal mining	0	0	0	0	-
87	18.9	Researched mining	0	0	0	0	-
87	18.10	Mining record office plans	0	0	0	0	-
87	18.11	BGS mine plans	0	0	0	0	-
88	18.12	Coal mining	None (within 0m)				
88	18.13	Brine areas	None (within 0m)				
88	18.14	Gypsum areas	None (within 0m)				
88	18.15	Tin mining	None (within 0m)				
88	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
89	19.1	Natural cavities	0	0	0	0	-
89	19.2	Mining cavities	0	0	0	0	0
89	19.3	Reported recent incidents	0	0	0	0	-
89	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
91 >	20.1 >	Radon >	Less than 1% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
93 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	0	-	-	-
93	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
93	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
94	22.1	Underground railways (London)	0	0	0	-	-
94	22.2	Underground railways (Non-London)	0	0	0	-	-
94	22.3	Railway tunnels	0	0	0	-	-
94	22.4	Historical railway and tunnel features	0	0	0	-	-
94	22.5	Royal Mail tunnels	0	0	0	-	-

95	22.6	Historical railways	0	0	0	-	-
95	22.7	Railways	0	0	0	-	-
95	22.8	Crossrail 2	0	0	0	0	-
95	22.9	HS2	0	0	0	0	-



Recent aerial photograph



Capture Date: 06/04/2021

Site Area: 0.5ha



Recent site history - 2019 aerial photograph



Capture Date: 14/09/2019

Site Area: 0.5ha



Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 0.5ha



Recent site history - 2009 aerial photograph

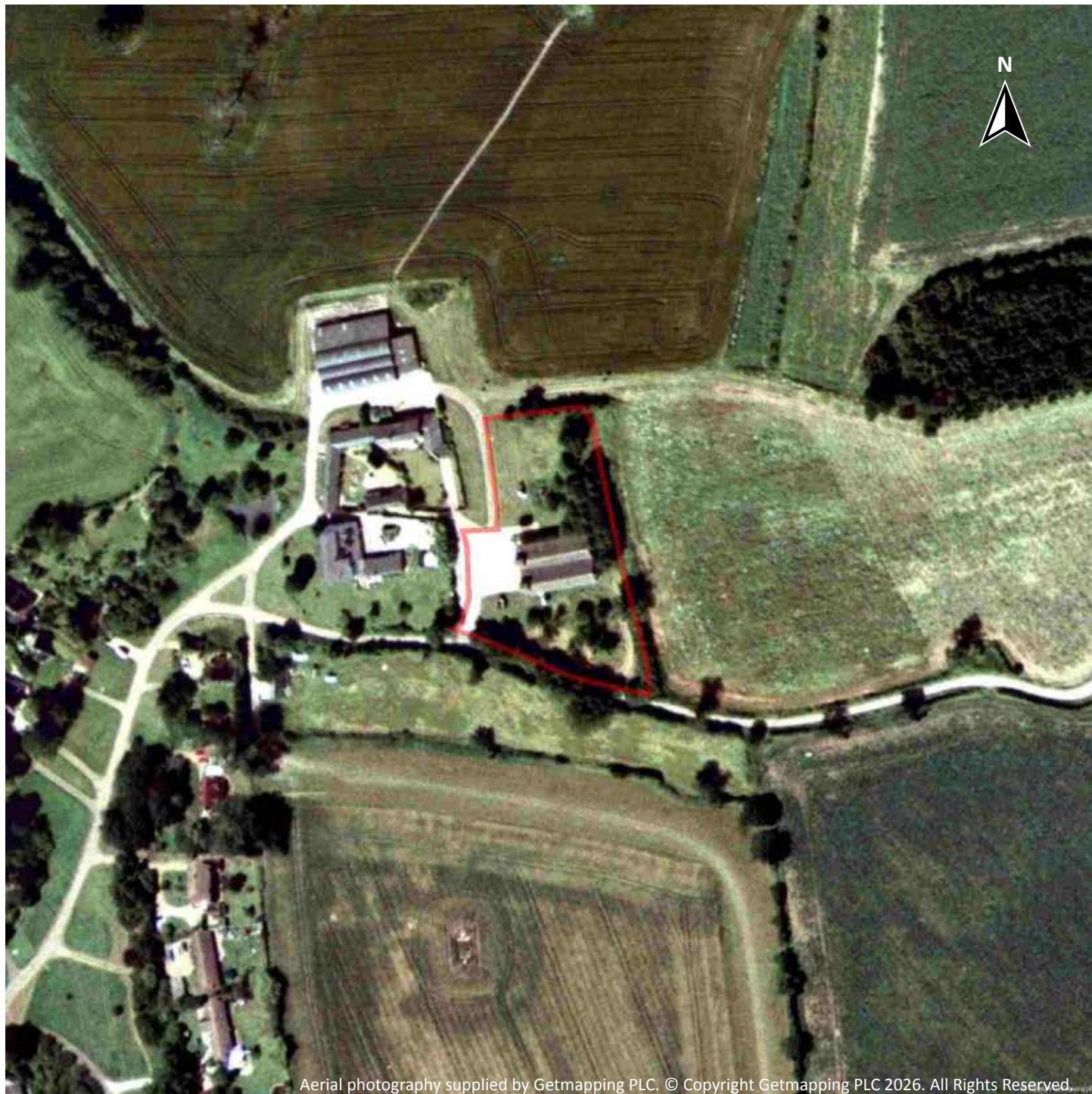


Capture Date: 01/07/2009

Site Area: 0.5ha



Recent site history - 1999 aerial photograph

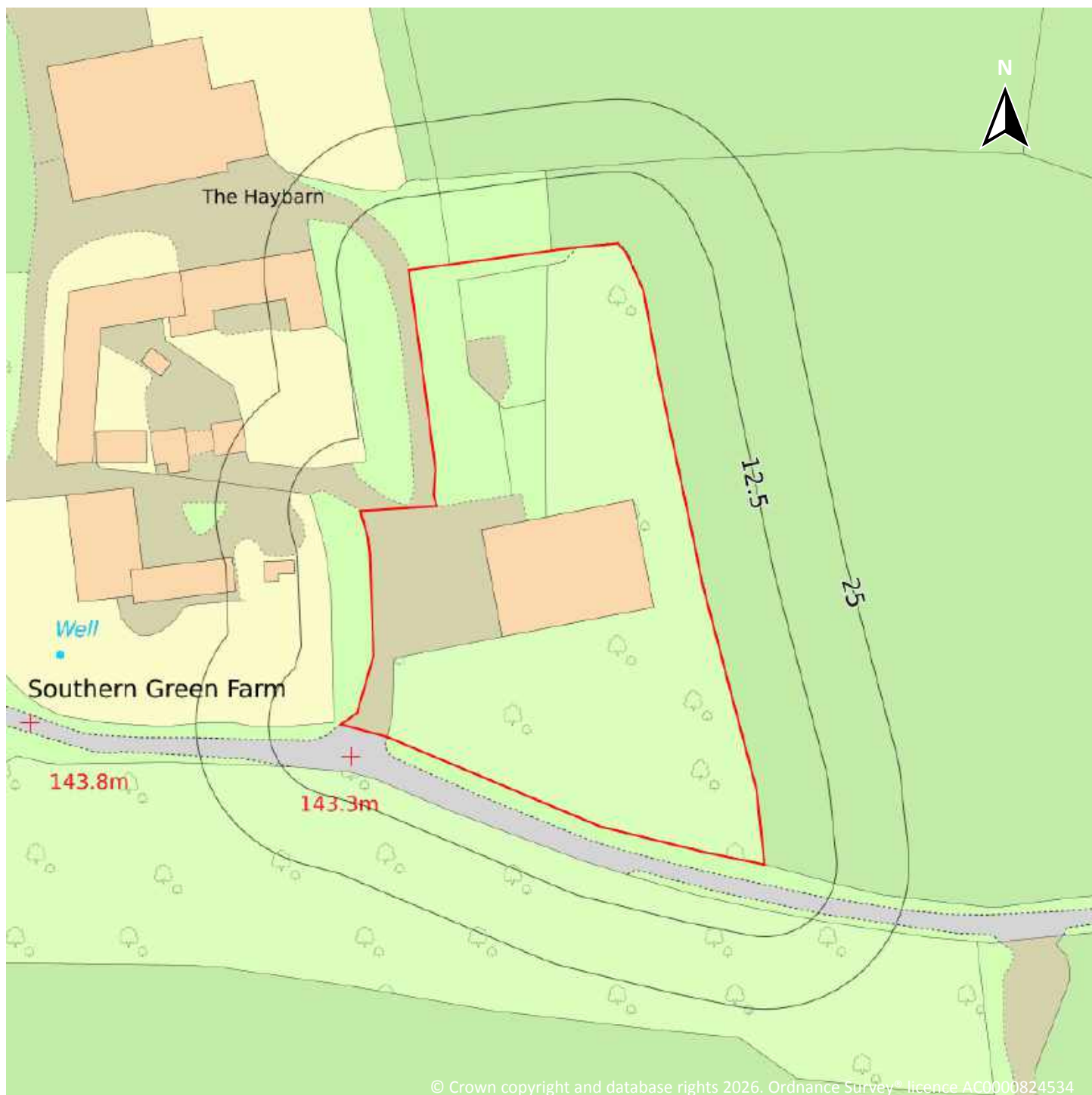


Capture Date: 18/07/1999

Site Area: 0.5ha



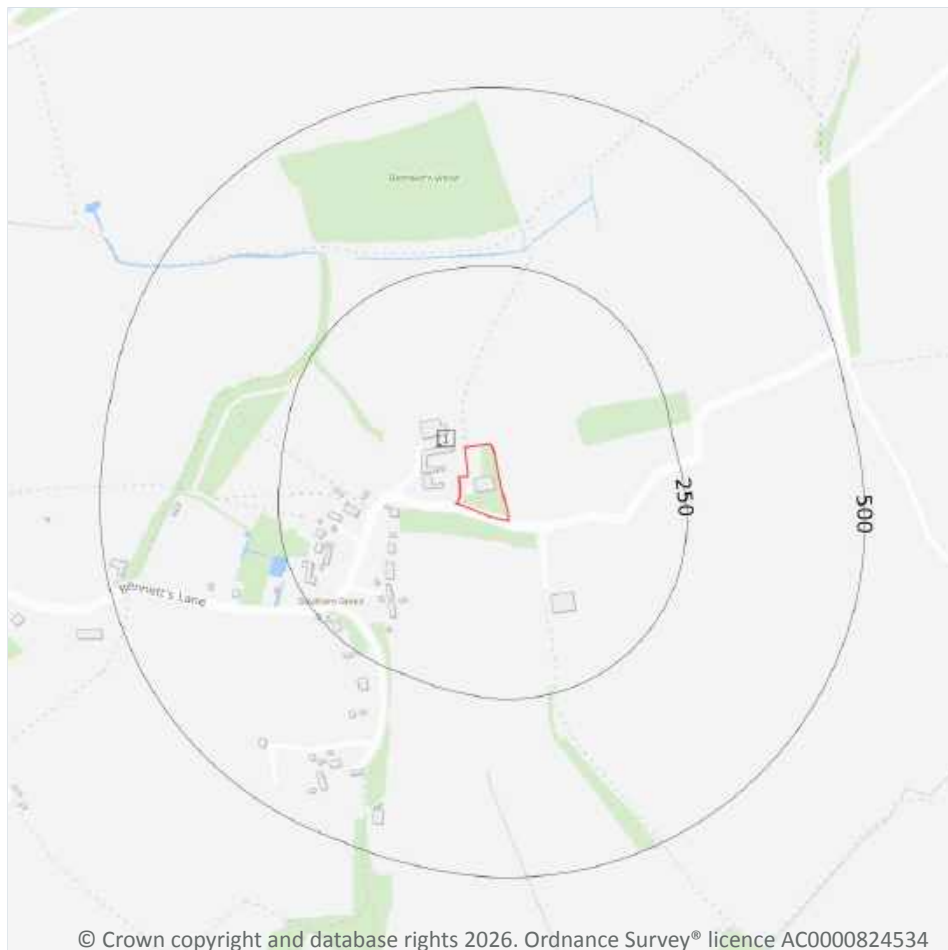
OS MasterMap site plan



Site Area: 0.5ha



1 Past land use



— Site Outline
Search buffers in metres (m)
■ Historical tanks

1.1 Historical industrial land uses

Records within 500m

0

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'.

This data is sourced from Ordnance Survey® / Groundsure.

1.2 Historical tanks

Records within 500m

1

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

Features are displayed on the Past land use map on [page 15 >](#)

ID	Location	Land use	Dates present	Group ID
1	32m W	Unspecified Tank	1976	362916

This data is sourced from Ordnance Survey® / Groundsure.

1.3 Historical energy features

Records within 500m

0

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

This data is sourced from Ordnance Survey® / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey® / Groundsure.



1.5 Historical garages

Records within 500m

0

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

This data is sourced from Ordnance Survey® / Groundsure.

1.6 Historical military land

Records within 500m

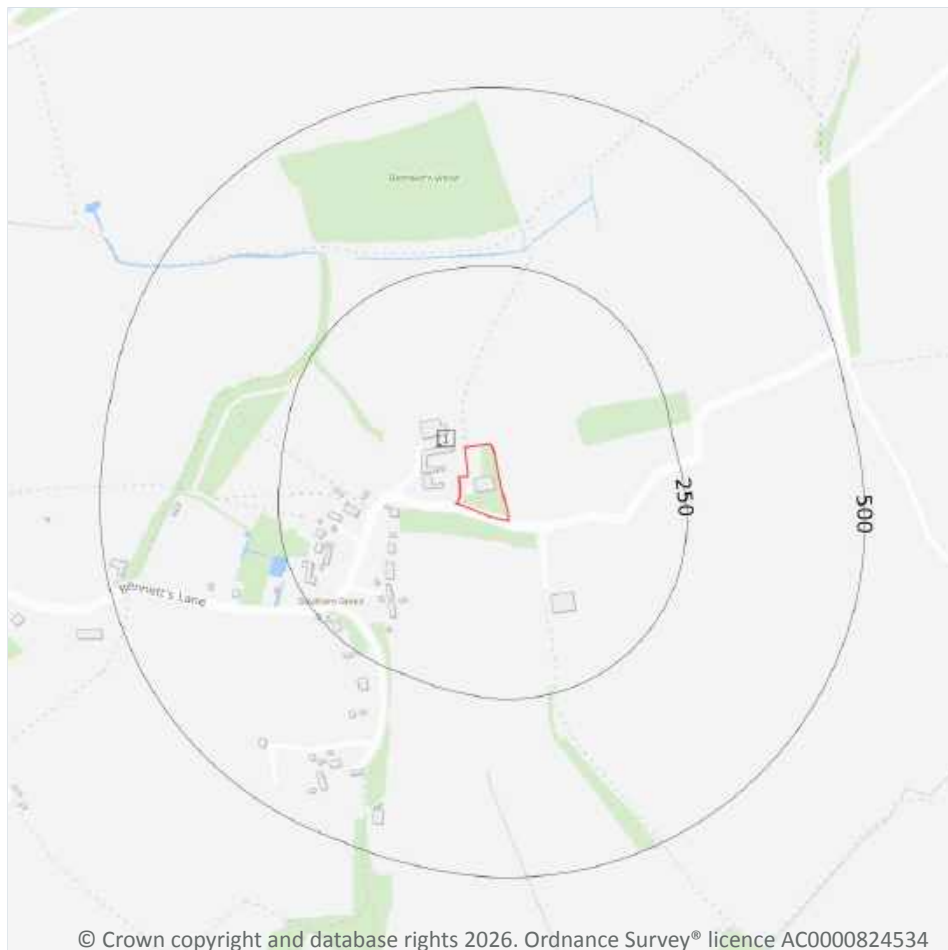
0

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

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



2 Past land use - un-grouped



— Site Outline
Search buffers in metres (m)
■ Historical tanks

2.1 Historical industrial land uses

Records within 500m

0

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'.

This data is sourced from Ordnance Survey® / Groundsure.

2.2 Historical tanks

Records within 500m

1

Tank features digitised from historical Ordnance Survey® mapping at high-detail 1:1,250 and 1:2,500 scale. 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
1	32m W	Unspecified Tank	1976	362916

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

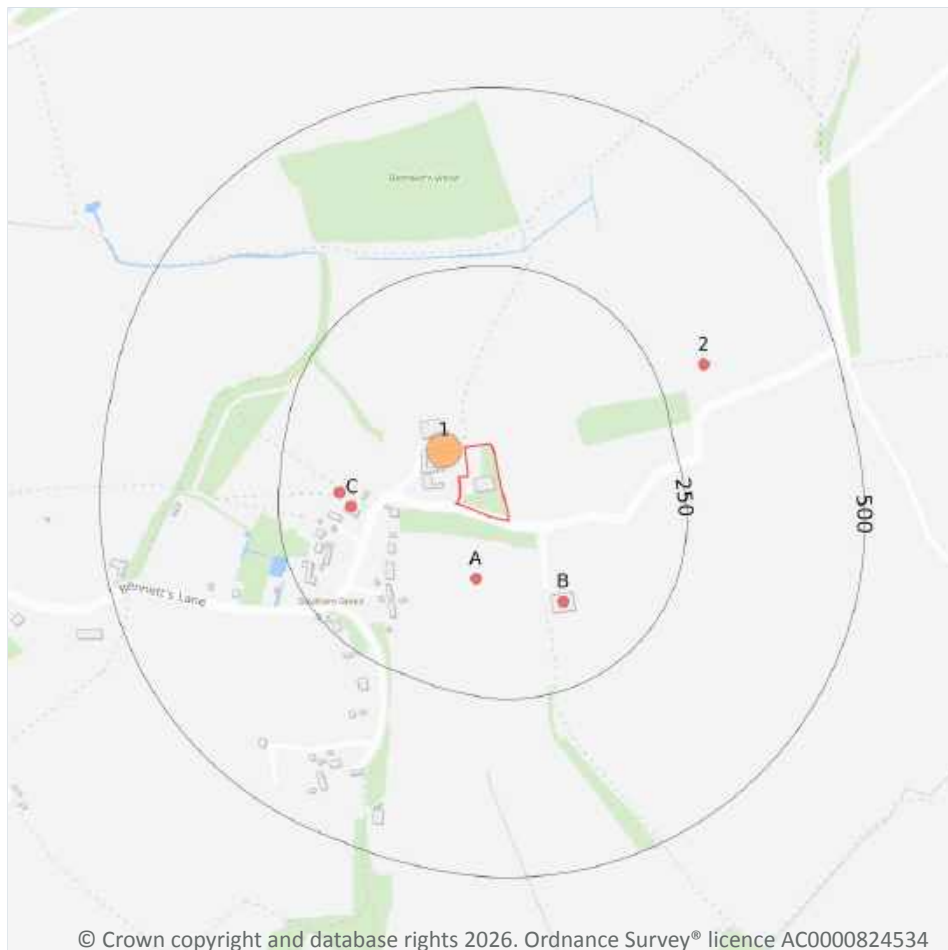
0

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 20 >](#)

ID	Location	Address	Further Details	Date
1	4m W	Site Address: Southern Green Farm, Southern Green, Rushden, BUNTINGFORD, Hertfordshire, SG9 0SX	Type of Site: Waste Storage Planning application reference: 3/11/0414/CM Description: Scheme comprises importation of clean, waste material to provide an earth bund to deter crime. Construction - bunds site works. An application (ref: 3/11/0414/CM) for detailed planning permission was submitted to East Hertfordshire D.C. A detailed planning application has been submitted. Data source: Historic Planning Application Data Type: Point	28/02/2012

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

17

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

Features are displayed on the Waste and landfill map on [page 20](#) >

ID	Location	Site	Reference	Category	Sub-Category	Description
A	90m S	-	WEX006922	Storing waste exemption	On a farm	Storage of sludge
A	90m S	Southern Green Farm Herts Sg9 0sx	EPR/SE5055W V/A001	Storing waste exemption	Non-agricultural waste only	Storage of sludge
B	137m SE	The Haybarn Southern Green Farm Southern Green Buntingford Hertfordshire Sg9 0sx	EPR/HF0807E Q/A001	Disposing of waste exemption	Agricultural waste only	Deposit of waste from dredging of inland waters
B	137m SE	The Haybarn Southern Green Farm Southern Green Buntingford Hertfordshire Sg9 0sx	EPR/HF0807E Q/A001	Using waste exemption	Agricultural waste only	Use of waste in construction
B	137m SE	The Haybarn Southern Green Farm Southern Green Buntingford Hertfordshire Sg9 0sx	EPR/HF0807E Q/A001	Using waste exemption	Agricultural waste only	Incorporation of ash into soil
B	137m SE	The Haybarn Southern Green Farm Southern Green Buntingford Hertfordshire Sg9 0sx	EPR/HF0807E Q/A001	Storing waste exemption	Non-agricultural waste only	Storage of sludge
B	137m SE	The Haybarn Southern Green Farm Southern Green Buntingford Hertfordshire Sg9 0sx	EPR/HF0807E Q/A001	Disposing of waste exemption	Agricultural waste only	Burning waste in the open
C	146m W	Southern Green Farm, Southern Green, Rushden, Sg90sx	WEX423292	Using waste exemption	On a farm	Use of waste in construction



ID	Location	Site	Reference	Category	Sub-Category	Description
C	146m W	Southern Green Farm, Southern Green, Rushden, Sg90sx	WEX423292	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	147m W	Southern Green Farm, Southern Green, Rushden, Sg90sx	WEX157065	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	147m W	Southern Green Farm, Southern Green, Rushden, Sg90sx	WEX157065	Using waste exemption	On a farm	Use of waste in construction
C	148m W	The Haybarn Southern Green Farm Southern Green Buntingford Hertfordshire Sg9 0sx	EPR/ZH0017R R/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place
C	148m W	The Haybarn Southern Green Farm Southern Green Buntingford Hertfordshire Sg9 0sx	EPR/ZH0017R R/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
C	148m W	The Haybarn Southern Green Farm Southern Green Buntingford Hertfordshire Sg9 0sx	EPR/ZH0017R R/A001	Using waste exemption	Both agricultural and non-agricultural waste	Incorporation of ash into soil
C	165m W	Southern Green Farm, Southern Green, Rushden, Sg90sx	WEX293083	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	165m W	Southern Green Farm, Southern Green, Rushden, Sg90sx	WEX293083	Using waste exemption	On a farm	Use of waste in construction
2	318m E	-	WEX154033	Storing waste exemption	On a farm	Storage of sludge

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m

1

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 24](#) >

ID	Location	Company	Address	Activity	Category
1	136m SW	Blinds & Sails	5, Southern Green, Rushden, Hertfordshire, SG9 0SR	Curtains and Blinds	Consumer Products

This data is sourced from Ordnance Survey®.



4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m**0**

Current or recent tanks identified from the Ordnance Survey® NGD.

This data is sourced from Ordnance Survey®.

4.3 Current or recent petrol stations

Records within 500m**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 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.

4.7 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.

4.8 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.

4.9 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.

4.10 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.

4.11 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.

4.12 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.



4.13 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.

4.14 Licensed Discharges to controlled waters

Records within 500m**1**

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 24](#) >

ID	Location	Address	Details	
2	272m SW	ANNEX TO PARKNASILLA, SOUTHERN GREEN, RUSHDEN, BUNTINGFORD, HERTFORDSHIRE, SG9 0SP	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRJP3623SM Permit Version: 1 Receiving Water: TRIBUTARY OF RIVER BEANE	Status: NEW ISSUED UNDER EPR 2010 Issue date: 01/06/2023 Effective Date: 01/06/2023 Revocation Date: -

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

4.15 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.

4.16 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.



4.17 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.

4.18 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.

4.19 Pollution Incidents (EA/NRW)

Records within 500m**0**

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

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

4.20 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.

4.21 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.



4.22 Pollution inventory radioactive waste

Records within 500m

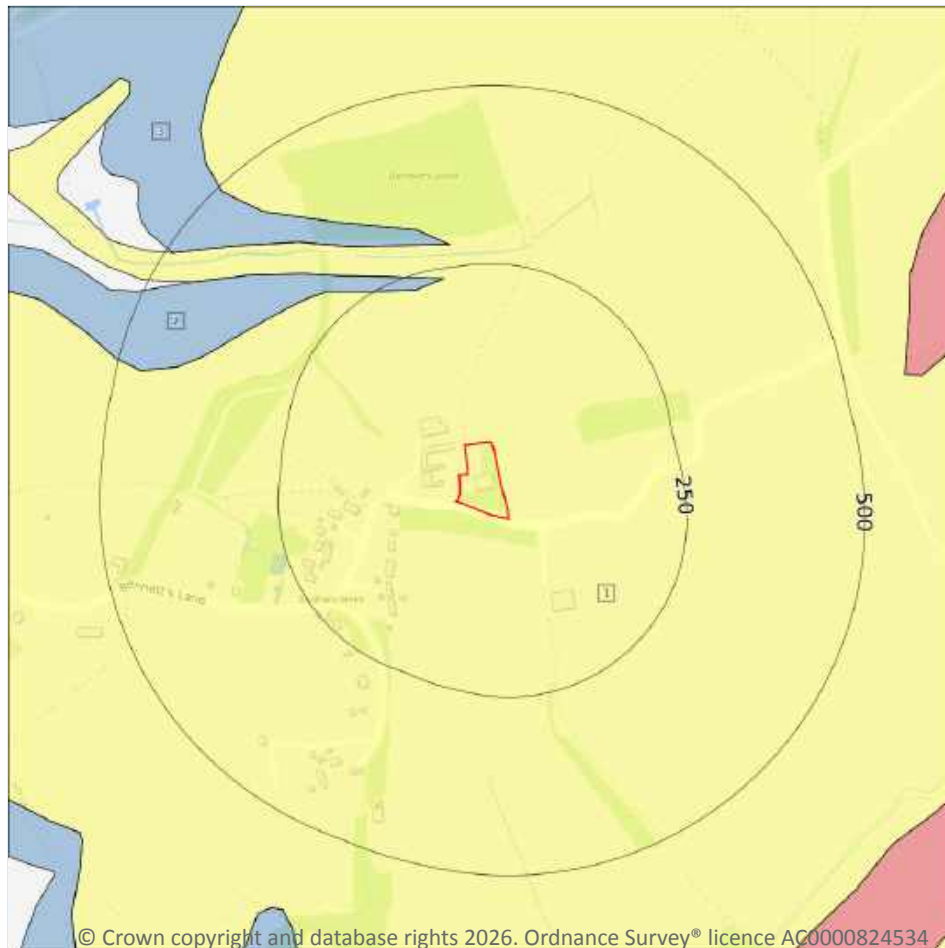
0

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



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

3

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 30](#) >

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	228m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

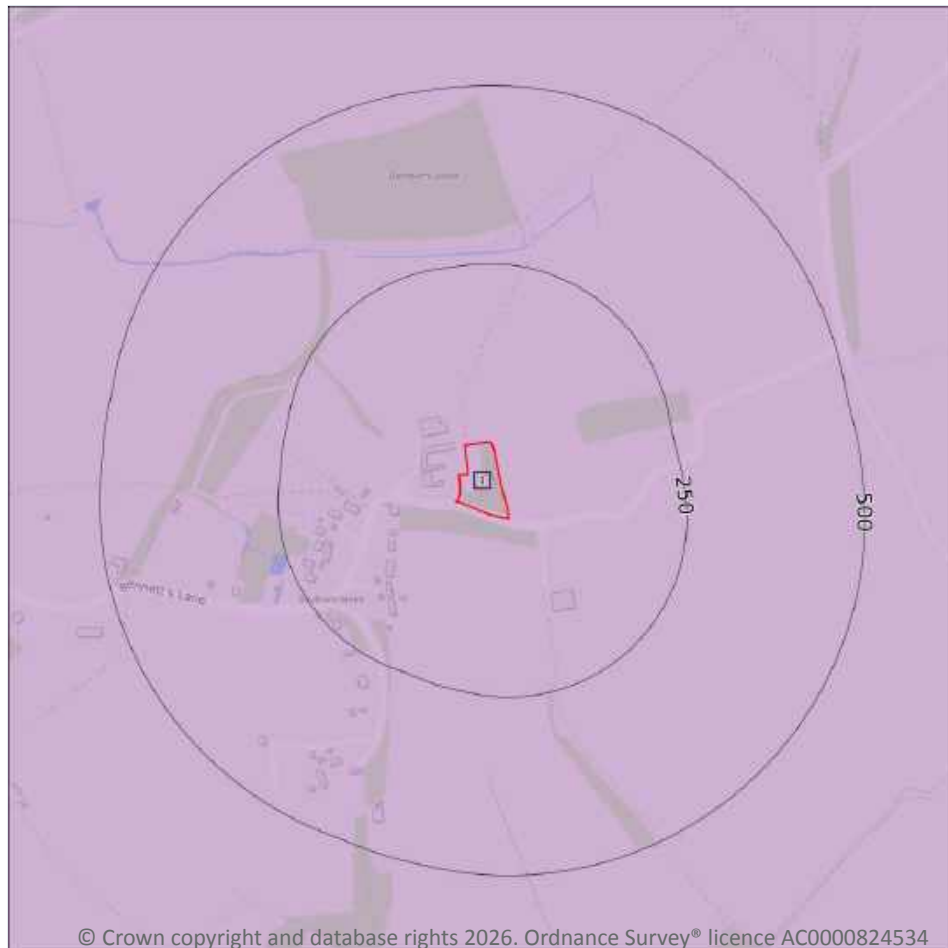


ID	Location	Designation	Description
3	282m N	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

5.2 Bedrock aquifer

Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

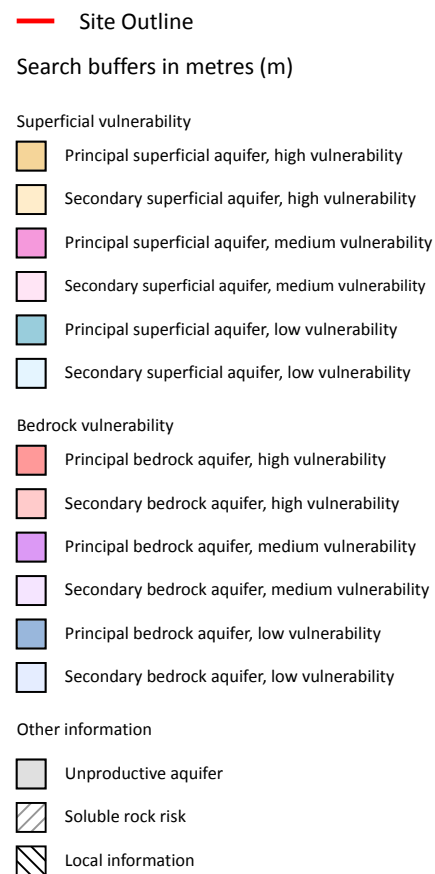
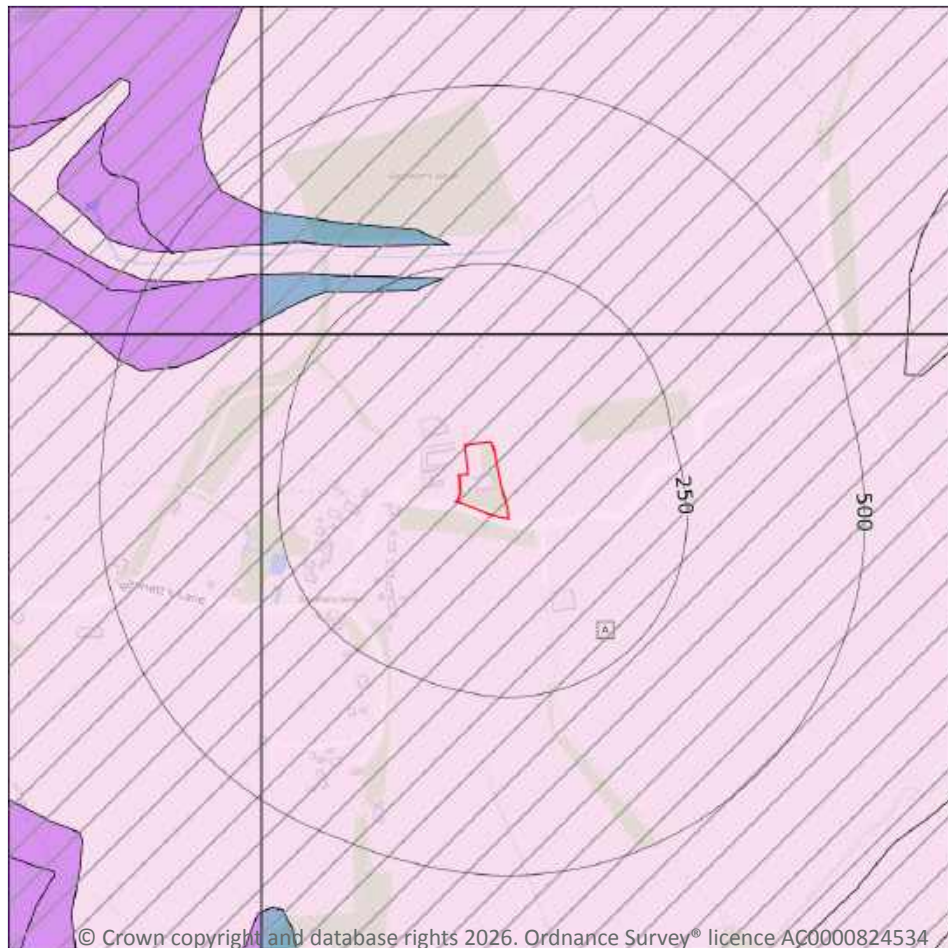
Features are displayed on the Bedrock aquifer map on [page 32](#) >

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

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



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

1

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

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

Features are displayed on the Groundwater vulnerability map on [page 33](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
A	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Principal 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	1
------------------------	----------

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
A	Very significant soluble rocks are likely to be present with a moderate possibility of localised natural subsidence or dissolution-related degradation of bedrock, especially in adverse conditions such as concentrated surface or subsurface water flow.	1.0%

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
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

6

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 35 >](#)

ID	Location	Details	
-	952m SE	Status: Historical Licence No: 29/38/04/0031 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: BOREHOLE AT LODGE FARM, BUNTINGFORD, HERTS Data Type: Point Name: HICKEY Easting: 532190 Northing: 231300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/06/1966 Expiry Date: - Issue No: 101 Version Start Date: 30/03/1993 Version End Date: -
-	1237m W	Status: Active Licence No: 29/38/03/0021 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: SHAW GREEN FARM WELL 'B' Data Type: Point Name: STREATHER HAYWARD FARMS LTD Easting: 530100 Northing: 232200	Annual Volume (m ³): 1945 Max Daily Volume (m ³): 56.3 Original Application No: W/388 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -
-	1237m W	Status: Active Licence No: 29/38/03/0021 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: SHAW GREEN FARM WELL 'A' Data Type: Point Name: STREATHER HAYWARD FARMS LTD Easting: 530100 Northing: 232200	Annual Volume (m ³): 1945 Max Daily Volume (m ³): 56.3 Original Application No: W/388 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -
-	1237m W	Status: Active Licence No: 29/38/03/0021 Details: Spray Irrigation - Direct Direct Source: THAMES GROUNDWATER Point: SHAW GREEN FARM WELL 'B' Data Type: Point Name: STREATHER HAYWARD FARMS LTD Easting: 530100 Northing: 232200	Annual Volume (m ³): 1945 Max Daily Volume (m ³): 56.3 Original Application No: W/388 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -
-	1237m W	Status: Active Licence No: 29/38/03/0021 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: SHAW GREEN FARM WELL 'A' Data Type: Point Name: STREATHER HAYWARD FARMS LTD Easting: 530100 Northing: 232200	Annual Volume (m ³): 1945 Max Daily Volume (m ³): 56.3 Original Application No: W/388 Original Start Date: 20/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date: -



ID	Location	Details	
-	1654m SW	Status: Historical Licence No: 29/38/03/0033 Details: General Farming & Domestic Direct Source: THAMES GROUNDWATER Point: CUMBERLOW GREEN WELL Data Type: Point Name: HODGE Easting: 530100 Northing: 230600	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 20/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 09/10/1973 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	2
-----------------------------	----------

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	
2	589m NE	Status: Historical Licence No: 6/33/53/*S/0117 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: DRAIN AT TURF FEN Data Type: Line Name: ROBINSON Easting: 531700 Northing: 232300	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/12/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1998 Version End Date: -
-	1483m W	Status: Historical Licence No: 29/38/03/0061 Details: Make-Up Or Top Up Water Direct Source: THAMES SURFACE WATER - NON TIDAL Point: KINGSWOODBURY TRIBURTARY Data Type: Line Name: KINGSWOODBURY LTD Easting: 528700 Northing: 232400	Annual Volume (m ³): 42005 Max Daily Volume (m ³): 1050 Original Application No: - Original Start Date: 05/10/1992 Expiry Date: - Issue No: 100 Version Start Date: 05/10/1992 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

1

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on [page 35 >](#)

ID	Location	Type	Description
1	On site	3	Total catchment

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

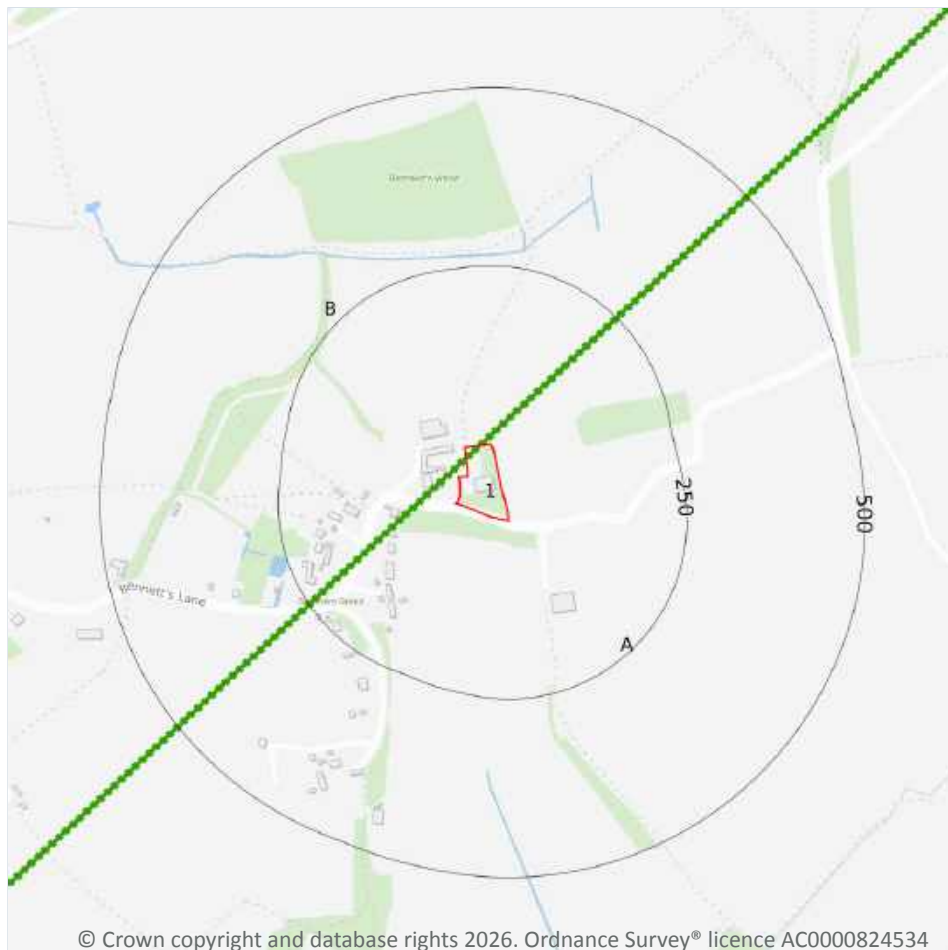
0

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

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



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS NGD)
- 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 NGD)

Records within 250m

0

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

This data is sourced from the Ordnance Survey®.

6.2 Surface water features

Records within 250m

1

Covering rivers, streams and lakes (some overlap with OS NGD 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 39](#) >

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 39](#) >

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	On site	River	Beane (Source to Stevenage Brook)	GB106038040110	Lee Upper	Lee Upper

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 39](#) >

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	990m W	River	Beane (Source to Stevenage Brook)	GB106038040110 ↗	No longer applicable	Does not require assessment	Poor	2022

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

6.5 WFD Groundwater bodies

Records on site

2

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

Features are displayed on the Hydrology map on [page 39](#) >

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	On site	Upper Lee Chalk	GB40601G602900 ↗	Poor	Poor	Poor	2019
B	On site	Upper Bedford Ouse Chalk	GB40601G603000 ↗	Poor	Poor	Poor	2019

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



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m**0**

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

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

7.2 Historical Flood Events

Records within 250m**0**

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

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

7.3 Flood Defences

Records within 250m**0**

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

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



7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

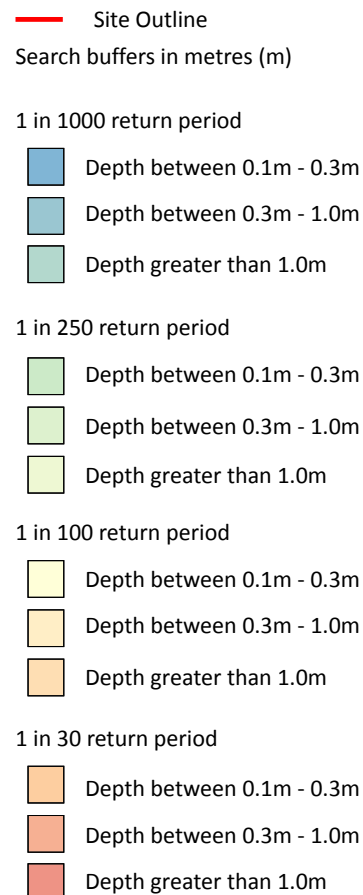
0

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

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



8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 1000 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

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

Features are displayed on the Surface water flooding map on [page 45 >](#)

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.

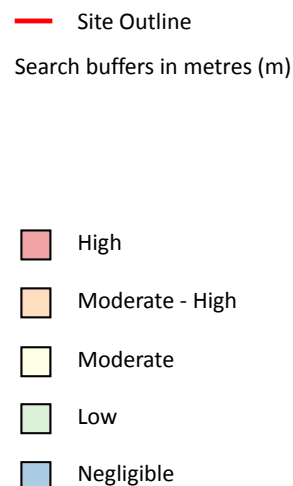
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.1m and 0.3m
1 in 250 year	Negligible
1 in 100 year	Negligible
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

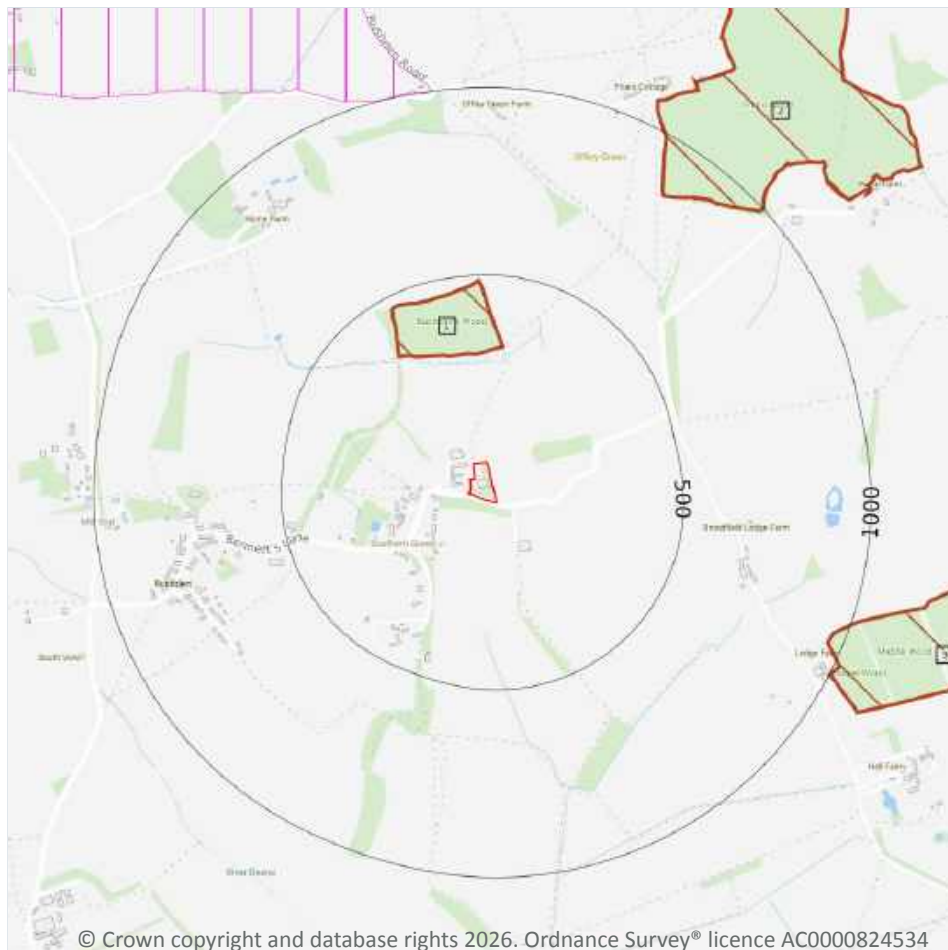
Low

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 47](#) >

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Designated Ancient Woodland
- Green Belt
- Nitrate Sensitive Areas

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**6**

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 48 >](#)

ID	Location	Name	Woodland Type
1	290m N	Bachelors Wood	Ancient & Semi-Natural Woodland
2	854m NE	Friars Wood	Ancient & Semi-Natural Woodland
3	960m SE	Great Wood	Ancient & Semi-Natural Woodland
-	1530m SW	Munches Wood	Ancient & Semi-Natural Woodland
-	1887m NW	Coles Wood	Ancient & Semi-Natural Woodland
-	1925m W	Baskets Wood	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

1

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

Features are displayed on the Environmental designations map on [page 48 >](#)

ID	Location	Name	Local Authority name
-	1894m W	London Green Belt	North Hertfordshire

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

2

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).

Features are displayed on the Environmental designations map on [page 48 >](#)

ID	Location	Name	Data source
4	997m N	Slip End	Natural England
-	1630m NW	Slip End	Natural England

This data is sourced from Natural England.



10.16 Nitrate Vulnerable Zones

Records within 2000m

4

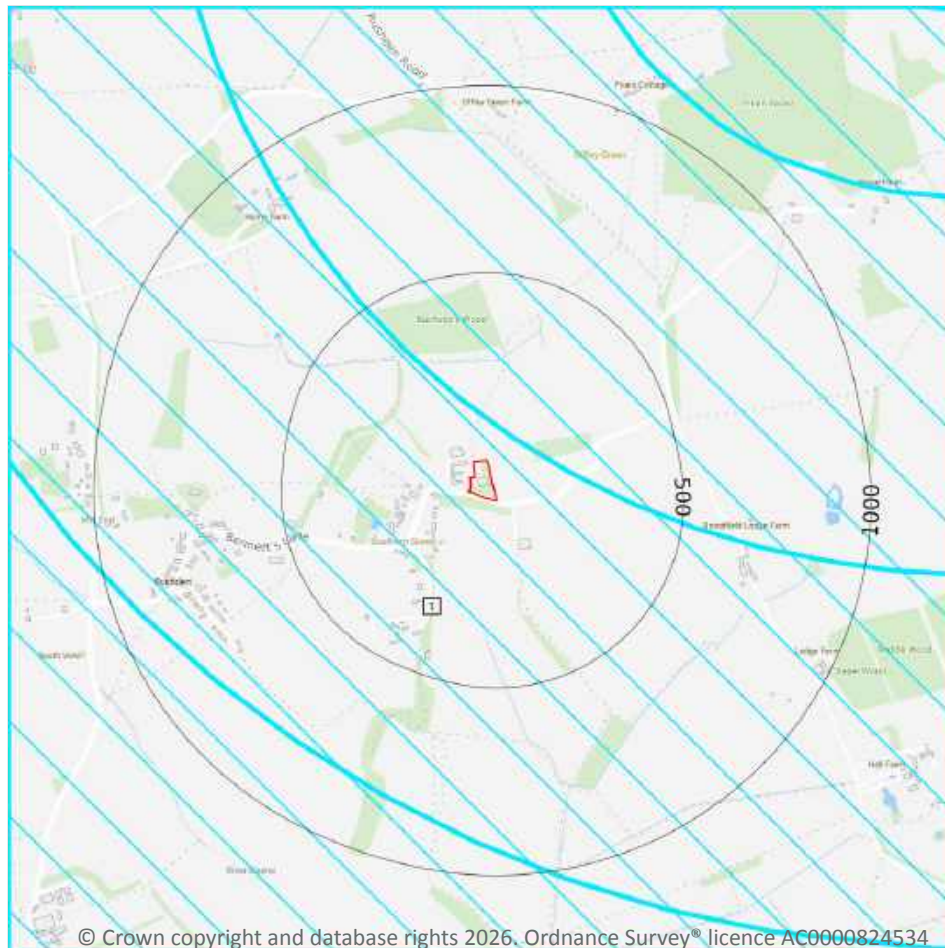
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	LEE NVZ	Surface Water	443	Existing
On site	Buntingford Chalk	Groundwater	141	Existing
On site	Anglian Chalk	Groundwater	71	Existing
1332m NW	Great Ouse NVZ	Surface Water	391	Existing

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



SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

1

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

Features are displayed on the SSSI Impact Zones and Units map on [page 54](#) >

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0301000500000&notes=&location=534825,232270%20(IRZ%20polygon%20centre)

This data is sourced from Natural England.



10.18 SSSI Units

Records within 2000m

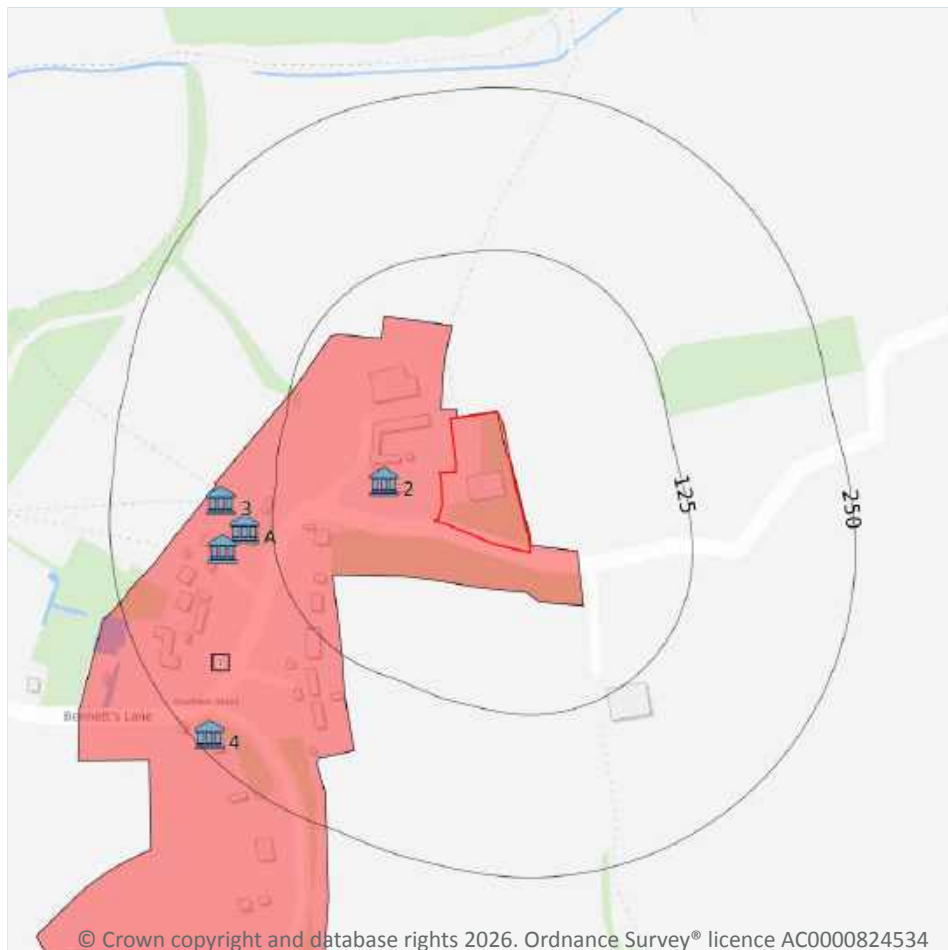
0

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



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

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

5

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

Features are displayed on the Visual and cultural designations map on [page 56 >](#)

ID	Location	Name	Grade	Reference Number	Listed date
2	43m W	Southern Green Farm House	II	1102633	29/01/1986
A	146m W	Southern Cottage	II	1102631	29/01/1986
A	165m W	Moonshine Stile End	II	1102630	19/12/1980
3	165m W	Bachelors	II	1102632	29/01/1986
4	239m SW	Parknasilla	II	1102634	29/01/1986

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



11.5 Conservation Areas

Records within 250m

1

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.

Features are displayed on the Visual and cultural designations map on [page 56](#) >

ID	Location	Name	District	Date of designation
1	On site	Southern Green	North Hertfordshire	06/10/1969

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

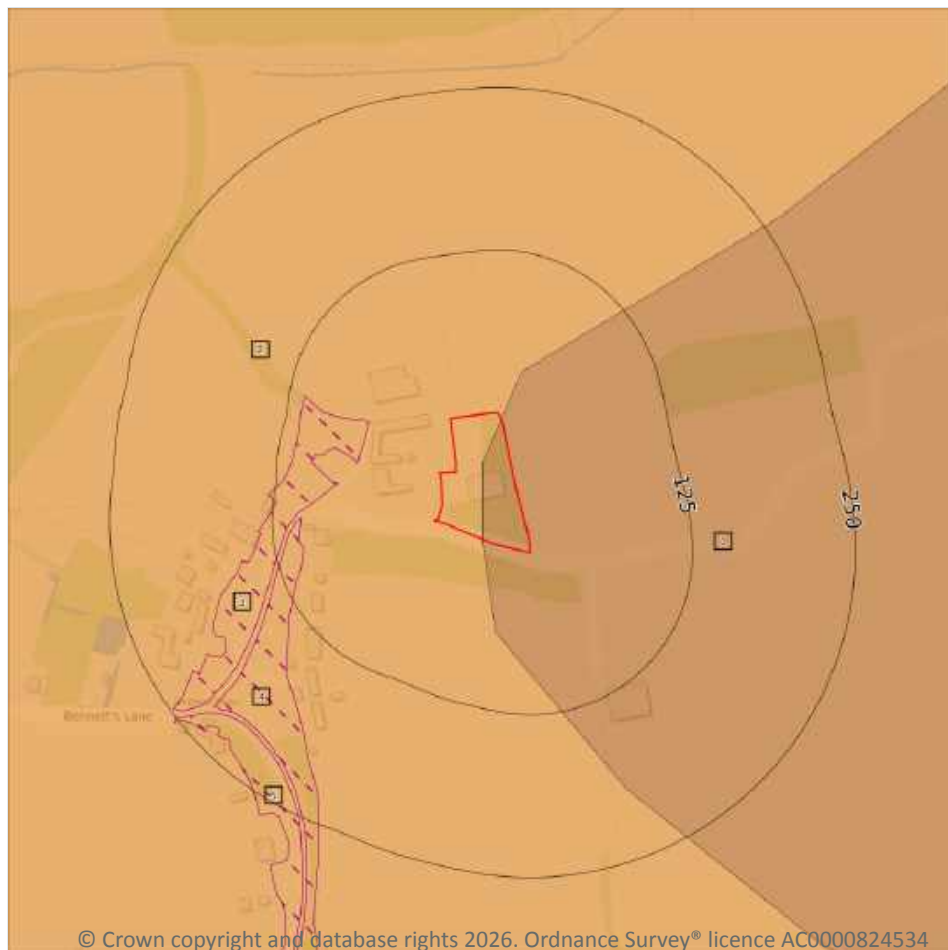
0

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

2

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

Features are displayed on the Agricultural designations map on [page 59](#) >

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

3

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.

Features are displayed on the Agricultural designations map on [page 59 >](#)

ID	Location	Name	Classification	Other relevant legislation
3	62m W	Southern Green	Section 4 Conclusive Registered Common Land	-
4	103m W	Southern Green	Section 4 Conclusive Registered Common Land	-
5	214m SW	Southern Green	Section 4 Conclusive Registered Common Land	-

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

2

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.

Location	Reference	Scheme	Start Date	End date
On site	AG00371337	Entry Level plus Higher Level Stewardship	01/05/2011	30/04/2021
30m S	AG00371337	Entry Level plus Higher Level Stewardship	01/05/2011	30/04/2021

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

3

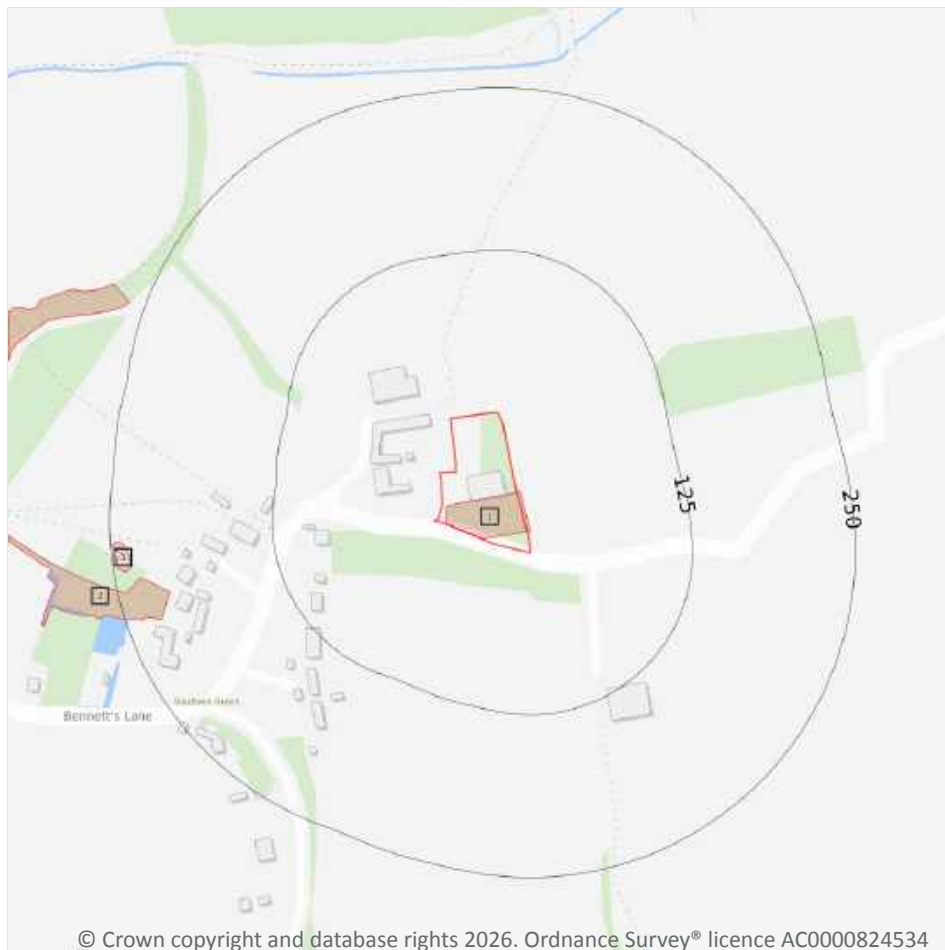
Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

Location	Reference	Scheme	Start Date	End Date
On site	1426225	Countryside Stewardship (Middle Tier)	01/01/2023	31/12/2027
30m S	1426225	Countryside Stewardship (Middle Tier)	01/01/2023	31/12/2027
56m N	1000277	Countryside Stewardship (Higher Tier)	01/01/2021	31/12/2030

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

3

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

Features are displayed on the Habitat designations map on [page 62](#) >

ID	Location	Main Habitat	Other habitats
1	On site	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
2	211m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	236m W	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 64](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	TL33SW

This data is sourced from the British Geological Survey.



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

14.2 Artificial and made ground (10k)

Records within 500m

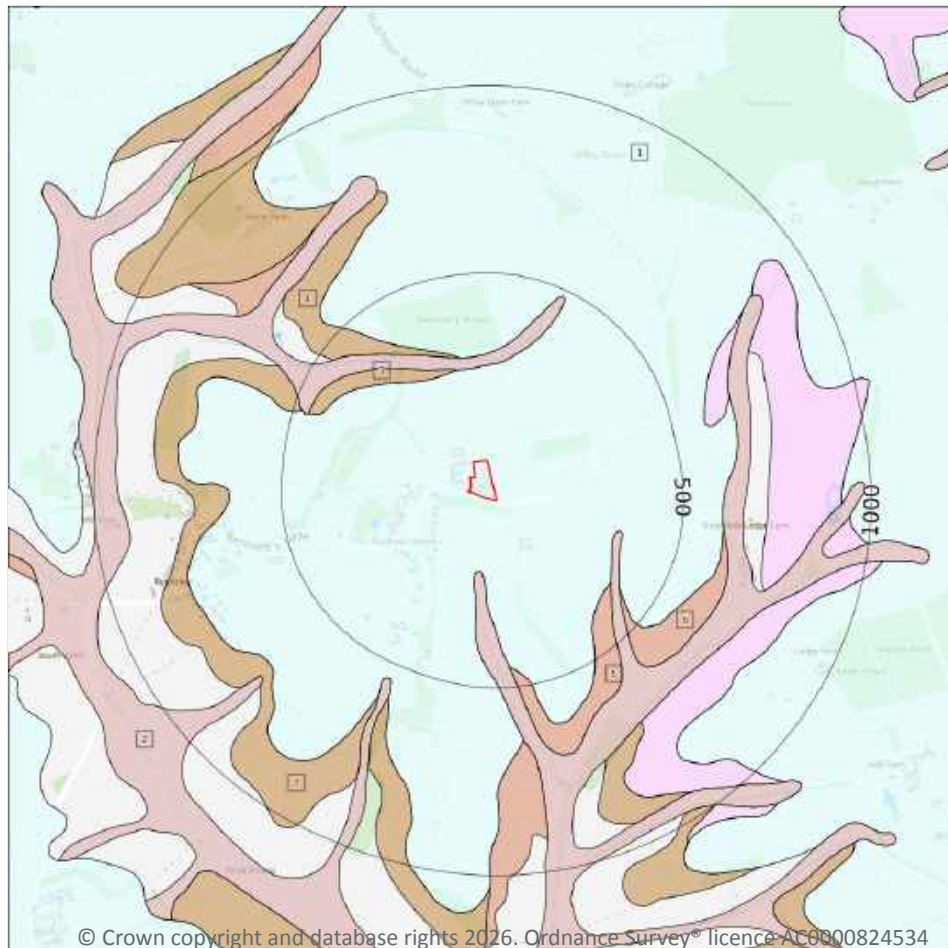
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



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

14.3 Superficial geology (10k)

Records within 500m

7

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 66](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	LOFT-DMTN	Lowestoft Formation-Diamicton	Diamicton
2	194m S	HEAD-XCZSV	Head-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel
3	245m N	CWF-XCZSV	Clay-With-Flints Formation-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel



ID	Location	LEX Code	Description	Rock description
4	280m N	CWF-XCZSV	Clay-With-Flints Formation-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel
5	375m SE	HEAD1-XCZSV	Head, 1-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel
6	402m SE	HEAD1-XCZSV	Head, 1-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel
7	475m W	CWF-XCZSV	Clay-With-Flints Formation-Clay, Silt, Sand And Gravel	Clay, silt, sand and gravel

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

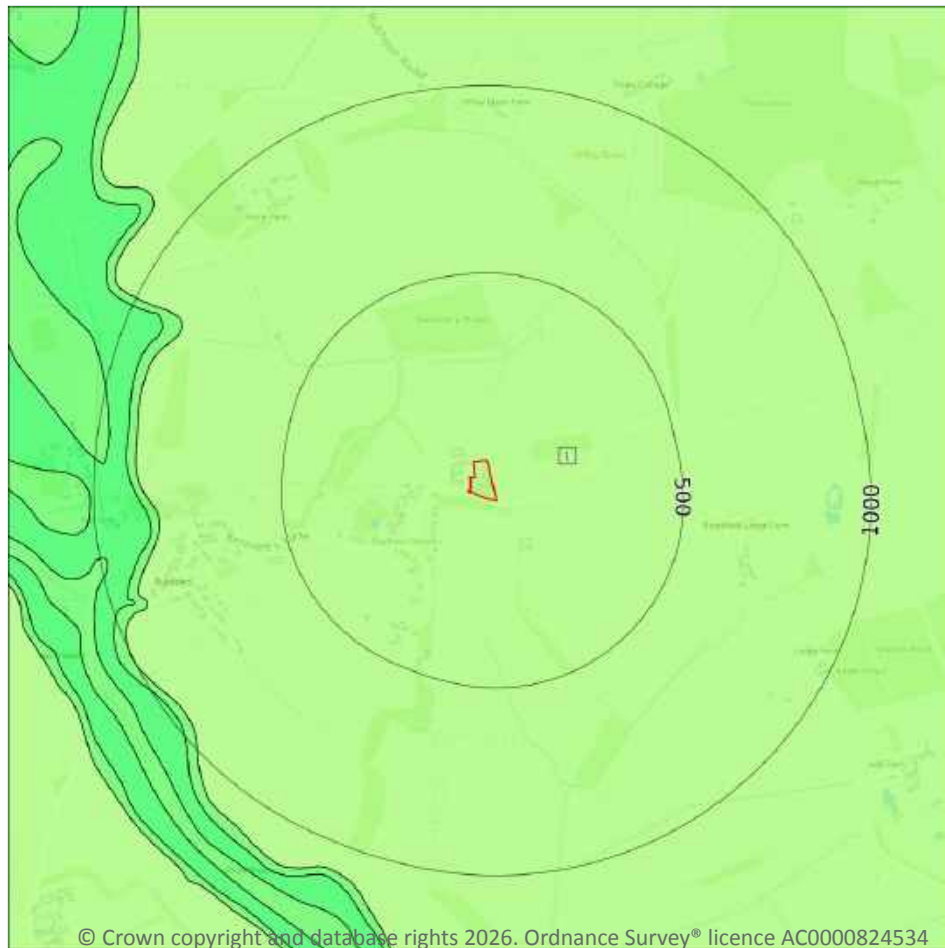
0

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

1

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 68](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	LECH-CHLK	Lewes Nodular Chalk Formation-Chalk	Turonian

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 70](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW221_hitchin_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

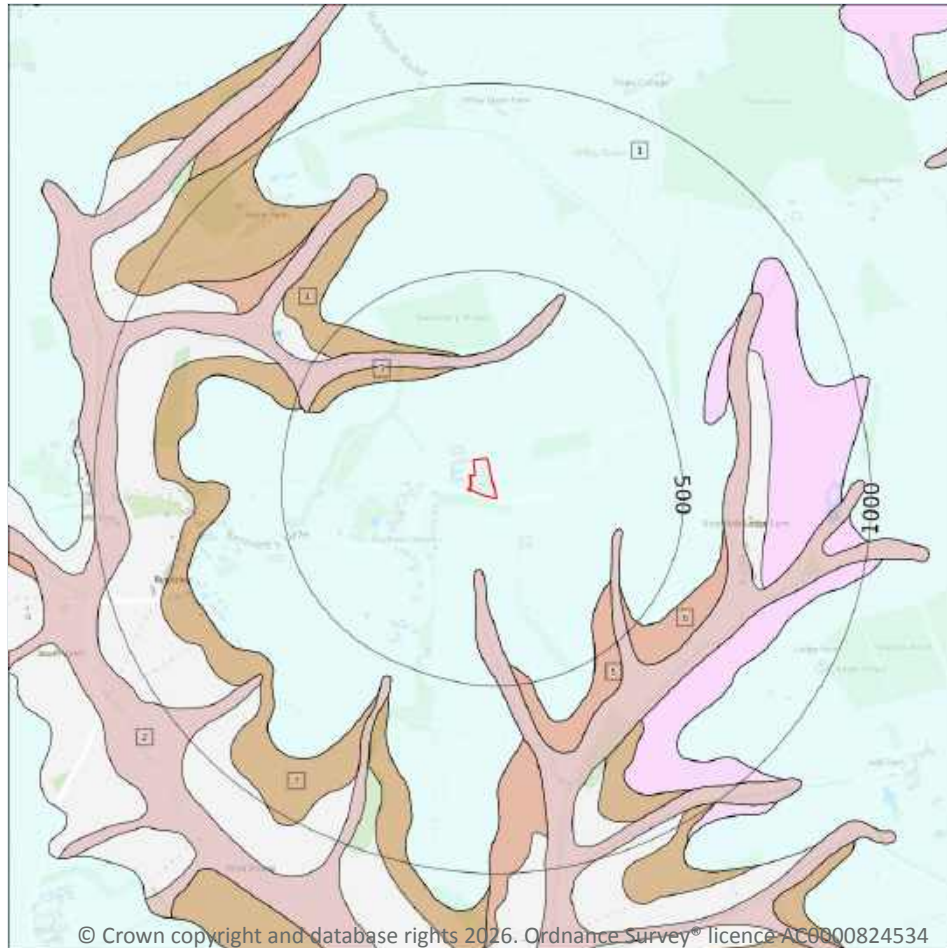
0

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



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

15.4 Superficial geology (50k)

Records within 500m

7

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

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 72 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	LOFT-DMTN	Lowestoft Formation	Diamicton
2	194m S	HEAD-XCZSV	Head	Clay, silt, sand and gravel
3	245m N	CWF-XCZSV	Clay-with-flints Formation	Clay, silt, sand and gravel



ID	Location	LEX Code	Description	Rock description
4	280m N	CWF-XCZSV	Clay-with-flints Formation	Clay, silt, sand and gravel
5	375m SE	HEAD1-XCZSV	Head, 1	Clay, silt, sand and gravel
6	402m SE	HEAD1-XCZSV	Head, 1	Clay, silt, sand and gravel
7	475m W	CWF-XCZSV	Clay-with-flints Formation	Clay, silt, sand and gravel

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1
---------------------------	----------

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

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

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

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

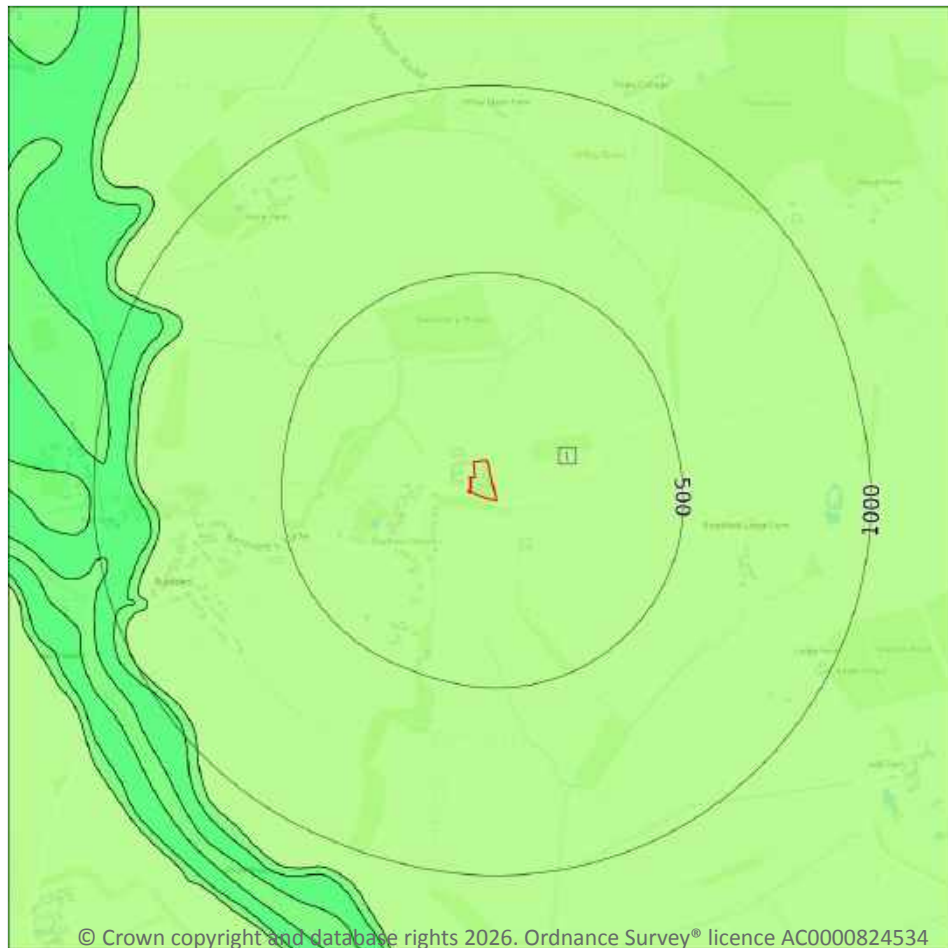
Records within 50m	0
---------------------------	----------

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

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m

1

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

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 74 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	LECH-CHLK	Lewes Nodular Chalk Formation-Chalk	Turonian

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

1

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Very High	Very High

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



— Site Outline
Search buffers in metres (m)

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

16.1 BGS Boreholes

Records within 250m

1

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

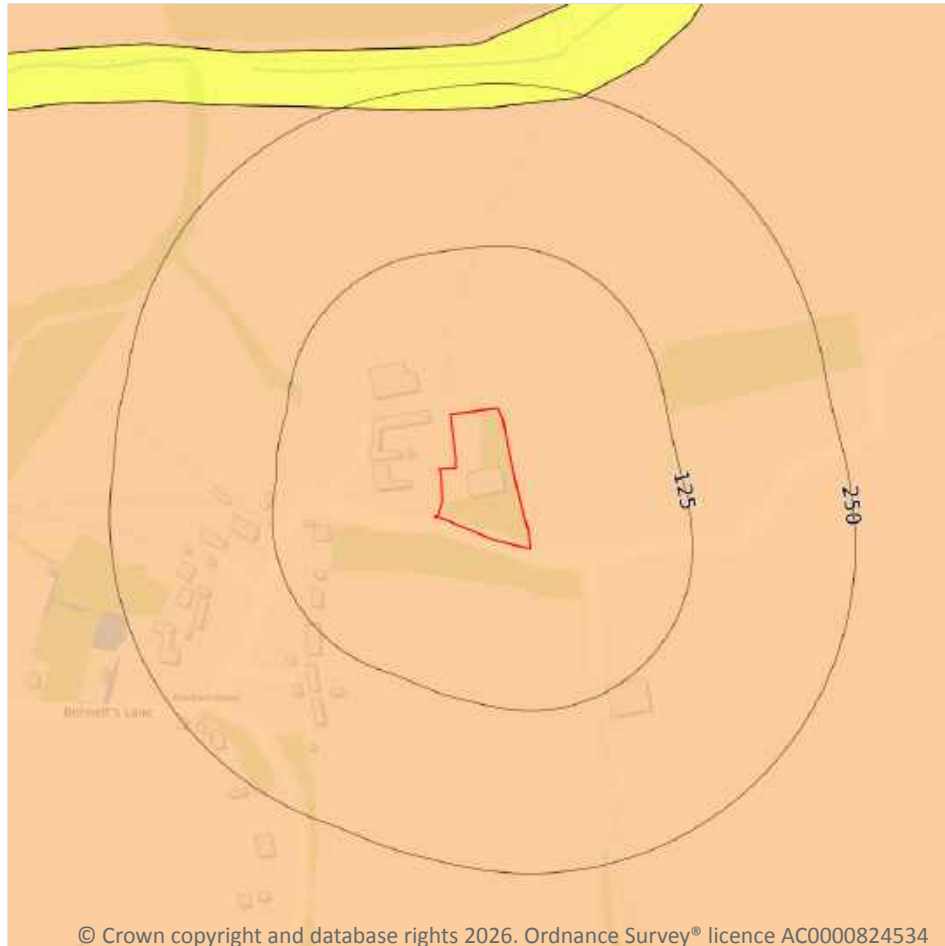
Features are displayed on the Boreholes map on [page 76 >](#)

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	28m W	531250 231790	SOUTHERN GREEN FARM, RUSHDEN	91.44	N	538605 ↗

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

1

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

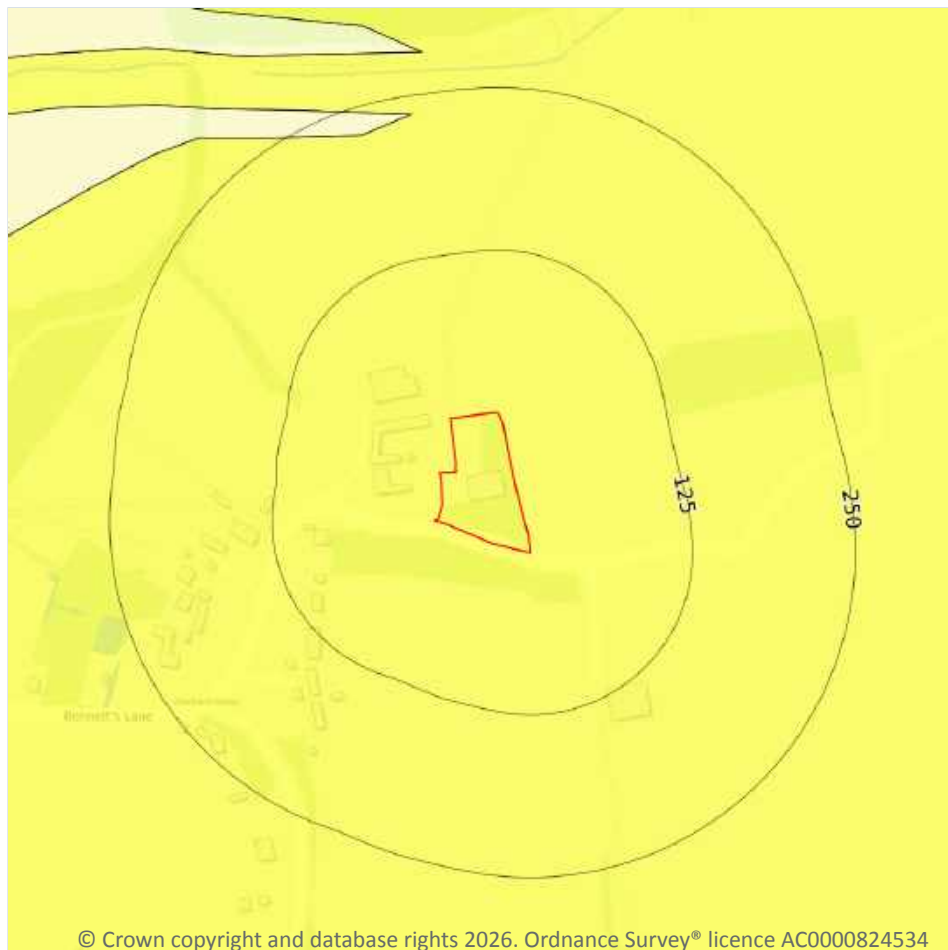
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 77 >](#)

Location	Hazard rating	Details
On site	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.

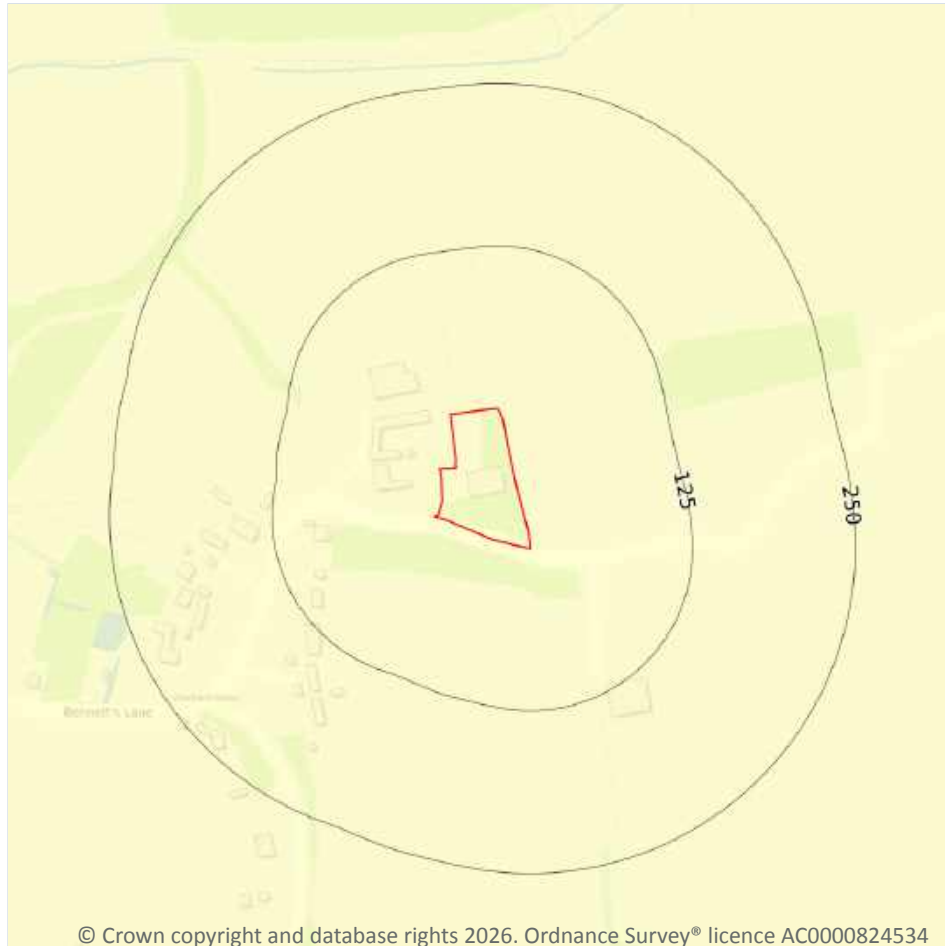
Features are displayed on the Natural ground subsidence - Running sands map on [page 78](#) >

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- 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.

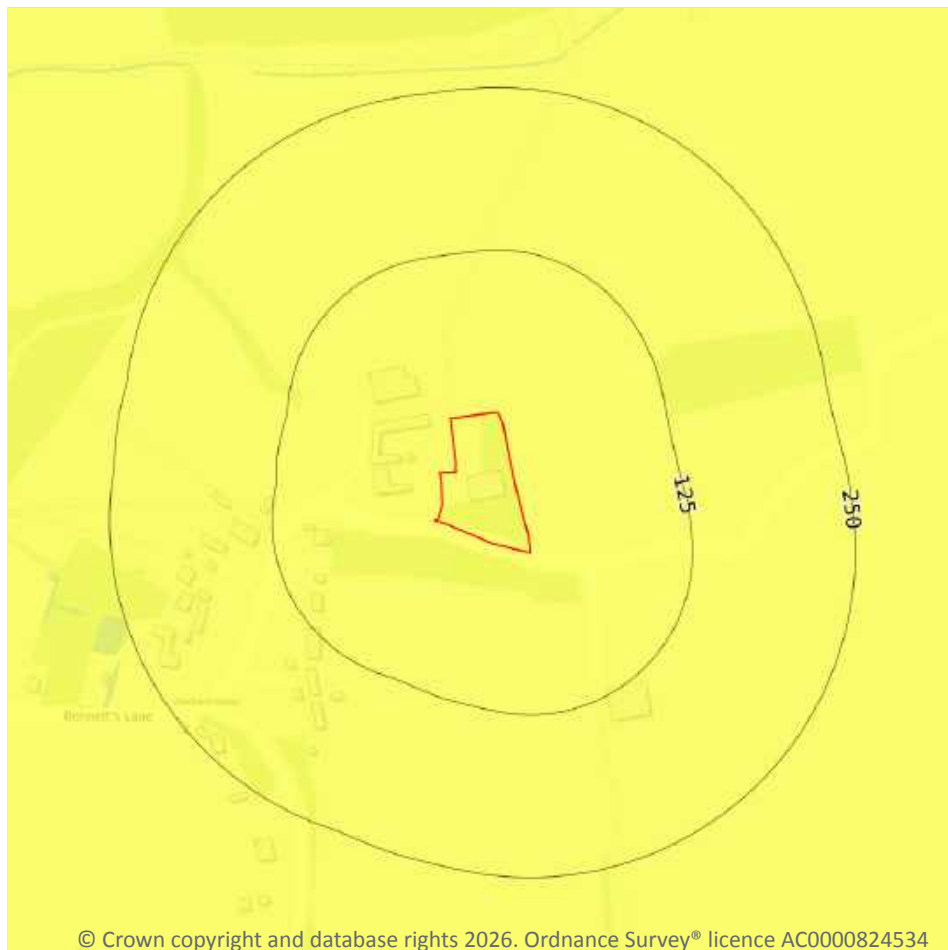
Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 79 >](#)

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- 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.

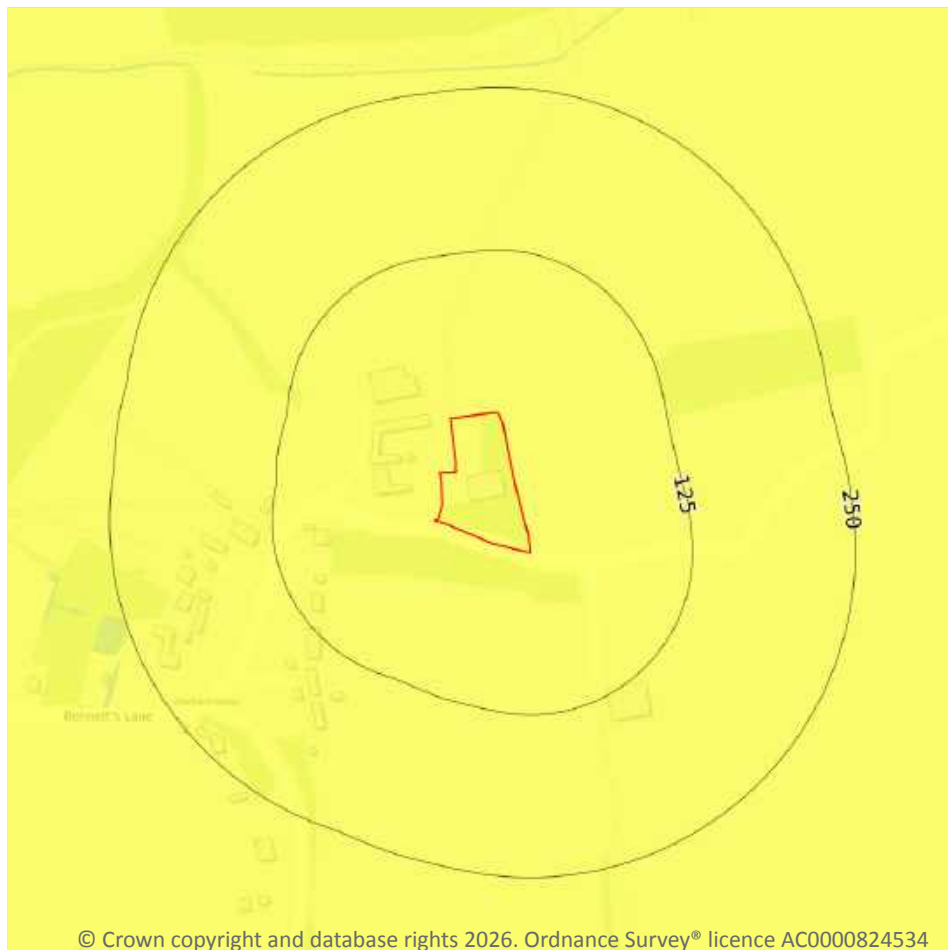
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 80 >](#)

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Landslides



- 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.

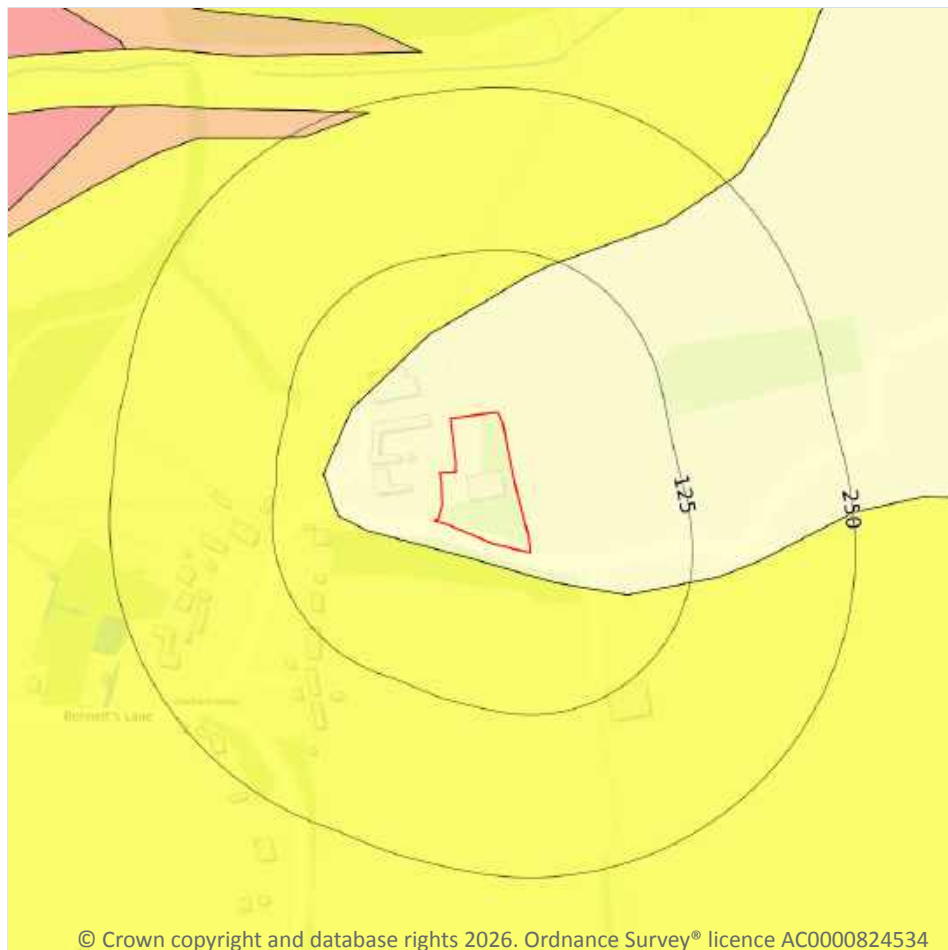
Features are displayed on the Natural ground subsidence - Landslides map on [page 81](#) >

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

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



- 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

2

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

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 82](#)

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

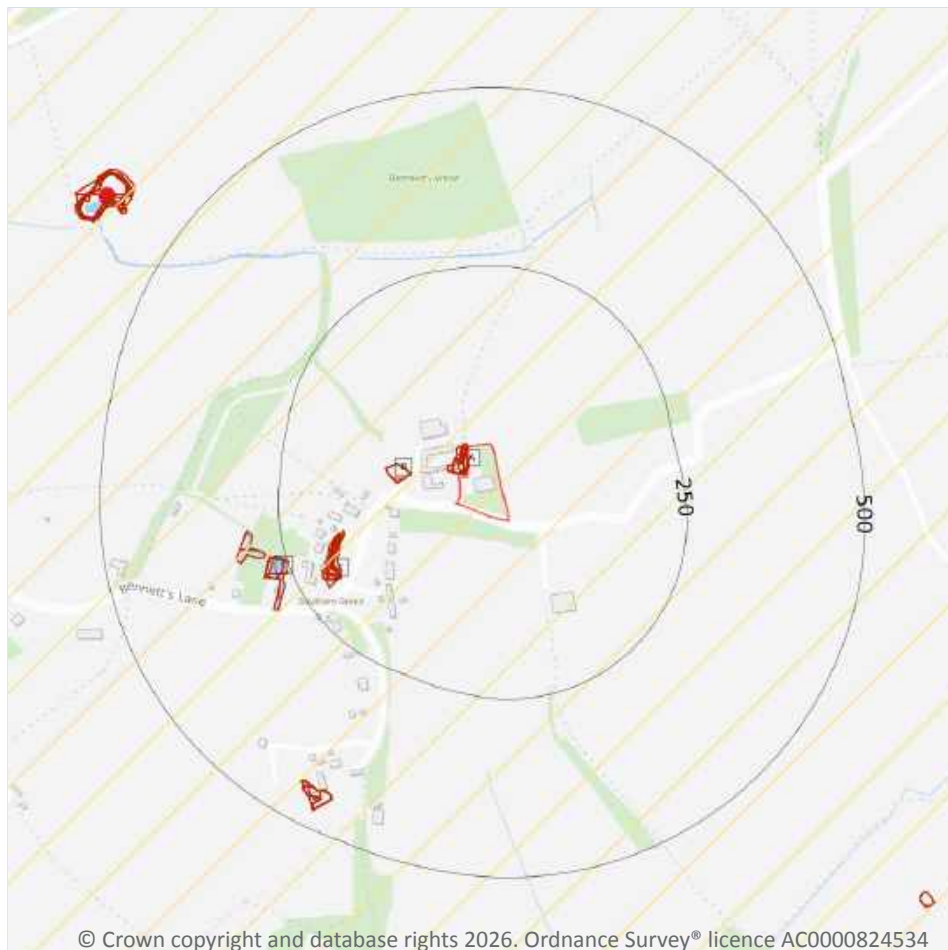


Location	Hazard rating	Details
16m S	Very low	Soluble rocks are present within the ground. Few dissolution features are likely to be present. Potential for difficult ground conditions or localised subsidence are at a level where they need not be considered.

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

0

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

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m

15

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 84](#) >

ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Pond	1883	1:10560
A	On site	Pond	1925	1:10560
A	On site	Pond	1950	1:10560
A	On site	Pond	1951	1:10560
A	3m W	Pond	1896	1:10560
B	67m W	Pond	1951	1:10560
B	67m W	Pond	1981	1:10000
C	162m W	Pond	1922	1:10560
C	165m W	Pond	1883	1:10560
C	165m W	Pond	1947	1:10560
C	165m W	Pond	1896	1:10560
C	165m W	Pond	1922	1:10560
C	171m W	Pond	1951	1:10560
C	171m W	Pond	1981	1:10000
D	249m W	Ponds	1883	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 84](#) >

ID	Location	Name	Commodity	Class	Likelihood
1	On site	Not available	Chalk	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. 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
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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.

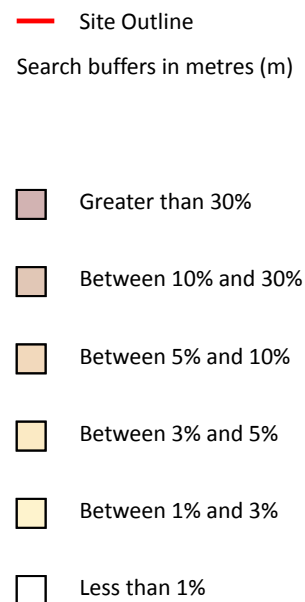
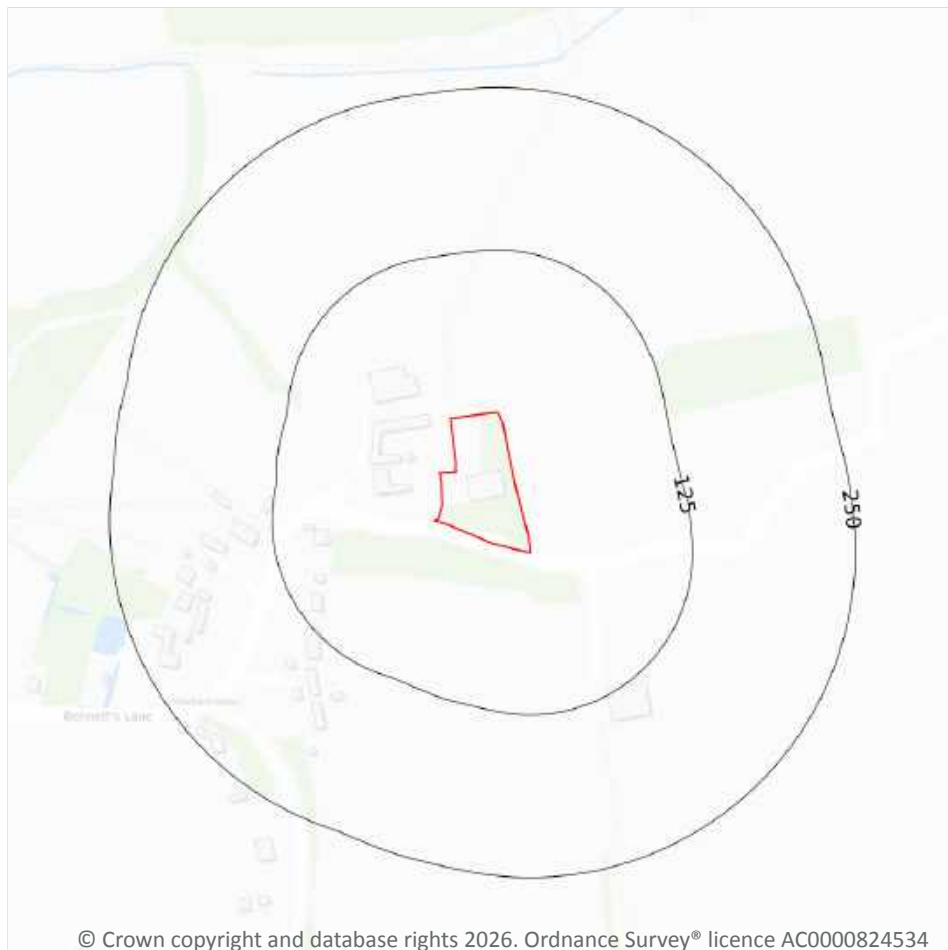
Not all 'holes' noted on Ordnance Survey® mapping will necessarily be present within this dataset.



This data is sourced from Groundsure.



20 Radon



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 91](#) >

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

1

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 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 km²).

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 km².

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 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.

22.9 HS2

Records within 500m

0

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

This data is sourced from HS2 Ltd.

Data providers

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

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-conditions-april-2026/ ↗.



Appendix C – Risk Definitions

Risk Evaluation

Risk evaluation is qualitative and is developed from the model provided in CIRIA C552 *Contaminated Land Risk Assessment – a guide to good practice* (DETR 2001). It involves classifying risk in terms of the probability of occurrence x magnitude of the potential consequence of occurrence. The risk rating is used to determine what action, if any, is needed to further investigate that risk and/or remediate to reduce risk to an acceptable level.

Classification of Probability

Classification	Definition
High	There is a pollution linkage and an event appears very likely in the short term and almost inevitable in the long term or there is actual evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely in the long term.
Low	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is not certain that even over a longer period such event would take place, and is less likely in the shorter term.
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur in the very long term.

Classification of Consequence

Classification	Definition	Examples
Severe	- Short-term (acute) risk to human health likely to result in significant harm. - Short-term (acute) risk of pollution of sensitive water resource. - Short-term (acute) risk to an ecosystem, or organism forming part of an ecosystem.	Unusually high concentration of toxic substance on the surface of a garden. Presence of asbestos AIB, free fibres or lagging. Major release into controlled waters. EA Category 1 pollution incident. Closure of an abstraction point. Explosion, causing building collapse (and death if occupied).
Medium	- Chronic damage to human health likely to result in significant harm. - Pollution of sensitive water resource. - Significant change in a particular ecosystem, or organism forming part of such ecosystem.	Concentration of contaminant from site exceeds generic or site-specific assessment criteria for human health or water supply pipes. Presence of asbestos cement. Leaching of contaminants from a site to a principal or secondary A aquifer. Concentration exceeds DWS in Inner Source Protection Zone (SPZ1) or EQS adjacent to water resource. EA Category 2+ pollution incident. Death of a species or loss of habitat within an area of national importance.
Mild	- Exposure is unlikely to result in significant harm to human health. - Pollution of non-sensitive water resource. - Damage to sensitive buildings, structures and services or the environment.	Concentration of contaminant from site below generic or site-specific assessment criteria. Pollution of secondary (B or undifferentiated) aquifer. EA Category 3 pollution incident. Damage to a building rendering it unsafe to occupy. Death of a species or loss of habitat within an area of local importance.
Minor	Harm (but not significant harm) resulting	Pollution of unproductive strata.

Classification	Definition	Examples
	in a financial loss or expenditure to resolve. - Non-permanent human health effects. - Easily repairable damage to buildings, structures and services	Loss of plants in garden or landscape areas.

Risk Estimation

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High	Very high risk	High risk	Moderate risk	Low risk
	Likely	High risk	Moderate risk	Low risk	Low risk
	Low	Moderate risk	Low risk	Low risk	Very low risk
	Unlikely	Low risk	Low risk	Very low risk	Very low risk
	No linkage	No risk			

Description of the Estimated Risks and Likely Action Required

Risk	Action
Very high	There is a high probability that severe harm could arise or there is evidence that severe harm is currently happening. This risk, if realised, is likely to result in substantial liability. - Urgent investigation required. - Remediation required for the site in its existing state and for development.
High	Harm is likely to arise. Realisation of the risk is likely to present a significant liability. - Urgent investigation is required and remedial works may be necessary in the short term and are likely over the long term. - Remediation required for development.
Moderate	A potential linkage is identifiable. However, it is either relatively unlikely that harm would be severe or, if any harm were to occur, it is more likely that the harm would be relatively mild. - Investigation required to quantify the risk and determine potential liability. - Remediation required for development.
Low	It is possible that harm could arise but it is likely that this harm, if realised, would at worst normally be mild. - Investigation is not normally required but could be useful to confirm findings. - Remediation unlikely to be required or will be limited.
Very low	There is a low possibility that harm could arise. In the event of such harm being realised it is not likely to be severe. Site is not capable of being determined under Part 2a. No further action recommended.