

Fosse Green Energy

Preliminary Environmental Information Report

VOLUME

3

Appendix 14-B: Phase 1 Preliminary Risk Assessment

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Prepared for:

Fosse Green Energy Limited

Prepared by:

AECOM Limited

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Executive Summary

ES1 A Stage 1, Tier 1 Preliminary Risk Assessment (PRA) (as defined by the Government guidance titled 'Land Contamination Risk Management') of Fosse Green Energy (hereafter referred to as the 'Proposed Development') has been undertaken by AECOM Limited (AECOM) to support Development Consent Order Application.

ES2 The Proposed Development comprises the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) electricity generating facility, associated electrical equipment, cabling and on-site energy storage facilities across a proposed Site which lies to the south and south west of Lincoln (hereafter referred to as the 'Principal Site') together with grid connection infrastructure (hereafter referred to as the 'Cable Corridor').

ES3 The purpose of this report is to determine whether potentially contaminative land uses have taken place within, or in close proximity to, the Site which could have led to the contamination of underlying soils or groundwater.

ES4 The Site consists of fields mainly under arable production, interspersed with individual trees and hedgerows; and wooded areas. Some farm buildings are located on-site. Two surface Water Framework Directive (WFD) watercourses run within the Site Boundary, these being the River Witham and River Brant.

ES5 The anticipated geology includes Quaternary deposits, classified as Secondary A aquifers, over sedimentary bedrock of mudstone and limestone formations, classified as Secondary B or Principal aquifers.

ES6 Based on a review of historical maps, the Site was undeveloped land/agricultural fields since the earliest available historical maps (late 1800's). Potential contaminative sources identified locally on-site may be associated with former pits which may have been filled with a variety of (potentially unlicensed) waste materials. Farmland, including current farm buildings and yards with fuel and agricultural materials storage, are also shown at various locations within or adjacent to the Site. Swinderby Airfield is indicated within the central part of the Principal Site, to the east of Witham St Hughs (and extending off-site to the west).

ES7 The land uses surrounding the Site (relevant to contaminated land) include (inter alia) current and former sewage works and pumping stations, a former waste management facility, and a current filling station.

ES8 The potential risks identified have been assessed by the preliminary risk assessment as being very low to moderate / low, with the highest risks associated with the former Swinderby Airfield. Limited intrusive site investigation and further risk assessment is recommended in the areas of potential contamination to confirm the results of this PRA.

ES9 The information collected as part of this PRA suggests that there are no significant constraints with regards to contamination of soil and groundwater that would limit the development of the Site as a solar farm.

ES10 The regional unexploded bomb (UXB) mapping published by Zetica shows that the Site lies within a zone that experiences a low risk of UXB. However, the Site lies within areas formerly occupied by the Swinderby Airfield, which is considered a wartime site of interest. The commissioning of a detailed Unexploded Ordnance (UXO) Assessment is recommended prior to the commencement of any intrusive works to assess and potentially zone the UXO hazard level at the Site.

1. Introduction

1.1 Term of Appointment

1.1.1 On the instructions of Fosse Green Energy Limited (hereafter referred to as 'the Applicant'), AECOM Limited (AECOM) has undertaken a Stage 1, Tier 1 Preliminary Risk Assessment (PRA) (as defined by Government guidance titled 'Land Contamination Risk Management') of the Fosse Green Energy development (hereafter referred to as the 'Proposed Development').

1.1.2 The Proposed Development comprises the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) electricity generating facility, associated electrical equipment, cabling and on-site energy storage facilities across a proposed site which lies to the south and south west of Lincoln (hereafter referred to as the 'Principal Site') together with grid connection infrastructure (hereafter referred to as the 'Cable Corridor'). Underground interconnecting cables (hereafter referred to as 'Interconnecting Cable Corridor') connect areas within the Principal Site; and the Principal Site to the Cable Corridor. The Proposed Development would allow for an anticipated export of exceeding 50 megawatts (MW) electrical capacity. Collectively, the Principal Site and the Cable Corridor are referred to as 'the Site'.

1.1.3 Due to its proposed generating capacity, the Proposed Development is classified as a Nationally Significant Infrastructure Project (NSIP) and will therefore require consent via a Development Consent Order (DCO) under the Planning Act 2008 (Ref 1).

1.1.4 **PEI Report Volume 2, Figure 14-B-1** in Annex A shows the maximum area of land potentially required for the construction, operation and maintenance of the Proposed Development and includes land required for permanent and temporary purposes. The Principal Site represents the current maximum extent of land being considered and may be further refined; some of this land will also be used for landscaping and habitat enhancement rather than solar PV infrastructure.

1.1.5 The Principal Site will be fenced and protected via security measures such as closed circuit television (CCTV) and emergency lighting. Internal access tracks, habitat management and drainage will also be provided within the fenced areas on the Principal Site.

1.1.6 Refer to **PEI Report Volume 1, Chapter 2: The Site and Surroundings** and **PEI Report Volume 1, Chapter 3: The Proposed Development** for further details.

1.2 Report Objectives

1.2.1 The primary objective of this report is to determine whether potentially contaminative land uses have taken place within, or in close proximity to, the Site, which could have led to the contamination of underlying soils or

groundwater. This report aims to identify and evaluate potential land quality risks and development constraints associated with the Proposed Development and to construct an initial conceptual site model (CSM) that can be used to inform future decision making and the design of future ground investigation (if needed).

1.2.2 This report is prepared to support a DCO application under the requirements of the Planning Act 2008 (as amended) (Ref 1), the National Planning Policy Framework (2023) (Ref 2), and considers the potential implications of Part 2A of the Environmental Protection Act 1990 (Part 2A) (Ref 3) and the associated Contaminated Land (England) Regulations 2006 (as amended) (Ref 4). Relevant legislation is described in **PEI Report Volume 3, Appendix 14-A**.

1.2.3 The planning policies from relevant National Policy Statements (NPS) that have been considered in this assessment include:

a. Overarching NPS for Energy (NPS EN-1) (Ref 5), with particular reference to sections 5.4 Biodiversity and Geological Conservation and 5.16 Water Quality and Resources; and

b. NPS for Electricity Networks Infrastructure (NPS EN-5), (Ref 6), with particular reference to impact of electricity networks on soils and geological conservation.

1.2.4 This report has been prepared in general accordance with the technical guidance and procedures described in the UK Government guidance titled Land Contamination Risk Management (updated 2023) (Ref 7); British Standard (BS) 5930:2015+A1:2020 Code of Practice for Ground Investigations (BSI) (Ref 8) and BS 10175:2011+A2:2017 Investigation of Potentially Contaminated Sites – Code of Practice (BSI) (Ref 9) to:

a. Describe the geology, hydrogeology and shallow mining potential across the Site;

b. Describe the environmental setting/sensitivity and current/historical land use of the Site and surrounding area;

c. Describe the findings of a site reconnaissance visit;

d. Summarise the findings of any historical ground investigation work (if available);

e. Provide an initial CSM for the prevailing ground conditions; and

f. Using the source-pathway-receptor model present a qualitative PRA of potential land contamination risks to human (chronic), environmental, and controlled water receptors from contamination sources on, or in the vicinity of, the Site.

1.3 Sources of Information

1.3.1 This report has been prepared using a combination of published records (e.g. British Geological Survey (BGS), Environment Agency (EA) and

Department for Environment, Food & Rural Affairs (Defra)). These include statutory records (in a pdf format) and historical mapping (in a GIS format) supplied within a Groundsure Report (October 2023) (Ref 10), published geological and hydrogeological mapping, historical borehole records, and observations made during the site reconnaissance, completed on the 24 October 2023. The site reconnaissance included a visual inspection (non-intrusive survey) of the Site to identify the range of activities undertaken on the Site and any obvious potential sources of ground contamination present at the time of the visit.

1.3.2 The North Kesteven District Council website (Ref 11) have been also reviewed for any 'contaminated land' as defined under the Environmental Protection Act 1990, Part 2A, within the Site and surrounding areas.

1.3.3 An Unexploded Bomb (UXB) Risk Map from Zetica (Ref 13) has been obtained and included as Annex D.

1.3.4 Specific information sources are referenced throughout the document and a bibliography is included in section 16 of this report.

2. Site Setting

2.1 Location

2.1.1 The Site lies within the country of Lincolnshire, within the district of North Kesteven, to the south and south west of Lincoln. The Principal Site extends from Thorpe on the Hill to the north and Bassingham to the south, with Haddington and Witham St Hughes to east and west, respectively. The Cable Corridor passes through largely agricultural land and crosses the River Brant to the west of Broughton Lane, travelling 600m south of Coleby, and 1.7km north of Navenby. As National Grid has not announced the proposed location of the Navenby Substation, flexibility has been maintained to consider the options within the Assessments presented in the PEI Report.

2.2 Description and Setting

2.2.1 The Site is shown in **PEI Report Volume 2, Figure 14-B-1** in Annex A. The Site is the maximum extent of land required for the construction, operation and maintenance of the Proposed Development, and the Cable Corridor to the National Grid Substation at Navenby. It includes land required for temporary and permanent uses. It is important to note that this may be subject to change as the design and environmental impact assessment (EIA) progress and comments from stakeholders and the public during the statutory consultation are taken into account.

Principal Site

2.2.2 The Principal Site consists of agricultural fields mainly under arable production, interspersed with individual trees and hedgerows; and wooded areas. Where there are hedgerows, these generally form the boundaries of fields as they adjoin roads. The fields are separated by a few minor roads and tracks. Farm buildings are located at few locations across the northern and southern parts of the Principal Site. These includes Housham Grance Farm (in the northern part of the Principal Site, north of the A46); and Church Farm and two farms both named River Farm across the southern part of the Principal Site. A digestate holding lagoon is shown across the southern part of the Solar PV Area, south of Moor Lane (GSIP-2023-14155-15965_D2).

2.2.3 The Principal Site is mainly surrounded by agricultural fields and wooded areas, with agricultural buildings and dwellings, and small villages. Artificial angling ponds are located immediately west of the southern extent of the Principal Site.

2.2.4 Industrial features adjacent to the Principal Site include a pumping station, located along the northern boundary, in Thorpe on the Hill (GSIP-2023-14155-15965_C); a pumping station, located adjacent south of the eastern extent of the Principal Site, on the western bank of River Brant (GSIP-2023-14155-15965_F2); and sewage works bordering the Principal Site to the southwest of Bassingham and to the east of Witham St Hughs (GSIP-2023-

14155-15965_D1). A mast is located adjacent north of the A46, along the western boundary of the Principal Site (GSIP-2023-14155-15965_A).

2.2.5 The River Witham flows in a northern direction along the eastern boundary of the Principal Site, west of Bassingham; and crosses the Principal Site to the south of Haddington.

2.2.6 The River Brant, a tributary of the River Witham, flows in a northern direction adjacent east of the Principal Site (crossing the Cable Run Corridor) and meets the River Witham to the south of South Hykeham.

2.2.7 Several drains associated with the agricultural land are located across the Principal Site.

2.2.8 The topography of the Principal Site is relatively flat, with existing ground levels generally under 20m Above Ordnance Datum (AOD) according to online Ordnance Survey (OS) (Ref 14), with gentle undulations around the larger watercourses.

Cable Corridor

2.2.9 The Cable Corridor consists of agricultural fields mainly under arable production, interspersed with individual trees, hedgerows, and local roads. Where there are hedgerows, these generally form the boundaries of fields as they adjoin roads.

2.2.10 River Brant, a tributary of River Witham, flows with a northern direction across the western extent of the Cable Corridor. Proceeding from north west to south east, the Cable Corridor crosses Broughton Lane, Grantham Road, High Dyke and Heath Lane and Green Man Road.

2.2.11 Pylons with associated electricity lines are located across most of the Cable Corridor.

2.2.12 The topography of the area is relatively flat, with existing ground levels generally under 20m AOD (Ref 14). The elevation increases sharply on the eastern edge of the Cable Corridor, with elevation reaching 80m AOD north of Boothby Graffoe and 50 to 70m AOD east of Navenby.

3. Geological and Environmental Setting

3.1 Introduction

3.1.1 The environmental setting including the topography, geology, hydrogeology and hydrology are the key factors that influence the way in which contaminants in the soil or groundwater can be transported on-site or off-site, and also the way in which contamination can affect applicable receptors including controlled waters and users of the Site and surrounding areas.

3.1.2 The environmental setting of the Site has been assessed by making reference to the information sources detailed in Section 1.3.

3.2 Geology and Soils

Published Geology & Exploratory Hole Records

3.2.1 AECOM has reviewed publicly available information. The published 1:50,000 scale geological map of the area produced by the BGS (Ref 15) and the BGS Geoindex Onshore online geological mapping (accessed November 2023) (Ref 16) indicates that the Site is underlain by the geological succession summarised in Table 1.

3.2.2 The BGS maintains an archive of historical exploratory borehole records throughout the UK. AECOM has searched the database and those which are considered to provide useful information on the ground profile at the Site have been considered as part of the Preliminary Ground Model in Section 8. Copies of these exploratory hole records are included as Annex C. The location of the boreholes is included in the Groundsure Report (Ref 10).

Table 1: Geology encountered across the Site

Age	Group or Parent	Geological Stratum	Description	Anticipated Thickness (m) (approximate)	
Superficial deposits					
2.58 million years ago to present	Fluvial Deposits	Alluvium	Clay, silt, sand and gravel.	Variable	Located in proximity to the River Witham and tributaries, across the Principal Site, west and north of Bassingham; and in proximity of River Brant, across the eastern end of the Principal Site, on Fen Lane.
2.58 million years ago to present	NA	River terrace Deposits (undifferentiated)	Sand and gravel, locally with lenses of silt, clay or peat.	Variable.	Patchy across the southern part of the Principal Site, at Thurlby.
2.58 million years ago to 118,000 years ago.	Trent-Witham Catchments Subgroup	Balderton Sand and Gravel Member of the Trent Valley Formation	Sand and gravel.	Variable, typically 6 to 8m; maximum approximately 9m.	Across the north western part of the Principal Site, at Morton. Across the northern edge of the Principal Site, north of Stocking Wood. Along the south western boundary of the Principal Site, north of Norton Disney. Across the eastern part of the Principal Site, north of Bassingham.

Age	Group or Parent	Geological Stratum	Description	Anticipated Thickness (m) (approximate)	
2.58 million years ago to 118,000 years ago.	Trent-Witham Catchments Subgroup	Eagle Moor Sand and Gravel Member of the Trent Valley Formation	Sand and gravel.	Variable, typically 2 to 3m; maximum approximately 6m.	Patchy across the north western part of the Principal Site, north of Stone Lane.
2.58 million years ago to 118,000 years ago.	Trent-Witham Catchments Subgroup	Fulbeck Sand and Gravel Member of the Trent Valley Formation	Sand and gravel.	Variable, typically 1 to 2m; maximum approximately 5m.	Across the eastern end of the Principal Site, on Fen Lane.
Bedrock (from west to east)					
205.7 million years to 192.9 million years ago.	Lias Group	Scunthorpe Mudstone Formation – Mudstone and Limestone – Interbedded.	Mudstone and limestone, interbedded. Grey, variably calcareous and silty, blocky or fissile mudstone with thin beds of argillaceous limestone and calcareous siltstone.	To approximately 128m	Across most of the Principal Site; west of Bassingham and south of Thorpe on the Hill.
199.5 million years to 184.2 million years ago.	Lias Group	Charmouth Mudstone Formation - Mudstone	Mudstone. Dark grey laminated shales, and dark, pale and bluish grey mudstones; locally concretionary and tabular limestone beds; abundant argillaceous limestone, phosphatic or ironstone nodules.	To approximately 335m	Across the Principal Site, south east of Haddington/Aubourn; and across the western part of the Cable Corridor to the west of Boothby Graffoe.

Age	Group or Parent	Geological Stratum	Description	Anticipated Thickness (m) (approximate)	
184.2 million years to 174.7 million years ago	Lias Group	Whitby Mudstone Formation - Mudstone	Mudstone. Medium and dark grey fossiliferous mudstone and siltstone, with thin siltstone or silty mudstone beds and rare fine-grained calcareous sandstone beds; dense, smooth argillaceous limestone nodules very common at some horizons; phosphatic nodules at some levels.	To approximately 120m	Across a small section of the Cable Corridor at Boothby Graffoe.
170.9 million years to 168.2 million years ago	Inferior Oolite Group	Lower Lincolnshire Limestone Member of the Lincolnshire Limestone Formation	Limestones - wackestone and packstone. Commonly includes sandy limestone or calcareous sandstone in basal part and contains substantial units of mudstone, particularly from the Lincoln area northwards.	Variable, maximum approximately 20m.	Across a small section of the Cable Corridor to the east of Boothby Graffoe.
170.9 million years to 168.2 million years ago	Inferior Oolite Group	Lincolnshire Limestone Formation - Limestone	Limestone – typically calcilutites with wackestones and packstones in the lower part and high energy ooidal and shell	Variable, maximum approximately 30m.	Across the eastern part of the Cable Corridor to the east of Navenby.

Age	Group or Parent	Geological Stratum	Description	Anticipated Thickness (m) (approximate)
			fragmental grainstones in the upper part.	

Source: BGS Geoindex Onshore online geological mapping (accessed November 2023)

Soils and Soil Chemistry

3.2.3 Natural England (Ref 17) reports the Agricultural Land Use Classification (ALC) for the Site to be variable from Grade 2 to 3 (very good to moderate quality), typically Grade 2 across the central and southern extent of the Principal Site and across the eastern end of the Cable Corridor; and Grade 3 across the northern part of the Principal Site and western section of the Cable Corridor. However, Natural England maps represent a generalised pattern of land classification grades and are not sufficiently accurate for use in the assessment of individual fields. The maps do not show the subdivisions of Grade 3 which are normally mapped by a more detailed survey.

3.2.4 Primary soil data has been collected to determine the ALC and this is presented in **Appendix 12-B: Agricultural Land Classification Report**.

3.2.5 The Groundsure Report (Ref 10) provides indicative information on regional concentrations of five potentially harmful elements: arsenic, cadmium, chromium, nickel and lead in soil. Elevated concentrations of these PHEs can exist because of natural geological conditions or possible anthropogenic contamination. The following estimated soil chemistry levels are attributed to the Site based on the geometric mean concentrations of available data (presented in **Table 2**).

Table 2: Estimated Soil Chemistry

Potentially Harmful Element	Estimated geometric mean concentration (mg/kg)
Arsenic	15; 15 - 25
Bio-accessible Arsenic	1 (when data available)
Cadmium	1.8
Chromium	40 - 60; 60 - 90; 90 - 120
Lead	100
Bio-accessible Lead	60
Nickel	15; 15 – 30; 30 - 45

Ground Stability Records

3.2.6 **Table 3** shows the variable hazard of natural ground subsidence across the Site, taken from the Groundsure Report (Ref 10).

Table 3: Natural Ground Subsidence

Hazard Type	Hazard Potential
Shrink swell clays	Negligible to low
Running sands	Negligible to low.

Hazard Type	Hazard Potential
Compressible deposits	Negligible and Moderate. Moderate hazard identified in correspondence of the alluvial deposits associated to the River Witham and tributaries, west and north of Bassingham; and associated with River Brant, around Fen Lane. Compressibility and uneven settlement hazards are probably present at these locations. Land use should consider specifically the compressibility and variability of the Site.
Collapsible deposits	Negligible to very low
Landslides	Very low to low
Ground dissolution of soluble rocks	Negligible to low

Mining and Mineral Extraction

Aggregate/Mineral Quarrying, Mining and Mineral Sites

3.2.7 **Table 4** presents the available information on mining and quarrying operations (Ref 15 and Ref 10), past or present that are known to have taken place on-site and within 250m of the Site.

3.2.8 Extensive areas of surface mineral working extended from approximately 150m west of the southern extent of the Principal Site. These areas are currently occupied by lakes.

3.2.9 Three British Pits (BritPits) have been identified within the Site and two BritPit within 250m of the Site.

Table 4: Quarrying (<250m of the Site)

National Grid Reference	Distance and Direction	Name	Operator	Status / Material Quarried
488983 359750	150m west of the southern part of the Principal Site.	Norton Disney Quarry (opencast)	NA	Ceased/sand and gravel
489003 360107	240m west of the southern part of the Principal Site	Norton Disney Quarry (opencast)	NA	Ceased/sand and gravel
491218 361882	Within the Principal Site, adjacent east of the River Witham.	Thurlby Gall Gravel Pit. (Recorded British Pit)	NA	Ceased/sand and gravel
495349 359997	Within the western part of the Cable Corridor, south west of Coleby Covert.	Coleby Low Field Sand Pit. (Recorded British Pit)	NA	Ceased/sand

National Grid Reference	Distance and Direction	Name	Operator	Status / Material Quarried
499082 359495	Within the central part of the Cable Corridor, south of Coleby.	Boothby Graffoe. (Recorded British Pit)	NA	Ceased/limestone
501735 358905	180m north of the eastern part of the Cable Corridor, south of Green Man Road.	Scopwick Heath. (Recorded British Pit)	NA	Ceased/limestone

3.2.10 In addition to the above, several small ponds and small pits have been identified on-site or within 250m of the Site from the Groundsure Report. These features may or may not have been subsequently backfilled.

Coal Mining

3.2.11 The Coal Authority's Interactive Map Viewer (Ref 17) and the Groundsure Report indicate that the Site is not located in areas which could be affected by past, current or future coal mining.

Non-coal Mining

3.2.12 According to the Groundsure Report, the Cable Corridor runs across an area potentially affected by historical non-coal mining, which extends to the south of Coleby. The commodity is indicated as 'iron ore (bedded)'. A mining cavity, associated with this area, is indicated approximately 320m north of the Cable Corridor, south of Coleby.

Radon

3.2.13 The UK Health Security Agency (UKHSA) and BGS interactive map for radon (Ref 18) indicates that the Principal Site is within a low probability radon area (less than 1% of homes are estimated to be above the Action Level). No radon protective measures are necessary in the construction of new dwellings or extensions.

3.2.14 The Cable Corridor crosses areas where maximum radon potential is 1-3% (between River Brant and Coleby); and areas where the maximum radon potential is 10-30% (between Coleby and Navenby).

3.3 Hydrogeology

Aquifer Classification

3.3.1 The Environment Agency's Groundwater Protection Policy adopts aquifer designations that are consistent with the Water Framework Directive. Definitions of the various aquifer types can be found on the Environment Agency section of the gov.uk website (Ref 20). According to this system, the superficial deposits underlying the Site are classified as Secondary A aquifers (Alluvium, River terrace Deposits and Trent Valley Formation). The

solid geology of the Scunthorpe Mudstone Formation and Charmouth Mudstone Formation is classified as a Secondary B aquifer; and the Lincolnshire Limestone Formation as a Principal aquifer. Whitby Mudstone Formation is an Unproductive Strata.

Groundwater Vulnerability

3.3.2 The Environment Agency's Simplified Groundwater Vulnerability Map in Magic (Ref 23) shows that the Site is located in an area where the groundwater vulnerability to pollution is generally medium-high, where the superficial deposits are present; and high, in areas where the bedrock directly underlain the Site. Soluble rock risk is also present across the eastern extent of the Site.

3.3.3 All associated terminology/definitions can be found on the Environment Agency section of the gov.uk website (Ref 20).

Source Protection Zones and Drinking Water Safeguarding Zones for Groundwater

3.3.4 In terms of identifying the risk of contamination from potentially polluting activities in a given area to groundwater sources (wells, boreholes and springs) used for supplying public drinking water, the Environment Agency identifies Source Protection Zones (SPZ). These show the extent of a groundwater source catchment and are divided into three zones, which can be found on the Environment Agency section of the gov.uk website (Ref 20).

3.3.5 The Principal Site does not lie within an SPZ (Ref 21). The eastern part the Cable Corridor, by Coleby, is within a Zone III (Total Catchment) of a SPZ. There are no other SPZ within 1km of the Site.

3.3.6 The southern extent of the Principal Site lies within a Drinking Water Protected Area for surface water (Ref 21).

3.3.7 The Site does not lie within any Drinking Water Safeguard Zones (DWSZ) for groundwater or surface water (Ref 21).

Licensed Groundwater Abstractions

3.3.8 Two active licensed groundwater abstractions (>20m^3/day) have been identified within 250m of the Site. A further eleven licenced groundwater abstractions (>20m^3/day) have been identified within 1km of the Site (Ref 10). The abstractions are listed in **Table 5**.

Table 5: Licensed Groundwater Abstractions

National Grid Reference	Distance & Direction / Location	Operator	Source	Use
487550 E 365080 N	520m north west of the Principal Site.	GH Chennels (Farms) Ltd	NA	Spray irrigation – direct.

National Grid Reference	Distance & Direction / Location	Operator	Source	Use
488015 E 366918 N	590m north west of the Principal Site.	Tarmac Trading Limited	NA	Dewatering.
487400 E 365325 N	830m north west of the Principal Site.	GH Chennels (Farm) Ltd	NA	Spray irrigation – direct.
489746 E 365987 N (multiple records)	470m north of the Principal Site.	GH Chennels (Farm) Ltd	NA	Spray irrigation – direct.
489402 E 365964 N	530m north of the Principal Site.	GH Chennels (Farm) Ltd	NA	Spray irrigation – direct.
488450 E 365700 N	660m north of the Principal Site.	GH Chennels (Farm) Ltd	NA	Spray irrigation – direct.
490520 E 366680 N	980m north of the Principal Site.	C Nevile & Son	NA	Spray irrigation – direct.
491900 E 365700 N	810m north east of the Principal Site.	Pennells Estates Ltd	NA	Spray irrigation – storage.
486500 E 359250 N	180m south west of the Principal Site.	Breedon Trading Limited	NA	Dewatering.
488490 E 361090 N	900m west of the southern extent of the Principal Site.	Cemex UK Material Ltd	NA	Mineral washing.
487181 E 361591 N	300m west of the southern extent of the Principal Site.	Cemex UK Material Ltd	NA	Mineral washing.
491024 E 361105 N	40m east of the central extent of the Principal Site.	J & J Burnett Limited	NA	Trickle Irrigation - Direct
493300 E 361600 N	700m north of the eastern part of the Principal Site.	H & J Nevile & Son		Spray irrigation – storage.

Risk of Flooding from Groundwater

3.3.9 The Groundsure Report (Ref 10) indicates that there is generally a negligible to low risk for groundwater flooding to occur within most of the Principal Site. However, moderate to high risk is indicated across the eastern extent of the Principal Site, along the River Brant. Moderate risk is also indicated in the north west of the Principal Site.

3.3.10 The Cable Corridor is located in areas of between negligible and high risk from groundwater flooding. Areas of moderate to high risk from groundwater

flooding are along the River Brant; to the south of Coleby; and across its eastern end, east of Navenby.

Surface Water Courses and Drainage

3.3.11 The Site is located within the Anglian River Basin District, and extends across eight surface water WFD water bodies, which are:

a. Witham Upper / South Hykeham Catchwater Water Body (GB105030062460) (Ref 21);

b. Witham Upper / Boultham Catchwater Drain Water Body (GB105030062380) (Ref 22);

c. Witham Upper / The Fleet Lower Catchment (Tributary of Trent) Water Body (GB104028058250) (Ref 23);

d. Witham Upper / Witham from Cringle Brook to Brant Lower Water Body (GB105030056780) (Ref 24);

e. Witham Upper / Brant - Lower Water Body (GB105030056770) (Ref 25);

f. Witham Lower / Dunston Beck Water Body (GB105030056230) (Ref 26);

g. Witham Lower / Metheringham Beck Water Body (GB105030056210) Ref 27); and

h. Withiam Lower / Dorrington Dike Water body (GB105030056175).

3.3.12 All the above waterbodies have moderate ecological status (WFD classifications 2022) and have a chemical status of failing (WFD classifications 2019), except for The Fleet Lower Catchment (Tributary of Trent) Water Body (GB104028058250) Ref 23), which has a poor ecological status (WFD classifications 2022).

3.3.13 The River Witham flows in a northern direction along the eastern boundary of the Principal Site, west of Bassingham; and crosses the Principal Site to the south of Haddington.

3.3.14 The River Brant, a tributary of the River Witham, flows with a northern direction adjacent east of the Principal Site (crossing the Cable Run Corridor) and meets the River Witham to the south of South Hykeham.

3.3.15 There are also a number of smaller water features within 250m of the Site, which do not have WFD classifications in their own right, but which would all ultimately drain to the River Witham or The Fleet.

Licensed Surface Water Abstractions

3.3.16 Three active licensed surface water abstractions have been identified on-site and within 1km of the Site (Ref 10). The abstractions are listed in **Table 6**.

Table 6: Licensed Surface Water Abstractions

Grid Reference (GR)	Distance (metres) & Direction / Location	Operator	Source	Use
491024 E 361105 N	320m south of the Principal Site	J & J Burnett Limited	River Witham	Trickle irrigation – direct.
488700 E 357300 N	580m south of the Principal Site	R Wray & Sons Limited	River Witham	Spray Irrigation - Direct
493300 E 361600 N	700m north of the Cable Corridor	H&J Nevile & Son	NA	Spray Irrigation - Storage

Risk of Flooding from Surface Water

3.3.17 The indicative floodplain map (Ref 39) for the area, published by the Environment Agency, shows that the risk of surface water flooding at the Site is generally very low (annual chance of flooding of less than 0.1%) with isolated patches of low (chance of flooding of between 0.1% and 1%), medium (chance of flooding of between 1% and 3%) and high risk (chance of flooding of greater than 3.3%). The areas of high risk are likely associated with areas of low topography where surface water sits and pools rather than draining away or show areas at risk of flooding from smaller ordinary watercourses and/or local land drains.

4. Historical & Planned Development

4.1 Historical Ordnance Survey Mapping and Aerial Photographs

4.1.1 Historical Ordnance Survey (OS) maps of the Site and the wider environs were provided in the Groundsure Report (in a GIS format) (scales 1:2,500, 1:10,560 and 1:10,000) (Ref 10) and from Google Earth Pro (Ref 30) and these are reviewed in this section.

4.1.2 **Table 7** presents a summary of the main features present on, and within, approximately 250m radius of the Site. It should be noted that only indicative map scales are provided. Where dates are stated, these refer to the dates of maps on which the features are present, have changed use or are no longer annotated, and do not necessarily refer to the exact dates of existence of a particular feature. Development that may have occurred between map editions is recorded as occurring on the later published map, hence there are some limitations to the accuracy of the date of development unless supplementary evidence is available.

4.1.3 It is worth noting that historical mapping may be inaccurate for wartime usage as maps and aerial photographs were amended for security to remove evidence of military sites.

Table 7: Summary of Historical Mapping

Location	Key Feature on-site	Key Feature off site
North western part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_A)	No feature relevant to ground conditions.	Sewage works (including unspecified tanks) are indicated in the historical map dated 1979 adjacent north west of the Principal Site. Unspecified tanks are indicated 130m west of the Principal Site, in the historical maps dated 1904 and 1965. An airfield (Swinderby Airfield) is indicated 300m west of the Principal Site, in the historical maps dated 1965 and 1979.
Northern part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_B)	An unspecified tank is indicated at Housham Grange, in the historical map dated 1975.	An unspecified depot is indicated 170m north east of the Principal Site, in the historical map dated 1973. A smithy is indicated 240m north east of the Principal

Location	Key Feature on-site	Key Feature off site
		Site in the historical map dated 1955.
North eastern part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_C)	No feature relevant to ground conditions.	A pumping station is indicated in Fosse Lane (adjacent north of the Site), in the historical map dated 1987. A smithy is indicated 170m north of the Principal Site, in the historical maps dated between 1904 and 1955. An unspecified tank is indicated 120m east of the Principal Site, in the historical map dated 1975. A garage is indicated 40m north of the Principal Site, in the historical map dated 1985. An unspecified depot is indicated 40m east of the Principal Site, in the historical map dated 1979.
Southern part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_D1)	No feature relevant to ground conditions.	Sewage works, including an unspecified tank, are indicated adjacent south of the Principal Site, in the historical map dated 1982. A pumping station is indicated 40m east of the Principal Site, in Bassingham, in the historical map dated 1982. A brewery is indicated 80m east of the Principal Site, in Bassingham, in the historical map dated 1986. A smithy is indicated 170m east of the Principal Site, in Bassingham, in the historical maps dated between 1904 and 1951. A graveyard is indicated 190m east of the Principal Site, in Bassingham, in the historical map dated 1981. A pumping station is indicated 230m south east of the Principal Site, in

Location	Key Feature on-site	Key Feature off site
		Bassingham, in the historical map dated 1982.
Central part of the Principal Site, west of Thurlby (Groundsure Report GSIP-2023-14155-15965_D2)	An airfield is indicated across the central part of the Principal Site, to the east of Witham St Hughs (and extending off-site to the west), in the historical maps dated 1955 and 1965.	Sewage works, including unspecified tanks, are indicated 20m west of the Principal Site, east of Witham St Hughs, in the historical map dated 1979. A smithy is indicated 20m east of the Principal Site, at Thurlby, in the historical maps between dated 1886 to 1948. An unspecified tank is indicated 130m east of the Principal Site, at Thurlby, in the historical map dated 1975.
Central part of the Principal Site, west of Haddington (Groundsure Report GSIP-2023-14155-15965_I)	An airfield is indicated across the central part of the Principal Site, to the east of Witham St Hughs (and extending off-site to the west), in the historical map dated 1955. A corn mill is indicated on-site, south of Haddington, in the historical maps dated between 1886 and 1948; and shown as disused in the historical map dated 1955.	A pump house is indicated off-site, adjacent west, at Witham St Hughs, in the historical map dated 1979. Electricity substations are indicated 90 and 100m west of the Principal Site, at Witham St Hughs, in the historical map dated 1975. An unspecified pit is indicated 240m east of the Principal Site, at Haddington, in the historical maps dated between 1904 and 1979.
Eastern part of the Principal Site, between River Witham and River Brant (Groundsure Report GSIP-2023-14155-15965_F2)	A gravel pit is indicated on-site, east of River Witham, in the historical maps dated between 1904 and 1955.	A windmill is indicated 140m south of the Principal Site, in Bassingham, in the historical maps dated between 1904 and 1948. Unspecified tanks are indicated 230m south of the Principal Site, at North Field Farm, in the historical map dated 1975.
Western part of the Cable Corridor, from Broughton Lane to south of Coleby.	A sand pit is indicated on-site (and extending off-site to the north), south of Hill Rise, in	An unspecified heap is indicated 80m north of the Cable Corridor, south west of Coleby, in the historical

Location	Key Feature on-site	Key Feature off site
(Groundsure Report GSIP-2023-14155-15965_E2)	the historical maps dated between 1886 and 1951. A cutting is indicated on-site (and extending off-site to the north), south west of Coleby, in the historical maps dated between 1886 and 1948.	maps dated between 1906 and 1948. Cuttings are indicated 160m south of the Cable Corridor, north of Castle Lane, in the historical map dated 1886.
Central part of the Cable Corridor, from south of Coleby to Green Man Road. (Groundsure Report GSIP-2023-14155-15965_G)	An unspecified old quarry is indicated on-site, in Health Lane, in the historical map dated 1886.	An unspecified disused quarry is indicated 210m north of the Cable Corridor, south east of Coleby, in the historical map dated 1973. An airfield is indicated 240m north of the Cable Corridor, north of B1202, in the historical map dated 1951.
Southern part of the Cable Corridor, to the west of the A15. (Groundsure Report GSIP-2023-14155-15965_H). Note that the site boundary in the Groundsure Report is slightly different from the Site. Only the features relevant to the Site have been considered for this area.	No feature relevant to ground conditions.	An unspecified old quarry is indicated 140m east of the Cable Corridor, adjacent west of A15, in the historical maps dated between 1886 and 1951.

4.2 Planning Authority Records

4.2.1 Local land official search reports (Ref 33) which cover most of the Principal Site were provided by the Applicant. Any planning application record relevant to ground conditions is included in **Table 6**.

Table 8: Planning Application Record

Location	Description	Origination Authority	Authority Reference	Registration date
Off-site, adjacent west of the central part of the Principal Site. (Morton Manor, Morton Lane, Swinderby, LN6 9HW)	Part demolition of existing redundant farm building, rebuild and extension to form a new	North Kesteven District Council	14/0977/FUL	18 September 2014

Location	Description	Origination Authority	Authority Reference	Registration date
	granny annexe – approved.			
Off-site, adjacent west of the central part of the Principal Site. (Morton Manor, Morton Lane, Swinderby, LN6 9HW)	Extension to existing bio-fuel boiler house including siting of 4 no. solar panels on roof Approved	North Kesteven District Council	13/0451/LBC	5 July 2013
Off-site, adjacent west of the northern part of the Principal Site. (Immigration Centre Morton Hall Eagle Road Swinderby Lincoln LN6 9PT)	Retention of emergency generator, supply fuel tanks and 25 new car parking spaces outside secure perimeter. Approved	North Kesteven District Council	11/1198/FUL	20 December 2011
Off-site, adjacent north of the Principal Site. (Housham Wood Farm Newark Road Aubourn Lincoln LN6 9HW)	Erection of replacement dwelling. Approved	North Kesteven District Council	11/0629/FUL	28 July 2011
Off-site, adjacent west of the central part of the Principal Site. (44 Nettleton Drive, Witham St Hughs, Lincoln, LN6 9GF)	Erection of single storey and two storey rear extension, including all associated external works. Approved	North Kesteven District Council	20/0058/HOUS	14 April 2020
Off-site, adjacent west of the central part of the Principal Site. (Former RAF Swinderby, Land North of Moor Lane Thurlby, Lincoln)	Construction of new free standing settlement comprising housing, primary school, community buildings, shops, public open space, landscaping,	North Kesteven District Council	97/1053/OUT	11 January 2001

Location	Description	Origination Authority	Authority Reference	Registration date
	access roads, etc, at land to the east of Camp Road and to the north of Moor Lane comprising part of former RAF Swinderby. Approved			
Off-site, adjacent east of the northern part of the Principal Site. (Home Farm Bungalow Lincoln Lane Thorpe on the Hill Lincoln)	Erection of two storey extension and increase in roof height to provide first floor accommodation and erection of garage. Approved	North Kesteven District Council	04/0234/FUL	20 April 2004
Off-site, in the central part of the Principal Site, north of A46, but excluded from the Site. (Cathedral View Caravan Park, Newark Road, Aubourn, Lincoln, LN5 9EJ)	Application to vary condition 3 of application 07/0585/FUL (change of use to static caravan park for 35 units, siting of water tank and gas storage tanks) to enable the siting of an additional 8 static caravans (43 static caravans in total)) to enable the siting of an additional 3 static caravans (46 static caravans in total). Approved	North Kesteven District Council	21/0254/VARCON	15 July 2021

Location	Description	Origination Authority	Authority Reference	Registration date
Off-site, adjacent east of the northern part of the Principal Site. (44 Fosse Lane, Thorpe on The Hill)	Erect double garage. Approved	North Kesteven District Council	94/0158/FUL	28 March 1994
Off-site, in the central part of the Principal Site, north of A46, but excluded from the Site. (Field House Farm, Fosse Way Aubourn Lincoln)	Erection of double garage store and utility room. Approved.	North Kesteven District Council	N/64/1087/83	16 February 1984
Off-site, in the central part of the Principal Site, north of A46, but excluded from the Site. (Field House Farm, Thorpe on The Hill, Lincoln)	Planning permission to drill an exploratory borehole to prove coal seams. Approved	North Kesteven District Council	N/05/64/0723/81	19 August 1981
Off-site, adjacent east of the northern part of the Principal Site. (Jubilee Farm, Middle Lane, Thorpe on The Hill, Lincoln, LN6 9BH)	Conversion of redundant farm buildings into 3 units of holiday accommodation. Change of use from existing holiday lets to dwelling. Approved	North Kesteven District Council	22/0339/VARCON	20 May 2022
Off-site, adjacent west of the northern part of the Principal Site. (The Dovecote, Newark Road, Swinderby, Lincoln, LN6 9HN)	Erection of an 80 bedroom hotel (Outline) - renewal of 09/0550. Approved	North Kesteven District Council	12/1014/OUTEXT	22 January 2013

Location	Description	Origination Authority	Authority Reference	Registration date
On-site, central extent of the northern part of the Principal Site. (Housham Grange, Newark Road, Aubourn, Lincoln, LN6 9HW)	Erection of agricultural storage building. Approved	North Kesteven District Council	N/64/0031/83	18 February 1983
Off-site, adjacent south of the Principal Site. (Sewage Treatment Works at Clay Lane Bassingham)	Extensions to sewage treatment works. Extend Approved.	North Kesteven District Council	N/07/1435/89	25 April 1990
On-site, southern part of the PV Solar Array Area. (Cattle Building, River Farm, Norton Disney, LN6 9JS)	Erection of cattle building	North Kesteven District Council	N/66/0223/84	13 April 1984

4.3 Other Relevant Site History

Swinderby Airfield

4.3.1

4.3.2 Areas formerly associated with the Swinderby Airfield extend across the western part of Site, north of Moor Lane, and further to the west of the Site. Online sources (Airfields of Britain Conservation Trust website (Ref 32)) indicate that Swinderby was opened in August 1940 as a bomber airfield. In November 1941 the airfield closed briefly. The website indicates that “up until November 1941, all flying had been carried out using grass runways after the airfield had opened, with much building work not having been completed. After November 1941, Swinderby saw a large amount of work being completed, including the construction of three hard runways”. The airfield reopened in the spring 1942, when training became the focus of the site. “Technical Training Command took over Swinderby after the Flying School had disbanded, with the focus of the airfield switched to ground based activities and becoming the home of No 7 School of Recruit Training. The School became the RAF School of Recruit Training in 1970, with the WRAF School of Recruit Training arriving in 1982”. Aircraft activity ceased at the site in December 1993. It is understood that “the airfield was in relatively good condition until in recent years demolition work has taken place, with the majority of the technical site and the two control towers being demolished”.

4.4 Unexploded Ordnance Risk

Wartime Land-use

4.4.1 Based on a review of historical maps, the Site was open land during wartime Britain, meaning it was possible for bomb strikes to go unobserved. It should be also noted that mapping detail may have been deliberately omitted during the war years for security. Areas formerly associated with the Swinderby Airfield, which is considered a wartime site of interest, extend on-site to the north of Moor Lane and off-site, west of the central part of the Principal Site.

Post War Development

4.4.2 An analysis of the post war historical map does not show visible changes of the land uses on the Site which could indicate potential aerial bombing. However, due to its rural nature, the chances of unexploded Ordnance (UXO) going unnoticed do exist. An online search has been undertaken for any mention of recent ordnance discovery reported at or around the Site. The search did not identify any records of ordnance in the study area.

Unexploded Ordnance Mapping

4.4.3 The regional UXB mapping published by Zetica (Ref 12 and Annex D) show that the Site lies within a zone that experiences a low risk of UXB. It is estimated that the bombing density of the area is 15 bombs or less within 1000 acres.

Historical and Planned Development Key Findings:

The Site was undeveloped land/agricultural fields since the earliest available historical maps (late 1800's), with contamination sources limited to potential application of pesticides and fertilisers for agricultural purposes. Potential contaminative sources identified locally on-site may be associated with former pits and small quarries which may have been filled with a variety of (potentially unlicensed) waste materials. Infilled land may be also associated with a cutting indicated within the Cable Corridor, southwest of Coleby (and extending off-site to the north).

Farmland, including farm buildings and yards where fuel and agricultural materials were/are stored, are shown at various locations within the Principal Site and adjacent to the Site.

Swinderby Airfield is indicated within the central part of the Principal Site, to the east of Witham St Hughs (and extending off-site to the west). Due to its military nature, the historical mapping may be inaccurate for this feature.

A corn mill is indicated on the Principal Site, south of Haddington, in the historical maps dated between 1886 and 1948; and shown as disused in the historical map dated 1955.

The land uses surrounding the Site (relevant to contaminated land) include, in addition to farmland, former and current sewage works; a current pumping station; former unspecified

tanks; former unspecified depots; former smithies; a garage; a former brewery; electricity substations; a former windmill; and a former airfield (unspecified), indicated 240m north of the Cable Corridor, north of B1202, in the historical map dated 1951.

The planning records indicate the presence of various commercial activities and features (agricultural buildings; cattle buildings; and extension of sewage treatment works) on-site or in the proximity of the Site. The planning records also indicate that an application was approved in January 2001, for the construction of new settlement at land to the east of Camp Road and to the north of Moor Lane, comprising part of former RAF Swinderby. It is therefore assumed that appropriate remediation has been undertaken as part of the construction works for this scheme, and as such any contaminant source related to the former airfield (in this area) would have been addressed.

5. Review of Historical Report

5.1.1 AECOM has not been provided with previous historical reports related to the Site.

6. Regulated Activities and Statutory Consultation

6.1 Introduction

6.1.1 The key relevant features that characterise the Site and surrounding area are summarised in this section, along with an indication of the risk to the land quality of the Site.

6.1.2 Information on groundwater and surface water abstractions is detailed in Sections 3.3.8and 3.3.15and is not repeated here.

6.1.3 Generally, any regulated activities within 250m of the Site could, depending upon their nature, represent potential off-site sources of contamination. This section indicates the activities present within 250m. The extent of this study area has been developed using professional judgement on the basis that contamination migration beyond this distance is likely to be minimal. This principle has been applied in assessing similar sites.

6.2 Regulated Processes

6.2.1 **Table 9**summarises information on regulated processes contained in the Groundsure Report (Ref 10). The Groundsure Report collates data from a variety of sources including the Environment Agency and the BGS.

6.2.2 There were no instances of the following data identified within the information sources reviewed:

a. Current or recent petrol station;
b. Electricity cables;
c. Gas pipelines;
d. Site determined as Contaminated Land;
e. Regulated explosive sites;
f. Historical licensed industrial activities (Integrated Pollution Control);
g. Licenced pollutant release (Part A(2)/B);
h. Radioactive substance authorisations;
i. Pollutant release to surface waters (red list);
j. Pollutant release to public sewer;
k. List 1 Dangerous Substances;
l. Pollution inventory substances;
m. Pollution inventory waste transfers; and
n. Pollution inventory radioactive waste.

Table 9: Summary of Regulatory Information

Subject	Number Present		Details
	On site	0-250,	
Agency & Hydrological			
Recent industrial land uses	3	14	North western part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_A) Two recent industrial land uses are listed off-site, within 250m of the north western part of the Principal Site; and relate to a hire service (Cross Plant) (150m west of the Principal Site) and a pumping station (200m west of the Principal Site). Northern part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_B). One tank is listed on-site across the northern part Principal Site, at Housham Grange. North eastern part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_C). A pumping station is listed, adjacent north of the Principal Site, in Fosse Lane. Five recent industrial land uses are listed off-site, within 250m of the northern part of the Principal Site, east of Fosse Lane, and relate to consumer products (BHIUK) (50m east of the Principal Site); industrial products (rubber, silicones and plastics) (Handrail Padding) (90m east of the Principal Site); a business park (Fosse 46 Business Park) (110m east of the Principal Site); industrial products (vehicle components) (Mark Phillips Motor Cycle Clothing Ltd) (160m east of the Principal Site); and motoring activities (Lincs V W Commercial Vehicle Sales Ltd) (180m east of the Principal Site). Southern part of the Principal Site (GSIP-2023-14155-15965_D1). Sewage works, including sludge tanks, are listed along the southern boundary of Principal Site, in Clay Lane. Three recent industrial land uses are listed off-site, within 250m of the southern part of the Principal Site, in Bassingham, and relate to a pumping station (40m

Subject	Number Present		Details
			east of the Principal Site); a vehicle repair and servicing A R Motors) (150m east of the Principal Site); and distribution and haulage activity (Ritchie Services) (170m east of the Principal Site). Central part of the Principal Site, west of Thurlby (Groundsure Report GSIP-2023-14155-15965_D2) Slurry tanks are listed across the central part of Principal Site, south of Moor Lane. Sewage works and a pumping station are listed 90m west and 180m west of the Principal Site, respectively, east of Witham St Hughs. Eastern part of the Principal Site, between River Witham and River Brant (Groundsure Report GSIP-2023-14155-15965_F2) A pumping station is listed along the southern boundary of Principal Site, in Fen Lane. Note - Small electricity substations (when located over 100m from the Site) have not been included as features of relevance for contaminated land.
Control of Major Accident Hazards Sites (COMAH)	1	NA	North western part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_A) One COMAH site, associated with UK Border Agency, is listed bordering the Principal Site to the west, in Morton Hall.
Hazardous Substance storage/usage	NA	1	North western part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_A) One hazardous substance storage/usage consent is listed 210m west of the Principal Site; in Morton Hall; and relates to the alteration and extensions and siting of liquefied petroleum gas (LPG) tanks.
Licenced Discharge to Controlled Waters	13	24	North western part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_A) Three discharge consents are listed off-site, within 250m of the Principal Site, and relate to sewage or unspecified discharges into freshwater stream (Mill Dam Dyke or unknown tributaries of the River Witham). The only active consent appears to be located 20m north of the Principal Site, in Housham Wood Farm.

Subject	Number Present	Details
		Northern part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_B). One (revoked) discharge consent is listed on-site, at Field Farm House; and related to unspecified discharges into land. North eastern part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_C). One (active) discharge consent is listed on-site, along the northern site boundary, in Fosse Lane; and relates to sewage discharges from a pumping station into an unknown tributary of the River Witham. Three (revoked) discharge consents are listed off-site within 250m of the Principal Site, east of Fosse lane; and relate to sewage discharges or unspecified discharges into freshwater stream. Southern part of the Principal Site (GSIP-2023-14155-15965_D1). Two (revoked) discharge consents are listed on-site. One is located along the western site boundary and related to trade discharges (from mineral workings) into a tributary of the River Witham; one, located along the eastern site boundary, related to unspecified discharge into the River Witham. Thirteen discharge consent entries are listed at the location of the Bassingham Sewage Treatment Works (STW), along the southern boundary of the Principal Site, west of Bassingham. These entries are either for sewage discharges (final/treated effluent) or storm overflow/storm tanks into the River Witham. Two (revoked) discharge consent entries are listed 40m and 100m west of the Principal Site, at Tonge's Farm Quarry; and relate to trade discharges for mineral workings into tributary of the River Witham. Central part of the Principal Site, west of Thurlby (Groundsure Report GSIP-2023-14155-15965_D2) Eight discharge consent entries are listed on-site, along the eastern boundary of the Principal Site, at the Swinderby (Exraf) STW; and relate to either sewage discharges (final/treated effluent) or storm overflow/storm tanks into the River Witham. One (revoked) discharge consent entry is listed adjacent east of the Principal Site; and relate to sewage discharges (sewer storm overflow) from Thurlby pumping station into unspecified tributary of the River Witham.

Subject	Number Present		Details
			Central part of the Principal Site, west of Haddington (Groundsure Report GSIP-2023-14155-15965_I) One (revoked) discharge consent entry is listed on-site, west of River Witham; and relate to unspecified discharges. One (revoked) discharge consent entry is listed 200m east of the Principal Site, in Butt Lane; and relate to unspecified discharges into land. Eastern part of the Principal Site, between River Witham and River Brant (Groundsure Report GSIP-2023-14155-15965_F2) One (revoked) discharge consent entry is listed 130m north of the Principal Site, in Moor Covert; and relate to unspecified agricultural discharges.
Pollution Incidents (EA/NRW)	4	3	Northern part of the Principal Site (Groundsure Report GSIP-2023-14155-15965_B). One pollution incident is listed off-site, 200m north east from the Principal Site. This incident relates to release of natural ochre occurred in August 2003. The incident was classified as Category 4 (no impact to water, land or air). Southern part of the Principal Site (GSIP-2023-14155-15965_D1). Four pollution incidents are listed on-site, along the south eastern boundary of the Principal Site. These incidents relate to pollutants such as crude sewage or inert materials and wastes, occurred between June 2001 and October 2002. The incidents were classified as Category 4 (no impact to land or air) and Category 3 (minor impact to water). One incident is listed 40m east of the Principal Site; and related to release of oils and fuels occurred in June 2003. The incident was classified as Category 4 (no impact to land or air) and Category 3 (minor impact to water). Central part of the Principal Site, west of Thurlby (Groundsure Report GSIP-2023-14155-15965_D2) One pollution incident is listed on-site, west of Bassingham Road; and related to release of an unknown pollutant occurred in May 2002. The incident was classified as Category 3 (minor impact to water and land) and Category 4 (no impact to air).

Subject	Number Present		Details
			Central part of the Principal Site, west of Haddington (Groundsure Report GSIP-2023-14155-15965_I) One pollution incident is listed 10m east of the Principal Site, in Stone Lane; and related to release of household waste occurred in July 2001. The incident was classified as Category 3 (minor impact to land) and Category 4 (no impact to air and water). Western part of the Cable Corridor, from Broughton Lane to south of Coleby (Groundsure Report GSIP-2023-14155-15965_E2) One pollution incident is listed 230m north of the Cable Corridor; and related to release of inorganic chemical or products occurred in April 2002. The incident was classified as Category 3 (minor impact to land) and Category 4 (no impact to air and water).
List 2 Dangerous Substances	NA	2	Central part of the Principal Site, west of Thurlby (Groundsure Report GSIP-2023-14155-15965_D2) Features that discharge substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015 are indicated 40m north of the Principal Site. These includes Danwood Group Limited and Swinderby(exraf) STW, both listed as not active.
Part A(1) Industrial Activities	NA	2	Central part of the Cable Corridor, from south of Coleby to Green Man Road. (Groundsure Report GSIP-2023-14155-15965_G) Two (superseded) entries are indicated 140m north of the Cable Corridor, at Boothby Health Farm, for intensive farming (production pigs).

6.3 Licensed Waste Management Facilities

6.3.1 An attempt has been made to identify any landfilling operations, past and present, that have taken place in the vicinity (within 250m) of the Site.

6.3.2 A digestate holding lagoon is indicated in the southern extent of the Site, south of Moor Lane. Two transfer station entries are indicated 20m and 100m east of the northern part of the Site, north of Haddington. The nearest to the Site was operated by Ringway Infrastructure Services Limited and the licence is indicated as surrendered. The other is shown as currently operated by Lincolnshire County Council. A sewage sludge treatment is shown 200m north of the Cable Corridor, in Heat Lane, currently operated by Digit Resource Management Ltd.

6.3.3 In addition, several permits for activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit are located on-site and within 250m of the Site.

6.3.4 **Table 10** provides a summary of the identified licensed waste management facilities located within 250m of the Site.

Table 10: Licensed Waste Management Facilities (<250 m of Site)

Groundsure Report	Distance and Direction	Name / Category	Operator or license holder	Status / Dates
GSIP-2023-14155-15965_D2_1	On-site, southern extent of the Site, south of Moor Lane	South Farm Digestate Holding Lagoon / storage of anaerobic digestate 75,000 total	H And S Roe and Sons Farms Limited	Issued / 13 August 2019
GSIP-2023-14155-15965_C_1	20m east of the northern part of the Site, north of Haddington	Ringway Infrastructure Services Limited (formerly Sky Lane) / household, commercial and industrial waste transfer station	Ringway Infrastructure Services Limited	Surrendered / 4 May 2005
GSIP-2023-14155-15965_C_1	100m east of the northern part of the Site, north of Haddington	Haddington Lane / transfer station taking non-biodegradable wastes	Lincolnshire County Council	Issued / 28 July 2020

Groundsure Report	Distance and Direction	Name / Category	Operator or license holder	Status / Dates
GSIP-2023-14155-15965_G_1	200m north of the Cable Corridor, in Heat Lane	Wind Pump Farm / sewage sludge treatment	Digit Resource Management Ltd	Issued / 12 July 2018

6.4 Sensitive Land Uses

6.4.1 The Groundsure Report identifies adjacent environmental designations such as Sites of Special Scientific Interest (SSSI), Conserved wetland sites (Ramsar sites), Special Areas of Conservation, Special Protection Areas, National Nature Reserves, Local Nature Reserves, Designated Ancient Woodland, Biosphere Reserves, Forest Parks, Marine Conservation Zones, Green Belt, Proposed Ramsar sites, Possible Special Areas of Conservation, Potential Special Protection Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones, SSSI Impact Risk Zones and SSSI Units; and visual and cultural designations such as World Heritage Sites, Area of Outstanding Natural Beauty, National Parks, Listed Buildings, Conservation Areas and Scheduled Ancient Monuments.

6.4.2 A designated ancient woodland, Tunman/housham Woods, is located adjacent to the north of the Site, at the north western and northern part of the Principal Site.

6.4.3 The Site is located within a nitrate vulnerable zone.

6.4.4 A SSSI Impact Risk Zone, which applies to infrastructure and air pollution, is located across a section of the northern and all the north eastern part of the Principal Site, of the Site.

6.4.5 There are no other sensitive land uses within 250m of the Site.

6.5 Regulatory Consultation

6.5.1 No regulatory consultation has been undertaken.

7. Site Reconnaissance

7.1.1 An external inspection of the Site was completed by a suitably qualified and experienced AECOM Engineer on 24th of October 2023. The aim of the visit was to identify the range of activities carried out on the Site and any obvious potential sources of ground contamination.

7.1.2 A photographic record of the visit is included as Annex E. Maps showing the photo locations are appended in Annex A.

7.1.3 Due to its size, the site walkover took place at several locations spread evenly throughout the Site. Access to some parts of the Site was restricted due to hedgerows, foliage, and fencing.

7.1.4 The Site consists of agricultural fields used for crops or grazing (refer to Photo 2c in Annex E) and some wooded areas. A number of roads, paths and farm buildings (refer to Photo 16a, 17a, 17b and 17c in Annex E) are present within the Site or in the immediate surrounding areas. Sewage treatment works were observed along the southern boundary of the Principal Site, west of Bassingham (refer to Photos 20a, 20b, 20c, 20d and 20e in Annex E).

7.1.5 Several surface water drainage ditches have been identified across the Site (refer to Photos 10a and 10c in Annex E). No evidence of water contamination was observed in the surface water. Flooded fields have been identified in few locations, across the western part of the Cable Corridor (refer to Photos 9a and 9b in Annex E) and in the proximity of the River Witham (refer to Photos 12b and 12c in Annex E).

7.1.6 Electrical pylons are located along the Cable Corridor (refer to Photos 4a, 4b and 4c in Annex E). Unspecified pipes have been identified across the southeastern section of the Cable Corridor (refer to Photos 6c, 7a and 7b in Annex E).

8. Preliminary Ground Model

8.1.1 Based on the review of published geological and hydrogeological information and a selection of historical borehole records, the ground conditions within the Site are considered to comprise the following sequence presented in **Table 11**.

Table 11: Preliminary Ground Model

Geology	Description	Thickness	Groundwater
Superficial Deposits			
Made Ground	In agricultural areas likely to be mainly reworked natural soil with some anthropogenic materials such as brick, concrete, and pottery.	Variable.	Not reported.
River terrace Deposits (undifferentiated)	Sand and gravel, locally with lenses of silt, clay or peat.	Variable. 3.6m proven thickness in SK96SW6 (east of Haddington)	Reported at +5.8m AOD (November 1973) SK96SW6 (east of Haddington)
Balderton Sand and Gravel Member of the Trent Valley Formation	Sand and gravel.	Variable, typically 6 to 8m; maximum approximately 9m. 5.9m proven thickness in SK86SE7 (east of Morton)	Not reported.
Eagle Moor Sand and Gravel Member of the Trent Valley Formation	Sand and gravel.	Variable, typically 2 to 3m; maximum approximately 6m.	Not reported.
Fulbeck Sand and Gravel Member of the Trent Valley Formation	Sand and gravel.	Variable, typically 1 to 2m; maximum approximately 5m.	Not reported.
Bedrock			
Scunthorpe Mudstone Formation – Mudstone and Limestone – Interbedded.	Grey, variably calcareous and silty, blocky or fissile mudstone with thin beds of argillaceous limestone and	To approximately 128m	Not reported.

Geology	Description	Thickness	Groundwater
	calcareous siltstone.		
Charmouth Mudstone Formation - Mudstone	Dark grey laminated shales, and dark, pale and bluish grey mudstones; locally concretionary and tabular limestone beds; abundant argillaceous limestone.	To approximately 335m	Not reported.
Whitby Mudstone Formation - Mudstone	Medium and dark grey fossiliferous mudstone and siltstone, with thin siltstone or silty mudstone beds and rare fine-grained calcareous sandstone beds; dense, smooth argillaceous limestone nodules very common at some horizons; phosphatic nodules at some levels.	To approximately 120m	Not reported.
Lower Lincolnshire Limestone Member of the Lincolnshire Limestone Formation	Limestones and wackestone and packstone. Commonly includes sandy limestone or calcareous sandstone in basal part and contains substantial units of mudstone, particularly from the Lincoln area northwards.	Variable, maximum approximately 20 m.	Not reported.
Lincolnshire Limestone Formation - Limestone	Limestone, typically calcilutites, and wackestones and packstones in the lower part and	Variable, maximum approximately 30 m.	Not reported.

Geology	Description	Thickness	Groundwater
	high energy ooidal and shell fragmental grainstones in the upper part.		

9. Initial Conceptual Site Model

9.1 Introduction

9.1.1 this section is aimed at identifying possible risks, if any, arising from substances used or deposited on-site, or from other sources of land contamination. Both past and current potentially contaminative land uses have been considered. It is based on the Proposed Development which will comprise the solar PV electricity generating facility, associated electrical equipment, cabling and on-site energy storage facilities as identified in Section 1.1. The aim of the initial CSM is to inform future decision making and the design of any future ground investigation (if needed).

9.2 Assessment Framework

9.2.1 The Site, in terms of potential land contamination, will be regulated by the Local Planning Authority (North Kesteven District Council), taking account of the NPPF 2023 (Ref 2), with the Environment Agency, Natural England and Historic England acting as potential statutory consultees.

9.2.2 Environmental liabilities can arise through provisions contained within statutory legislation including Part 2A of the Environmental Protection Act 1990 (Ref 3), the Environmental Damage (Prevention and Remediation) (England) Regulations 2015 (Ref 35), the Water Resources Act 1991 (Ref 36), the Environmental Permitting (England and Wales) Regulations 2016 and the Water Act 2003 (Ref 37).

9.2.3 Current industry good practice recommends that the determination of health hazards due to contaminated land is based on the principle of risk assessment, as outlined in the Statutory Guidance to Part 2A (2012) and LCRM (Ref 7).

9.2.4 The “suitable for use” approach is adopted for the assessment of contaminated land where remedial measures are undertaken where unacceptable risks to human health or the environment are realised considering the use (or proposed use) of the land in question and the environmental setting. The proposed end-use for the Site is the installation of PV panels and on-site energy storage facilities.

9.2.5 The risk assessment process for environmental contaminants is based on a source-pathway-receptor analysis. These terms can be defined as follows:

a. Source: hazardous substance that has the potential to cause adverse impacts;

b. Pathway: route whereby a hazardous substance may come into contact with the receptor: examples include ingestion of contaminated soil and leaching of contaminants from soil into watercourses; and

c. Receptor: target that may be affected by contamination: examples include human occupants/ users of site, water resources (surface waters or groundwater), or structures.

9.2.6 For a risk to be present, there must be a relevant/viable contaminant linkage; i.e. a mechanism whereby a source impacts on a sensitive receptor via a pathway.

9.2.7 The following sections detail the initial CSM which has been developed for the Site with a view to assessing the potential risks/liabilities and constraints associated with the Site in its current condition prior to any proposed development. Risks associated with the Proposed Development have also been assessed based on a future land use scenario as a solar farm, including any potential sources of contamination, potential receptors and potential contaminant pathways identified during this desk-based assessment.

9.3 Sources of Potential Contamination

On Site – Principal Site

9.3.1 The potential for localised contamination has been identified on the Site. This includes farm buildings and yards where fuel and agricultural materials were/are stored. Farm buildings (Housham Grance Farm, Church Farm and two farms both named River Farm) are currently located across the northern and southern parts of the Principal Site.

9.3.2 The historical review identified a corn mill on-site, south of Haddington. A digestate holding lagoon (slurry tanks) is indicated across the central part of Principal Site, south of Moor Lane.

9.3.3 Historical small pits/quarries have been identified locally on-site, which have been filled with a variety of (potentially unlicensed) waste materials.

9.3.4 Swinderby Airfield was located across the central part of the Principal Site, to the east of Witham St Hughs (and extending off-site to the west).

9.3.5 Potential contaminants associated with the identified potential sources above include metals, semi-metals, asbestos, organic and inorganic compounds. In addition, there is the potential for landfill gases such as methane or carbon dioxide and leachate. Per-and polyfluoroalkyl substances (PFAS) may also be associated with the former airfield, for example in consideration of the potential use of firefighting foams. Contamination from pathogens (micro-organisms) may be associated with the digestate holding lagoon (slurry tanks).

9.3.6 Pollution Incidents to Controlled Waters identified on-site, along the south eastern boundary of the Principal Site, occurred more than 20 years ago and are therefore not considered to be of concern.

On Site – Cable Corridor

9.3.7 Former pits (Coleby Low Field Sand Pit and Boothby Graffoe Pit) (potentially infilled) have been identified across the Cable Corridor. Infilled land may be also associated with an area of cutting, southwest of Coleby. A non-coal mining area is indicated extending within the Site, south of Coleby. Potential contaminants associated with infilled land include metals, semi-metals, asbestos, organic and inorganic compounds.

Off Site – Principal Site

9.3.8 The following potential sources of off-site contamination have been identified as requiring consideration for the Principal Site:

a. Farm buildings located adjacent to the Principal Site at various locations.

b. Former pump house (adjacent west).

c. A current pumping station adjacent north of the Principal Site, in Fosse Lane, Thorpe on the Hill.

d. Former sewage works, adjacent northwest of the Principal Site.

e. Current sewage works, adjacent south of the Principal Site, in Clay Lane and adjacent west of the Principal Site in Witham St Hughs.

f. Former household, commercial and industrial waste transfer station (20m east).

9.3.9 Most of the historical and recent industrial land uses entries identified in this assessment are small scale or located at a certain distance from the Principal Site; hence unlikely to be a pertinent off-site source. These include:

a. Former unspecified tanks (130m west, 120m east, 130m east and 230m south); former unspecified depots (170m northeast and 40m east); former smithies (20m east and 170m north); a former garage (40m north); a former brewery (80m east); sewage works (20m west); electricity substations (90m and 100m west); and a former windmill (140m south).

b. Recent industrial land uses, including hire service (150m west); pumping station (40m east and 200m west); consumer products (50m east); industrial products (rubber, silicones and plastics) (90m east); a business park (Fosse 46 Business Park) (110m east); industrial products (vehicle components) (160m east); motoring activities (180m east), a pumping station (40m east); a vehicle repair and servicing (150m east); and distribution and haulage activity (170m east).

c. Current transfer station taking non-biodegradable wastes (100m east),

9.3.10 Small pits quarries adjacent the Principal Site have not been considered as potential sources given the age and the size of these features.

Off Site – Cable Corridor

9.3.11 No off-site source has been considered relevant for the Cable Corridor.

9.3.12 The unspecified heap (80m north of the Cable Corridor) and cuttings (160m south of the Cable Corridor) would be excluded from the assessment, given the distance and the age of these features.

9.3.13 Plausible linkage would be also unlikely for the former unspecified airfield (240 north), former intensive farming (production pigs) (140m north), given the distance of these potential sources from the Cable Corridor. These sources would be no longer considered in the assessment.

9.4 Summary of potential sources

9.4.1 **Table 12** indicates the potential contaminants that may be associated with the current land use.

Table 12: Potential Sources of Contamination

Source Reference	Location	Potential Sources	Associated Contaminants of Potential Concern (CoPC)
Principal Site			
S1	On Site	Current farm buildings and yards where fuel and agricultural materials were/are stored. Made Ground, including infilled pits/quarries/former ponds). Former corn mill. Digestate holding lagoon (slurry tanks).	Heavy metals and inorganics (including sulphate, nitrate, phosphate, ammoniacal nitrogen, acidic/alkaline pH), total petroleum hydrocarbon (TPH), polyaromatic hydrocarbons (PAH), semi-volatile organic compound (SVOCs), Volatile Organic Compound (VOCs), asbestos and asbestos containing materials (ACMs), pesticides and fertilisers. Made Ground and alluvium represent potential sources of ground gas. Possibly helped by the absence of properties across most of the Site, most vents naturally to atmosphere. Pathogens and dangerous gases, such as hydrogen sulphide, methane, ammonia can be associated with the digestate holding lagoon (slurry tanks).
S2	On Site	Former Swinderby Airfield	Heavy metals and inorganics (including sulphate, nitrate, phosphate, ammoniacal nitrogen, acidic/alkaline pH), TPH, SVOCs, VOCs,

Source Reference	Location	Potential Sources	Associated Contaminants of Potential Concern (CoPC)
			asbestos, ACMs, PCB and PFAS.
S3	Off Site, various locations.	Current and former farm buildings and yards where fuel and agricultural materials were/are stored.	Heavy metals and inorganics (including sulphate, nitrate, phosphate, ammoniacal nitrogen, acidic/alkaline pH), TPH, SVOCs, VOCs, asbestos, ACMs, pesticides and fertilisers.
S4	Off Site, 20m east of the northern part of the Principal Site	Waste management facility.	Heavy metals and inorganics (including sulphate, nitrate, phosphate, ammoniacal nitrogen, acidic/alkaline pH), TPH, SVOCs, VOCs, asbestos, ACMs.
S5	Off Site, various locations.	Former and current sewage works. Former pump house. Current pumping station.	Heavy metals, micro-organisms.
Cable Corridor			
S6	On Site, various locations.	Made Ground (infilled pits/infilled land/quarries)	Metals, TPHs, PAHs, ACM, SVOCs, VOCs, sulphate.

9.5 Potential Receptors

On-Site Receptors

9.5.1 The principal human receptors on-site are considered to be current site users, including; residents, farmers, site visitors and general public on the Site using the public rights of way (PRoW); construction and maintenance workers; and future site users, including maintenance workers, and general public on the Site using the PRoW, as these will remain following development.

9.5.2 The controlled water receptors include groundwater (Secondary A aquifers of the Alluvium, River terrace Deposits and Trent Valley Formation; Secondary B aquifers of the Scunthorpe Mudstone Formation and Charmouth Mudstone Formation; and Principal aquifer of the Lincolnshire Limestone Formation). Surface water receptors include River Witham, River Brant, drains and ponds.

9.5.3 Property receptors include existing buildings, crops and livestock; and future PV mounting structure and cables.

9.5.4 There are no sensitive ecological receptors associated with the Site.

Off-Site Receptors

9.5.5 The principal human receptors off-site are considered to be neighbours in residential/commercial properties adjacent to the Site.

9.5.6 Sensitive ecological receptors include Tunman/Housham Woods designated ancient woodland, located adjacent north of the Principal Site.

9.5.7 Property receptors include farm buildings, crops and livestock.

Summary of Potential Receptors

9.5.8 Potential receptors associated with the Site are shown on **Table 13**.

Table 13: Potential receptors

Receptor Reference	Receptor	Description
R1	Human Health: Acute[1]	Construction and maintenance workers
R2	Human Health	Current Site Users: residents/farmers/site visitors/general public on the Site using the PRoW
R3	Human Health	Future Site Users: farmers/site visitors/trespassers/general public on the Site using the PRoW
R4	Human Health	Adjacent site users during earthworks: neighbours in residential/commercial properties adjacent to the Site and general public in the areas adjacent the Site
R5	Water Environment: Aquifers	Secondary A aquifers of the Alluvium, River terrace Deposits and Trent Valley Formation. Secondary B aquifers of the Scunthorpe Mudstone Formation and Charmouth Mudstone Formation. Principal aquifer of the Lincolnshire Limestone Formation

[1] Refer to a considerable exposure to contaminated land in a short period of time (for example during construction activities).

Receptor Reference	Receptor	Description
R6	Water Environment: Surface waters	River Witham, River Brant, drains and ponds
R7	Sensitive ecological receptors	Tunman/Housham Woods designated ancient woodland
R8	Buildings & Infrastructure: Concrete	Future proposed infrastructures (PV Mounting Structure and cables)
R9	Buildings & Infrastructure: Structures	Proposed structures
R10	Buildings & Infrastructure: Services	Potable water supply pipes and other services
R11	Property	Crops and livestock

9.6 Potential Pathways

On-Site Pathways

9.6.1 The human health exposure pathways that are considered viable based on UK guidance (Environment Agency, Contaminated Land Exposure Model "CLEA UK") (Ref 38) are listed below:

a. Direct contact, dermal absorption or ingestion of soil;

b. Ingestion of fruit and vegetables and/or waters;

c. Inhalation of dust particulates derived from soils; and

d. Migration of hazardous gases/vapours via permeable strata into confined spaces and/or service/utility trenches (asphyxiation/ explosion).

9.6.2 The evaluation of exposure pathways for controlled waters receptors requires an understanding of geological and hydrogeological pathways beneath the Site. The controlled waters pathways considered viable with respect to the Site are as follows:

a. Spillage/loss/run off from surface direct to receiving water;

b. Leaching of chemicals and vertical migration via permeable unsaturated strata to groundwater; and

c. Lateral migration in groundwater and baseflow into surface waters.

9.6.3 The ecosystem pathways (flora and fauna) considered viable with respect to the Site are as follows:

a. Vertical and lateral groundwater migration to the ecological designations off-site; and

b. Migration of dust to ecological designation off-site.

9.6.4 The property receptor (crop and livestock) pathways considered viable with respect to the Site are as follows:

a. Direct contact, dermal absorption or ingestion of soil/ingestion of fruit and vegetables and/ or waters/inhalation of dust particulates derived from soils; and

b. uptake via root system.

9.6.5 The buildings and infrastructure pathways considered viable with respect to the Site are as follows:

a. Direct contact of buried concrete (proposed PV Mounting Structure and cables) with contaminated soils (i.e. hydrocarbons) and aggressive ground conditions (pH and sulphate); and

b. Migration of hazardous gases/vapours via permeable strata into confined spaces and service/utility trenches.

Summary of Potential Pathways

9.6.6 Potential pathways associated with the Proposed Development are shown in **Table 14**.

Table 14: Potential Pathways

Pathway Reference	Receptor	Description
P1	Human Health / Property: People (Human Health) and animals (Property)	Direct Pathway: direct contact, dermal absorption or ingestion of soil.
P2	Human Health / Property: People (Human Health) and animals (Property)	Indirect Pathway: inhalation of soil particulates or vapour derived from soils.
P3	Human Health: People (Human Health)	Indirect Pathway: migration of hazardous gases/vapours via permeable strata into confined spaces and/or services trenches (asphyxiation/explosion)
P4	Water Environment: Surface water	Direct Pathway: spillage/loss/run off from surface direct to receiving water
P5	Water Environment: Groundwater	Indirect Pathway: leaching of chemicals and vertical migration via permeable unsaturated strata to groundwater
P6	Water Environment: Surface water / Groundwater	Indirect Pathway: lateral migration in groundwater and baseflow into surface waters

Pathway Reference	Receptor	Description
P7	Ecosystems: Flora and fauna in ecological designations	Indirect Pathway: uptake via root system and ingestion
P8	Buildings and Infrastructure: Concrete	Direct Pathway: direct contact of buried concrete with contaminated soils (i.e. hydrocarbons) and aggressive ground conditions (pH and sulphate).
P9	Buildings and Infrastructure: Supply pipes	Direct Pathway: direct contact of services and supply pipes with contaminated soils.
P10	Buildings & Infrastructure: Structures	Indirect Pathway: Migration of hazardous gases/vapours via permeable strata into enclosed spaces and service/utility trenches.

10. Environmental Risk Assessment

10.1 Risk Assessment Principles

10.1.1 Current industry good practice recommends that the determination of hazards due to contaminated land is based on the principle of risk assessment, as outlined in the Environment Agency guidance LCRM (Ref 7).

10.1.2 For a risk to be present, there must be a viable contaminant linkage (at the current site condition and/or during construction and/or when the Proposed Development is complete and operational); i.e. a mechanism whereby a source impacts on a sensitive receptor via a pathway.

10.1.3 Assessments of risks associated with each of these contaminant linkages are discussed in the following sections. The methodology adopted within this PRA does not intend to reflect the EIA Methodology, as described in **PEI Report Volume 1, Chapter 5: EIA Methodology and Consultation**. Using criteria broadly based on those presented in in Section 6.3 of the CIRIA Report "Contaminated Land Risk Assessment: A Guide to Good Practice" (CIRIA Report C552) (Ref 39), the magnitude of the risk associated with potential contamination at the Site has been assessed. To do this an estimate is made of:

a. The magnitude of the potential consequence (i.e. severity); and

b. The magnitude of probability (i.e. likelihood).

10.2 Risk Assessment Framework

10.2.1 The severity of the risk is classified according to the criteria in **Table 15**

Table 15: Description of Severity of Risk

Term	Description
Severe	• Highly elevated concentrations likely to result in significant harm to human health. • Catastrophic damage to crops, buildings or property (e.g. by explosion). • Equivalent to EA Category 1 pollution incident including persistent and/or extensive effects of water quality. Major damage to aquatic or other ecosystems.
Medium	• Elevated concentrations which could result in significant harm to human health. • Significant damage to crops, buildings or property (e.g. damage to building rendering it unsafe). • Equivalent to EA Category 2 pollution incident including significant effect on water quality. Significant damage to aquatic or other ecosystems.

Term	Description
Mild	• Exposure to human health unlikely to lead to significant harm. • Minor damage to crops, buildings or property (e.g. surface spalling to concrete). • Equivalent to EA Category 3 pollution incident including minimal or short-lived effect on water quality. • Minor or short-lived damage to aquatic or other ecosystems.
Minor	• No measurable effect on humans. • Repairable effects of damage to buildings, structures and services. • Equivalent to insubstantial pollution incident with no observed effect on water quality of ecosystems.

10.2.2 The probability of the risk occurring is classified according to the criteria in **Table 16**.

Table 16: Likelihood of Risk Occurrence

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

10.2.3 An overall evaluation of the level of risk is gained from a comparison of the severity and probability, as shown in **Table 17**.

Table 17: Risk based on Comparison of Likelihood and Severity

		Severity			
		SEVERE	**MEDIUM**	**MILD**	**MINOR**
Likelihood	**HIGH**	Very High	High	Moderate	Low
	LIKELY	High	Moderate	Moderate/Low	Low
	LOW	Moderate	Moderate/Low	Low	Very Low
	UNLIKELY	Moderate/Low	Low	Very Low	Very Low

10.3 Preliminary Risk Assessment

10.3.1 A CSM illustrating plausible contaminant linkages has been formulated for the Site. The qualitative preliminary risk assessment of the possible linkages of the above sources (S1 to S6), transport pathways (P1 to P10) and receptors (R1 to R11) is provided in the **Table 18**and **Table 19**.

10.3.2 The level of risk is determined based on the current condition of the Site (i.e. the effects of mitigation measures are not included).

10.3.3 The preliminary risk assessment undertaken within this section does not consider acute linkages for construction and maintenance workers. It is anticipated that these acute linkages will be managed by appropriate health and safety measures. As construction workers are protected under existing health and safety legislation, any potential effects are considered to be temporary and will be avoided, prevented and reduced through the implementation of standard mitigation measures to be incorporated into a Construction Environmental Management Plan (CEMP). Work will be undertaken in accordance with relevant Construction Design Management (CDM) Regulations 2015 (Ref 40).

Table 18: Potential Sources, Pathways and Receptors for the Principal Site

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
S1: On-site, current farm buildings and yards where fuel and agricultural materials were/are stored. Made Ground (infilled pits/quarries/former ponds). Former corn mill. Current digestate holding lagoon. *Heavy metals and inorganics (including sulphate, nitrate, phosphate, ammoniacal nitrogen, acidic/alkaline pH), TPH, PAH, SVOCs, VOCs, asbestos and ACMs, pesticides and fertilisers.* *Ground gases (such as methane or carbon dioxide) and leachate.*	P1: Direct contact, dermal absorption or ingestion of soil.	R2: Current Site Users	Mild	Unlikely	Very Low	Localised contamination and Made Ground may be associated with current and former farm buildings and yards where fuel and agricultural materials were/are stored. Made ground of unknown quality may be associated with infilling of the former pits/quarries/ponds on the Principal Site. The volume of the infill is relatively small and unlikely to represent a significant widespread issue. Current users are farmers and the general public who might be exposed to soils. Future users include site visitors/trespassers/general public on the Principal Site using the PRoW and who might be exposed to soils. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable, given the

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
						current use of the Principal Site as agricultural fields and the proposed use as a solar farm.
		R3: Future Site Users	Mild	Unlikely	Very Low	
	P2: Inhalation of soil particulates and vapour derived from soils.	R2: Current Site Users	Mild	Unlikely	Very Low	Although limited potential for ground contamination has been identified at the Principal Site, the presence of ACM in the farm buildings located on-site or within Made Ground cannot be discounted. Limited potential for soil vapour exists at the Principal Site, given the age of the potentially infilled land and Made Ground. Therefore, risk of inhalation of soil particulates and vapours is considered to be very low. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. The digestate holding lagoon, registered as

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
						licensed waste management facility, can release dangerous gases, including hydrogen sulphide, methane, ammonia, and other harmful gases. Cautions is required when working adjacent this feature.
		R3: Future Site Users	Mild	Unlikely	Very Low	
	P3: Migration of hazardous gases/vapours via permeable strata into confined spaces (asphyxiation/ explosion)	R2: Current Site Users	Medium	Unlikely	Low	Ground gas accumulation and potential explosion risk is generally unlikely at the Principal Site, given that limited potential sources of hazardous gases/vapours have been identified. The Principal Site includes current farm buildings. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
		R3: Future Site Users	Medium	Unlikely	Low	Ground gas accumulation and potential explosion risk is generally unlikely at the Principal Site, given that limited potential sources of

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
						hazardous gases/vapours have been identified. The Proposed Development will include switch housing/control room in terms of structures. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P5: Leaching of chemicals and vertical migration via permeable unsaturated strata to groundwater	R5: Aquifers (Principal / Secondary A / Secondary B)	Medium	Unlikely	Low	Complete pathways may be present but current information suggests a gross contaminant source is unlikely to be present. The risk of harm to groundwater from leaching of contaminants is considered low.
	P6: Lateral migration in groundwater and baseflow into surface waters	R6: Surface waters	Minor	Unlikely	Very Low	Complete pathways may be present but current information suggests a gross contaminant source is unlikely. The risk of harm to surface waters from lateral migration in groundwater and baseflow into surface waters is very low.

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
	P7: Uptake via root system and ingestion	R7: Ecological Receptors	Minor	Unlikely	Very Low	Complete pathways may be present but current information suggests a gross source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
		R11: Property (crops and livestock)				
	P8: Direct contact of buried concrete with contaminated soils (i.e. hydrocarbons) and aggressive ground conditions (pH and sulphate).	R8: Buildings and Infrastructure: Concrete (PV Mounting Structure and cables)	Minor	Unlikely	Very Low	Complete pathways may be present but current information suggests a gross contaminant source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. Potential risk from direct contact with contaminated soils for buried concrete and infrastructure (PV Mounting Structure and cables) is considered very low.

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
	P9: Direct contact of services and supply pipes with contaminated soils.	R10: Buildings and Infrastructure: Services (potable water supply pipes and other services)	Minor	Unlikely	Very Low	Complete pathways may be present for water supply pipes at properties located on-site and off-site from on-site sources, but current information suggests a gross contaminant source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
	P10: Migration of hazardous gases/vapours via permeable strata into enclosed spaces and service/utility trenches	R9: Buildings and Infrastructure: Structures	Mild	Unlikely	Very Low	Ground gas accumulation and potential explosion risk is generally unlikely at the Principal Site, given that limited potential sources of hazardous gases/vapours have been identified. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
S2: Former Swinderby Airfield. *Heavy metals and inorganics (including sulphate, nitrate, phosphate, ammoniacal nitrogen, acidic/alkaline pH), TPH, PAH, SVOCs, VOCs, asbestos, ACMs, PCB and PFAS*.	P1: Direct contact, dermal absorption or ingestion of soil.	R2: Current Site Users	Medium	Low	Moderate / Low	Swinderby Airfield is indicated to have been located across the western part of the Principal Site, north of Moor Lane. Current users are farmers and the general public who might be exposed to soils. Future users include site visitors/trespassers/general public on the Principal Site, using the PRoW and who might be exposed to soils. Contaminant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so, given the current use of the Site as agricultural fields and the proposed use of the Site as a solar farm.
		R3: Future Site Users	Medium	Low	Moderate / Low	
	P2: Inhalation of soil particulates and vapour derived from soils.	R2: Current Site Users	Medium	Low	Moderate / Low	Therefore, risk of inhalation of soil particulates and vapours is considered to be moderate / low in areas historically occupied by the airfield.

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
						Contaminant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so, given the current use of the Site as agricultural fields and the proposed use of the Site as a solar farm.
		R3: Future Site Users	Medium	Low	Moderate / Low	
	P3: Migration of hazardous gases/vapours via permeable strata into confined spaces (asphyxiation/ explosion)	R2: Current Site Users	Minor	Unlikely	Very Low	There are no structures or buildings across areas of the Principal Site historically occupied by the airfield. Ground gas accumulation and potential explosion risk is very low in this part of the Site.
		R3: Future Site Users	Medium	Low	Moderate / Low	Potential sources of hazardous gases/vapours may be present in the areas historically occupied by the airfield. The Proposed Development will include switch housing/control room in terms of structures. Contaminant linkage may be present and there is a possibility of the risk occurring, although there is

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
						no certainty that it will do so, given the proposed use of the Site as a solar farm.
	P5: Leaching of chemicals and vertical migration via permeable unsaturated strata to shallow groundwater	R5: Aquifers (Principal / Secondary A / Secondary B)	Medium	Low	Moderate / Low	Leaching of chemicals and vertical migration via unsaturated strata to groundwater may occur in areas historically occupied by the airfield. The risk of harm to groundwater from leaching of contaminants is considered moderate / low in these areas.
	P6: Lateral migration in groundwater and baseflow into surface waters	R6: Surface waters	Minor	Unlikely	Very Low	River Witham is over 800m east of the areas of the Site historically occupied by the airfield. Complete pathways are unlikely. The risk of harm to surface waters from lateral migration in groundwater and baseflow into surface waters is very low.
	P7: Uptake via root system and ingestion	R11: Property (crops and livestock)	Minor	Unlikely	Very Low	Sensitive ecological receptors (Tunman/Housham Woods (designated ancient woodland)) are over 2km away from the areas of the Principal Site historically

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
						occupied by the airfield. Complete pathways are unlikely.
	P8: Direct contact of buried concrete with contaminated soils (i.e. hydrocarbons) and aggressive ground conditions (pH and sulphate).	R8: Buildings and Infrastructure: Concrete (PV Mounting Structure and cables)	Minor	Unlikely	Very Low	Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable. Potential risk from direct contact with contaminated soils for buried concrete and infrastructure (PV Mounting Structure and cables) is considered very low.
	P9: Direct contact of services and supply pipes with contaminated soils.	R10: Buildings and Infrastructure: Services (potable water supply pipes and other services)	Minor	Low	Very Low	No properties are located in the part of the Site historically occupied by the airfield. The risk for services located adjacent the DOC Site in considered very low.
	P10: Migration of hazardous gases/vapours via permeable strata into enclosed spaces and service/utility trenches	R9: Buildings and Infrastructure: Structures	Medium	Low	Moderate / Low	Potential sources of hazardous gases/vapours may be present in the areas historically occupied by the airfield. The Proposed Development will include switch housing/control room in terms of structures. No buildings are currently

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Justification
						present across the areas of the Site formerly occupied by the airfield. Contaminant linkage may be present and there is a possibility of the risk occurring, although there is no certainty that it will do so, given the proposed use of the Site as a solar farm.
S3: Off Site; current and former farm buildings and yards where fuel and agricultural materials were/are stored. S4: Off waste management facility. S5: Off Site former and current sewage works. Former pump house. Current pumping station. *Heavy metals and inorganics (including sulphate, nitrate, phosphate, ammoniacal nitrogen, acidic/alkaline pH), TPH, PAH, SVOCs, VOCs, asbestos, ACMs, pesticides and fertilisers.* *Pathogens.*	P5: Leaching of chemicals and vertical migration via permeable unsaturated strata to groundwater	R5: Aquifers (Principal / Secondary A / Secondary B)	Medium	Unlikely	Low	Complete pathways may be present but current information suggests that this is unlikely. The risk of harm to groundwater from leaching of contaminants and migration to the Principal Site is considered low for groundwater.

Table 19: Potential Sources, Pathways and Receptors for the Cable Corridor

Source	Pathway	Receptor	Potential Survey	Likelihood of Occurrence	Potential Risk	Justification
S6: Made Ground (infilled pits/infilled land/quarries) Metals, TPHs, PAHs, ACM, SVOCs, VOCs, sulphate.	P1: Direct contact, dermal absorption, or ingestion of soil.	R2: Current Site Users	Mild	Unlikely	Very Low	Made ground of unknown quality may be present across the Cable Corridor, associated with the local roads and with potential infilling of the former pits/quarries on the Site. The volume of the infill is relatively small and unlikely to represent a significant widespread issue. Current and future users are general public who might be exposed to soils. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.
		R3: Future Site Users	Mild	Unlikely	Very Low	
	P5: Leaching of chemicals and vertical migration via	R5: Aquifers	Medium	Unlikely	Low	Complete pathways may be present but current information

Source	Pathway	Receptor	Potential Survey	Likelihood of Occurrence	Potential Risk	Justification
	permeable unsaturated strata to groundwater					suggests a gross source is unlikely. The risk of harm to groundwater from leaching of contaminants is considered low for groundwater.
	P6: Lateral migration in groundwater and baseflow into surface waters	R6: Surface waters	Minor	Unlikely	Very Low	Complete pathways may be present but current information suggests a gross source is unlikely. The risk of harm to surface waters from lateral migration in groundwater and baseflow into surface waters is very low.
	P7: Uptake via root system and ingestion	R11: Property (crops and livestock)	Minor	Unlikely	Very Low	Complete pathways may be present but current information suggests a gross contaminant source is unlikely. Contaminant linkage may be present but the circumstances under which harm

Source	Pathway	Receptor	Potential Survey	Likelihood of Occurrence	Potential Risk	Justification
						would occur even in the long-term are improbable.
	P9: Direct contact of services and supply pipes with contaminated soils.	R10: Buildings and Infrastructure: Services (potable water supply pipes and other services)	Minor	Unlikely	Very Low	Complete pathways may be present for water supply pipes at properties located off-site from on-site sources, but current information suggests a gross contaminant source is unlikely. Contaminant linkage may be present but the circumstances under which harm would occur even in the long-term are improbable.

11. Environmental Design and Management

11.1.1 A number of environmental embedded/standard mitigation measures are expected to be employed as standard to minimise impacts to both human health and controlled waters from the Proposed Development. The mitigation measures are anticipated to be implemented in order to avoid, prevent, reduce, or offset the following potential impacts:

11.1.2 Human exposure through direct contact/inhalation/dermal uptake of contaminants:

a. Creation of preferential pathways and mobilisation of contamination;
b. Contamination of natural soils, driving of contamination into an aquifer during piling, contamination of groundwater with concrete, paste or grout;
c. Pollution and degradation of water quality of any underlying aquifer;
d. Infiltration and/or run off into the local drainage/sewerage network – pollution of drainage and sewerage network and any adjacent surface water features;
e. Run-off and infiltration of contaminants from material stockpiles;
f. Contamination of drainage and sewerage network and/or groundwater; and
g. Spread of nuisance dusts and soils to the wider environment and local roads.

11.1.3 A Framework Construction Environmental Management Plan (CEMP) will be developed as part of the PEI Report for the Proposed Development (presented in **PEI Report Volume 3, Appendix 3-A**). A detailed CEMP will be produced for the Proposed Development following the appointment of the contractor in accordance with a Requirement of the DCO, prior to commencing construction.

11.1.4 **Table 20** lists the standard or tertiary mitigation measures which will be included in the **PEI Report Volume 3, Appendix 3-A: Framework Construction Environmental Management Plan**. These mitigation measures, defined by IEMA (Ref 39) are considered to be standard measures that form part of the general environmental management of the Proposed Development.

Table 20: Construction Embedded/Standard Environmental Mitigation Measures

Potential Impact	Mitigation / Measure
Potential for risks to human health associated with waste generation, land contamination, airborne contamination, and groundwater contamination. The discovery of ground contamination during groundworks. Levelling of the Site including the possible introduction of new fill materials.	Best practice avoidance and mitigation measures proposed include: • All workers would be required to wear Personal Protective Equipment (PPE) such as dust masks as applicable; • Containment measures would be implemented, including drip trays, bunding or double-skinned tanks of fuels and oils; all chemicals would be stored in accordance with their COSHH guidelines, whilst spill kits would be provided in areas of fuel/oil storage; • All plant and machinery would be kept away from surface water bodies wherever possible, checked regularly and, where necessary, the use of drip trays would be employed. Refuelling and delivery areas would be located away from surface water drains; • An emergency spillage action plan will be produced, which staff would have read and understood, and provisions made to contain any leak/spill; • Should any potentially contaminated ground, including isolated 'hotspots' of contamination and/or potential deposits of asbestos containing materials (ACM), be encountered, the contractor would be required to investigate the areas and assess the need for containment or disposal of the material. The contractor would also be required to assess whether any additional health and safety measures are required; • To further minimise the risks of contaminants being transferred and contaminating other soils or water, construction workers would be briefed as to the possibility of the presence of such materials; • In the event that contamination is identified, appropriate remediation measures would be agreed with the appropriate authorities and undertaken to protect construction workers, future site users, water resources, structures, and services; • The contractor would be required to place arisings and temporary stockpiles away from watercourses and drainage systems, whilst surface water would be directed away from stockpiles to prevent erosion; • The risk to surface water and groundwater from run-off from any contaminated stockpiles during

construction works would be reduced by implementing suitable measures to minimise rainwater infiltration and/or capture runoff and leachates, through use of bunding and/or temporary drainage systems. These mitigation measures would be designed in line with current good practice, follow appropriate guidelines and all relevant licences/permits;

- The contractor would ensure that all material is suitable for its proposed use and would not result in an increase in contamination-related risks on identified receptors, including any landscaped areas and underlying groundwater;
- Any waters removed from excavations by dewatering would be discharged appropriately, subject to the relevant permits being obtained from the Environment Agency;
- The contractor will implement a dust suppression/management system in order to control the potential risk from airborne contamination migrating off-site to adjacent sites; and
- Piling design and construction works will be completed following the preparation of a piling risk assessment

12. Discussion of Acute Risk to Future Construction Workers & Off-Site Receptors.

12.1.1 The proposed works will be undertaken in compliance with Construction Design and Management (CDM) 2015 Regulations (Ref 40).

12.1.2 Prior to work commencing, a health and safety risk assessment should be undertaken by the appointed principal contractor and developed in accordance with current health and safety regulations. This assessment should cover potential risks to construction staff, permanent site staff and the local population. Based on the findings of this risk assessment, appropriate mitigation measures should be implemented during the construction period. These mitigation measures, defined by IEMA (Ref 41) are considered to be standard measures that form part of the general environmental management of the Proposed Development, and are integrated within the **PEI Report, Volume 3, Appendix 3-A: Framework Construction Environmental Management Plan** (refer to **Table 20**).

12.1.3 The greatest potential for generation of dust will be during the construction phase. Dust generation should be kept to a minimum in accordance with

general industry good practice, as outlined in, for example, 'Environmental Good Practice on Site Guide', CIRIA Publication C811 5th Edition (Ref 40) (refer to **Table 20**).

12.1.4 The risk to construction workers during the site preparation and construction phases in terms of potential exposure to high concentrations of contaminants is considered to be low given the historic and current land uses identified at the Site. Should gross contamination be identified during the construction phase, then this may pose a potential acute risk to construction workers. It is likely that the risks to construction workers can be effectively managed through good health and safety practices and protocols. Adoption of appropriate dust suppression techniques would also mitigate the degree of potential particulate migration off-site; these will be included within the **PEI Report Volume 3, Appendix 3-A: Framework Construction Environmental Management Plan** for the Proposed Development.

13. Decommissioning

13.1.1 Potential impacts from the decommissioning of the Site are similar in nature to those during construction, as some ground works would be required to remove infrastructure installed. A detailed Decommissioning Environmental Management Plan will be prepared to identify required measures to prevent pollution during this phase of the development, based on the detailed decommissioning plan.

13.1.2 As a result, it is considered the decommissioning impacts and effects would mirror those of the construction phase. Standard mitigation measures (refer to **Table 20**) are expected to be applied during decommissioning.

14. Conclusions

14.1.1 The potential risks that have been identified from potential contaminated land have been assessed by the PRA as being very low to moderate / low. The highest risks have been identified in the areas formerly occupied by the Swinderby Airfield.

14.1.2 Environmental design and management measures will be employed as standard best practice to minimise impacts to both human health and controlled waters during the construction and decommissioning phases of the Proposed Development. These will be incorporated into the **PEI Report Volume 3, Appendix 3-A: Framework Construction Environmental Management Plan** which will be provided alongside the Environmental Statement as part of the DCO application.

14.1.3 The information collected as part of this PRA suggests that there are no significant constraints with regards to contamination of soil and groundwater that would limit the development of the Site for a solar PV project.

15. Recommendations

15.1.1 A detailed unexploded ordnance (UXO) assessment should be considered, prior to the commencement of any intrusive works, before ground is broken. While it is acknowledged that the UXB mapping published by Zetica shows that the Site is characterised by a low risk of UXB, the central part of the Principal Site, north of Moor lane, lies within land formerly occupied by the Swinderby Airfield, which is considered a wartime site of interest. An unspecified former airfield was also located 240m north of the Cable Corridor.

15.1.2 Limited intrusive Site Investigation and Generic Quantitative Risk Assessment (GQRA) is recommended in the selected areas of potential contamination. Figure 14-B-3 in Annex A shows the location of the areas of potential contamination relevant for the Site. Where features are off-site, the investigation locations will be on-site but adjacent or around the feature. The Site Investigation and GQRA will need to be carried out pre-construction, hence could be carried out post-consent.

15.1.3 Areas recommended to be included within the site investigation related to the Principal Site are:

a. Across the area of the former Swindarby Airfield (on-site);
b. Near current farm buildings (on-site and off-site);
c. Near the former pit (on-site);
d. Near the former corn mill (on-site);
e. Near the current digestate holding lagoon (on-site)
f. Near the former pump house (off-site);
g. Near the current pumping station (off-site);
h. Near the former and current sewage works (off-site); and
i. Near the former waste transfer station (off-site).

15.1.4 Areas recommended to be included within the site investigation related to the Cable Corridor are:

a. Infilled pits and cutting (potentially infilled) (on-site).

15.1.5 The results of the investigation can be used to refine the findings of this PRA and allow for any recommendations for further works. The results of the investigation will also allow for appropriate soil re-use (following CL:AIRE Definition of Waste: Code of Practice (DoW:CoP) 2011) (Ref 41).

15.1.6 Ground stability issues have been identified at some areas of the Site which may need further assessment. Moderate hazard has been identified from compressible deposits, in correspondence of the alluvial deposits associated to the River Witham and tributaries, west and north of Bassingham; and associated with River Brant, around Fen Lane. Compressibility and uneven

settlement hazards are probably present at these locations. Land use should consider specifically the compressibility and variability of the Site.

15.1.7 The Cable Corridor runs across an area potentially affected by historical non-coal mining, which extends to the south of Coleby. Underground mining is considered likely to have occurred within or close to this area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.

16. References

Ref 1 Central Government (2008) Planning Act 2008.

Ref 2 Ministry of Housing, Communities and Local Government (MCHLG) (2023) National Planning Policy Framework (NPPF). Conserving and enhancing the historic environment. Ministry of Housing, Communities & Local Government. Available at: www.gov.uk/government/publications/national-planning-policy-framework--2.

Ref 3 DEFRA (2012) Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance

Ref 4 HMSO (2012) The Contaminated Land (England) (Amendment) Regulations 2012

Ref 5 National Planning Statement (NPS) for Overarching National Planning Statement for Energy EN-1 (November 2023). Available at https://assets.publishing.service.gov.uk/media/65bbfbdc709fe1000f637052/overarching-nps-for-energy-en1.pdf.

Ref 6 National Planning Statement (NPS) for Electricity Networks EN-5 (November 2023). Available at https://assets.publishing.service.gov.uk/media/65a78a5496a5ec000d731abb/nps-electricity-networks-infrastructure-en5.pdf.

Ref 7 Environment Agency (2023). Land Contamination Risk Management (LCRM). Available at https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm.

Ref 8 British Standards 5930:2015+A1:2020 ‘Code of Practice for Ground Investigations‘

Ref 9 British Standards 10175 2011+A1:2017 ‘Investigation of Potentially Contaminated Sites – Code of Practice’

Ref 10 Groundsure (2023); Enviro and Geo Insight Data. Historical mapping supplied in a GIS format. Order Numbers: GSIP-2023-14155-1596. Ordered 10 October 2023.

Ref 11 North Kesteven District Council (2023). Public Access. Available at https://www.n-kesteven.gov.uk/environment-climate/environmental-protection/contaminated-land. https://www.n-kesteven.gov.uk/sites/default/files/2023-01/contaminated_land_strategy_2019.pdf. Accessed November 2023.

Ref 12 Zetica Risk Map. Accessed November 2023.

Ref 13 Ordnance Survey (2021). Open Data. Available at: Accessed November 2023.

Ref 14 Geological Survey of Great Britain (England and Wales) (1973). Sheet 114 Lincoln. Scale 1:50 000. Solid and Drift Editions.

Ref 15 British Geology Survey (2023) Geoindex Onshore online geological mapping viewer.

Ref 16 BGS, (2023). The Coal Authority Interactive Map.

Ref 17 UKHSA and BGS. UK Maps for Radon. Available at https://www.ukradon.org/information/ukmaps. Accessed November 2023

Ref 18 Environment Agency (EA) (February 2018). The Environment Agency's approach to groundwater protection. Version 1.2.

Ref 19 https://www.gov.uk/government/organisations/environment-agency.

Ref 20 Department for Environment, Food, and Rural Affairs' (DEFRA). Multi-Agency Geographic Information for the Countryside (MAGIC) map. Available at: https://magic.defra.gov.uk/MagicMap.aspx. Accessed November 2023.

Ref 21 Environment Agency (2019) Catchment Data Explorer Tool. Available at: https://environment.data.gov.uk/catchment-planning/WaterBody/GB105030062460.

Ref 22 Environment Agency (2019) Catchment Data Explorer Tool. Available at: https://environment.data.gov.uk/catchment-planning/WaterBody/GB105030062380.

Ref 23 Environment Agency (2019) Catchment Data Explorer Tool. Available at: https://environment.data.gov.uk/catchment-planning/WaterBody/GB104028058250.

Ref 24 Environment Agency (2019) Catchment Data Explorer Tool. Available at: https://environment.data.gov.uk/catchment-planning/WaterBody/GB105030056780.

Ref 25 Environment Agency (2019) Catchment Data Explorer Tool. Available at: https://environment.data.gov.uk/catchment-planning/WaterBody/GB105030056770.

Ref 26 Environment Agency (2019) Catchment Data Explorer Tool. Available at: https://environment.data.gov.uk/catchment-planning/WaterBody/GB105030056230.

Ref 27 Environment Agency (2019) Catchment Data Explorer Tool. Available at: https://environment.data.gov.uk/catchment-planning/WaterBody/GB105030056210.

Ref 28 Environment Agency (2023). Flood map for planning. Available at: https://check-long-term-flood-risk.service.gov.uk/risk#. Accessed November 2023.

Ref 29 Google Earth Pro v7.3.6.9285. Accessed November 2023.

Ref 30 Airfield of Britain Conservation Trust (2023). Swinderby. Available at https://www.abct.org.uk/airfields/airfield-finder/swinderby/. Accessed December 2023.

Ref 31 HM Land Register (January 2023). Local Land Charges Official Search.

Ref 32 CL:AIRE (2012). Research Bulletin RB17. A Pragmatic Approach to Ground Gas Risk Assessment

Ref 33 HMSO (2015). Environmental Damage (Prevention and Remediation) Regulations 2015

Ref 34 HMSO (1991). The Water Resources Act 1991

Ref 35 HMSO, (2003); The Water Act 2003

Ref 36 Environment Agency (2009). Updated technical Background to the CLEA model; Science Report: SC050021/SR3 (Contaminated land exposure assessment (CLEA) spreadsheet based tool)

Ref 37 CIRIA Report C552 ‘Contaminated Land Risk Assessment: A Guide to Good Practice’

Ref 38 HMSO (2015). The Construction (Design and Management) Regulations.

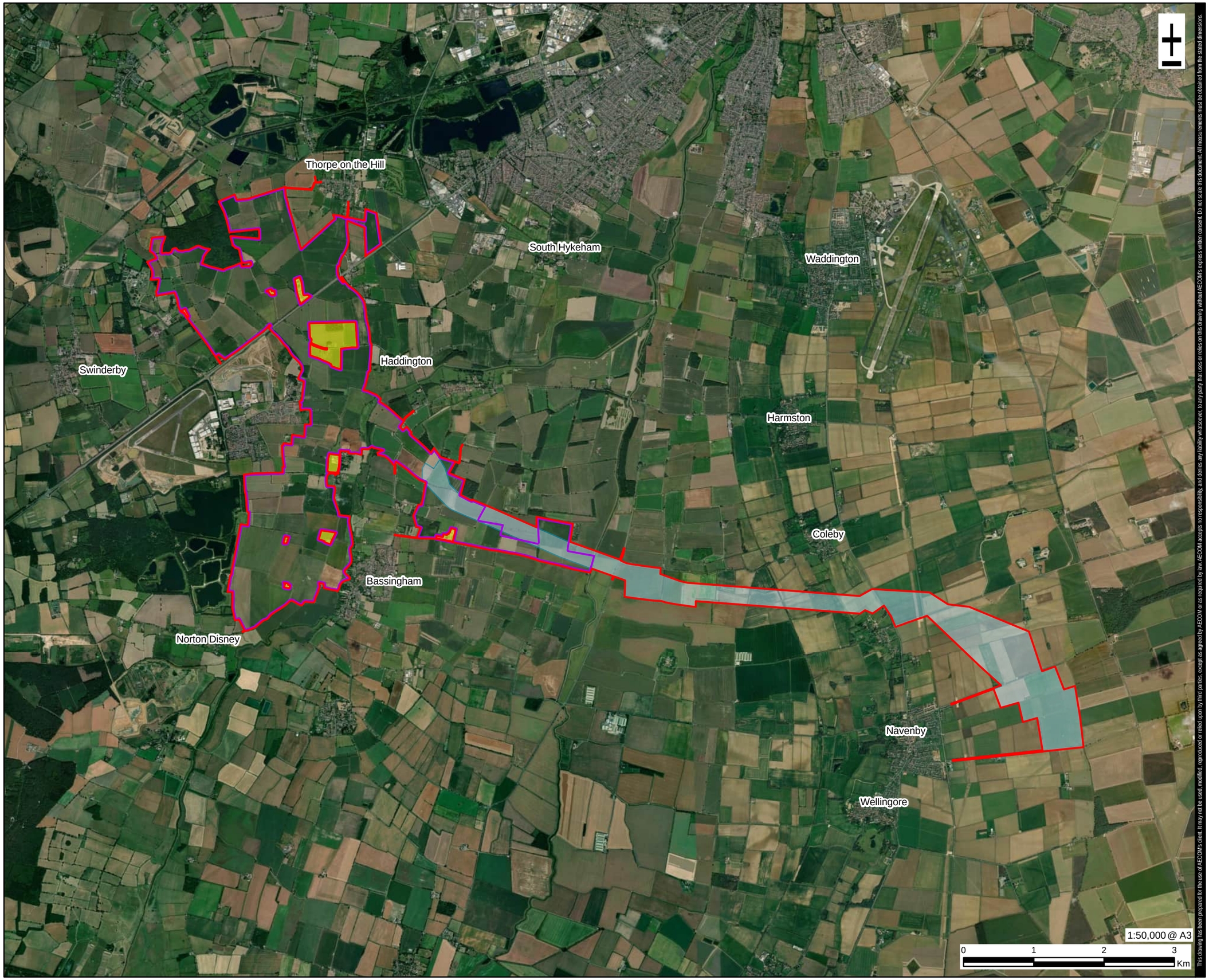
Ref 39 IEMA (2016). Environmental Impact Assessment Guide to Delivering Quality Development

Ref 40 CIRIA (2023). PUB C811 Environmental good practice on site guide. 5th edition

Ref 41 CL:AIRE (March 2011) Definition of Waste: Code of Practice (DoW:CoP).

Annex A Figures

Revision: 01 Drawn: AM Checked: BF Approved: TH Date: 2024-10-10



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LEGEND

- Site Boundary
- Land Not Included In Site Boundary
- Principal Site
- Grid Connection Corridor

NOTES

World Imagery: Maxar, Microsoft

ISSUE PURPOSE

PRA Report

PROJECT NUMBER

60700987

FIGURE TITLE

Site Location Plan

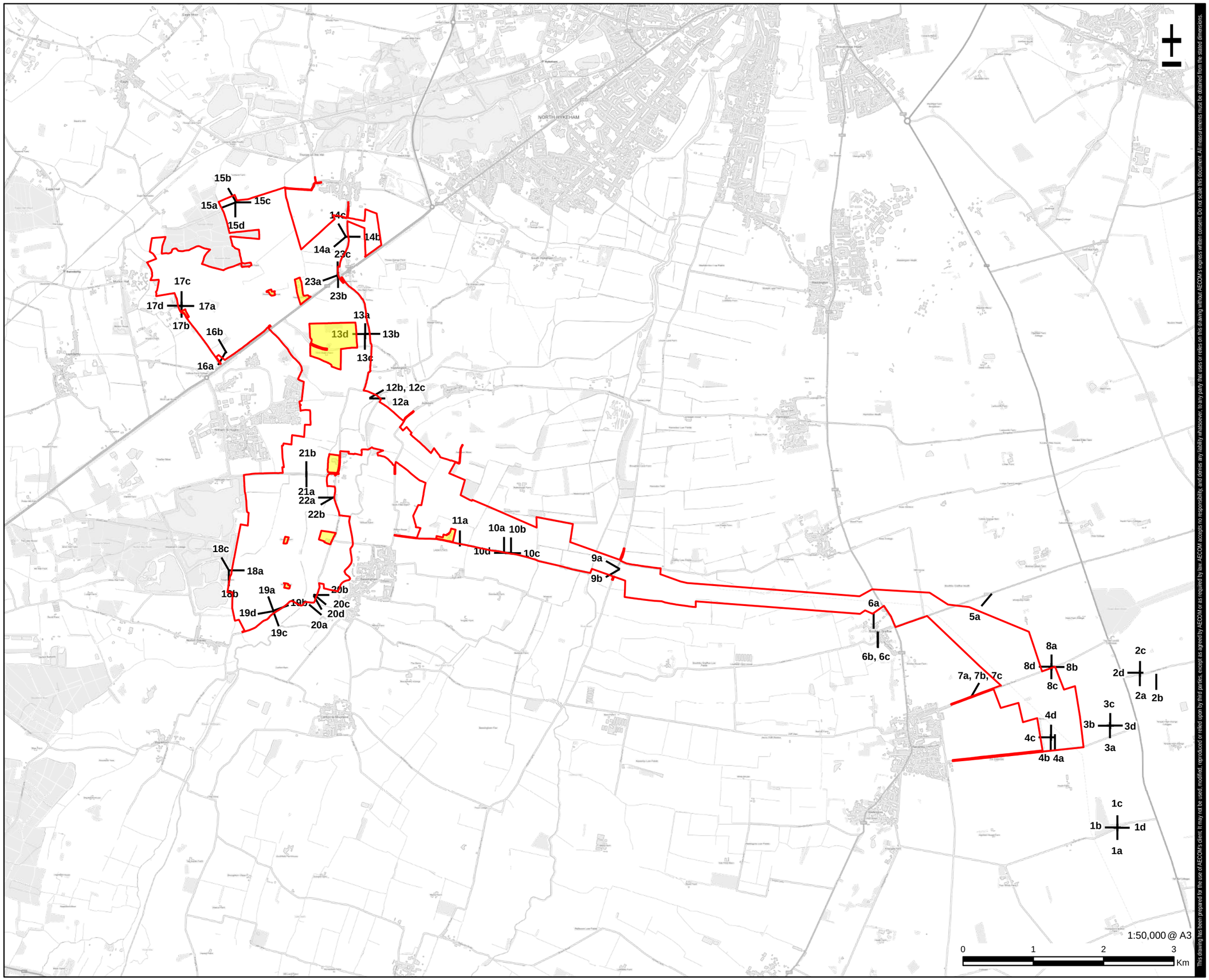
FIGURE NUMBER

Figure 14-B-1

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Revision: 01 Drawn: AM Checked: BF Approved: TH Date: 2024-10-10

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LEGEND

- Site Boundary
- Land Not Included In Site Boundary
- Site Walkover Photographs

NOTES

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ISSUE PURPOSE

PRA Report

PROJECT NUMBER

60700987

FIGURE TITLE

Photos Location plan

FIGURE NUMBER

Figure 14-B-2

Revision: 01 Drawn: HW Checked: AM Approved: MV Date: 2024-10-10

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Current Pumping Station
Former Sewage Works
Farm
Farm
Former Waste Transfer Station
Former Pump House
Former Corn Mill
Current Sewage Works
Farm
Thurlby Gall Gravel Pit
Former Pumping Station
Current Digestate Holding Lagoon
Farm
Farm
Farm
Current Sewage Works
Farm
Pumping Station
Coleby Low Field Sant Pit
Boothyby Graffoe Pit

1:45,000 @ A3

0 1 2 3 Km

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LEGEND

- Site Boundary
- Land Not Included In Site Boundary
- Potentially Contaminative Sources
- Cutting
- Former Swinderby Airfield
- Non Coal Mining Area

NOTES

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ISSUE PURPOSE

PRA Report

PROJECT NUMBER

60700987

FIGURE TITLE

Potentially Contaminative Sources

FIGURE NUMBER

Figure 14-B-3

Annex B Selected Groundsure Extracts

(Full Groundsure Report available on request)

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 10/10/2023

Your ref: 60700987

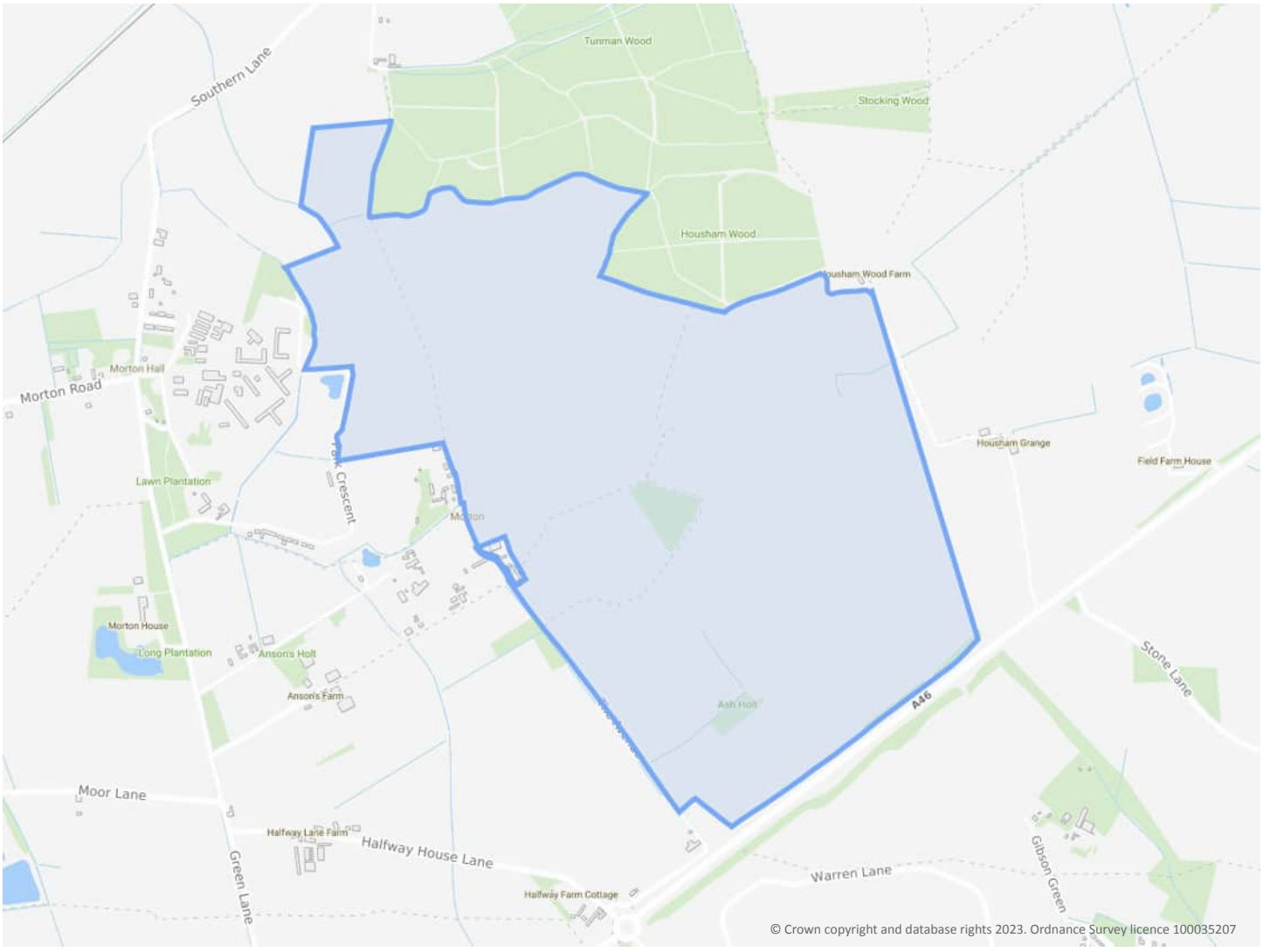
Our Ref: GSIP-2023-14155-15965_A

Site Details

Location: 488654 364090

Area: 156.54 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

Aerial image p. 9 >

OS MasterMap site plan N/A: >10ha

groundsure.com/insightuserguide ↗

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

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	1	1	3	8	-
15 >	1.2 >	Historical tanks >	0	1	2	3	-
16 >	1.3 >	Historical energy features >	0	0	0	2	-
16	1.4	Historical petrol stations	0	0	0	0	-
16	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 >	1	1	4	12	-
19 >	2.2 >	Historical tanks >	0	1	2	3	-
20 >	2.3 >	Historical energy features >	0	0	0	2	-
20	2.4	Historical petrol stations	0	0	0	0	-
20	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	0	-
22 >	3.6 >	Licensed waste sites >	0	0	0	5	-
24 >	3.7 >	Waste exemptions >	0	0	22	16	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
27 >	4.1 >	Recent industrial land uses >	0	2	4	-	-
28	4.2	Current or recent petrol stations	0	0	0	0	-
28	4.3	Electricity cables	0	0	0	0	-
28	4.4	Gas pipelines	0	0	0	0	-
28	4.5	Sites determined as Contaminated Land	0	0	0	0	-

29 >	4.6 >	Control of Major Accident Hazards (COMAH) >	1	0	0	1	-
29	4.7	Regulated explosive sites	0	0	0	0	-
29 >	4.8 >	Hazardous substance storage/usage >	0	0	1	0	-
30	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
30	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
30	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
30	4.12	Radioactive Substance Authorisations	0	0	0	0	-
30 >	4.13 >	Licensed Discharges to controlled waters >	0	2	1	1	-
31	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
31	4.15	Pollutant release to public sewer	0	0	0	0	-
32	4.16	List 1 Dangerous Substances	0	0	0	0	-
32	4.17	List 2 Dangerous Substances	0	0	0	0	-
32 >	4.18 >	Pollution Incidents (EA/NRW) >	0	0	0	1	-
32	4.19	Pollution inventory substances	0	0	0	0	-
33	4.20	Pollution inventory waste transfers	0	0	0	0	-
33	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
34 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
36 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
38 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
40	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
40	5.5	Groundwater vulnerability- local information	None (within 0m)				
41 >	5.6 >	Groundwater abstractions >	0	0	0	1	35
49 >	5.7 >	Surface water abstractions >	0	0	0	0	1
49	5.8	Potable abstractions	0	0	0	0	0
50	5.9	Source Protection Zones	0	0	0	0	-
50	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
51 >	6.1 >	Water Network (OS MasterMap) >	11	14	17	-	-

55 >	6.2 >	Surface water features >	1	12	10	-	-
55 >	6.3 >	WFD Surface water body catchments >	3	-	-	-	-
56 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
56 >	6.5 >	WFD Groundwater bodies >	2	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
57 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
58	7.2	Historical Flood Events	0	0	0	-	-
58	7.3	Flood Defences	0	0	0	-	-
58	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
58	7.5	Flood Storage Areas	0	0	0	-	-
59 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
60 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
61 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
63 >	9.1 >	Groundwater flooding >	Moderate (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
64	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
65	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
65	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
65	10.4	Special Protection Areas (SPA)	0	0	0	0	0
65	10.5	National Nature Reserves (NNR)	0	0	0	0	0
66 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	1
66 >	10.7 >	Designated Ancient Woodland >	1	0	0	0	2
66	10.8	Biosphere Reserves	0	0	0	0	0
67	10.9	Forest Parks	0	0	0	0	0
67	10.10	Marine Conservation Zones	0	0	0	0	0
67	10.11	Green Belt	0	0	0	0	0
67	10.12	Proposed Ramsar sites	0	0	0	0	0

67	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
68	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
68	10.15	Nitrate Sensitive Areas	0	0	0	0	0
68 >	10.16 >	Nitrate Vulnerable Zones >	2	0	0	0	4
69	10.17	SSSI Impact Risk Zones	0	-	-	-	-
69	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
70	11.1	World Heritage Sites	0	0	0	-	-
71	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
71	11.3	National Parks	0	0	0	-	-
71 >	11.4 >	Listed Buildings >	0	2	0	-	-
72	11.5	Conservation Areas	0	0	0	-	-
72	11.6	Scheduled Ancient Monuments	0	0	0	-	-
72	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations** >	On site	0-50m	50-250m	250-500m	500-2000m
73 >	12.1 >	Agricultural Land Classification >	Grade 2 (within 250m)				
74	12.2	Open Access Land	0	0	0	-	-
74 >	12.3 >	Tree Felling Licences >	0	3	3	-	-
75 >	12.4 >	Environmental Stewardship Schemes >	0	0	1	-	-
75 >	12.5 >	Countryside Stewardship Schemes >	2	0	2	-	-
Page	Section	**Habitat designations** >	On site	0-50m	50-250m	250-500m	500-2000m
77 >	13.1 >	Priority Habitat Inventory >	5	8	9	-	-
78	13.2	Habitat Networks	0	0	0	-	-
79	13.3	Open Mosaic Habitat	0	0	0	-	-
79	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
80 >	14.1 >	10k Availability >	Identified (within 500m)				
81	14.2	Artificial and made ground (10k)	0	0	0	0	-
82	14.3	Superficial geology (10k)	0	0	0	0	-

82	14.4	Landslip (10k)	0	0	0	0	-
83	14.5	Bedrock geology (10k)	0	0	0	0	-
83	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
84 >	**15.1 >**	**50k Availability >**	Identified (within 500m)				
85	15.2	Artificial and made ground (50k)	0	0	0	0	-
85	15.3	Artificial ground permeability (50k)	0	0	-	-	-
86 >	**15.4 >**	**Superficial geology (50k) >**	2	0	0	1	-
87 >	**15.5 >**	**Superficial permeability (50k) >**	Identified (within 50m)				
87	15.6	Landslip (50k)	0	0	0	0	-
87	15.7	Landslip permeability (50k)	None (within 50m)				
88 >	**15.8 >**	**Bedrock geology (50k) >**	1	0	0	0	-
89 >	**15.9 >**	**Bedrock permeability (50k) >**	Identified (within 50m)				
89	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
90 >	**16.1 >**	**BGS Boreholes >**	2	3	5	-	-
Page	Section	**Natural ground subsidence >**					
92 >	**17.1 >**	**Shrink swell clays >**	Low (within 50m)				
93 >	**17.2 >**	**Running sands >**	Very low (within 50m)				
95 >	**17.3 >**	**Compressible deposits >**	Negligible (within 50m)				
96 >	**17.4 >**	**Collapsible deposits >**	Very low (within 50m)				
97 >	**17.5 >**	**Landslides >**	Very low (within 50m)				
98 >	**17.6 >**	**Ground dissolution of soluble rocks >**	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
100	18.1	BritPits	0	0	0	0	-
101 >	**18.2 >**	**Surface ground workings >**	1	5	0	-	-
101	18.3	Underground workings	0	0	0	0	0
101	18.4	Underground mining extents	0	0	0	0	-
102	18.5	Historical Mineral Planning Areas	0	0	0	0	-

102	18.6	Non-coal mining	0	0	0	0	0
102	18.7	JPB mining areas	None (within 0m)				
102	18.8	The Coal Authority non-coal mining	0	0	0	0	-
103	18.9	Researched mining	0	0	0	0	-
103	18.10	Mining record office plans	0	0	0	0	-
103	18.11	BGS mine plans	0	0	0	0	-
103	18.12	Coal mining	None (within 0m)				
103	18.13	Brine areas	None (within 0m)				
104	18.14	Gypsum areas	None (within 0m)				
104	18.15	Tin mining	None (within 0m)				
104	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
105	19.1	Natural cavities	0	0	0	0	-
105	19.2	Mining cavities	0	0	0	0	0
105	19.3	Reported recent incidents	0	0	0	0	-
105	19.4	Historical incidents	0	0	0	0	-
106	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon** >					
107 >	**20.1** >	**Radon** >	Less than 1% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
109 >	**21.1** >	**BGS Estimated Background Soil Chemistry** >	34	5	-	-	-
110	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
111	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
112	22.1	Underground railways (London)	0	0	0	-	-
112	22.2	Underground railways (Non-London)	0	0	0	-	-
112	22.3	Railway tunnels	0	0	0	-	-
112	22.4	Historical railway and tunnel features	0	0	0	-	-
112	22.5	Royal Mail tunnels	0	0	0	-	-

113	22.6	Historical railways	0	0	0	-	-
113	22.7	Railways	0	0	0	-	-
113	22.8	Crossrail 1	0	0	0	0	-
113	22.9	Crossrail 2	0	0	0	0	-
113	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 156.54ha

Recent site history - 2018 aerial photograph



Capture Date: 15/05/2018

Site Area: 156.54ha

Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 156.54ha

Recent site history - 2007 aerial photograph



Capture Date: 18/09/2007

Site Area: 156.54ha

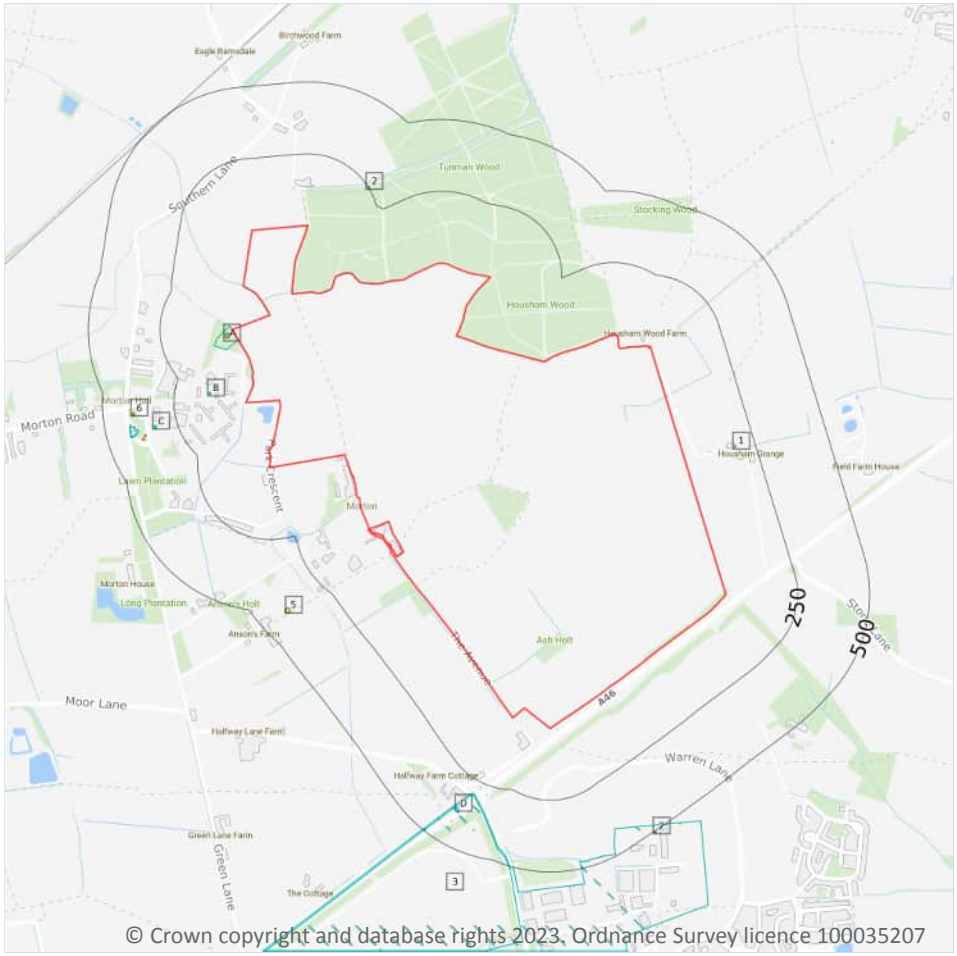
Recent site history - 1999 aerial photograph



Capture Date: 21/06/1999

Site Area: 156.54ha

1 Past land use



1.1 Historical industrial land uses

Records within 500m	13

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Sewage Works**	**1979**	**1577556**

ID	Location	Land use	Dates present	Group ID
A	15m NW	Unspecified Tank	1979	1594097
B	126m W	Unspecified Tank	1904 - 1948	1642586
B	127m W	Unspecified Tank	1904	1728520
B	128m W	Unspecified Tank	1965	1644327
3	294m S	Airfield	1979	1642458
4	301m S	Airfield	1965	1616132
C	322m W	Unspecified Tank	1965	1655380
C	323m W	Unspecified Tank	1904 - 1948	1622628
D	367m S	Smithy	1886	1645026
D	369m S	Smithy	1904 - 1948	1733375
C	387m W	Laundry	1904 - 1948	1734263
C	390m W	Laundry	1904	1669564

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**6**

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
A	19m NW	Unspecified Tank	1997	256677
1	179m E	Unspecified Tank	1975	256671
2	250m NW	Unspecified Tank	1975	256679
5	388m SW	Unspecified Tank	1997	256668
6	390m W	Unspecified Tank	1997	256667
7	500m SE	Unspecified Tank	1995	256670

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	2

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
C	366m W	Electricity Substation	1975	149420
C	376m W	Electricity Substation	1997	149421

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

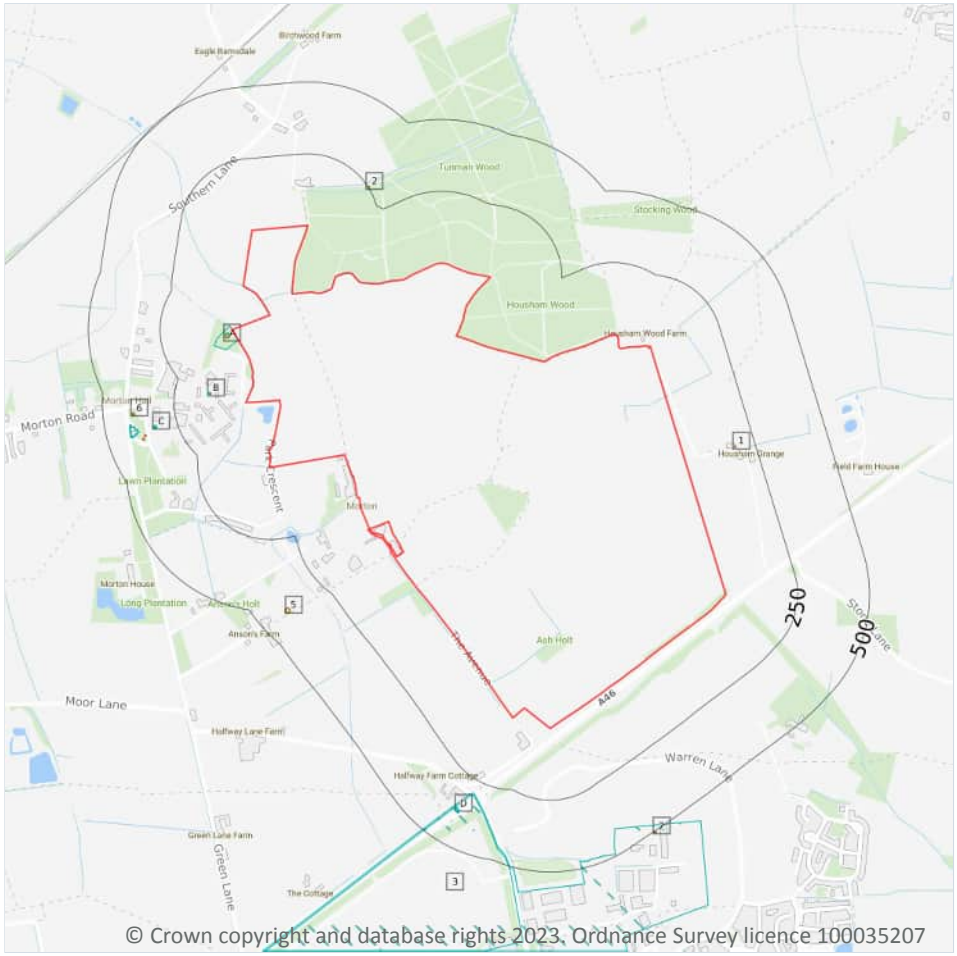
1.6 Historical military land

Records within 500m	0

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

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

2 Past land use - un-grouped



2.1 Historical industrial land uses

Records within 500m	18

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

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

ID	Location	Land Use	Date	Group ID
A	**On site**	**Sewage Works**	**1979**	**1577556**
A	15m NW	Unspecified Tank	1979	1594097
B	126m W	Unspecified Tank	1948	1642586

ID	Location	Land Use	Date	Group ID
B	126m W	Unspecified Tank	1904	1642586
B	127m W	Unspecified Tank	1904	1728520
B	128m W	Unspecified Tank	1965	1644327
3	294m S	Airfield	1979	1642458
4	301m S	Airfield	1965	1616132
C	322m W	Unspecified Tank	1965	1655380
C	323m W	Unspecified Tank	1948	1622628
C	323m W	Unspecified Tank	1904	1622628
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D	369m S	Smithy	1904	1733375
D	369m S	Smithy	1904	1733375
C	387m W	Laundry	1948	1734263
C	387m W	Laundry	1904	1734263
C	390m W	Laundry	1904	1669564

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**6**

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
A	19m NW	Unspecified Tank	1997	256677
1	179m E	Unspecified Tank	1975	256671
2	250m NW	Unspecified Tank	1975	256679
5	388m SW	Unspecified Tank	1997	256668
6	390m W	Unspecified Tank	1997	256667

ID	Location	Land Use	Date	Group ID
7	500m SE	Unspecified Tank	1995	256670

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	2

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'.

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

ID	Location	Land Use	Date	Group ID
C	366m W	Electricity Substation	1975	149420
C	376m W	Electricity Substation	1997	149421

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.

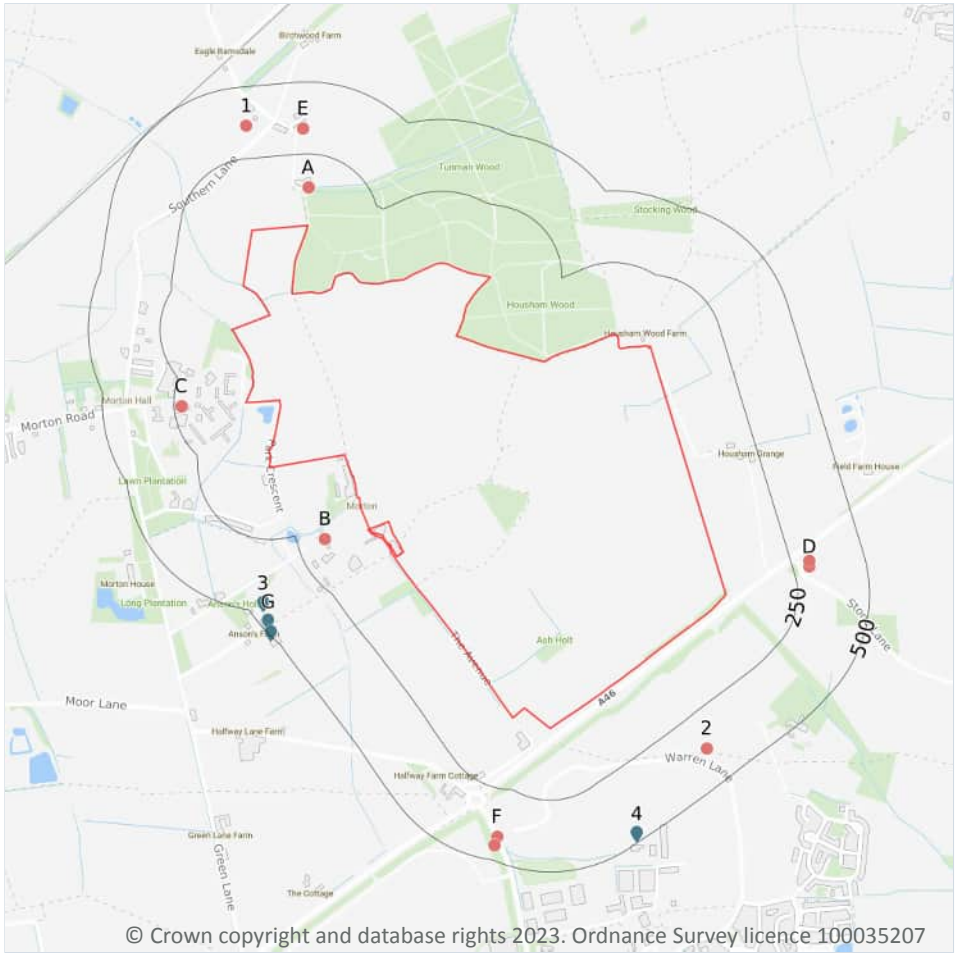
2.5 Historical garages

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)

Licensed 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	0

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

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

3.6 Licensed waste sites

Records within 500m	5

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

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

ID	Location	Details		
3	448m SW	Site Name: M E C Recycling Site Address: M E C Recycling Limited, Ansons Farm, Eagle Road, Swinderby, Lincoln, Lincolnshire, LN6 9HS Correspondence Address: -	Type of Site: Composting Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 631935 EPR reference: EA/EPR/WP3990CK Operator: M E C Recycling Limited Waste Management licence No: 43663 Annual Tonnage: 24999	Issue Date: 26/04/2005 Effective Date: 26/04/2005 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: 26/04/2005 Status: Expired

ID	Location	Details		
G	474m SW	Site Name: Ansons Farm Site Address: Ansons Farm, Swinderby, Lincoln, Lincolnshire, LN6 9HS Correspondence Address: Ansons Farm, Swinderby, Lincoln, Lincolnshire, LN6 9HS	Type of Site: Composting Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: MEC005 EPR reference: - Operator: M E C Recycling Ltd Waste Management licence No: 100297 Annual Tonnage: 0	Issue Date: 9/17/2008 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
G	474m SW	Site Name: Ansons Farm Site Address: M E C Recycling Limited, Ansons Farm, Swinderby, Lincoln, Lincolnshire, LN6 9HS Correspondence Address: -	Type of Site: Composting Facility Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 652716 EPR reference: EA/EPR/UP3298EH Operator: M E C Recycling Limited Waste Management licence No: 100297 Annual Tonnage: 45000	Issue Date: 17/09/2008 Effective Date: 17/09/2008 Modified: 17/09/2008 Surrendered Date: - Expiry Date: - Cancelled Date: 17/09/2008 Status: Issued
4	474m S	Site Name: Hobleys Yard Site Address: Claire Townsend, Camp Road, Camp Road, Swinderby, Lincoln, Lincolnshire, LN6 9TW Correspondence Address: -	Type of Site: Treatment of waste to produce soil 75,000 tpy Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 636076 EPR reference: EA/EPR/CB3504UW Operator: Claire Townsend Waste Management licence No: 402111 Annual Tonnage: 74999	Issue Date: 12/03/2015 Effective Date: 12/03/2015 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: 12/03/2015 Status: Issued
G	496m SW	Site Name: Ansons Farm Site Address: M E C Recycling Limited, Ansons Farm, Swinderby, Lincoln, Lincolnshire, LN6 9HS Correspondence Address: -	Type of Site: Treatment of waste wood 75000 tps Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 647938 EPR reference: EA/EPR/FB3032AZ Operator: M E C Recycling Limited Waste Management licence No: 103878 Annual Tonnage: 74999	Issue Date: 18/03/2013 Effective Date: 18/03/2013 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: 18/03/2013 Status: Issued

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

3.7 Waste exemptions

Records within 500m	38

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

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

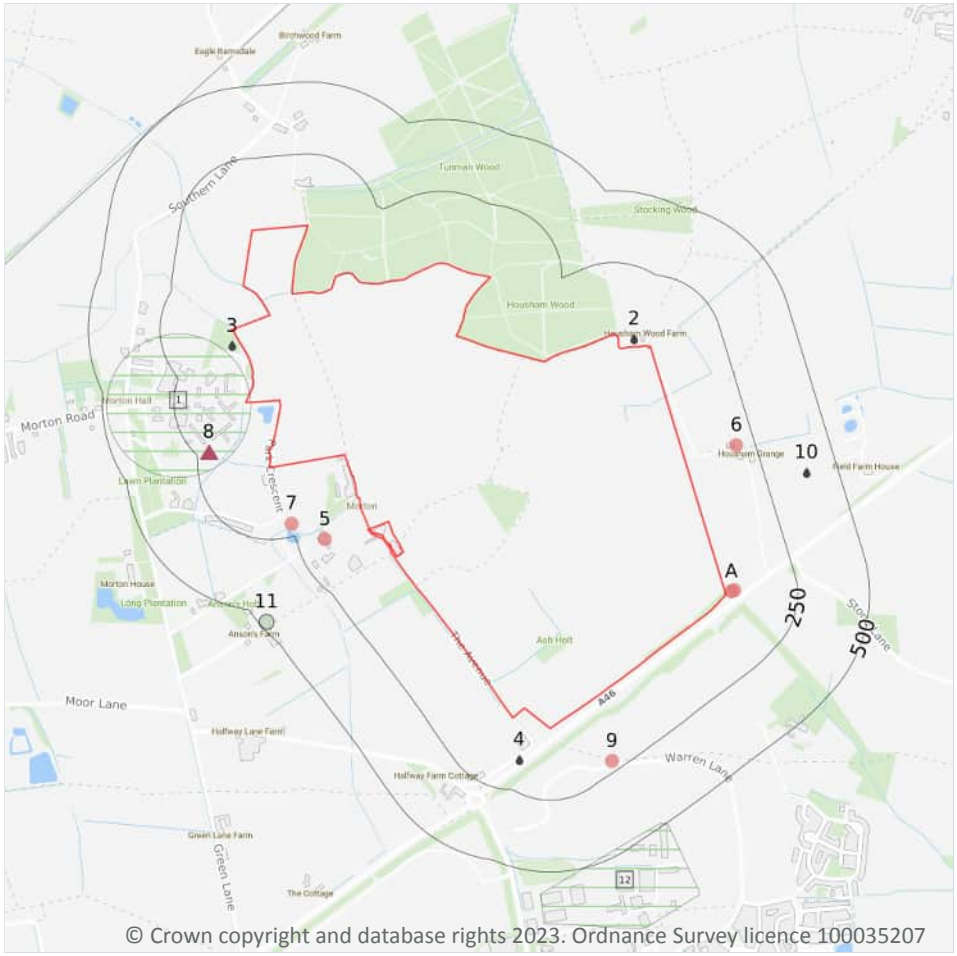
ID	Location	Site	Reference	Category	Sub-Category	Description
A	131m NW	-	WEX153960	Disposing of waste exemption	On a Farm	Burning waste in the open
A	131m NW	-	WEX291735	Disposing of waste exemption	On a farm	Burning waste in the open
A	131m NW	-	WEX291735	Using waste exemption	On a farm	Use of waste in construction
A	131m NW	-	WEX291735	Using waste exemption	On a farm	Use of waste for a specified purpose
B	155m W	PARK FARM, EAGLE ROAD, SWINDERBY, LINCOLN, LN6 9HS	WEX149750	Using waste exemption	On a Farm	Use of waste in construction
B	155m W	PARK FARM, EAGLE ROAD, SWINDERBY, LINCOLN, LN6 9HS	WEX149750	Disposing of waste exemption	On a Farm	Burning waste in the open
B	155m W	PARK FARM, EAGLE ROAD, SWINDERBY, LINCOLN, LN6 9HS	WEX117240	Storing waste exemption	On a farm	Storage of waste in secure containers
B	155m W	PARK FARM, EAGLE ROAD, SWINDERBY, LINCOLN, LN6 9HS	WEX117240	Storing waste exemption	On a farm	Storage of waste in a secure place
B	155m W	PARK FARM, EAGLE ROAD, SWINDERBY, LINCOLN, LN6 9HS	WEX117245	Treating waste exemption	On a farm	Screening and blending of waste
B	155m W	PARK FARM, EAGLE ROAD, SWINDERBY, LINCOLN, LN6 9HS	WEX257986	Storing waste exemption	On a farm	Storage of waste in a secure place
B	155m W	PARK FARM, EAGLE ROAD, SWINDERBY, LINCOLN, LN6 9HS	WEX257986	Storing waste exemption	On a farm	Storage of waste in secure containers

ID	Location	Site	Reference	Category	Sub-Category	Description
B	155m W	PARK FARM, EAGLE ROAD, SWINDERBY, LINCOLN, LN6 9HS	WEX286952	Disposing of waste exemption	On a farm	Burning waste in the open
B	155m W	PARK FARM, EAGLE ROAD, SWINDERBY, LINCOLN, LN6 9HS	WEX286952	Using waste exemption	On a farm	Use of waste in construction
B	155m W	-	WEX289513	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	155m W	-	WEX289513	Using waste exemption	Not on a farm	Use of waste in construction
C	227m W	MORTON HALL, SWINDERBY, LINCOLN, LN6 9PT	WEX104925	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
C	227m W	MORTON HALL, SWINDERBY, LINCOLN, LN6 9PT	WEX320293	Using waste exemption	Not on a farm	Use of waste in construction
C	227m W	-	WEX260991	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
C	227m W	MORTON HALL, SWINDERBY, LINCOLN, LN6 9PT	WEX248956	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
C	227m W	MORTON HALL, SWINDERBY, LINCOLN, LN6 9PT	WEX317668	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	227m W	MORTON HALL, SWINDERBY, LINCOLN, LN6 9PT	WEX317669	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
C	227m W	MORTON HALL, SWINDERBY, LINCOLN, LN6 9PT	WEX317669	Treating waste exemption	Not on a farm	Sorting mixed waste
D	305m E	-	WEX322896	Storing waste exemption	On a farm	Storage of sludge
D	311m E	Land at SK9001063690	EPR/FE5746EP/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
E	337m NW	Tunman Farm LINCOLN LN6 9EA	EPR/AE5553JE/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters

ID	Location	Site	Reference	Category	Sub-Category	Description
E	337m NW	Tunman Farm LINCOLN LN6 9EA	EPR/AE5553JE/A001	Disposing of waste exemption	Agricultural Waste Only	Disposal by incineration
E	337m NW	Tunman Farm LINCOLN LN6 9EA	EPR/AE5553JE/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
E	337m NW	Tunman Farm LINCOLN LN6 9EA	EPR/AE5553JE/A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
E	337m NW	Tunman Farm LINCOLN LN6 9EA	EPR/AE5553JE/A001	Treating waste exemption	Agricultural Waste Only	Aerobic composting and associated prior treatment
E	337m NW	Tunman Farm LINCOLN LN6 9EA	EPR/AE5553JE/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
E	337m NW	Tunman Farm LINCOLN LN6 9EA	EPR/AE5553JE/A001	Using waste exemption	Agricultural Waste Only	Incorporation of ash into soil
E	337m NW	Tunman Farm LINCOLN LN6 9EA	EPR/AE5553JE/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
E	337m NW	Tunman Farm LINCOLN LN6 9EA	EPR/AE5553JE/A001	Using waste exemption	Agricultural Waste Only	Use of waste to manufacture finished goods
1	363m NW	The Willows Nursery Eagles Barnsdale LN6 9EA	EPR/ZE5685NU/A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in secure containers
2	372m SE	-	WEX274732	Using waste exemption	Not on a farm	Use of waste in construction
F	419m S	-	WEX332682	Using waste exemption	Not on a farm	Use of waste in construction
F	449m S	Swinderby Quarry Camp Road LINCOLN LN6 9TW	EPR/CF0103FY/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
F	449m S	Swinderby Quarry Camp Road LINCOLN LN6 9TW	EPR/TF0105FA/A001	Treating waste exemption	Non-Agricultural Waste Only	Screening and blending of waste

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

4 Current industrial land use



4.1 Recent industrial land uses

Records within 250m	6

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Company	Address	Activity	Category
A	21m SE	Mast	Lincolnshire, LN6	Telecommunications Features	Infrastructure and Facilities
A	32m SE	Pylon	Lincolnshire, LN6	Electrical Features	Infrastructure and Facilities
5	155m W	Cross Plant	Park Farm, Eagle Road, Swinderby, Lincoln, Lincolnshire, LN6 9HS	Construction and Tool Hire	Hire Services

ID	Location	Company	Address	Activity	Category
6	187m E	Tank	Lincolnshire, LN5	Tanks (Generic)	Industrial Features
7	204m W	Pumping Station	Lincolnshire, LN6	Water Pumping Stations	Industrial Features
9	214m S	Electricity Sub Station	Lincolnshire, LN6	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	**0**

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	2

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.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Company	Address	Operational status	Tier
1	**On site**	**Uk Border Agency**	**Uk Border Agency, Irc Morton Hall, Morton Hall, Swinderby, Lincolnshire, LN6 9PT**	**Historical NIHHS Site**	**-**
12	478m S	British Gas Lp Gas (t/a Supergas Ltd)	British Gas Lp Gas (t/a Supergas Ltd), Camp Road, Witham St Hughs, LN6 9TW	Historical NIHHS Site	-

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	1

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.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Details	
8	209m W	Application reference number: 02/0878/FUL Application status: Approved Application date: 25/07/2002 Address: IRC Morton Hall, Swinderby, Lincoln, North Kesteven, England, LN6 9PT	Details: Alterations and Extensions and siting of LPG tanks Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	4

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

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Address	Details	
2	27m NE	HOUSHAM WOOD FARM, NEWARK ROAD, AUBOURN, LINCOLN, LN6 9HW	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRZP3224XR Permit Version: 1 Receiving Water: UNKNOWN TRIB OF RIVER WITHAM	Status: NEW ISSUED UNDER EPR 2010 Issue date: 18/02/2013 Effective Date: 18/02/2013 Revocation Date: -
3	30m NW	HM PRISON-MORTON HALL, MORTON HALL, SWINDERBY, LINCS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: T/69/45214/S Permit Version: 1 Receiving Water: MILL DAM DYKE	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 17/02/1998 Effective Date: 17/02/1998 Revocation Date: 25/07/2005
4	146m S	THURLBY SHEEP WALKS, SWINDERBY	Effluent Type: AGRICULTURE - UNSPECIFIED Permit Number: PR3NFA1068 Permit Version: 1 Receiving Water: -	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/05/1963 Effective Date: 30/05/1963 Revocation Date: 23/04/1991
10	391m E	HOUSE AT FIELD HOUSE FARM, THE FOSSE WAY, AUBOURN, LINCOLN	Effluent Type: UNSPECIFIED Permit Number: PR3LFU1040 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 17/05/1979 Effective Date: 17/05/1979 Revocation Date: 01/10/1996

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	**0**

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

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

4.15 Pollutant release to public sewer

Records within 500m	**0**

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Details	
11	477m SW	Incident Date: 16/04/2003 Incident Identification: 152140 Pollutant: Inorganic Chemicals/Products Pollutant Description: Other Inorganic Chemical or Product	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

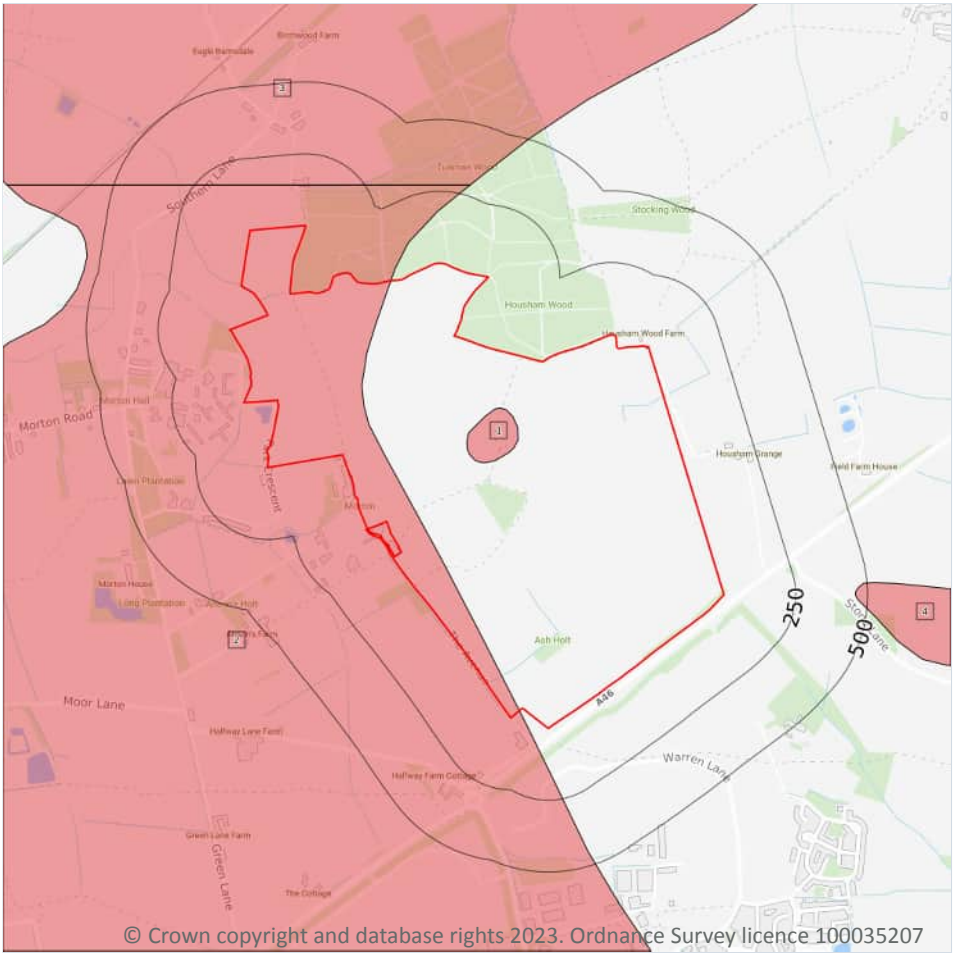
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



5.1 Superficial aquifer

Records within 500m	4

Aquifer status of groundwater held within superficial geology.

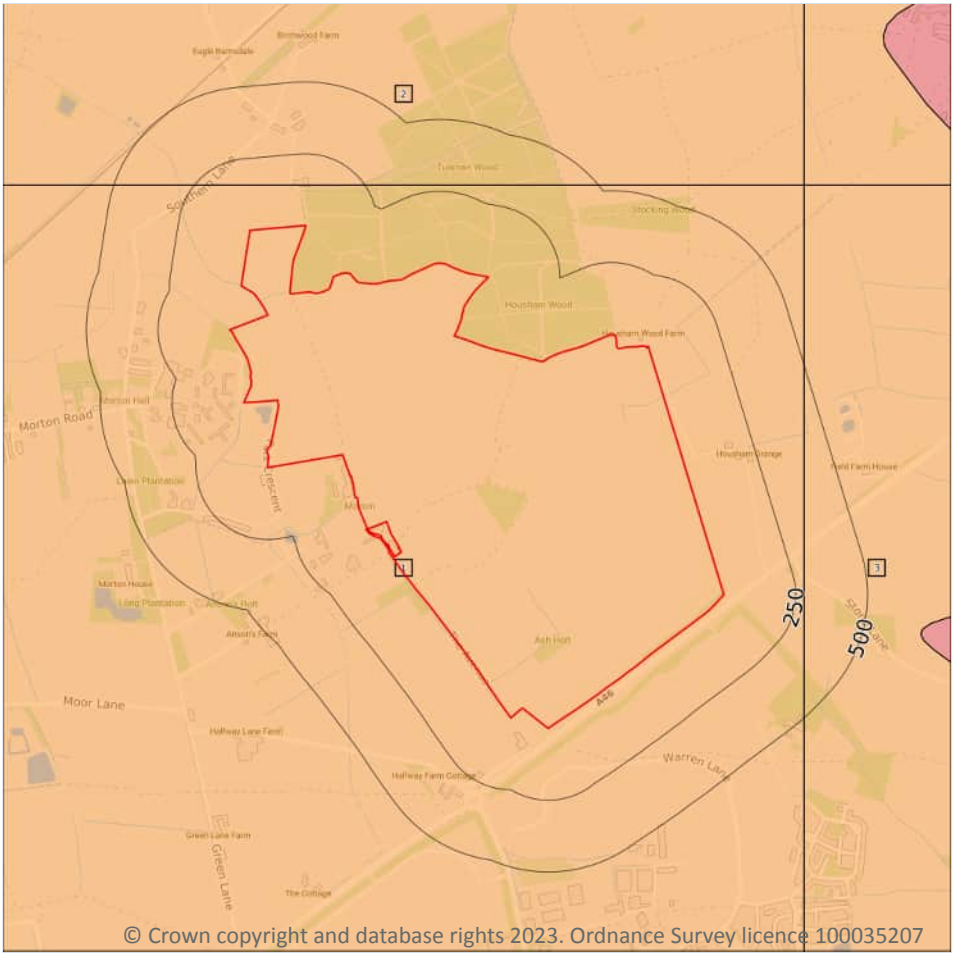
Features are displayed on the Hydrogeology map on **page 34 >**

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

ID	Location	Designation	Description
3	141m NW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	458m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m	3

Aquifer status of groundwater held within bedrock geology.

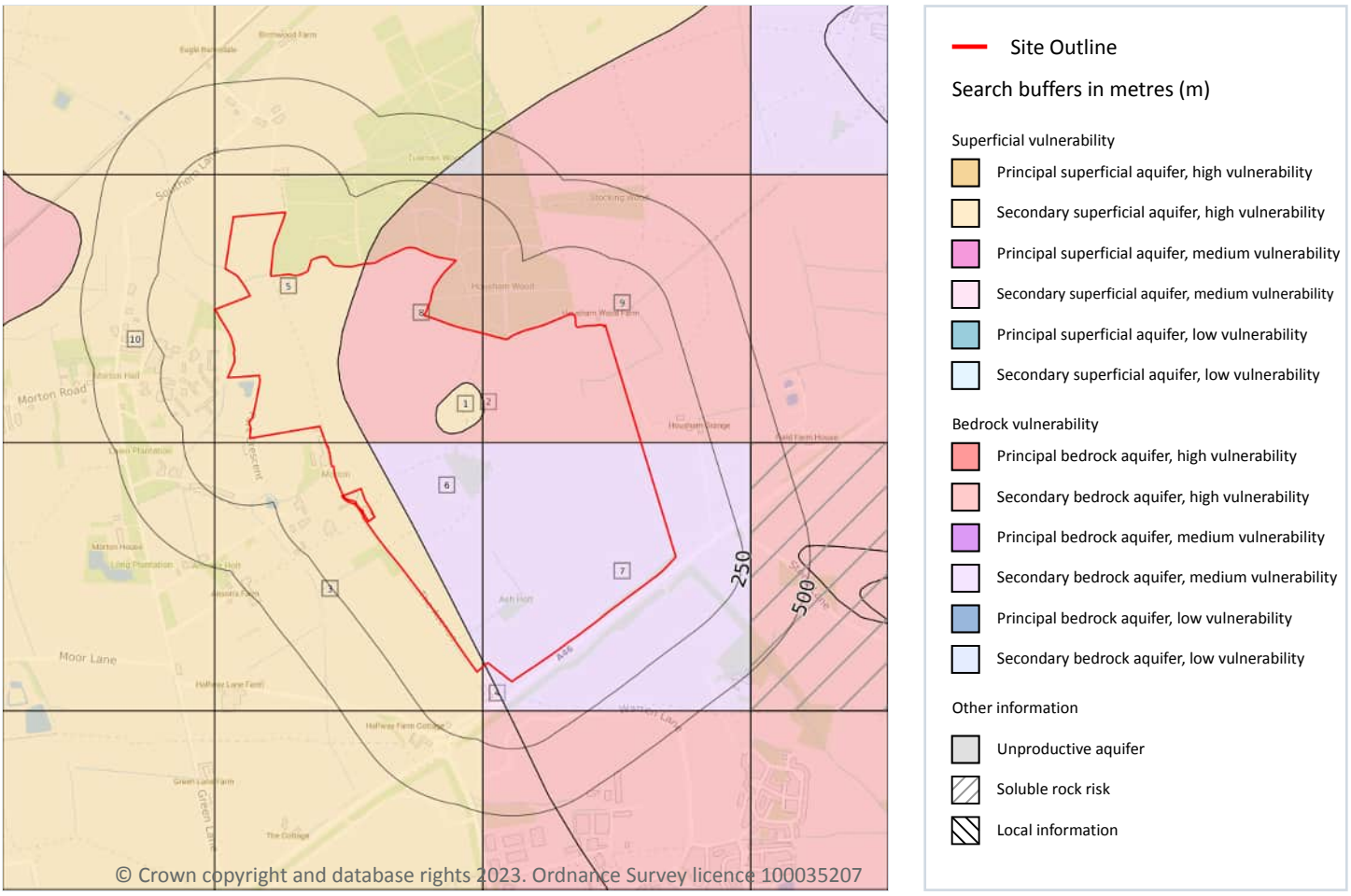
Features are displayed on the Bedrock aquifer map on **page 36 >**

ID	Location	Designation	Description
1	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
2	141m NW	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

ID	Location	Designation	Description
3	279m E	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-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	10

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 38 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
7	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
8	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

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

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

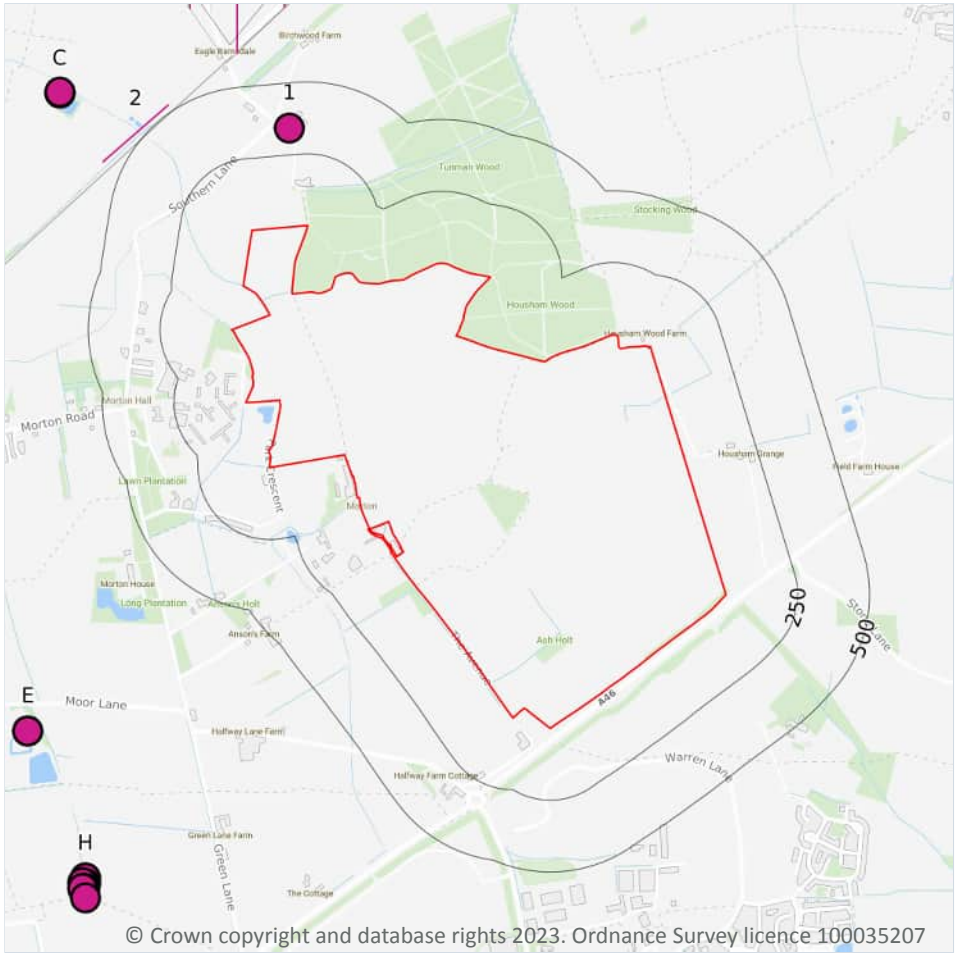
5.5 Groundwater vulnerability- local information

Records on site	0

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

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

Abstractions and Source Protection Zones



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Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	36

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 41 >**

ID	Location	Details	
1	344m NW	Status: Historical Licence No: 03/28/69/0051 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: EAGLE BARNSDALE - WELL Data Type: Point Name: J G CATER AND SON Easting: 488200 Northing: 365200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 03/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
2	520m NW	Status: Active Licence No: 03/28/69/0208 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: EAGLE BARNSDALE - WELLPOINT SYSTEM Data Type: Line Name: G H CHENNELLS (FARMS) LTD Easting: 487550 Northing: 365080	Annual Volume (m^3): 150000 Max Daily Volume (m^3): 2400 Original Application No: A/28/69/59 Original Start Date: 28/05/1993 Expiry Date: - Issue No: 102 Version Start Date: 03/12/2018 Version End Date: -
A	589m NW	Status: Active Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WHISBY QUARRY A Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488015 Northing: 366918	Annual Volume (m^3): 89320 Max Daily Volume (m^3): 2310 Original Application No: NPS/WR/036787 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 11/11/2022 Version End Date: -
B	650m NW	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASES 5F 5H AND 6 Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488077 Northing: 366730	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -
B	650m NW	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASES 5F 5H AND 6 Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488077 Northing: 366730	Annual Volume (m^3): 89320 Max Daily Volume (m^3): 2310 Original Application No: NPS/WR/036787 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 11/11/2022 Version End Date: -

ID	Location	Details	
C	823m NW	Status: Historical Licence No: 03/28/69/0296 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: EAGLE HALL FARM, EAGLE BARNSDALE, LINCOLN - SEEPAGE LAGOON Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487400 Northing: 365320	Annual Volume (m^3): 75000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 08/08/2001 Expiry Date: 31/10/2006 Issue No: 1 Version Start Date: 08/08/2001 Version End Date: -
C	823m NW	Status: Historical Licence No: 03/28/69/0296/1 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: EAGLE HALL FARM, EAGLE BARNSDALE, LINCOLN - SEEPAGE LAGOON Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487400 Northing: 365320	Annual Volume (m^3): 75000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 21/02/2007 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 21/02/2007 Version End Date: -
C	826m NW	Status: Active Licence No: 03/28/69/0296/1/R01 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: EAGLE HALL FARM, EAGLE BARNSDALE, LINCOLN - SEEPAGE LAGOON Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487400 Northing: 365325	Annual Volume (m^3): 75000 Max Daily Volume (m^3): 2000 Original Application No: A/28/69/182 Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/04/2019 Version End Date: -
-	860m N	Status: Active Licence No: 4/30/03/*G/0068 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CHENNELLS CATCHPIT - EAGLE Data Type: Point Name: G H CHENNELLS FARMS LTD Easting: 488450 Northing: 365700	Annual Volume (m^3): 26140 Max Daily Volume (m^3): 1364 Original Application No: N1110 Original Start Date: 01/09/1985 Expiry Date: - Issue No: 101 Version Start Date: 22/12/2000 Version End Date: -
-	1063m N	Status: Historical Licence No: 4/30/03/*G/0043 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: SCOTLAND FARM WELL1 THORPE ETC Data Type: Point Name: SHELTON Easting: 489200 Northing: 365700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1993 Version End Date: -

ID	Location	Details	
-	1065m N	Status: Historical Licence No: 4/30/03/*G/0043 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: SCOTLAND FARM WELL2 THORPE ETC Data Type: Point Name: SHELTON Easting: 489210 Northing: 365700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1993 Version End Date: -
-	1070m N	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASES 5A AND 5B Data Type: Poly4 Name: Tarmac Trading Limited Easting: 487679 Northing: 366424	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -
E	1244m SW	Status: Historical Licence No: 03/28/69/0288 Details: Vegetable washing Direct Source: Groundwater Midlands Region Point: BOREHOLE AT SWINDERBY - B Data Type: Point Name: FENMARC PRODUCE LIMITED Easting: 487290 Northing: 363100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 04/02/2000 Expiry Date: 31/03/2008 Issue No: 1 Version Start Date: 04/02/2000 Version End Date: -
E	1244m SW	Status: Historical Licence No: 03/28/69/0288/1 Details: Vegetable Washing Direct Source: Groundwater Midlands Region Point: BOREHOLE AT SWINDERBY - B Data Type: Point Name: FENMARC PRODUCE LIMITED Easting: 487290 Northing: 363100	Annual Volume (m^3): 65000 Max Daily Volume (m^3): 240 Original Application No: - Original Start Date: 08/08/2003 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 08/08/2003 Version End Date: -
-	1259m SW	Status: Historical Licence No: 03/28/69/0288 Details: Vegetable washing Direct Source: Groundwater Midlands Region Point: BOREHOLE AT SWINDERBY-A Data Type: Point Name: FENMARC PRODUCE LIMITED Easting: 487200 Northing: 363170	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 04/02/2000 Expiry Date: 31/03/2008 Issue No: 1 Version Start Date: 04/02/2000 Version End Date: -

ID	Location	Details	
-	1259m SW	Status: Historical Licence No: 03/28/69/0288/1 Details: Vegetable Washing Direct Source: Groundwater Midlands Region Point: BOREHOLE AT SWINDERBY-A Data Type: Point Name: FENMARC PRODUCE LIMITED Easting: 487200 Northing: 363170	Annual Volume (m^3): 65000 Max Daily Volume (m^3): 240 Original Application No: - Original Start Date: 08/08/2003 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 08/08/2003 Version End Date: -
-	1378m N	Status: Active Licence No: 4/30/03/*G/0109/R01 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: G H CHENNELLS FARMS LTD Easting: 489402 Northing: 365964	Annual Volume (m^3): 15000 Max Daily Volume (m^3): 1380 Original Application No: NPS/WR/030699 Original Start Date: 19/04/2016 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 08/03/2019 Version End Date: -
-	1378m N	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489402 Northing: 365964	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 16/08/2012 Version End Date: -
-	1447m S	Status: Active Licence No: MD/028/0069/038 Details: Dewatering Direct Source: Groundwater Midlands Region Point: ABSTRACTION AREA EDGED IN RED AT SWINDERBY QUARRY Data Type: Poly4 Name: CEMEX UK MATERIALS LIMITED Easting: 487181 Northing: 361591	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPS/NA/000078 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
-	1465m N	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASE 5D Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488293 Northing: 366434	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -

ID	Location	Details	
-	1480m NE	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489868 Northing: 365860	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 16/08/2012 Version End Date: -
-	1492m N	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASE 5C Data Type: Poly4 Name: Tarmac Trading Limited Easting: 487917 Northing: 366511	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -
H	1534m SW	Status: Active Licence No: 03/28/69/0280 Details: Spray Irrigation - Storage Direct Source: Groundwater Midlands Region Point: SWINDERBY - BOREHOLE (A) Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487490 Northing: 362587	Annual Volume (m^3): 360000 Max Daily Volume (m^3): 1100 Original Application No: NPS/WR/028451 Original Start Date: 27/04/1999 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2021 Version End Date: -
H	1534m SW	Status: Active Licence No: 03/28/69/0280 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: SWINDERBY - BOREHOLE (A) Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487490 Northing: 362587	Annual Volume (m^3): 360000 Max Daily Volume (m^3): 1100 Original Application No: NPS/WR/028451 Original Start Date: 27/04/1999 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2021 Version End Date: -
H	1544m SW	Status: Active Licence No: 03/28/69/0280 Details: Spray Irrigation - Storage Direct Source: Groundwater Midlands Region Point: SWINDERBY - BOREHOLE (B) Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487491 Northing: 362569	Annual Volume (m^3): 360000 Max Daily Volume (m^3): 1100 Original Application No: NPS/WR/028451 Original Start Date: 27/04/1999 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2021 Version End Date: -

ID	Location	Details	
H	1544m SW	Status: Active Licence No: 03/28/69/0280 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: SWINDERBY - BOREHOLE (B) Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487491 Northing: 362569	Annual Volume (m^3): 360000 Max Daily Volume (m^3): 1100 Original Application No: NPS/WR/028451 Original Start Date: 27/04/1999 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2021 Version End Date: -
H	1552m SW	Status: Historical Licence No: 03/28/69/0280 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: SWINDERBY - BOREHOLE (1) Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487480 Northing: 362570	Annual Volume (m^3): 113650 Max Daily Volume (m^3): 1137 Original Application No: - Original Start Date: 27/04/1999 Expiry Date: - Issue No: 1 Version Start Date: 03/12/2018 Version End Date: -
H	1556m SW	Status: Active Licence No: 03/28/69/0280 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: SWINDERBY - BOREHOLE (C) Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487489 Northing: 362552	Annual Volume (m^3): 360000 Max Daily Volume (m^3): 1100 Original Application No: NPS/WR/028451 Original Start Date: 27/04/1999 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2021 Version End Date: -
H	1556m SW	Status: Active Licence No: 03/28/69/0280 Details: Spray Irrigation - Storage Direct Source: Groundwater Midlands Region Point: SWINDERBY - BOREHOLE (C) Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487489 Northing: 362552	Annual Volume (m^3): 360000 Max Daily Volume (m^3): 1100 Original Application No: NPS/WR/028451 Original Start Date: 27/04/1999 Expiry Date: - Issue No: 2 Version Start Date: 01/04/2021 Version End Date: -
-	1556m NE	Status: Active Licence No: 4/30/03/*G/0109/R01 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: G H CHENNELLS FARMS LTD Easting: 489746 Northing: 365987	Annual Volume (m^3): 15000 Max Daily Volume (m^3): 1380 Original Application No: NPS/WR/030699 Original Start Date: 19/04/2016 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 08/03/2019 Version End Date: -

ID	Location	Details	
-	1561m N	Status: Historical Licence No: 4/30/03/*G/0100 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489550 Northing: 366100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: 31/10/2004 Issue No: 1 Version Start Date: 30/06/2000 Version End Date: -
H	1564m SW	Status: Historical Licence No: 03/28/69/0280 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: SWINDERBY - BOREHOLE (2) Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487480 Northing: 362550	Annual Volume (m^3): 113650 Max Daily Volume (m^3): 1137 Original Application No: - Original Start Date: 27/04/1999 Expiry Date: - Issue No: 1 Version Start Date: 03/12/2018 Version End Date: -
-	1569m N	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASE 5E Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488380 Northing: 366670	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -
H	1574m SW	Status: Historical Licence No: 03/28/69/0280 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: SWINDERBY - BOREHOLE (3) Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487490 Northing: 362520	Annual Volume (m^3): 113650 Max Daily Volume (m^3): 1137 Original Application No: - Original Start Date: 27/04/1999 Expiry Date: - Issue No: 1 Version Start Date: 03/12/2018 Version End Date: -
-	1603m N	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489700 Northing: 366070	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 1 Version Start Date: 22/04/2005 Version End Date: -

ID	Location	Details	
-	1931m NE	Status: Historical Licence No: 4/30/03/*G/0022 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: RICHARDSON WELL THORPE-O-T-H. Data Type: Point Name: RICHARDSON Easting: 491000 Northing: 365600	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1965 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**1**

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 41 >**

ID	Location	Details	
-	1886m SE	Status: Active Licence No: AN/030/0003/007 Details: Trickle Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BETWEEN POINTS E AND F, RIVER WITHAM, BASSINGHAM Data Type: Line Name: J & J Burnett Limited Easting: 491024 Northing: 361105	Annual Volume (m^3): 18920 Max Daily Volume (m^3): 1000 Original Application No: NPS/NA/000192 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	**0**

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

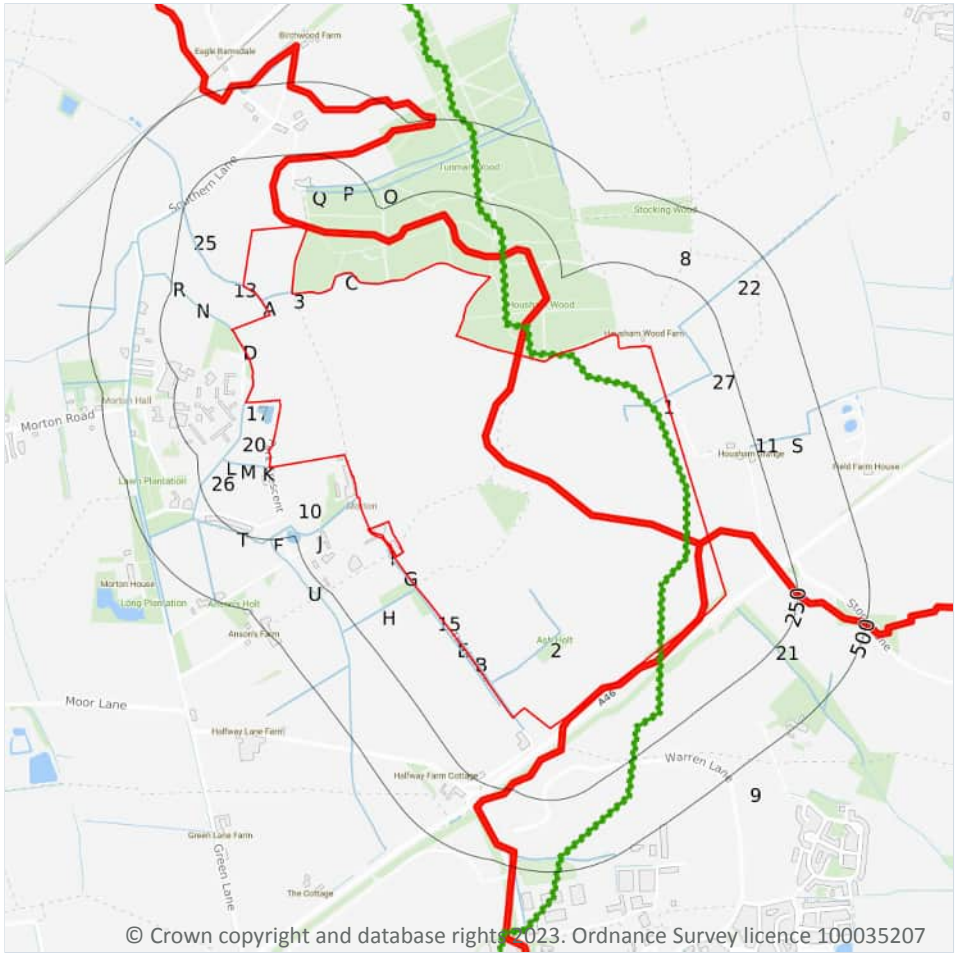
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	42

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

Features are displayed on the Hydrology map on **page 51 >**

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

ID	Location	Type of water feature	Ground level	Permanence	Name
2	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
3	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**Mill Dam Dyke**
A	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**Mill Dam Dyke**
A	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**Mill Dam Dyke**
B	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
B	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
B	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
B	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
B	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
C	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**Mill Dam Dyke**
A	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
D	1m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
13	1m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Mill Dam Dyke

ID	Location	Type of water feature	Ground level	Permanence	Name
G	5m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
15	5m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	5m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	7m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
17	7m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
J	7m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	10m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	12m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	14m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
20	19m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	50m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
21	57m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	61m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
22	120m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	120m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	132m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	135m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
25	147m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Mill Dam Dyke
L	157m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
N	157m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
L	161m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	163m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
26	163m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
27	168m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	233m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	243m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
T	245m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	245m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**23**

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

Features are displayed on the Hydrology map on **page 51 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**3**

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 51 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
8	**On site**	**River**	**Boultham Catchwater Drain**	**GB105030062380**	**Witham Upper**	**Witham**
9	**On site**	**River**	**Witham - conf Cringle Bk to conf Brant**	**GB105030056780**	**Witham Upper**	**Witham**
F	**On site**	**River**	**The Fleet Lower Catchment (trib of Trent)**	**GB104028058250**	**Trent and Trib**	**Trent Lower and Erewash**

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

6.4 WFD Surface water bodies

Records identified	3

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 51 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1879m SE	River	Witham - conf Cringle Bk to conf Brant	GB105030056780 ↗	Moderate	Fail	Moderate	2019
-	2204m NW	River	The Fleet Lower Catchment (trib of Trent)	GB104028058250 ↗	Poor	Fail	Poor	2019
-	7427m N	River	Boultham Catchwater Drain	GB105030062380 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	2

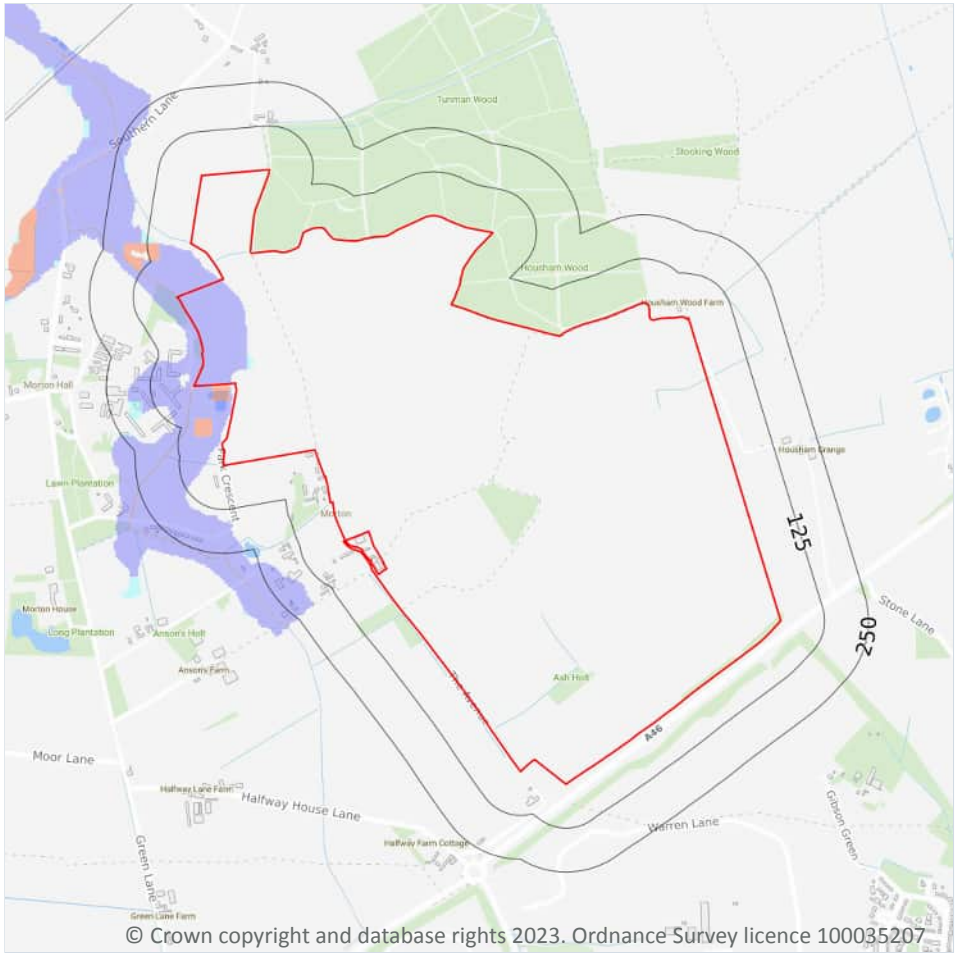
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 51 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
10	**On site**	**Lower Trent Erewash - Secondary Combined**	**GB40402G990300 ↗**	**Good**	**Good**	**Good**	**2019**
11	**On site**	**Witham Lias**	**GB40502G401400 ↗**	**Good**	**Good**	**Good**	**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	7

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).

Features are displayed on the River and coastal flooding map on **page 57 >**

Distance	Flood risk category
On site	**High**
0 - 50m	High

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.

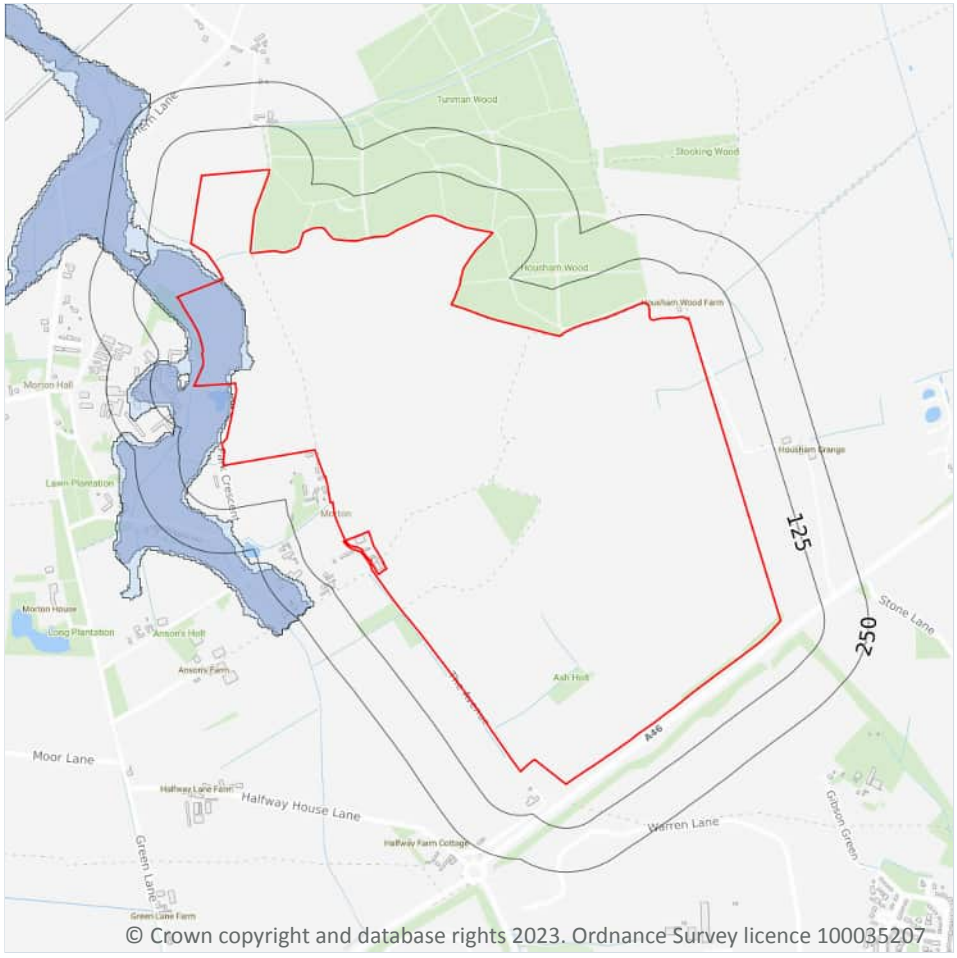
7.5 Flood Storage Areas

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



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

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.

Features are displayed on the River and coastal flooding map on **page 57 >**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

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

7.7 Flood Zone 3

Records within 50m	1

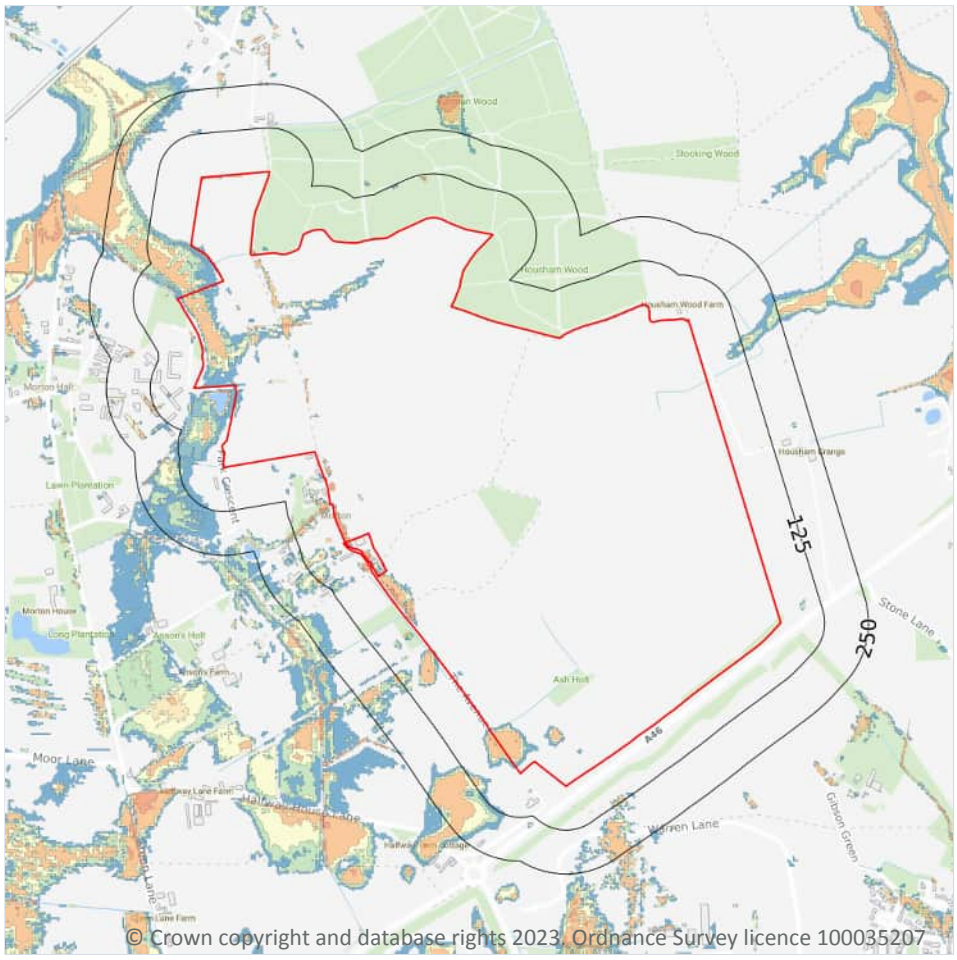
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 57 >**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

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

8 Surface water flooding



Site Outline

Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
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 61 >**

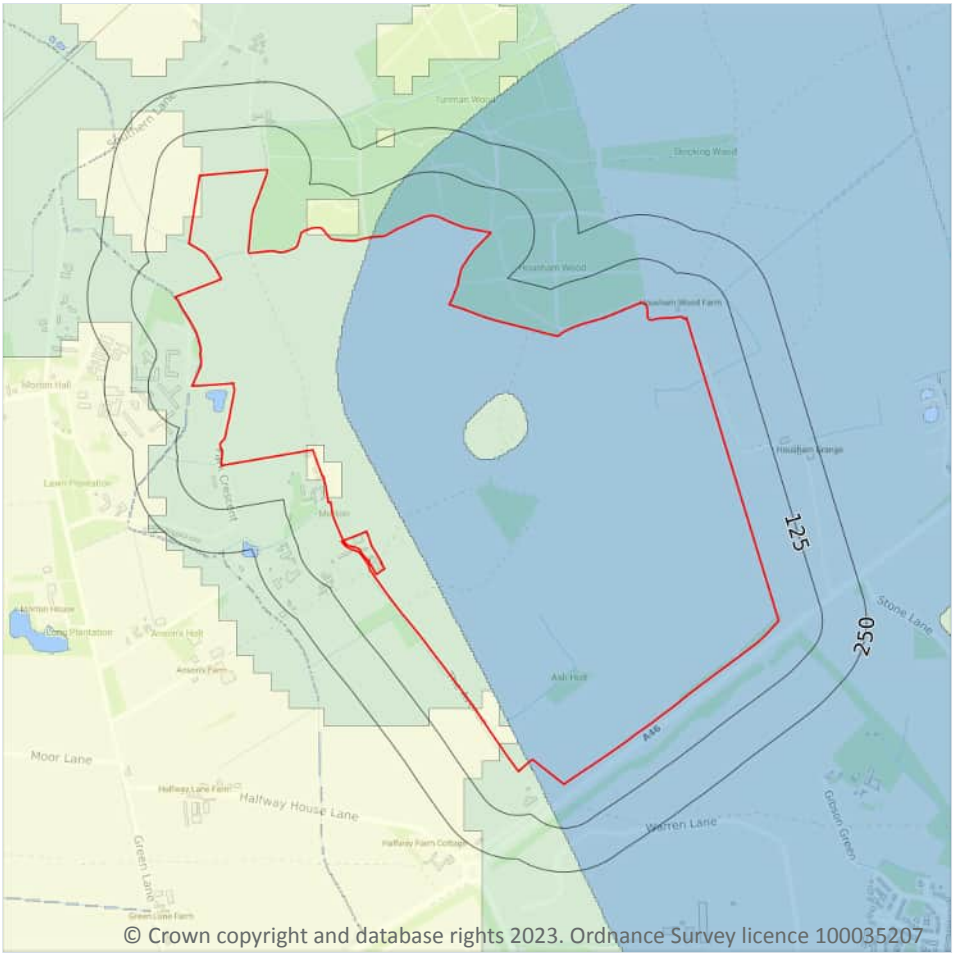
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

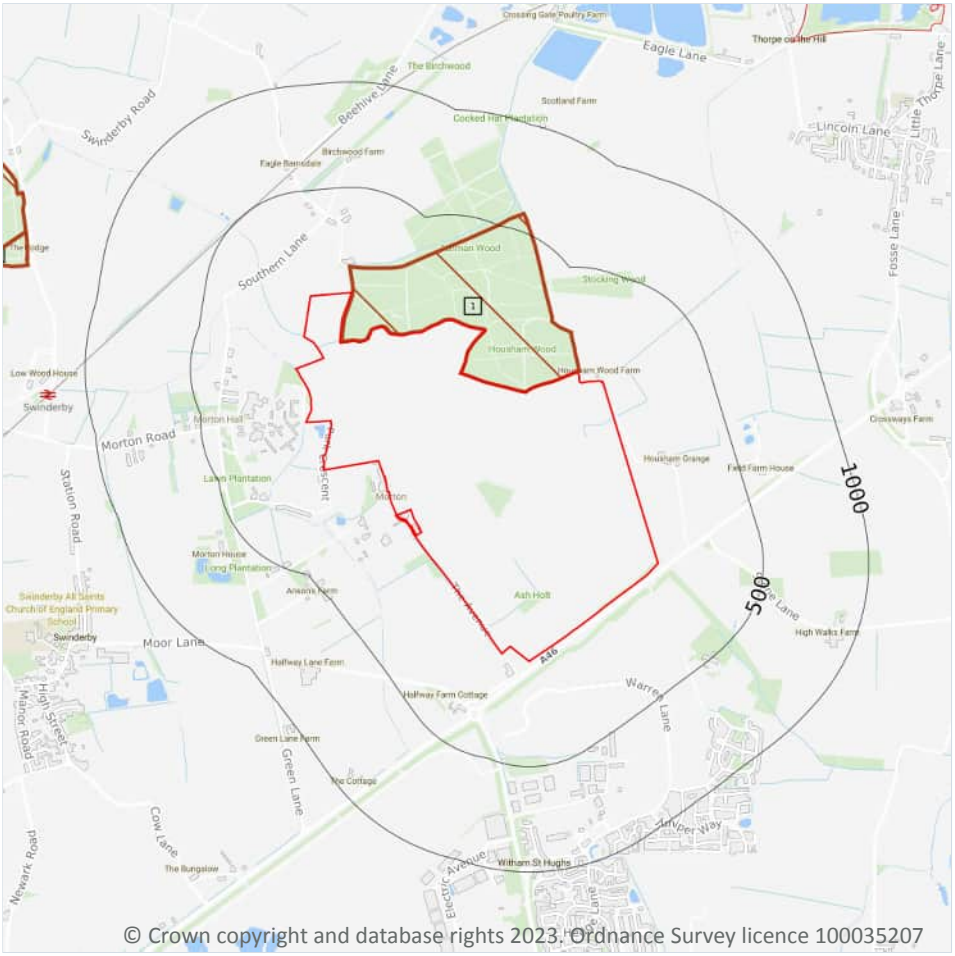
Highest risk on site	**Moderate**
Highest risk within 50m	**Moderate**

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 63 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



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Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	1

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.

Features are displayed on the Environmental designations map on **page 64 >**

ID	Location	Name	Data source
4	1845m NE	Whisby Nature Park	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	3

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 64 >**

ID	Location	Name	Woodland Type
1	**On site**	**Tunman/housham Woods**	**Ancient Replanted Woodland**
2	1348m NW	Great Low Wood	Ancient & Semi-Natural Woodland
3	1384m NW	Great Low Wood	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	6

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	**The Fleet Lower Catchment (trib of Trent) NVZ**	**Surface Water**	**338**	**Existing**
On site	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
1123m N	Lower Witham NVZ	Surface Water	375	Existing
1185m NW	The Fleet Lower Catchment (trib of Trent) NVZ	Surface Water	338	Existing
1889m NW	R Trent from Carlton-on-Trent to Laughton Drain NVZ	Surface Water	347	Existing
1923m SW	The Fleet Upper Catchment (trib of Trent) NVZ	Surface Water	331	Existing

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

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

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.

This data is sourced from Natural England.

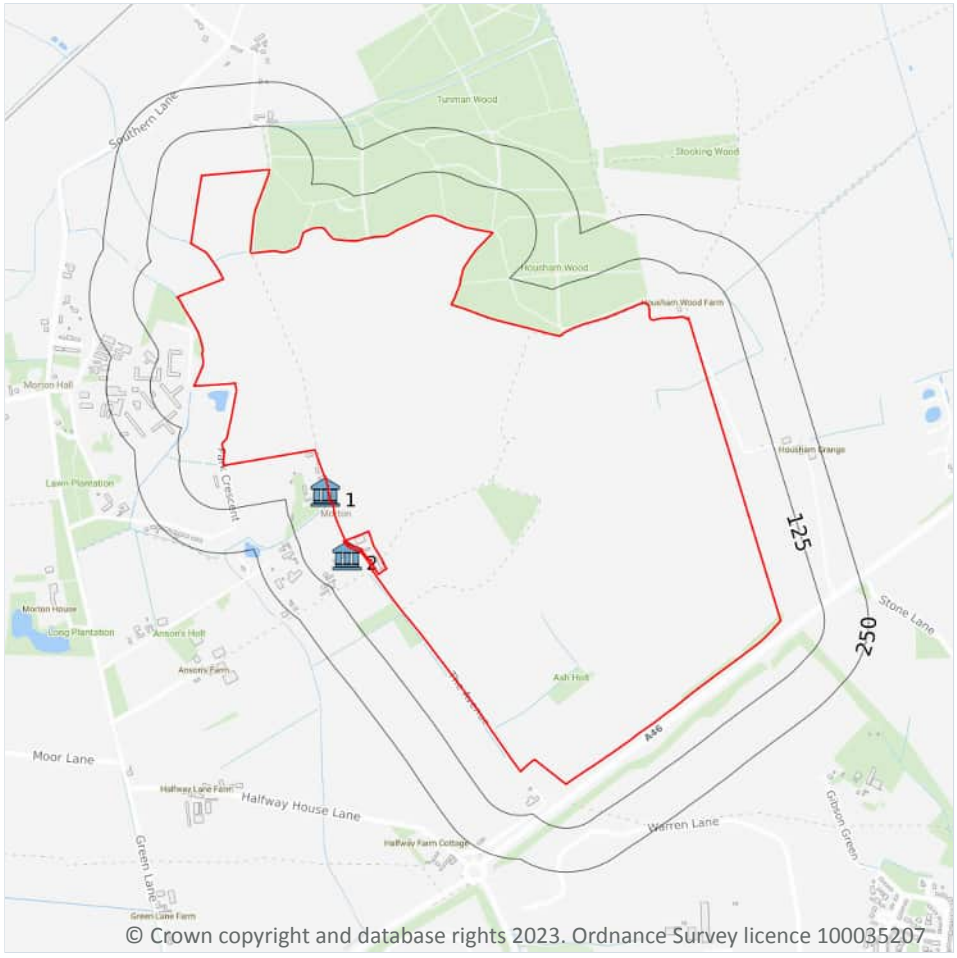
10.18 SSSI Units

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	2

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 70 >**

ID	Location	Name	Grade	Reference Number	Listed date
1	8m W	Morton Manor	II	1061930	22/12/1983
2	23m SW	Morton Grange	II	1317323	23/08/1967

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

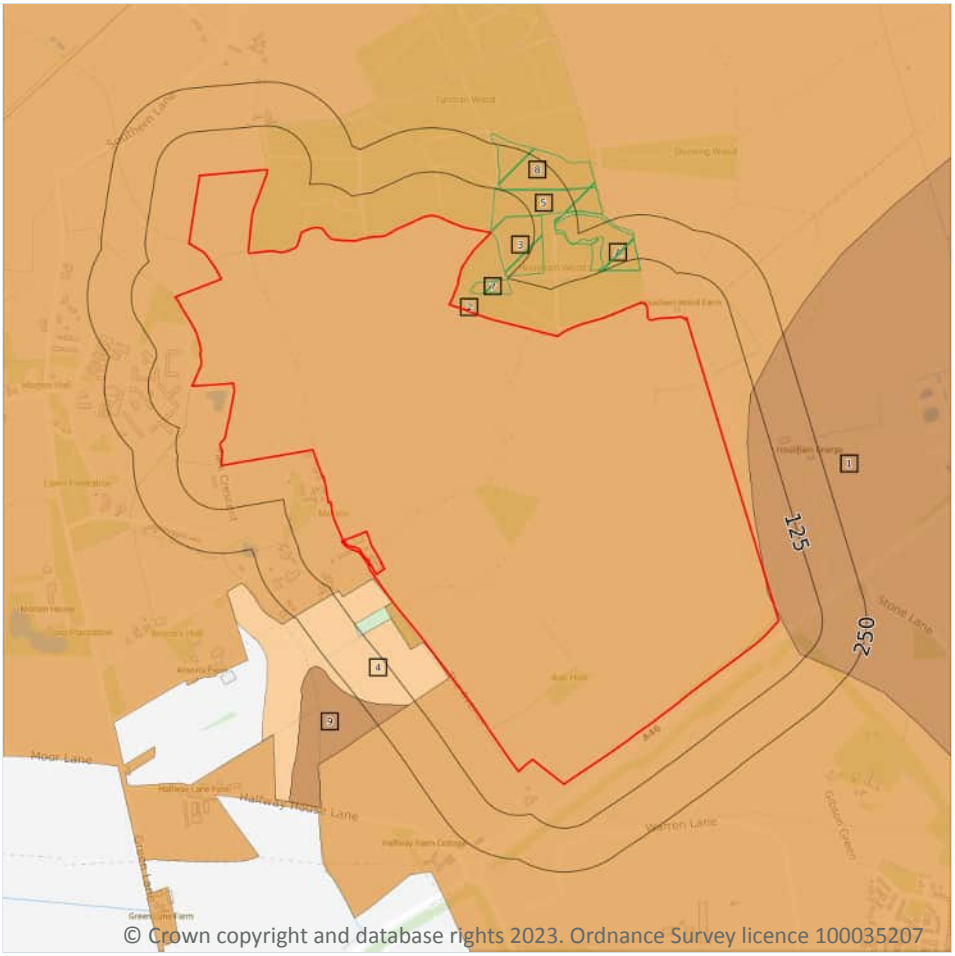
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



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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	4

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 73 >**

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.**
4	2m SW	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
9	146m S	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.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

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

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

12.3 Tree Felling Licences

Records within 250m	**6**

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.

Features are displayed on the Agricultural designations map on **page 73 >**

ID	Location	Description	Reference	Application date
3	2m N	Selective Fell/Thin (Unconditional)	014/247/99-00	15/03/2000
5	5m N	Selective Fell/Thin (Conditional)	017/400/14-15	16/02/2015
7	39m N	Selective Fell/Thin (Unconditional)	014/127/09-10	17/03/2010
A	91m NE	Selective Fell/Thin (Unconditional)	014/127/09-10	17/03/2010
A	92m NE	Selective Fell/Thin (Unconditional)	014/6/03-04	02/05/2003
8	128m N	Selective Fell/Thin (Conditional)	017/400/14-15	16/02/2015

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m **1**

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
118m NE	AG00404879	Entry Level plus Higher Level Stewardship	01/08/2012	31/07/2022

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m **4**

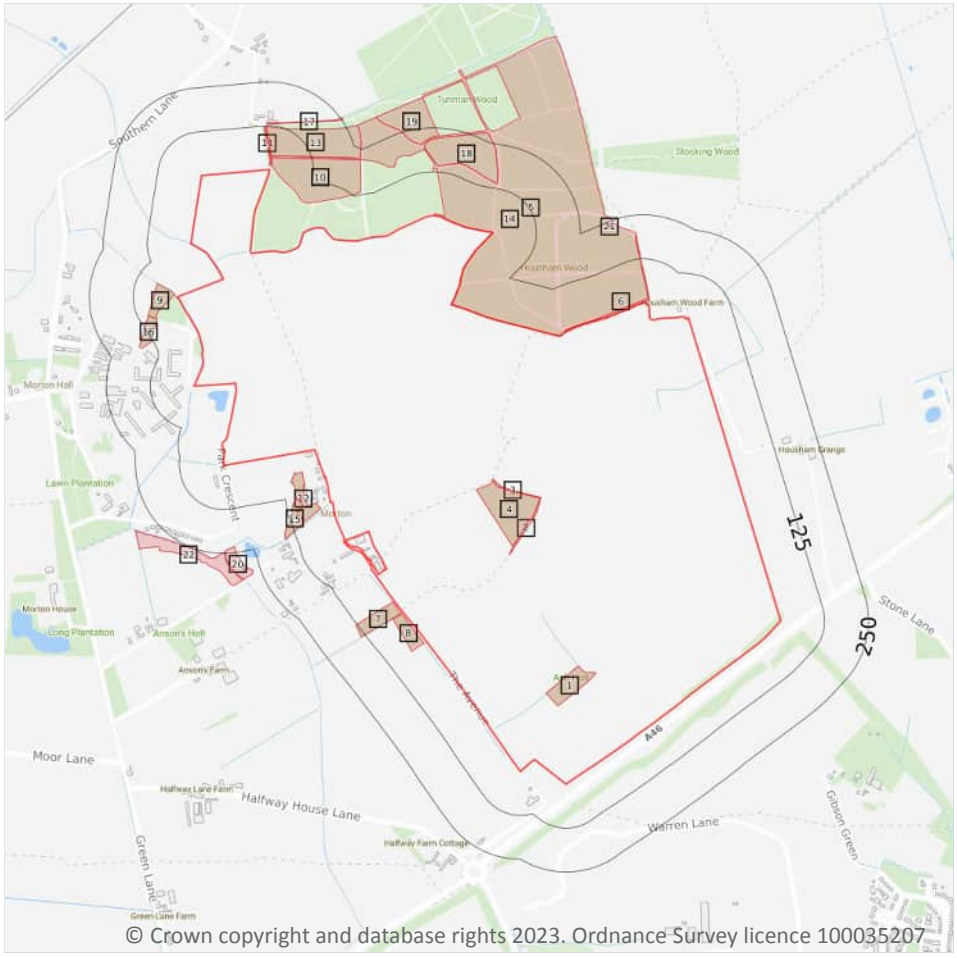
Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

Location	Reference	Scheme	Start Date	End Date
On site	**630710**	**Countryside Stewardship (Middle Tier)**	**01/01/2019**	**31/12/2023**
On site	**1013215**	**Countryside Stewardship (Middle Tier)**	**01/01/2021**	**31/12/2025**
58m SE	493402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022

Location	Reference	Scheme	Start Date	End Date
137m NW	1013215	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025

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	22

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 77 >**

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
6	0m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	5m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	6m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	9m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	12m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	13m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	31m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	40m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
14	61m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
15	80m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
16	82m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
17	130m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
18	139m N	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
19	205m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
20	233m W	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%)
21	235m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
22	247m W	Coastal and floodplain grazing marsh	Main habitat: CFPGM (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.

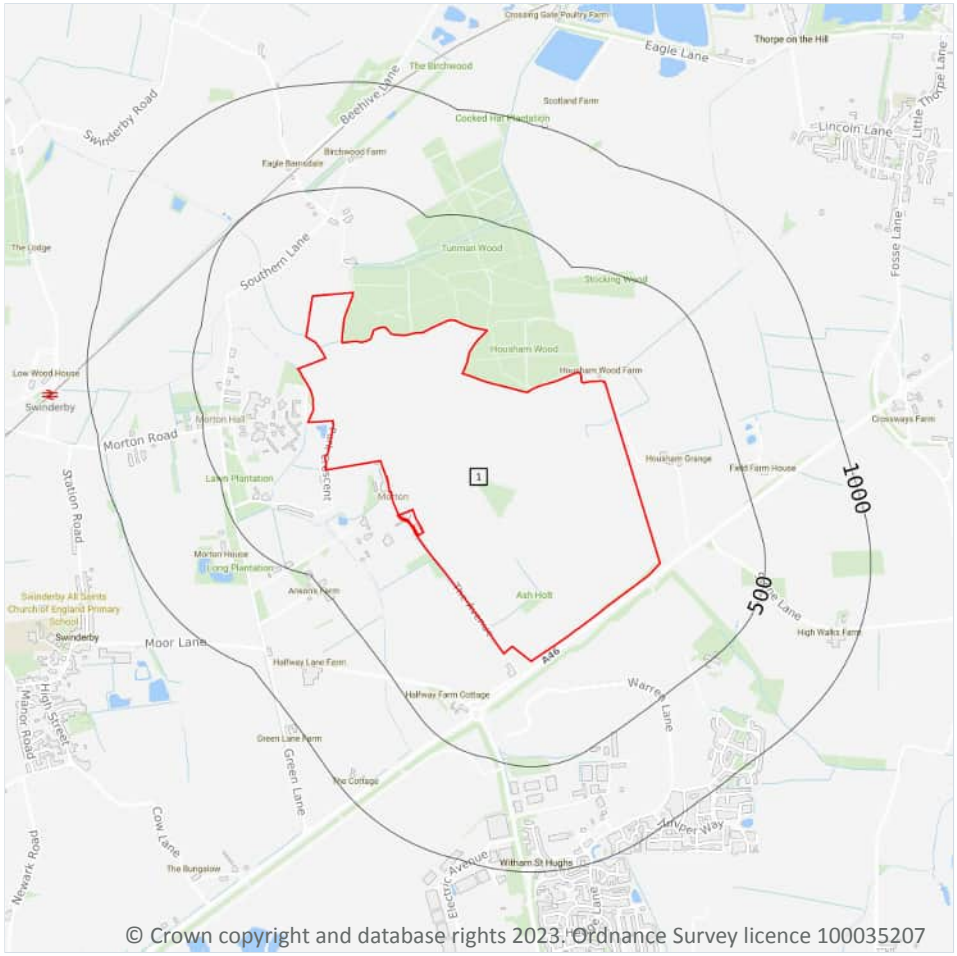
13.4 Limestone Pavement Orders

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 80 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

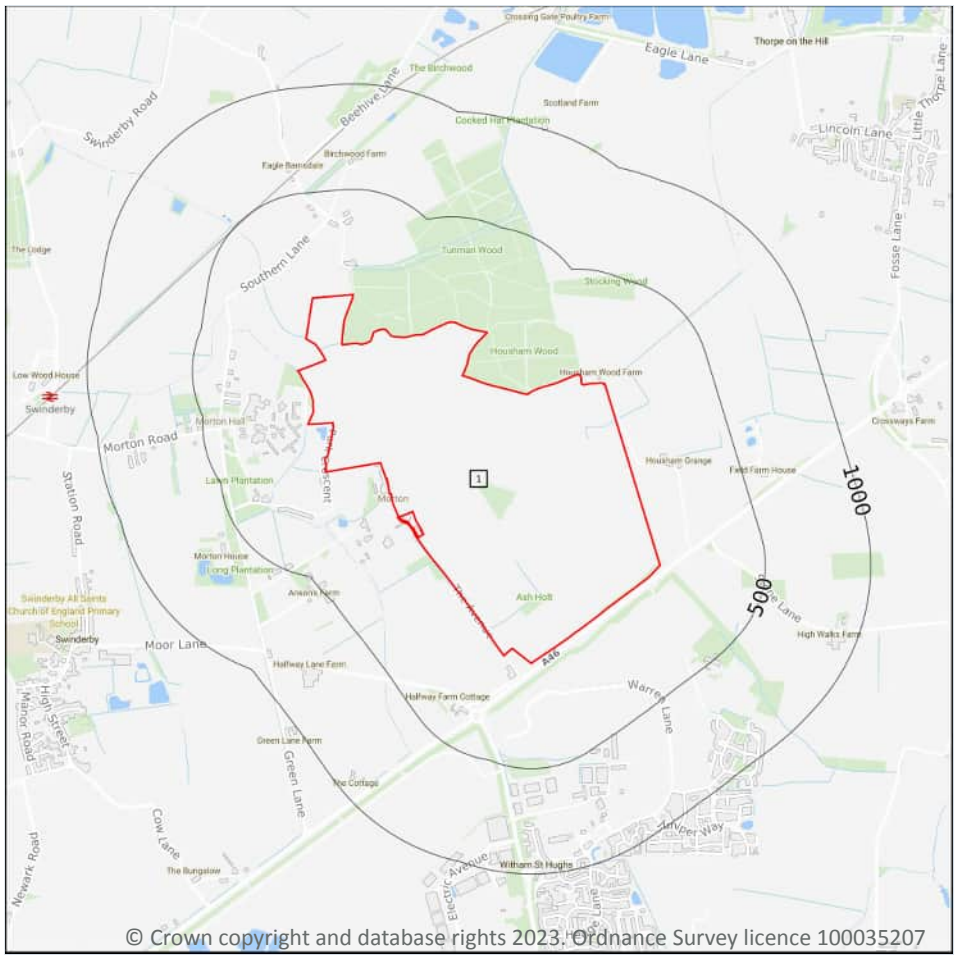
14.6 Bedrock faults and other linear features (10k)

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 84 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_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.

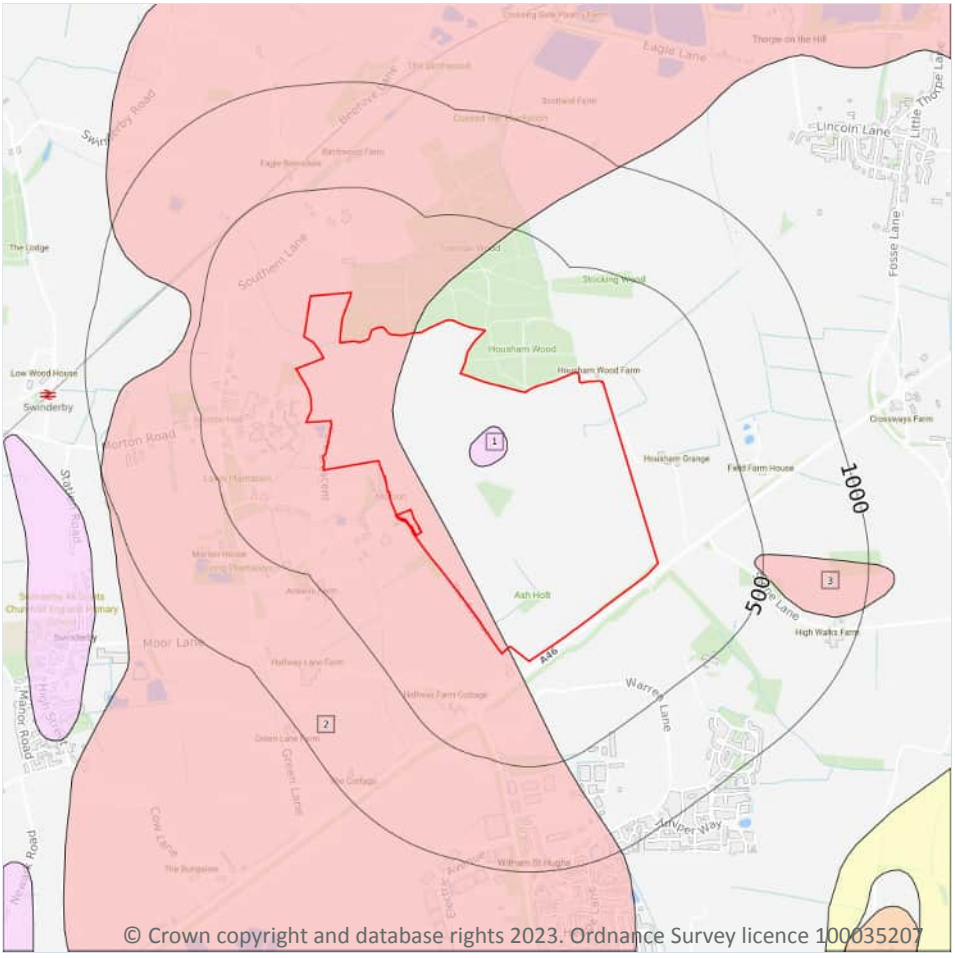
15.3 Artificial ground permeability (50k)

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	3

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 86 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**EMSG-XSV**	**EAGLE MOOR SAND AND GRAVEL MEMBER**	**SAND AND GRAVEL**
2	**On site**	**BDTN-XSV**	**BALDERTON SAND AND GRAVEL MEMBER**	**SAND AND GRAVEL**
3	458m E	BDTN-XSV	BALDERTON SAND AND GRAVEL MEMBER	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	2

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**Very High**	**High**
On site	**Intergranular**	**Very High**	**High**

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.

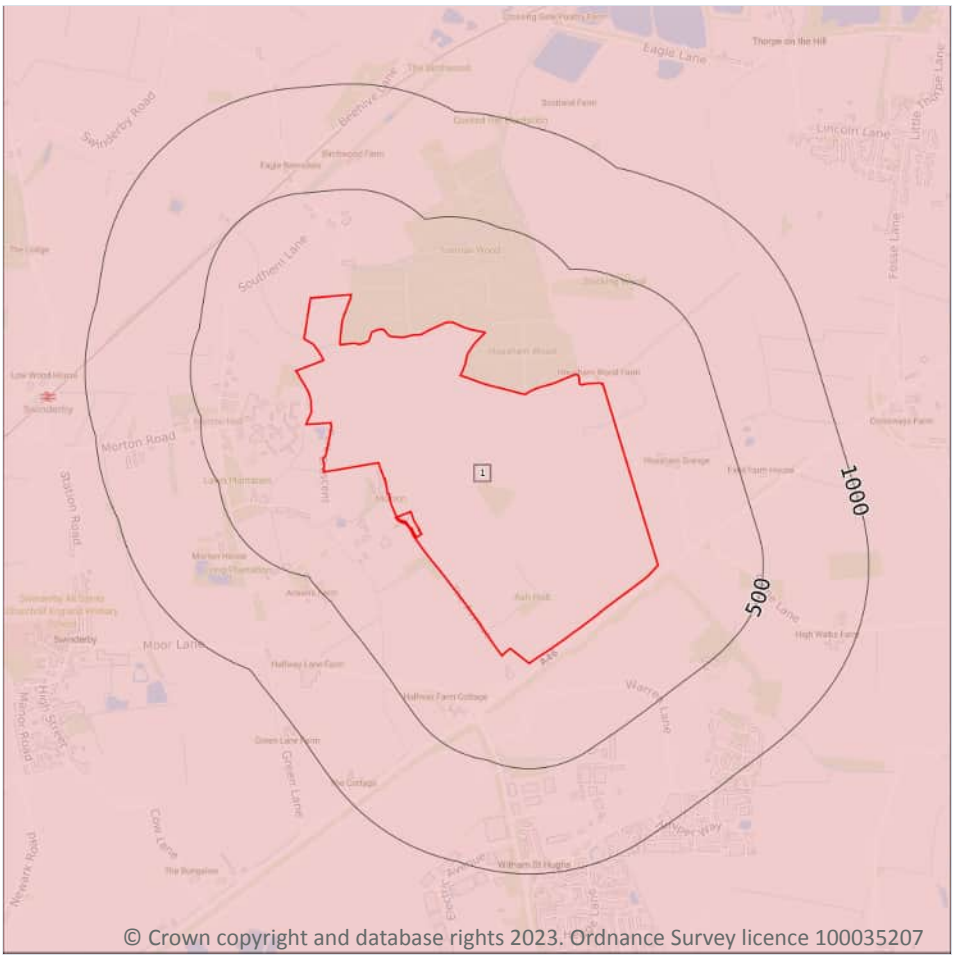
15.7 Landslip permeability (50k)

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 88 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**SMD-MDLM**	**SCUNTHORPE MUDSTONE FORMATION - MUDSTONE AND LIMESTONE, INTERBEDDED**	**RHAETIAN**

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**	**High**	**Low**

This data is sourced from the British Geological Survey.

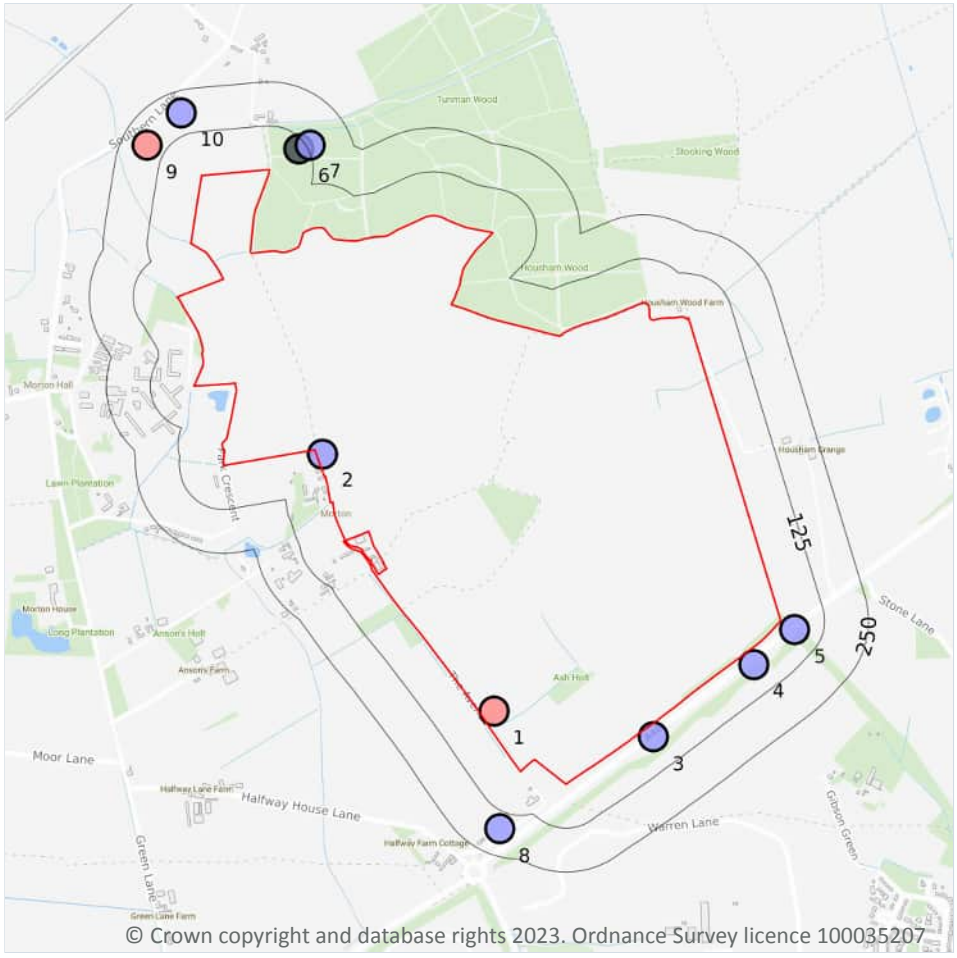
15.10 Bedrock faults and other linear features (50k)

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



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16.1 BGS Boreholes

Records within 250m	10

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.

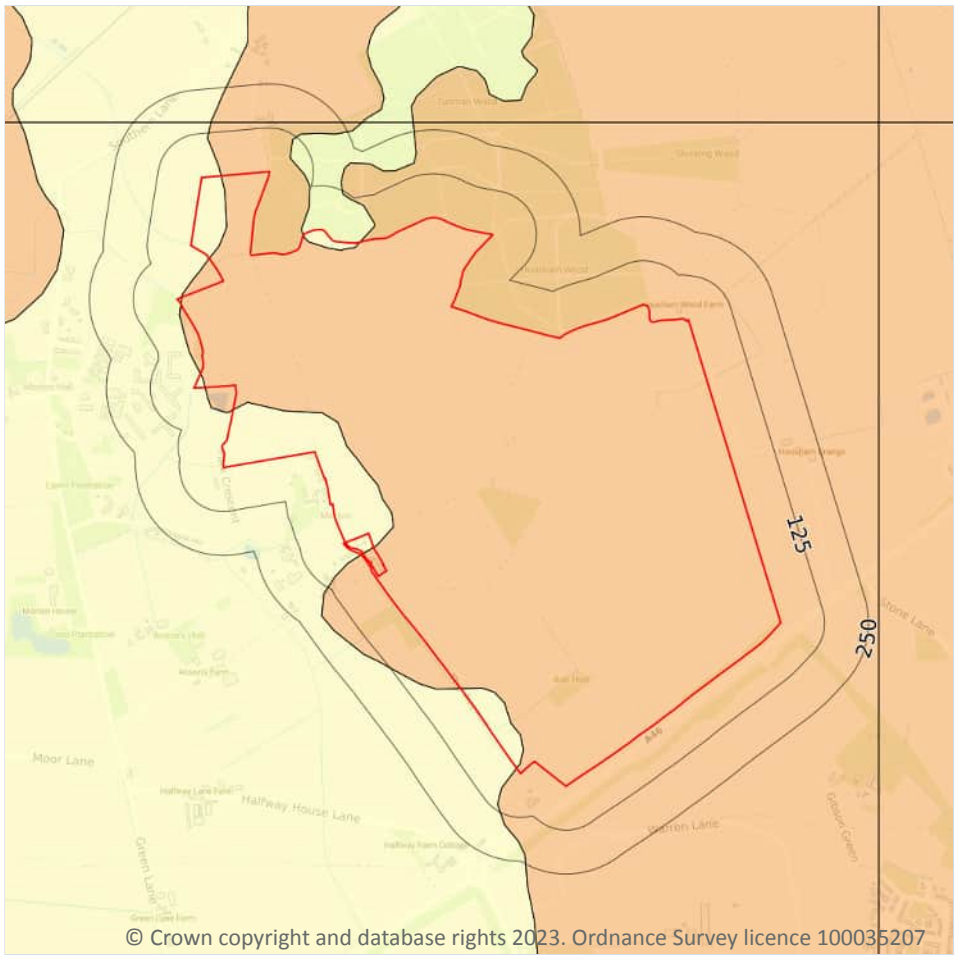
Features are displayed on the Boreholes map on **page 90 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	**On site**	**488903 363316**	**HALFWAY HOUSE**	**899.64**	**N**	**243416** ↗
2	**On site**	**488415 364050**	**MORTON MANOR**	**8.0**	**N**	**243395** ↗
3	32m SE	489358 363243	A46 NEWARK-LINCOLN IMPRO TP 67	2.0	N	243448 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	40m SE	489643 363449	A46 NEWARK-LINCOLN IMPRO 70	6.0	N	243435 ↗
5	48m SE	489761 363549	A46 NEWARK-LINCOLN IMPRO TP 71	2.0	N	243449 ↗
6	103m NW	488348 364919	TUNMAN WOODS BARNSDALE LINCS	-	Y	N/A
7	136m NW	488380 364930	TUNMAN WOODS EAGLE BARNSDALE	7.92	N	243527 ↗
8	175m S	488919 362981	WITHAM ST HUGHS PHASE 3 REINFORCEMENT MAIN BH101	9.23	N	20943870 ↗
9	179m NW	487914 364929	TUNMAN WOOD	902.75	N	243421 ↗
10	189m NW	488012 365022	SOUTHERN LANE	7.0	N	243158 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	2

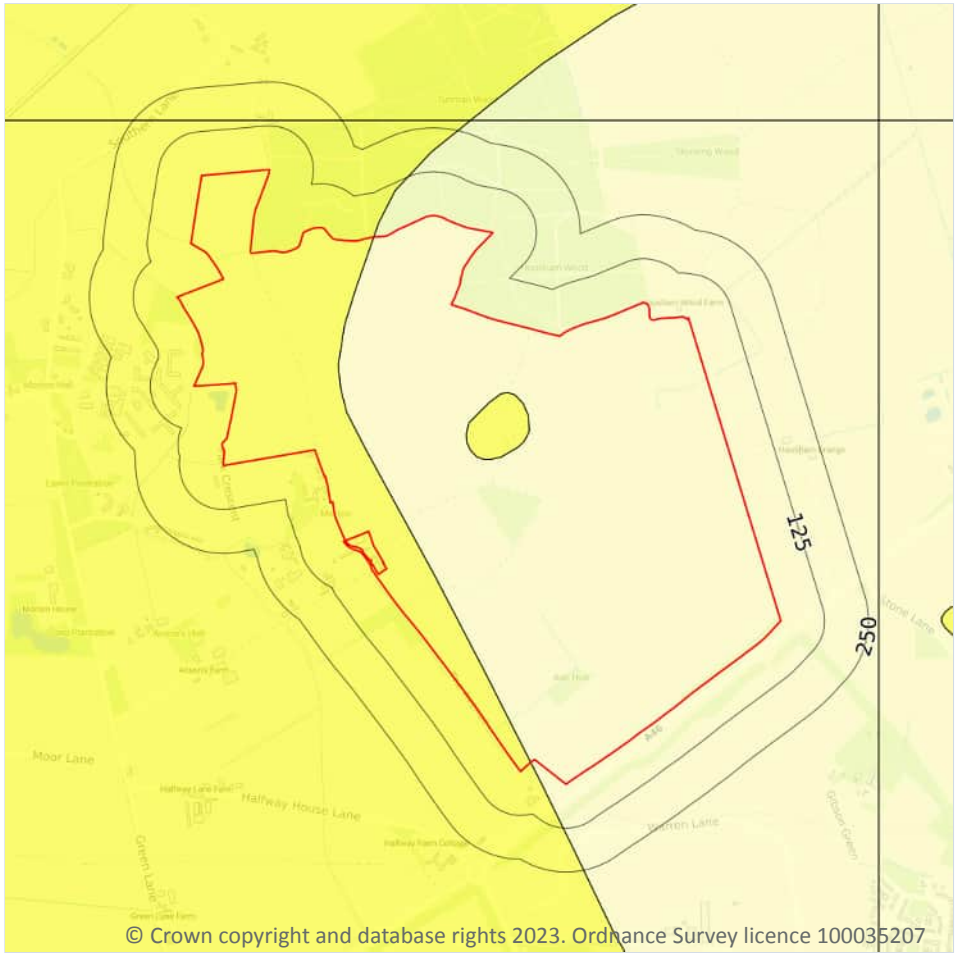
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 92 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	2

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.

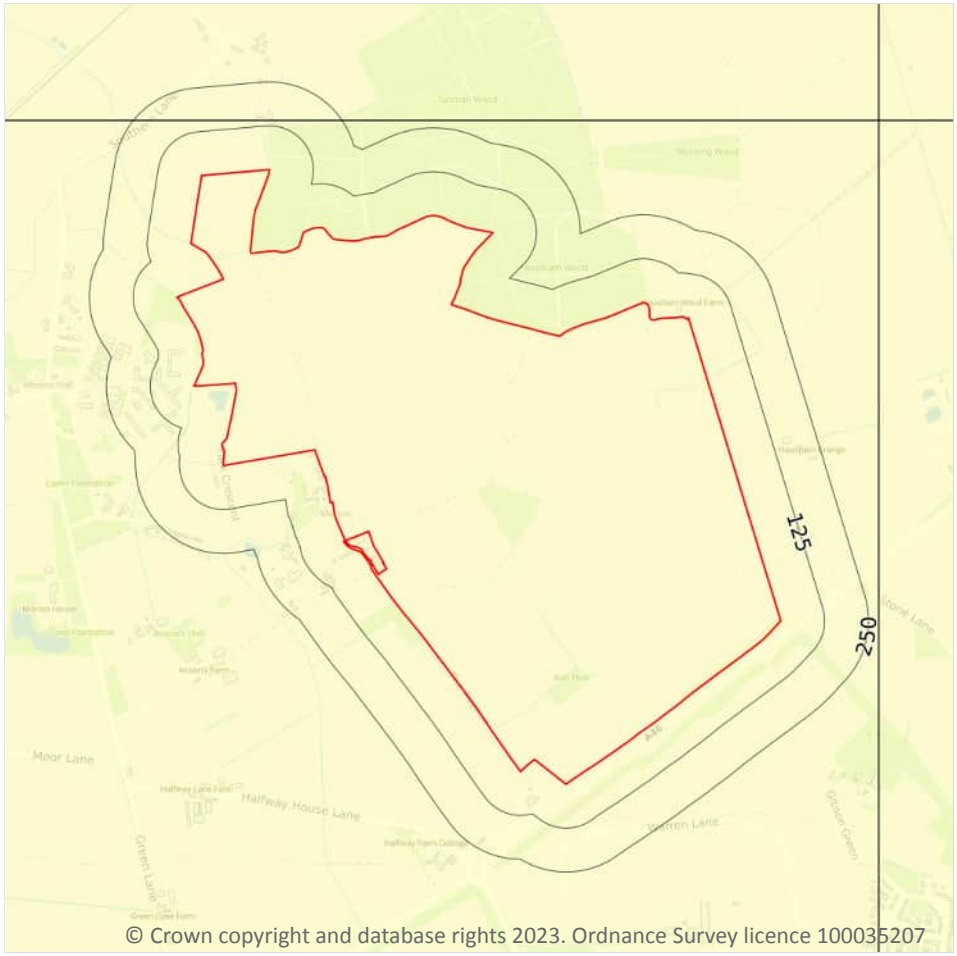
Features are displayed on the Natural ground subsidence - Running sands map on **page 93 >**

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

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

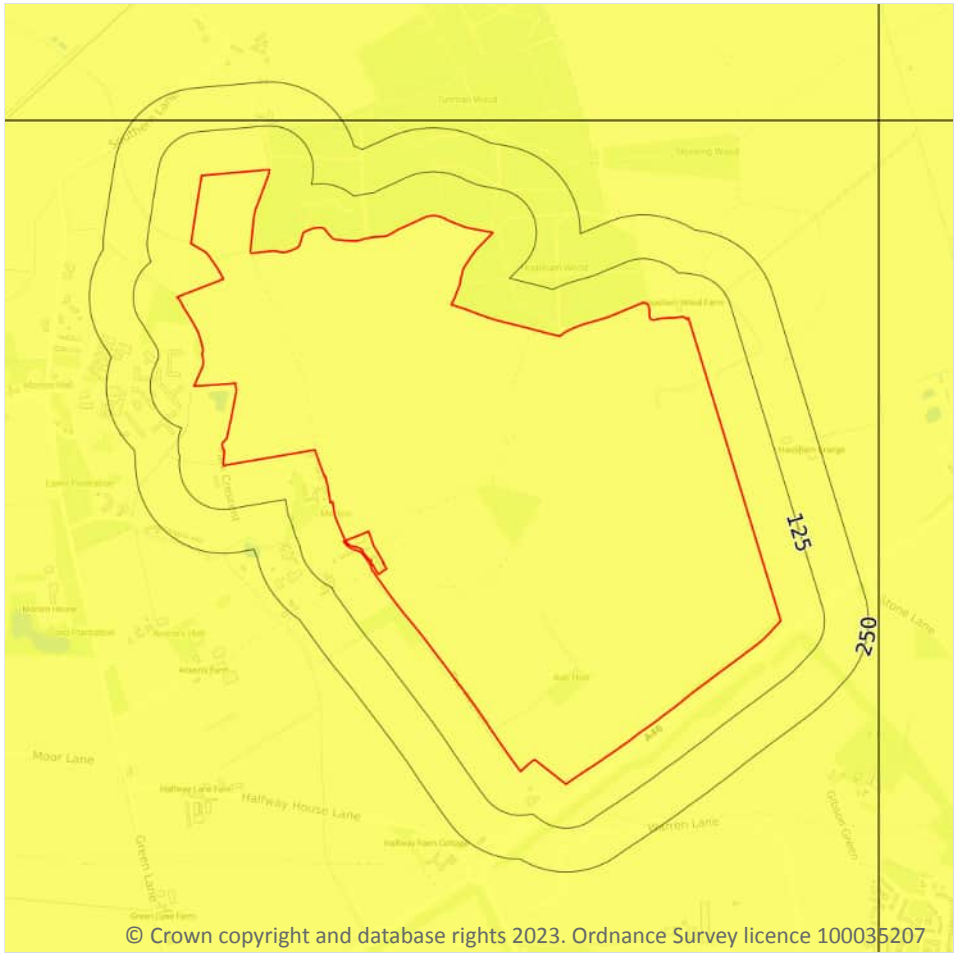
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 95 >**

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

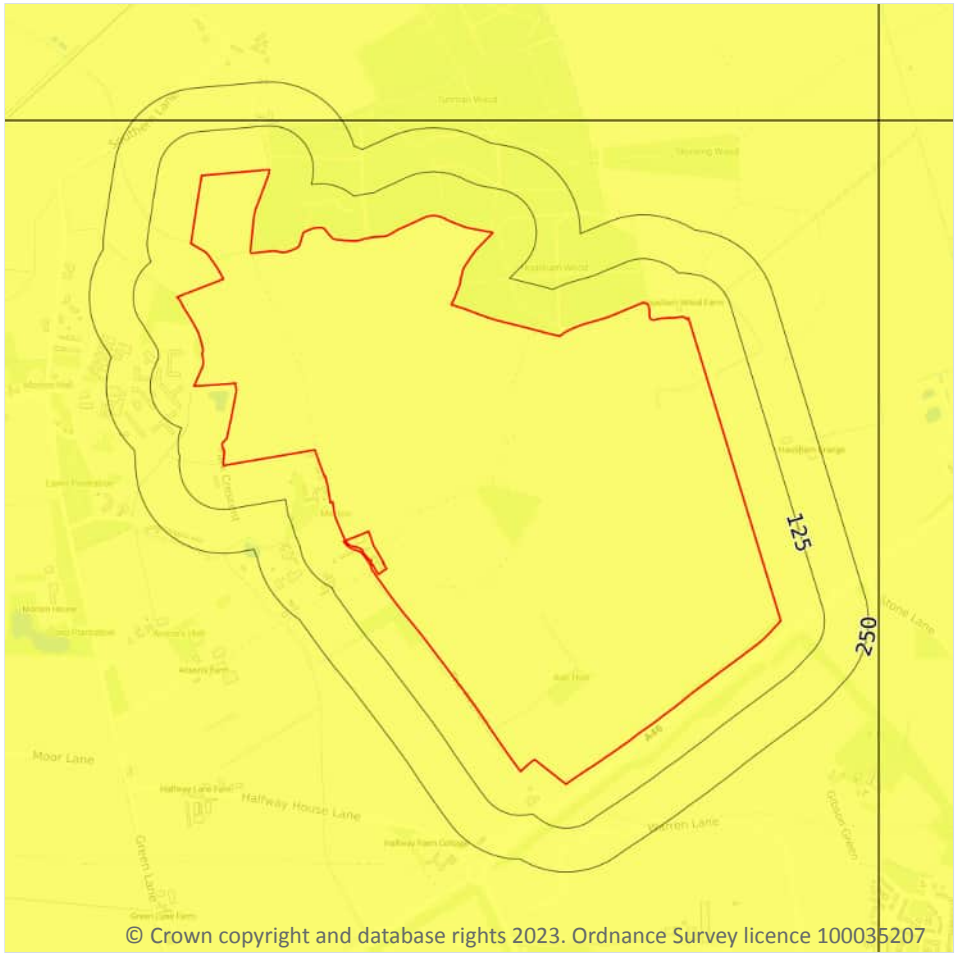
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 96 >**

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

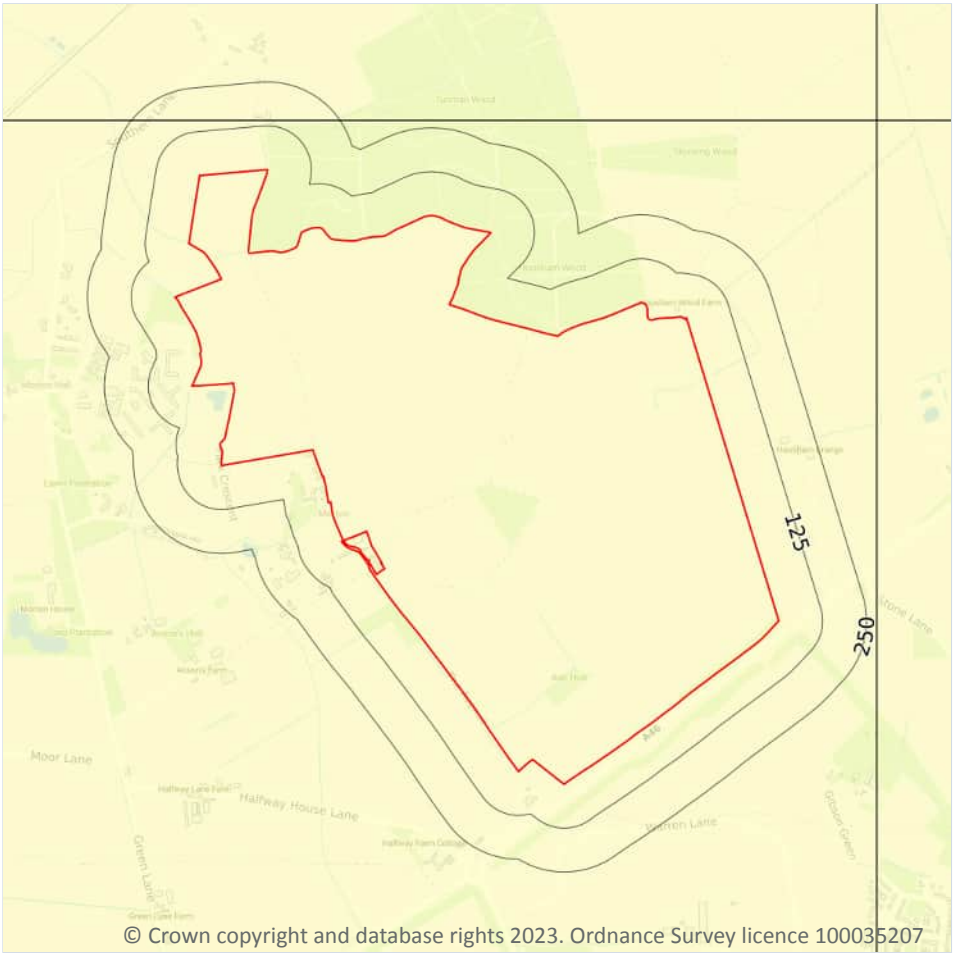
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 97 >**

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



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Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	1

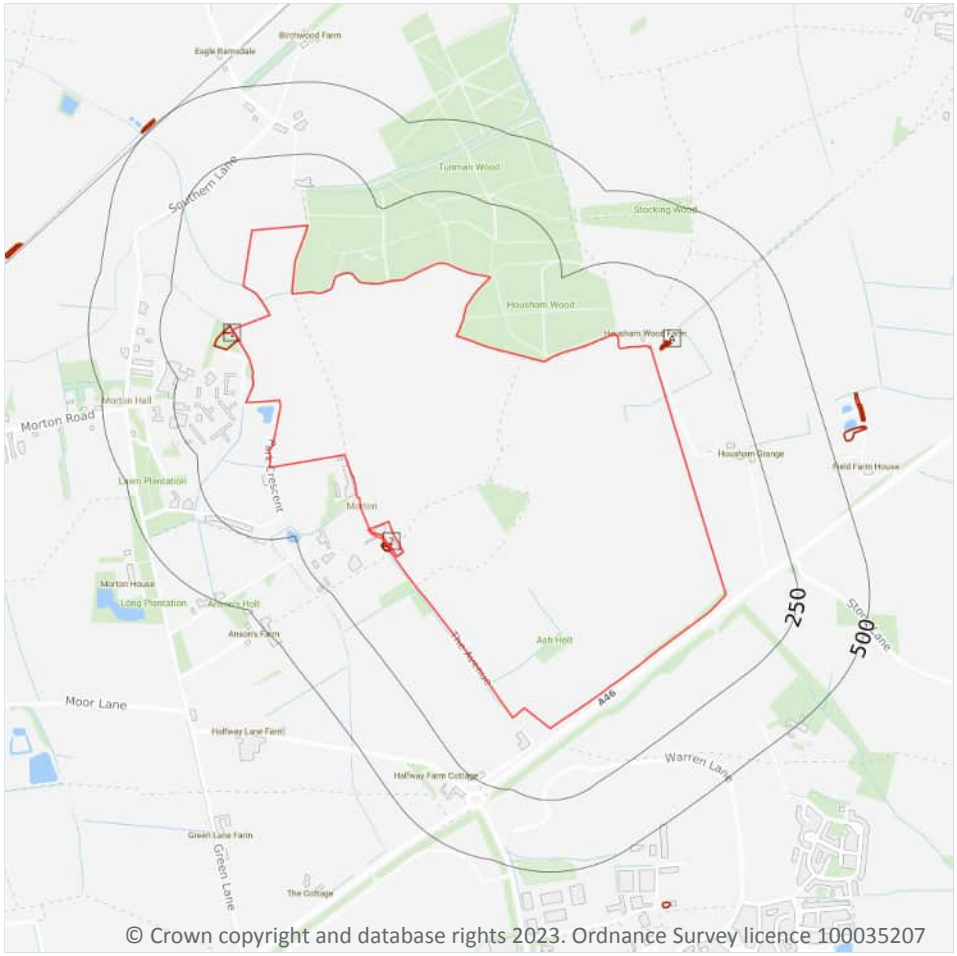
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 98 >**

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



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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	**6**

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 100 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Sewage Works**	**1979**	**1:10000**
2	1m SW	Pond	1979	1:10000
A	33m NE	Pond	1965	1:10560
A	33m NE	Pond	1948	1:10560
A	33m NE	Pond	1904	1:10560
A	34m NE	Pond	1979	1:10000

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	0

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).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

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

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

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

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

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

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

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

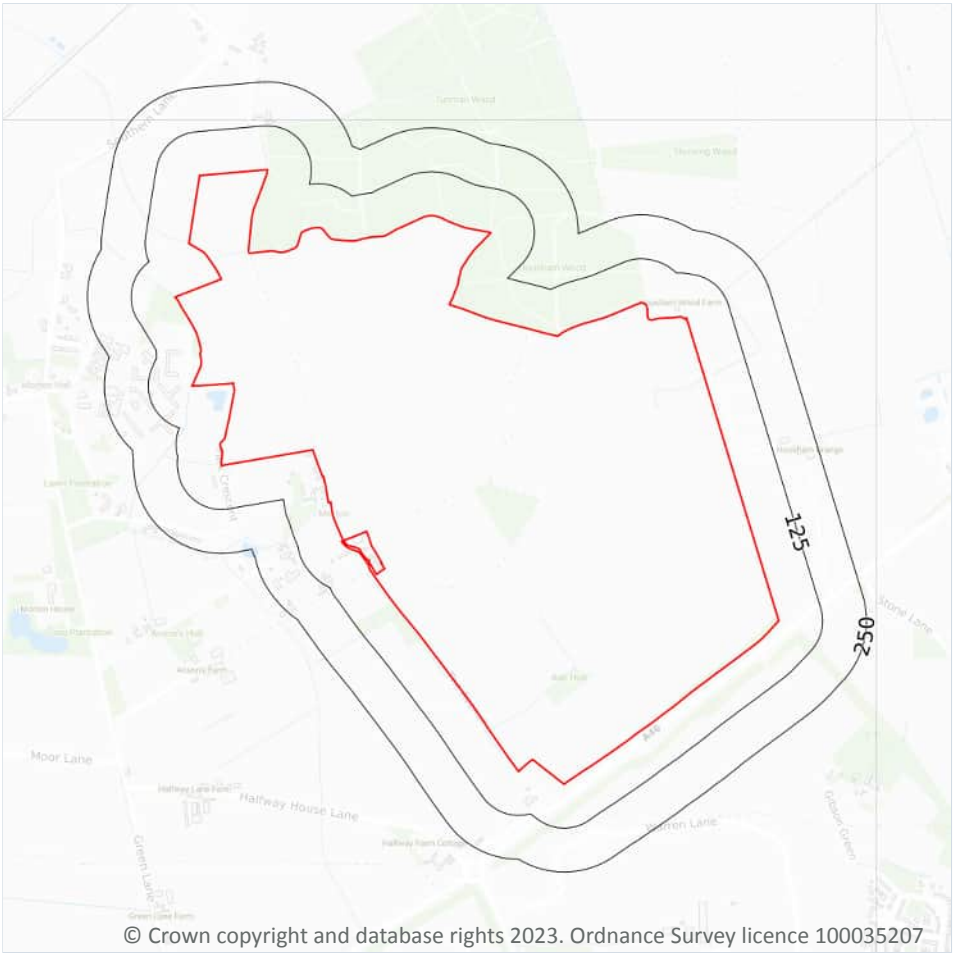
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

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

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

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

Greater than 30%

Between 10% and 30%

Between 5% and 10%

Between 3% and 5%

Between 1% and 3%

Less than 1%

20.1 Radon

Records on site	1

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

Features are displayed on the Radon map on **page 107 >**

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	**39**

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
1m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
1m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
3m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
3m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
19m NE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	**0**

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

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

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

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-april-2023/ ↗.

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 10/10/2023

Your ref: 60700987

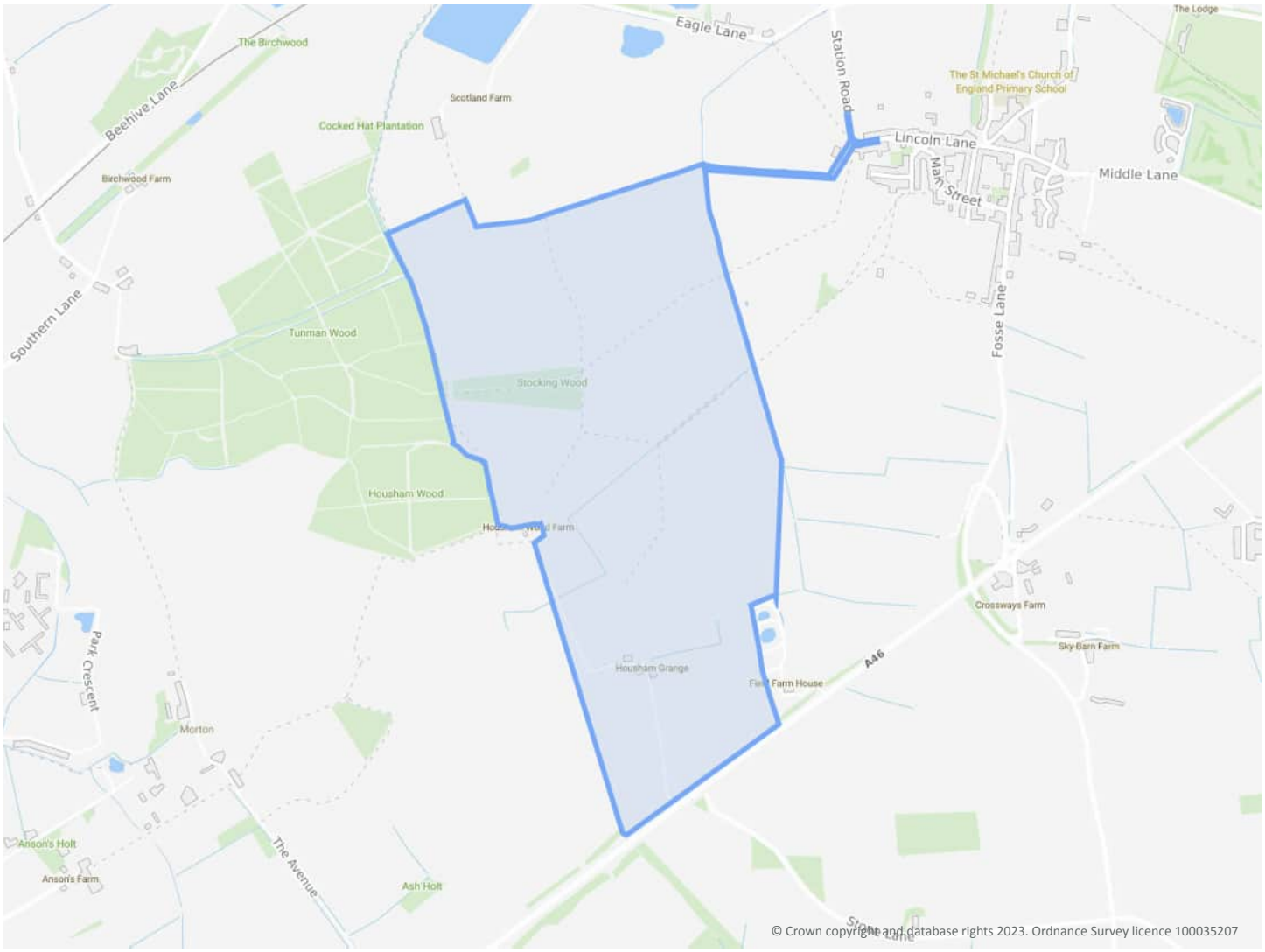
Our Ref: GSIP-2023-14155-15965_B

Site Details

Location: 489798 365136

Area: 136.45 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

Aerial image p. 9 >

OS MasterMap site plan N/A: >10ha

groundsure.com/insightuserguide ↗

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

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	0	0	2	3	-
15 >	1.2 >	Historical tanks >	1	0	0	0	-
15	1.3	Historical energy features	0	0	0	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
16 >	1.5 >	Historical garages >	0	0	0	1	-
16	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
17 >	2.1 >	Historical industrial land uses >	0	0	2	4	-
18 >	2.2 >	Historical tanks >	1	0	0	0	-
18	2.3	Historical energy features	0	0	0	0	-
18	2.4	Historical petrol stations	0	0	0	0	-
19 >	2.5 >	Historical garages >	0	0	0	1	-
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	2	-
21	3.5	Historical waste sites	0	0	0	0	-
22	3.6	Licensed waste sites	0	0	0	0	-
22 >	3.7 >	Waste exemptions >	0	22	6	14	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
27 >	4.1 >	Recent industrial land uses >	3	0	0	-	-
28	4.2	Current or recent petrol stations	0	0	0	0	-
28	4.3	Electricity cables	0	0	0	0	-
28	4.4	Gas pipelines	0	0	0	0	-
28	4.5	Sites determined as Contaminated Land	0	0	0	0	-

28	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
29	4.7	Regulated explosive sites	0	0	0	0	-
29	4.8	Hazardous substance storage/usage	0	0	0	0	-
29	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
29	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
29	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
30	4.12	Radioactive Substance Authorisations	0	0	0	0	-
30 >	**4.13 >**	**Licensed Discharges to controlled waters >**	1	1	0	1	-
30	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
31	4.15	Pollutant release to public sewer	0	0	0	0	-
31	4.16	List 1 Dangerous Substances	0	0	0	0	-
31	4.17	List 2 Dangerous Substances	0	0	0	0	-
31 >	**4.18 >**	**Pollution Incidents (EA/NRW) >**	0	0	1	0	-
32	4.19	Pollution inventory substances	0	0	0	0	-
32	4.20	Pollution inventory waste transfers	0	0	0	0	-
32	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
33 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
35 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
37 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
39 >	**5.4 >**	**Groundwater vulnerability- soluble rock risk >**	Identified (within 0m)				
39	5.5	Groundwater vulnerability- local information	None (within 0m)				
40 >	**5.6 >**	**Groundwater abstractions >**	0	0	2	2	28
47 >	**5.7 >**	**Surface water abstractions >**	0	0	0	0	4
48	5.8	Potable abstractions	0	0	0	0	0
49	5.9	Source Protection Zones	0	0	0	0	-
49	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
50 >	**6.1 >**	**Water Network (OS MasterMap) >**	16	20	7	-	-

54 >	6.2 >	Surface water features >	1	10	5	-	-
54 >	6.3 >	WFD Surface water body catchments >	2	-	-	-	-
55 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
55 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
56	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
56	7.2	Historical Flood Events	0	0	0	-	-
56	7.3	Flood Defences	0	0	0	-	-
57	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
57	7.5	Flood Storage Areas	0	0	0	-	-
58	7.6	Flood Zone 2	None (within 50m)				
58	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
59 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
61 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
62	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
63	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
63	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
63	10.4	Special Protection Areas (SPA)	0	0	0	0	0
63	10.5	National Nature Reserves (NNR)	0	0	0	0	0
64 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	1	1
64 >	10.7 >	Designated Ancient Woodland >	1	0	0	0	0
64	10.8	Biosphere Reserves	0	0	0	0	0
65	10.9	Forest Parks	0	0	0	0	0
65	10.10	Marine Conservation Zones	0	0	0	0	0
65	10.11	Green Belt	0	0	0	0	0
65	10.12	Proposed Ramsar sites	0	0	0	0	0

65	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
66	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
66	10.15	Nitrate Sensitive Areas	0	0	0	0	0
66 >	10.16 >	Nitrate Vulnerable Zones >	2	0	0	1	1
67 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
68	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
69	11.1	World Heritage Sites	0	0	0	-	-
70	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
70	11.3	National Parks	0	0	0	-	-
70 >	11.4 >	Listed Buildings >	0	0	2	-	-
71	11.5	Conservation Areas	0	0	0	-	-
71	11.6	Scheduled Ancient Monuments	0	0	0	-	-
71	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
72 >	12.1 >	Agricultural Land Classification >	Grade 3b (within 250m)				
74	12.2	Open Access Land	0	0	0	-	-
74 >	12.3 >	Tree Felling Licences >	4	1	1	-	-
74 >	12.4 >	Environmental Stewardship Schemes >	1	0	0	-	-
75 >	12.5 >	Countryside Stewardship Schemes >	4	2	2	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
76 >	13.1 >	Priority Habitat Inventory >	3	3	0	-	-
77 >	13.2 >	Habitat Networks >	0	0	1	-	-
77	13.3	Open Mosaic Habitat	0	0	0	-	-
77	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
78 >	14.1 >	10k Availability >	Identified (within 500m)				
79	14.2	Artificial and made ground (10k)	0	0	0	0	-
80	14.3	Superficial geology (10k)	0	0	0	0	-

80	14.4	Landslip (10k)	0	0	0	0	-
81	14.5	Bedrock geology (10k)	0	0	0	0	-
81	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
82 >	**15.1 >**	**50k Availability >**	Identified (within 500m)				
83	15.2	Artificial and made ground (50k)	0	0	0	0	-
83	15.3	Artificial ground permeability (50k)	0	0	-	-	-
84 >	**15.4 >**	**Superficial geology (50k) >**	1	0	1	1	-
85 >	**15.5 >**	**Superficial permeability (50k) >**	Identified (within 50m)				
85	15.6	Landslip (50k)	0	0	0	0	-
85	15.7	Landslip permeability (50k)	None (within 50m)				
86 >	**15.8 >**	**Bedrock geology (50k) >**	1	0	0	0	-
87 >	**15.9 >**	**Bedrock permeability (50k) >**	Identified (within 50m)				
87	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
88 >	**16.1 >**	**BGS Boreholes >**	1	3	2	-	-
Page	Section	**Natural ground subsidence >**					
90 >	**17.1 >**	**Shrink swell clays >**	Low (within 50m)				
91 >	**17.2 >**	**Running sands >**	Very low (within 50m)				
93 >	**17.3 >**	**Compressible deposits >**	Negligible (within 50m)				
94 >	**17.4 >**	**Collapsible deposits >**	Very low (within 50m)				
95 >	**17.5 >**	**Landslides >**	Very low (within 50m)				
96 >	**17.6 >**	**Ground dissolution of soluble rocks >**	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
98	18.1	BritPits	0	0	0	0	-
99 >	**18.2 >**	**Surface ground workings >**	4	3	0	-	-
99	18.3	Underground workings	0	0	0	0	0
99	18.4	Underground mining extents	0	0	0	0	-
100	18.5	Historical Mineral Planning Areas	0	0	0	0	-

100	18.6	Non-coal mining	0	0	0	0	0
100	18.7	JPB mining areas	None (within 0m)				
100	18.8	The Coal Authority non-coal mining	0	0	0	0	-
101	18.9	Researched mining	0	0	0	0	-
101	18.10	Mining record office plans	0	0	0	0	-
101	18.11	BGS mine plans	0	0	0	0	-
101	18.12	Coal mining	None (within 0m)				
101	18.13	Brine areas	None (within 0m)				
102	18.14	Gypsum areas	None (within 0m)				
102	18.15	Tin mining	None (within 0m)				
102	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
103	19.1	Natural cavities	0	0	0	0	-
103	19.2	Mining cavities	0	0	0	0	0
103	19.3	Reported recent incidents	0	0	0	0	-
103	19.4	Historical incidents	0	0	0	0	-
104	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon** >					
105 >	**20.1** >	**Radon** >	Less than 1% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
107 >	**21.1** >	**BGS Estimated Background Soil Chemistry** >	27	7	-	-	-
109	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
109	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
110	22.1	Underground railways (London)	0	0	0	-	-
110	22.2	Underground railways (Non-London)	0	0	0	-	-
110	22.3	Railway tunnels	0	0	0	-	-
110	22.4	Historical railway and tunnel features	0	0	0	-	-
110	22.5	Royal Mail tunnels	0	0	0	-	-

111	22.6	Historical railways	0	0	0	-	-
111	22.7	Railways	0	0	0	-	-
111	22.8	Crossrail 1	0	0	0	0	-
111	22.9	Crossrail 2	0	0	0	0	-
111	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 136.45ha

Recent site history - 2018 aerial photograph



Capture Date: 15/05/2018

Site Area: 136.45ha

Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 136.45ha

Recent site history - 2007 aerial photograph



Capture Date: 18/09/2007

Site Area: 136.45ha

Recent site history - 1999 aerial photograph



Capture Date: 21/06/1999

Site Area: 136.45ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical garages

1.1 Historical industrial land uses

Records within 500m	5

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
2	172m NE	Unspecified Depot	1973	1583590

ID	Location	Land use	Dates present	Group ID
A	243m NE	Smithy	1955	1726166
A	293m NE	Smithy	1904 - 1948	1725234
A	302m NE	Smithy	1904	1663159
4	453m NE	Unspecified Disused Pit	1987	1589551

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 un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Unspecified Tank**	**1975**	**256671**

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**0**

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

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	1

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
3	447m NE	Garage	1985	47547

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

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

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

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical garages

2.1 Historical industrial land uses

Records within 500m	6

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

Features are displayed on the Past land use - un-grouped map on **page 17 >**

ID	Location	Land Use	Date	Group ID
2	172m NE	Unspecified Depot	1973	1583590
A	243m NE	Smithy	1955	1726166
A	293m NE	Smithy	1948	1725234

ID	Location	Land Use	Date	Group ID
A	293m NE	Smithy	1904	1725234
A	302m NE	Smithy	1904	1663159
4	453m NE	Unspecified Disused Pit	1987	1589551

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 17 >**

ID	Location	Land Use	Date	Group ID
1	**On site**	**Unspecified Tank**	**1975**	**256671**

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	1

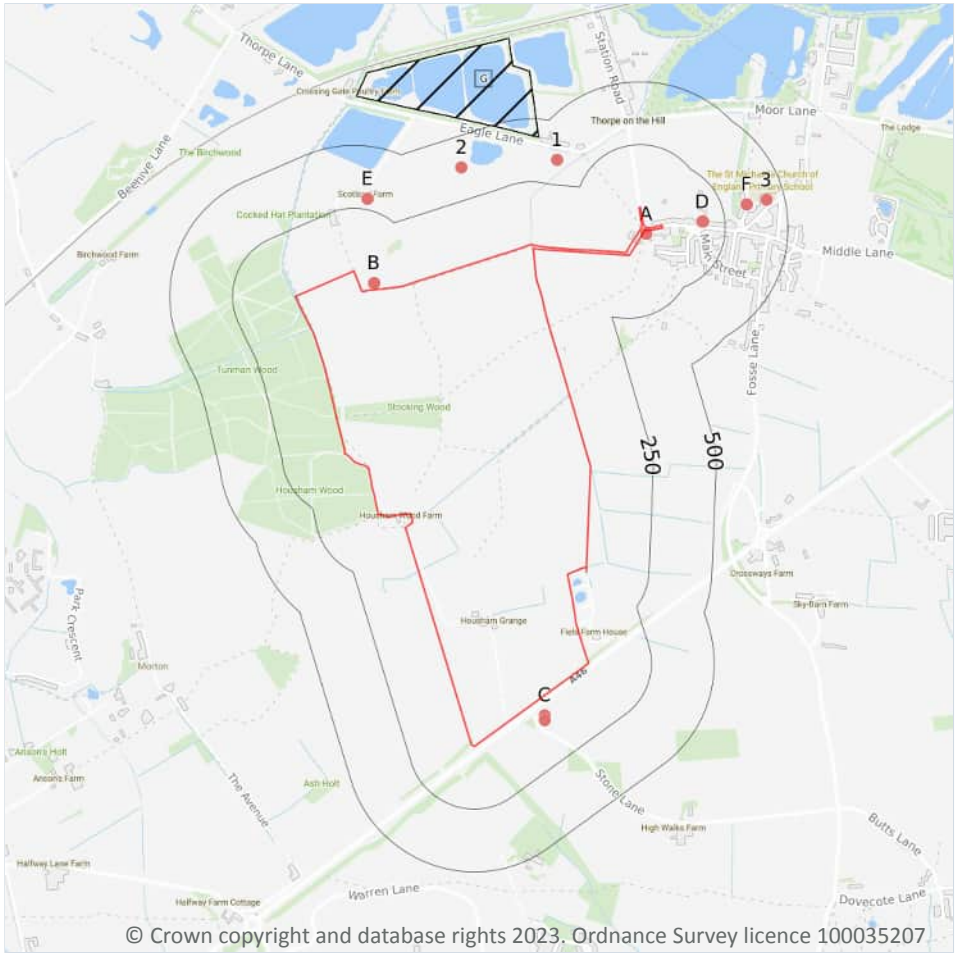
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17 >**

ID	Location	Land Use	Date	Group ID
3	447m NE	Garage	1985	47547

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



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Site Outline

Search buffers in metres (m)

Historical landfill (EA/NRW)

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	2

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.

Features are displayed on the Waste and landfill map on **page 20 >**

ID	Location	Details		
G	428m N	Site Address: Whisby Landfill Site, Thorpe Road, Whisby, Lincoln, Lincolnshire Licence Holder Address: -	Waste Licence: Yes Site Reference: L245, NK-5-01/89 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 31/12/1988 Licence Surrender: -	Operator: Lincwaste Licence Holder: Lincwaste Limited First Recorded 31/12/1988 Last Recorded: -
G	428m N	Site Address: Whisby Landfill Site (superseded By 73224), Thorpe Road, Lincoln, Whisby, Lincolnshire Licence Holder Address: Matilda Road, Lincoln, Lincolnshire	Waste Licence: Yes Site Reference: - Waste Type: Special Environmental Permitting Regulations (Waste) Reference: AX1/L/LIN008 Licence Issue: 16/09/1993 Licence Surrender: 14/07/2008	Operator: Lincwaste Ltd Licence Holder: Lincwaste Ltd First Recorded - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m	0

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

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	42

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	12m NE	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
A	12m NE	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Disposing of waste exemption	On a farm	Burning waste in the open
A	12m NE	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Storing waste exemption	On a farm	Storage of waste in secure containers
A	12m NE	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Storing waste exemption	On a farm	Storage of waste in a secure place
A	12m NE	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Treating waste exemption	On a farm	Aerobic composting and associated prior treatment
A	12m NE	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	12m NE	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Using waste exemption	On a farm	Use of waste in construction
A	12m NE	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
A	12m NE	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Using waste exemption	On a farm	Use of waste for a specified purpose
A	12m NE	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Treating waste exemption	Agricultural Waste Only	Aerobic composting and associated prior treatment
A	12m NE	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Deposit of waste from dredging of inland waters
A	12m NE	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
A	12m NE	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in secure containers
A	12m NE	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place
A	12m NE	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	12m NE	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
A	12m NE	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
A	12m NE	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose
B	26m NW	Land at SK8933065410	EPR/HE5385ED/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
B	26m NW	Land at NGR:SK8933065410	EPR/DE5487VE/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
B	26m NW	Land At SK89336541	EPR/GE5383WT/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
B	26m NW	Land at NGR : SK8933065410	EPR/KE5480WT/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
C	64m S	Land at SK9001063690	EPR/FE5746EP/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
C	80m S	-	WEX322896	Storing waste exemption	On a farm	Storage of sludge
D	159m NE	38, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX196577	Disposing of waste exemption	On a Farm	Burning waste in the open
D	159m NE	38, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX042173	Disposing of waste exemption	On a farm	Burning waste in the open
D	159m NE	38, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX323257	Disposing of waste exemption	On a farm	Burning waste in the open
D	161m NE	38 Lincoln Lane LINCOLN LN6 9BH	EPR/EE5187SG/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
E	291m N	SCOTLAND FARMHOUSE, EAGLE LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BP	WEX170800	Disposing of waste exemption	On a farm	Burning waste in the open
E	291m N	SCOTLAND FARMHOUSE, EAGLE LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BP	WEX170800	Disposing of waste exemption	On a farm	Disposal by incineration

ID	Location	Site	Reference	Category	Sub-Category	Description
E	291m N	SCOTLAND FARMHOUSE, EAGLE LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BP	WEX170800	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
E	291m N	SCOTLAND FARMHOUSE, EAGLE LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BP	WEX307652	Disposing of waste exemption	On a farm	Burning waste in the open
E	291m N	SCOTLAND FARMHOUSE, EAGLE LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BP	WEX307652	Disposing of waste exemption	On a farm	Disposal by incineration
E	291m N	SCOTLAND FARMHOUSE, EAGLE LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BP	WEX307652	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
F	345m NE	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
F	345m NE	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
F	345m NE	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
F	345m NE	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit
F	345m NE	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose
1	348m N	Land at NGR: SK90066590	EPR/NE5885VU/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge

ID	Location	Site	Reference	Category	Sub-Category	Description
2	377m N	SK89686587	EPR/FE5880ZE /A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
3	424m NE	St Michael's C of E Primary School School Lane Lincoln Lincolnshire LN6 9BN	EPR/SF0502KP /A001	Treating waste exemption	Non-Agricultural Waste Only	Crushing waste fluorescent tubes

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	3

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Company	Address	Activity	Category
1	**On site**	**Tank**	**Lincolnshire, LN5**	**Tanks (Generic)**	**Industrial Features**
A	**On site**	**Pylon**	**Lincolnshire, LN6**	**Electrical Features**	**Infrastructure and Facilities**
A	**On site**	**Mast**	**Lincolnshire, LN6**	**Telecommunications Features**	**Infrastructure and Facilities**

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	3

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 27 >**

ID	Location	Address	Details	
2	**On site**	**HOUSE AT FIELD HOUSE FARM, THE FOSSE WAY, AUBOURN, LINCOLN**	**Effluent Type: UNSPECIFIED Permit Number: PR3LFU1040 Permit Version: 1 Receiving Water: Land**	**Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 17/05/1979 Effective Date: 17/05/1979 Revocation Date: 01/10/1996**
3	16m SW	HOUSHAM WOOD FARM, NEWARK ROAD, AUBOURN, LINCOLN, LN6 9HW	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRZP3224XR Permit Version: 1 Receiving Water: UNKNOWN TRIB OF RIVER WITHAM	Status: NEW ISSUED UNDER EPR 2010 Issue date: 18/02/2013 Effective Date: 18/02/2013 Revocation Date: -
5	357m NE	MAIN STREET/MIDDLE STREET, THORPE ON THE HILL, THORPE ON THE HILL, LINCOLN., LN6 9BZ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR3LFU844 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 20/12/1976 Effective Date: 20/12/1976 Revocation Date: 01/10/1996

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Details	
4	199m NE	Incident Date: 04/08/2003 Incident Identification: 179384 Pollutant: Other Pollutant Pollutant Description: Natural Ochre	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

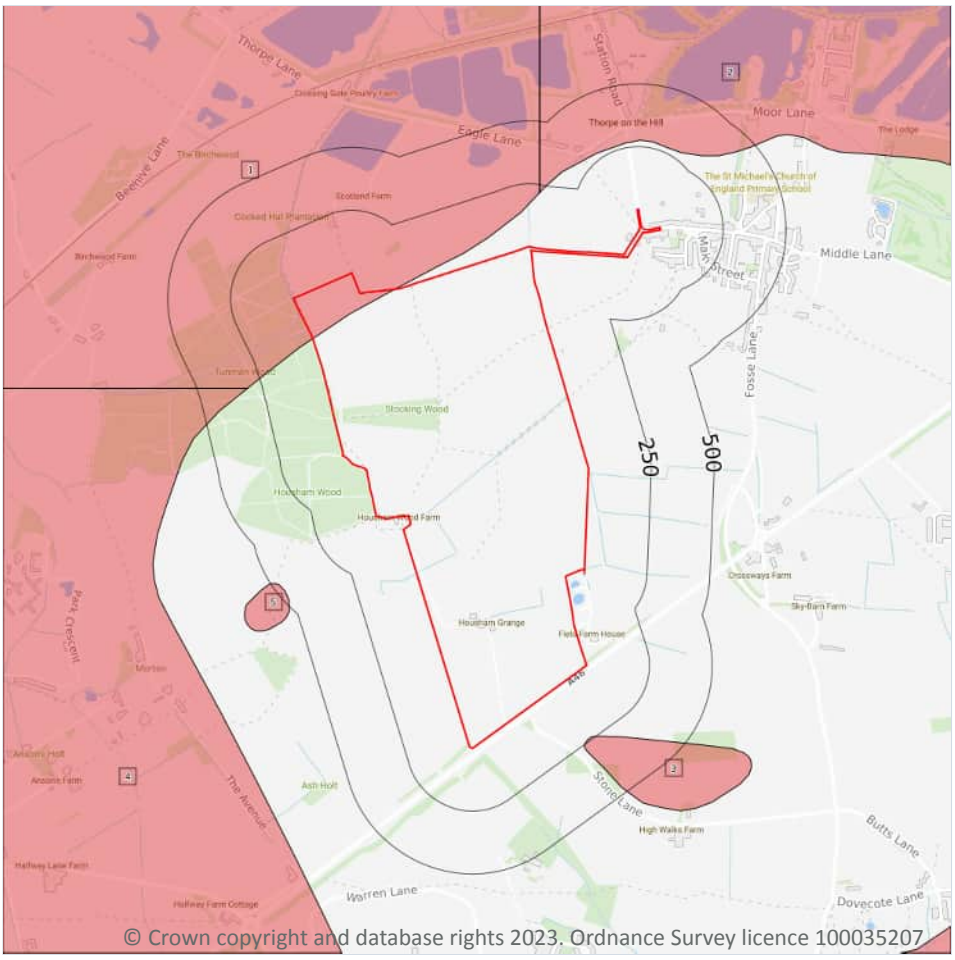
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	5

Aquifer status of groundwater held within superficial geology.

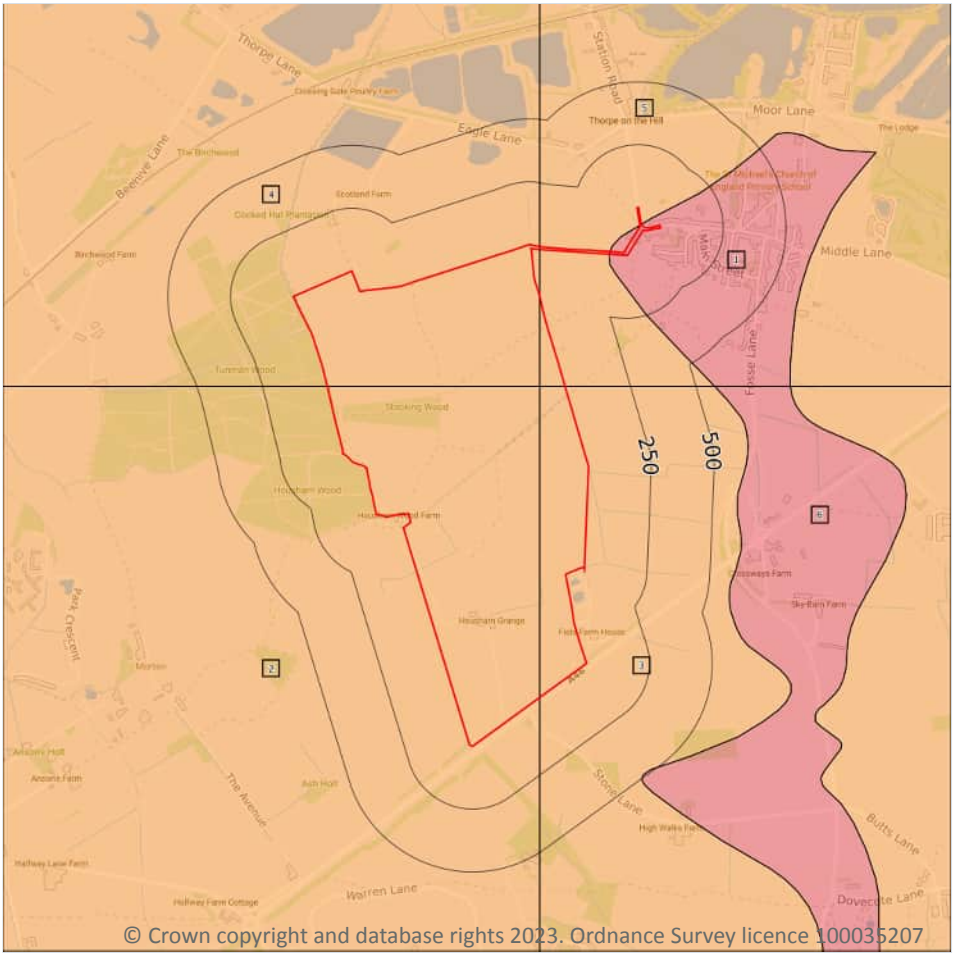
Features are displayed on the Hydrogeology map on **page 33 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	219m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ID	Location	Designation	Description
3	241m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	308m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	471m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	6

Aquifer status of groundwater held within bedrock geology.

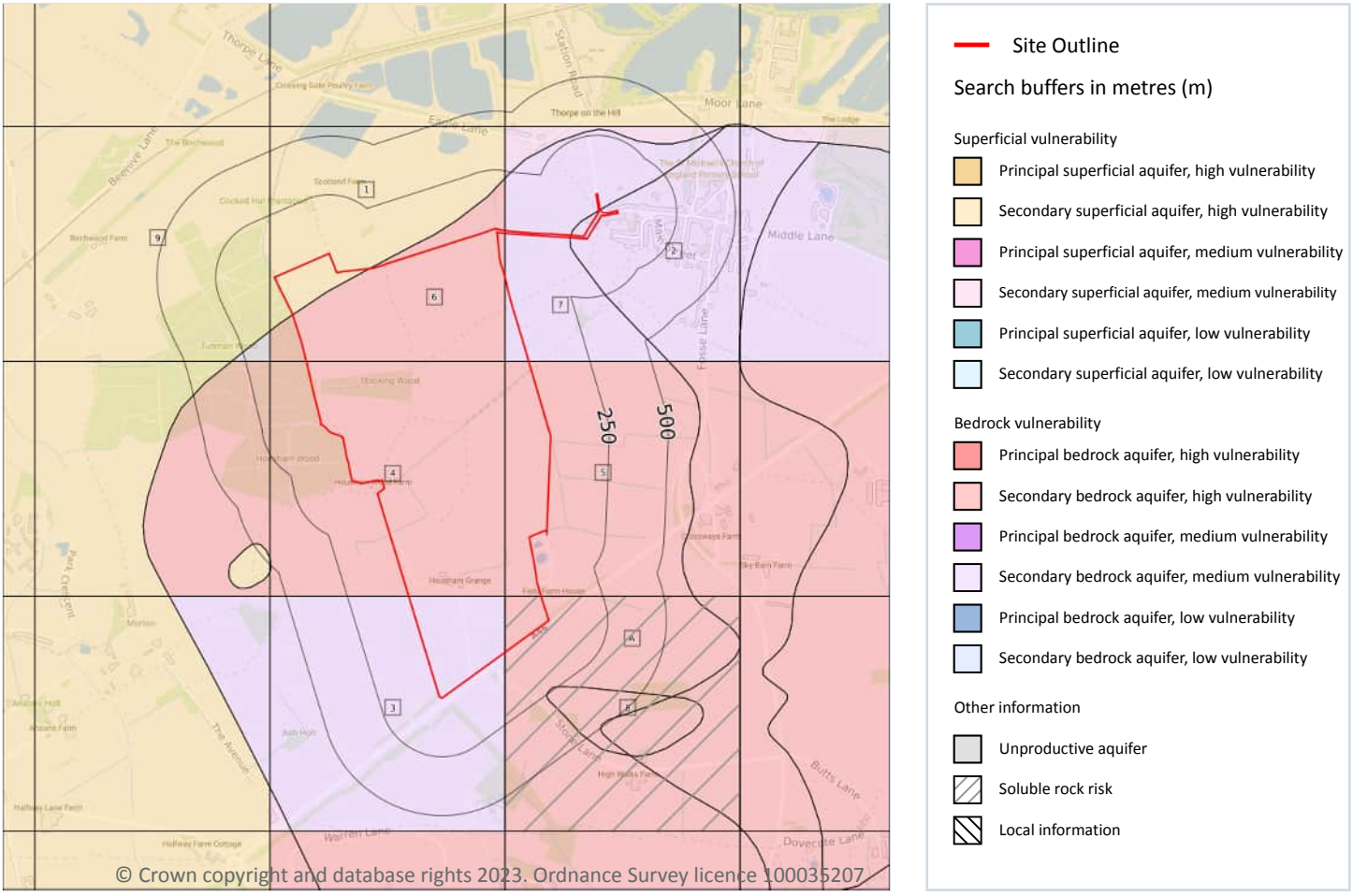
Features are displayed on the Bedrock aquifer map on **page 35 >**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

ID	Location	Designation	Description
3	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
4	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
5	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
6	492m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Groundwater vulnerability



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5.3 Groundwater vulnerability

Records within 50m	9

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 37 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
7	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
A	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
9	19m NW	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: >90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary 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
8	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**7.000000000000001%**

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

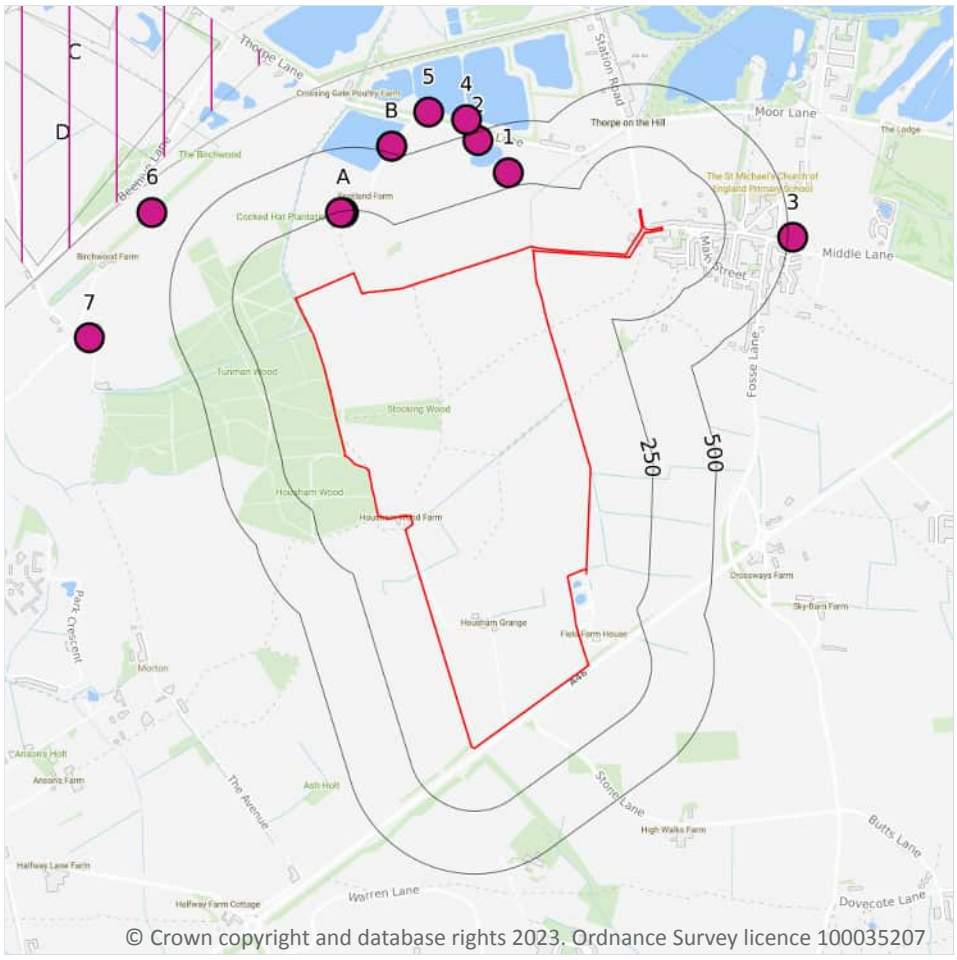
5.5 Groundwater vulnerability- local information

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



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5.6 Groundwater abstractions

Records within 2000m	32

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 40 >**

ID	Location	Details	
A	244m NW	Status: Historical Licence No: 4/30/03/*G/0043 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: SCOTLAND FARM WELL2 THORPE ETC Data Type: Point Name: SHELTON Easting: 489210 Northing: 365700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1993 Version End Date: -
A	246m NW	Status: Historical Licence No: 4/30/03/*G/0043 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: SCOTLAND FARM WELL1 THORPE ETC Data Type: Point Name: SHELTON Easting: 489200 Northing: 365700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1993 Version End Date: -
1	308m N	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489868 Northing: 365860	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 16/08/2012 Version End Date: -
2	468m N	Status: Active Licence No: 4/30/03/*G/0109/R01 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: G H CHENNELLS FARMS LTD Easting: 489746 Northing: 365987	Annual Volume (m^3): 15000 Max Daily Volume (m^3): 1380 Original Application No: NPS/WR/030699 Original Start Date: 19/04/2016 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 08/03/2019 Version End Date: -
3	520m NE	Status: Historical Licence No: 4/30/03/*G/0022 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: RICHARDSON WELL THORPE-O-T-H. Data Type: Point Name: RICHARDSON Easting: 491000 Northing: 365600	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1965 Version End Date: -

ID	Location	Details	
B	526m N	Status: Active Licence No: 4/30/03/*G/0109/R01 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: G H CHENNELLS FARMS LTD Easting: 489402 Northing: 365964	Annual Volume (m^3): 15000 Max Daily Volume (m^3): 1380 Original Application No: NPS/WR/030699 Original Start Date: 19/04/2016 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 08/03/2019 Version End Date: -
B	526m N	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489402 Northing: 365964	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 16/08/2012 Version End Date: -
4	561m N	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489700 Northing: 366070	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 1 Version Start Date: 22/04/2005 Version End Date: -
5	635m N	Status: Historical Licence No: 4/30/03/*G/0100 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489550 Northing: 366100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: 31/10/2004 Issue No: 1 Version Start Date: 30/06/2000 Version End Date: -
6	664m NW	Status: Active Licence No: 4/30/03/*G/0068 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CHENNELLS CATCHPIT - EAGLE Data Type: Point Name: G H CHENNELLS FARMS LTD Easting: 488450 Northing: 365700	Annual Volume (m^3): 26140 Max Daily Volume (m^3): 1364 Original Application No: N1110 Original Start Date: 01/09/1985 Expiry Date: - Issue No: 101 Version Start Date: 22/12/2000 Version End Date: -

ID	Location	Details	
C	768m NW	Status: Active Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WHISBY QUARRY A Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488015 Northing: 366918	Annual Volume (m^3): 89320 Max Daily Volume (m^3): 2310 Original Application No: NPS/WR/036787 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 11/11/2022 Version End Date: -
C	794m NW	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASES 5A AND 5B Data Type: Poly4 Name: Tarmac Trading Limited Easting: 487679 Northing: 366424	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -
7	834m W	Status: Historical Licence No: 03/28/69/0051 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: EAGLE BARNSDALE - WELL Data Type: Point Name: J G CATER AND SON Easting: 488200 Northing: 365200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 03/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
D	876m NW	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASES 5F 5H AND 6 Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488077 Northing: 366730	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -
D	876m NW	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASES 5F 5H AND 6 Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488077 Northing: 366730	Annual Volume (m^3): 89320 Max Daily Volume (m^3): 2310 Original Application No: NPS/WR/036787 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 11/11/2022 Version End Date: -

ID	Location	Details	
-	976m N	Status: Active Licence No: AN/030/0003/002 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GRAVEL PIT AT WHISBY Data Type: Point Name: C NEVILE & SON Easting: 490520 Northing: 366680	Annual Volume (m^3): 40000 Max Daily Volume (m^3): 650 Original Application No: NPS/WR/002352 Original Start Date: 01/11/1996 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/04/2020 Version End Date: -
-	976m N	Status: Historical Licence No: 4/30/03/*G/0098 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GRAVEL PIT AT WHISBY Data Type: Point Name: NEVILE & SON Easting: 490520 Northing: 366680	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/11/1996 Expiry Date: 01-Oct-03 Issue No: 101 Version Start Date: 25/03/1999 Version End Date: -
-	976m N	Status: Historical Licence No: 4/30/03/*G/0104 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GRAVEL PIT AT WHISBY Data Type: Point Name: C NEVILE & SON Easting: 490520 Northing: 366680	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 650 Original Application No: - Original Start Date: 02/08/2004 Expiry Date: 30/09/2009 Issue No: 1 Version Start Date: 02/08/2004 Version End Date: -
8	1109m NW	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASE 5D Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488293 Northing: 366434	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -
-	1138m N	Status: Active Licence No: AN/030/0003/014 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WHISBY LANDFILL SITE Data Type: Point Name: Lincwaste Limited Easting: 489723 Northing: 366678	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPS/NA/001496 Original Start Date: 17/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 17/03/2022 Version End Date: -

ID	Location	Details	
10	1240m NW	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASE 5C Data Type: Poly4 Name: Tarmac Trading Limited Easting: 487917 Northing: 366511	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -
-	1242m W	Status: Active Licence No: 03/28/69/0208 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: EAGLE BARNSDALE - WELLPOINT SYSTEM Data Type: Line Name: G H CHENNELLS (FARMS) LTD Easting: 487550 Northing: 365080	Annual Volume (m^3): 150000 Max Daily Volume (m^3): 2400 Original Application No: A/28/69/59 Original Start Date: 28/05/1993 Expiry Date: - Issue No: 102 Version Start Date: 03/12/2018 Version End Date: -
12	1300m NW	Status: Historical Licence No: AN/030/0003/008 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: PHASE 5E Data Type: Poly4 Name: Tarmac Trading Limited Easting: 488380 Northing: 366670	Annual Volume (m^3): 67000 Max Daily Volume (m^3): 1200 Original Application No: NPS/WR/033799 Original Start Date: 09/10/2020 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 09/10/2020 Version End Date: -
-	1301m N	Status: Active Licence No: 4/30/03/*G/0096 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT AT WHISBY Data Type: Point Name: Tarmac Aggregates Limited Easting: 489490 Northing: 366780	Annual Volume (m^3): 1155000 Max Daily Volume (m^3): 4200 Original Application No: NPS/WR/038724 Original Start Date: 05/08/1994 Expiry Date: - Issue No: 107 Version Start Date: 26/08/2022 Version End Date: -
-	1301m N	Status: Active Licence No: 4/30/03/*G/0096 Details: Mineral Washing Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT AT WHISBY Data Type: Point Name: Tarmac Aggregates Limited Easting: 489490 Northing: 366780	Annual Volume (m^3): 1155000 Max Daily Volume (m^3): 4200 Original Application No: NPS/WR/038724 Original Start Date: 05/08/1994 Expiry Date: - Issue No: 107 Version Start Date: 26/08/2022 Version End Date: -

ID	Location	Details	
-	1301m N	Status: Historical Licence No: 4/30/03/*G/0096 Details: Mineral Washing Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT AT WHISBY Data Type: Point Name: LAFARGE AGGREGATES LTD Easting: 489490 Northing: 366780	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/08/1994 Expiry Date: - Issue No: 101 Version Start Date: 02/01/2001 Version End Date: -
-	1420m NE	Status: Active Licence No: 4/30/03/*G/0081 Details: Spray Irrigation - Storage Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT AT NORTH HYKEHAM Data Type: Point Name: PENNELLS ESTATES LTD Easting: 491900 Northing: 365700	Annual Volume (m^3): 40000 Max Daily Volume (m^3): 250 Original Application No: - Original Start Date: 01/01/1990 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1992 Version End Date: -
-	1525m NW	Status: Historical Licence No: 4/30/03/*G/0112 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - EAGLE MOOR Data Type: Point Name: E J & M H PRIESTLEY Easting: 488750 Northing: 366900	Annual Volume (m^3): 6000 Max Daily Volume (m^3): 200 Original Application No: - Original Start Date: 04/05/2007 Expiry Date: 31/03/2016 Issue No: 1 Version Start Date: 04/05/2007 Version End Date: -
-	1620m W	Status: Active Licence No: 03/28/69/0296/1/R01 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: EAGLE HALL FARM, EAGLE BARNSDALE, LINCOLN - SEEPAGE LAGOON Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487400 Northing: 365325	Annual Volume (m^3): 75000 Max Daily Volume (m^3): 2000 Original Application No: A/28/69/182 Original Start Date: 01/04/2015 Expiry Date: 31/03/2027 Issue No: 1 Version Start Date: 01/04/2019 Version End Date: -
-	1620m W	Status: Historical Licence No: 03/28/69/0296 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: EAGLE HALL FARM, EAGLE BARNSDALE, LINCOLN - SEEPAGE LAGOON Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487400 Northing: 365320	Annual Volume (m^3): 75000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 08/08/2001 Expiry Date: 31/10/2006 Issue No: 1 Version Start Date: 08/08/2001 Version End Date: -

ID	Location	Details	
-	1620m W	Status: Historical Licence No: 03/28/69/0296/1 Details: Spray Irrigation - Direct Direct Source: Groundwater Midlands Region Point: EAGLE HALL FARM, EAGLE BARNSDALE, LINCOLN - SEEPAGE LAGOON Data Type: Point Name: G H CHENNELLS (FARMS) LTD Easting: 487400 Northing: 365320	Annual Volume (m^3): 75000 Max Daily Volume (m^3): 2000 Original Application No: - Original Start Date: 21/02/2007 Expiry Date: 31/03/2015 Issue No: 1 Version Start Date: 21/02/2007 Version End Date: -
-	1688m N	Status: Historical Licence No: 4/30/03/*G/0020 Details: Process water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: R. M. CONCRETE BOREHOLE WHISBY Data Type: Point Name: READY MIXED CONCRETE (UK) LTD Easting: 490400 Northing: 367400	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/10/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1970 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m **4**

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 40 >**

ID	Location	Details	
-	1713m NE	Status: Active Licence No: 4/30/03/*S/0103/R01 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: PIKE DRAIN - NORTH HYKEHAM Data Type: Point Name: LINCOLNSHIRE WILDLIFE TRUST Easting: 491900 Northing: 366598	Annual Volume (m^3): 170000 Max Daily Volume (m^3): 3600 Original Application No: NPS/WR/035381 Original Start Date: 04/08/2022 Expiry Date: 31/03/2040 Issue No: 1 Version Start Date: 04/08/2022 Version End Date: -

ID	Location	Details	
-	1739m NE	Status: Historical Licence No: 4/30/03/*S/0103 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: PIKE DRAIN - NORTH HYKEHAM Data Type: Point Name: LINCOLNSHIRE WILDLIFE TRUST Easting: 491950 Northing: 366570	Annual Volume (m^3): 170000 Max Daily Volume (m^3): 3600 Original Application No: - Original Start Date: 23/01/2004 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2006 Version End Date: -
-	1739m NE	Status: Historical Licence No: 4/30/03/*S/0103/L Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: PIKE DRAIN - NORTH HYKEHAM Data Type: Point Name: LINCOLNSHIRE WILDLIFE TRUST Easting: 491950 Northing: 366570	Annual Volume (m^3): 170000 Max Daily Volume (m^3): 3600 Original Application No: N1305 Original Start Date: 01/04/2022 Expiry Date: - Issue No: 1 Version Start Date: 01/04/2022 Version End Date: -
-	1763m SE	Status: Active Licence No: AN/030/0003/007 Details: Trickle Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BETWEEN POINTS E AND F, RIVER WITHAM, BASSINGHAM Data Type: Line Name: J & J Burnett Limited Easting: 491024 Northing: 361105	Annual Volume (m^3): 18920 Max Daily Volume (m^3): 1000 Original Application No: NPS/NA/000192 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	**0**

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

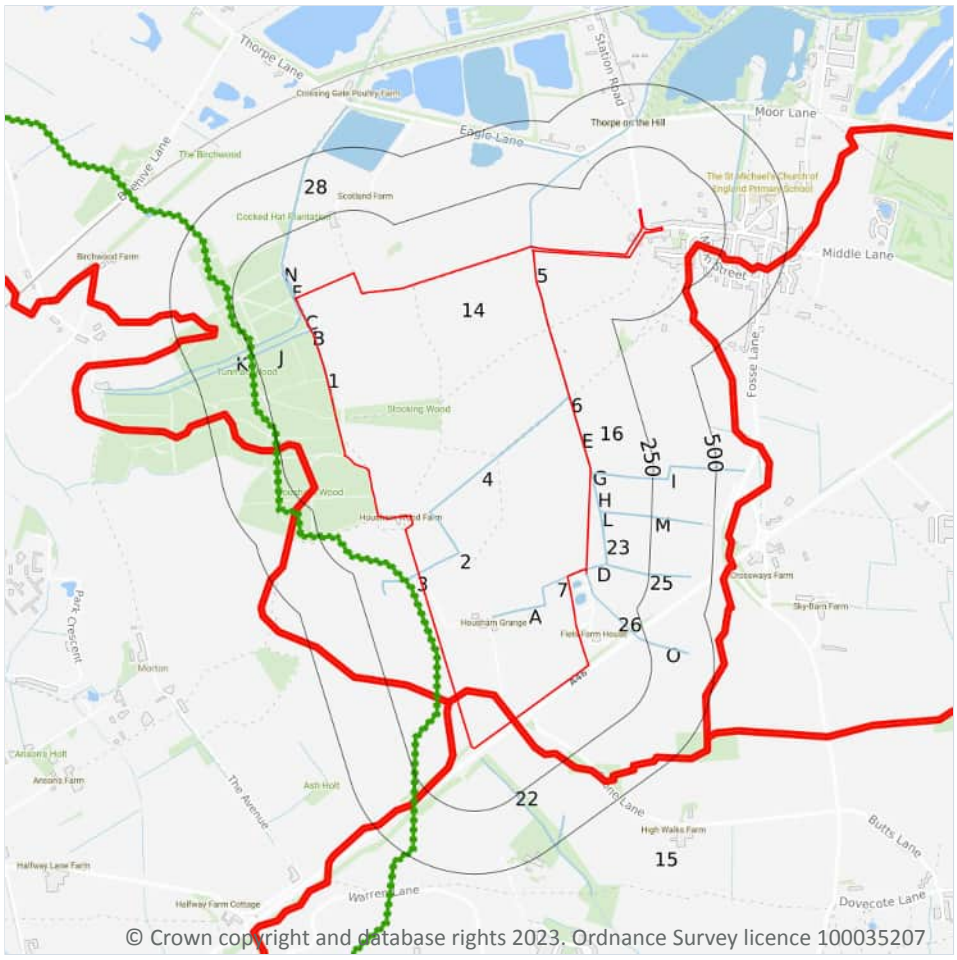
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**43**

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

Features are displayed on the Hydrology map on **page 50 >**

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

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
D	**On site**	**Lake, loch or reservoir.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
E	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
F	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
G	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
G	2m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	5m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	5m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	6m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	8m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	9m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	10m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	22m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	34m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
D	41m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	41m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	44m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	44m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	44m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
22	45m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
23	47m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	48m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	49m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
M	54m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	68m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
25	79m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
26	83m SE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
N	118m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
28	150m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	225m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**16**

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

Features are displayed on the Hydrology map on **page 50 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**2**

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 50 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
14	**On site**	**River**	**Boultham Catchwater Drain**	**GB105030062380**	**Witham Upper**	**Witham**
15	**On site**	**River**	**Witham - conf Cringle Bk to conf Brant**	**GB105030056780**	**Witham Upper**	**Witham**

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

6.4 WFD Surface water bodies

Records identified	2

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 50 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	1713m SE	River	Witham - conf Cringle Bk to conf Brant	GB105030056780 ↗	Moderate	Fail	Moderate	2019
-	6066m NE	River	Boultham Catchwater Drain	GB105030062380 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	1

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 50 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
16	**On site**	**Witham Lias**	**GB40502G401400 ↗**	**Good**	**Good**	**Good**	**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.

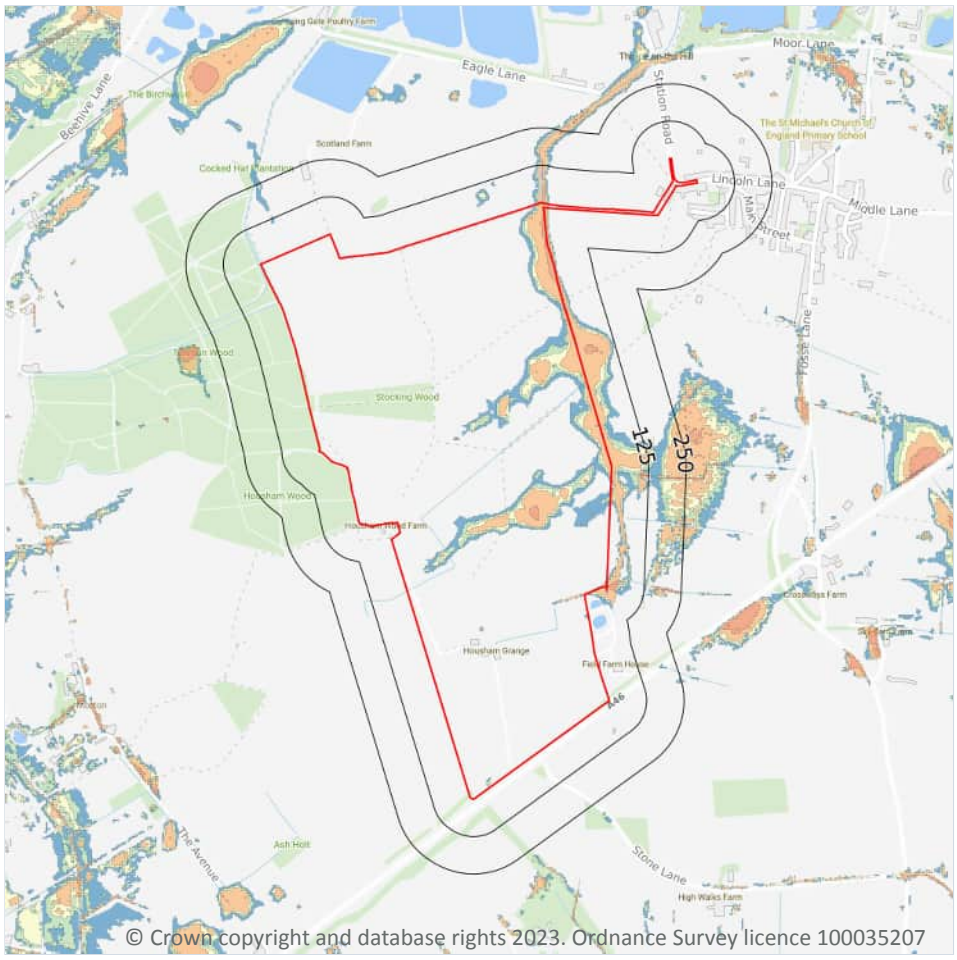
7.7 Flood Zone 3

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



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
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 59 >**

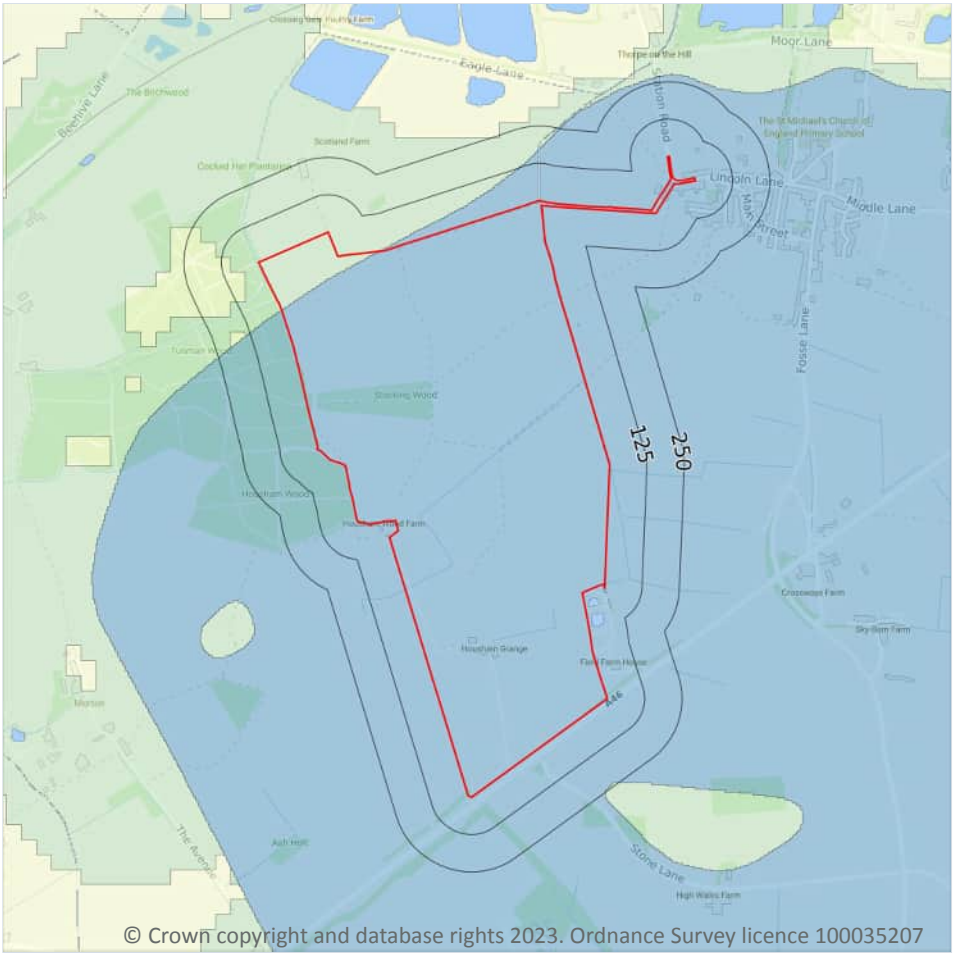
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

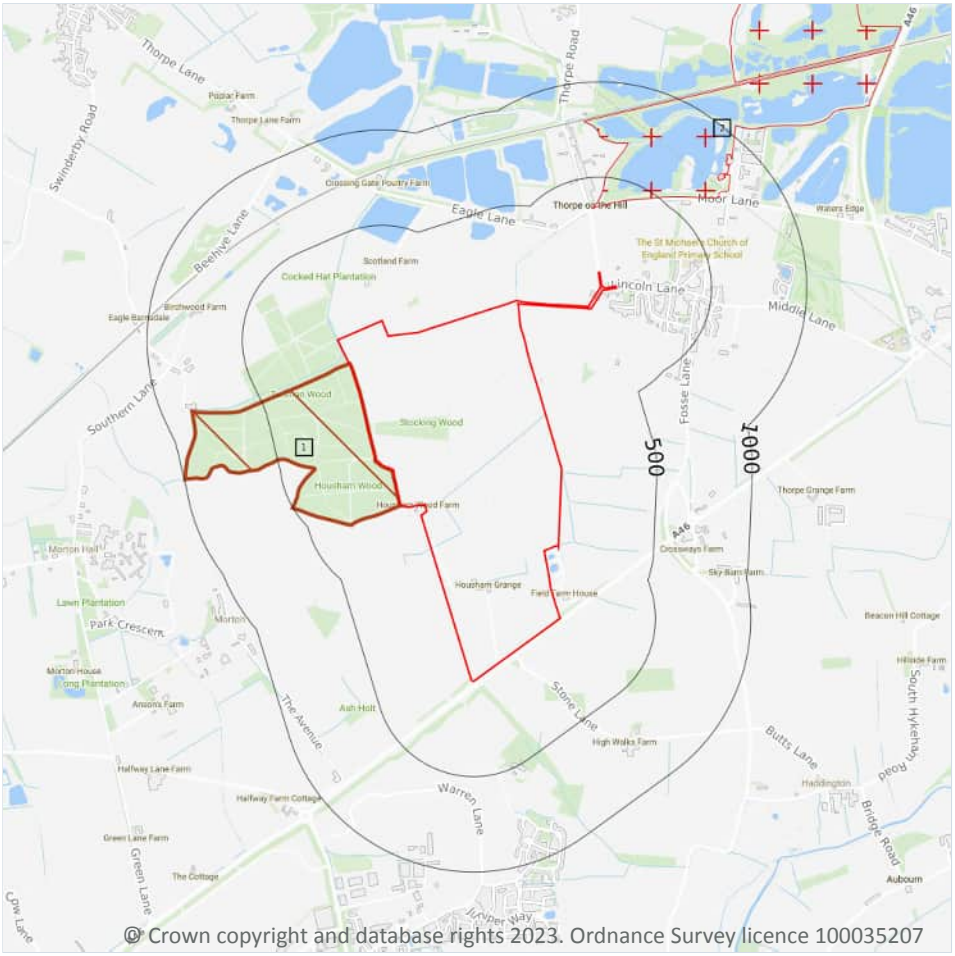
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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 61 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	2

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.

Features are displayed on the Environmental designations map on **page 62 >**

ID	Location	Name	Data source
2	339m NE	Whisby Nature Park	Natural England
3	1224m NE	Whisby Nature Park	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	1

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 62 >**

ID	Location	Name	Woodland Type
1	**On site**	**Tunman/housham Woods**	**Ancient Replanted Woodland**

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

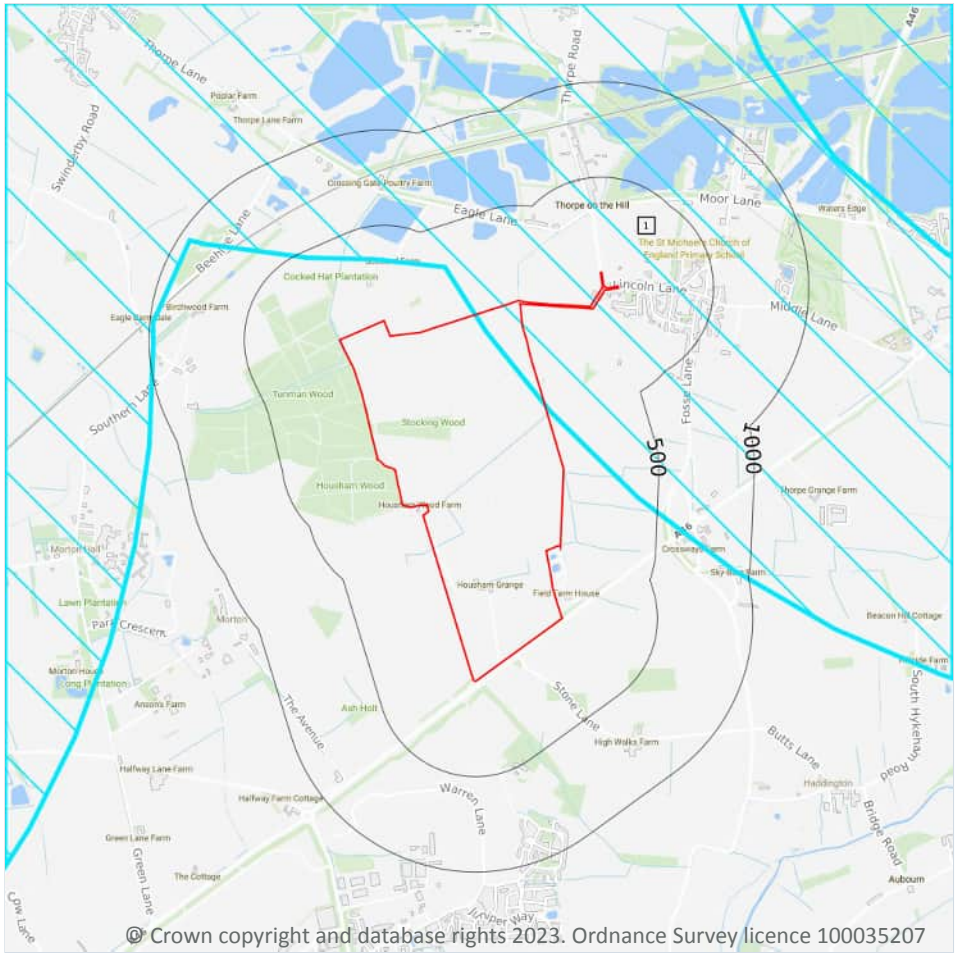
Records within 2000m	4

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	**The Fleet Lower Catchment (trib of Trent) NVZ**	**Surface Water**	**338**	**Existing**
On site	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
270m NE	Lower Witham NVZ	Surface Water	375	Existing
1418m NW	The Fleet Lower Catchment (trib of Trent) NVZ	Surface Water	338	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 67 >**

ID	Location	Type of developments requiring consultation
1	**On site**	**Infrastructure - Airports, helipads and other aviation proposals.** **Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t.**

This data is sourced from Natural England.

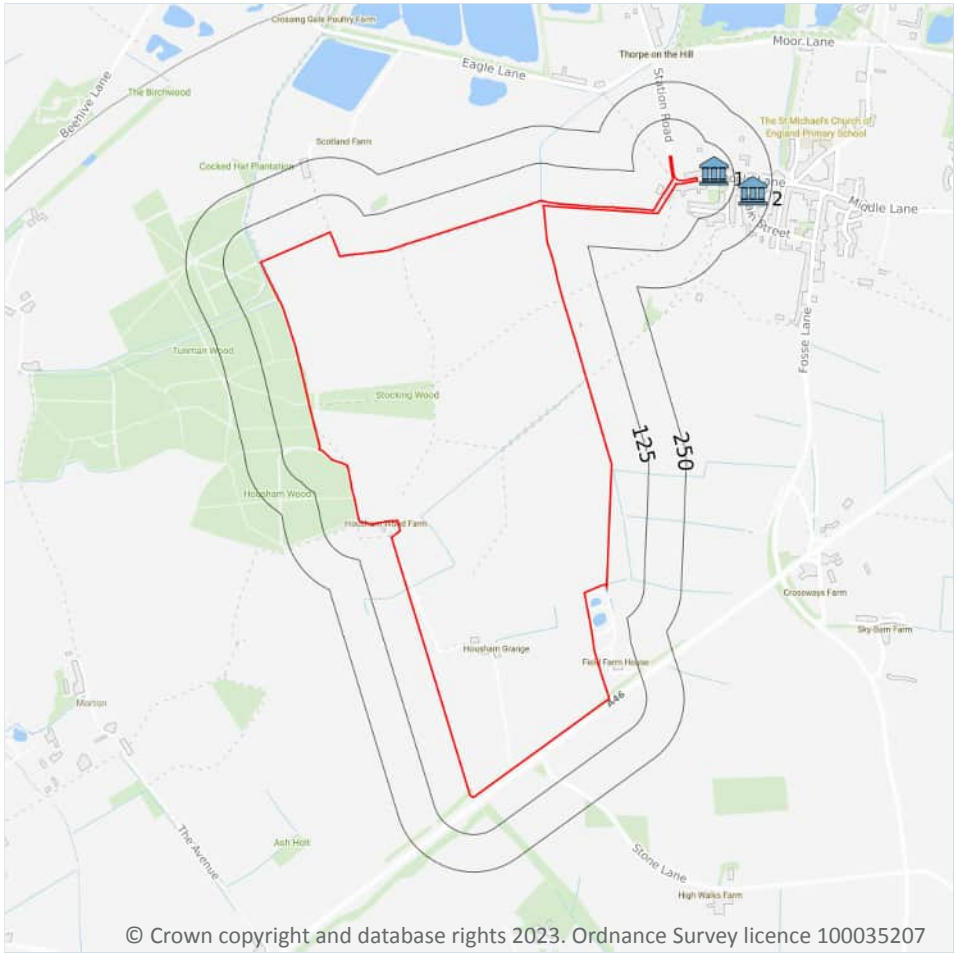
10.18 SSSI Units

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



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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	2

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 69 >**

ID	Location	Name	Grade	Reference Number	Listed date
1	63m NE	Sun Mill House	II	1164748	22/12/1983
2	188m NE	Manor Farmhouse	II	1061969	22/12/1983

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

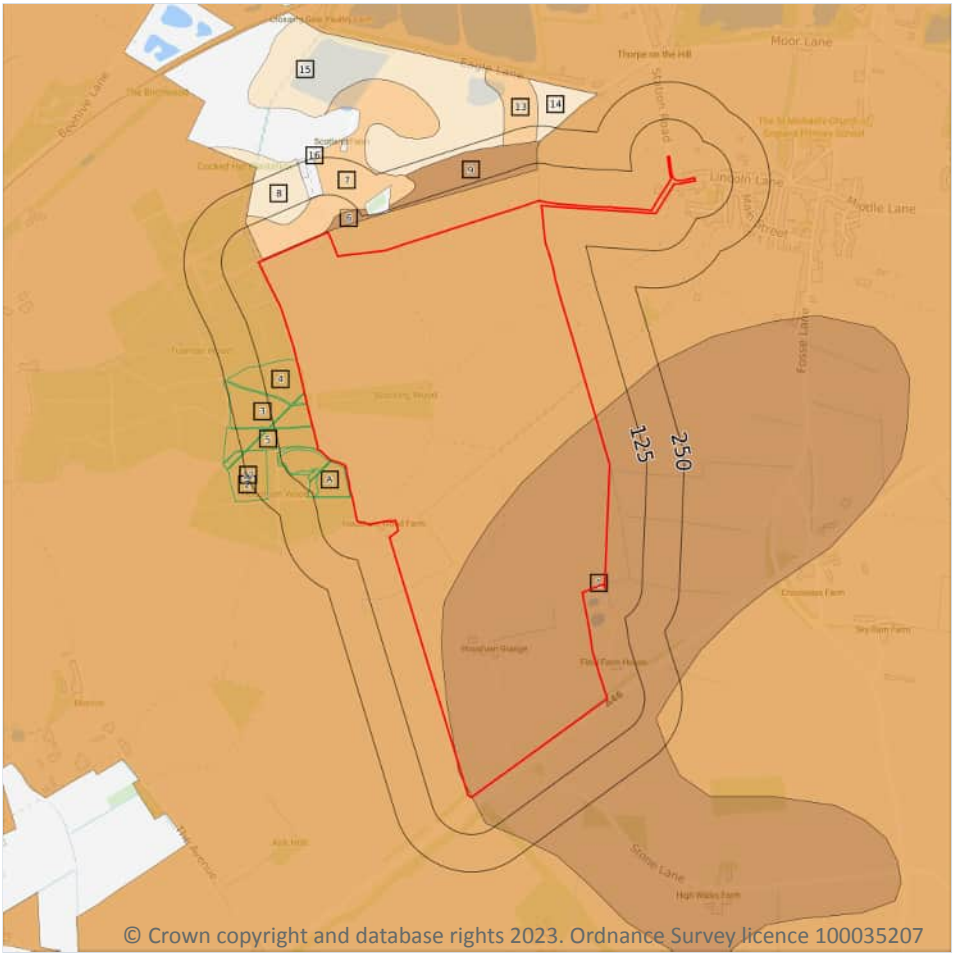
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

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

12.1 Agricultural Land Classification

Records within 250m	10

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 72 >**

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.**
6	3m NW	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.
7	4m NW	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
8	79m NW	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
9	101m N	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.
13	198m N	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
14	198m N	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
15	213m N	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
16	243m NW	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

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

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

12.3 Tree Felling Licences

Records within 250m	6

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.

Features are displayed on the Agricultural designations map on **page 72 >**

ID	Location	Description	Reference	Application date
3	**On site**	**Selective Fell/Thin (Conditional)**	**017/400/14-15**	**16/02/2015**
4	**On site**	**Selective Fell/Thin (Conditional)**	**017/400/14-15**	**16/02/2015**
5	**On site**	**Selective Fell/Thin (Conditional)**	**017/400/14-15**	**16/02/2015**
A	**On site**	**Selective Fell/Thin (Unconditional)**	**014/6/03-04**	**02/05/2003**
A	3m W	Selective Fell/Thin (Unconditional)	014/127/09-10	17/03/2010
12	170m W	Selective Fell/Thin (Unconditional)	014/247/99-00	15/03/2000

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	1

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	**AG00404879**	**Entry Level plus Higher Level Stewardship**	**01/08/2012**	**31/07/2022**

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

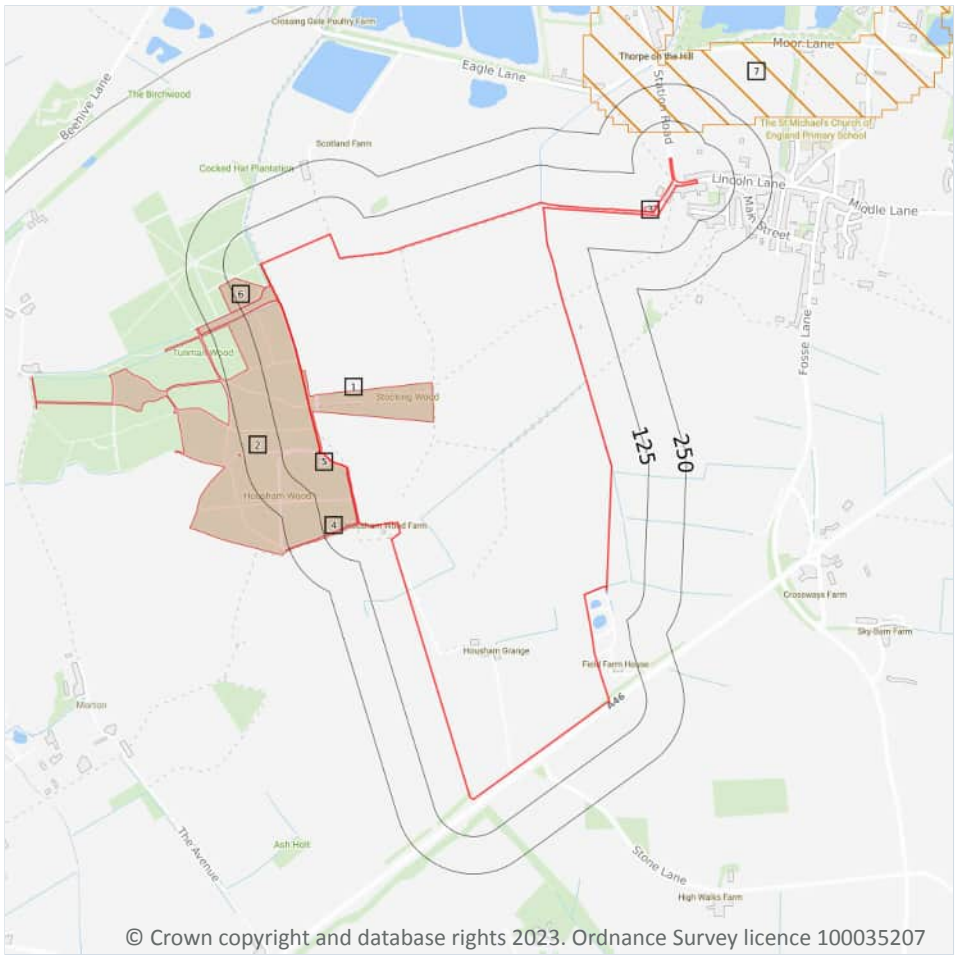
Records within 250m	**8**

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	**492048**	**Countryside Stewardship (Middle Tier)**	**01/01/2017**	**31/12/2021**
On site	**492048**	**Countryside Stewardship (Middle Tier)**	**01/01/2017**	**31/12/2021**
On site	**1021048**	**Countryside Stewardship (Middle Tier)**	**01/01/2021**	**31/12/2025**
On site	**1021048**	**Countryside Stewardship (Middle Tier)**	**01/01/2021**	**31/12/2025**
36m SE	493402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022
42m S	493402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022
194m NE	1021048	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025
238m NW	1013215	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025

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	6

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 76 >**

ID	Location	Main Habitat	Other habitats
1	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
2	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
3	**On site**	**Traditional orchard**	**Overruled by Traditional Orchards HAP Inventory dataset**
4	2m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	14m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	19m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	**1**

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.

Features are displayed on the Habitat designations map on **page 76 >**

ID	Location	Type	Habitat
7	88m NE	Network Enhancement Zone 1	Not specified

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 78 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

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 82 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_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



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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 **3**

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 84 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**BDTN-XSV**	**BALDERTON SAND AND GRAVEL MEMBER**	**SAND AND GRAVEL**
2	241m SE	BDTN-XSV	BALDERTON SAND AND GRAVEL MEMBER	SAND AND GRAVEL
3	471m SW	EMSG-XSV	EAGLE MOOR SAND AND GRAVEL MEMBER	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	**Intergranular**	**Very High**	**High**

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.

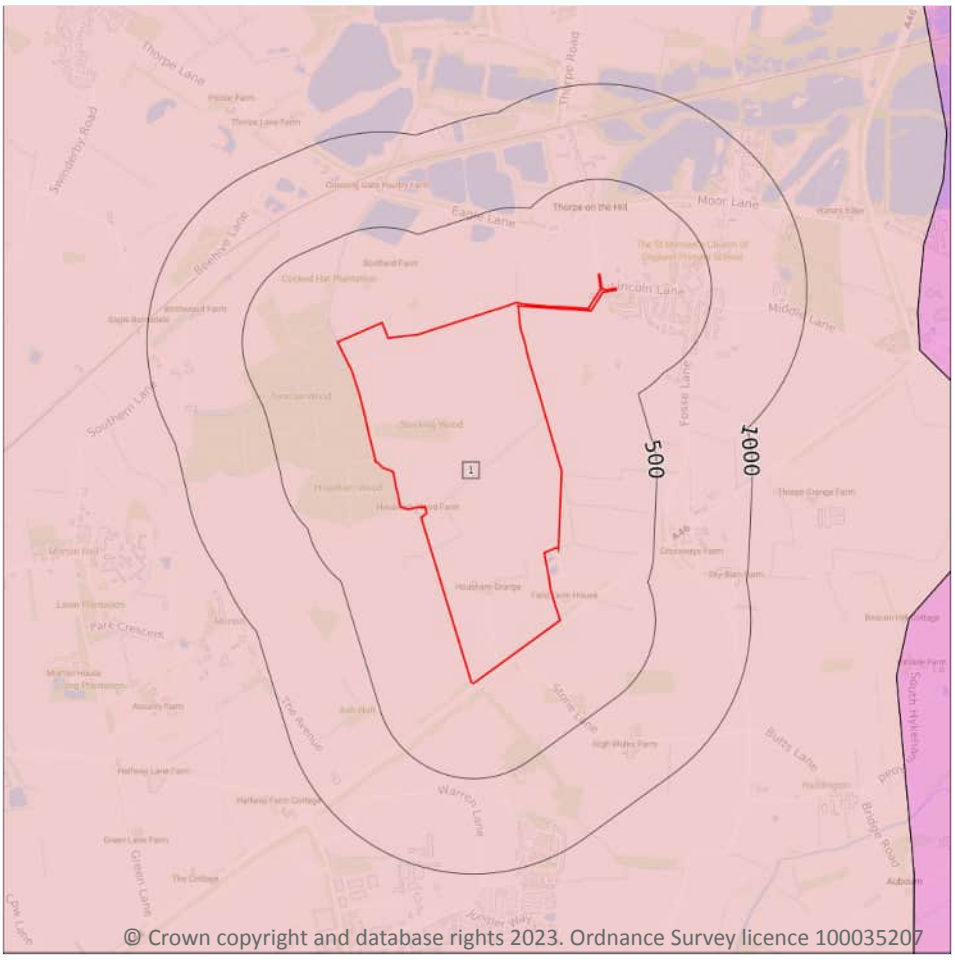
15.7 Landslip permeability (50k)

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 86 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**SMD-MDLM**	**SCUNTHORPE MUDSTONE FORMATION - MUDSTONE AND LIMESTONE, INTERBEDDED**	**RHAETIAN**

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	4

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**	**High**	**Low**
On site	**Fracture**	**High**	**Low**
On site	**Fracture**	**High**	**Low**
On site	**Fracture**	**High**	**Low**

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	6

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.

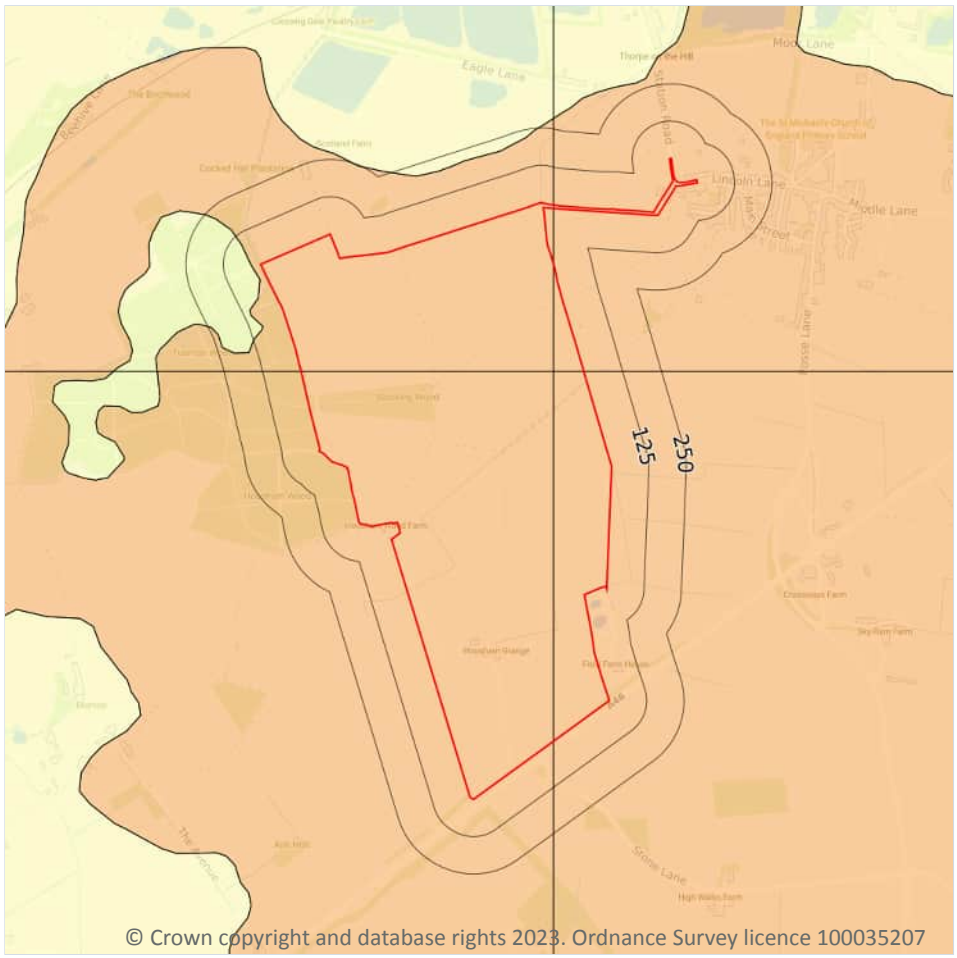
Features are displayed on the Boreholes map on **page 88 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	**On site**	**490068 363851**	**A46 NEWARK-LINCOLN IMPRO TP 73**	**2.0**	**N**	**250751** ↗
2	24m SE	490105 363808	A46 NEWARK-LINCOLN IMPRO TP73A	3.0	N	250752 ↗
3	24m SE	490197 363945	A46 NEWARK-LINCOLN IMPRO TP 75	3.0	N	250753 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	32m S	489761 363549	A46 NEWARK-LINCOLN IMPRO TP 71	2.0	N	243449 ↗
5	93m SE	490254 363990	BLACK CAT 1	1003.04	N	250737 ↗
6	147m S	489643 363449	A46 NEWARK-LINCOLN IMPRO 70	6.0	N	243435 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



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Site Outline

Search buffers in metres (m)

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

17.1 Shrink swell clays

Records within 50m	2

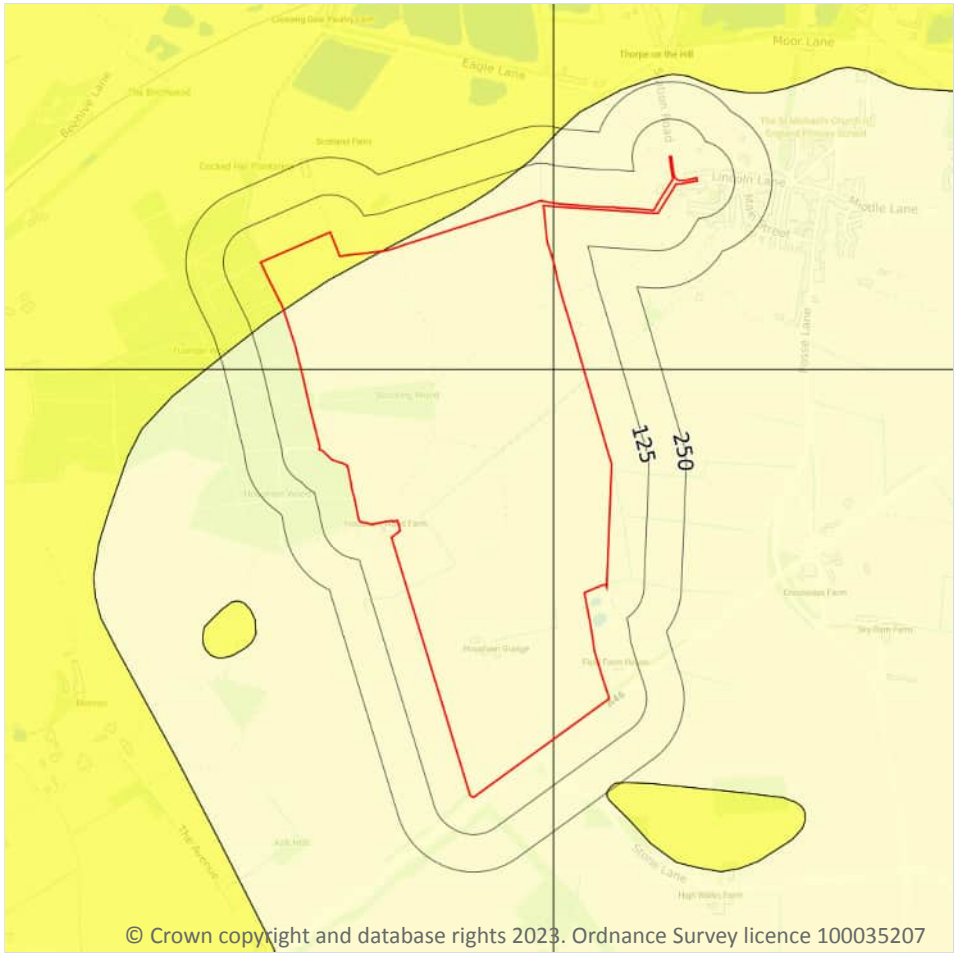
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 90 >**

Location	Hazard rating	Details
On site	**Low**	**Ground conditions predominantly medium plasticity.**
24m NW	Negligible	Ground conditions predominantly non-plastic.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



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Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	2

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.

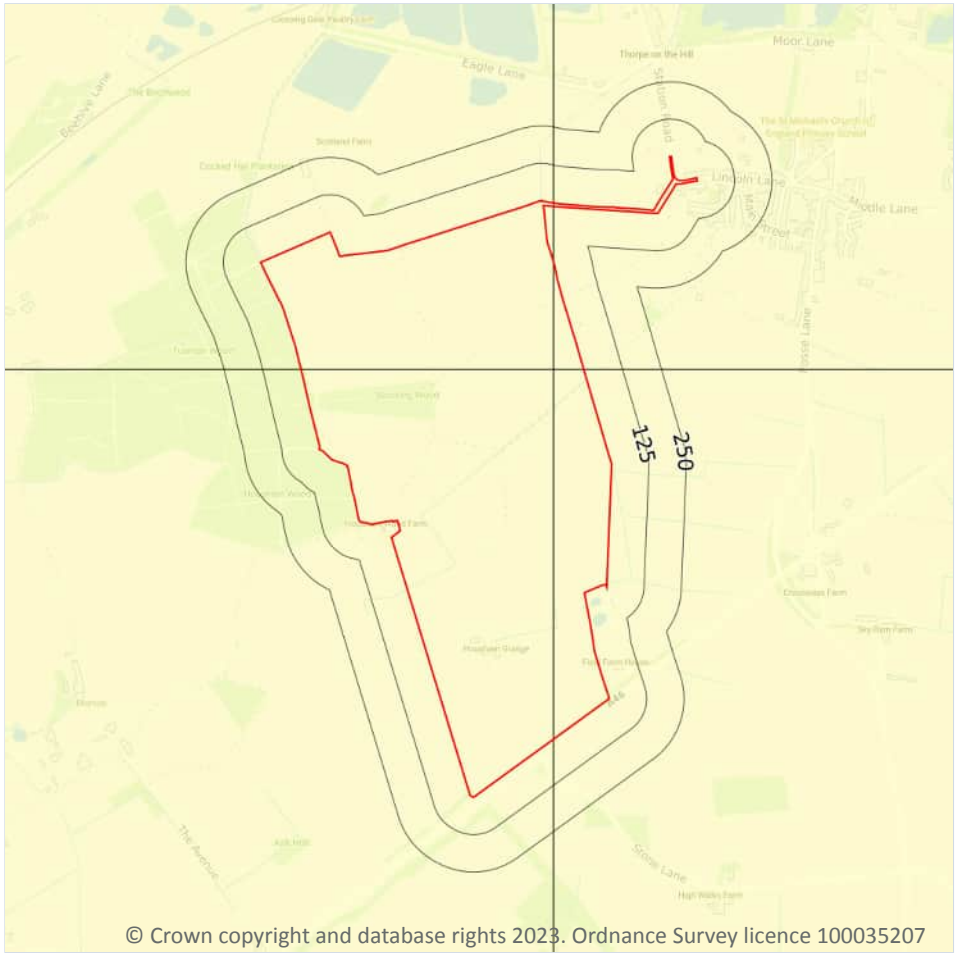
Features are displayed on the Natural ground subsidence - Running sands map on **page 91 >**

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

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



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Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	1

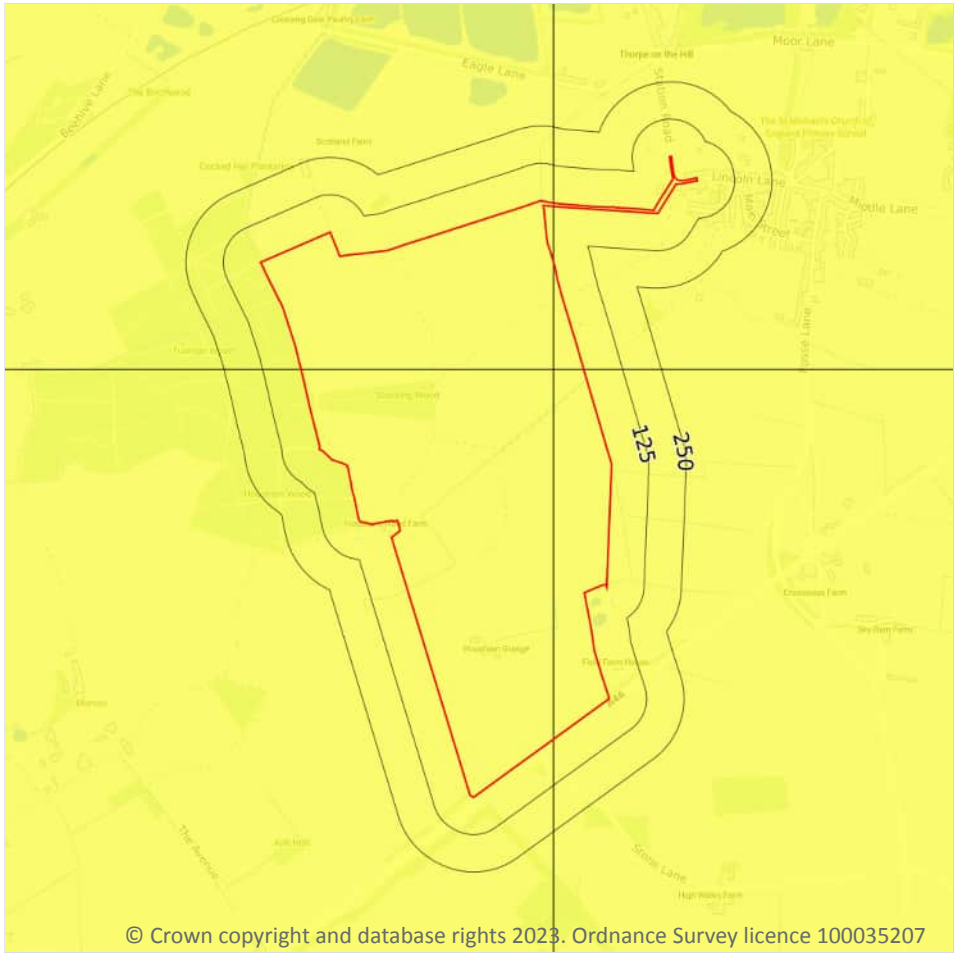
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 93 >**

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



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Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	1

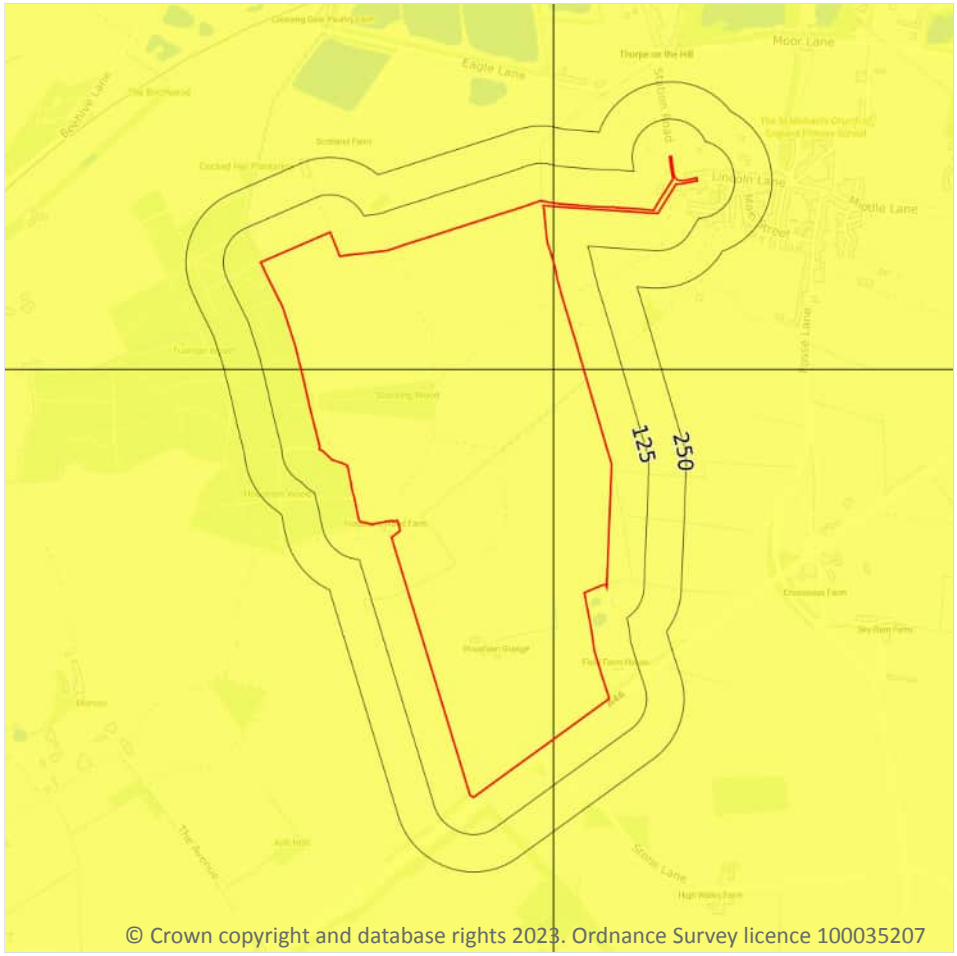
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 94 >**

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

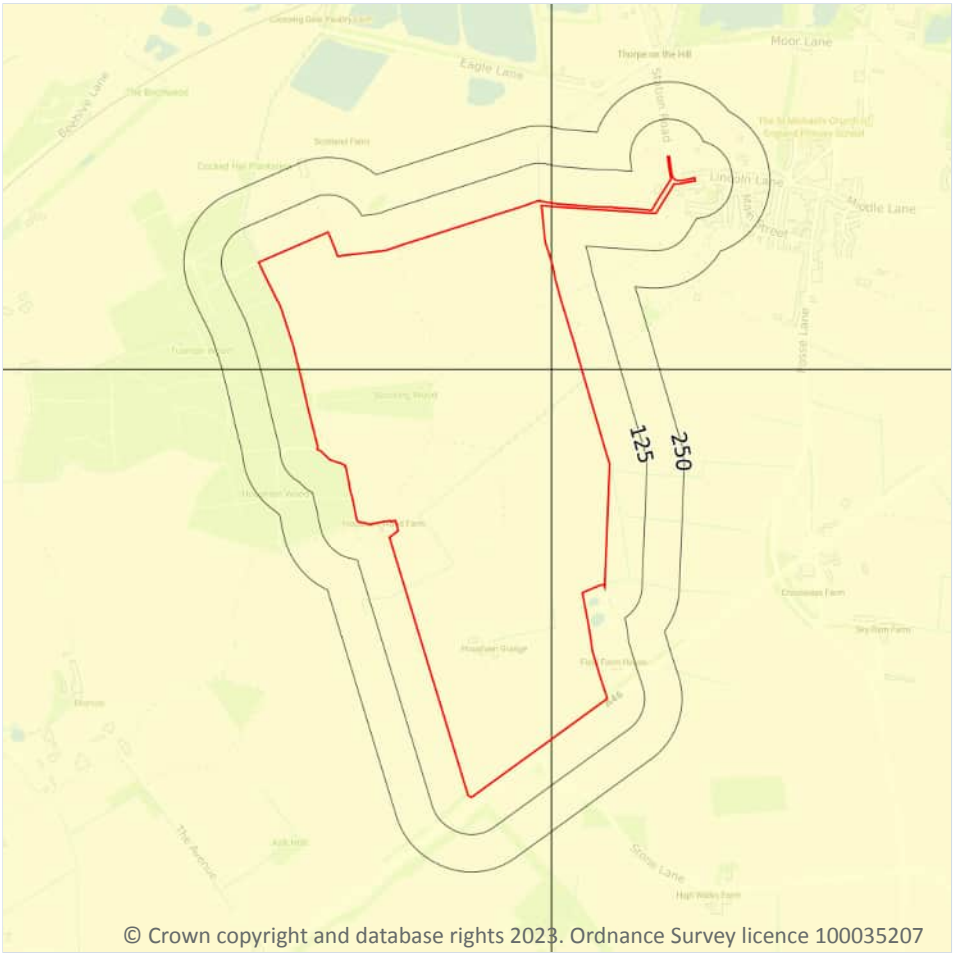
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 95 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	1

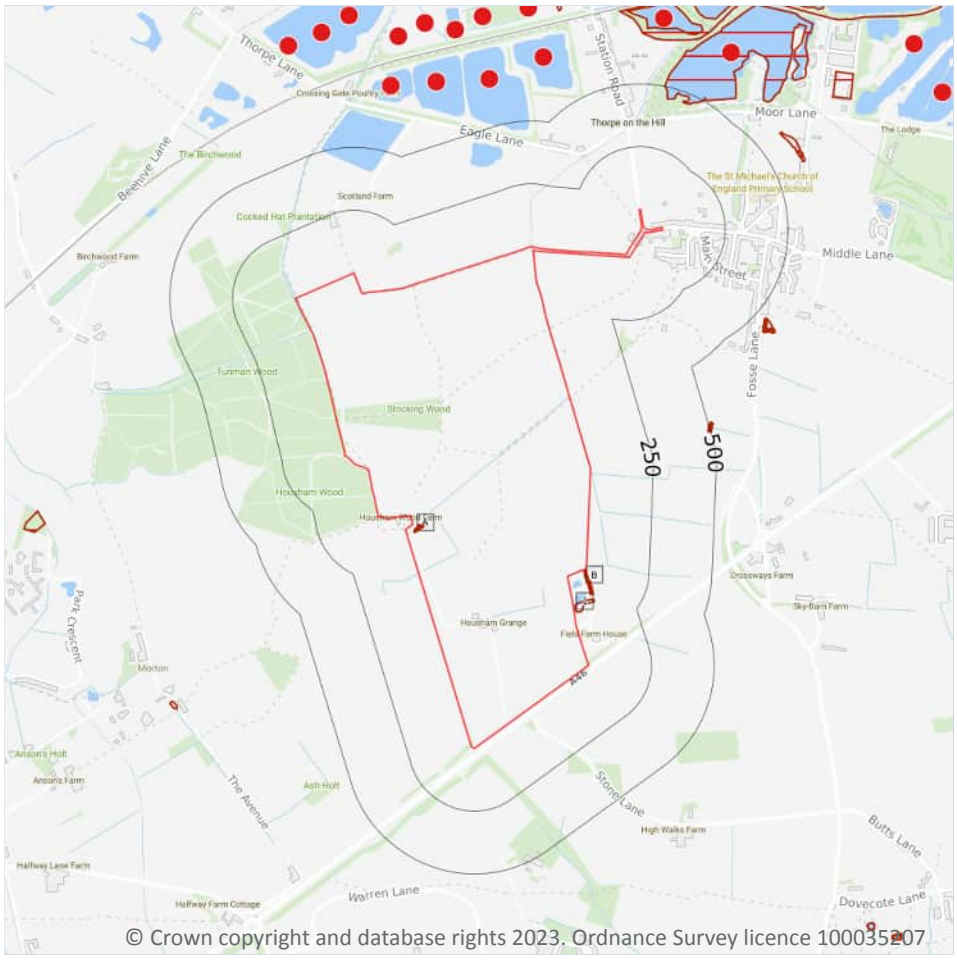
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 96 >**

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



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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	7

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 98 >**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Pond**	**1948**	**1:10560**
A	**On site**	**Pond**	**1904**	**1:10560**
A	**On site**	**Pond**	**1965**	**1:10560**
A	**On site**	**Pond**	**1979**	**1:10000**
B	1m SE	Ponds	1886	1:10560
1	6m SE	Ponds	1979	1:10000
B	39m SE	Pond	1979	1:10000

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	0

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).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

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

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

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

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

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

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

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

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

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

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

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

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

20.1 Radon

Records on site	1

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

Features are displayed on the Radon map on **page 105 >**

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	34

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
18m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
19m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
20m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
20m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
22m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
41m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
42m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

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

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-april-2023/ ↗.

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 10/10/2023

Your ref: 60700987

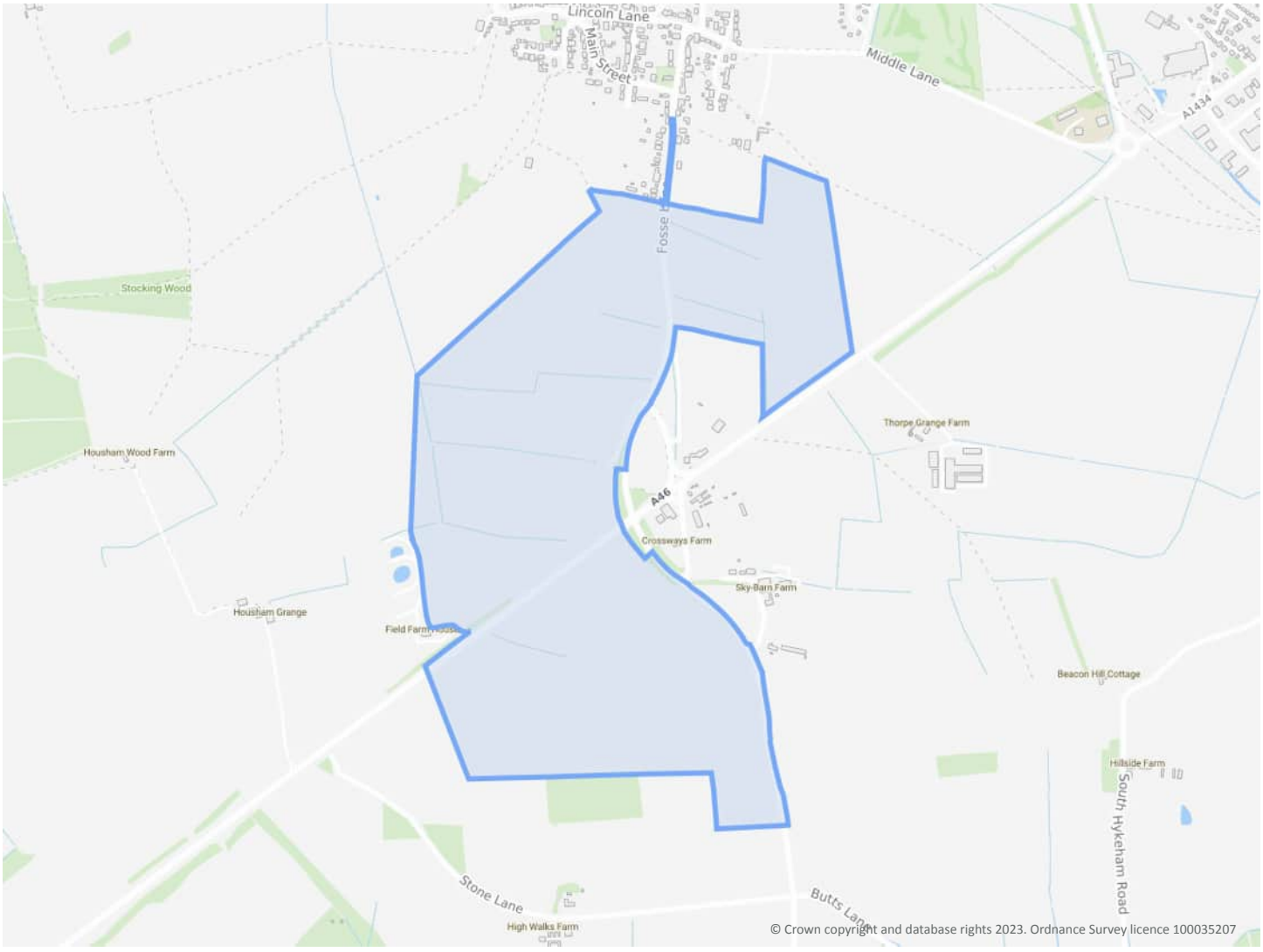
Our Ref: GSIP-2023-14155-15965_C

Site Details

Location: 490799 364440

Area: 113.68 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

OS MasterMap site plan N/A: >10ha

Aerial image p. 9 >

groundsure.com/insightuserguide ↗

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

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	1	4	3	1	-
15 >	1.2 >	Historical tanks >	0	0	1	1	-
15	1.3	Historical energy features	0	0	0	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
16 >	1.5 >	Historical garages >	0	1	0	0	-
16	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
17 >	2.1 >	Historical industrial land uses >	1	5	4	1	-
18 >	2.2 >	Historical tanks >	0	0	1	1	-
18	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	1	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	0	0	0	-
21 >	3.6 >	Licensed waste sites >	0	1	3	0	-
22 >	3.7 >	Waste exemptions >	1	0	40	35	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
30 >	4.1 >	Recent industrial land uses >	1	0	5	-	-
31	4.2	Current or recent petrol stations	0	0	0	0	-
31	4.3	Electricity cables	0	0	0	0	-
31	4.4	Gas pipelines	0	0	0	0	-
31	4.5	Sites determined as Contaminated Land	0	0	0	0	-

32	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
32	4.7	Regulated explosive sites	0	0	0	0	-
32	4.8	Hazardous substance storage/usage	0	0	0	0	-
32	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
32	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
33	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
33	4.12	Radioactive Substance Authorisations	0	0	0	0	-
33 >	**4.13 >**	**Licensed Discharges to controlled waters >**	1	0	5	1	-
34	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
34	4.15	Pollutant release to public sewer	0	0	0	0	-
35	4.16	List 1 Dangerous Substances	0	0	0	0	-
35	4.17	List 2 Dangerous Substances	0	0	0	0	-
35 >	**4.18 >**	**Pollution Incidents (EA/NRW) >**	0	0	0	2	-
35	4.19	Pollution inventory substances	0	0	0	0	-
36	4.20	Pollution inventory waste transfers	0	0	0	0	-
36	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
37 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
38 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
40 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
43 >	**5.4 >**	**Groundwater vulnerability- soluble rock risk >**	Identified (within 0m)				
43	5.5	Groundwater vulnerability- local information	None (within 0m)				
44 >	**5.6 >**	**Groundwater abstractions >**	0	0	0	1	17
48 >	**5.7 >**	**Surface water abstractions >**	0	0	0	0	10
51	5.8	Potable abstractions	0	0	0	0	0
51	5.9	Source Protection Zones	0	0	0	0	-
51	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
52 >	**6.1 >**	**Water Network (OS MasterMap) >**	33	6	11	-	-

56 >	6.2 >	Surface water features >	1	5	7	-	-
57 >	6.3 >	WFD Surface water body catchments >	3	-	-	-	-
57 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
58 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
59	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
59	7.2	Historical Flood Events	0	0	0	-	-
59	7.3	Flood Defences	0	0	0	-	-
60	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
60	7.5	Flood Storage Areas	0	0	0	-	-
61	7.6	Flood Zone 2	None (within 50m)				
61	7.7	Flood Zone 3	None (within 50m)				

Page	Section	Surface water flooding >	
62 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)

Page	Section	Groundwater flooding >	
64 >	9.1 >	Groundwater flooding >	Low (within 50m)

Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
65	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
66	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
66	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
66	10.4	Special Protection Areas (SPA)	0	0	0	0	0
66	10.5	National Nature Reserves (NNR)	0	0	0	0	0
67 >	10.6 >	Local Nature Reserves (LNR) >	0	0	0	0	2
67 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	1
67	10.8	Biosphere Reserves	0	0	0	0	0
68	10.9	Forest Parks	0	0	0	0	0
68	10.10	Marine Conservation Zones	0	0	0	0	0
68	10.11	Green Belt	0	0	0	0	0
68	10.12	Proposed Ramsar sites	0	0	0	0	0

68	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
69	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
69	10.15	Nitrate Sensitive Areas	0	0	0	0	0
69 >	**10.16 >**	**Nitrate Vulnerable Zones >**	1	0	0	0	2
70 >	**10.17 >**	**SSSI Impact Risk Zones >**	1	-	-	-	-
71	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
72	11.1	World Heritage Sites	0	0	0	-	-
73	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
73	11.3	National Parks	0	0	0	-	-
73 >	**11.4 >**	**Listed Buildings >**	0	1	1	-	-
74	11.5	Conservation Areas	0	0	0	-	-
74	11.6	Scheduled Ancient Monuments	0	0	0	-	-
74	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
75 >	**12.1 >**	**Agricultural Land Classification >**	Grade 3 (within 250m)				
76	12.2	Open Access Land	0	0	0	-	-
76	12.3	Tree Felling Licences	0	0	0	-	-
76 >	**12.4 >**	**Environmental Stewardship Schemes >**	0	1	0	-	-
77 >	**12.5 >**	**Countryside Stewardship Schemes >**	2	1	2	-	-
Page	Section	**Habitat designations >**	On site	0-50m	50-250m	250-500m	500-2000m
78 >	**13.1 >**	**Priority Habitat Inventory >**	3	0	0	-	-
79	13.2	Habitat Networks	0	0	0	-	-
79	13.3	Open Mosaic Habitat	0	0	0	-	-
79	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
80 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
81	14.2	Artificial and made ground (10k)	0	0	0	0	-
82	14.3	Superficial geology (10k)	0	0	0	0	-

82	14.4	Landslip (10k)	0	0	0	0	-
83	14.5	Bedrock geology (10k)	0	0	0	0	-
83	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
84 >	15.1 >	**50k Availability >**	Identified (within 500m)				
85	15.2	Artificial and made ground (50k)	0	0	0	0	-
85	15.3	Artificial ground permeability (50k)	0	0	-	-	-
86 >	15.4 >	**Superficial geology (50k) >**	0	1	0	0	-
87 >	15.5 >	**Superficial permeability (50k) >**	Identified (within 50m)				
87	15.6	Landslip (50k)	0	0	0	0	-
87	15.7	Landslip permeability (50k)	None (within 50m)				
88 >	15.8 >	**Bedrock geology (50k) >**	1	0	0	0	-
89 >	15.9 >	**Bedrock permeability (50k) >**	Identified (within 50m)				
89	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
90 >	16.1 >	**BGS Boreholes >**	3	4	5	-	-
Page	Section	**Natural ground subsidence >**					
92 >	17.1 >	**Shrink swell clays >**	Low (within 50m)				
93 >	17.2 >	**Running sands >**	Very low (within 50m)				
95 >	17.3 >	**Compressible deposits >**	Negligible (within 50m)				
96 >	17.4 >	**Collapsible deposits >**	Very low (within 50m)				
97 >	17.5 >	**Landslides >**	Very low (within 50m)				
98 >	17.6 >	**Ground dissolution of soluble rocks >**	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
100	18.1	BritPits	0	0	0	0	-
101 >	18.2 >	**Surface ground workings >**	5	5	0	-	-
101	18.3	Underground workings	0	0	0	0	0
101	18.4	Underground mining extents	0	0	0	0	-
102	18.5	Historical Mineral Planning Areas	0	0	0	0	-

102	18.6	Non-coal mining	0	0	0	0	0
102	18.7	JPB mining areas	None (within 0m)				
102	18.8	The Coal Authority non-coal mining	0	0	0	0	-
103	18.9	Researched mining	0	0	0	0	-
103	18.10	Mining record office plans	0	0	0	0	-
103	18.11	BGS mine plans	0	0	0	0	-
103	18.12	Coal mining	None (within 0m)				
103	18.13	Brine areas	None (within 0m)				
104	18.14	Gypsum areas	None (within 0m)				
104	18.15	Tin mining	None (within 0m)				
104	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
105	19.1	Natural cavities	0	0	0	0	-
105	19.2	Mining cavities	0	0	0	0	0
105	19.3	Reported recent incidents	0	0	0	0	-
105	19.4	Historical incidents	0	0	0	0	-
106	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon** >					
107 >	**20.1** >	**Radon** >	Less than 1% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
109 >	**21.1** >	**BGS Estimated Background Soil Chemistry** >	30	6	-	-	-
111	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
111	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
112	22.1	Underground railways (London)	0	0	0	-	-
112	22.2	Underground railways (Non-London)	0	0	0	-	-
112	22.3	Railway tunnels	0	0	0	-	-
112	22.4	Historical railway and tunnel features	0	0	0	-	-
112	22.5	Royal Mail tunnels	0	0	0	-	-

113	22.6	Historical railways	0	0	0	-	-
113	22.7	Railways	0	0	0	-	-
113	22.8	Crossrail 1	0	0	0	0	-
113	22.9	Crossrail 2	0	0	0	0	-
113	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 113.68ha

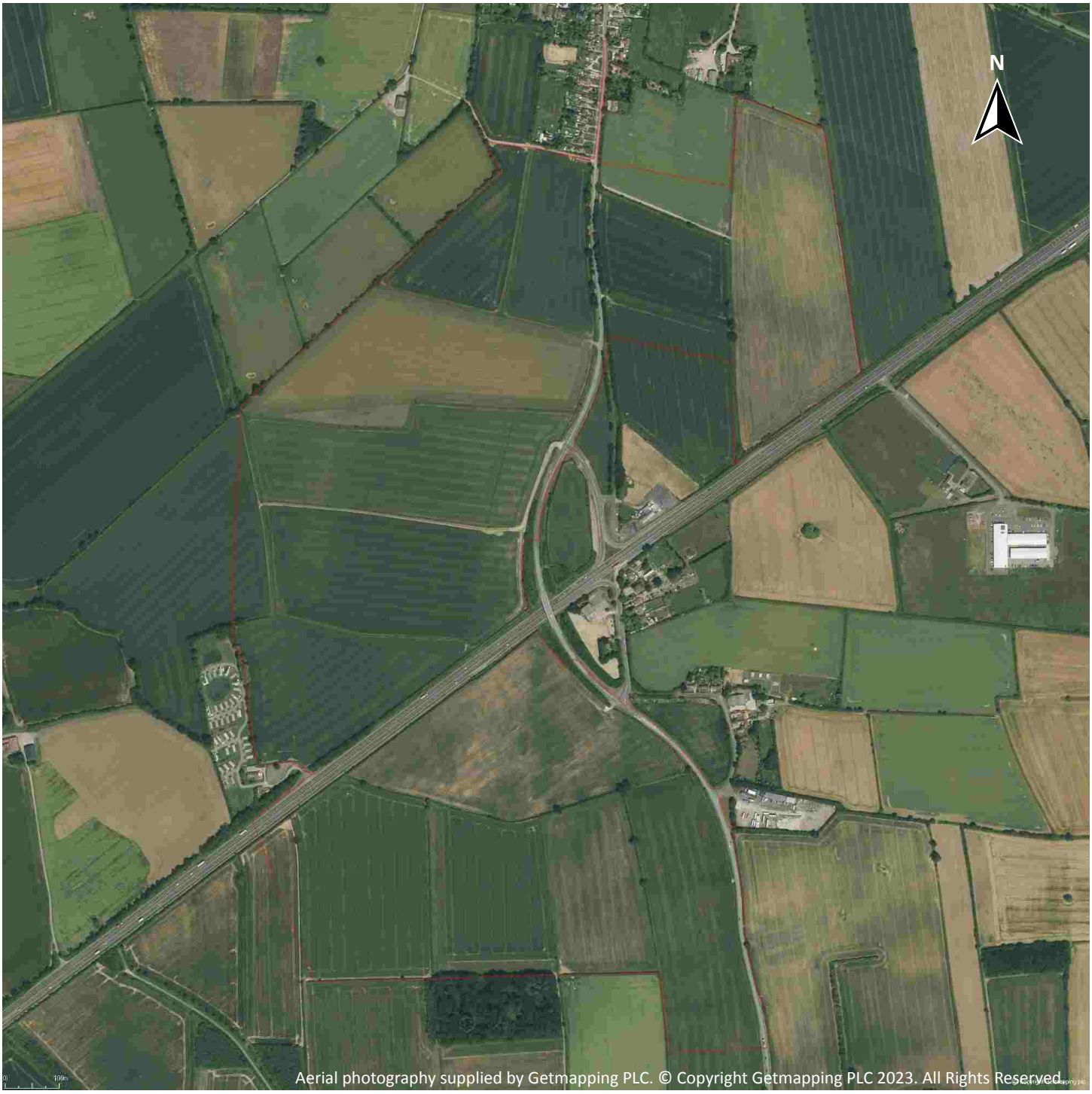
Recent site history - 2018 aerial photograph



Capture Date: 15/05/2018

Site Area: 113.68ha

Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 113.68ha

Recent site history - 2007 aerial photograph



Capture Date: 18/09/2007

Site Area: 113.68ha

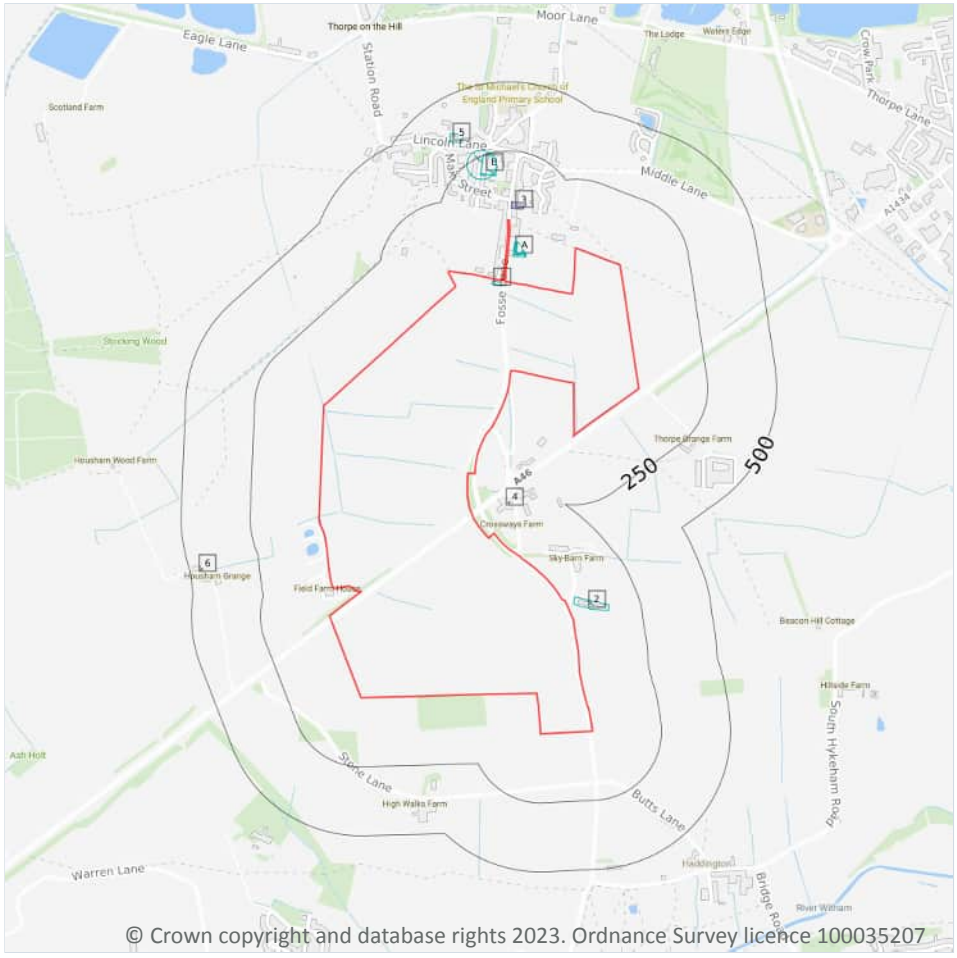
Recent site history - 1999 aerial photograph



Capture Date: 05/06/1999

Site Area: 113.68ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical garages

1.1 Historical industrial land uses

Records within 500m	9

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Pumping Station**	**1987**	**1589203**

ID	Location	Land use	Dates present	Group ID
A	21m N	Unspecified Pit	1955	1610310
A	21m N	Unspecified Ground Workings	1904	1749493
A	22m N	Unspecified Ground Workings	1904 - 1948	1726370
2	24m SE	Unspecified Depot	1979	1583592
B	166m N	Smithy	1904 - 1948	1725234
B	168m N	Smithy	1955	1726166
B	180m N	Smithy	1904	1663159
5	327m N	Unspecified Depot	1973	1583590

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**2**

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
4	120m E	Unspecified Tank	1975	256665
6	455m W	Unspecified Tank	1975	256671

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**0**

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

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	1

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
3	43m N	Garage	1985	47547

This data is sourced from Ordnance Survey / Groundsure.

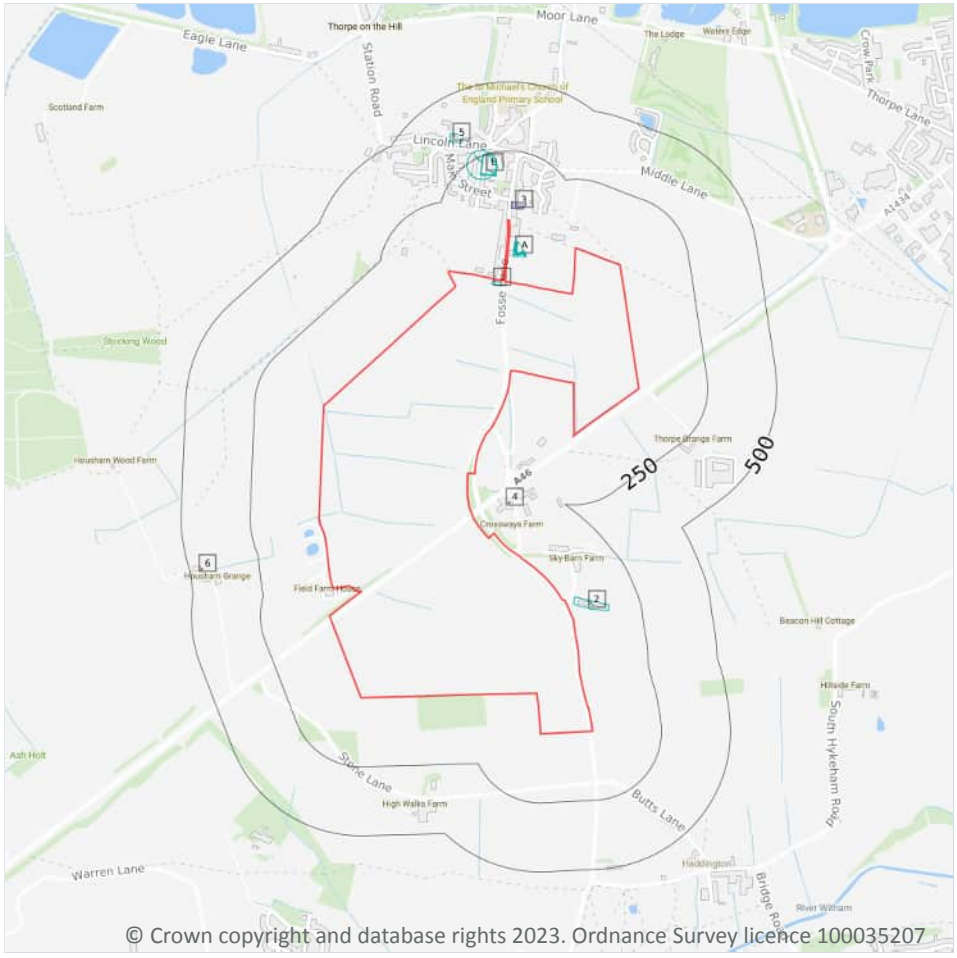
1.6 Historical military land

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



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Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical garages

2.1 Historical industrial land uses

Records within 500m	11

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

Features are displayed on the Past land use - un-grouped map on **page 17 >**

ID	Location	Land Use	Date	Group ID
1	**On site**	**Pumping Station**	**1987**	**1589203**
A	21m N	Unspecified Pit	1955	1610310
A	21m N	Unspecified Ground Workings	1904	1749493

ID	Location	Land Use	Date	Group ID
A	22m N	Unspecified Ground Workings	1948	1726370
A	22m N	Unspecified Ground Workings	1904	1726370
2	24m SE	Unspecified Depot	1979	1583592
B	166m N	Smithy	1948	1725234
B	166m N	Smithy	1904	1725234
B	168m N	Smithy	1955	1726166
B	180m N	Smithy	1904	1663159
5	327m N	Unspecified Depot	1973	1583590

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**2**

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 17 >**

ID	Location	Land Use	Date	Group ID
4	120m E	Unspecified Tank	1975	256665
6	455m W	Unspecified Tank	1975	256671

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	1

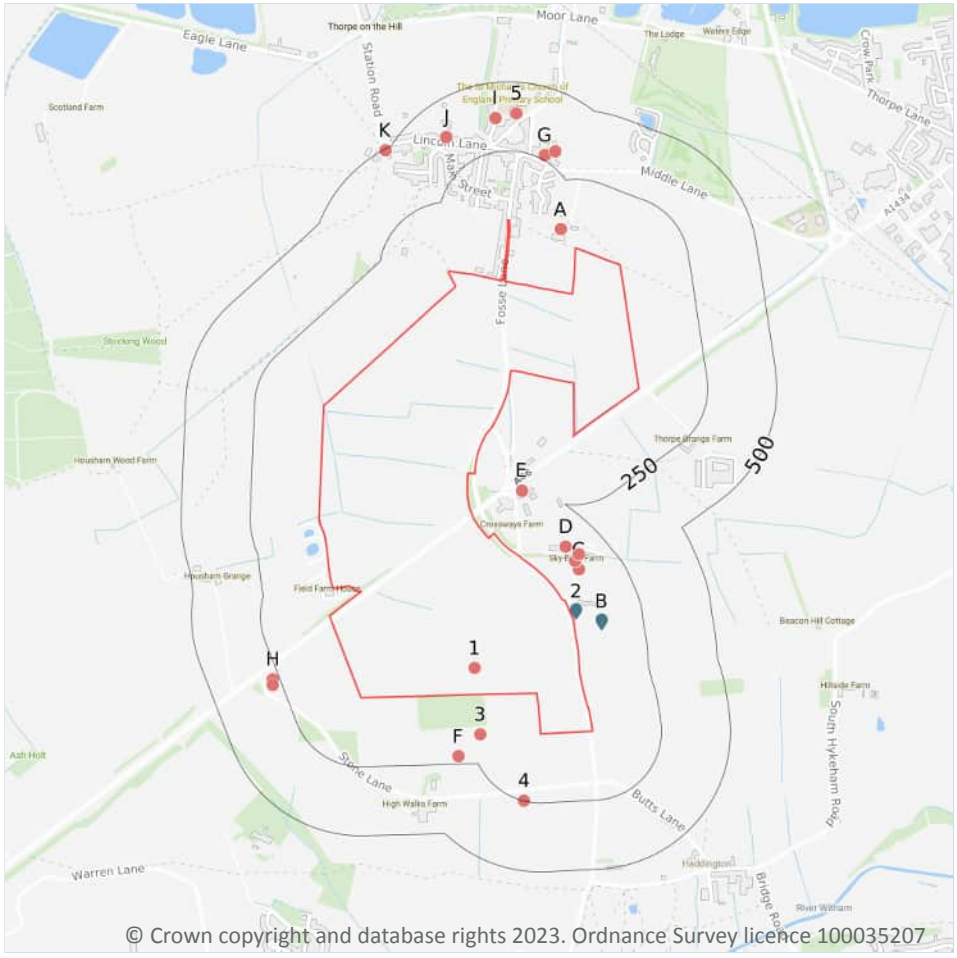
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17 >**

ID	Location	Land Use	Date	Group ID
3	43m N	Garage	1985	47547

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



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Site Outline

Search buffers in metres (m)

Licensed 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	0

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

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

3.6 Licensed waste sites

Records within 500m	4

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

Features are displayed on the Waste and landfill map on **page 20 >**

ID	Location	Details		
2	19m SE	Site Name: Sky Lane Site Address: Ringway Infrastructure Services Limited, (formerly Sky Lane, Sky Lane, Aubourn, Lincoln, Lincolnshire, LN5 9FE Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 646511 EPR reference: EA/EPR/HP3092NN Operator: Ringway Infrastructure Services Limited Waste Management licence No: 73198 Annual Tonnage: 0	Issue Date: 04/05/2005 Effective Date: 04/05/2005 Modified: - Surrendered Date: 04/05/2005 Expiry Date: - Cancelled Date: 04/05/2005 Status: Surrendered

ID	Location	Details		
B	98m SE	Site Name: Haddington Lane (Transfer Station) Site Address: Haddington Lane, Auborn, Nr Lincoln, Lincs, LN5 9EL Correspondence Address: L C R Highways, Haddington Lane, Aubourn, Lincoln, Lincs, LN5 9FE	Type of Site: Transfer Station taking Non-Biodegradable Wastes Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LIN028 EPR reference: - Operator: Lincolnshire County Council Waste Management licence No: 73090 Annual Tonnage: 5000	Issue Date: 28/07/2000 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
B	98m SE	Site Name: Haddington Lane (Transfer Station) Site Address: Sky Lane, Auborn, Lincoln, Lincolnshire, LN5 9FE Correspondence Address: -	Type of Site: Transfer Station taking Non-Biodegradable Wastes Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LCR002 EPR reference: EA/EPR/SP3292NU/V003 Operator: Lcr Highways Ltd Waste Management licence No: 73090 Annual Tonnage: 5000	Issue Date: 28/07/2000 Effective Date: 15/07/2004 Modified: 03/05/2005 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
B	98m SE	Site Name: Haddington Lane (Transfer Station) Site Address: L C R Highways Limited, Sky Lane, Aubourn, Lincoln, Lincolnshire, LN5 9FE Correspondence Address: -	Type of Site: Transfer Station taking Non-Biodegradable Wastes Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 645187 EPR reference: EA/EPR/SP3292NU Operator: L C R Highways Limited Waste Management licence No: 73090 Annual Tonnage: 5000	Issue Date: 28/07/2000 Effective Date: 28/07/2000 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: 28/07/2000 Status: Expired

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

3.7 Waste exemptions

Records within 500m	**76**

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
1	**On site**	**-**	**WEX210981**	**Storing waste exemption**	**On a Farm**	**Storage of sludge**
A	88m N	Jubilee Farm Lincoln Lane LINCOLN LN6 9BH	EPR/VF0733KC/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Deposit of waste from dredging of inland waters
A	88m N	Jubilee Farm Lincoln Lane LINCOLN LN6 9BH	EPR/VF0733KC/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
A	88m N	Jubilee Farm Lincoln Lane LINCOLN LN6 9BH	EPR/VF0733KC/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
A	88m N	Jubilee Farm Lincoln Lane LINCOLN LN6 9BH	EPR/VF0733KC/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit
A	88m N	Jubilee Farm Lincoln Lane LINCOLN LN6 9BH	EPR/VF0733KC/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of mulch
A	88m N	Jubilee Farm Lincoln Lane LINCOLN LN6 9BH	EPR/VF0733KC/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading of plant matter to confer benefit
C	108m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX309465	Storing waste exemption	On a farm	Storage of waste in secure containers
C	108m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX309465	Disposing of waste exemption	On a farm	Burning waste in the open
C	108m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX309465	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters

ID	Location	Site	Reference	Category	Sub-Category	Description
C	108m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX309465	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	108m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX309465	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
C	108m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX309465	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	108m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX309465	Using waste exemption	On a farm	Use of waste in construction
C	118m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX014525	Disposing of waste exemption	On a farm	Burning waste in the open
C	118m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX014525	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	118m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX014525	Storing waste exemption	On a farm	Storage of waste in secure containers
C	118m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX014525	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	118m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX014525	Using waste exemption	On a farm	Use of waste in construction
C	118m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX014525	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	118m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX014525	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
D	131m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX173496	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
D	131m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX173496	Disposing of waste exemption	On a farm	Burning waste in the open

ID	Location	Site	Reference	Category	Sub-Category	Description
D	131m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX173496	Using waste exemption	On a farm	Use of waste in construction
D	131m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX173496	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
D	131m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX173496	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
D	131m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX173496	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
D	131m SE	Skybarn Farm, Sky Lane, Haddington, Lincoln, LN5 9FL	WEX173496	Storing waste exemption	On a farm	Storage of waste in secure containers
C	143m SE	Skybarn Farm Sky Lane Lincoln LN5 9FL	EPR/VH0774XF/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
C	143m SE	Skybarn Farm Sky Lane Lincoln LN5 9FL	EPR/VH0774XF/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
C	143m SE	Skybarn Farm Sky Lane Lincoln LN5 9FL	EPR/VH0774XF/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	143m SE	Skybarn Farm Sky Lane Lincoln LN5 9FL	EPR/VH0774XF/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
C	143m SE	Skybarn Farm Sky Lane Lincoln LN5 9FL	EPR/VH0774XF/A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit
C	143m SE	Skybarn Farm Sky Lane Lincoln LN5 9FL	EPR/VH0774XF/A001	Using waste exemption	Agricultural Waste Only	Spreading of plant matter to confer benefit
3	147m S	-	WEX102057	Storing waste exemption	On a farm	Storage of sludge
E	179m E	1, OLD HADDINGTON LANE, HADDINGTON, LINCOLN, LN5 9FN	WEX120948	Using waste exemption	Not on a farm	Spreading waste on non-agricultural land to confer benefit
E	179m E	1, OLD HADDINGTON LANE, HADDINGTON, LINCOLN, LN5 9FN	WEX120948	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance

ID	Location	Site	Reference	Category	Sub-Category	Description
E	179m E	-	WEX260716	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
E	179m E	-	WEX260716	Using waste exemption	Not on a farm	Spreading waste on non-agricultural land to confer benefit
F	224m S	-	WEX239190	Storing waste exemption	On a farm	Storage of sludge
F	224m S	-	WEX249646	Storing waste exemption	On a farm	Storage of sludge
4	251m S	Land at SK9092063250	EPR/CE5046EG/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
G	265m N	Middle Lane, Thorpe on the Hill, Lincoln, LN6 9FB	WEX286801	Using waste exemption	Not on a farm	Use of waste in construction
G	265m N	Middle Lane, Thorpe on the Hill, Lincoln, LN6 9FB	WEX286801	Disposing of waste exemption	Not on a farm	Burning waste in the open
H	275m SW	Land at SK9001063690	EPR/FE5746EP/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
H	282m SW	-	WEX322896	Storing waste exemption	On a farm	Storage of sludge
G	296m N	Middle Lane, Thorpe on the Hill, Lincoln, LN6 9FB	WEX149386	Disposing of waste exemption	Not on a farm	Burning waste in the open
G	296m N	Middle Lane, Thorpe on the Hill, Lincoln, LN6 9FB	WEX149386	Using waste exemption	Not on a farm	Use of waste in construction
I	371m N	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
I	371m N	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
I	371m N	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
I	371m N	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit
I	371m N	Hill Close Farm Lincoln Lane LINCOLN LN6 9BH	EPR/JH0673AD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose
J	372m N	38 Lincoln Lane LINCOLN LN6 9BH	EPR/EE5187SG/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
J	373m N	38, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX196577	Disposing of waste exemption	On a Farm	Burning waste in the open
J	373m N	38, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX042173	Disposing of waste exemption	On a farm	Burning waste in the open
J	373m N	38, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX323257	Disposing of waste exemption	On a farm	Burning waste in the open
5	386m N	St Michael's C of E Primary School School Lane Lincoln Lincolnshire LN6 9BN	EPR/SF0502KP/A001	Treating waste exemption	Non-Agricultural Waste Only	Crushing waste fluorescent tubes
K	495m N	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
K	495m N	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Disposing of waste exemption	On a farm	Burning waste in the open
K	495m N	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Storing waste exemption	On a farm	Storage of waste in secure containers
K	495m N	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Storing waste exemption	On a farm	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
K	495m N	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Treating waste exemption	On a farm	Aerobic composting and associated prior treatment
K	495m N	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
K	495m N	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Using waste exemption	On a farm	Use of waste in construction
K	495m N	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
K	495m N	HOME FARM, LINCOLN LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BH	WEX010492	Using waste exemption	On a farm	Use of waste for a specified purpose
K	495m N	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Treating waste exemption	Agricultural Waste Only	Aerobic composting and associated prior treatment
K	495m N	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Deposit of waste from dredging of inland waters
K	495m N	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Disposing of waste exemption	Both agricultural and non-agricultural waste	Burning waste in the open
K	495m N	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in secure containers
K	495m N	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place
K	495m N	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
K	495m N	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
K	495m N	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Spreading waste on agricultural land to confer benefit
K	495m N	Home Farm Lincoln Lane LN6 9BH	EPR/NE5750DD/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste for a specified purpose

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

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	6

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 30 >**

ID	Location	Company	Address	Activity	Category
A	**On site**	**Pumping Station**	**Lincolnshire, LN6**	**Water Pumping Stations**	**Industrial Features**
B	53m SE	B H I UK	1, Sky Lane, Haddington, Lincoln, Lincolnshire, LN5 9FL	Baby, Nursery and Playground Equipment	Consumer Products
B	95m SE	Handrail Padding	Sky Lane, Aubourn, Lincolnshire, Lincolnshire, LN5	Rubber, Silicones and Plastics	Industrial Products

ID	Location	Company	Address	Activity	Category
2	115m NE	Fosseway 46 Business Park	Lincolnshire, LN5	Business Parks and Industrial Estates	Industrial Features
C	161m NE	Mark Phillips Motor Cycle Clothing Ltd	-, Newark Road, Aubourn, Lincoln, Lincolnshire, LN5 9EJ	Vehicle Components	Industrial Products
C	178m NE	Lincs V W Commercial Vehicle Sales Ltd	The Fosseway Business Park 46, Newark Road, Aubourn, Lincoln, Lincolnshire, LN5 9EJ	New Vehicles	Motoring

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	7

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 30 >**

ID	Location	Address	Details	
A	**On site**	**SPS THORPE ON THE HILL, FOSSE LANE, THORPE-ON-THE-HILL, LINCOLN, LN6 9BE**	**Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY** **Permit Number: AW3NFF703** **Permit Version: 1** **Receiving Water: Unknown trib.**	**Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY)** **Issue date: 30/05/1968** **Effective Date: 30/05/1968** **Revocation Date: -**
B	71m SE	LINCS C C HIGHWAYS DEP, AUBOURN, LINCOLNSHIRE, LN5 9FE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRNNF01279 Permit Version: 1 Receiving Water: Unnamed watercourse	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 20/07/1989 Effective Date: 20/07/1989 Revocation Date: 04/02/1992
1	103m SE	XROADS - THORPE ON HILL, AUBOURN, LINCOLN, LN5	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: AW3NFF1035 Permit Version: 1 Receiving Water: Unknown trib.	Status: CONSENT REVOKED - DISCHARGE CEASED (WRA 91, SCHED 10 & 6) Issue date: 08/10/1973 Effective Date: 08/10/1973 Revocation Date: 20/04/2005

ID	Location	Address	Details	
3	120m N	MAIN STREET/MIDDLE STREET, THORPE ON THE HILL, THORPE ON THE HILL, LINCOLN., LN6 9BZ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR3LFU844 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 20/12/1976 Effective Date: 20/12/1976 Revocation Date: 01/10/1996
4	142m SE	SKY BARN FARM, HADDINGTON ROAD, AUBOURN, LINCOLN, LN5 9FL	Effluent Type: UNSPECIFIED Permit Number: PRNLF03572 Permit Version: 1 Receiving Water: -	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 06/09/1990 Effective Date: 06/09/1990 Revocation Date: 12/08/1997
5	225m SW	HOUSE AT FIELD HOUSE FARM, THE FOSSE WAY, AUBOURN, LINCOLN	Effluent Type: UNSPECIFIED Permit Number: PR3LFU1040 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 17/05/1979 Effective Date: 17/05/1979 Revocation Date: 01/10/1996
7	308m SE	WATER SPORTS CENTRE, MOOR LANE, THORPE ON THE HILL, LINCS	Effluent Type: UNSPECIFIED Permit Number: PR3LF8 Permit Version: 1 Receiving Water: Into Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 14/09/1984 Effective Date: 14/09/1984 Revocation Date: 15/05/1997

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	2

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

Features are displayed on the Current industrial land use map on **page 30 >**

ID	Location	Details	
6	291m N	Incident Date: 04/08/2003 Incident Identification: 179384 Pollutant: Other Pollutant Pollutant Description: Natural Ochre	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
8	315m S	Incident Date: 04/07/2001 Incident Identification: 13679 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

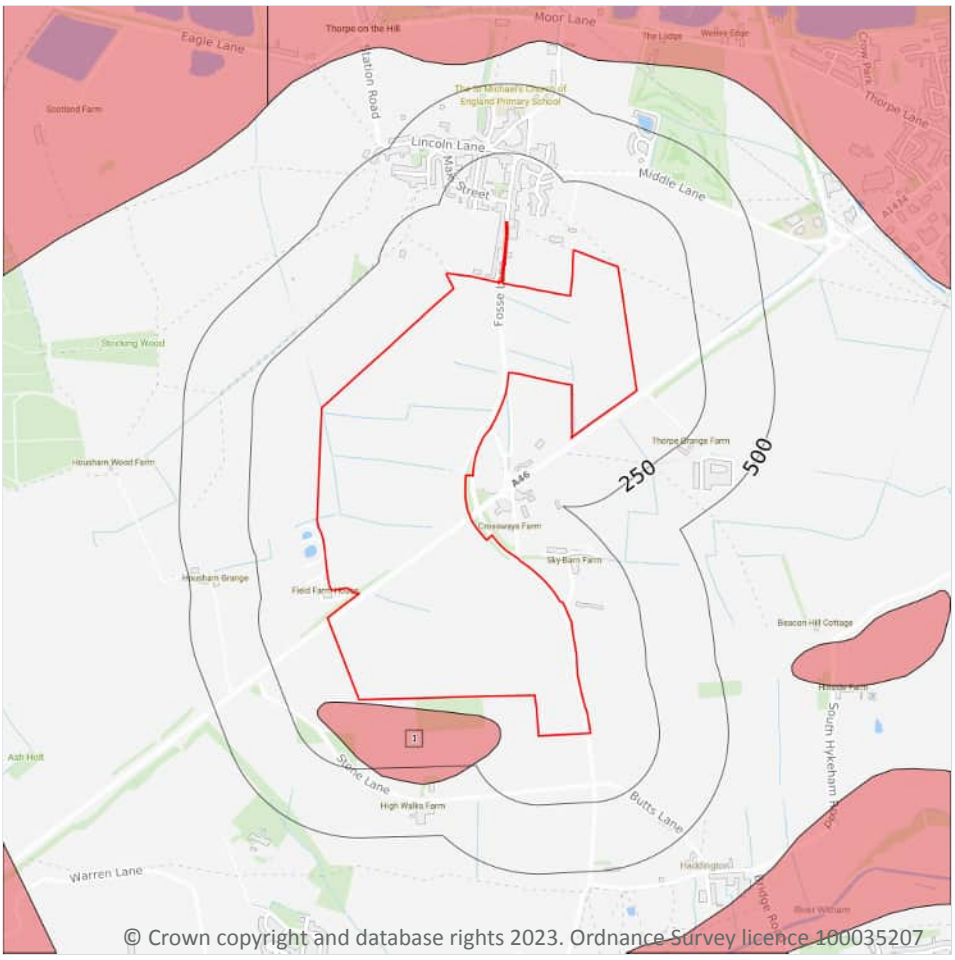
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	1

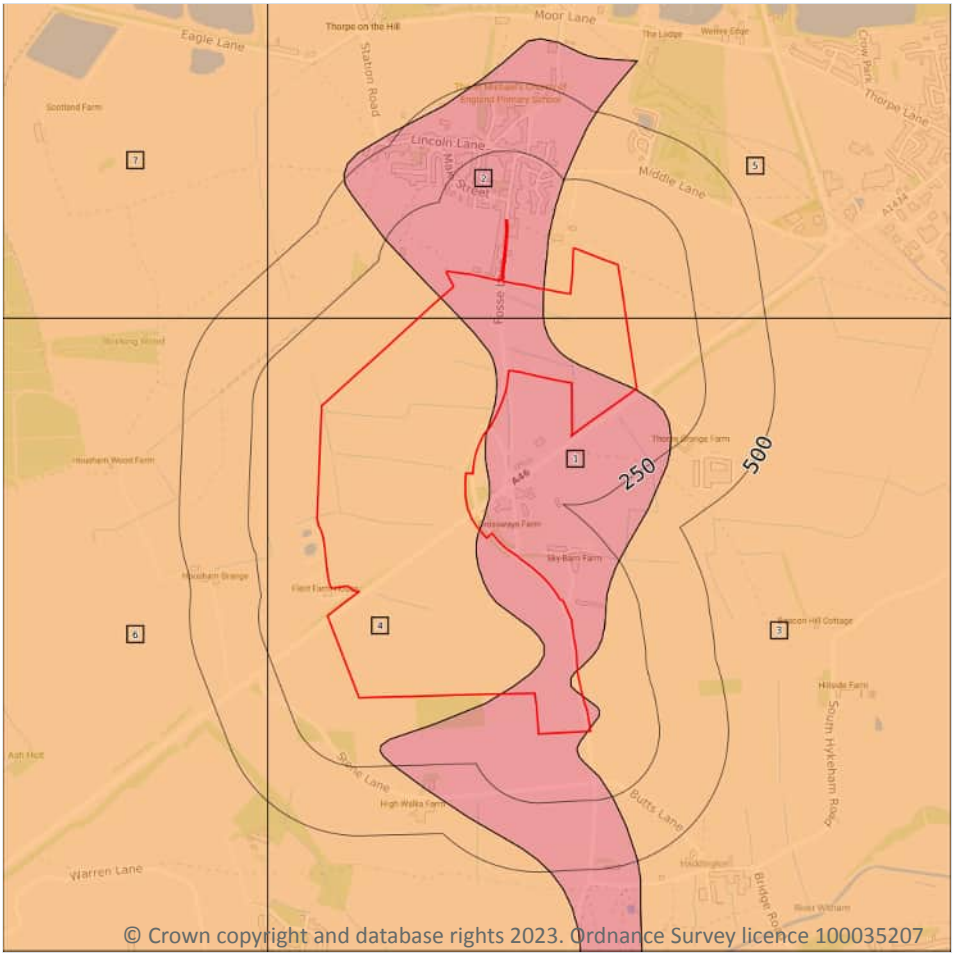
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 37 >**

ID	Location	Designation	Description
1	12m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	7

Aquifer status of groundwater held within bedrock geology.

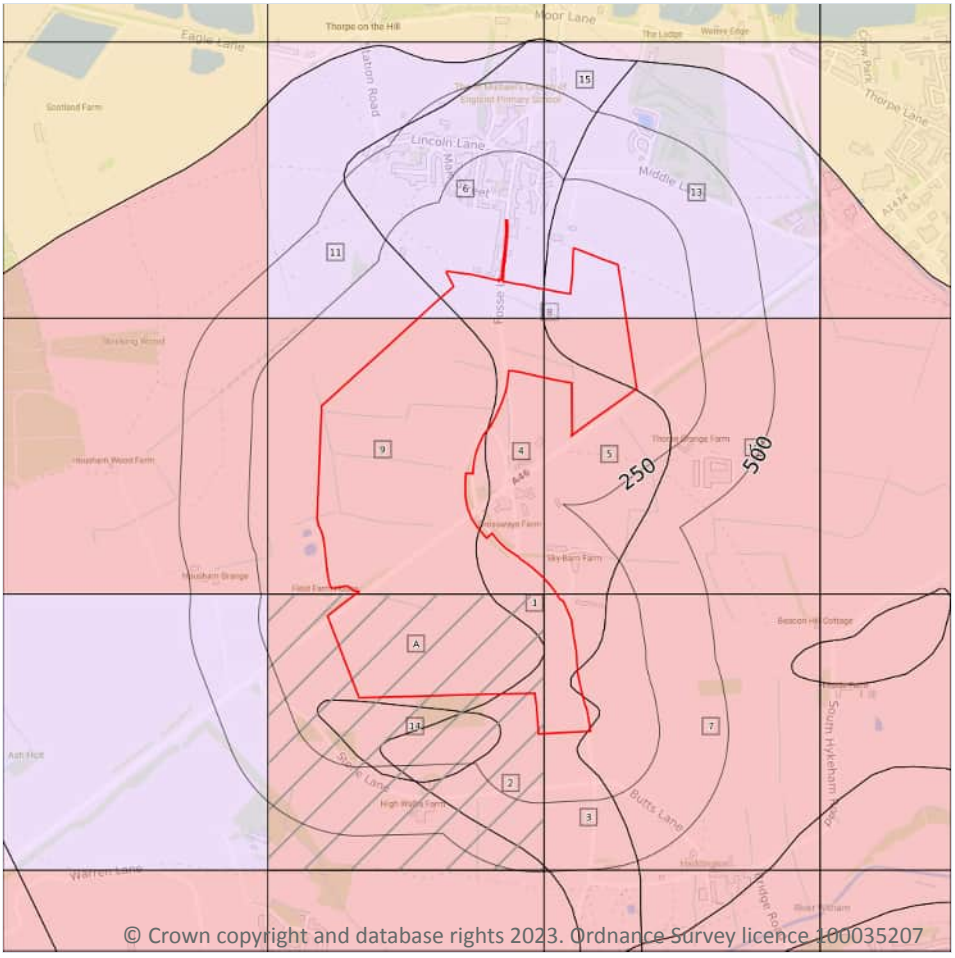
Features are displayed on the Bedrock aquifer map on **page 38 >**

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

ID	Location	Designation	Description
3	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
4	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
5	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
6	178m W	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
7	367m NW	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability
- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability
- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information
- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	16

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 40 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
7	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
8	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
11	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
12	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
13	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
A	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
15	10m N	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
A	12m SW	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary 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
14	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**7.000000000000001%**

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

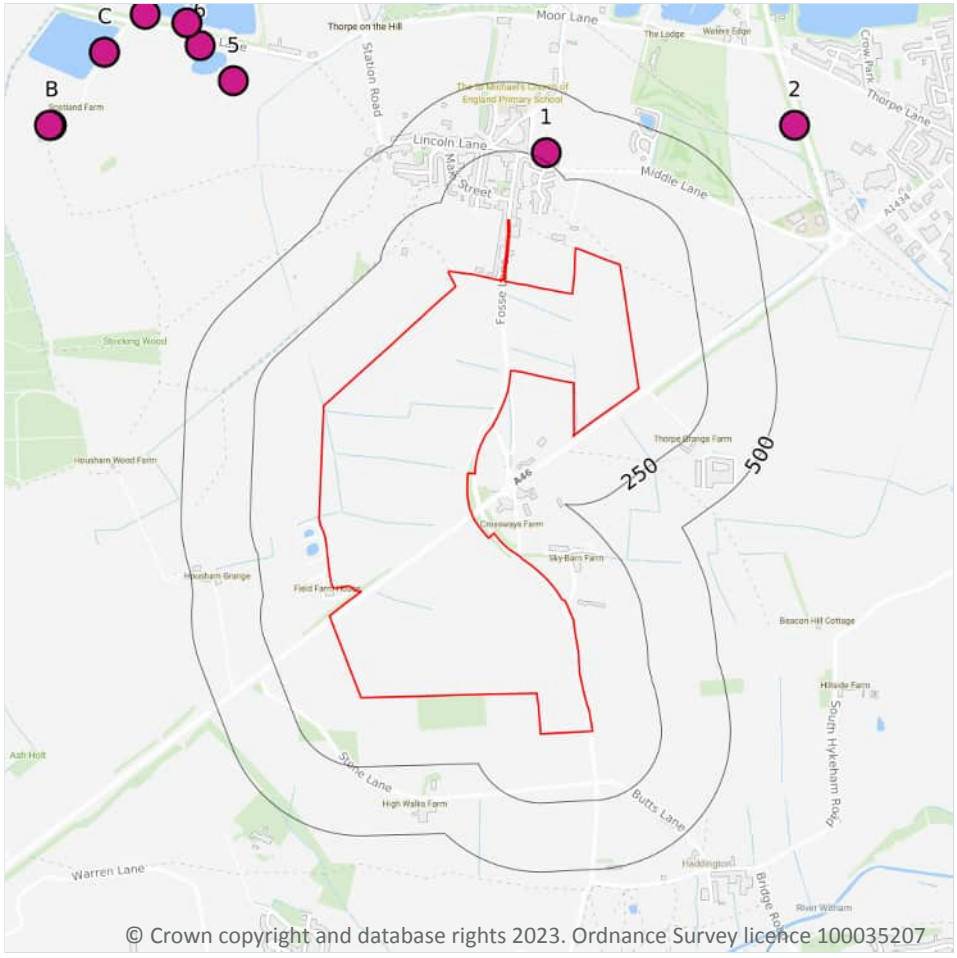
5.5 Groundwater vulnerability- local information

Records on site	**0**

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

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	18

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 44 >**

ID	Location	Details	
1	278m N	Status: Historical Licence No: 4/30/03/*G/0022 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: RICHARDSON WELL THORPE-O-T-H. Data Type: Point Name: RICHARDSON Easting: 491000 Northing: 365600	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1965 Version End Date: -
2	810m NE	Status: Active Licence No: 4/30/03/*G/0081 Details: Spray Irrigation - Storage Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT AT NORTH HYKEHAM Data Type: Point Name: PENNELLS ESTATES LTD Easting: 491900 Northing: 365700	Annual Volume (m^3): 40000 Max Daily Volume (m^3): 250 Original Application No: - Original Start Date: 01/01/1990 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1992 Version End Date: -
5	1043m NW	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489868 Northing: 365860	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 16/08/2012 Version End Date: -
6	1218m NW	Status: Active Licence No: 4/30/03/*G/0109/R01 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: G H CHENNELLS FARMS LTD Easting: 489746 Northing: 365987	Annual Volume (m^3): 15000 Max Daily Volume (m^3): 1380 Original Application No: NPS/WR/030699 Original Start Date: 19/04/2016 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 08/03/2019 Version End Date: -
7	1309m NW	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489700 Northing: 366070	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 1 Version Start Date: 22/04/2005 Version End Date: -

ID	Location	Details	
-	1368m N	Status: Active Licence No: AN/030/0003/002 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GRAVEL PIT AT WHISBY Data Type: Point Name: C NEVILE & SON Easting: 490520 Northing: 366680	Annual Volume (m^3): 40000 Max Daily Volume (m^3): 650 Original Application No: NPS/WR/002352 Original Start Date: 01/11/1996 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 13/04/2020 Version End Date: -
-	1368m N	Status: Historical Licence No: 4/30/03/*G/0098 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GRAVEL PIT AT WHISBY Data Type: Point Name: NEVILE & SON Easting: 490520 Northing: 366680	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/11/1996 Expiry Date: 01-Oct-03 Issue No: 101 Version Start Date: 25/03/1999 Version End Date: -
-	1368m N	Status: Historical Licence No: 4/30/03/*G/0104 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GRAVEL PIT AT WHISBY Data Type: Point Name: C NEVILE & SON Easting: 490520 Northing: 366680	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 650 Original Application No: - Original Start Date: 02/08/2004 Expiry Date: 30/09/2009 Issue No: 1 Version Start Date: 02/08/2004 Version End Date: -
B	1416m NW	Status: Historical Licence No: 4/30/03/*G/0043 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: SCOTLAND FARM WELL2 THORPE ETC Data Type: Point Name: SHELTON Easting: 489210 Northing: 365700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1993 Version End Date: -
B	1423m NW	Status: Historical Licence No: 4/30/03/*G/0043 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: SCOTLAND FARM WELL1 THORPE ETC Data Type: Point Name: SHELTON Easting: 489200 Northing: 365700	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1993 Version End Date: -

ID	Location	Details	
8	1440m NW	Status: Historical Licence No: 4/30/03/*G/0100 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489550 Northing: 366100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: - Expiry Date: 31/10/2004 Issue No: 1 Version Start Date: 30/06/2000 Version End Date: -
C	1478m NW	Status: Active Licence No: 4/30/03/*G/0109/R01 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: G H CHENNELLS FARMS LTD Easting: 489402 Northing: 365964	Annual Volume (m^3): 15000 Max Daily Volume (m^3): 1380 Original Application No: NPS/WR/030699 Original Start Date: 19/04/2016 Expiry Date: 31/03/2028 Issue No: 2 Version Start Date: 08/03/2019 Version End Date: -
C	1478m NW	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489402 Northing: 365964	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 16/08/2012 Version End Date: -
-	1695m NE	Status: Historical Licence No: 4/30/03/*G/0041 Details: Mineral Washing Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GRAVEL PIT NORTH HYKEHAM Data Type: Point Name: CEMEX UK MATERIALS LTD Easting: 492700 Northing: 366100	Annual Volume (m^3): 1268360.50 Max Daily Volume (m^3): 4228 Original Application No: - Original Start Date: 01/06/1969 Expiry Date: - Issue No: 103 Version Start Date: 21/12/2018 Version End Date: -
-	1745m NW	Status: Active Licence No: AN/030/0003/014 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WHISBY LANDFILL SITE Data Type: Point Name: Lincwaste Limited Easting: 489723 Northing: 366678	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPS/NA/001496 Original Start Date: 17/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 17/03/2022 Version End Date: -

ID	Location	Details	
-	1977m NW	Status: Active Licence No: 4/30/03/*G/0096 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT AT WHISBY Data Type: Point Name: Tarmac Aggregates Limited Easting: 489490 Northing: 366780	Annual Volume (m^3): 1155000 Max Daily Volume (m^3): 4200 Original Application No: NPS/WR/038724 Original Start Date: 05/08/1994 Expiry Date: - Issue No: 107 Version Start Date: 26/08/2022 Version End Date: -
-	1977m NW	Status: Active Licence No: 4/30/03/*G/0096 Details: Mineral Washing Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT AT WHISBY Data Type: Point Name: Tarmac Aggregates Limited Easting: 489490 Northing: 366780	Annual Volume (m^3): 1155000 Max Daily Volume (m^3): 4200 Original Application No: NPS/WR/038724 Original Start Date: 05/08/1994 Expiry Date: - Issue No: 107 Version Start Date: 26/08/2022 Version End Date: -
-	1977m NW	Status: Historical Licence No: 4/30/03/*G/0096 Details: Mineral Washing Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT AT WHISBY Data Type: Point Name: LAFARGE AGGREGATES LTD Easting: 489490 Northing: 366780	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/08/1994 Expiry Date: - Issue No: 101 Version Start Date: 02/01/2001 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**10**

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 44 >**

ID	Location	Details	
3	986m SE	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - SCOTWATER TO AUBOURN BR Data Type: Line Name: H W SMITH & SONS (CARLTON) LTD Easting: 489290 Northing: 358750	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 4 Version Start Date: 16/12/2011 Version End Date: -
-	994m S	Status: Active Licence No: AN/030/0003/007 Details: Trickle Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BETWEEN POINTS E AND F, RIVER WITHAM, BASSINGHAM Data Type: Line Name: J & J Burnett Limited Easting: 491024 Northing: 361105	Annual Volume (m^3): 18920 Max Daily Volume (m^3): 1000 Original Application No: NPS/NA/000192 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
-	1536m NE	Status: Historical Licence No: 4/30/03/*S/0103 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: PIKE DRAIN - NORTH HYKEHAM Data Type: Point Name: LINCOLNSHIRE WILDLIFE TRUST Easting: 491950 Northing: 366570	Annual Volume (m^3): 170000 Max Daily Volume (m^3): 3600 Original Application No: - Original Start Date: 23/01/2004 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2006 Version End Date: -
-	1536m NE	Status: Historical Licence No: 4/30/03/*S/0103/L Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: PIKE DRAIN - NORTH HYKEHAM Data Type: Point Name: LINCOLNSHIRE WILDLIFE TRUST Easting: 491950 Northing: 366570	Annual Volume (m^3): 170000 Max Daily Volume (m^3): 3600 Original Application No: N1305 Original Start Date: 01/04/2022 Expiry Date: - Issue No: 1 Version Start Date: 01/04/2022 Version End Date: -

ID	Location	Details	
-	1540m NE	Status: Active Licence No: 4/30/03/*S/0103/R01 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: PIKE DRAIN - NORTH HYKEHAM Data Type: Point Name: LINCOLNSHIRE WILDLIFE TRUST Easting: 491900 Northing: 366598	Annual Volume (m^3): 170000 Max Daily Volume (m^3): 3600 Original Application No: NPS/WR/035381 Original Start Date: 04/08/2022 Expiry Date: 31/03/2040 Issue No: 1 Version Start Date: 04/08/2022 Version End Date: -
-	1744m S	Status: Historical Licence No: 4/30/03/*S/0102 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
-	1744m S	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
-	1760m S	Status: Historical Licence No: 4/30/03/*S/0059 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 491020 Northing: 361120	Annual Volume (m^3): 20457 Max Daily Volume (m^3): 900 Original Application No: - Original Start Date: 01/06/1983 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1993 Version End Date: -
-	1967m SE	Status: Active Licence No: 4/30/03/*S/0021 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM, AUBOURN Data Type: Line Name: H & J NEVILE & SON Easting: 493070 Northing: 363000	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 764 Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1997 Version End Date: -

ID	Location	Details	
-	1967m SE	Status: Active Licence No: 4/30/03/*S/0078 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - AUBOURN Data Type: Line Name: H & J NEVILE & SON Easting: 493070 Northing: 363000	Annual Volume (m^3): 36368 Max Daily Volume (m^3): 1023 Original Application No: NPS/WR/015027 Original Start Date: 01/07/1987 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2020 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	**0**

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

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

5.9 Source Protection Zones

Records within 500m	**0**

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

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

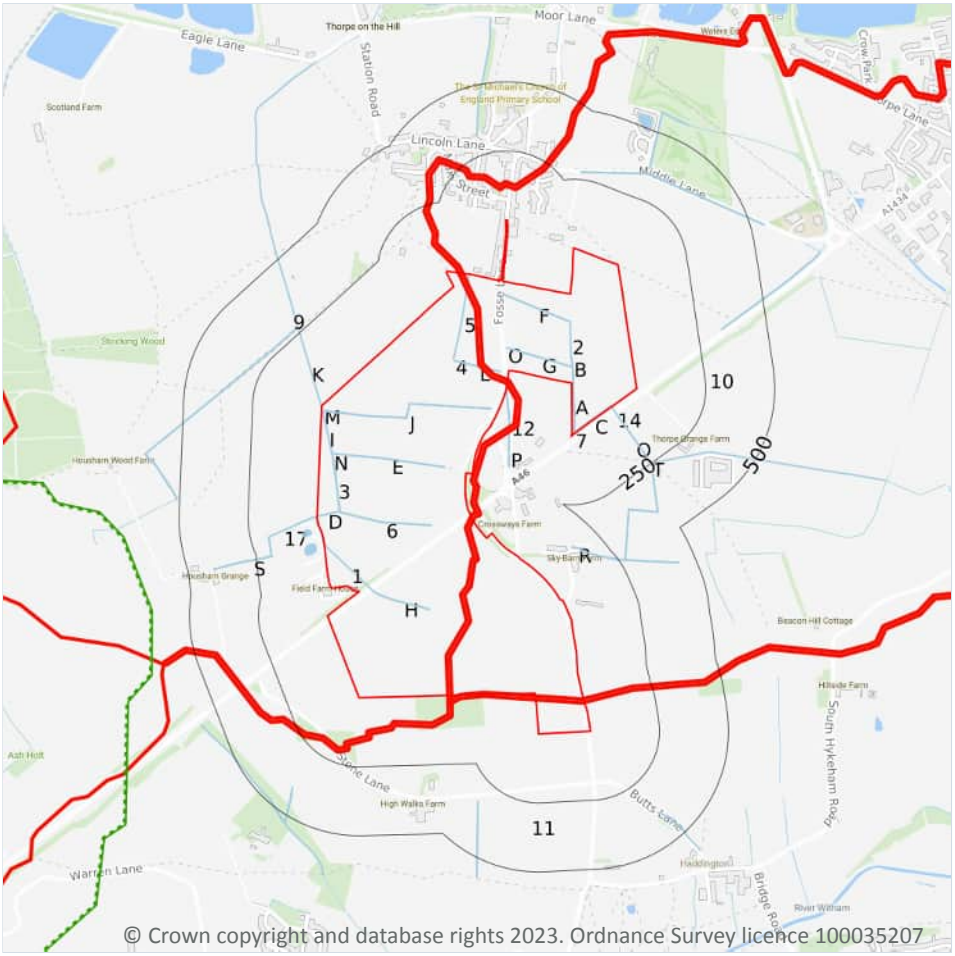
5.10 Source Protection Zones (confined aquifer)

Records within 500m	**0**

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**50**

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

Features are displayed on the Hydrology map on **page 52 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	**On site**	**Inland river not influenced by normal tidal action.**	**Not provided**	**Watercourse contains water year round (in normal circumstances)**	**-**

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
N	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
N	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
N	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
N	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
O	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
O	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
D	1m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	2m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	2m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
12	2m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
14	4m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
Q	47m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
17	81m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
P	105m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
P	114m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	150m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	166m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	166m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
S	184m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	202m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
R	208m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	241m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
T	248m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**13**

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

Features are displayed on the Hydrology map on **page 52 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	3

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 52 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
9	**On site**	**River**	**Boultham Catchwater Drain**	**GB105030062380**	**Witham Upper**	**Witham**
10	**On site**	**River**	**South Hykeham Catchwater**	**GB105030062460**	**Witham Upper**	**Witham**
11	**On site**	**River**	**Witham - conf Cringle Bk to conf Brant**	**GB105030056780**	**Witham Upper**	**Witham**

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

6.4 WFD Surface water bodies

Records identified	3

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 52 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	880m S	River	Witham - conf Cringle Bk to conf Brant	GB105030056780 ↗	Moderate	Fail	Moderate	2019
-	1169m E	River	South Hykeham Catchwater	GB105030062460 ↗	Moderate	Fail	Moderate	2019
-	5928m NE	River	Boultham Catchwater Drain	GB105030062380 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	1

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 52 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
P	**On site**	**Witham Lias**	**GB40502G401400** ↗	**Good**	**Good**	**Good**	**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.

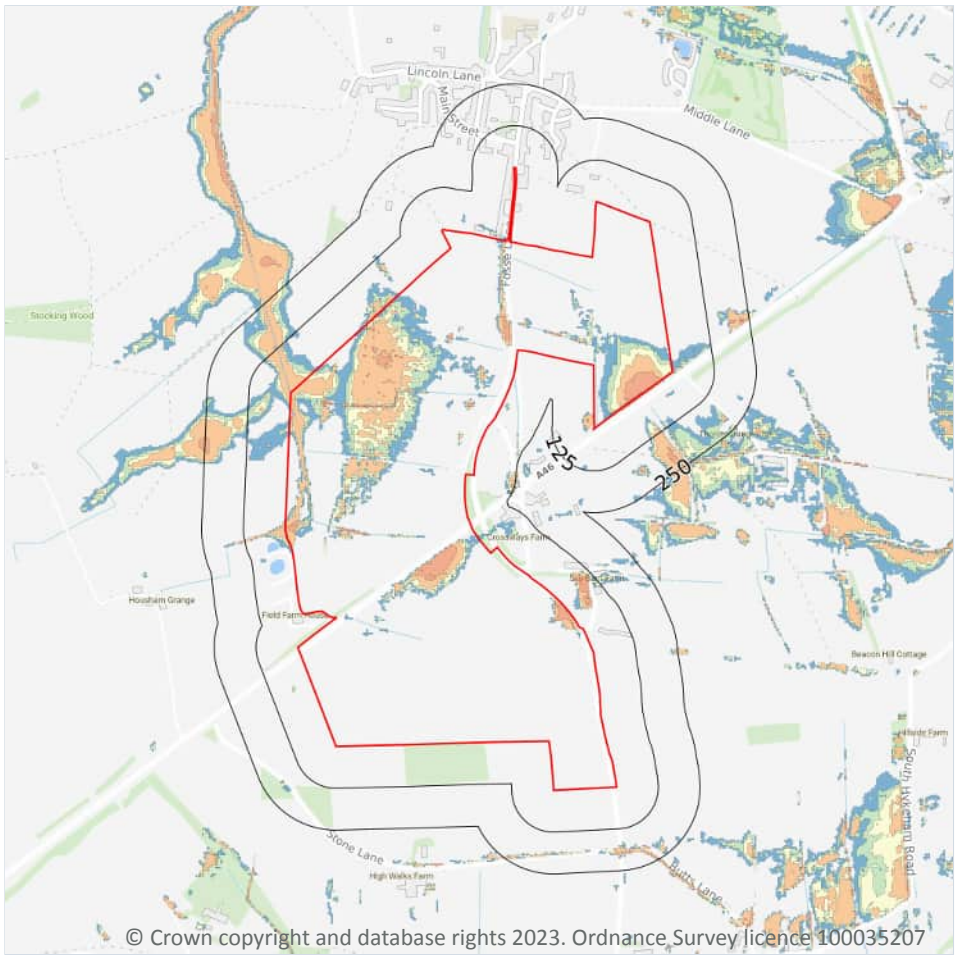
7.7 Flood Zone 3

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



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 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 62 >**

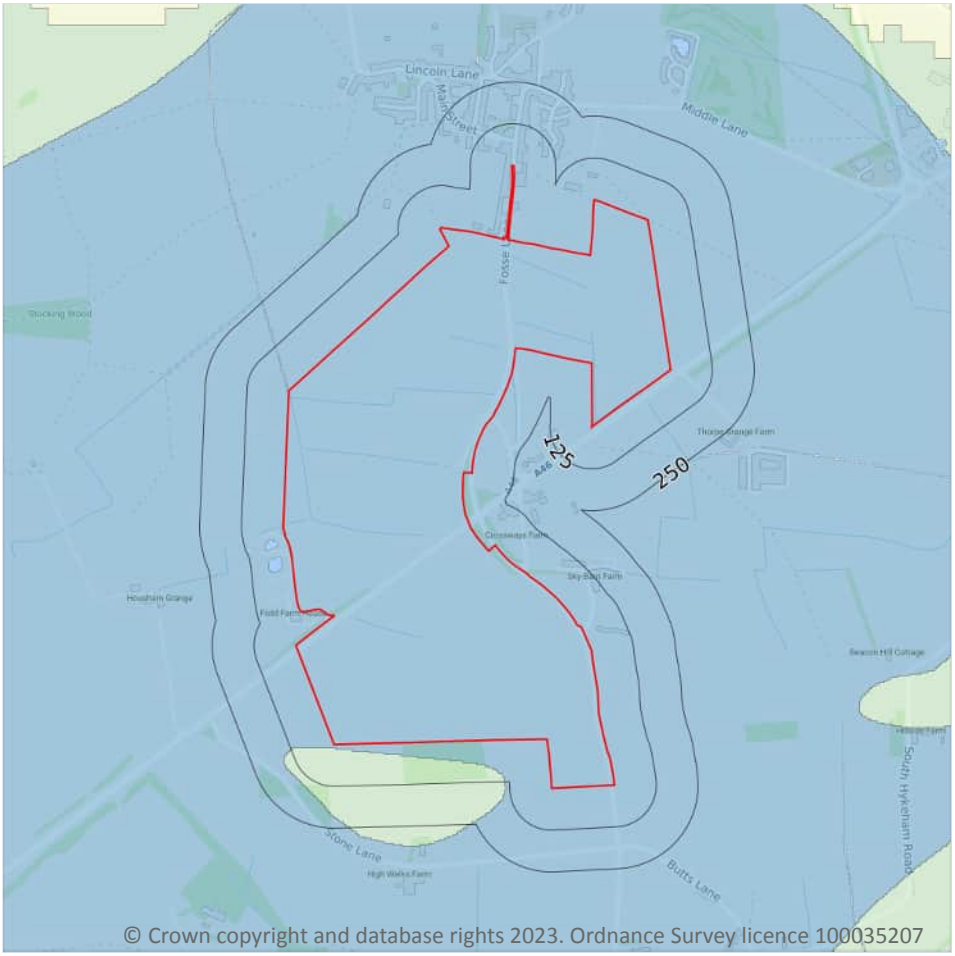
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

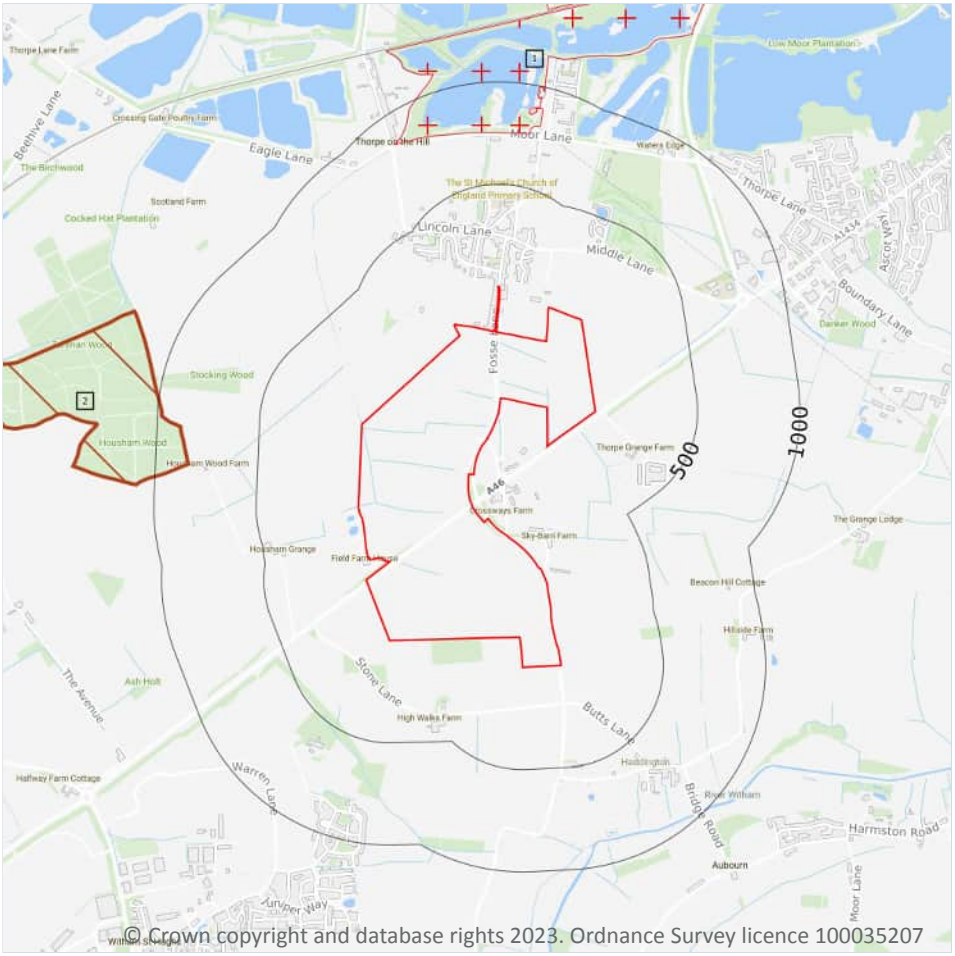
Highest risk on site	**Negligible**
Highest risk within 50m	**Low**

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 64 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



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	2

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.

Features are displayed on the Environmental designations map on **page 65 >**

ID	Location	Name	Data source
1	752m N	Whisby Nature Park	Natural England
3	1375m N	Whisby Nature Park	Natural England

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

10.7 Designated Ancient Woodland

Records within 2000m	1

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 65 >**

ID	Location	Name	Woodland Type
2	839m W	Tunman/housham Woods	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

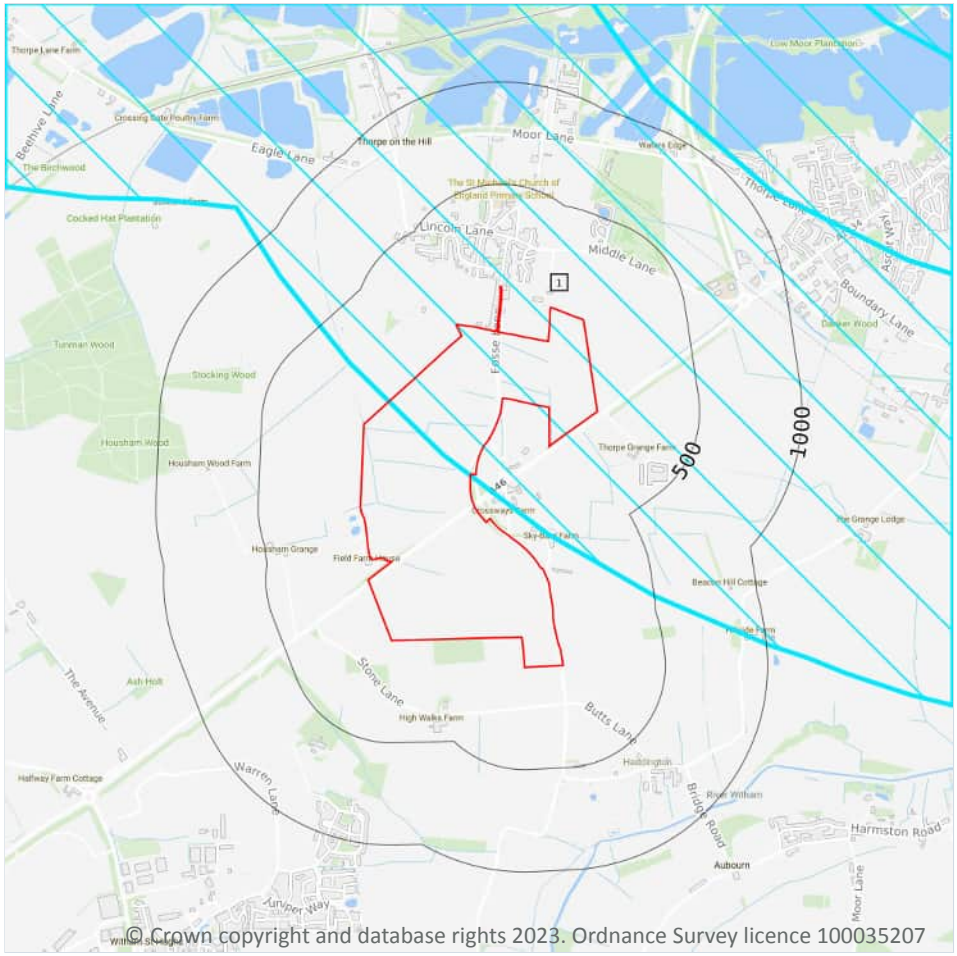
Records within 2000m	3

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	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
575m SW	The Fleet Lower Catchment (trib of Trent) NVZ	Surface Water	338	Existing
627m N	Lower Witham NVZ	Surface Water	375	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 70 >**

ID	Location	Type of developments requiring consultation
1	**On site**	**Infrastructure - Airports, helipads and other aviation proposals.** **Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t.**

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	2

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 72 >**

ID	Location	Name	Grade	Reference Number	Listed date
1	8m N	Hill Cottage	II	1360507	22/12/1983
2	109m N	Church Of St Michael And All Angels	II	1061970	23/08/1967

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

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

12.1 Agricultural Land Classification

Records within 250m	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 75 >**

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	**0**

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

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

12.3 Tree Felling Licences

Records within 250m	**0**

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	**1**

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
1m NW	AG00404879	Entry Level plus Higher Level Stewardship	01/08/2012	31/07/2022

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	**5**

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	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**1021048**	**Countryside Stewardship (Middle Tier)**	**01/01/2021**	**31/12/2025**
0m NE	1021048	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025
189m SW	493402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022
199m SE	493402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022

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 78 >**

ID	Location	Main Habitat	Other habitats
1	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
2	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
3	**On site**	**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.

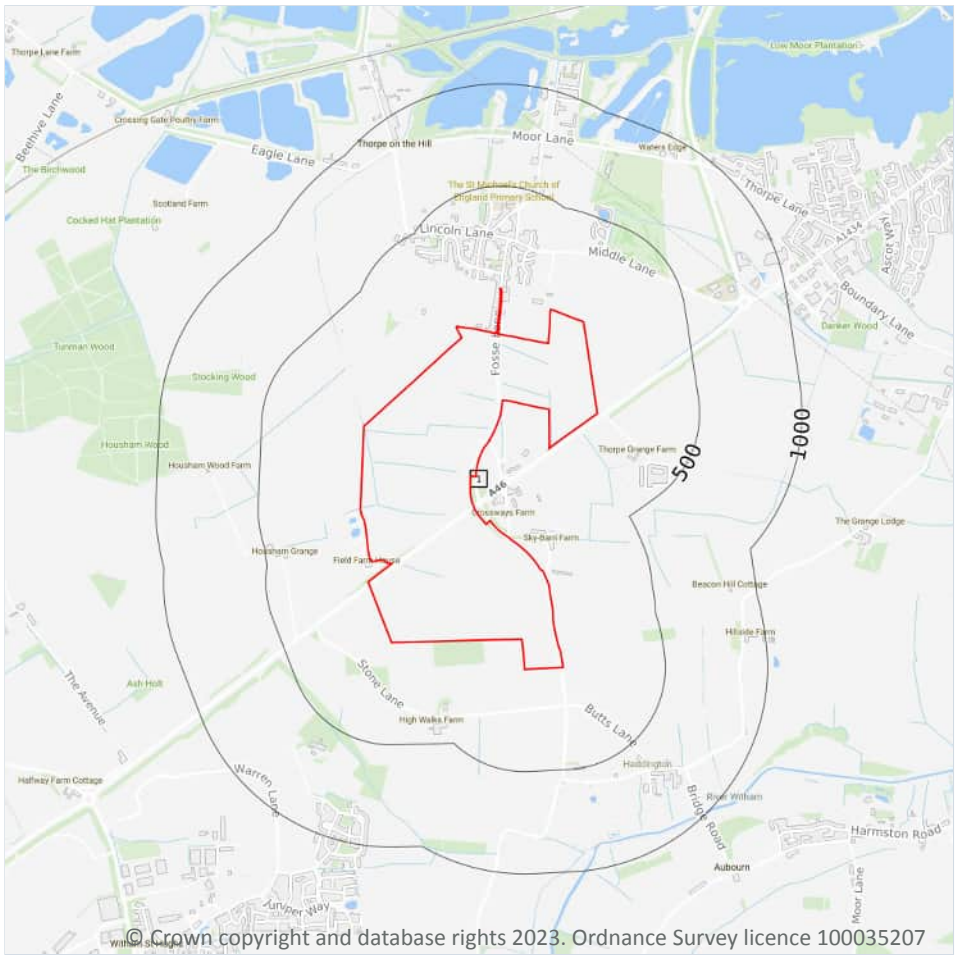
13.4 Limestone Pavement Orders

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



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 80 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

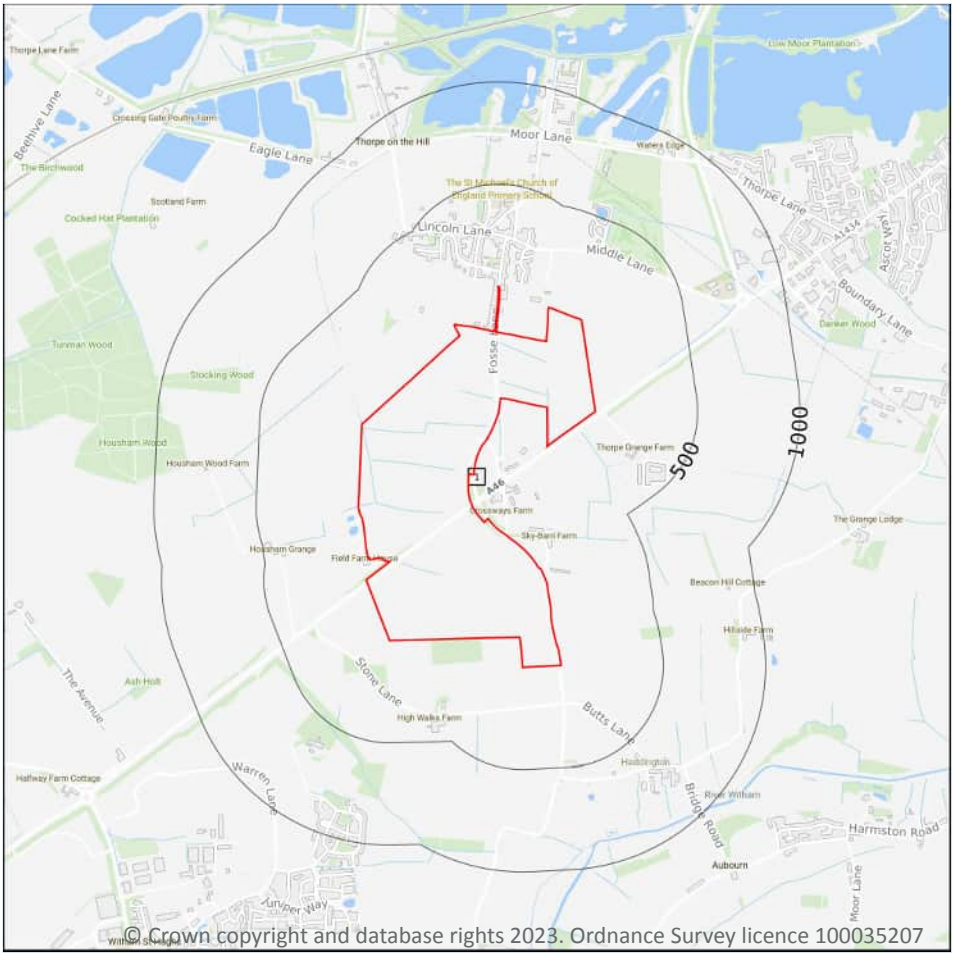
14.6 Bedrock faults and other linear features (10k)

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 84 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_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.

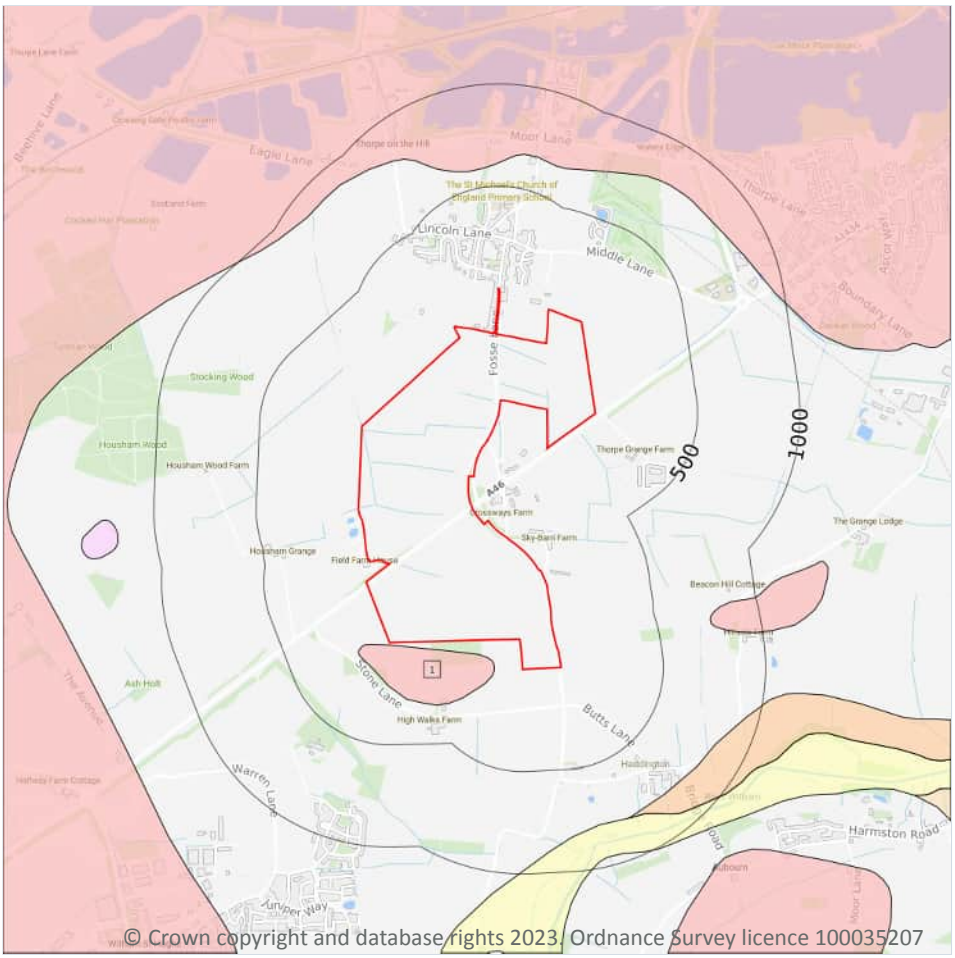
15.3 Artificial ground permeability (50k)

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	1

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 86 >**

ID	Location	LEX Code	Description	Rock description
1	12m SW	BDTN-XSV	BALDERTON SAND AND GRAVEL MEMBER	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
12m SW	Intergranular	Very High	High

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

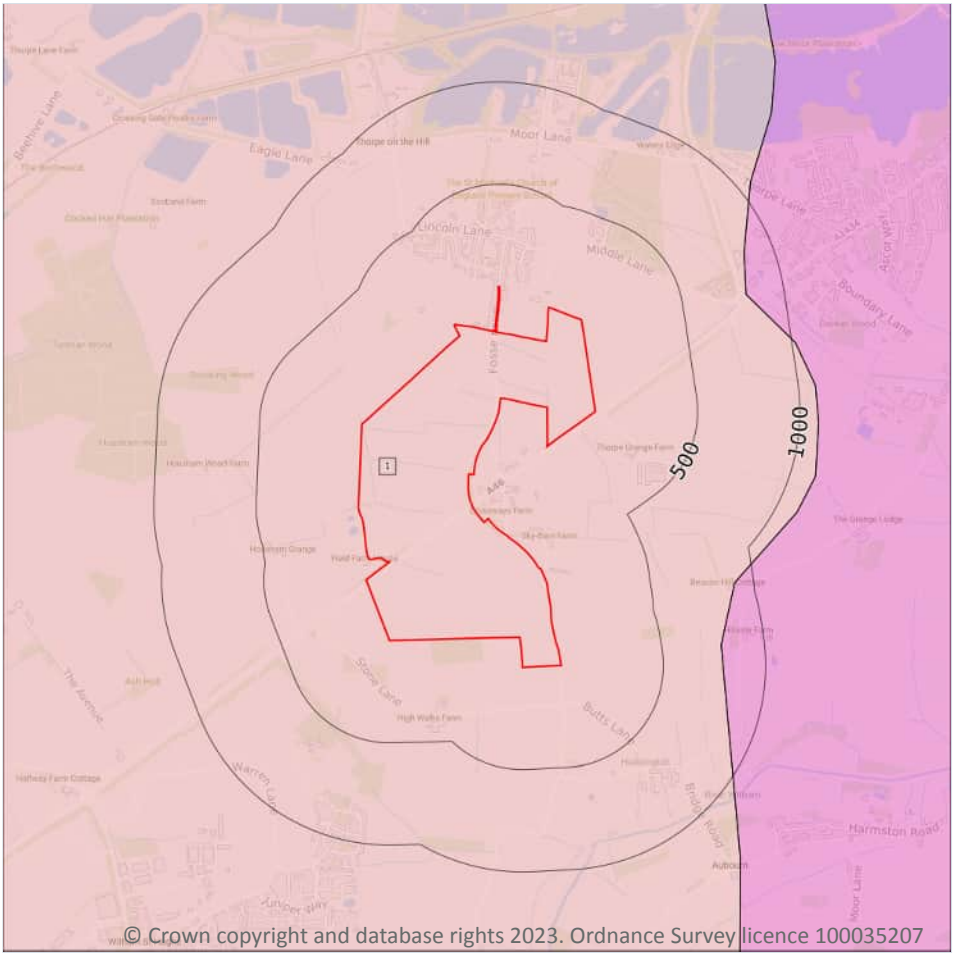
15.7 Landslip permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



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Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m	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 88 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**SMD-MDLM**	**SCUNTHORPE MUDSTONE FORMATION - MUDSTONE AND LIMESTONE, INTERBEDDED**	**RHAETIAN**

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	2

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**High**	**Low**
On site	**Fracture**	**High**	**Low**

This data is sourced from the British Geological Survey.

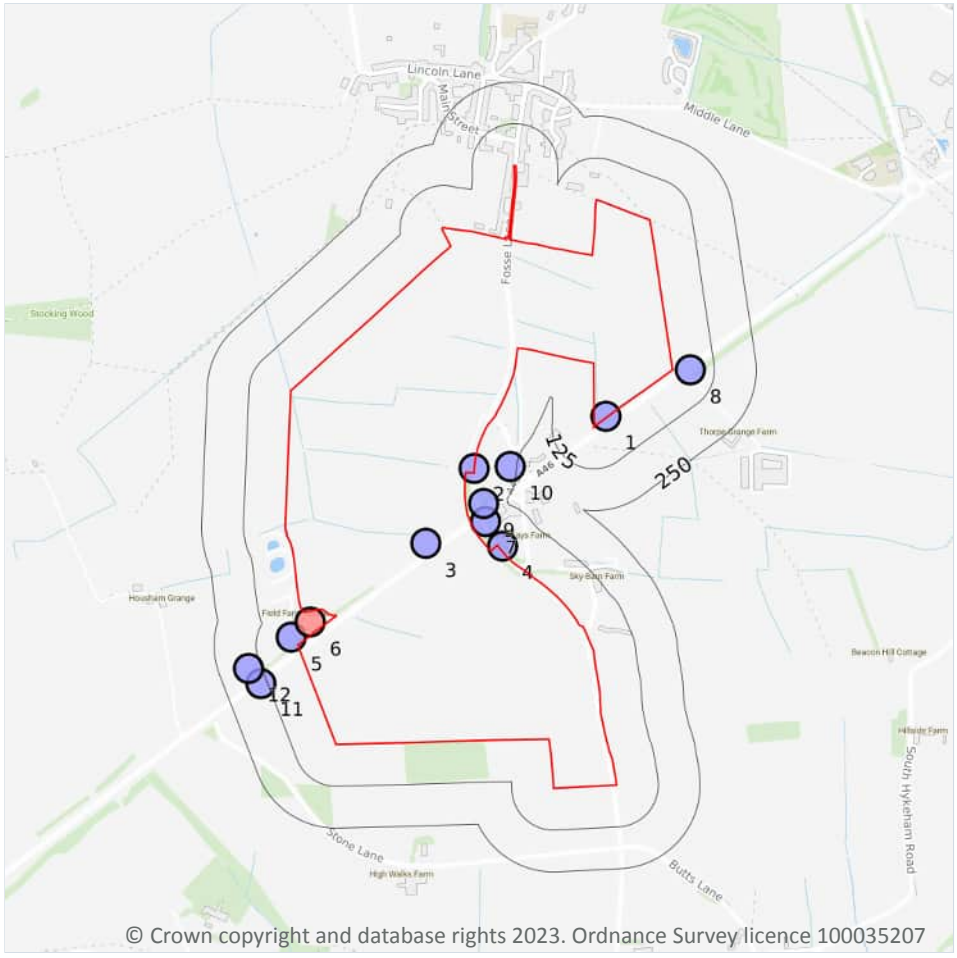
15.10 Bedrock faults and other linear features (50k)

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	12

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.

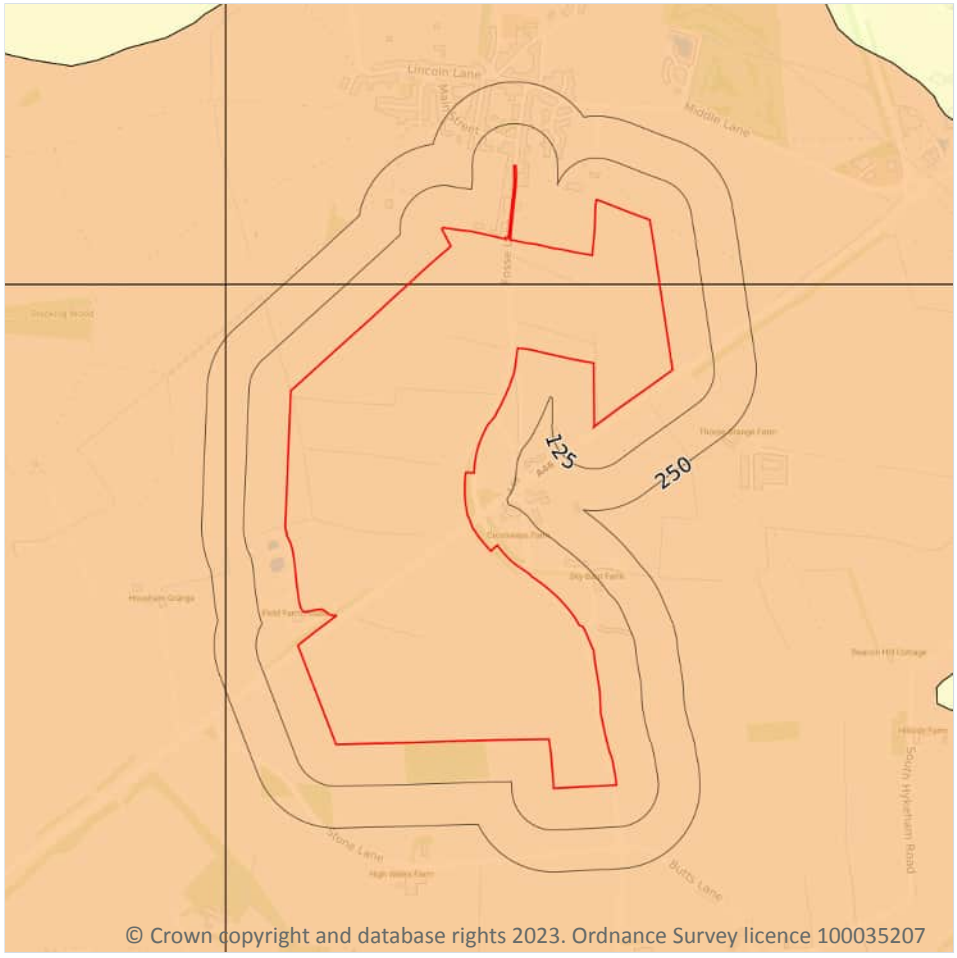
Features are displayed on the Boreholes map on **page 90 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	491136 364605	A46 NEWARK-LINCOLN IMPRO TP 83	4.0	N	250755 ↗
2	On site	490742 364451	A46 NEWARK-LINCOLN IMPRO BH81A	10.0	N	250750 ↗
3	On site	490598 364225	A46 NEWARK-LINCOLN IMPRO TP 77	4.0	N	250754 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	11m SE	490828 364217	A46 NEWARK-LINCOLN IMPRO BH77A	4.0	N	250746 ↗
5	31m SW	490197 363945	A46 NEWARK-LINCOLN IMPRO TP 75	3.0	N	250753 ↗
6	31m SW	490254 363990	BLACK CAT 1	1003.04	N	250737 ↗
7	43m SE	490778 364291	A46 NEWARK-LINCOLN IMPRO BH78A	4.0	N	250747 ↗
8	54m NE	491390 364744	A46 NEWARK-LINCOLN IMPRO TP 85	3.0	N	250756 ↗
9	54m E	490772 364345	A46 NEWARK-LINCOLN IMPRO BH80A	10.0	N	250749 ↗
10	107m NE	490851 364456	A46 NEWARK-LINCOLN IMPRO 80	10.0	N	250748 ↗
11	144m SW	490105 363808	A46 NEWARK-LINCOLN IMPRO TP73A	3.0	N	250752 ↗
12	163m SW	490068 363851	A46 NEWARK-LINCOLN IMPRO TP 73	2.0	N	250751 ↗

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

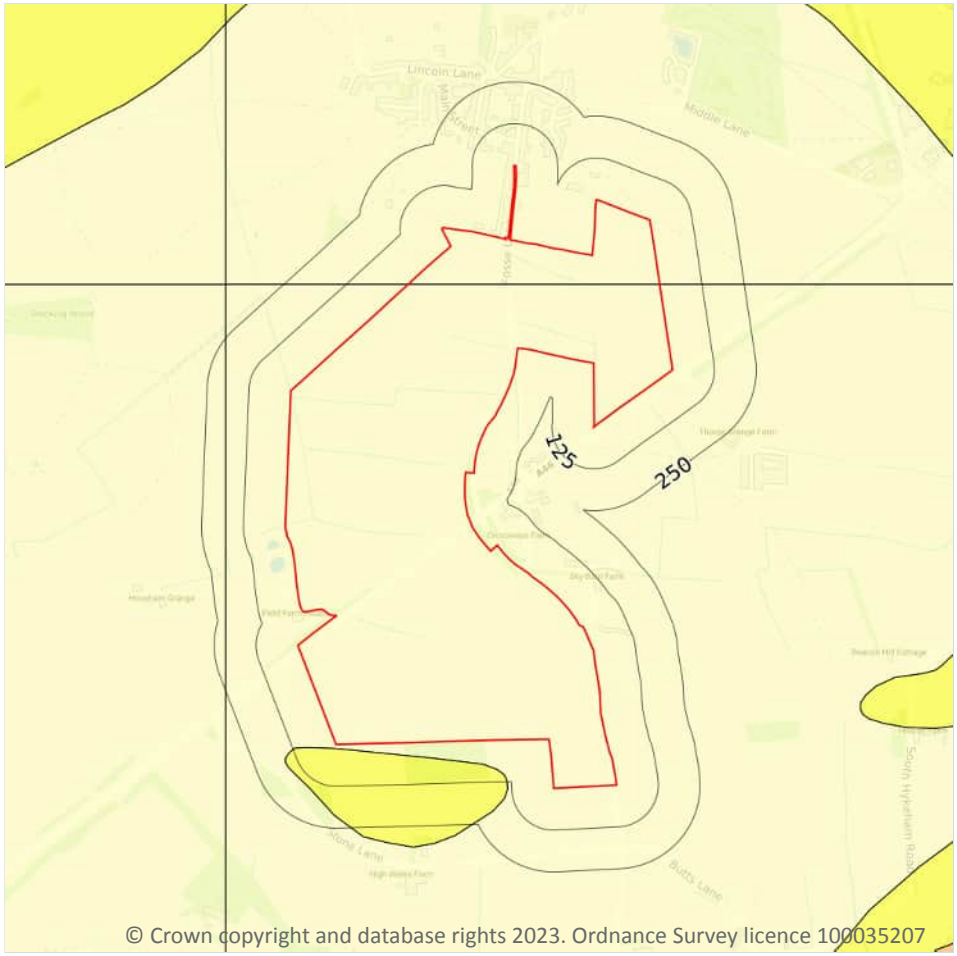
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 92 >**

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



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Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	2

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.

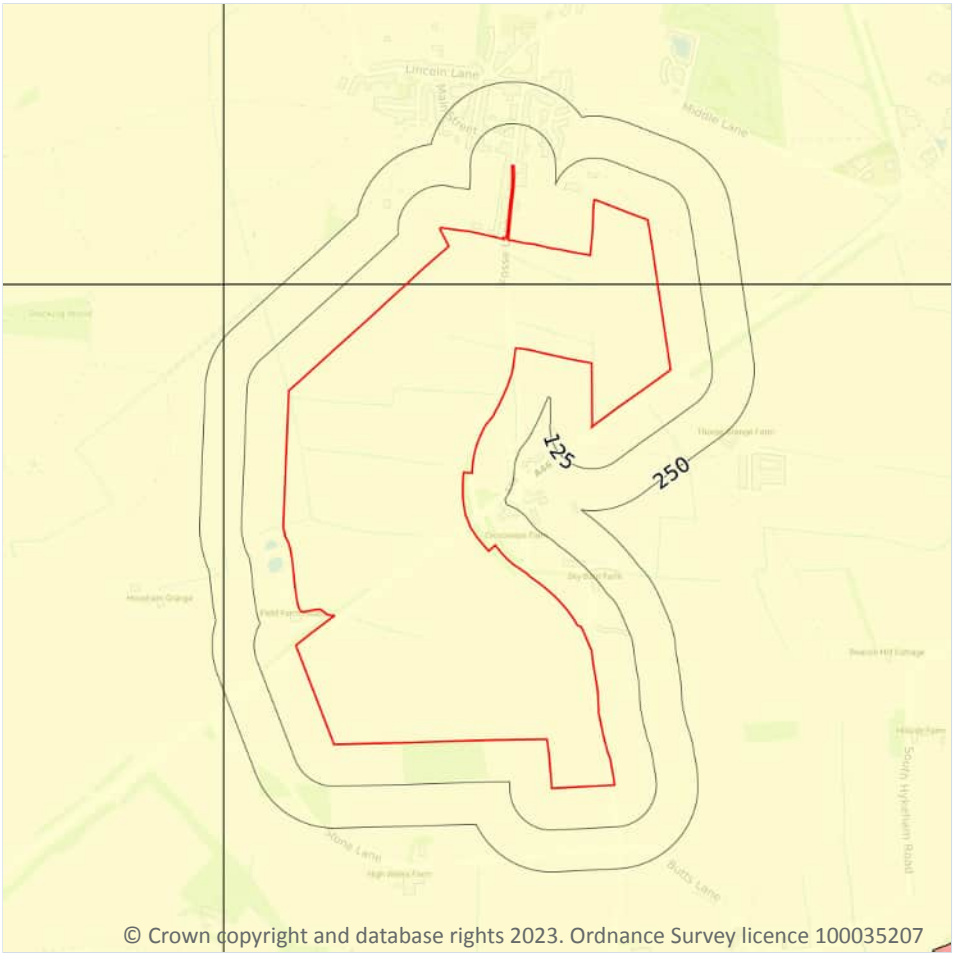
Features are displayed on the Natural ground subsidence - Running sands map on **page 93 >**

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

Location	Hazard rating	Details
12m SW	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



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Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	1

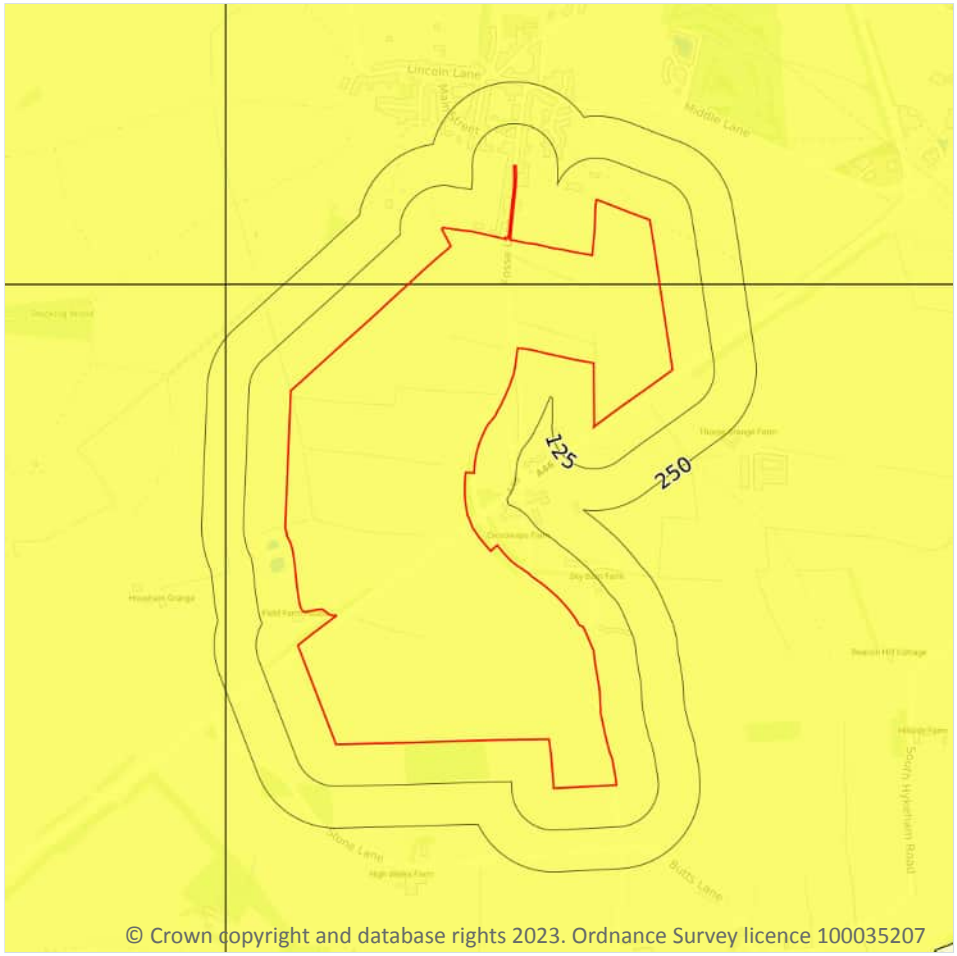
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 95 >**

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

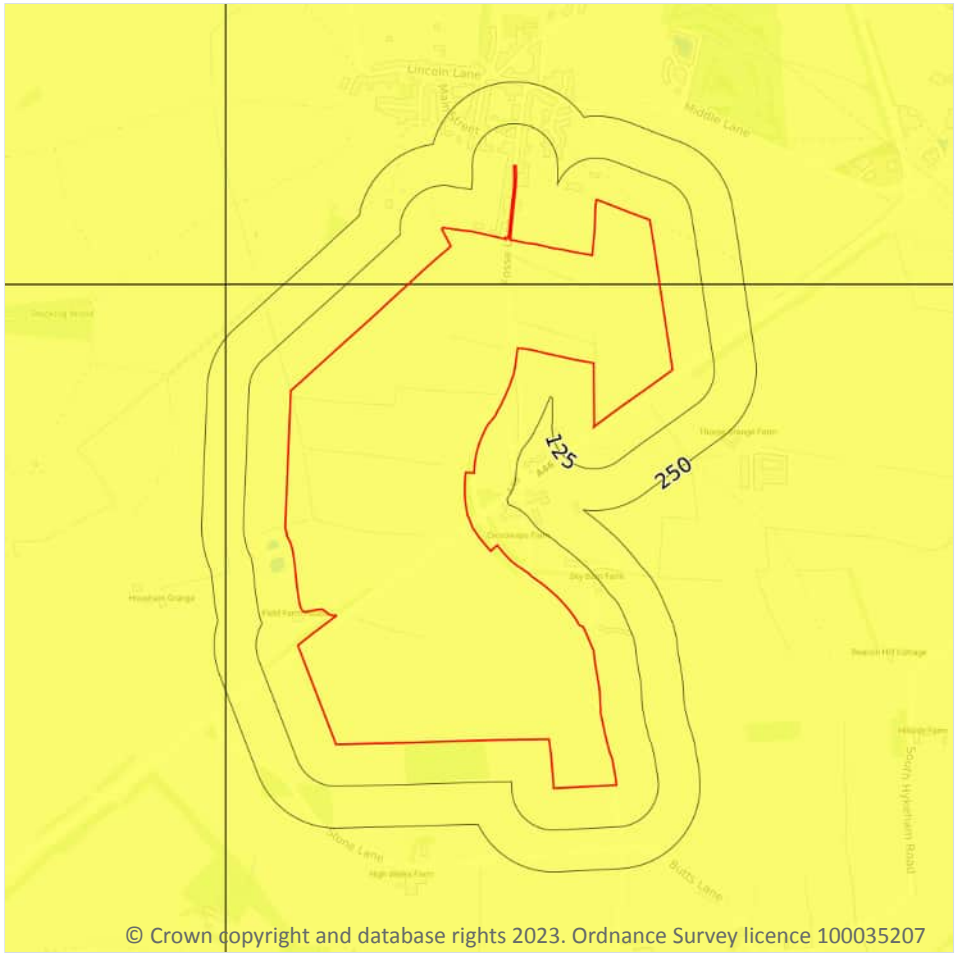
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 96 >**

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



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Site Outline

Search buffers in metres (m)

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

17.5 Landslides

Records within 50m	1

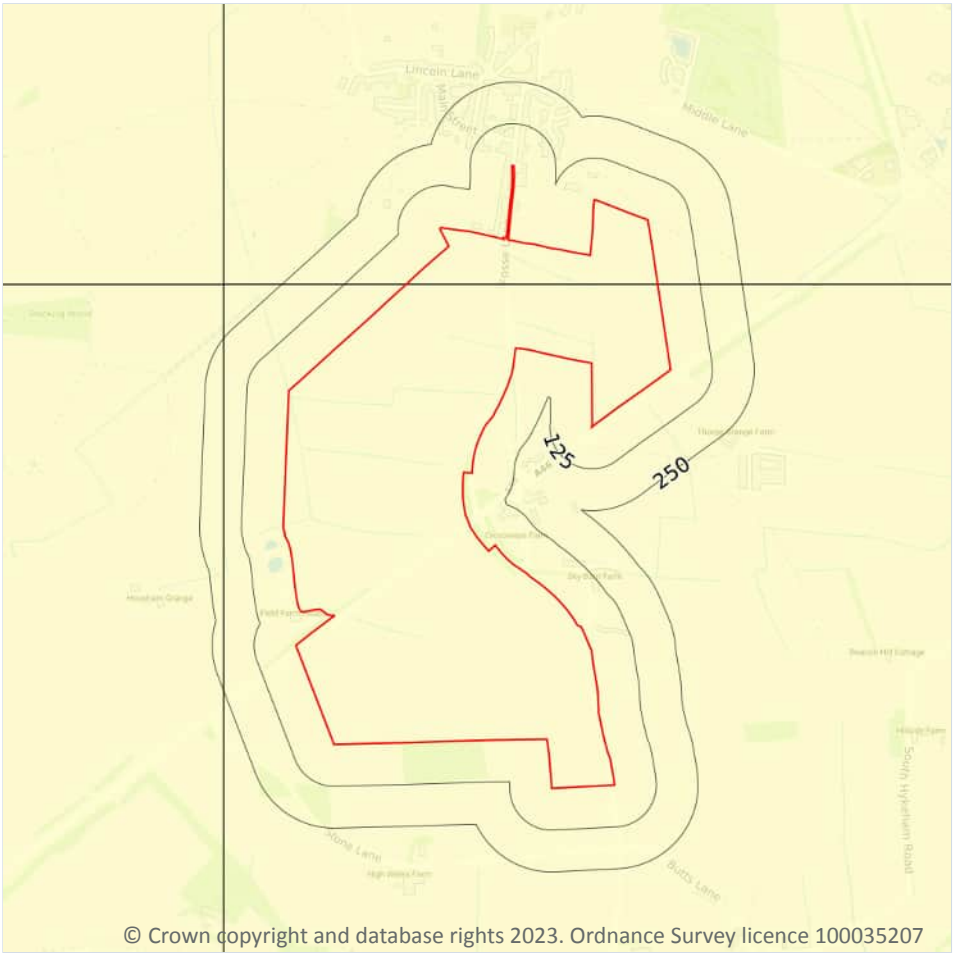
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 97 >**

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



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Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	1

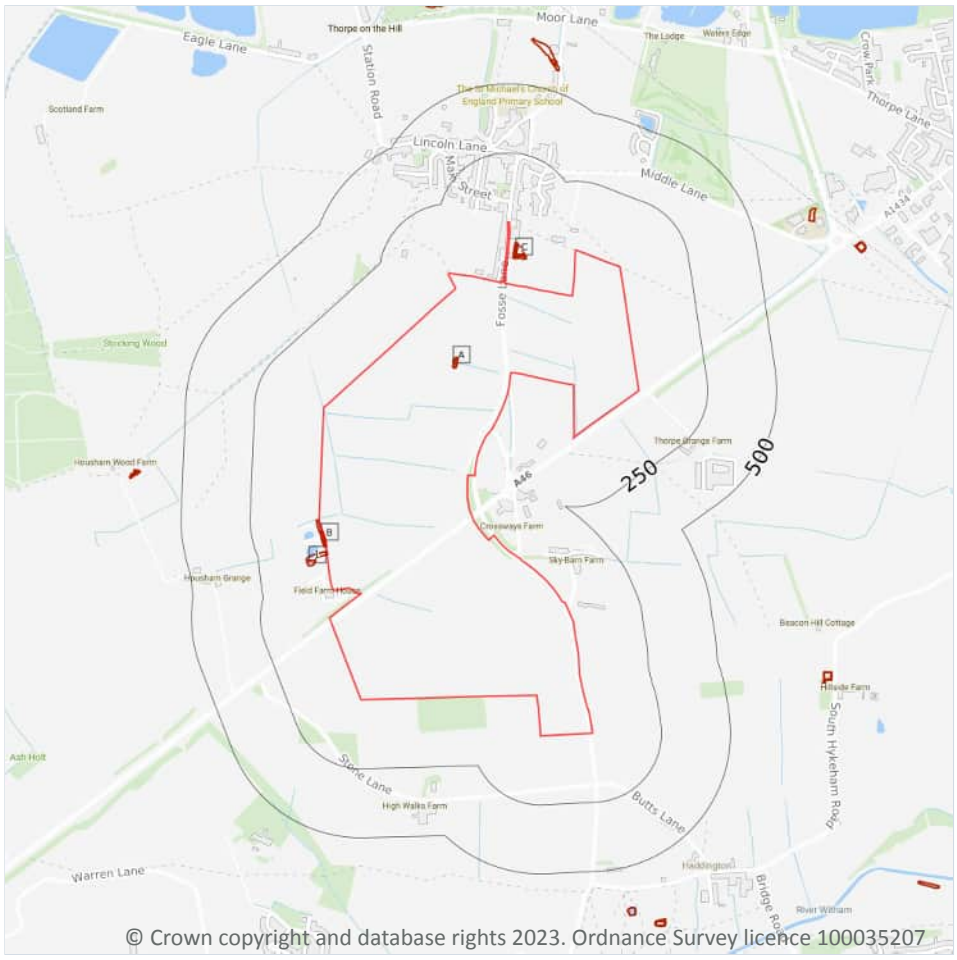
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 98 >**

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



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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	10

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 100 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Ponds**	**1979**	**1:10000**
A	**On site**	**Pond**	**1955**	**1:10560**
A	**On site**	**Pond**	**1948**	**1:10560**
A	**On site**	**Pond**	**1904**	**1:10560**
B	**On site**	**Pond**	**1979**	**1:10000**
B	0m W	Ponds	1886	1:10560
C	21m N	Unspecified Pit	1955	1:10560
C	21m N	Unspecified Ground Workings	1904	1:10560
C	22m N	Unspecified Ground Workings	1948	1:10560
C	22m N	Unspecified Ground Workings	1904	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	0

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).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

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

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

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

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

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

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

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

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

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

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

This data is sourced from the British Geological Survey.

20 Radon



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Site Outline

Search buffers in metres (m)

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

20.1 Radon

Records on site	1

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

Features are displayed on the Radon map on **page 107 >**

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	**36**

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**

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	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
3m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
10m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
12m SW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
30m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
30m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
33m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

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

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

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Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 11/10/2023

Your ref: 60700987

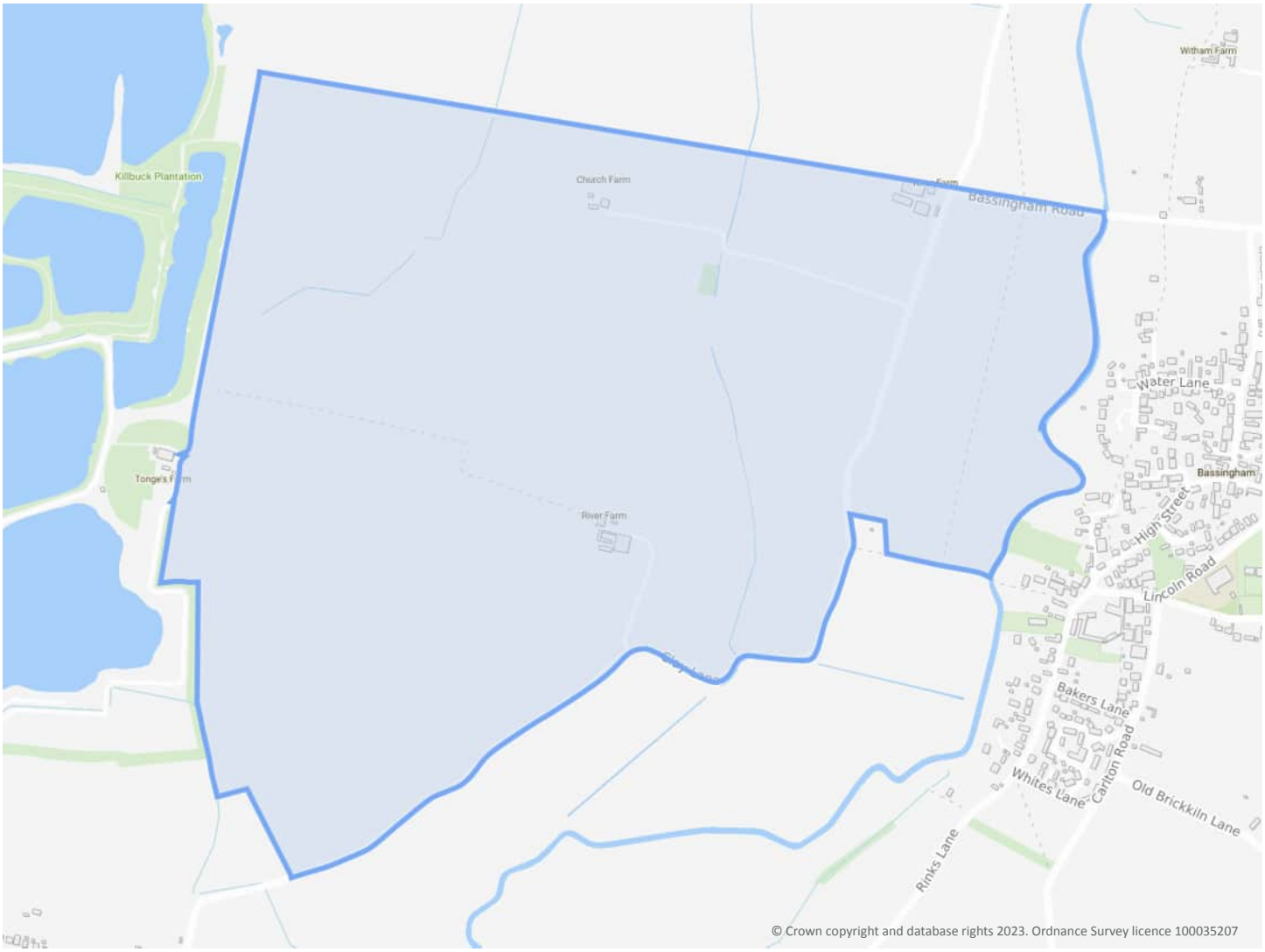
Our Ref: GSIP-2023-14155-15965_D1

Site Details

Location: 489994 359781

Area: 171.74 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

OS MasterMap site plan N/A: >10ha

Aerial image p. 9 >

groundsure.com/insightuserguide ↗

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

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Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	2	1	6	8	-
15	1.2	Historical tanks	0	0	0	0	-
16 >	1.3 >	Historical energy features >	0	0	0	1	-
16	1.4	Historical petrol stations	0	0	0	0	-
16 >	1.5 >	Historical garages >	0	0	0	1	-
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 >	2	1	7	12	-
19	2.2	Historical tanks	0	0	0	0	-
20 >	2.3 >	Historical energy features >	0	0	0	1	-
20	2.4	Historical petrol stations	0	0	0	0	-
20 >	2.5 >	Historical garages >	0	0	0	1	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	0	-
22	3.6	Licensed waste sites	0	0	0	0	-
22 >	3.7 >	Waste exemptions >	16	0	0	29	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
27 >	4.1 >	Recent industrial land uses >	2	5	3	-	-
28	4.2	Current or recent petrol stations	0	0	0	0	-
28	4.3	Electricity cables	0	0	0	0	-
28	4.4	Gas pipelines	0	0	0	0	-
29	4.5	Sites determined as Contaminated Land	0	0	0	0	-

29	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
29	4.7	Regulated explosive sites	0	0	0	0	-
29	4.8	Hazardous substance storage/usage	0	0	0	0	-
29	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
30	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
30	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
30	4.12	Radioactive Substance Authorisations	0	0	0	0	-
30 >	**4.13 >**	**Licensed Discharges to controlled waters >**	2	14	1	2	-
33	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
33	4.15	Pollutant release to public sewer	0	0	0	0	-
33	4.16	List 1 Dangerous Substances	0	0	0	0	-
34	4.17	List 2 Dangerous Substances	0	0	0	0	-
34 >	**4.18 >**	**Pollution Incidents (EA/NRW) >**	2	3	0	1	-
35	4.19	Pollution inventory substances	0	0	0	0	-
35	4.20	Pollution inventory waste transfers	0	0	0	0	-
35	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
36 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
38 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
40 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
44 >	**5.4 >**	**Groundwater vulnerability- soluble rock risk >**	Identified (within 0m)				
44	5.5	Groundwater vulnerability- local information	None (within 0m)				
45 >	**5.6 >**	**Groundwater abstractions >**	0	0	1	1	8
48 >	**5.7 >**	**Surface water abstractions >**	2	2	1	1	8
51	5.8	Potable abstractions	0	0	0	0	0
51	5.9	Source Protection Zones	0	0	0	0	-
51	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
52 >	**6.1 >**	**Water Network (OS MasterMap) >**	18	10	28	-	-

57 >	6.2 >	Surface water features >	1	6	13	-	-
57 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
58 >	6.4 >	WFD Surface water bodies >	1	0	0	-	-
58 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
59 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
60	7.2	Historical Flood Events	0	0	0	-	-
60 >	7.3 >	Flood Defences >	1	3	3	-	-
61	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
61	7.5	Flood Storage Areas	0	0	0	-	-
62 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
63 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
64 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
66 >	9.1 >	Groundwater flooding >	Moderate (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
67	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
68	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
68	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
68	10.4	Special Protection Areas (SPA)	0	0	0	0	0
68	10.5	National Nature Reserves (NNR)	0	0	0	0	0
69	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
69 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	2
69	10.8	Biosphere Reserves	0	0	0	0	0
69	10.9	Forest Parks	0	0	0	0	0
70	10.10	Marine Conservation Zones	0	0	0	0	0
70	10.11	Green Belt	0	0	0	0	0
70	10.12	Proposed Ramsar sites	0	0	0	0	0

70	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
70	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
71	10.15	Nitrate Sensitive Areas	0	0	0	0	0
71 >	10.16 >	Nitrate Vulnerable Zones >	1	0	0	0	1
72	10.17	SSSI Impact Risk Zones	0	-	-	-	-
72	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
73	11.1	World Heritage Sites	0	0	0	-	-
74	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
74	11.3	National Parks	0	0	0	-	-
74 >	11.4 >	Listed Buildings >	1	0	7	-	-
75 >	11.5 >	Conservation Areas >	1	0	0	-	-
75	11.6	Scheduled Ancient Monuments	0	0	0	-	-
75	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations** >	On site	0-50m	50-250m	250-500m	500-2000m
77 >	12.1 >	Agricultural Land Classification >	Non Agricultural (within 250m)				
78	12.2	Open Access Land	0	0	0	-	-
78 >	12.3 >	Tree Felling Licences >	0	0	1	-	-
79 >	12.4 >	Environmental Stewardship Schemes >	0	1	1	-	-
79 >	12.5 >	Countryside Stewardship Schemes >	0	0	1	-	-
Page	Section	**Habitat designations** >	On site	0-50m	50-250m	250-500m	500-2000m
80 >	13.1 >	Priority Habitat Inventory >	0	4	4	-	-
81	13.2	Habitat Networks	0	0	0	-	-
81	13.3	Open Mosaic Habitat	0	0	0	-	-
81	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
82 >	14.1 >	10k Availability >	Identified (within 500m)				
83	14.2	Artificial and made ground (10k)	0	0	0	0	-
84	14.3	Superficial geology (10k)	0	0	0	0	-

84	14.4	Landslip (10k)	0	0	0	0	-
85	14.5	Bedrock geology (10k)	0	0	0	0	-
85	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
86 >	15.1 >	**50k Availability >**	Identified (within 500m)				
87	15.2	Artificial and made ground (50k)	0	0	0	0	-
87	15.3	Artificial ground permeability (50k)	0	0	-	-	-
88 >	15.4 >	**Superficial geology (50k) >**	2	0	1	0	-
89 >	15.5 >	**Superficial permeability (50k) >**	Identified (within 50m)				
89	15.6	Landslip (50k)	0	0	0	0	-
89	15.7	Landslip permeability (50k)	None (within 50m)				
90 >	15.8 >	**Bedrock geology (50k) >**	1	0	0	0	-
91 >	15.9 >	**Bedrock permeability (50k) >**	Identified (within 50m)				
91	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
92 >	16.1 >	**BGS Boreholes >**	0	1	4	-	-
Page	Section	**Natural ground subsidence >**					
94 >	17.1 >	**Shrink swell clays >**	Low (within 50m)				
96 >	17.2 >	**Running sands >**	Low (within 50m)				
98 >	17.3 >	**Compressible deposits >**	Moderate (within 50m)				
100 >	17.4 >	**Collapsible deposits >**	Very low (within 50m)				
102 >	17.5 >	**Landslides >**	Very low (within 50m)				
103 >	17.6 >	**Ground dissolution of soluble rocks >**	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
105 >	18.1 >	**BritPits >**	0	0	2	2	-
106 >	18.2 >	**Surface ground workings >**	1	0	1	-	-
107	18.3	Underground workings	0	0	0	0	0
107	18.4	Underground mining extents	0	0	0	0	-
107 >	18.5 >	**Historical Mineral Planning Areas >**	0	0	0	1	-

107	18.6	Non-coal mining	0	0	0	0	0
108	18.7	JPB mining areas	None (within 0m)				
108	18.8	The Coal Authority non-coal mining	0	0	0	0	-
108 >	**18.9 >**	**Researched mining >**	0	2	2	2	-
109	18.10	Mining record office plans	0	0	0	0	-
109	18.11	BGS mine plans	0	0	0	0	-
109	18.12	Coal mining	None (within 0m)				
109	18.13	Brine areas	None (within 0m)				
109	18.14	Gypsum areas	None (within 0m)				
110	18.15	Tin mining	None (within 0m)				
110	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
111	19.1	Natural cavities	0	0	0	0	-
111	19.2	Mining cavities	0	0	0	0	0
111	19.3	Reported recent incidents	0	0	0	0	-
111	19.4	Historical incidents	0	0	0	0	-
112	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon >**					
113 >	**20.1 >**	**Radon >**	Less than 1% (within 0m)				
Page	Section	**Soil chemistry >**	On site	0-50m	50-250m	250-500m	500-2000m
115 >	**21.1 >**	**BGS Estimated Background Soil Chemistry >**	38	9	-	-	-
118	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
118	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
119	22.1	Underground railways (London)	0	0	0	-	-
119	22.2	Underground railways (Non-London)	0	0	0	-	-
119	22.3	Railway tunnels	0	0	0	-	-
119	22.4	Historical railway and tunnel features	0	0	0	-	-
119	22.5	Royal Mail tunnels	0	0	0	-	-

120	22.6	Historical railways	0	0	0	-	-
120	22.7	Railways	0	0	0	-	-
120	22.8	Crossrail 1	0	0	0	0	-
120	22.9	Crossrail 2	0	0	0	0	-
120	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 01/06/2021

Site Area: 171.74ha

Recent site history - 2018 aerial photograph



Capture Date: 15/05/2018

Site Area: 171.74ha

Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 171.74ha

Recent site history - 2007 aerial photograph



Capture Date: 18/09/2007

Site Area: 171.74ha

Recent site history - 1999 aerial photograph



Capture Date: 11/07/1999

Site Area: 171.74ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	17

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Sewage Works**	**1982**	**1577567**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Tank**	**1982**	**1594106**
1	43m E	Pumping Station	1982	1589207
2	82m E	Brewery	1886	1589876
B	166m E	Smithy	1951	1685015
B	167m E	Smithy	1904 - 1948	1722988
B	169m E	Smithy	1904	1747038
3	187m SE	Grave Yard	1982	1582822
4	229m SE	Pumping Station	1982	1589208
C	253m E	Smithy	1948	1737997
C	303m E	Smithy	1904	1742349
C	303m E	Smithy	1955	1740223
5	319m SE	Corn Windmill	1886	1572159
D	341m SW	Nursery	1904	1664162
D	342m SW	Nursery	1886	1659236
D	343m SW	Nursery	1904 - 1951	1649042
7	479m E	Windmill	1904 - 1948	1641218

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	1

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
6	379m E	Electricity Substation	1997	149428

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	1

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
C	262m E	Garage	1975	47556

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



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Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical energy features

Historical garages

2.1 Historical industrial land uses

Records within 500m	22

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

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

ID	Location	Land Use	Date	Group ID
A	**On site**	**Sewage Works**	**1982**	**1577567**
A	**On site**	**Unspecified Tank**	**1982**	**1594106**
1	43m E	Pumping Station	1982	1589207

ID	Location	Land Use	Date	Group ID
2	82m E	Brewery	1886	1589876
B	166m E	Smithy	1951	1685015
B	167m E	Smithy	1948	1722988
B	167m E	Smithy	1904	1722988
B	169m E	Smithy	1904	1747038
3	187m SE	Grave Yard	1982	1582822
4	229m SE	Pumping Station	1982	1589208
C	253m E	Smithy	1948	1737997
C	303m E	Smithy	1904	1742349
C	303m E	Smithy	1955	1740223
C	305m E	Smithy	1904	1742349
5	319m SE	Corn Windmill	1886	1572159
D	341m SW	Nursery	1904	1664162
D	342m SW	Nursery	1886	1659236
D	343m SW	Nursery	1948	1649042
D	343m SW	Nursery	1904	1649042
D	346m SW	Nursery	1951	1649042
E	479m E	Windmill	1948	1641218
E	479m E	Windmill	1904	1641218

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**0**

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

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	1

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'.

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

ID	Location	Land Use	Date	Group ID
6	379m E	Electricity Substation	1997	149428

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	1

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'.

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

ID	Location	Land Use	Date	Group ID
C	262m E	Garage	1975	47556

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

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	0

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

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	45

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

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

ID	Location	Site	Reference	Category	Sub-Category	Description
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX183970	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX183970	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX183970	Disposing of waste exemption	On a farm	Burning waste in the open
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Disposing of waste exemption	On a farm	Burning waste in the open
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Using waste exemption	On a farm	Use of waste for a specified purpose
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX313464	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX313464	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
A	On site	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX313464	Disposing of waste exemption	On a farm	Burning waste in the open
B	On site	River Farm Thurlby Road LINCOLN LN5 9LQ	EPR/SH0470GB/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
B	On site	River Farm Thurlby Road LINCOLN LN5 9LQ	EPR/SH0470GB/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice

ID	Location	Site	Reference	Category	Sub-Category	Description
B	**On site**	**River Farm Thurlby Road LINCOLN LN5 9LQ**	**EPR/SH0470GB/A001**	**Disposing of waste exemption**	**Agricultural Waste Only**	**Burning waste in the open**
B	**On site**	**River Farm Thurlby Road LINCOLN LN5 9LQ**	**EPR/SH0470GB/A001**	**Treating waste exemption**	**Agricultural Waste Only**	**Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising**
B	**On site**	**River Farm Thurlby Road LINCOLN LN5 9LQ**	**EPR/SH0470GB/A001**	**Using waste exemption**	**Agricultural Waste Only**	**Use of waste for a specified purpose**
C	262m E	Farm Yard, Bassingham, Lincoln, LN5 9HB	WEX195825	Disposing of waste exemption	On a Farm	Burning waste in the open
C	262m E	Farm Yard, Bassingham, Lincoln, LN5 9HB	WEX195825	Using waste exemption	On a Farm	Use of waste for a specified purpose
C	262m E	Farm Yard, Bassingham, Lincoln, LN5 9HB	WEX195825	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
C	262m E	Farm Yard, Bassingham, Lincoln, LN5 9HB	WEX195825	Disposing of waste exemption	On a Farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
C	262m E	Farm Yard, Bassingham, Lincoln, LN5 9HB	WEX322643	Disposing of waste exemption	On a farm	Burning waste in the open
C	262m E	Farm Yard, Bassingham, Lincoln, LN5 9HB	WEX322643	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
C	262m E	Farm Yard, Bassingham, Lincoln, LN5 9HB	WEX322643	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	262m E	Farm Yard, Bassingham, Lincoln, LN5 9HB	WEX322643	Using waste exemption	On a farm	Use of waste for a specified purpose
1	320m E	Bassingham Primary School Lincoln Road Lincoln Lincolnshire LN5 9HQ	EPR/EH0316QB/A001	Treating waste exemption	Non-Agricultural Waste Only	Crushing waste fluorescent tubes
D	343m NE	WITHAM FARMHOUSE, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX170246	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
D	343m NE	WITHAM FARMHOUSE, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX009172	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
D	343m NE	WITHAM FARMHOUSE, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX304118	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
E	347m SE	Farm yard, Carlton Road, Bassingham, Lincoln, LN5 9HB	WEX035163	Using waste exemption	On a farm	Use of waste for a specified purpose
E	347m SE	Farm yard, Carlton Road, Bassingham, Lincoln, LN5 9HB	WEX035163	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
E	347m SE	Farm yard, Carlton Road, Bassingham, Lincoln, LN5 9HB	WEX035163	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
E	347m SE	Farm yard, Carlton Road, Bassingham, Lincoln, LN5 9HB	WEX035163	Disposing of waste exemption	On a farm	Burning waste in the open
E	349m SE	21 Carlton Road LINCOLN LN5 9HB	EPR/ZH0473WX/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
E	349m SE	21 Carlton Road LINCOLN LN5 9HB	EPR/ZH0473WX/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
E	349m SE	21 Carlton Road LINCOLN LN5 9HB	EPR/ZH0473WX/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
E	349m SE	21 Carlton Road LINCOLN LN5 9HB	EPR/ZH0473WX/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
D	357m NE	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
D	357m NE	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice

ID	Location	Site	Reference	Category	Sub-Category	Description
D	357m NE	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
D	357m NE	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
D	357m NE	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
D	357m NE	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
F	453m SW	Whitewood Bungalow Main Street LINCOLN LN6 9JU	EPR/TE5346NE/A001	Using waste exemption	Non-Agricultural Waste Only	Burning of waste as a fuel in a small appliance
F	454m SW	WHITEWOOD BUNGALOW, MAIN STREET, NORTON DISNEY, LINCOLN, LN6 9JU	WEX146901	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
F	454m SW	WHITEWOOD BUNGALOW, MAIN STREET, NORTON DISNEY, LINCOLN, LN6 9JU	WEX285007	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance

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

4 Current industrial land use



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Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed Discharges to controlled waters

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	10

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Company	Address	Activity	Category
A	**On site**	**Sewage Works**	**Lincolnshire, LN5**	**Waste Storage, Processing and Disposal**	**Infrastructure and Facilities**
A	**On site**	**Sludge Tanks**	**Lincolnshire, LN5**	**Waste Storage, Processing and Disposal**	**Infrastructure and Facilities**
A	14m E	Tank	Lincolnshire, LN5	Tanks (Generic)	Industrial Features

ID	Location	Company	Address	Activity	Category
A	21m E	Tank	Lincolnshire, LN5	Tanks (Generic)	Industrial Features
C	41m E	Sewage Pumping	Lincolnshire, LN5	Waste Storage, Processing and Disposal	Infrastructure and Facilities
C	44m E	Pumping Station	Lincolnshire, LN5	Water Pumping Stations	Industrial Features
4	46m E	Solar Panels	Lincolnshire, LN5	Energy Production	Industrial Features
6	129m E	Electricity Sub Station	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities
7	151m E	A R Motors	4, Newark Road, Bassingham, Lincoln, Lincolnshire, LN5 9HA	Vehicle Repair, Testing and Servicing	Repair and Servicing
8	171m E	Ritchie Services	The Dovecote 14, Village Farm, Bassingham, Lincoln, Lincolnshire, LN5 9FS	Distribution and Haulage	Transport, Storage and Delivery

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	19

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 27 >**

ID	Location	Address	Details	
1	On site	TONGE'S FARM QUARRY, BUTT LANE, NORTON DISNEY, LINCOLN, LINCOLNSHIRE, LN6 9JT	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: PRNNF12996 Permit Version: 2 Receiving Water: TRIB OF RIVER WITHAM	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 19/03/2008 Effective Date: 19/03/2008 Revocation Date: 05/05/2011
2	On site	BASSINGHAM STW, HALLFIELD, BASSINGHAM, LINCOLN, LN5 9PF	Effluent Type: UNSPECIFIED Permit Number: AW3NF133 Permit Version: 1 Receiving Water: River Witham NT	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 10/09/1985 Effective Date: 10/09/1985 Revocation Date: 28/05/1993

ID	Location	Address	Details	
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 6 Receiving Water: RIVER WITHAM	Status: VARIED UNDER EPR 2010 Issue date: 03/02/2023 Effective Date: 31/03/2026 Revocation Date: -
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 1 Receiving Water: RIVER WITHAM	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 18/03/1991 Effective Date: 01/11/1993 Revocation Date: 18/07/1995
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 6 Receiving Water: RIVER WITHAM	Status: VARIED UNDER EPR 2010 Issue date: 03/02/2023 Effective Date: 31/03/2026 Revocation Date: -
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 2 Receiving Water: RIVER WITHAM	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 19/07/1995 Effective Date: 19/07/1995 Revocation Date: 31/03/2009
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 3 Receiving Water: RIVER WITHAM	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 14/10/2009 Effective Date: 01/04/2009 Revocation Date: 31/12/2009
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 4 Receiving Water: RIVER WITHAM	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 14/10/2009 Effective Date: 01/01/2010 Revocation Date: 02/02/2023
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 1 Receiving Water: RIVER WITHAM	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 18/03/1991 Effective Date: 01/11/1993 Revocation Date: 18/07/1995

ID	Location	Address	Details	
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 4 Receiving Water: RIVER WITHAM	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 14/10/2009 Effective Date: 01/01/2010 Revocation Date: 02/02/2023
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 2 Receiving Water: RIVER WITHAM	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 19/07/1995 Effective Date: 19/07/1995 Revocation Date: 31/03/2009
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 3 Receiving Water: RIVER WITHAM	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 14/10/2009 Effective Date: 01/04/2009 Revocation Date: 31/12/2009
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 5 Receiving Water: RIVER WITHAM	Status: VARIED UNDER EPR 2010 Issue date: 03/02/2023 Effective Date: 03/02/2023 Revocation Date: 30/03/2026
B	3m E	BASSINGHAM WATER RECYCLING CENTRE, CLAY LANE, BASSINGHAM, LINCOLN, LINCOLNSHIRE, LN5 9HA	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF10345 Permit Version: 5 Receiving Water: RIVER WITHAM	Status: VARIED UNDER EPR 2010 Issue date: 03/02/2023 Effective Date: 03/02/2023 Revocation Date: 30/03/2026
3	43m W	TONGE'S FARM QUARRY, BUTT LANE, NORTON DISNEY, LINCOLN, LINCOLNSHIRE, LN6 9JT	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: PRNNF12996 Permit Version: 3 Receiving Water: TRIB OF RIVER WITHAM	Status: SURRENDERED UNDER EPR 2010 Issue date: 06/05/2011 Effective Date: 06/05/2011 Revocation Date: 28/02/2019
C	44m E	HALLWATH PUMPING STN, BASSINGHAM, LINCOLN, LN5	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: AW3NF824 Permit Version: 1 Receiving Water: River Witham	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/04/1989 Effective Date: 19/04/1989 Revocation Date: -

ID	Location	Address	Details	
5	111m NW	TONGE'S FARM QUARRY, BUTT LANE, NORTON DISNEY, LINCOLN, LINCOLNSHIRE, LN6 9JT	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: PRNNF12996 Permit Version: 1 Receiving Water: TRIB OF RIVER WITHAM	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 01/09/2003 Effective Date: 01/09/2003 Revocation Date: 18/03/2008
9	295m SW	NORTON DISNEY PS, MAIN ROAD, NORTON DISNEY, LINCOLN, LN6 9JX	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: AW3NF827A Permit Version: 2 Receiving Water: River Witham	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/08/1989 Effective Date: 29/08/1989 Revocation Date: -
11	462m SW	CHURCH DRIVE/MAIN STEET HOUSES, CHURCH LANE & MAIN STREET, NORTON DISNEY., LINCOLN, LN6 9JX	Effluent Type: UNSPECIFIED Permit Number: PR3LFU540 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 23/09/1971 Effective Date: 23/09/1971 Revocation Date: 01/10/1996

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	6

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

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Details	
B	**On site**	**Incident Date: 07/10/2002** **Incident Identification: 113236** **Pollutant: Sewage Materials** **Pollutant Description: Crude Sewage**	**Water Impact: Category 3 (Minor)** **Land Impact: Category 4 (No Impact)** **Air Impact: Category 4 (No Impact)**
B	**On site**	**Incident Date: 07/10/2002** **Incident Identification: 113236** **Pollutant: Sewage Materials** **Pollutant Description: Crude Sewage**	**Water Impact: Category 3 (Minor)** **Land Impact: Category 4 (No Impact)** **Air Impact: Category 4 (No Impact)**
B	4m E	Incident Date: 09/06/2001 Incident Identification: 8389 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
B	4m E	Incident Date: 09/06/2001 Incident Identification: 8389 Pollutant: Inert Materials and Wastes Pollutant Description: Soils and Clay	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
C	40m E	Incident Date: 13/06/2003 Incident Identification: 165591 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
10	347m SW	Incident Date: 03/04/2003 Incident Identification: 149485 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

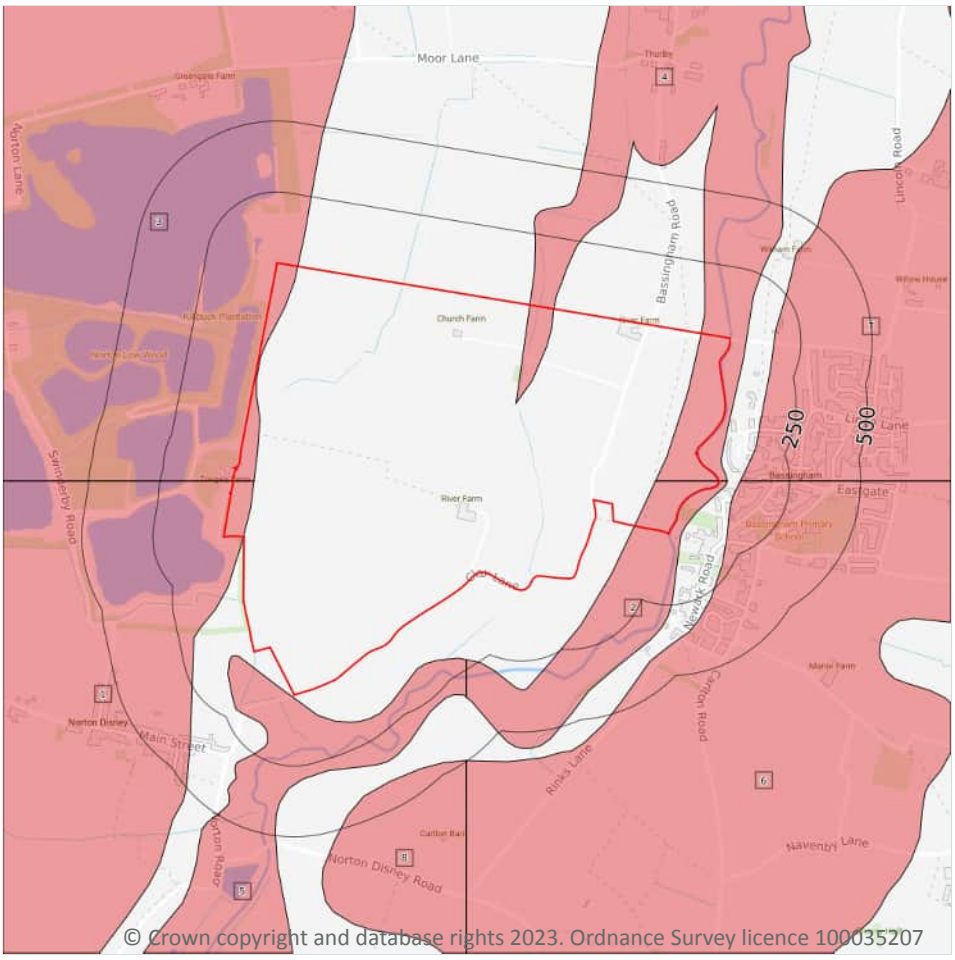
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	8

Aquifer status of groundwater held within superficial geology.

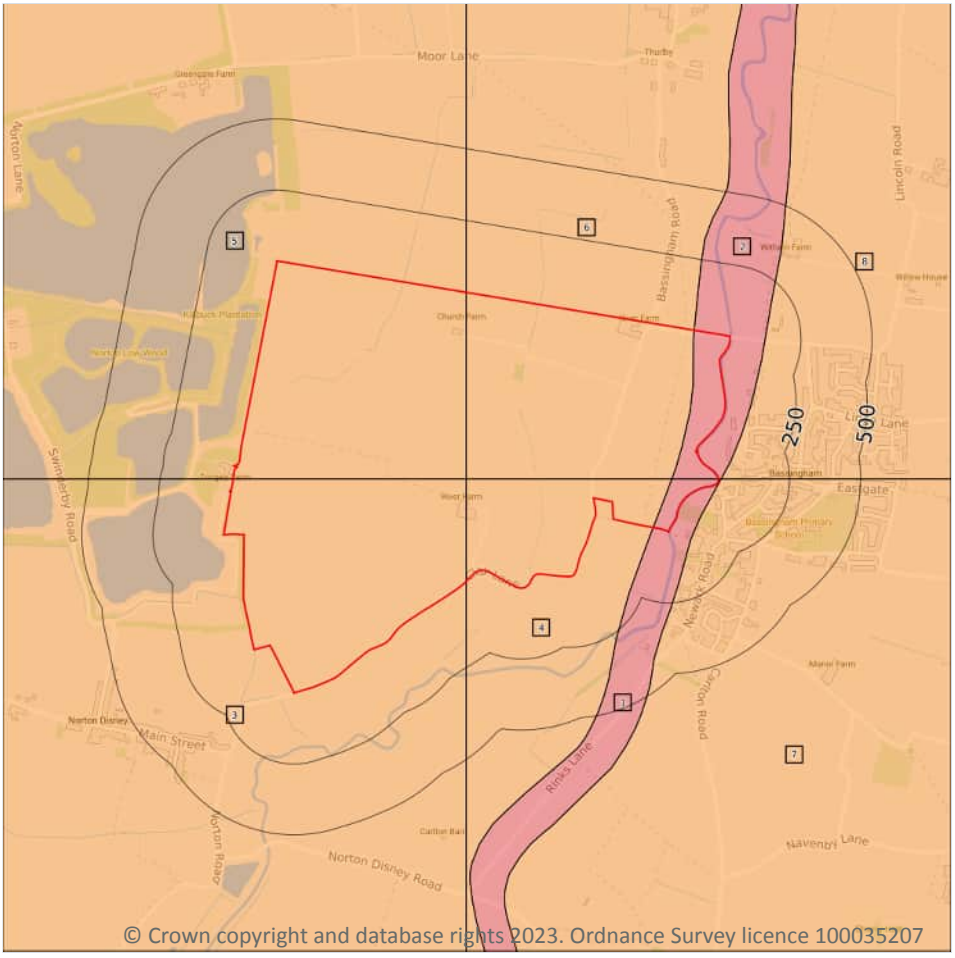
Features are displayed on the Hydrogeology map on **page 36 >**

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

ID	Location	Designation	Description
3	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
4	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
5	8m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
6	65m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
7	76m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
8	408m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	8

Aquifer status of groundwater held within bedrock geology.

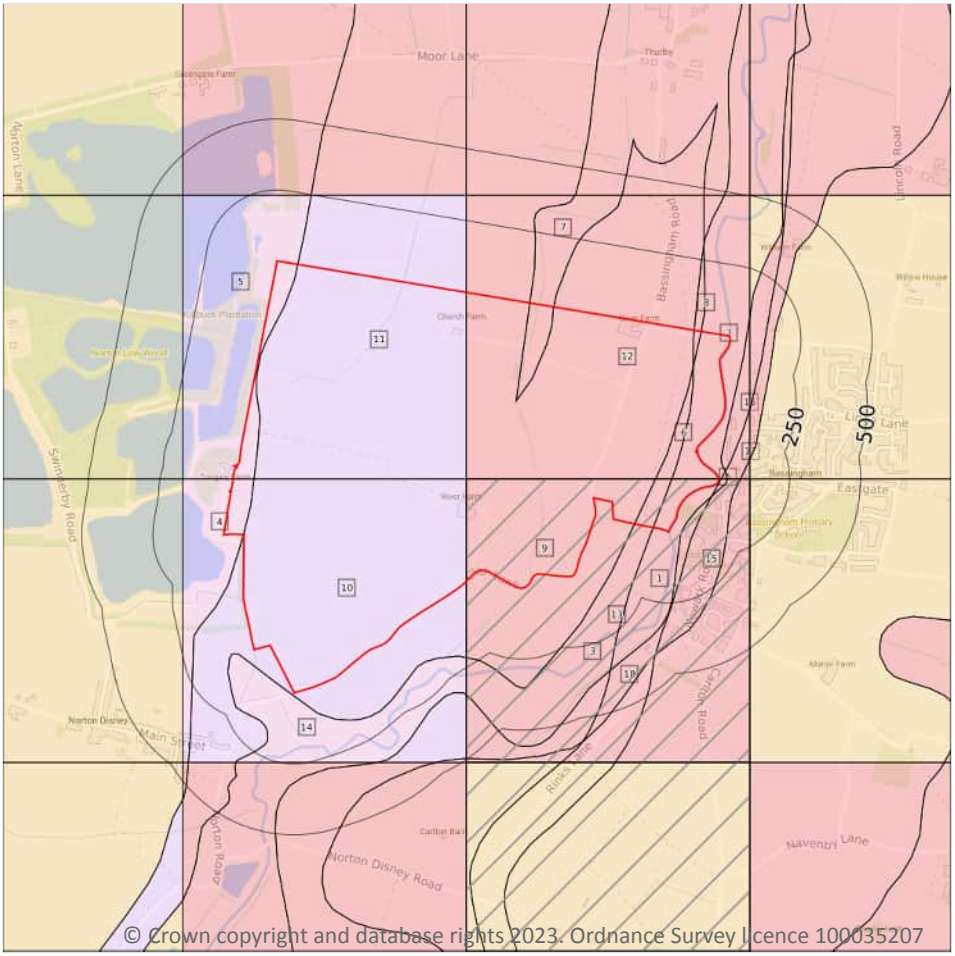
Features are displayed on the Bedrock aquifer map on **page 38 >**

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

ID	Location	Designation	Description
3	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
4	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
5	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
6	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
7	4m E	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
8	9m E	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

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

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability
- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability
- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information
- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	19

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 40 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
7	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
8	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
9	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
10	**On site**	**Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures**
11	**On site**	**Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures**
12	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
A	3m E	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
14	8m SW	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
A	8m E	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
15	20m E	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
16	22m E	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
17	28m E	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
18	35m E	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary 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
13	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**4.0%**

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

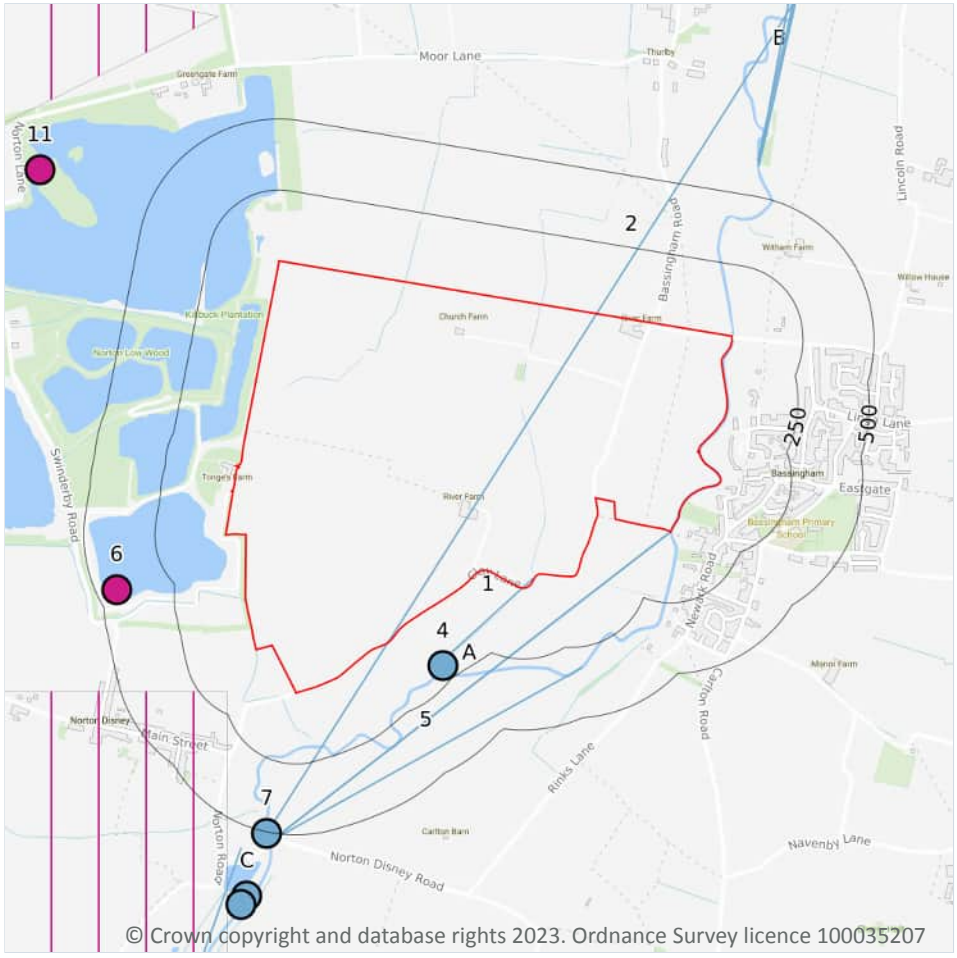
5.5 Groundwater vulnerability- local information

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
- 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	10

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 45 >**

ID	Location	Details	
3	180m SW	Status: Active Licence No: AN/030/0003/010 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: SUMP(S) AT NORTON BOTTOMS QUARRY, NORTON DISNEY Data Type: Poly4 Name: Breedon Trading Limited Easting: 486500 Northing: 359250	Annual Volume (m^3): 1279606 Max Daily Volume (m^3): 4536 Original Application No: NPS/NA/000609 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
6	430m SW	Status: Historical Licence No: 4/30/03/*G/0108 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT Data Type: Point Name: H W SMITH & SONS (CARLTON) LTD Easting: 488760 Northing: 359610	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 650 Original Application No: - Original Start Date: 24/06/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 20/04/2012 Version End Date: -
10	866m NW	Status: Active Licence No: MD/028/0069/038 Details: Dewatering Direct Source: Groundwater Midlands Region Point: ABSTRACTION AREA EDGED IN RED AT SWINDERBY QUARRY Data Type: Poly4 Name: CEMEX UK MATERIALS LIMITED Easting: 487181 Northing: 361591	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPS/NA/000078 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
11	902m NW	Status: Active Licence No: 4/30/03/*G/0049 Details: Mineral Washing Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GRAVEL PIT - THURLBY Data Type: Point Name: CEMEX UK MATERIALS LTD Easting: 488490 Northing: 361090	Annual Volume (m^3): 509163 Max Daily Volume (m^3): 2046 Original Application No: NPS/WR/030733 Original Start Date: 01/06/1973 Expiry Date: - Issue No: 104 Version Start Date: 21/12/2018 Version End Date: -
-	944m W	Status: Historical Licence No: 4/30/03/*G/0108 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: THURLBY LAKE Data Type: Point Name: H W SMITH & SONS (CARLTON) LTD Easting: 488360 Northing: 360710	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 650 Original Application No: - Original Start Date: 24/06/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 20/04/2012 Version End Date: -

ID	Location	Details	
-	1564m W	Status: Historical Licence No: 4/30/03/*G/0028 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WHITE HALL WELL NORTON DISNEY Data Type: Point Name: NORTON DISNEY ESTATE Easting: 487600 Northing: 360050	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2004 Version End Date: -
-	1688m NW	Status: Historical Licence No: 03/28/69/0039 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: OAKHILL FARM - WELL Data Type: Point Name: HAY Easting: 487700 Northing: 361200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 07/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
-	1835m NW	Status: Active Licence No: MD/028/0069/039 Details: Mineral Washing Direct Source: Groundwater Midlands Region Point: POINT A AT SWINDERBY QUARRY, SWINDERBY Data Type: Point Name: CEMEX UK MATERIALS LIMITED Easting: 487608 Northing: 361396	Annual Volume (m^3): 1080501 Max Daily Volume (m^3): 5400 Original Application No: NPS/NA/000129 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
-	1894m W	Status: Historical Licence No: 4/30/03/*G/0028 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: LODGE FARM WELL 2 NORTON DISN. Data Type: Point Name: NORTON DISNEY ESTATE Easting: 487250 Northing: 359800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2004 Version End Date: -
-	1894m W	Status: Historical Licence No: 4/30/03/*G/0028 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: LODGE FARM WELL 1 NORTON DISN. Data Type: Point Name: NORTON DISNEY ESTATE Easting: 487250 Northing: 359800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2004 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**14**

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 45 >**

ID	Location	Details	
1	**On site**	**Status: Historical** **Licence No: 4/30/03/*S/0097** **Details: Spray Irrigation - Direct** **Direct Source: SURFACE WATER SOURCE OF SUPPLY** **Point: TRIB R WITHAM, NORTON DISNEY** **Data Type: Line** **Name: C A SHAW FARMS** **Easting: 489910** **Northing: 359360**	**Annual Volume (m^3): 9091** **Max Daily Volume (m^3): 1091** **Original Application No: -** **Original Start Date: 01/09/1994** **Expiry Date: -** **Issue No: 100** **Version Start Date: 01/09/1994** **Version End Date: -**
2	**On site**	**Status: Historical** **Licence No: 4/30/03/*S/0102** **Details: Spray Irrigation - Direct** **Direct Source: SURFACE WATER SOURCE OF SUPPLY** **Point: RIVER WITHAM - SCOTWATER TO AUBOURN BR** **Data Type: Line** **Name: H W SMITH & SONS (CARLTON) LTD** **Easting: 489290** **Northing: 358750**	**Annual Volume (m^3): 91000** **Max Daily Volume (m^3): 1500** **Original Application No: -** **Original Start Date: 21/05/2002** **Expiry Date: 31/03/2022** **Issue No: 4** **Version Start Date: 16/12/2011** **Version End Date: -**
A	2m E	Status: Historical Licence No: 4/30/03/*S/0102 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - NORTON DISNEY TO BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 489296 Northing: 358716	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -

ID	Location	Details	
A	2m E	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - NORTON DISNEY TO BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 489296 Northing: 358716	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
4	196m S	Status: Historical Licence No: 4/30/03/*S/0097 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM AT NORTON DISNEY Data Type: Point Name: C A SHAW FARMS Easting: 489910 Northing: 359340	Annual Volume (m^3): 9091 Max Daily Volume (m^3): 1091 Original Application No: - Original Start Date: 01/09/1994 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1994 Version End Date: -
5	323m SE	Status: Active Licence No: AN/030/0003/007 Details: Trickle Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BETWEEN POINTS C AND D, RIVER WITHAM, BASSINGHAM Data Type: Line Name: J & J Burnett Limited Easting: 489298 Northing: 358720	Annual Volume (m^3): 18920 Max Daily Volume (m^3): 1000 Original Application No: NPS/NA/000192 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
7	505m SW	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - CARLTON LE MOORLAND Data Type: Point Name: H W SMITH & SONS (CARLTON) LTD Easting: 489290 Northing: 358750	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 4 Version Start Date: 16/12/2011 Version End Date: -
8	577m SW	Status: Active Licence No: 4/30/03/*S/0006 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM STAPLEFORD Data Type: Line Name: R Wray & Sons Limited Easting: 488700 Northing: 357300	Annual Volume (m^3): 7274 Max Daily Volume (m^3): 910 Original Application No: NPS/WR/031252 Original Start Date: 01/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 17/05/2019 Version End Date: -

ID	Location	Details	
B	608m NE	Status: Historical Licence No: 4/30/03/*S/0102 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
B	608m NE	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
9	609m NE	Status: Active Licence No: AN/030/0003/007 Details: Trickle Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BETWEEN POINTS E AND F, RIVER WITHAM, BASSINGHAM Data Type: Line Name: J & J Burnett Limited Easting: 491024 Northing: 361105	Annual Volume (m^3): 18920 Max Daily Volume (m^3): 1000 Original Application No: NPS/NA/000192 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
B	623m NE	Status: Historical Licence No: 4/30/03/*S/0059 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 491020 Northing: 361120	Annual Volume (m^3): 20457 Max Daily Volume (m^3): 900 Original Application No: - Original Start Date: 01/06/1983 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1993 Version End Date: -
C	735m SW	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - CARLTON LE MOORLAND Data Type: Point Name: H W SMITH & SONS CARLTON LTD Easting: 489220 Northing: 358530	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 21/05/2002 Version End Date: -

ID	Location	Details	
C	769m SW	Status: Active Licence No: 4/30/03/*S/0046 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM STAPLEFORD Data Type: Point Name: R Wray & Sons Limited Easting: 489200 Northing: 358500	Annual Volume (m^3): 27277 Max Daily Volume (m^3): 2273 Original Application No: NPS/WR/031253 Original Start Date: 01/10/1966 Expiry Date: - Issue No: 102 Version Start Date: 17/05/2019 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	**0**

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

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

5.9 Source Protection Zones

Records within 500m	**0**

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

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

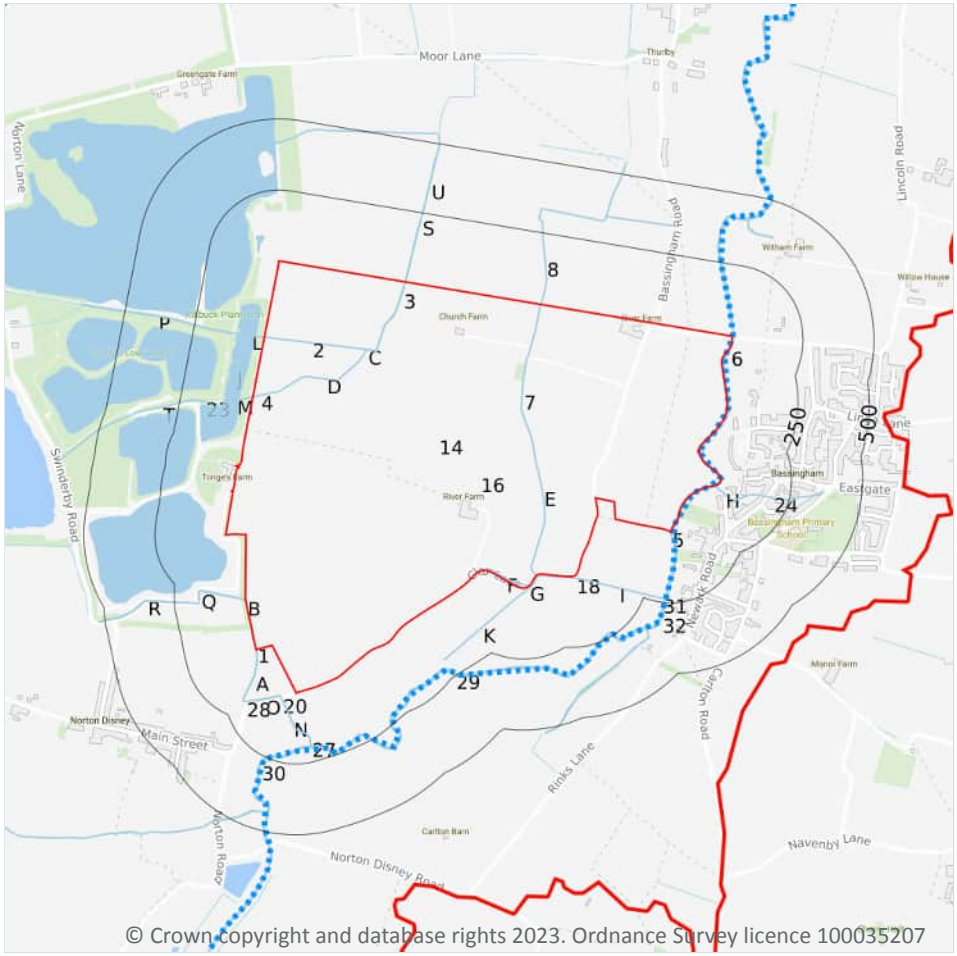
5.10 Source Protection Zones (confined aquifer)

Records within 500m	**0**

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**56**

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

Features are displayed on the Hydrology map on **page 52 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
7	On site	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
8	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
E	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
F	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
G	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
G	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
H	**On site**	**Inland river not influenced by normal tidal action.**	**Not provided**	**Watercourse contains water year round (in normal circumstances)**	**-**
G	3m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
18	4m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
G	5m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	6m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	9m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
I	16m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	30m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	30m NW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
M	44m W	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
20	53m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
N	53m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	55m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	70m NW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	70m NW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	72m W	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	76m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	89m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	96m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
23	98m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
P	115m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	118m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
24	128m E	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
Q	158m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
Q	163m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	163m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
R	164m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
27	164m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
28	170m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
29	187m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
30	192m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
S	220m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
S	227m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	230m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
31	235m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
32	236m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
S	237m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
U	242m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**20**

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

Features are displayed on the Hydrology map on **page 52 >**

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 52 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
14	**On site**	**River**	**Witham - conf Cringle Bk to conf Brant**	**GB105030056780**	**Witham Upper**	**Witham**

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 52 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
15	**On site**	**River**	**Witham - conf Cringle Bk to conf Brant**	**GB105030056780** ↗	**Moderate**	**Fail**	**Moderate**	**2019**

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

6.5 WFD Groundwater bodies

Records on site	1

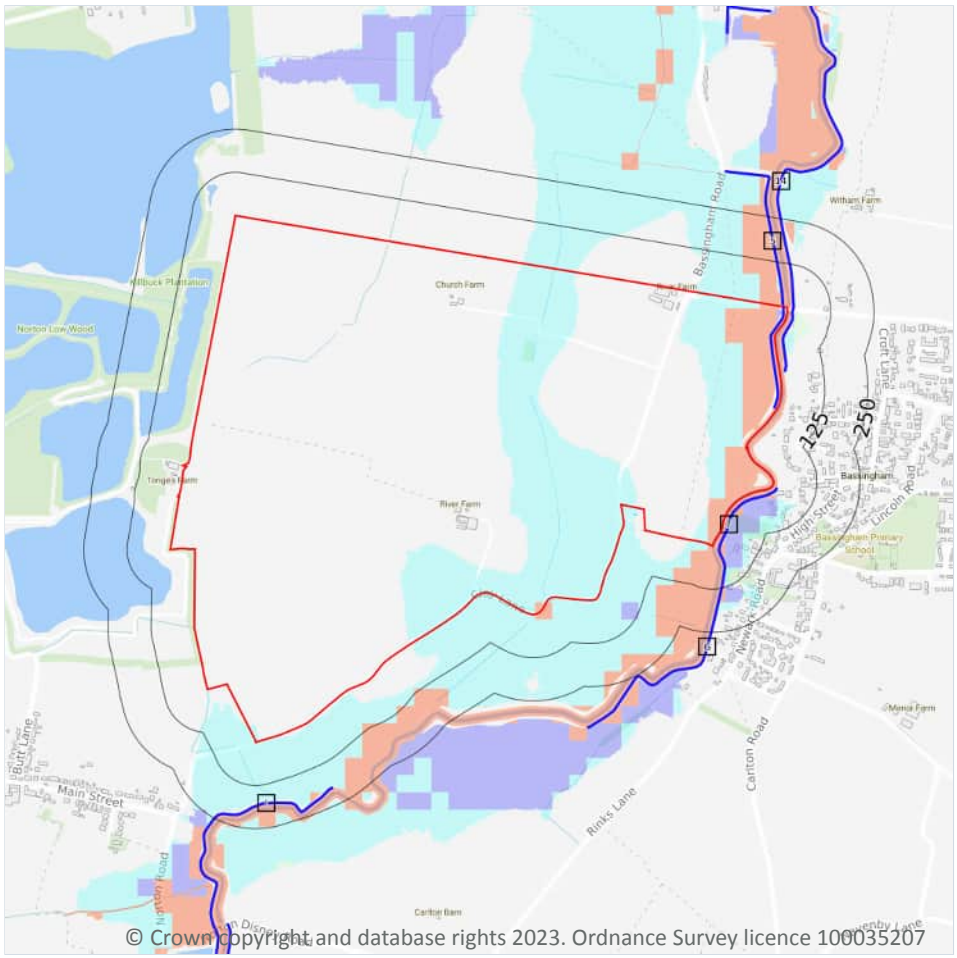
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 52 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
16	**On site**	**Witham Lias**	**GB40502G401400** ↗	**Good**	**Good**	**Good**	**2019**

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

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	26

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).

Features are displayed on the River and coastal flooding map on **page 59 >**

Distance	Flood risk category
On site	**High**
0 - 50m	High

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	**7**

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.

Features are displayed on the River and coastal flooding map on **page 59 >**

ID	Location	Update
B	**On site**	**08/11/2022**
5	6m NE	08/11/2022
7	13m E	08/11/2022
A	14m E	08/11/2022
G	116m SE	08/11/2022
14	132m NE	08/11/2022
I	178m SW	08/11/2022

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.

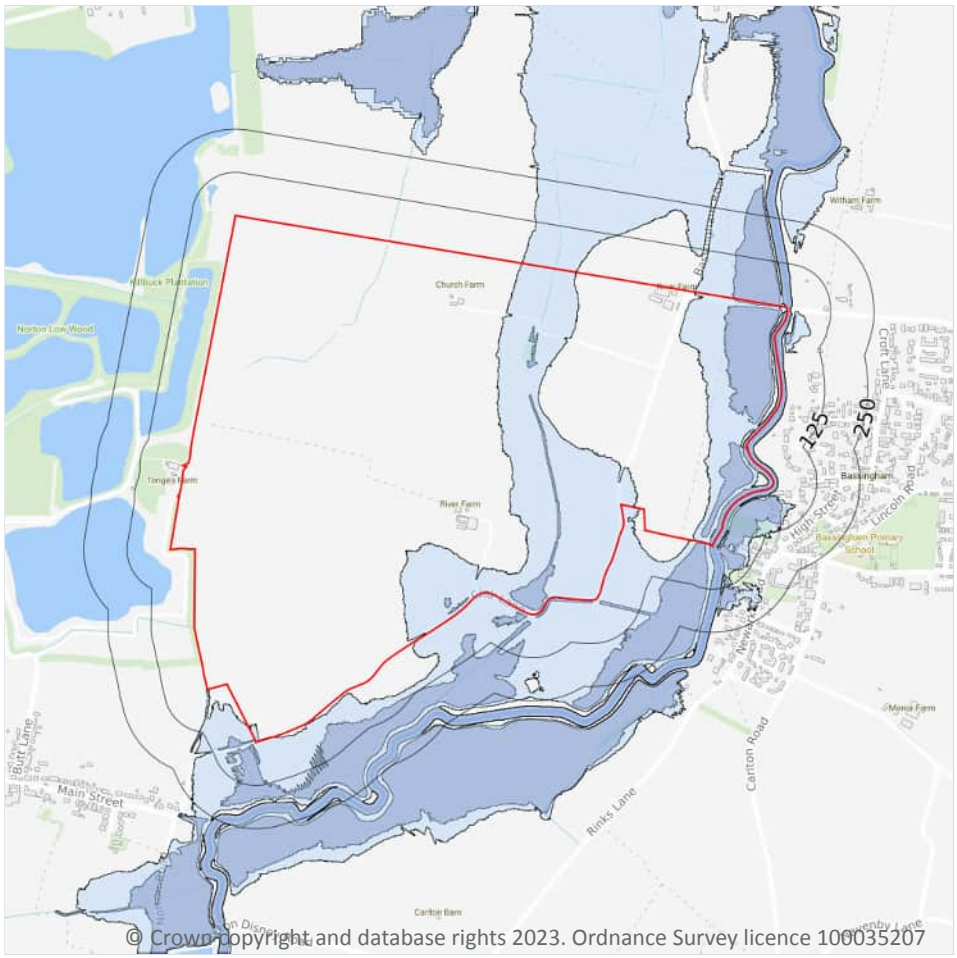
7.5 Flood Storage Areas

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



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Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

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.

Features are displayed on the River and coastal flooding map on **page 59 >**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

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

7.7 Flood Zone 3

Records within 50m	1

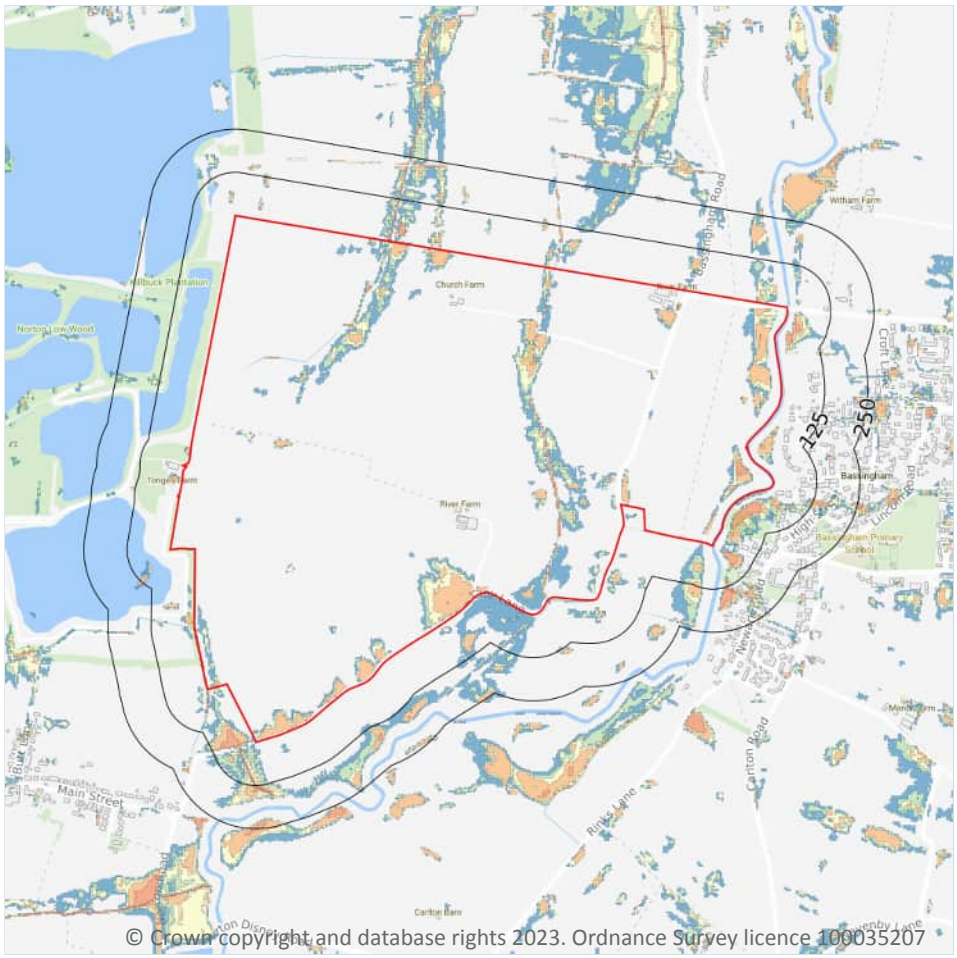
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 59 >**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

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

8 Surface water flooding



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8.1 Surface water flooding

Highest risk on site	**1 in 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 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 64 >**

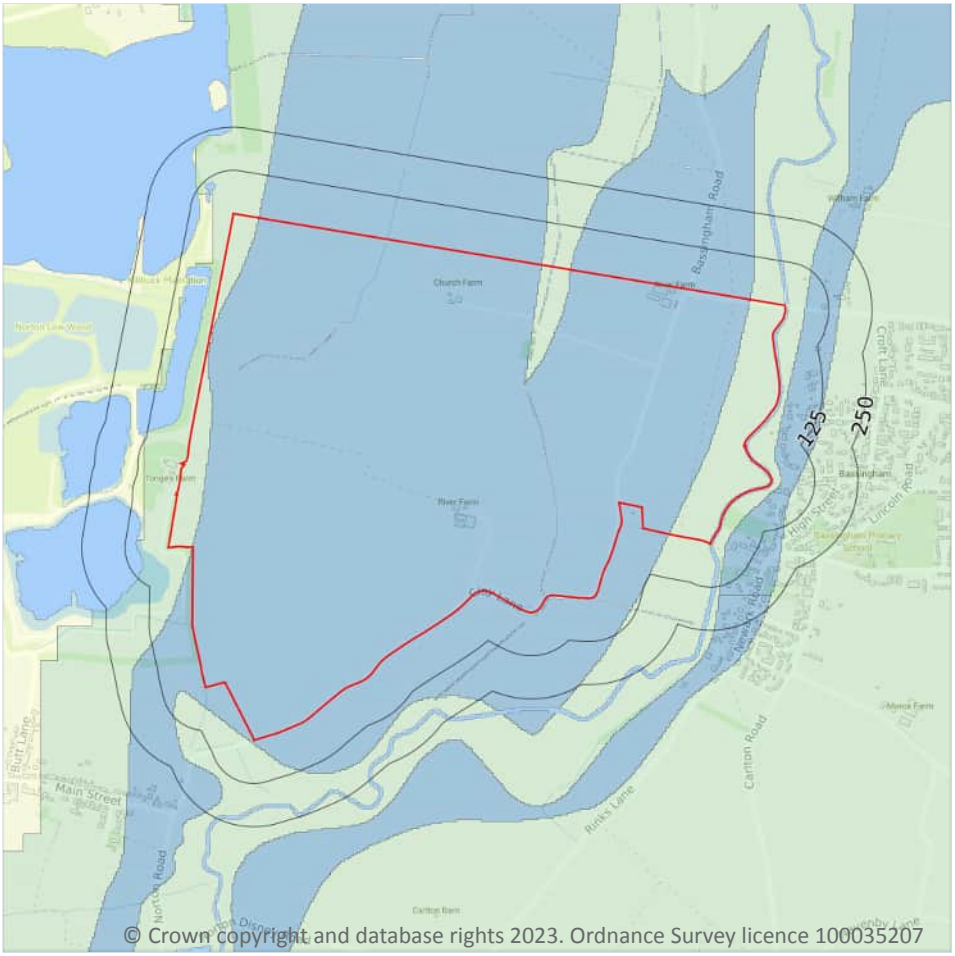
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

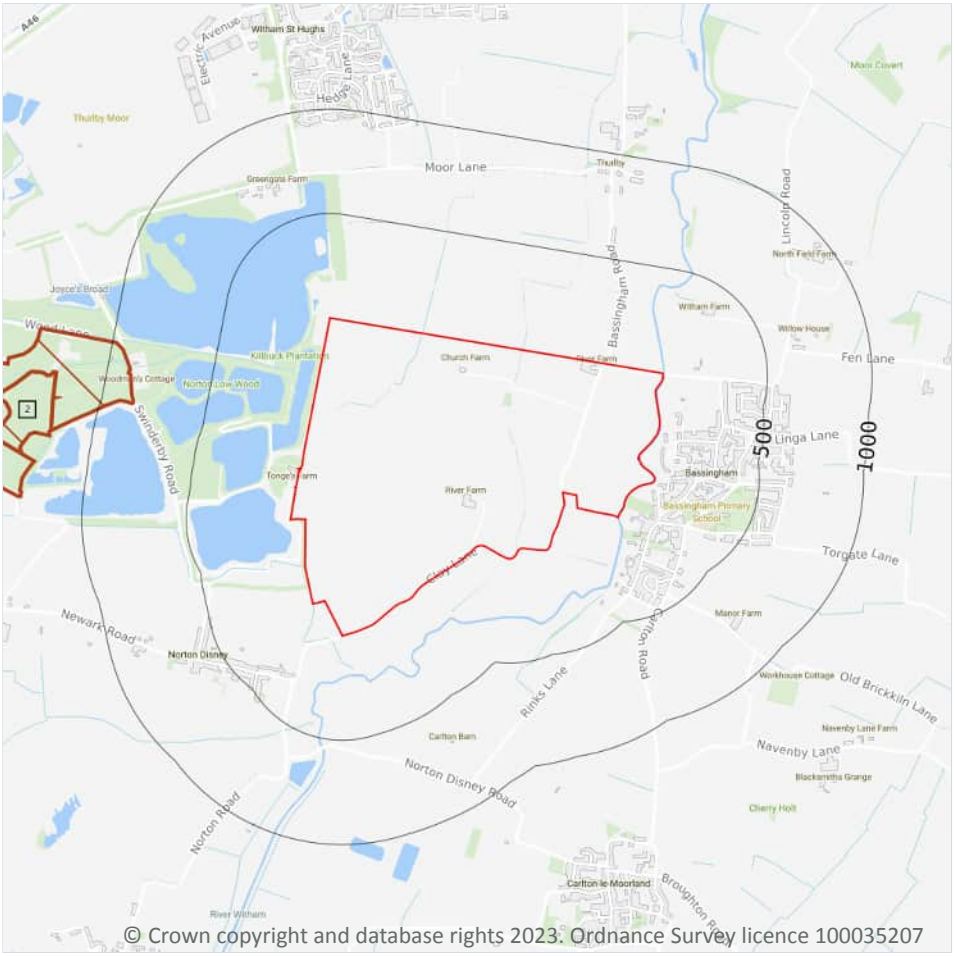
Highest risk on site	**Low**
Highest risk within 50m	**Moderate**

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 66 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



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Site Outline

Search buffers in metres (m)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

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

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

10.7 Designated Ancient Woodland

Records within 2000m	2

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 67 >**

ID	Location	Name	Woodland Type
1	849m W	Hawdins/norton Big Wood	Ancient & Semi-Natural Woodland
2	1198m W	Hawdins/norton Big Wood	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	2

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

Location	Name	Type	NVZ ID	Status
On site	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
985m NW	The Fleet Lower Catchment (trib of Trent) NVZ	Surface Water	338	Existing

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

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

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.

This data is sourced from Natural England.

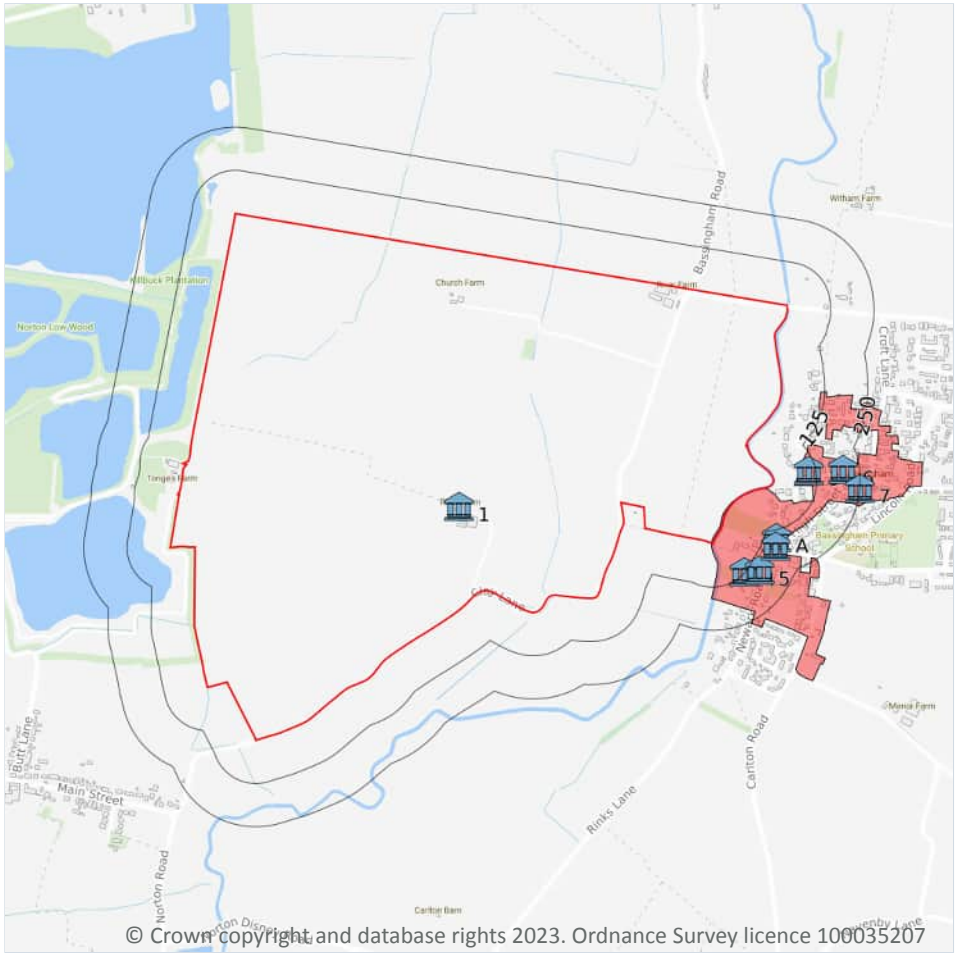
10.18 SSSI Units

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	8

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 73 >**

ID	Location	Name	Grade	Reference Number	Listed date
1	**On site**	**River Farmhouse**	**II**	**1168186**	**17/06/1986**
3	106m E	Manor House	II	1147372	17/06/1986
4	123m SE	Church Of St Michael And All Angels	II*	1061923	23/08/1967
A	149m E	Ivy House	II	1061921	23/08/1967
5	155m E	Church House	II	1308547	17/06/1986
A	165m E	Old Manor House And Outbuilding	II	1360523	17/06/1986

ID	Location	Name	Grade	Reference Number	Listed date
6	203m E	The Grange	II	1147317	23/08/1967
7	250m E	Wesleyan Methodist Chapel And Sunday Schoolroom, Bassingham.	II	1405886	31/10/2011

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 73 >**

ID	Location	Name	District	Date of designation
2	**On site**	**Bassingham**	**North Kesteven**	**11/06/1991**

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.

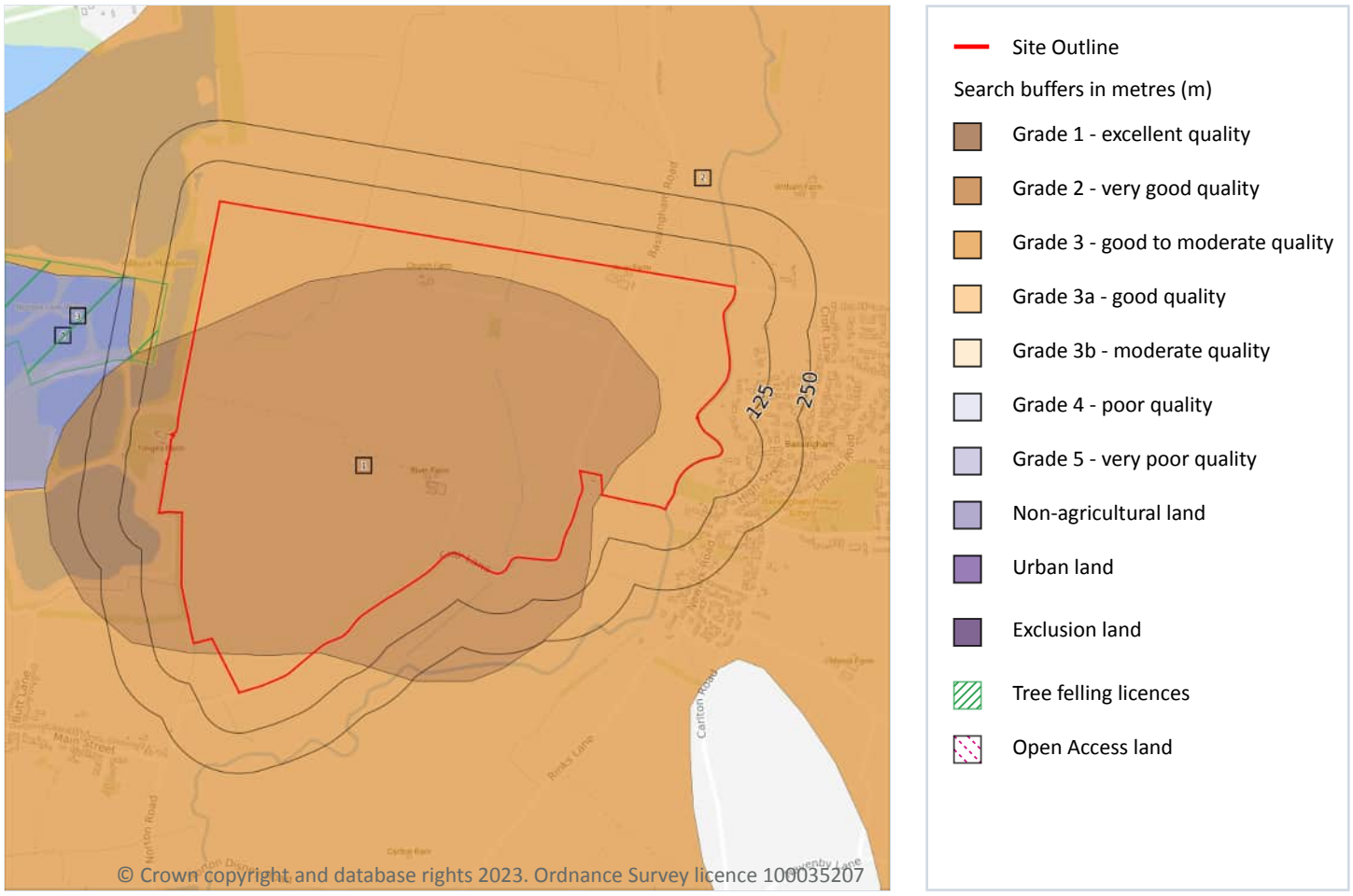
11.7 Registered Parks and Gardens

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



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12.1 Agricultural Land Classification

Records within 250m	3

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 77 >**

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.**
4	178m W	Non Agricultural	-

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

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

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

12.3 Tree Felling Licences

Records within 250m	**1**

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.

Features are displayed on the Agricultural designations map on **page 77 >**

ID	Location	Description	Reference	Application date
3	109m W	Selective Fell/Thin (Unconditional)	014/59/05-06	12/10/2005

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
10m E	AG00267841	Entry Level plus Higher Level Stewardship	01/08/2008	31/07/2018
149m NE	AG00267841	Entry Level plus Higher Level Stewardship	01/08/2008	31/07/2018

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

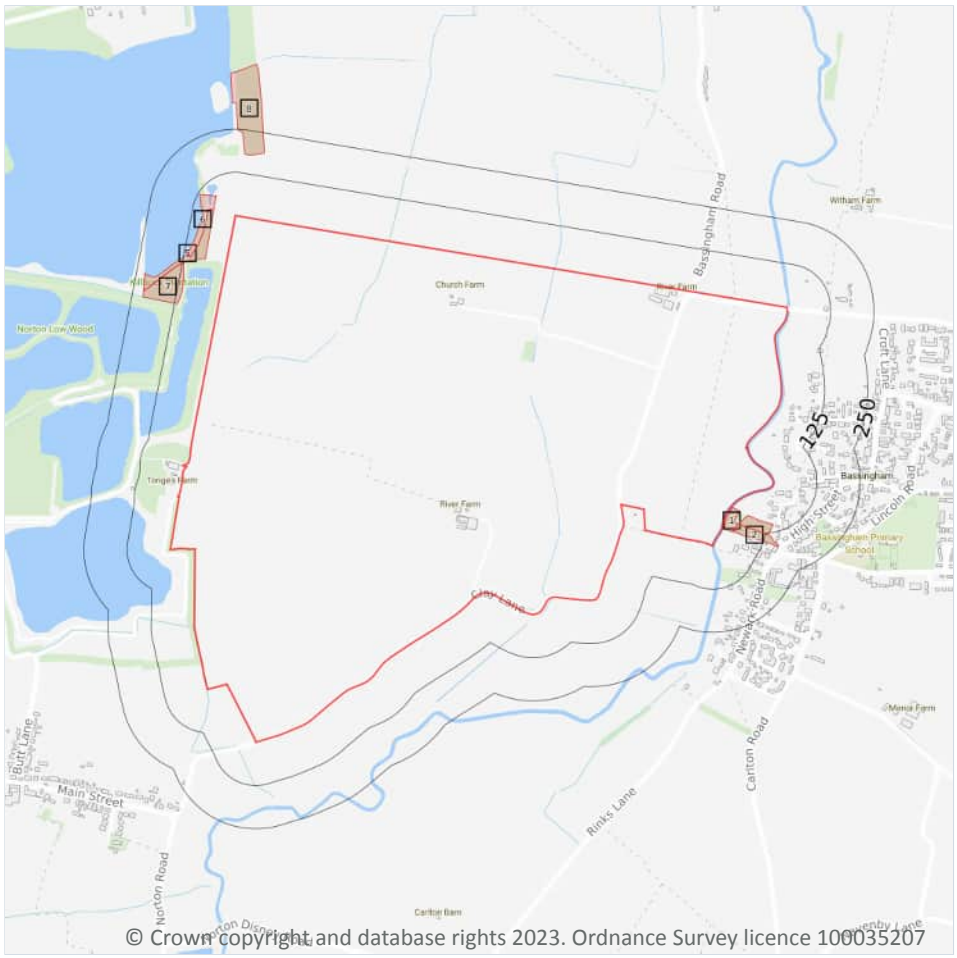
Records within 250m	1

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
149m NE	646407	Countryside Stewardship (Middle Tier)	01/01/2019	31/12/2023

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	**8**

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 80 >**

ID	Location	Main Habitat	Other habitats
1	4m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	31m E	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
3	36m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	44m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	62m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	65m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	110m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	179m NW	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 82 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

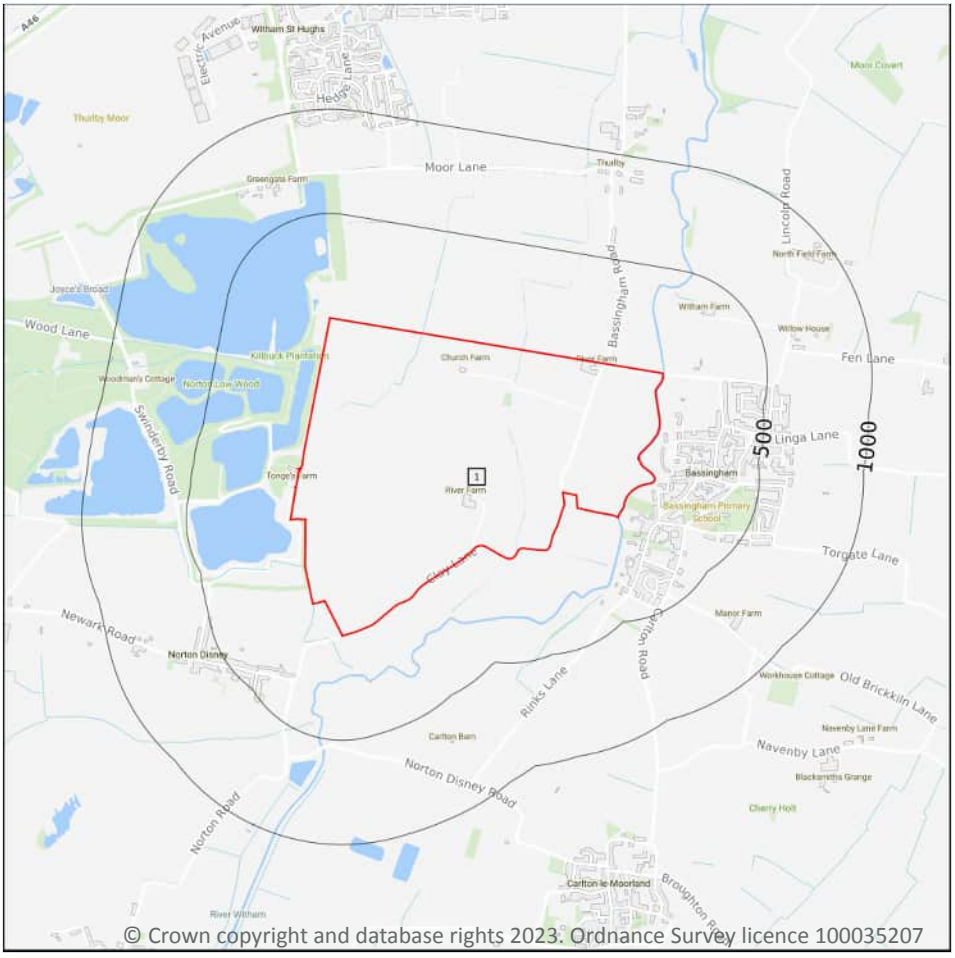
14.6 Bedrock faults and other linear features (10k)

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 86 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_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.

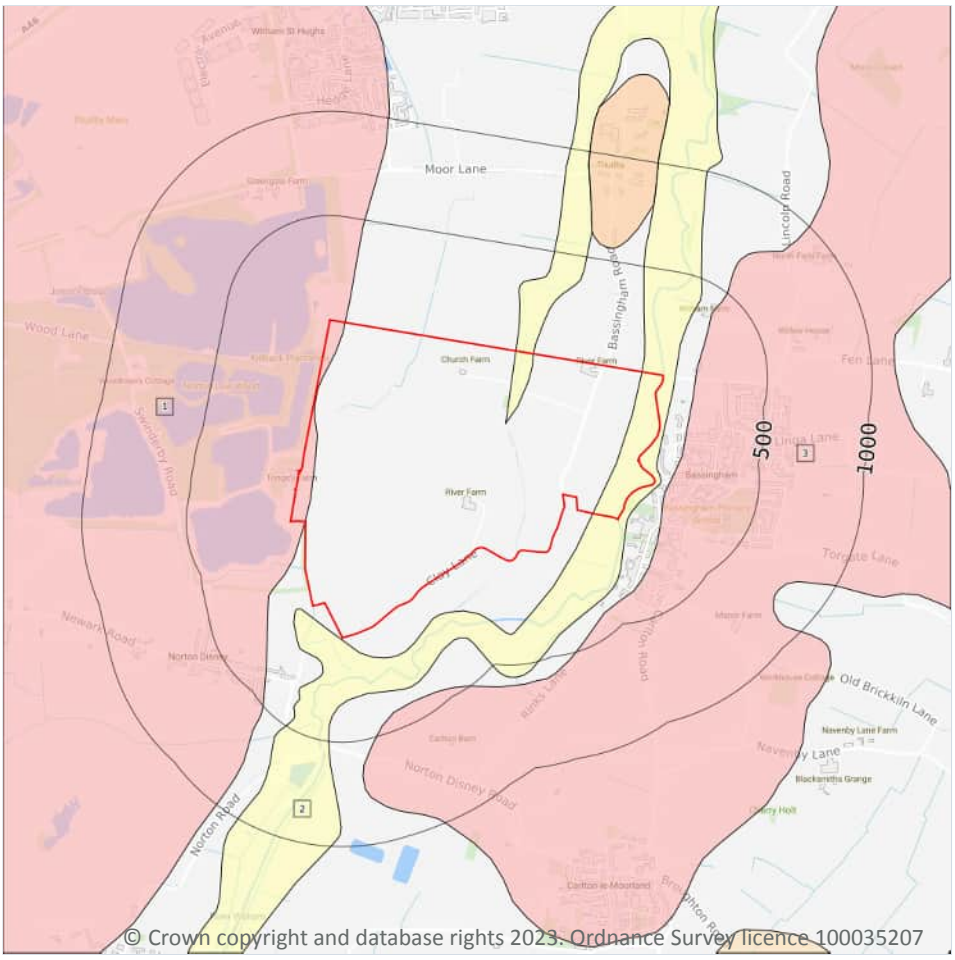
15.3 Artificial ground permeability (50k)

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 **3**

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 88 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**BDTN-XSV**	**BALDERTON SAND AND GRAVEL MEMBER**	**SAND AND GRAVEL**
2	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
3	65m E	BDTN-XSV	BALDERTON SAND AND GRAVEL MEMBER	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	5

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	**Intergranular**	**High**	**Very Low**
On site	**Intergranular**	**High**	**Very Low**
On site	**Intergranular**	**Very High**	**High**
On site	**Intergranular**	**Very High**	**High**
8m SW	Intergranular	High	Very 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.

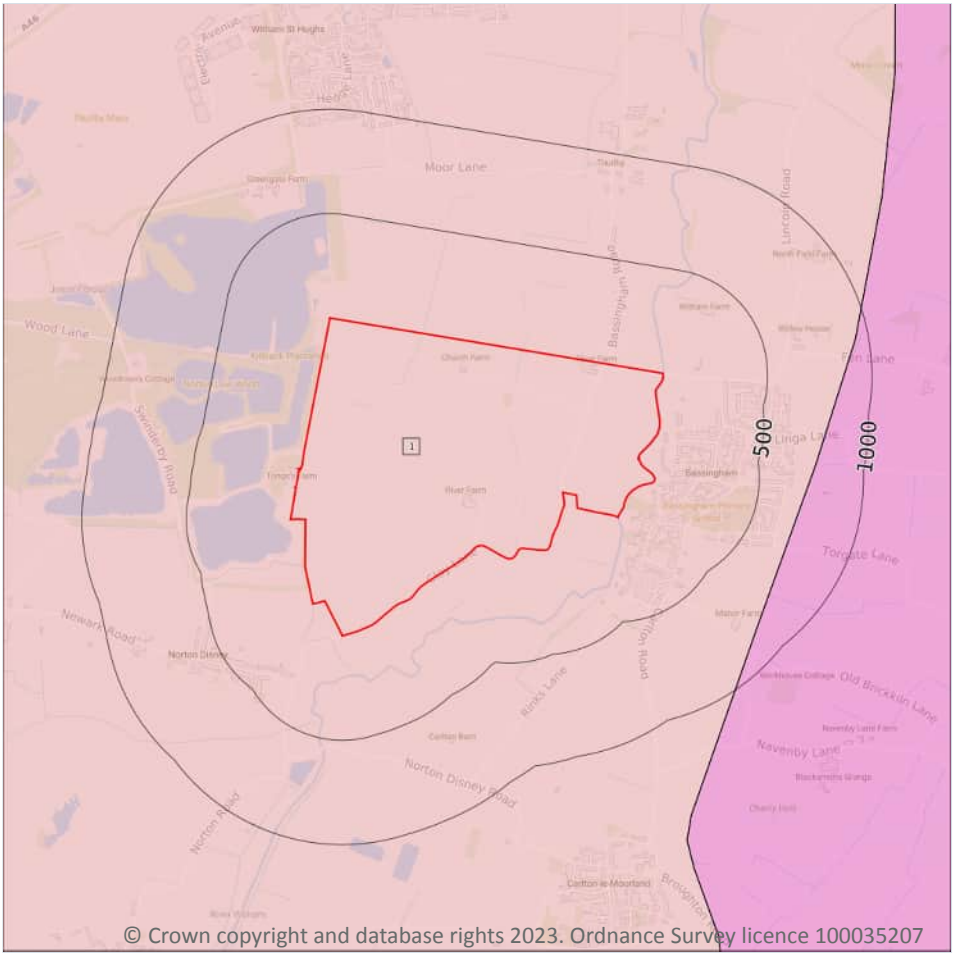
15.7 Landslip permeability (50k)

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 90 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**SMD-MDLM**	**SCUNTHORPE MUDSTONE FORMATION - MUDSTONE AND LIMESTONE, INTERBEDDED**	**RHAETIAN**

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	4

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**	**High**	**Low**
On site	**Fracture**	**High**	**Low**
On site	**Fracture**	**High**	**Low**
On site	**Fracture**	**High**	**Low**

This data is sourced from the British Geological Survey.

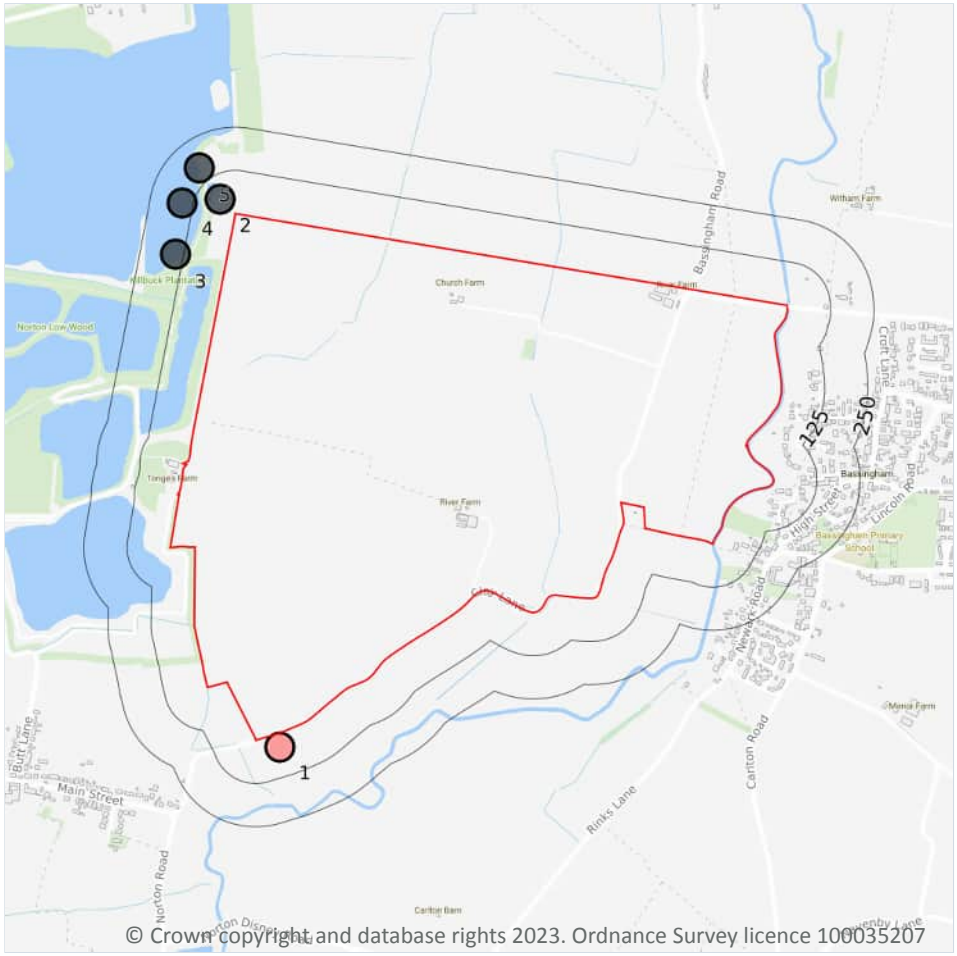
15.10 Bedrock faults and other linear features (50k)

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	5

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.

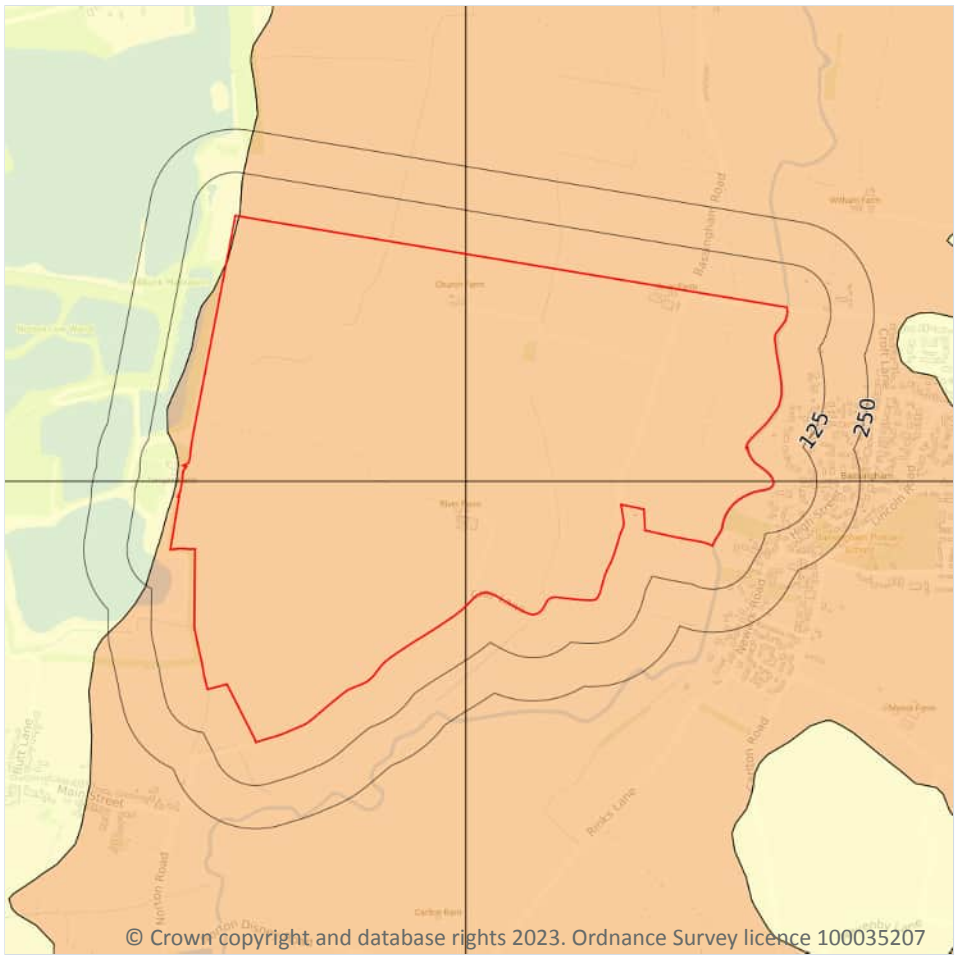
Features are displayed on the Boreholes map on **page 92 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	38m SW	489462 359226	NORTON DISNEY	915.03	N	242560 ↗
2	60m NW	489290 360810	THURLBY MACKLEY & TAYLOR BH9	-	Y	N/A
3	148m NW	489160 360650	THURLBY MACKLEY & TAYLOR BH8	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	156m NW	489180 360800	THURLBY MACKLEY & TAYLOR BH1	-	Y	N/A
5	167m NW	489230 360900	THURLBY MACKLEY & TAYLOR BH7	-	Y	N/A

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	3

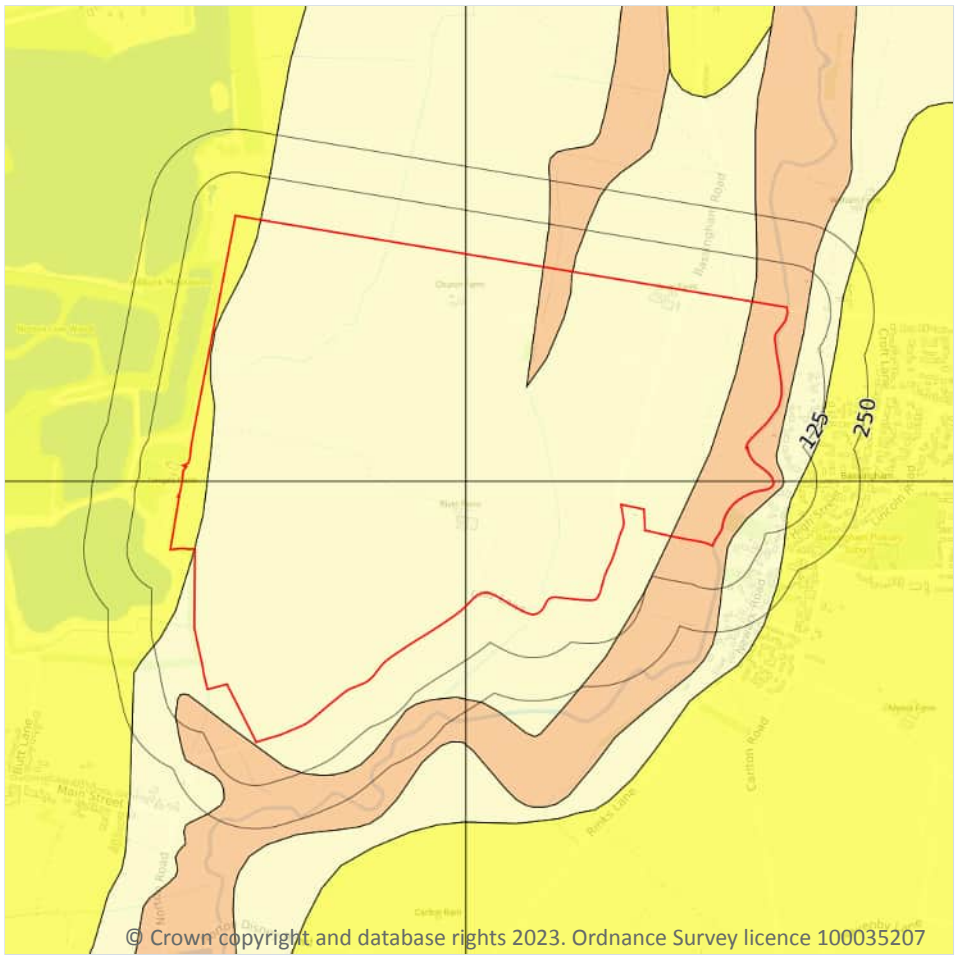
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 94 >**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Low**	**Ground conditions predominantly medium plasticity.**
14m W	Negligible	Ground conditions predominantly non-plastic.

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	6

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.

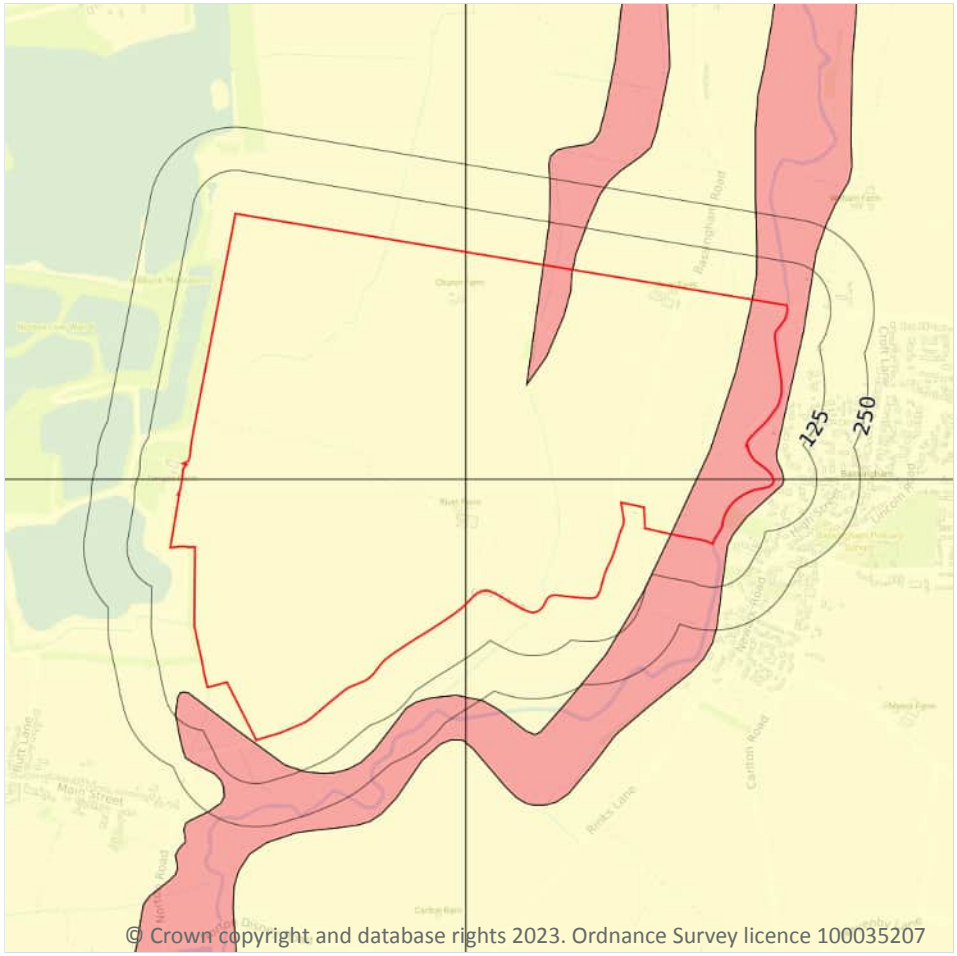
Features are displayed on the Natural ground subsidence - Running sands map on **page 96 >**

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

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.**
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**
8m SW	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.
21m E	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.
23m E	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	5

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.

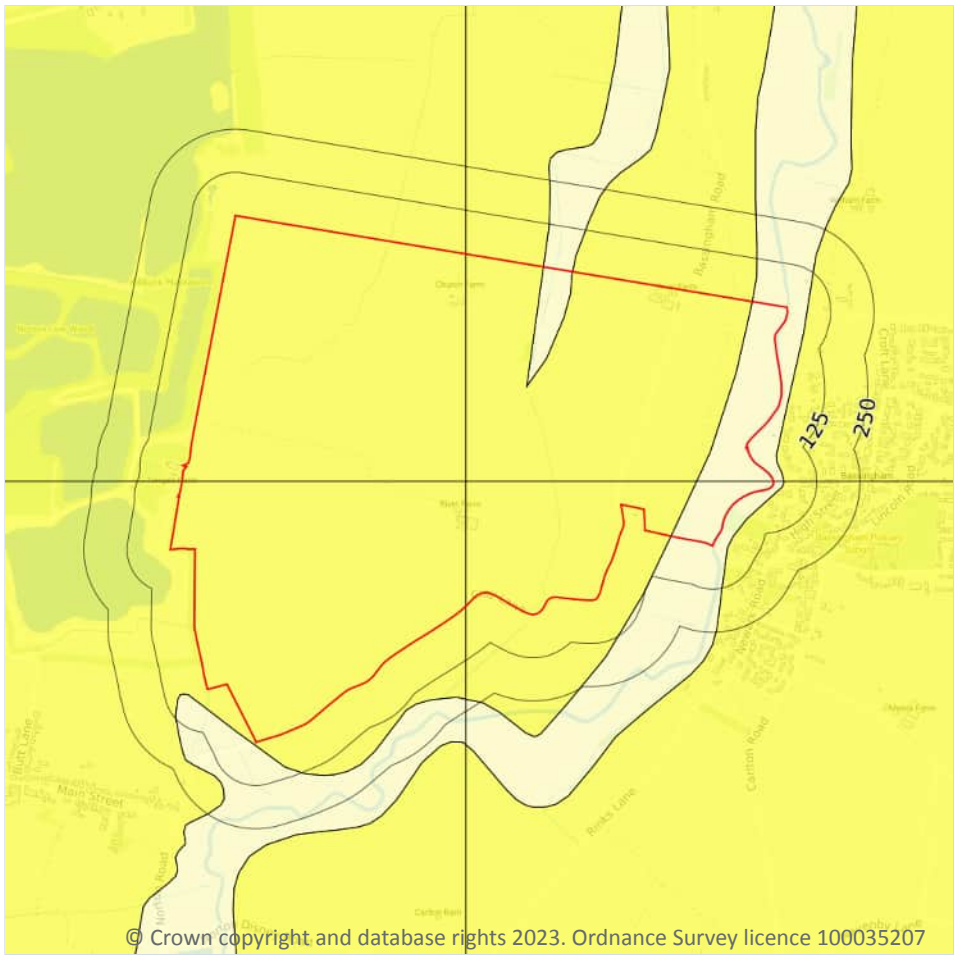
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 98 >**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**

Location	Hazard rating	Details
8m SW	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.
21m E	Negligible	Compressible strata are not thought to occur.
23m E	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	5

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.

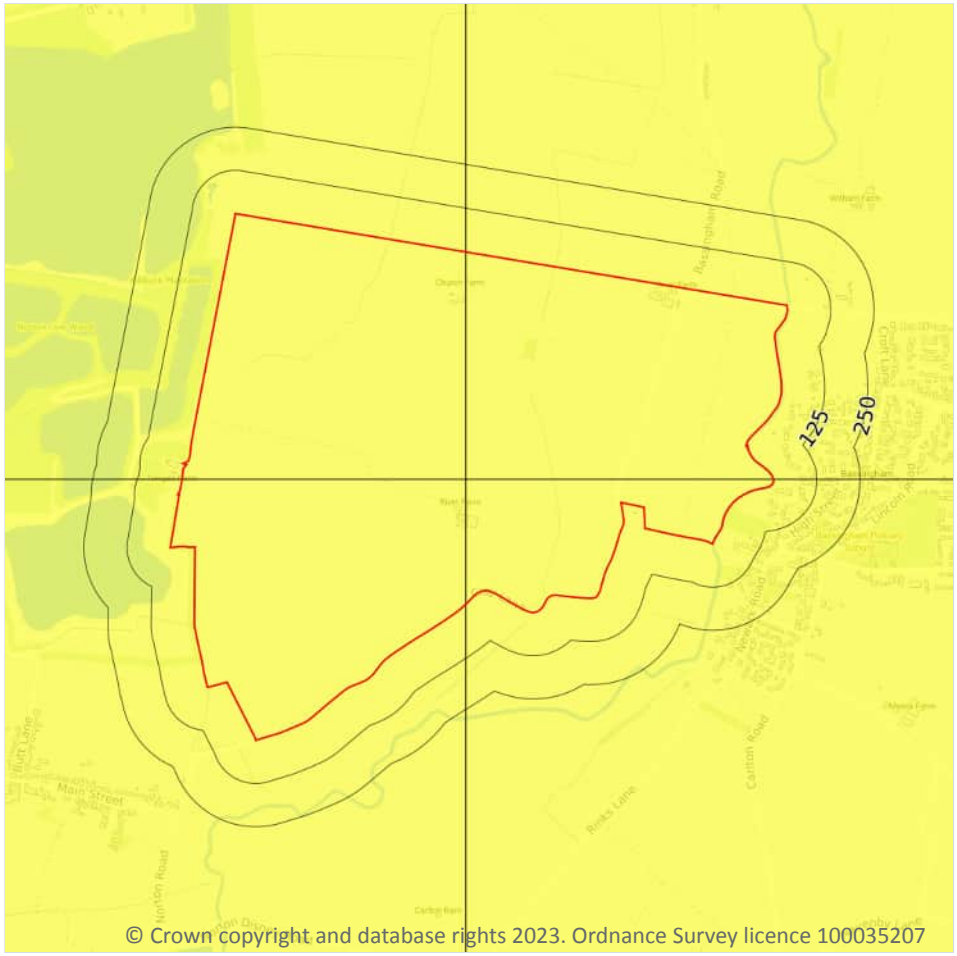
Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 100 >**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**
8m SW	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.

Location	Hazard rating	Details
21m E	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.
23m E	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

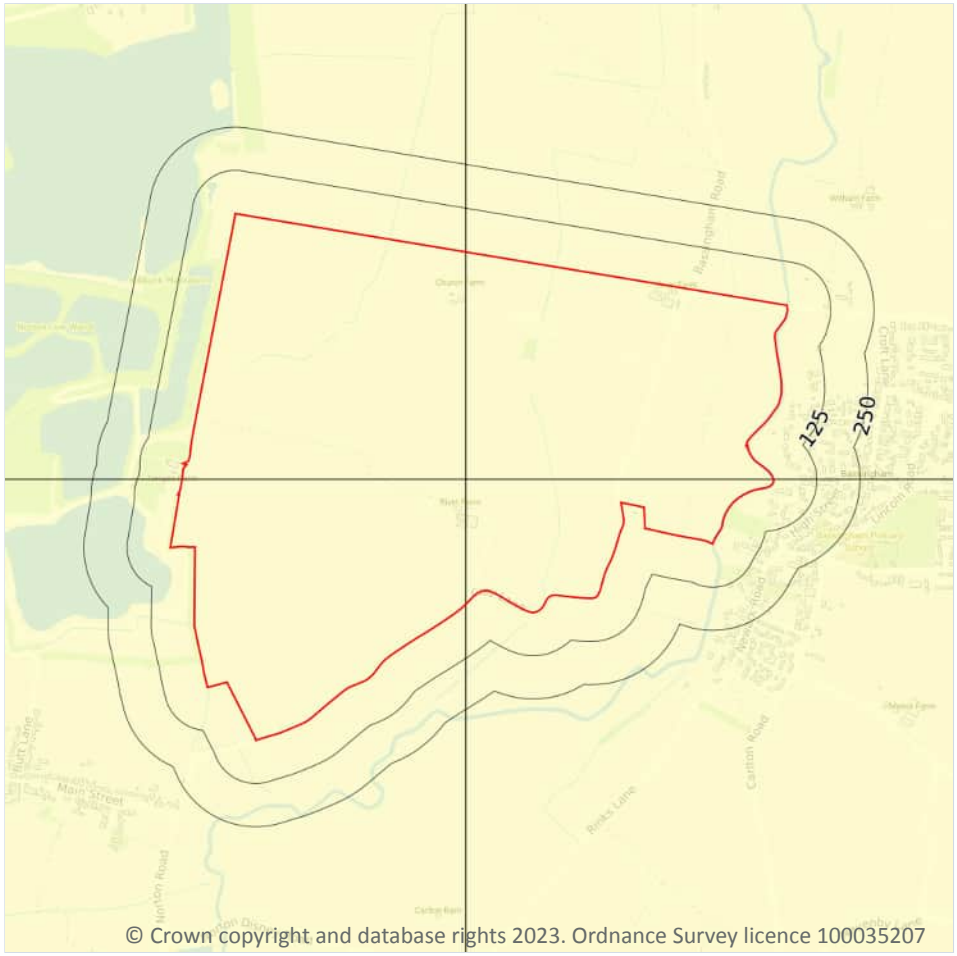
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 102 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	1

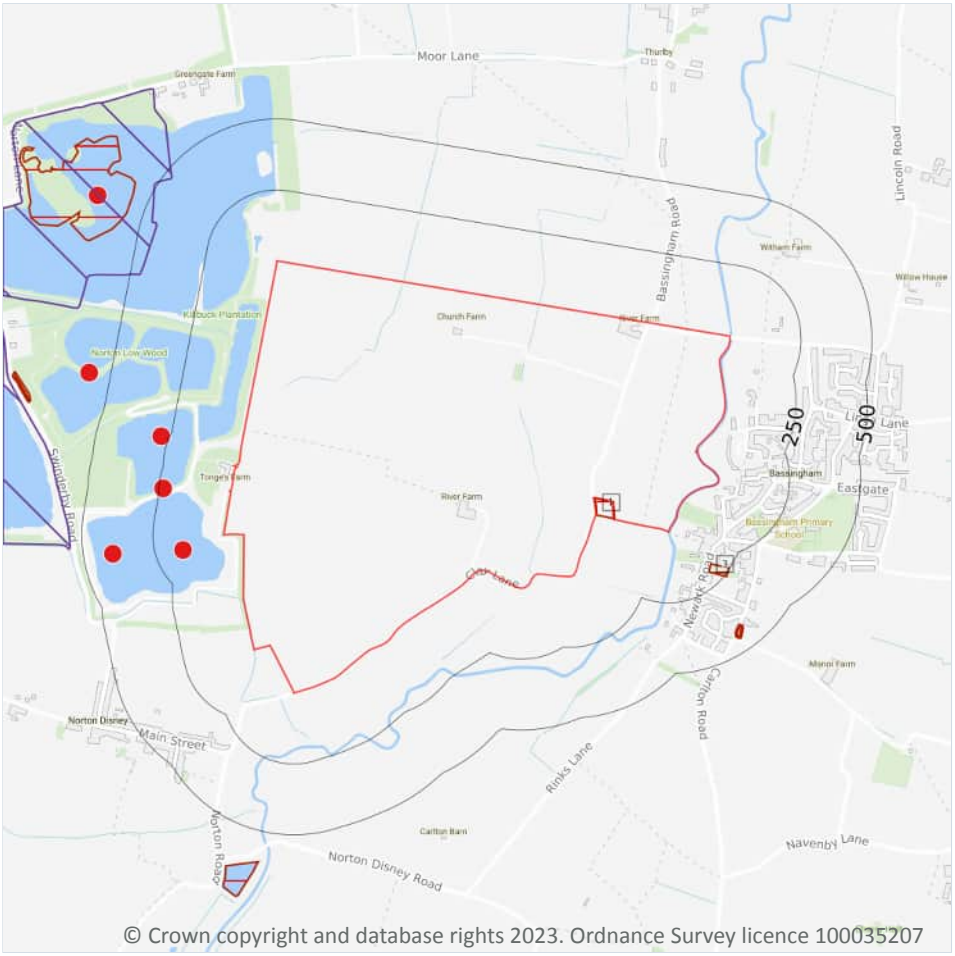
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 103 >**

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	4

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

Features are displayed on the Mining and ground workings map on **page 105 >**

ID	Location	Details	Description
2	154m W	Name: Norton Disney Quarry Address: NORTON DISNEY, Lincolnshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
4	236m W	Name: Norton Disney Quarry Address: NORTON DISNEY, Lincolnshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
5	277m W	Name: Norton Disney Quarry Address: NORTON DISNEY, Lincolnshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
6	395m W	Name: Norton Disney Quarry Address: NORTON DISNEY, Lincolnshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	**2**

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 105 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Sewage Works**	**1982**	**1:10000**
3	187m SE	Grave Yard	1982	1:10000

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	1

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.

Features are displayed on the Mining and ground workings map on **page 105 >**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
B	442m NW	Thurlby	Sand and gravel	Surface mineral working	Valid	1968

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

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).

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	6

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.

Location	Mineral type
32m NW	Stone
48m W	Stone
152m NW	Stone
160m W	Stone
318m W	Stone
448m W	Stone

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

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

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

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

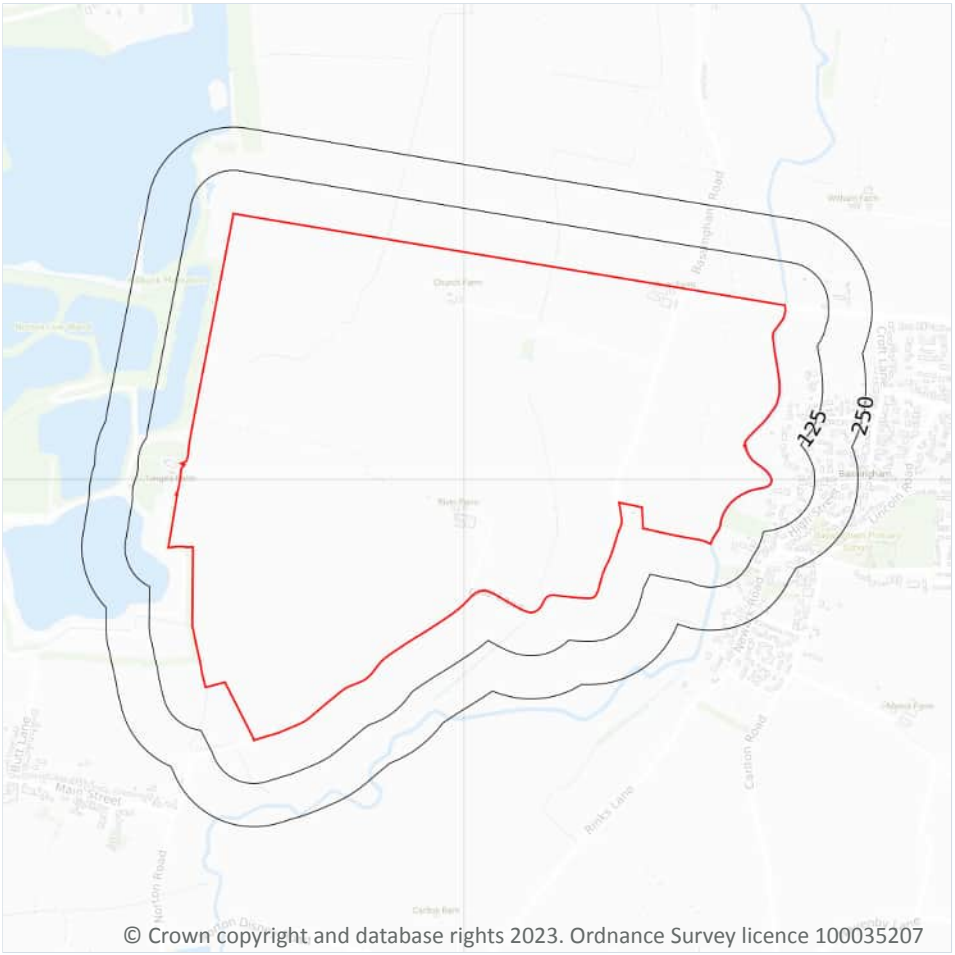
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

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

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

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

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

20.1 Radon

Records on site	1

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

Features are displayed on the Radon map on **page 113 >**

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 **47**

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
4m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
8m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
9m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
9m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
21m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
23m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
29m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
30m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
36m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 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 km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

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

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

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Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 11/10/2023

Your ref: 60700987

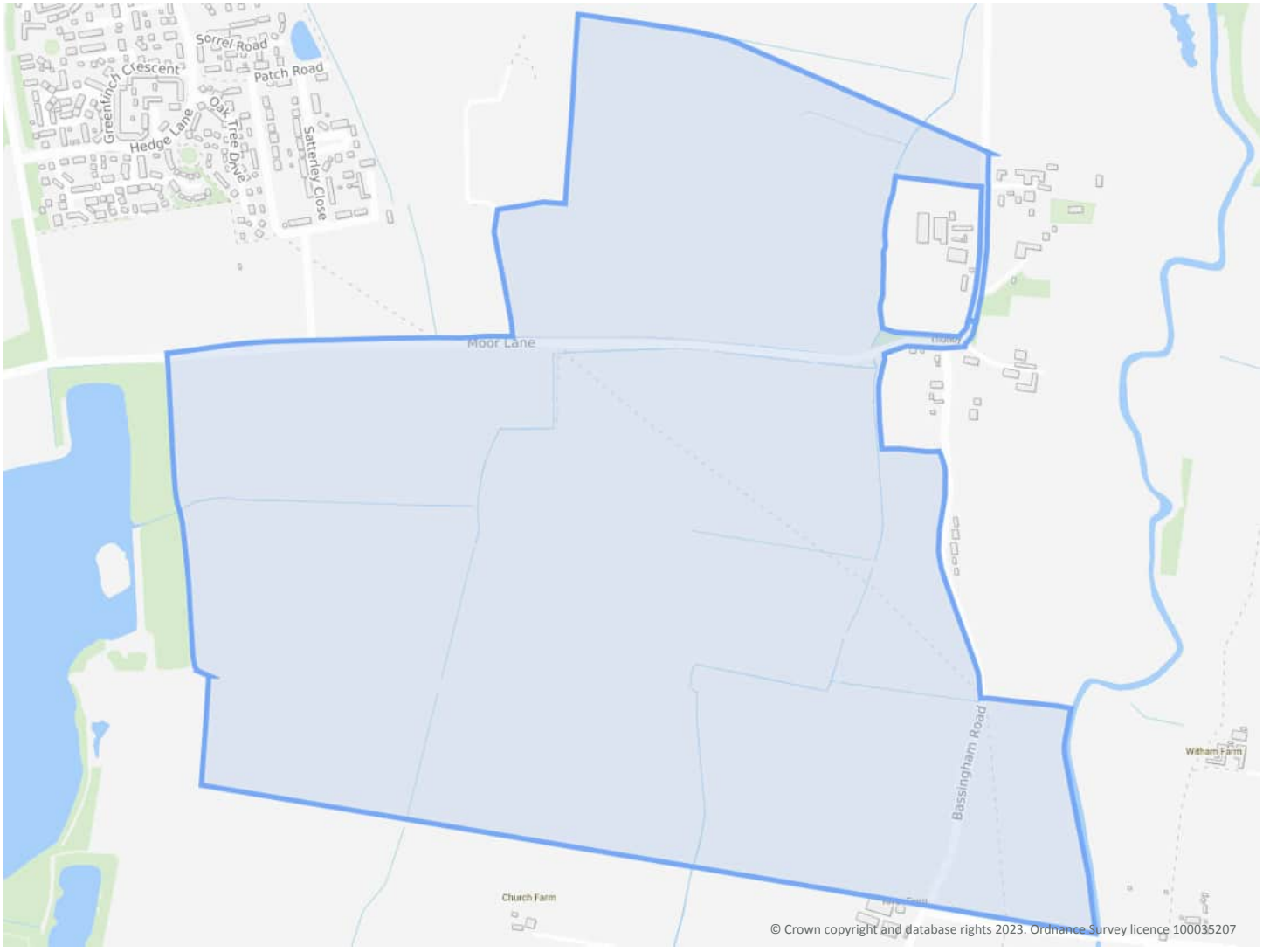
Our Ref: GSIP-2023-14155-15965_D2

Site Details

Location: 490273 361401

Area: 143.85 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

OS MasterMap site plan N/A: >10ha

Aerial image p. 9 >

groundsure.com/insightuserguide ↗

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

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Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	2	5	1	5	-
15 >	1.2 >	Historical tanks >	0	0	2	0	-
16 >	1.3 >	Historical energy features >	0	0	0	3	-
16	1.4	Historical petrol stations	0	0	0	0	-
16 >	1.5 >	Historical garages >	0	0	0	1	-
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 >	2	7	1	7	-
19 >	2.2 >	Historical tanks >	0	0	2	0	-
20 >	2.3 >	Historical energy features >	0	0	0	3	-
20	2.4	Historical petrol stations	0	0	0	0	-
20 >	2.5 >	Historical garages >	0	0	0	1	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	0	-
22 >	3.6 >	Licensed waste sites >	2	0	0	0	-
23 >	3.7 >	Waste exemptions >	0	25	17	1	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
27 >	4.1 >	Recent industrial land uses >	1	0	3	-	-
28	4.2	Current or recent petrol stations	0	0	0	0	-
28	4.3	Electricity cables	0	0	0	0	-
28	4.4	Gas pipelines	0	0	0	0	-
28	4.5	Sites determined as Contaminated Land	0	0	0	0	-

28	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
29	4.7	Regulated explosive sites	0	0	0	0	-
29	4.8	Hazardous substance storage/usage	0	0	0	0	-
29	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
29	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
29	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
30	4.12	Radioactive Substance Authorisations	0	0	0	0	-
30 >	**4.13 >**	**Licensed Discharges to controlled waters >**	8	1	0	4	-
32	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
32	4.15	Pollutant release to public sewer	0	0	0	0	-
32	4.16	List 1 Dangerous Substances	0	0	0	0	-
33 >	**4.17 >**	**List 2 Dangerous Substances >**	0	2	0	1	-
33 >	**4.18 >**	**Pollution Incidents (EA/NRW) >**	1	0	0	0	-
33	4.19	Pollution inventory substances	0	0	0	0	-
34	4.20	Pollution inventory waste transfers	0	0	0	0	-
34	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
35 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
37 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
39 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
42	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
42	5.5	Groundwater vulnerability- local information	None (within 0m)				
43 >	**5.6 >**	**Groundwater abstractions >**	0	0	0	1	7
45 >	**5.7 >**	**Surface water abstractions >**	1	0	0	4	6
48	5.8	Potable abstractions	0	0	0	0	0
48	5.9	Source Protection Zones	0	0	0	0	-
48	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
49 >	**6.1 >**	**Water Network (OS MasterMap) >**	47	6	4	-	-

54 >	6.2 >	Surface water features >	1	5	6	-	-
54 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
55 >	6.4 >	WFD Surface water bodies >	0	1	0	-	-
55 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
56 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
57	7.2	Historical Flood Events	0	0	0	-	-
57 >	7.3 >	Flood Defences >	3	2	3	-	-
58	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
58	7.5	Flood Storage Areas	0	0	0	-	-
59 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
60 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
61 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
63 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
64	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
65	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
65	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
65	10.4	Special Protection Areas (SPA)	0	0	0	0	0
65	10.5	National Nature Reserves (NNR)	0	0	0	0	0
66	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
66 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	2
66	10.8	Biosphere Reserves	0	0	0	0	0
66	10.9	Forest Parks	0	0	0	0	0
67	10.10	Marine Conservation Zones	0	0	0	0	0
67	10.11	Green Belt	0	0	0	0	0
67	10.12	Proposed Ramsar sites	0	0	0	0	0

67	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
67	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
68	10.15	Nitrate Sensitive Areas	0	0	0	0	0
68 >	**10.16 >**	**Nitrate Vulnerable Zones >**	1	0	0	0	1
69	10.17	SSSI Impact Risk Zones	0	-	-	-	-
69	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
70	11.1	World Heritage Sites	0	0	0	-	-
71	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
71	11.3	National Parks	0	0	0	-	-
71 >	**11.4 >**	**Listed Buildings >**	0	0	3	-	-
72	11.5	Conservation Areas	0	0	0	-	-
72 >	**11.6 >**	**Scheduled Ancient Monuments >**	0	0	1	-	-
72	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
73 >	**12.1 >**	**Agricultural Land Classification >**	Non Agricultural (within 250m)				
74	12.2	Open Access Land	0	0	0	-	-
74	12.3	Tree Felling Licences	0	0	0	-	-
74 >	**12.4 >**	**Environmental Stewardship Schemes >**	0	2	0	-	-
75 >	**12.5 >**	**Countryside Stewardship Schemes >**	3	2	1	-	-
Page	Section	**Habitat designations >**	On site	0-50m	50-250m	250-500m	500-2000m
76 >	**13.1 >**	**Priority Habitat Inventory >**	0	5	2	-	-
77	13.2	Habitat Networks	0	0	0	-	-
77	13.3	Open Mosaic Habitat	0	0	0	-	-
77	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
78 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
79	14.2	Artificial and made ground (10k)	0	0	0	0	-
80	14.3	Superficial geology (10k)	0	0	0	0	-

80	14.4	Landslip (10k)	0	0	0	0	-
81	14.5	Bedrock geology (10k)	0	0	0	0	-
81	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
82 >	15.1 >	**50k Availability >**	Identified (within 500m)				
83	15.2	Artificial and made ground (50k)	0	0	0	0	-
83	15.3	Artificial ground permeability (50k)	0	0	-	-	-
84 >	15.4 >	**Superficial geology (50k) >**	3	0	1	0	-
85 >	15.5 >	**Superficial permeability (50k) >**	Identified (within 50m)				
85	15.6	Landslip (50k)	0	0	0	0	-
85	15.7	Landslip permeability (50k)	None (within 50m)				
86 >	15.8 >	**Bedrock geology (50k) >**	1	0	0	0	-
87 >	15.9 >	**Bedrock permeability (50k) >**	Identified (within 50m)				
87	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
88 >	16.1 >	**BGS Boreholes >**	0	2	8	-	-
Page	Section	**Natural ground subsidence >**					
90 >	17.1 >	**Shrink swell clays >**	Low (within 50m)				
92 >	17.2 >	**Running sands >**	Low (within 50m)				
94 >	17.3 >	**Compressible deposits >**	Moderate (within 50m)				
96 >	17.4 >	**Collapsible deposits >**	Very low (within 50m)				
97 >	17.5 >	**Landslides >**	Very low (within 50m)				
98 >	17.6 >	**Ground dissolution of soluble rocks >**	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
100	18.1	BritPits	0	0	0	0	-
101 >	18.2 >	**Surface ground workings >**	0	1	0	-	-
101	18.3	Underground workings	0	0	0	0	0
101	18.4	Underground mining extents	0	0	0	0	-
101 >	18.5 >	**Historical Mineral Planning Areas >**	0	0	0	1	-

102	18.6	Non-coal mining	0	0	0	0	0
102	18.7	JPB mining areas	None (within 0m)				
102	18.8	The Coal Authority non-coal mining	0	0	0	0	-
102 >	**18.9 >**	**Researched mining >**	0	0	1	1	-
103	18.10	Mining record office plans	0	0	0	0	-
103	18.11	BGS mine plans	0	0	0	0	-
103	18.12	Coal mining	None (within 0m)				
103	18.13	Brine areas	None (within 0m)				
104	18.14	Gypsum areas	None (within 0m)				
104	18.15	Tin mining	None (within 0m)				
104	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
105	19.1	Natural cavities	0	0	0	0	-
105	19.2	Mining cavities	0	0	0	0	0
105	19.3	Reported recent incidents	0	0	0	0	-
105	19.4	Historical incidents	0	0	0	0	-
106	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon >**					
107 >	**20.1 >**	**Radon >**	Less than 1% (within 0m)				
Page	Section	**Soil chemistry >**	On site	0-50m	50-250m	250-500m	500-2000m
109 >	**21.1 >**	**BGS Estimated Background Soil Chemistry >**	39	5	-	-	-
111	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
112	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
113	22.1	Underground railways (London)	0	0	0	-	-
113	22.2	Underground railways (Non-London)	0	0	0	-	-
113	22.3	Railway tunnels	0	0	0	-	-
113	22.4	Historical railway and tunnel features	0	0	0	-	-
113	22.5	Royal Mail tunnels	0	0	0	-	-

114	22.6	Historical railways	0	0	0	-	-
114	22.7	Railways	0	0	0	-	-
114	22.8	Crossrail 1	0	0	0	0	-
114	22.9	Crossrail 2	0	0	0	0	-
114	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 143.85ha

Recent site history - 2018 aerial photograph



Capture Date: 15/05/2018

Site Area: 143.85ha

Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 143.85ha

Recent site history - 2007 aerial photograph



Capture Date: 18/09/2007

Site Area: 143.85ha

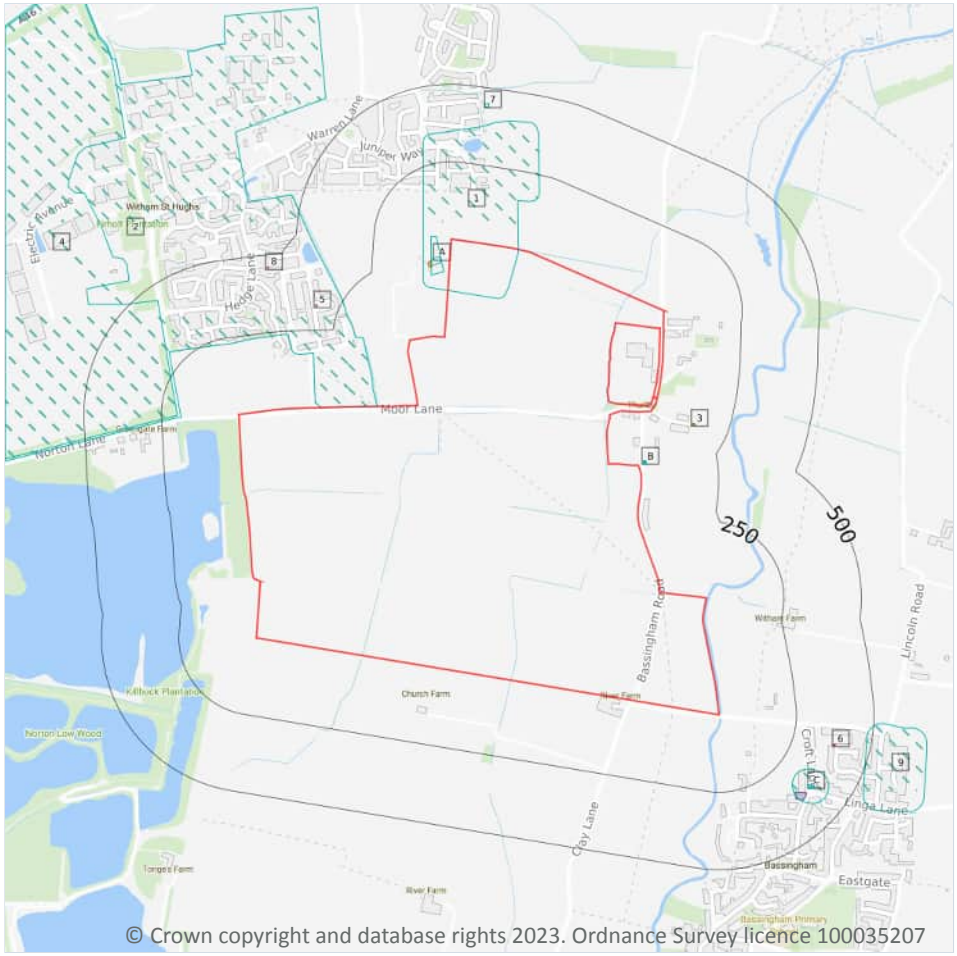
Recent site history - 1999 aerial photograph



Capture Date: 11/07/1999

Site Area: 143.85ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	13

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Airfield**	**1955**	**1573815**

ID	Location	Land use	Dates present	Group ID
2	**On site**	**Airfield**	**1965**	**1616132**
A	17m N	Sewage Works	1979	1577568
B	17m E	Smithy	1886 - 1904	1746822
B	18m E	Smithy	1955	1720522
B	19m E	Smithy	1904 - 1948	1683016
A	28m N	Unspecified Tanks	1979	1580754
4	198m W	Airfield	1979	1642458
C	314m SE	Smithy	1948	1737997
C	365m SE	Smithy	1904	1742349
C	365m SE	Smithy	1955	1740223
7	437m N	Pump House	1979	1613257
9	483m SE	Windmill	1904 - 1948	1641218

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**2**

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
A	58m N	Unspecified Tank	1975	256672
3	134m E	Unspecified Tanks	1975	262250

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	3

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
5	319m NW	Electricity Substation	1975	149430
6	383m SE	Electricity Substation	1997	149428
8	457m NW	Electricity Substation	1975	149432

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	1

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
C	350m SE	Garage	1975	47556

This data is sourced from Ordnance Survey / Groundsure.

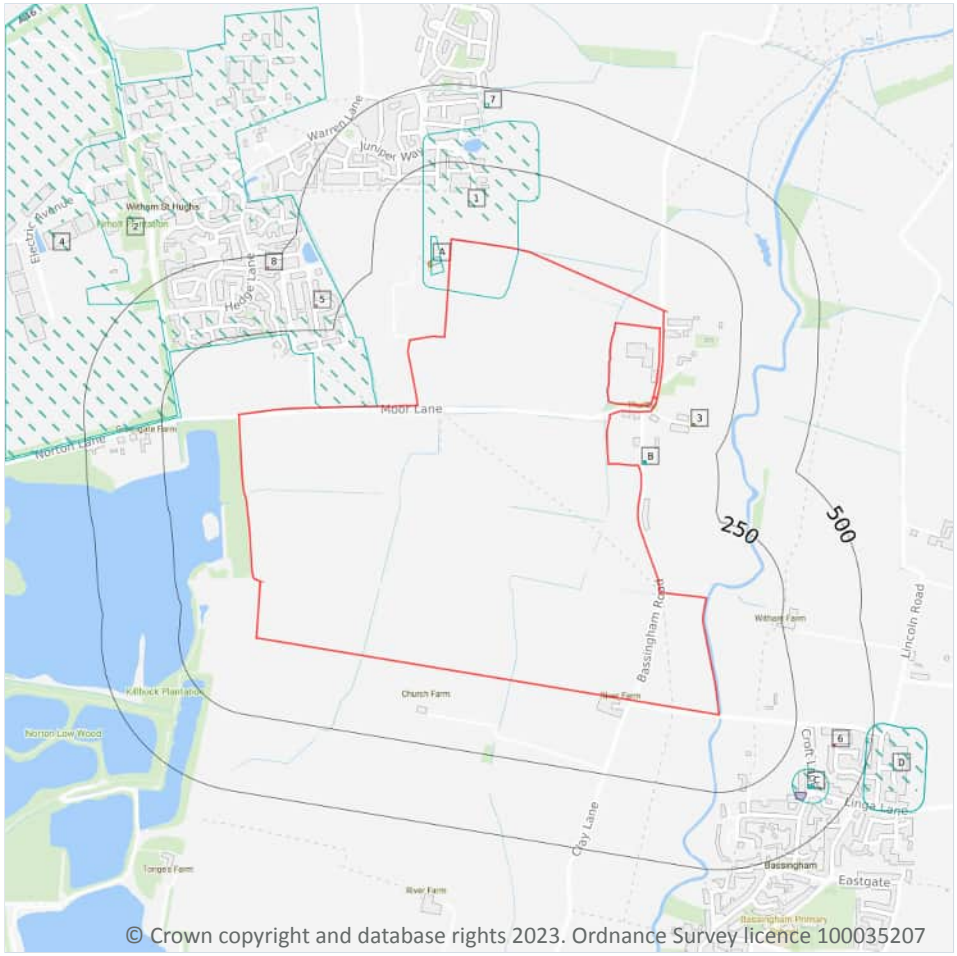
1.6 Historical military land

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



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2.1 Historical industrial land uses

Records within 500m	17

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

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

ID	Location	Land Use	Date	Group ID
1	**On site**	**Airfield**	**1955**	**1573815**
2	**On site**	**Airfield**	**1965**	**1616132**
A	17m N	Sewage Works	1979	1577568

ID	Location	Land Use	Date	Group ID
B	17m E	Smithy	1904	1746822
B	18m E	Smithy	1955	1720522
B	19m E	Smithy	1948	1683016
B	19m E	Smithy	1904	1683016
B	21m E	Smithy	1886	1746822
A	28m N	Unspecified Tanks	1979	1580754
4	198m W	Airfield	1979	1642458
C	314m SE	Smithy	1948	1737997
C	365m SE	Smithy	1904	1742349
C	365m SE	Smithy	1955	1740223
C	367m SE	Smithy	1904	1742349
7	437m N	Pump House	1979	1613257
D	483m SE	Windmill	1948	1641218
D	483m SE	Windmill	1904	1641218

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**2**

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
A	58m N	Unspecified Tank	1975	256672
3	134m E	Unspecified Tanks	1975	262250

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	3

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'.

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

ID	Location	Land Use	Date	Group ID
5	319m NW	Electricity Substation	1975	149430
6	383m SE	Electricity Substation	1997	149428
8	457m NW	Electricity Substation	1975	149432

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	1

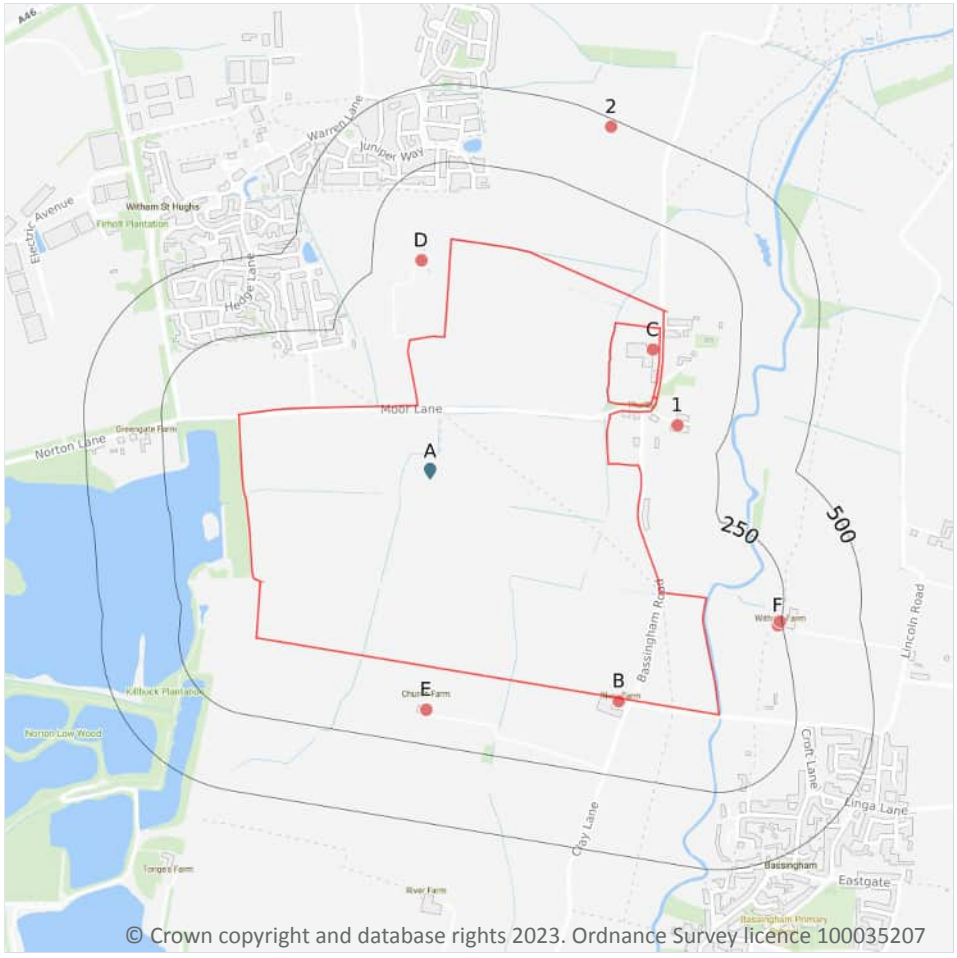
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

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

ID	Location	Land Use	Date	Group ID
C	350m SE	Garage	1975	47556

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



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Site Outline

Search buffers in metres (m)

Licensed 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	0

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

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

3.6 Licensed waste sites

Records within 500m	2

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

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

ID	Location	Details		
A	**On site**	**Site Name: South Farm Digestate Holding Lagoon** **Site Address: South Farm, Moor Lane, Thurlby, Lincolnshire, LN5 9FA** **Correspondence Address: -**	**Type of Site: Storage of anaerobic digestate 75,000 total** **Size: 25000 tonnes** **Environmental Permitting Regulations (Waste) Licence Number: HAS001** **EPR reference: EA/EPR/GB3904UU/A001** **Operator: H And S Roe And Sons Farms Limited** **Waste Management licence No: 405876** **Annual Tonnage: 74999**	**Issue Date: 13/08/2019** **Effective Date: -** **Modified: -** **Surrendered Date: -** **Expiry Date: -** **Cancelled Date: -** **Status: Issued**

ID	Location	Details		
A	**On site**	**Site Name: South Farm Digestate Holding Lagoon** **Site Address: H. & S. Roe & Sons Farms Limited, South Farm, Moor Lane, Thurlby, Lincolnshire, LN5 9FA** **Correspondence Address: -**	**Type of Site: Storage of wastes to be used in land treatment** **Size: >= 25000 tonnes 75000 tonnes** **Environmental Permitting Regulations (Waste) Licence Number: 633034** **EPR reference: EA/EPR/GB3904UU** **Operator: H. & S. Roe & Sons Farms Limited** **Waste Management licence No: 405876** **Annual Tonnage: 74999**	**Issue Date: 13/08/2019** **Effective Date: 13/08/2019** **Modified: -** **Surrendered Date: 13/08/2019** **Expiry Date: -** **Cancelled Date: 13/08/2019** **Status: Surrendered**

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

3.7 Waste exemptions

Records within 500m **43**

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

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

ID	Location	Site	Reference	Category	Sub-Category	Description
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX183970	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX183970	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX183970	Disposing of waste exemption	On a farm	Burning waste in the open
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Disposing of waste exemption	On a farm	Burning waste in the open

ID	Location	Site	Reference	Category	Sub-Category	Description
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX017439	Using waste exemption	On a farm	Use of waste for a specified purpose
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX313464	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX313464	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
B	11m SE	RIVER FARM, THURLBY ROAD, BASSINGHAM, LINCOLN, LN5 9LQ	WEX313464	Disposing of waste exemption	On a farm	Burning waste in the open
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Treating waste exemption	Agricultural Waste Only	Aerobic composting and associated prior treatment
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Treating waste exemption	Agricultural Waste Only	Treatment of sheep dip for disposal
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Spreading of plant matter to confer benefit
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Incorporation of ash into soil
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Pig and poultry ash
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Burning of waste as a fuel in a small appliance
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
C	23m NE	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Use of waste to manufacture finished goods
D	94m N	Swinderby STW Off Moor Lane Lincoln LN69QB	EPR/UE5581NN/A001	Treating waste exemption	Non-Agricultural Waste Only	Screening and blending of waste
D	94m N	Swinderby STW Off Moor Lane Lincoln LN69QB	EPR/UE5581NN/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste in construction
1	94m E	SOUTH FARM, THURLBY, LINCOLN, LN5 9EG	WEX208124	Using waste exemption	On a Farm	Use of waste in construction
E	140m S	River Farm Thurlby Road LINCOLN LN5 9LQ	EPR/SH0470GB/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
E	140m S	River Farm Thurlby Road LINCOLN LN5 9LQ	EPR/SH0470GB/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
E	140m S	River Farm Thurlby Road LINCOLN LN5 9LQ	EPR/SH0470GB/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
E	140m S	River Farm Thurlby Road LINCOLN LN5 9LQ	EPR/SH0470GB/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
E	140m S	River Farm Thurlby Road LINCOLN LN5 9LQ	EPR/SH0470GB/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
F	234m E	WITHAM FARMHOUSE, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX170246	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
F	234m E	WITHAM FARMHOUSE, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX009172	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
F	234m E	WITHAM FARMHOUSE, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX304118	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
F	242m E	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
F	242m E	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
F	242m E	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
F	242m E	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
F	242m E	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
F	242m E	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
2	474m N	Land at SK9058062400	EPR/CE5346EZ/A001	Storing waste exemption	Non-Agricultural Waste Only	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

List 2 Dangerous Substances

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	4

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Company	Address	Activity	Category
1	**On site**	**Slurry Tanks**	**Lincolnshire, LN5**	**Waste Storage, Processing and Disposal**	**Infrastructure and Facilities**
4	90m N	Sewage Works	Lincolnshire, LN6	Waste Storage, Processing and Disposal	Infrastructure and Facilities
5	156m SE	Solar Panels	Lincolnshire, LN5	Energy Production	Industrial Features

ID	Location	Company	Address	Activity	Category
6	178m NW	Pumping Station	Lincolnshire, LN6	Water Pumping Stations	Industrial Features

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	13

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 27 >**

ID	Location	Address	Details	
A	**On site**	**SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG**	**Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 2 Receiving Water: unnamed tributary River Witham**	**Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 14/10/2008 Effective Date: 01/04/2009 Revocation Date: 28/03/2010**
A	**On site**	**SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG**	**Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 5 Receiving Water: unnamed tributary River Witham**	**Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/03/2010 Effective Date: 01/01/2013 Revocation Date: 30/03/2015**
A	**On site**	**SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG**	**Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 3 Receiving Water: unnamed tributary River Witham**	**Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/03/2010 Effective Date: 29/03/2010 Revocation Date: 31/12/2012**
A	**On site**	**SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG**	**Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 4 Receiving Water: unnamed tributary River Witham**	**Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/03/2010 Effective Date: 31/03/2015 Revocation Date: 11/01/2017**

ID	Location	Address	Details	
A	**On site**	**SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG**	**Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY** **Permit Number: ANNNF13397** **Permit Version: 1** **Receiving Water: unnamed tributary River Witham**	**Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY)** **Issue date: 24/10/1997** **Effective Date: 24/10/1997** **Revocation Date: 31/03/2009**
A	**On site**	**SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG**	**Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY** **Permit Number: ANNNF13397** **Permit Version: 4** **Receiving Water: unnamed tributary River Witham**	**Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY)** **Issue date: 29/03/2010** **Effective Date: 31/03/2015** **Revocation Date: 11/01/2017**
A	**On site**	**SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG**	**Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY** **Permit Number: ANNNF13397** **Permit Version: 6** **Receiving Water: unnamed tributary River Witham**	**Status: VARIED UNDER EPR 2010** **Issue date: 12/01/2017** **Effective Date: 12/01/2017** **Revocation Date: -**
A	**On site**	**SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG**	**Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY** **Permit Number: ANNNF13397** **Permit Version: 6** **Receiving Water: unnamed tributary River Witham**	**Status: VARIED UNDER EPR 2010** **Issue date: 12/01/2017** **Effective Date: 12/01/2017** **Revocation Date: -**
3	2m E	THURLBY PUMPING STN, THURLBY, LINCOLN, LN5	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: AW3NF839 Permit Version: 3 Receiving Water: Unknown Trib.	Status: CONSENT REVOKED - DISCHARGE CEASED (WRA 91, SCHED 10 & 6) Issue date: 25/08/1989 Effective Date: 25/08/1989 Revocation Date: 20/04/2005
7	313m NE	ELMTREE, HADDINGTON	Effluent Type: UNSPECIFIED Permit Number: PR3NFA1190 Permit Version: 1 Receiving Water: -	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 07/06/1963 Effective Date: 07/06/1963 Revocation Date: 12/03/1991
8	320m SE	BASSINGHAM STW, HALLFIELD, BASSINGHAM, LINCOLN, LN5 9PF	Effluent Type: UNSPECIFIED Permit Number: AW3NF133 Permit Version: 1 Receiving Water: River Witham NT	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 10/09/1985 Effective Date: 10/09/1985 Revocation Date: 28/05/1993

ID	Location	Address	Details	
10	358m SW	TONGE'S FARM QUARRY, BUTT LANE, NORTON DISNEY, LINCOLN, LINCOLNSHIRE, LN6 9JT	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: PRNNF12996 Permit Version: 1 Receiving Water: TRIB OF RIVER WITHAM	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 01/09/2003 Effective Date: 01/09/2003 Revocation Date: 18/03/2008
11	453m SW	TONGE'S FARM QUARRY, BUTT LANE, NORTON DISNEY, LINCOLN, LINCOLNSHIRE, LN6 9JT	Effluent Type: TRADE DISCHARGES - MINERAL WORKINGS Permit Number: PRNNF12996 Permit Version: 2 Receiving Water: TRIB OF RIVER WITHAM	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 19/03/2008 Effective Date: 19/03/2008 Revocation Date: 05/05/2011

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	3

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.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Name	Status	Receiving Water	Authorised Substances
B	37m N	Danwood Group Limited	Not Active	Na	pH
B	37m N	Swinderby(exraf) Stw	Not Active	-	-
9	322m NW	Vip Bin Cleaning	Not Active	Na	pH

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Details	
2	**On site**	**Incident Date: 06/05/2002** **Incident Identification: 76810** **Pollutant: Pollutant Not Identified** **Pollutant Description: Not Identified**	**Water Impact: Category 3 (Minor)** **Land Impact: Category 3 (Minor)** **Air Impact: Category 4 (No Impact)**

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

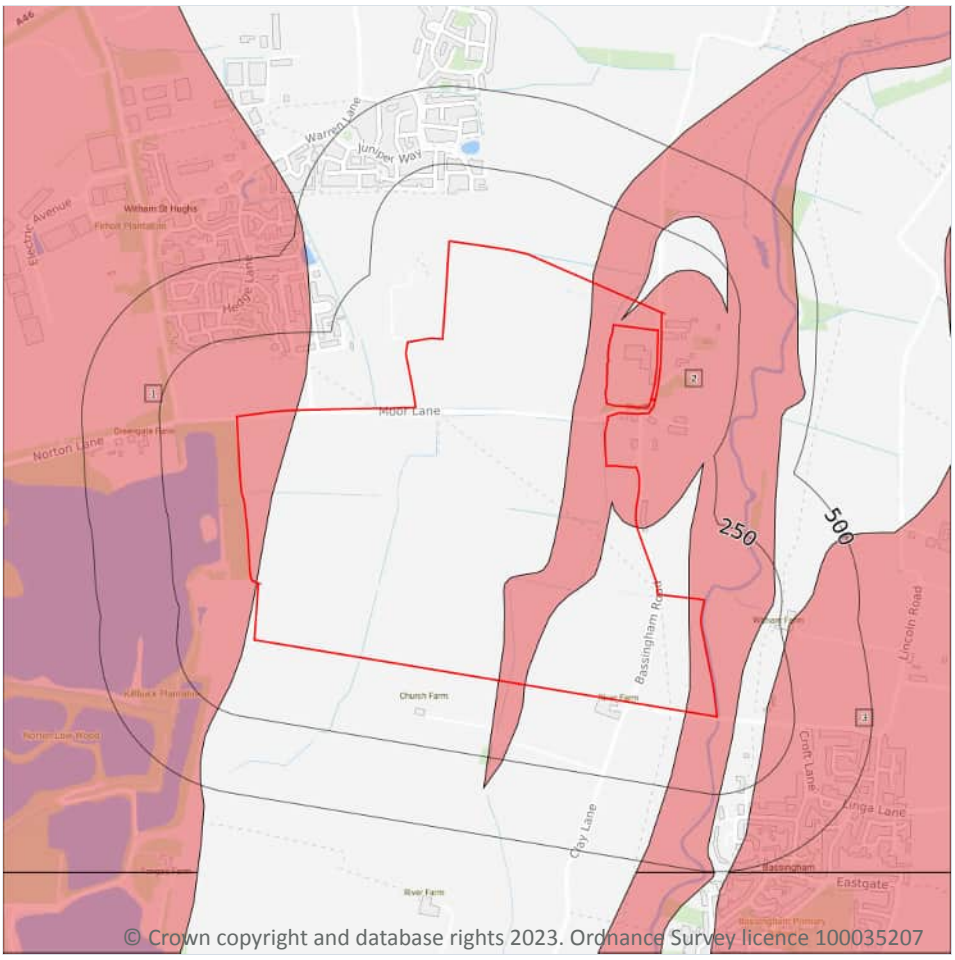
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



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.

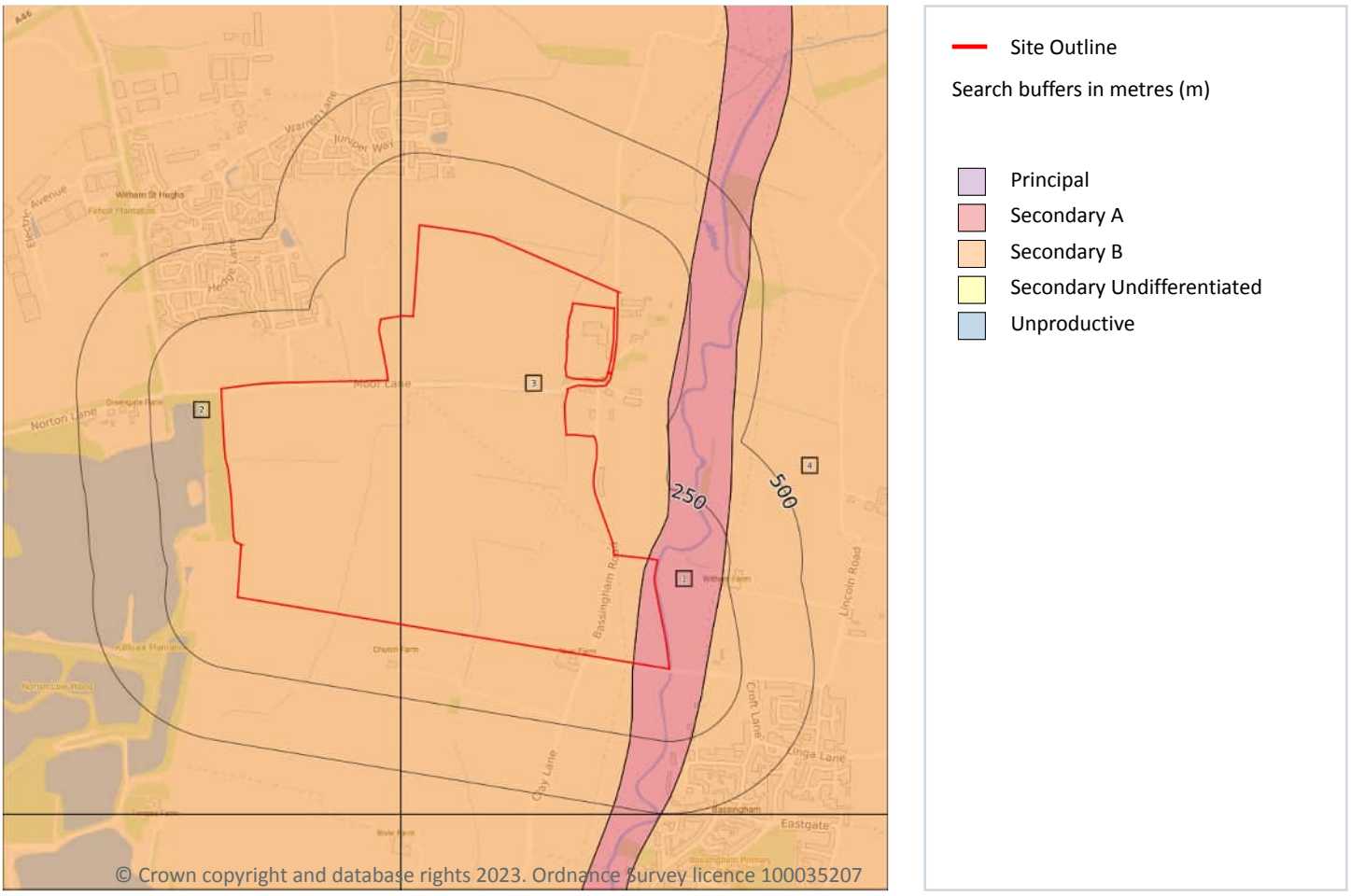
Features are displayed on the Hydrogeology map on **page 35 >**

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

ID	Location	Designation	Description
3	157m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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

Bedrock aquifer



5.2 Bedrock aquifer

Records within 500m	4

Aquifer status of groundwater held within bedrock geology.

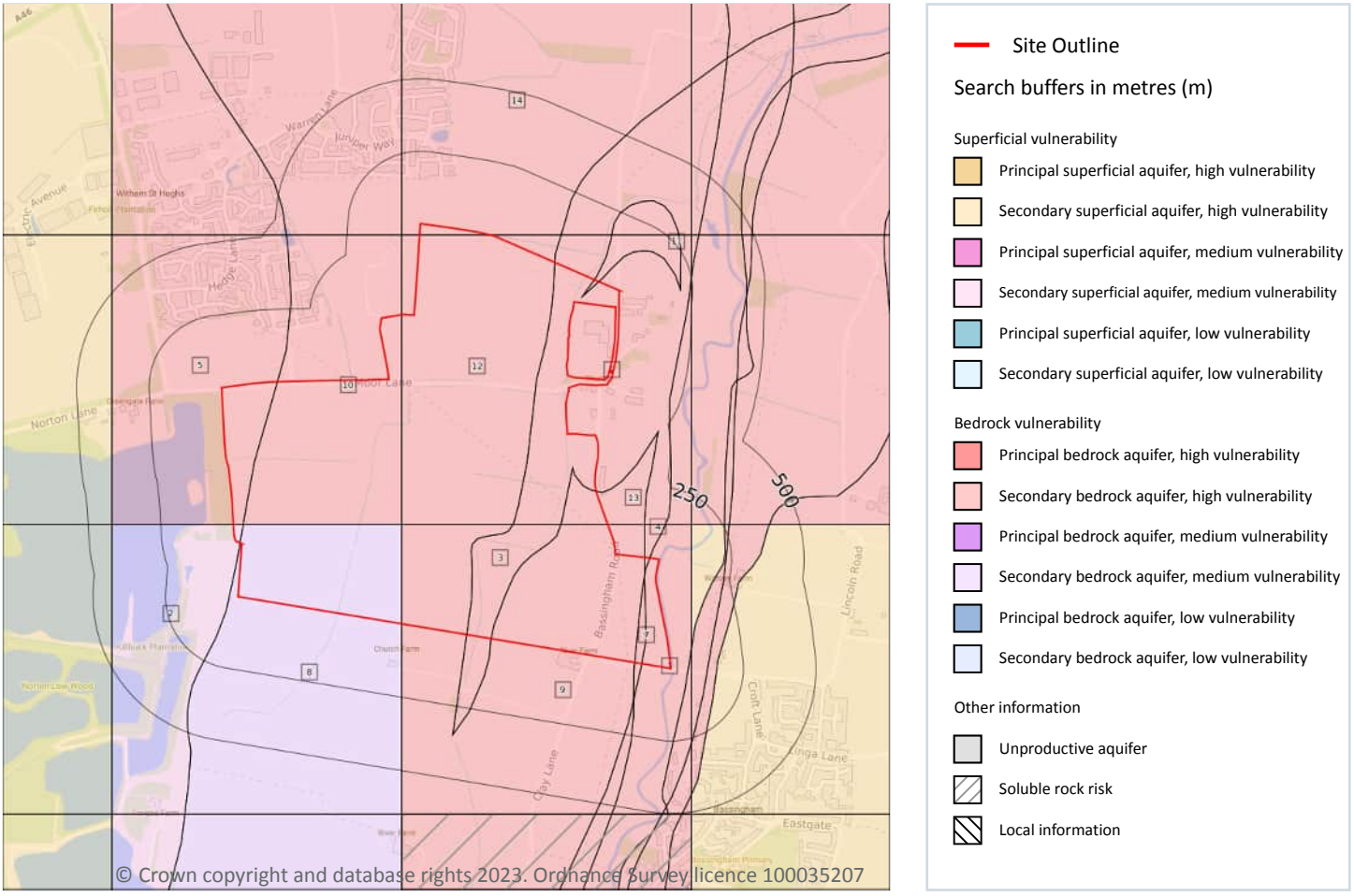
Features are displayed on the Bedrock aquifer map on **page 37 >**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

ID	Location	Designation	Description
3	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
4	125m SE	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-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	14

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 39 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
7	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
8	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
11	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
12	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
13	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

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

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	**0**

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

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

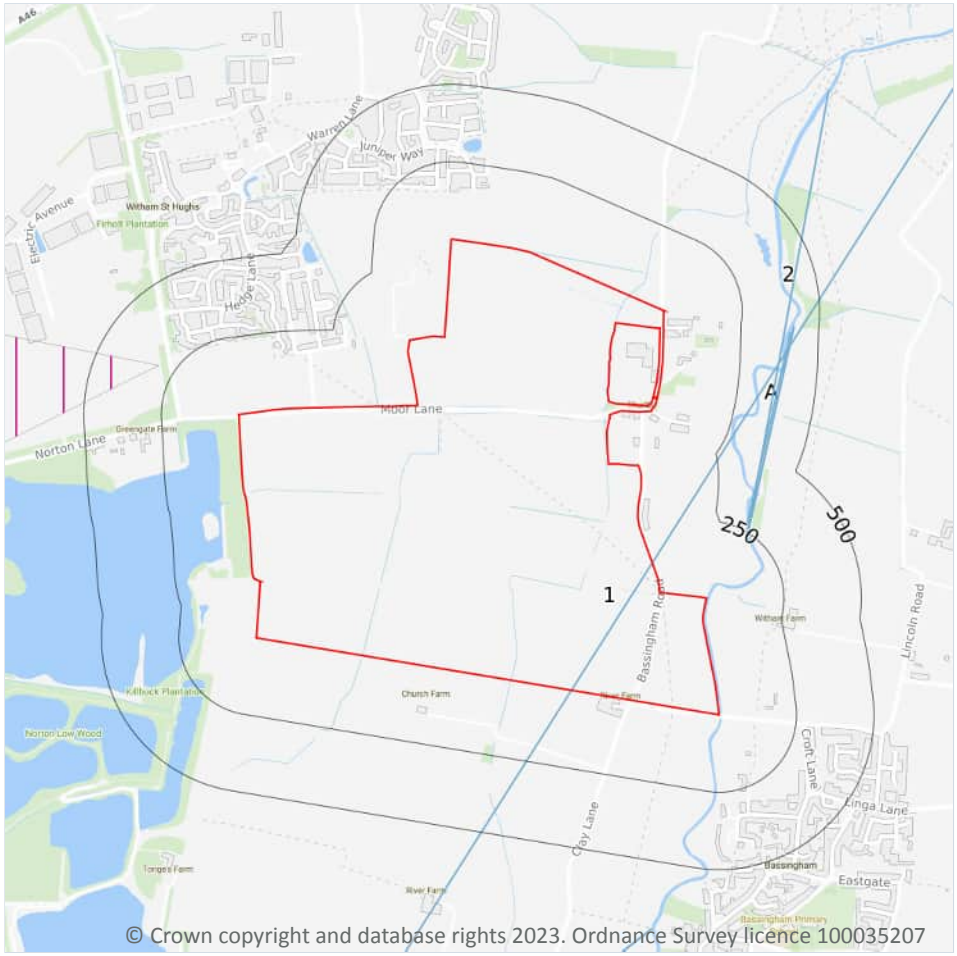
5.5 Groundwater vulnerability- local information

Records on site	**0**

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

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	8

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 43 >**

ID	Location	Details	
3	303m NW	Status: Active Licence No: MD/028/0069/038 Details: Dewatering Direct Source: Groundwater Midlands Region Point: ABSTRACTION AREA EDGED IN RED AT SWINDERBY QUARRY Data Type: Poly4 Name: CEMEX UK MATERIALS LIMITED Easting: 487181 Northing: 361591	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPS/NA/000078 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
-	914m W	Status: Active Licence No: 4/30/03/*G/0049 Details: Mineral Washing Direct Source: GROUND WATER SOURCE OF SUPPLY Point: GRAVEL PIT - THURLBY Data Type: Point Name: CEMEX UK MATERIALS LTD Easting: 488490 Northing: 361090	Annual Volume (m^3): 509163 Max Daily Volume (m^3): 2046 Original Application No: NPS/WR/030733 Original Start Date: 01/06/1973 Expiry Date: - Issue No: 104 Version Start Date: 21/12/2018 Version End Date: -
-	1076m W	Status: Historical Licence No: 4/30/03/*G/0108 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: THURLBY LAKE Data Type: Point Name: H W SMITH & SONS (CARLTON) LTD Easting: 488360 Northing: 360710	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 650 Original Application No: - Original Start Date: 24/06/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 20/04/2012 Version End Date: -
-	1326m SW	Status: Historical Licence No: 4/30/03/*G/0108 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT Data Type: Point Name: H W SMITH & SONS (CARLTON) LTD Easting: 488760 Northing: 359610	Annual Volume (m^3): 50000 Max Daily Volume (m^3): 650 Original Application No: - Original Start Date: 24/06/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 20/04/2012 Version End Date: -
-	1528m SW	Status: Active Licence No: AN/030/0003/010 Details: Dewatering Direct Source: GROUND WATER SOURCE OF SUPPLY Point: SUMP(S) AT NORTON BOTTOMS QUARRY, NORTON DISNEY Data Type: Poly4 Name: Breedon Trading Limited Easting: 486500 Northing: 359250	Annual Volume (m^3): 1279606 Max Daily Volume (m^3): 4536 Original Application No: NPS/NA/000609 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -

ID	Location	Details	
-	1690m W	Status: Historical Licence No: 03/28/69/0039 Details: General Farming & Domestic Direct Source: Groundwater Midlands Region Point: OAKHILL FARM - WELL Data Type: Point Name: HAY Easting: 487700 Northing: 361200	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 07/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2000 Version End Date: -
-	1772m W	Status: Active Licence No: MD/028/0069/039 Details: Mineral Washing Direct Source: Groundwater Midlands Region Point: POINT A AT SWINDERBY QUARRY, SWINDERBY Data Type: Point Name: CEMEX UK MATERIALS LIMITED Easting: 487608 Northing: 361396	Annual Volume (m^3): 1080501 Max Daily Volume (m^3): 5400 Original Application No: NPS/NA/000129 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
-	1964m SW	Status: Historical Licence No: 4/30/03/*G/0028 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WHITE HALL WELL NORTON DISNEY Data Type: Point Name: NORTON DISNEY ESTATE Easting: 487600 Northing: 360050	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/04/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2004 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	**11**

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 43 >**

ID	Location	Details	
1	**On site**	**Status: Historical** **Licence No: 4/30/03/*S/0102** **Details: Spray Irrigation - Direct** **Direct Source: SURFACE WATER SOURCE OF SUPPLY** **Point: RIVER WITHAM - SCOTWATER TO AUBOURN BR** **Data Type: Line** **Name: H W SMITH & SONS (CARLTON) LTD** **Easting: 489290** **Northing: 358750**	**Annual Volume (m^3): 91000** **Max Daily Volume (m^3): 1500** **Original Application No: -** **Original Start Date: 21/05/2002** **Expiry Date: 31/03/2022** **Issue No: 4** **Version Start Date: 16/12/2011** **Version End Date: -**
A	262m E	Status: Historical Licence No: 4/30/03/*S/0102 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
A	262m E	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
2	263m E	Status: Active Licence No: AN/030/0003/007 Details: Trickle Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BETWEEN POINTS E AND F, RIVER WITHAM, BASSINGHAM Data Type: Line Name: J & J Burnett Limited Easting: 491024 Northing: 361105	Annual Volume (m^3): 18920 Max Daily Volume (m^3): 1000 Original Application No: NPS/NA/000192 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
A	274m E	Status: Historical Licence No: 4/30/03/*S/0059 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 491020 Northing: 361120	Annual Volume (m^3): 20457 Max Daily Volume (m^3): 900 Original Application No: - Original Start Date: 01/06/1983 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1993 Version End Date: -

ID	Location	Details	
B	718m S	Status: Historical Licence No: 4/30/03/*S/0102 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - NORTON DISNEY TO BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 489296 Northing: 358716	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
B	718m S	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - NORTON DISNEY TO BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 489296 Northing: 358716	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
-	956m S	Status: Historical Licence No: 4/30/03/*S/0097 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: TRIB R WITHAM, NORTON DISNEY Data Type: Line Name: C A SHAW FARMS Easting: 489910 Northing: 359360	Annual Volume (m^3): 9091 Max Daily Volume (m^3): 1091 Original Application No: - Original Start Date: 01/09/1994 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1994 Version End Date: -
-	1238m S	Status: Active Licence No: AN/030/0003/007 Details: Trickle Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BETWEEN POINTS C AND D, RIVER WITHAM, BASSINGHAM Data Type: Line Name: J & J Burnett Limited Easting: 489298 Northing: 358720	Annual Volume (m^3): 18920 Max Daily Volume (m^3): 1000 Original Application No: NPS/NA/000192 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -

ID	Location	Details	
-	1314m S	Status: Historical Licence No: 4/30/03/*S/0097 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM AT NORTON DISNEY Data Type: Point Name: C A SHAW FARMS Easting: 489910 Northing: 359340	Annual Volume (m^3): 9091 Max Daily Volume (m^3): 1091 Original Application No: - Original Start Date: 01/09/1994 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1994 Version End Date: -
-	1998m S	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - CARLTON LE MOORLAND Data Type: Point Name: H W SMITH & SONS (CARLTON) LTD Easting: 489290 Northing: 358750	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 4 Version Start Date: 16/12/2011 Version End Date: -

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

5.8 Potable abstractions

Records within 2000m	0

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

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

5.9 Source Protection Zones

Records within 500m	0

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

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

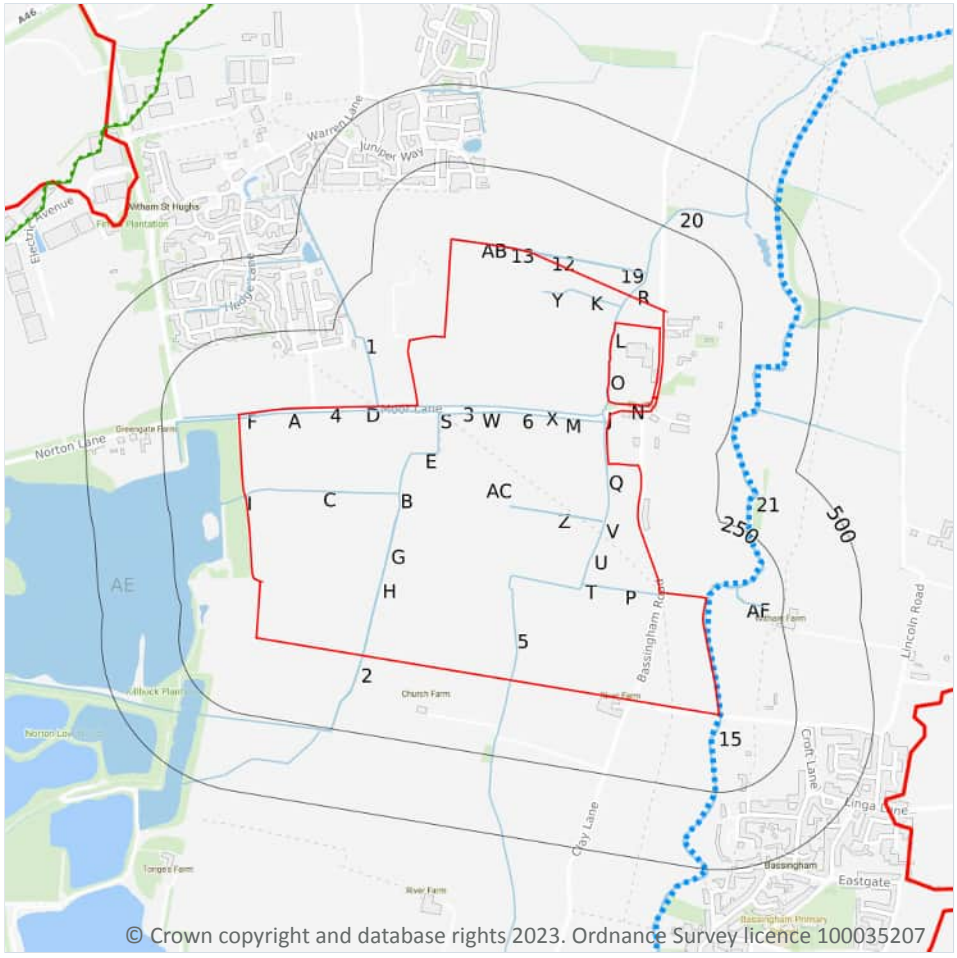
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

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

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

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**57**

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

Features are displayed on the Hydrology map on **page 49 >**

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

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
L	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
M	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
T	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
U	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
V	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
W	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
X	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
Y	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
Y	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
Z	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
12	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
13	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
AB	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
15	4m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
I	5m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
19	48m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
AE	80m W	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
20	88m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AF	98m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
21	103m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**12**

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

Features are displayed on the Hydrology map on **page 49 >**

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 49 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
AC	**On site**	**River**	**Witham - conf Cringle Bk to conf Brant**	**GB105030056780**	**Witham Upper**	**Witham**

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 49 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
16	4m SE	River	Witham - conf Cringle Bk to conf Brant	GB105030056780 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	1

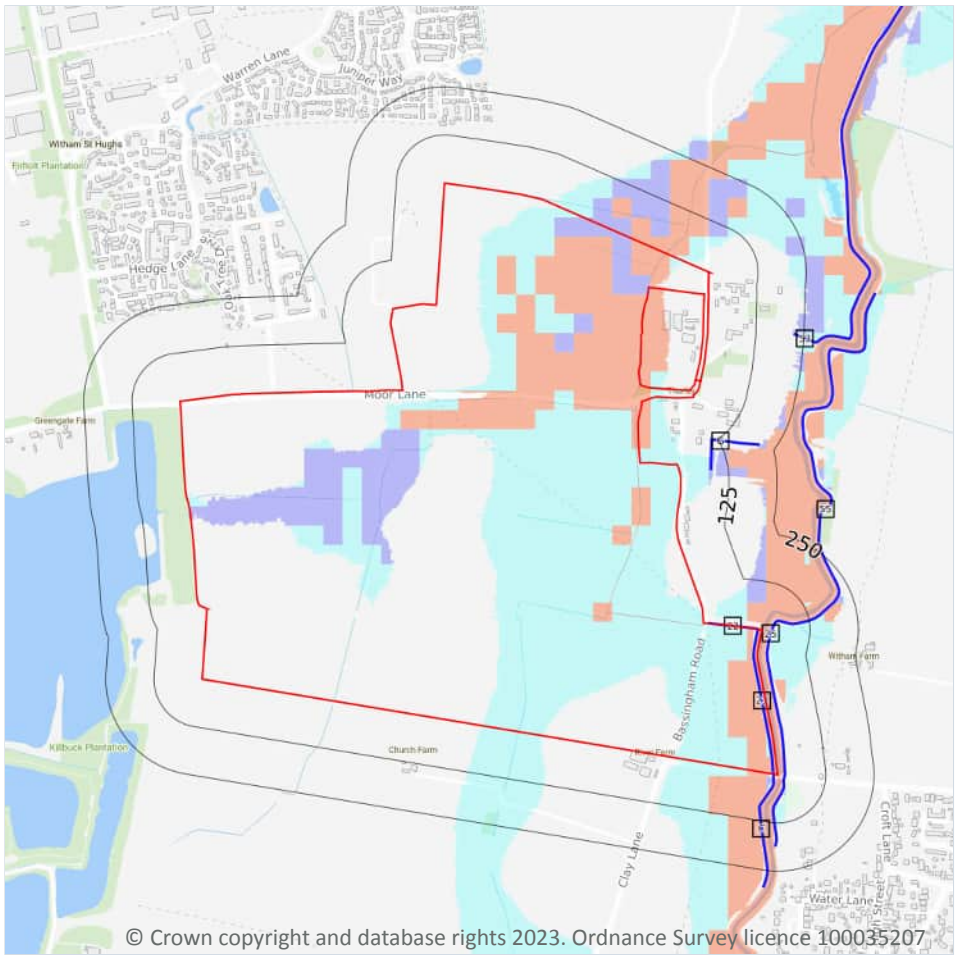
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 49 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
AC	**On site**	**Witham Lias**	**GB40502G401400 ↗**	**Good**	**Good**	**Good**	**2019**

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

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	38

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).

Features are displayed on the River and coastal flooding map on **page 56 >**

Distance	Flood risk category
On site	**High**
0 - 50m	High

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	**8**

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.

Features are displayed on the River and coastal flooding map on **page 56 >**

ID	Location	Update
22	**On site**	**08/11/2022**
23	**On site**	**08/11/2022**
C	**On site**	**08/11/2022**
D	18m SE	08/11/2022
25	23m SE	08/11/2022
G	80m E	08/11/2022
53	222m NE	08/11/2022
55	225m E	08/11/2022

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.

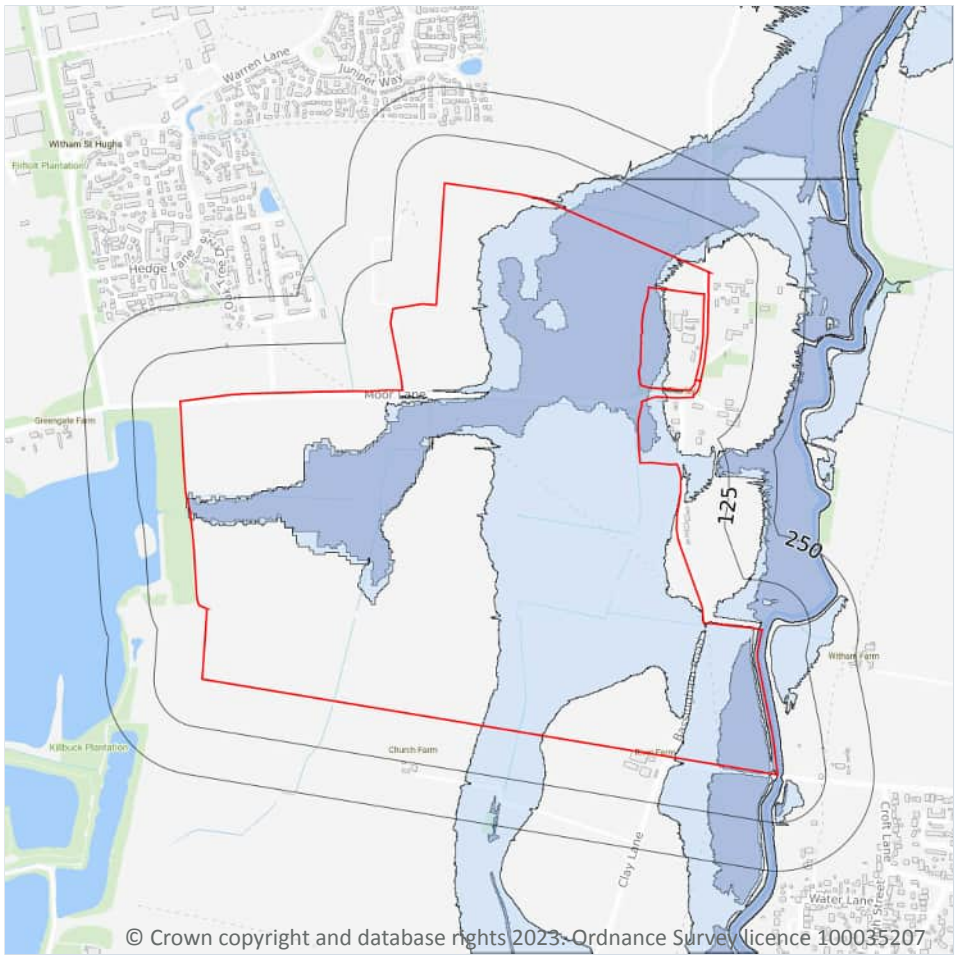
7.5 Flood Storage Areas

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



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

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.

Features are displayed on the River and coastal flooding map on **page 56 >**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

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

7.7 Flood Zone 3

Records within 50m	1

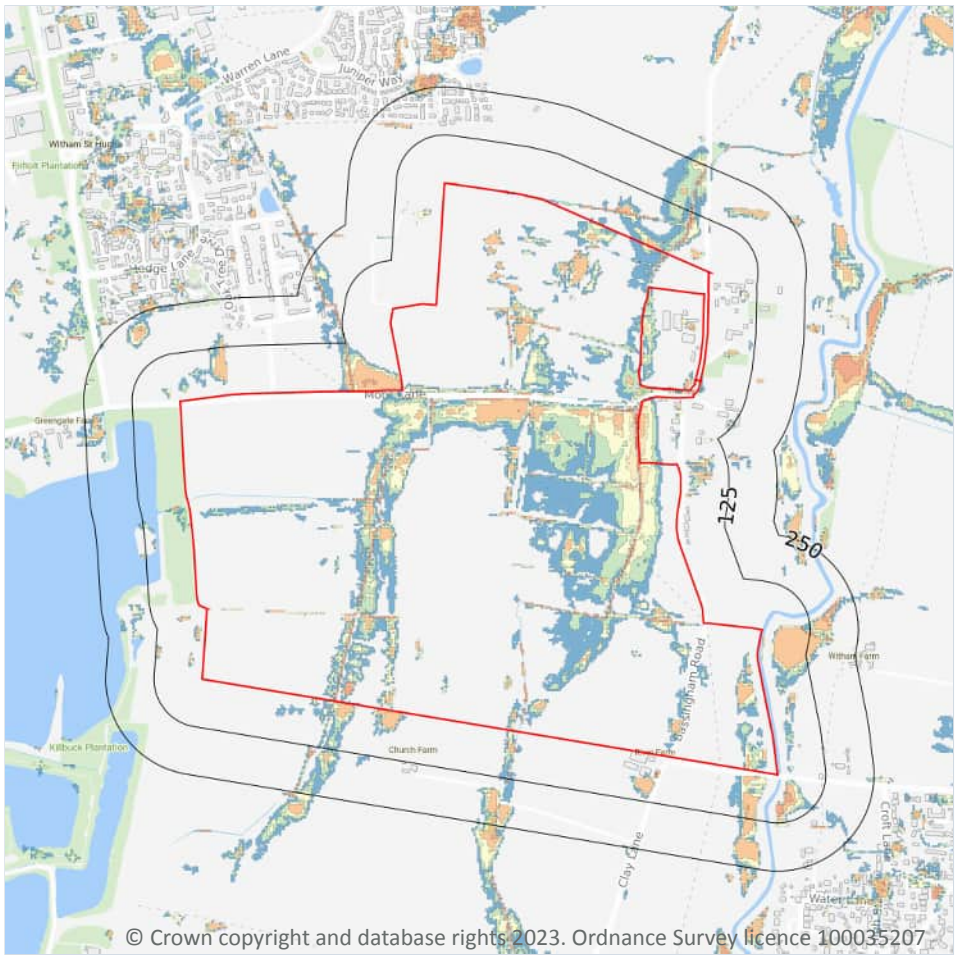
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 56 >**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

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

8 Surface water flooding



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 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 61 >**

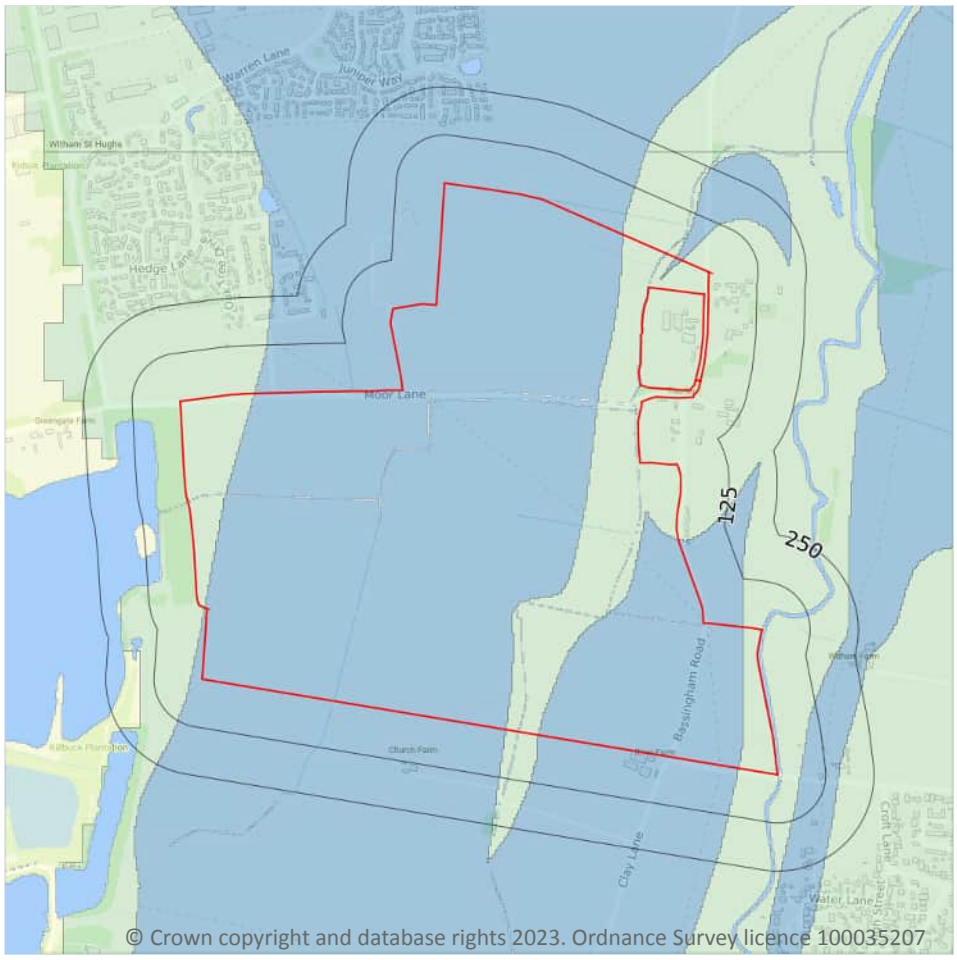
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

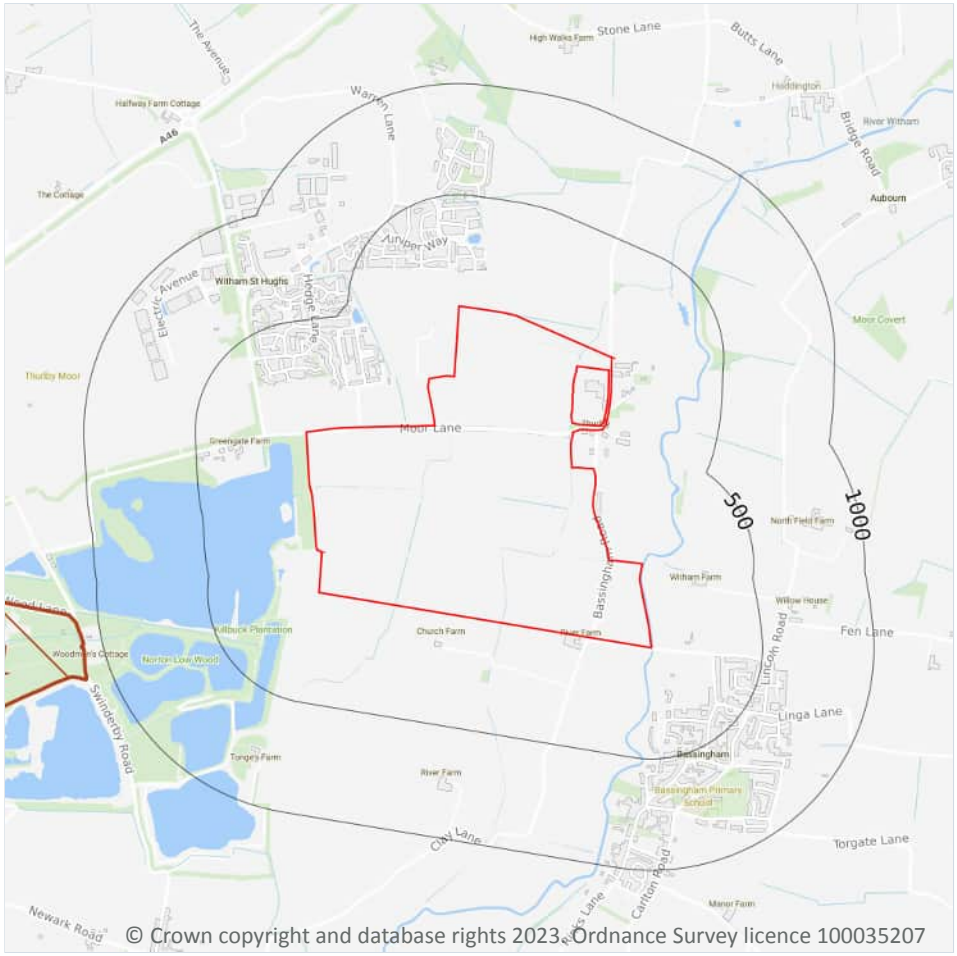
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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 63 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

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

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

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

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

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

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	0

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

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

10.5 National Nature Reserves (NNR)

Records within 2000m	0

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

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

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

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

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

10.7 Designated Ancient Woodland

Records within 2000m	2

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 64 >**

ID	Location	Name	Woodland Type
1	1084m W	Hawdins/norton Big Wood	Ancient & Semi-Natural Woodland
-	1435m W	Hawdins/norton Big Wood	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	2

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

Location	Name	Type	NVZ ID	Status
On site	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
564m W	The Fleet Lower Catchment (trib of Trent) NVZ	Surface Water	338	Existing

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

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

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.

This data is sourced from Natural England.

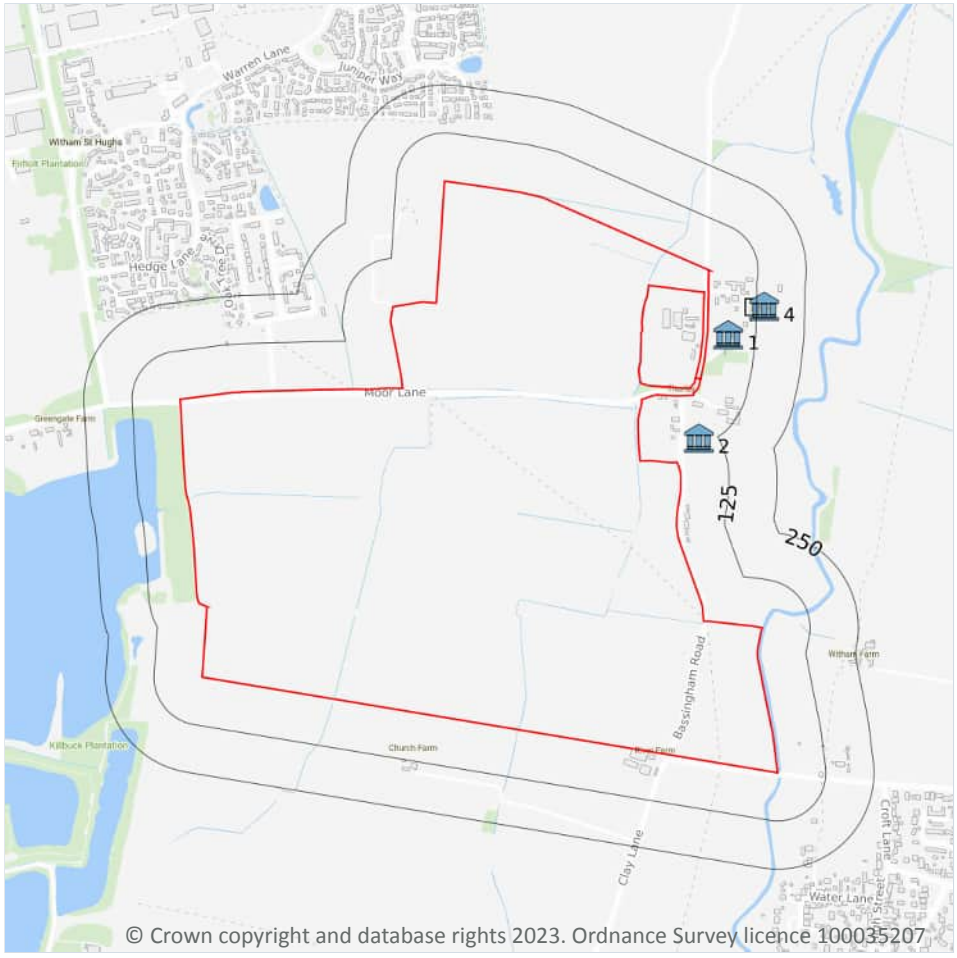
10.18 SSSI Units

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	3

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 70 >**

ID	Location	Name	Grade	Reference Number	Listed date
1	55m NE	Thurlby Hall And Outbuildings	II	1317332	23/08/1967
2	84m E	Rectory	II	1061973	09/12/1983
4	146m NE	Church Of St Germain	II*	1061972	23/08/1967

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	1

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.

Features are displayed on the Visual and cultural designations map on **page 70 >**

ID	Location	Ancient monument name	Reference number
3	112m NE	Churchyard cross, St Germain's churchyard	1013082

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

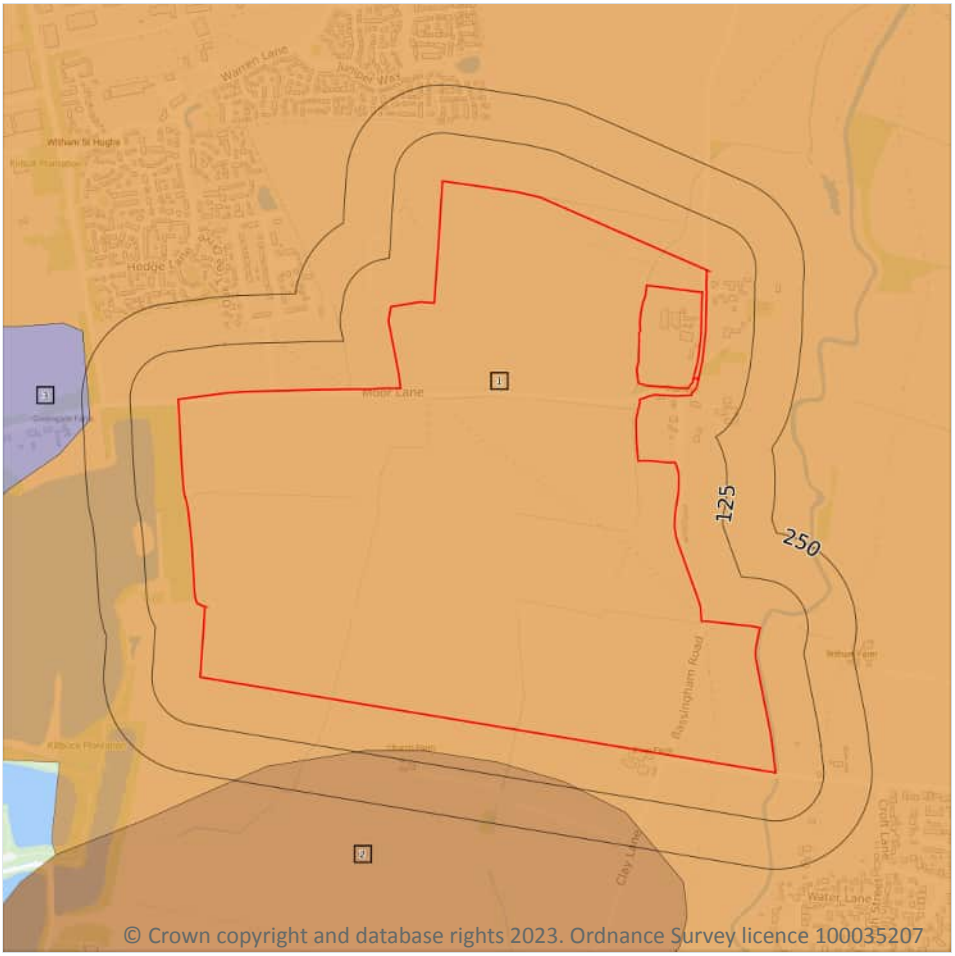
11.7 Registered Parks and Gardens

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	3

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 73 >**

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

ID	Location	Classification	Description
2	91m S	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.
3	231m W	Non Agricultural	-

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

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

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

12.3 Tree Felling Licences

Records within 250m	0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	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
9m SE	AG00267841	Entry Level plus Higher Level Stewardship	01/08/2008	31/07/2018
32m SE	AG00267841	Entry Level plus Higher Level Stewardship	01/08/2008	31/07/2018

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

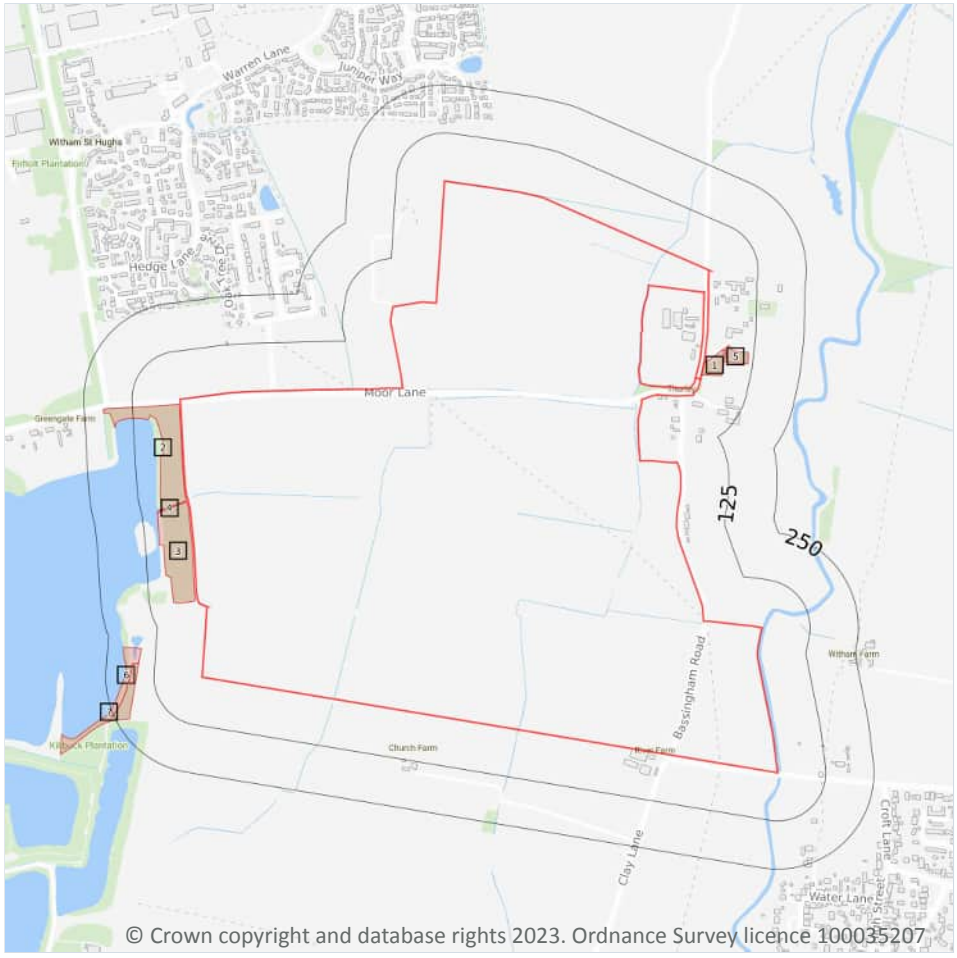
Records within 250m	**6**

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	**1021048**	**Countryside Stewardship (Middle Tier)**	**01/01/2021**	**31/12/2025**
On site	**1021048**	**Countryside Stewardship (Middle Tier)**	**01/01/2021**	**31/12/2025**
On site	**1021048**	**Countryside Stewardship (Middle Tier)**	**01/01/2021**	**31/12/2025**
3m NE	1021048	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025
9m SE	646407	Countryside Stewardship (Middle Tier)	01/01/2019	31/12/2023
170m N	493402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022

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	7

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 76 >**

ID	Location	Main Habitat	Other habitats
1	0m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	3m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	4m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	5m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	42m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	162m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	167m SW	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.

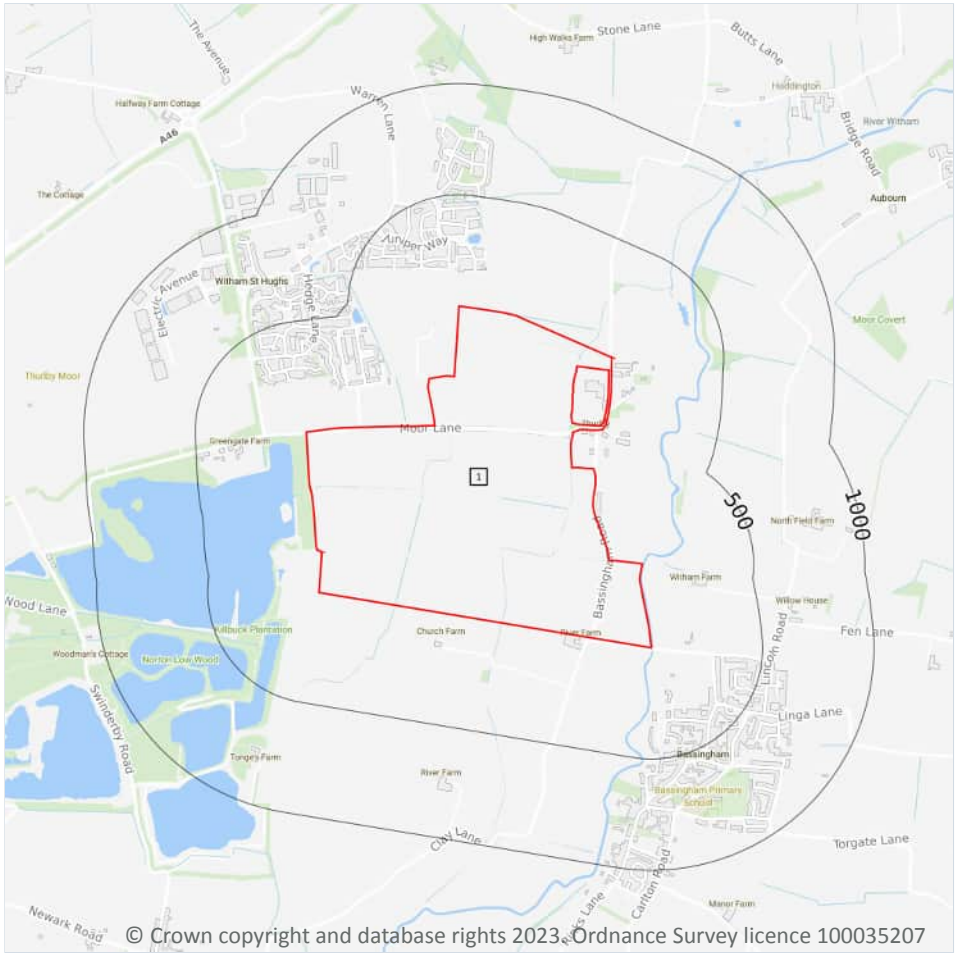
13.4 Limestone Pavement Orders

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 78 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

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

14.2 Artificial and made ground (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

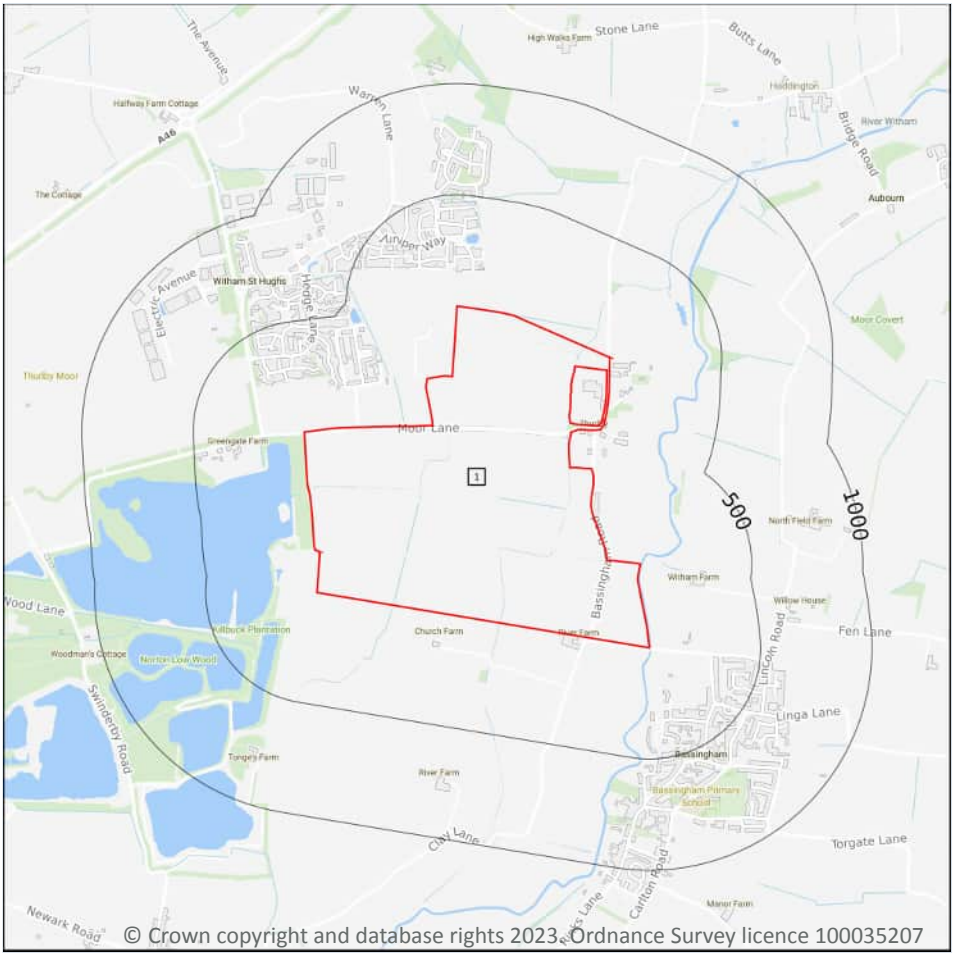
14.6 Bedrock faults and other linear features (10k)

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 82 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_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.

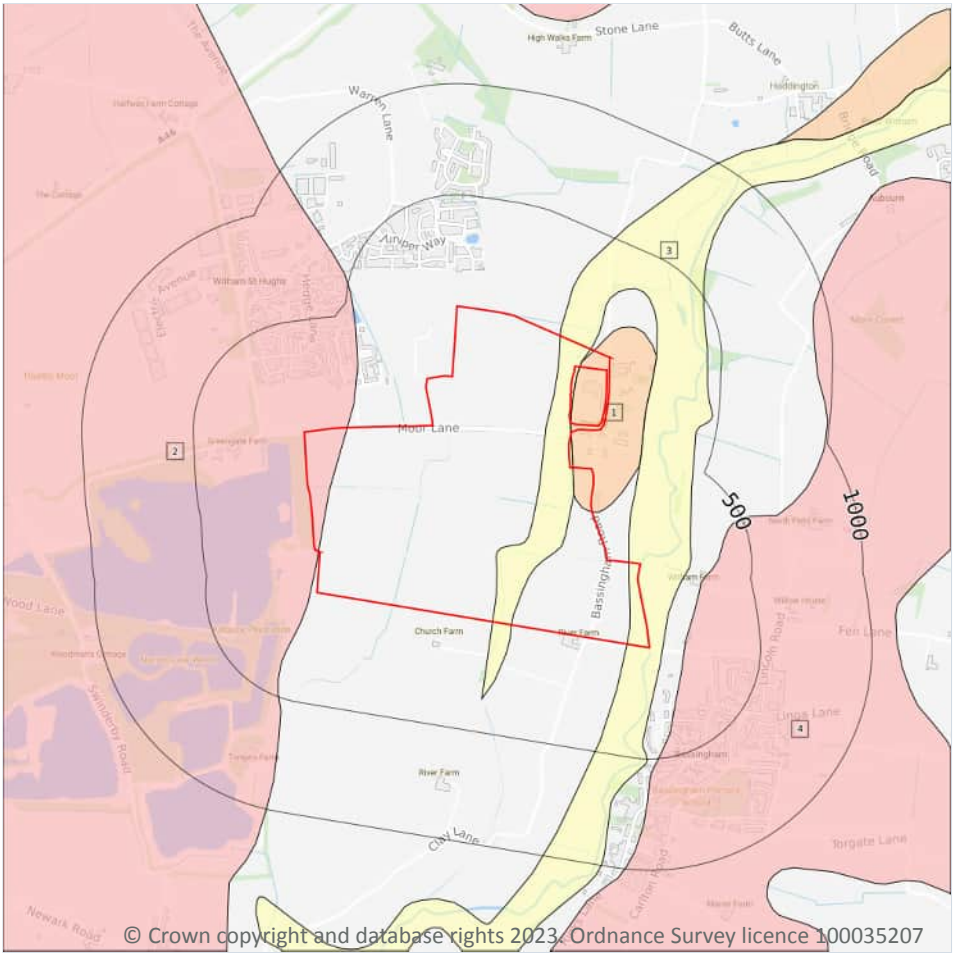
15.3 Artificial ground permeability (50k)

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 **4**

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 84 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**RTDU-XSV**	**RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)**	**SAND AND GRAVEL**
2	**On site**	**BDTN-XSV**	**BALDERTON SAND AND GRAVEL MEMBER**	**SAND AND GRAVEL**
3	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
4	157m SE	BDTN-XSV	BALDERTON SAND AND GRAVEL MEMBER	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	**3**

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	**Intergranular**	**High**	**Very Low**
On site	**Intergranular**	**Very High**	**High**
On site	**Intergranular**	**Very High**	**High**

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.

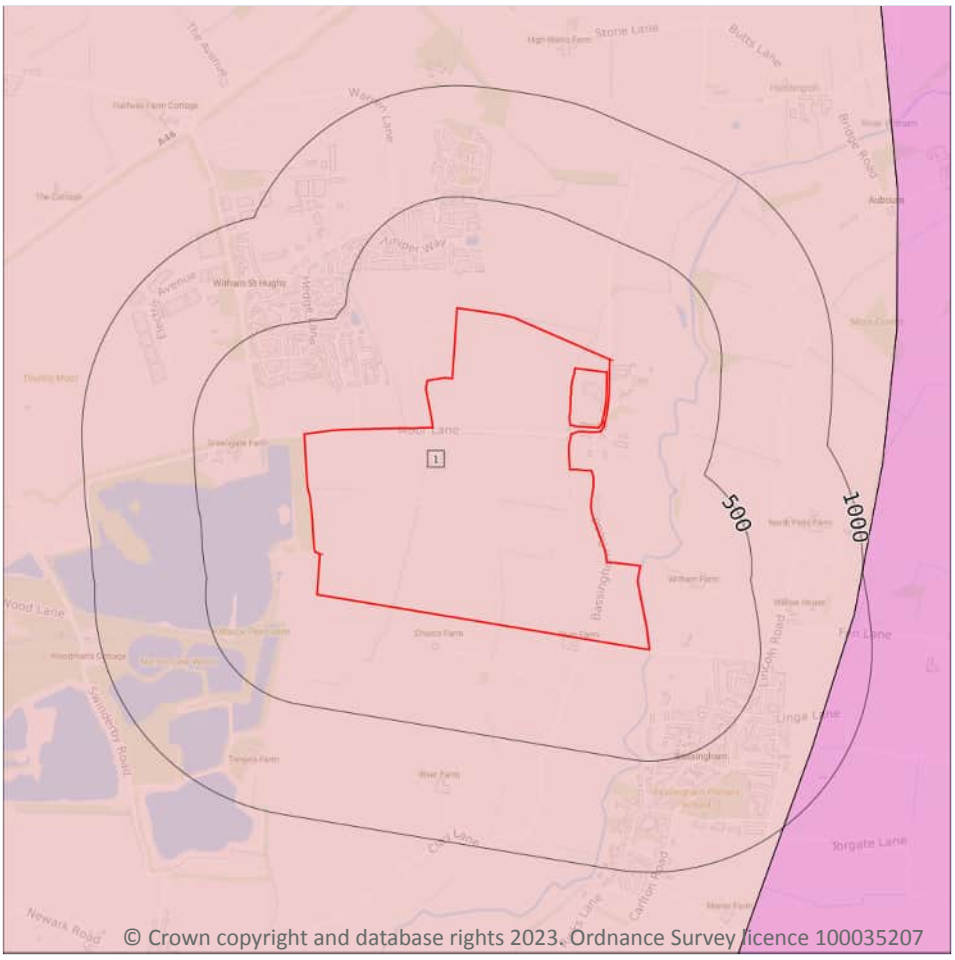
15.7 Landslip permeability (50k)

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 86 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**SMD-MDLM**	**SCUNTHORPE MUDSTONE FORMATION - MUDSTONE AND LIMESTONE, INTERBEDDED**	**RHAETIAN**

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	2

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**High**	**Low**
On site	**Fracture**	**High**	**Low**

This data is sourced from the British Geological Survey.

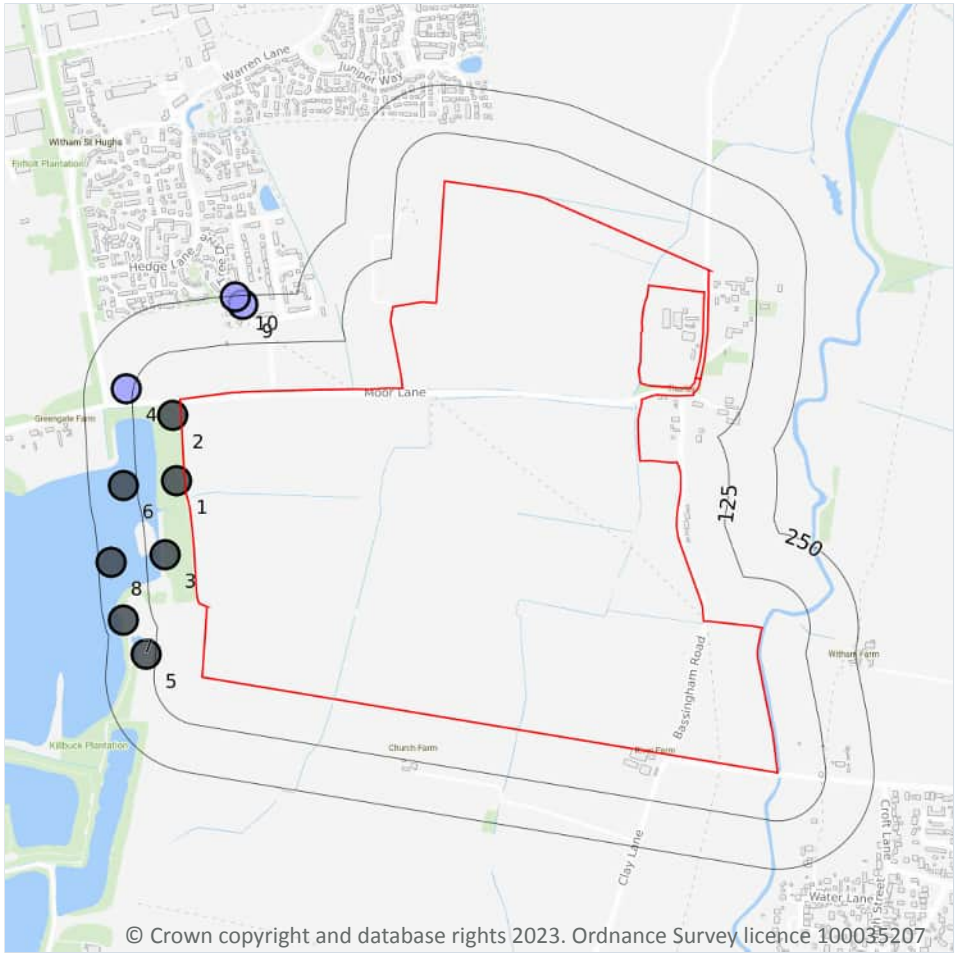
15.10 Bedrock faults and other linear features (50k)

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	10

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.

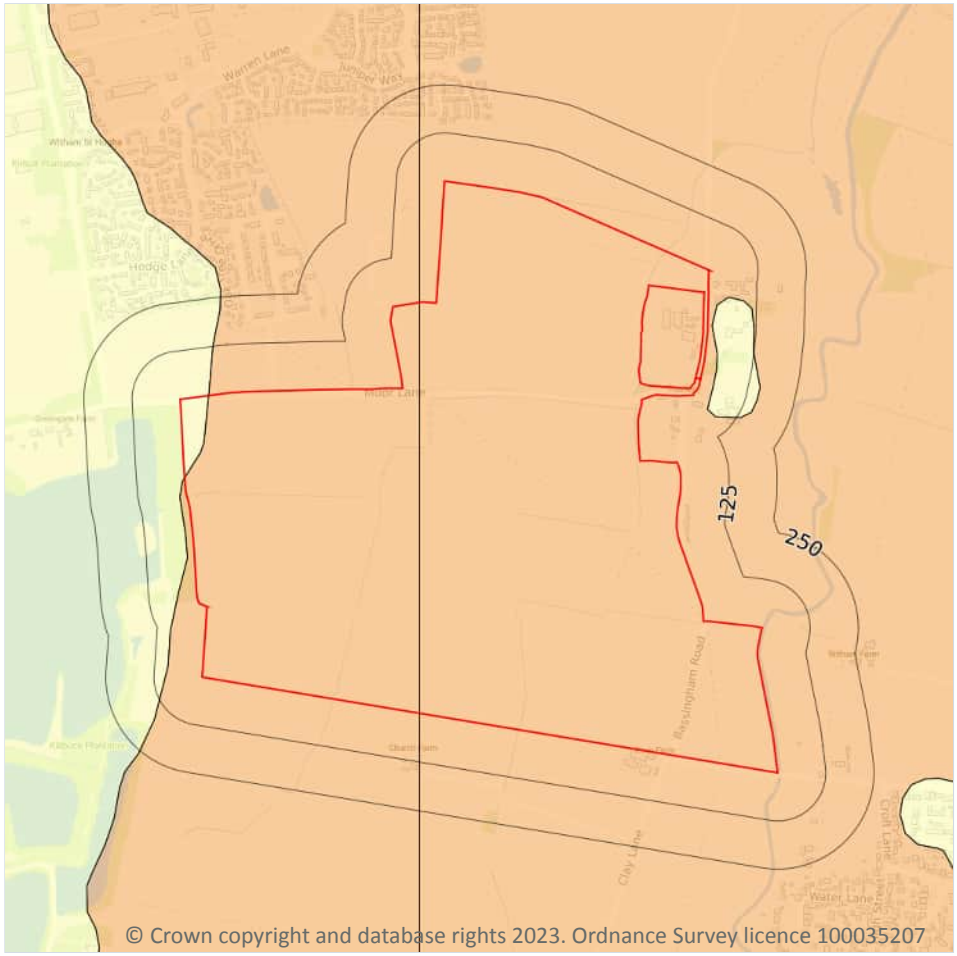
Features are displayed on the Boreholes map on **page 88 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	21m W	489370 361260	THURLBY MACKLEY & TAYLOR BH12	-	Y	N/A
2	21m W	489360 361430	THURLBY MACKLEY & TAYLOR BH13	-	Y	N/A
3	75m W	489340 361070	THURLBY MACKLEY & TAYLOR BH11	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	142m W	489239 361500	GREEN GATE FARM	4.5	N	243404 ↗
5	149m SW	489290 360810	THURLBY MACKLEY & TAYLOR BH9	-	Y	N/A
6	161m W	489230 361250	THURLBY MACKLEY & TAYLOR BH7	-	Y	N/A
7	201m W	489230 360900	THURLBY MACKLEY & TAYLOR BH7	-	Y	N/A
8	216m W	489200 361050	THURLBY MACKLEY & TAYLOR BH4	-	Y	N/A
9	227m NW	489540 361719	WITHAM ST HUGHS TRANCHE 16 SWINDERBY TP 7	2.0	N	18118866 ↗
10	248m NW	489522 361739	WITHAM ST HUGHS TRANCHE 16 SWINDERBY TP 6	2.0	N	18118861 ↗

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	3

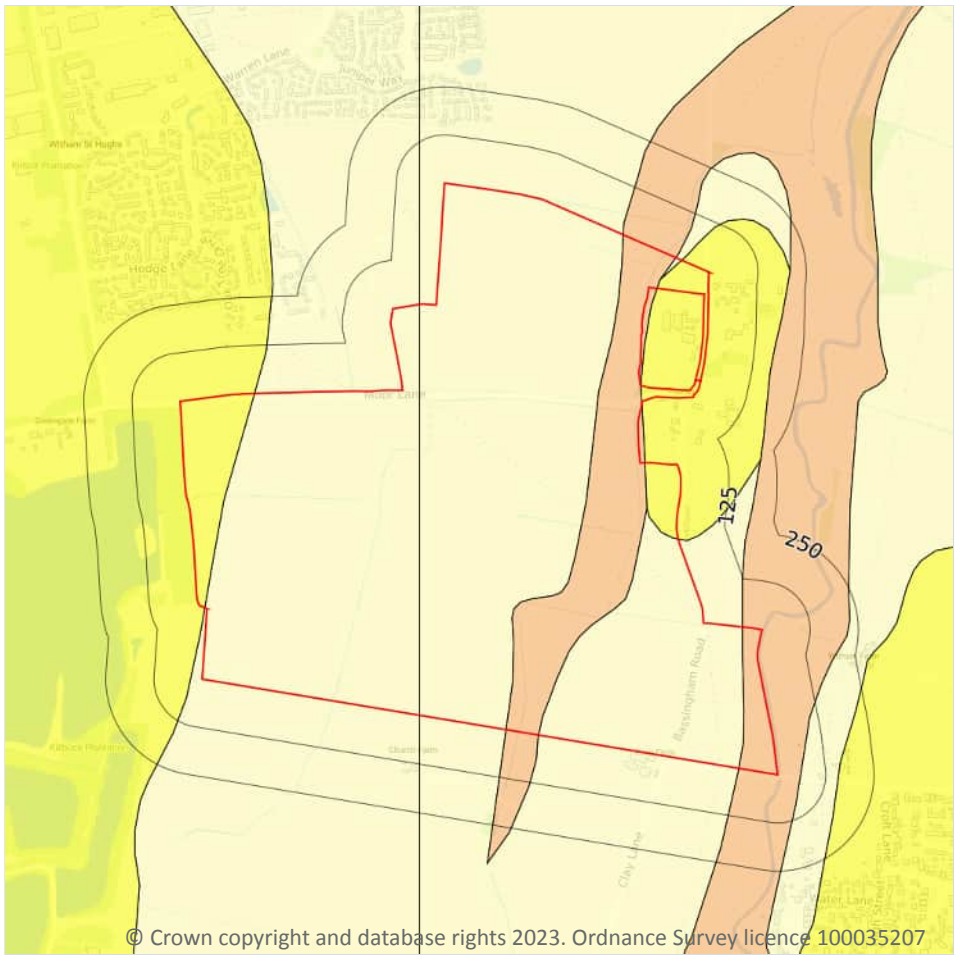
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 90 >**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Low**	**Ground conditions predominantly medium plasticity.**
11m NE	Negligible	Ground conditions predominantly non-plastic.

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	3

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.

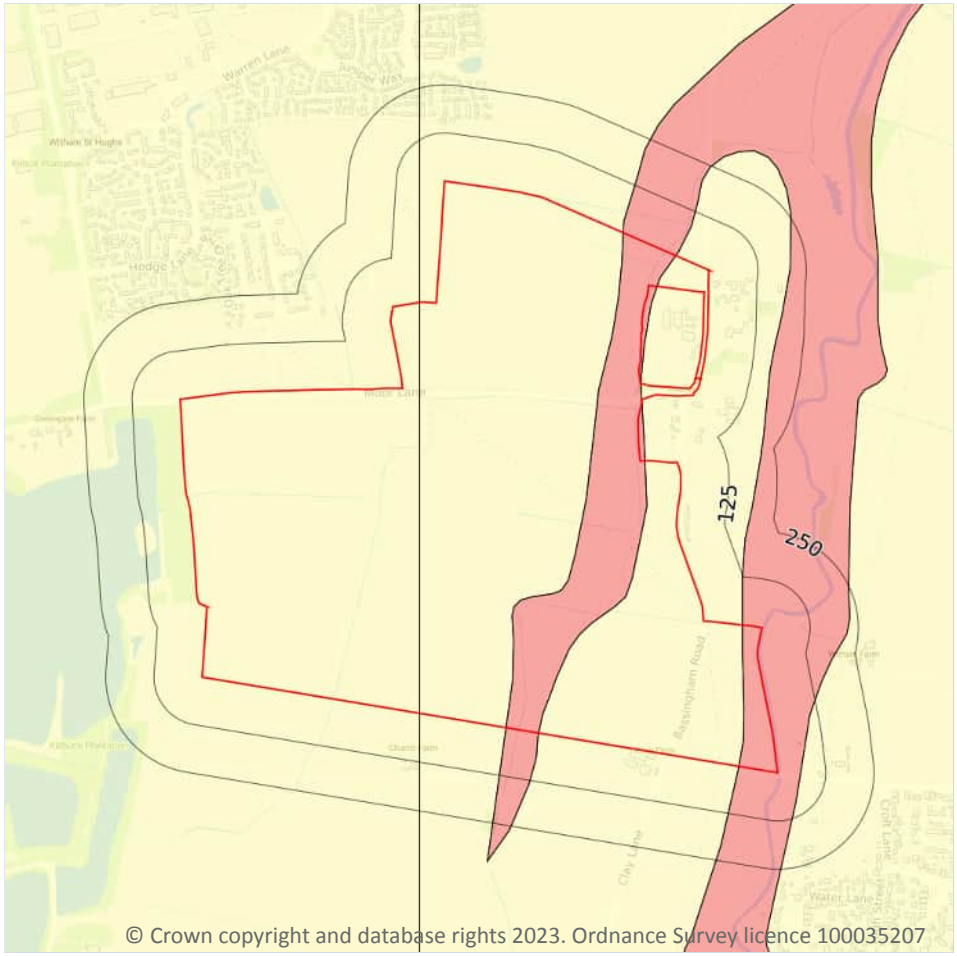
Features are displayed on the Natural ground subsidence - Running sands map on **page 92 >**

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

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.**
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



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Site Outline

Search buffers in metres (m)

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

17.3 Compressible deposits

Records within 50m	2

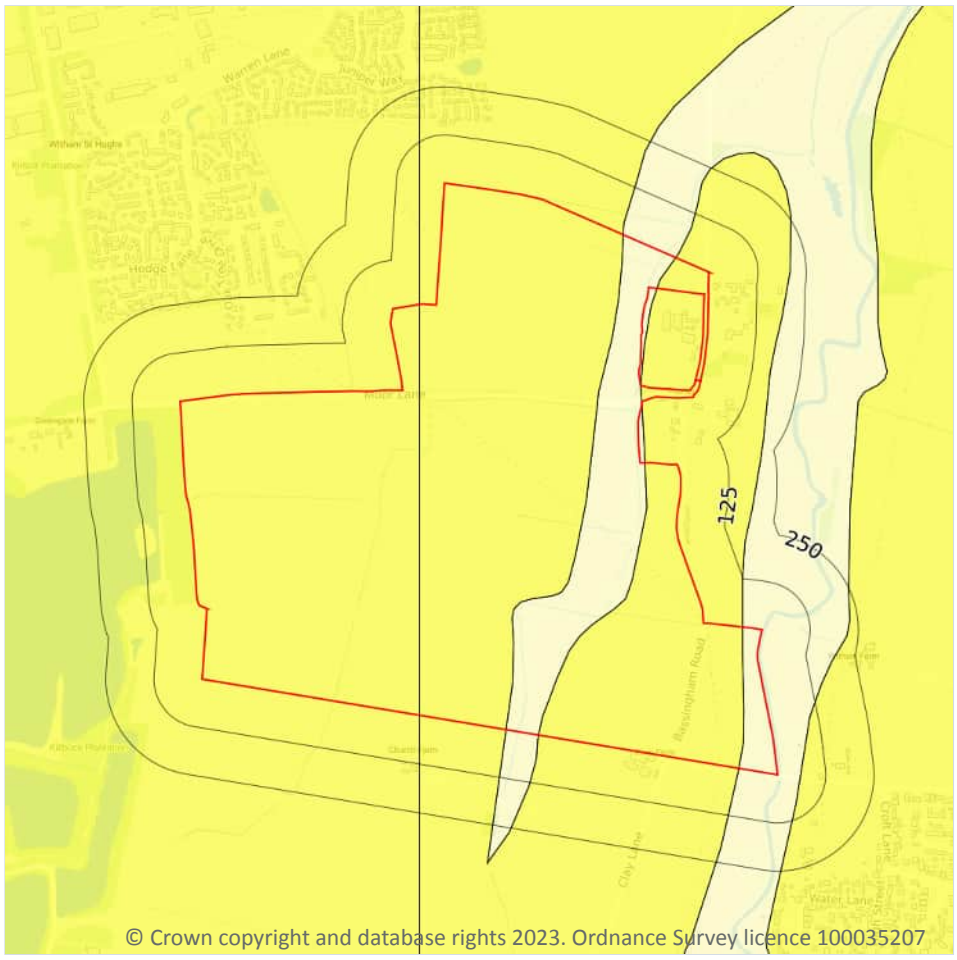
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 94 >**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**

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	2

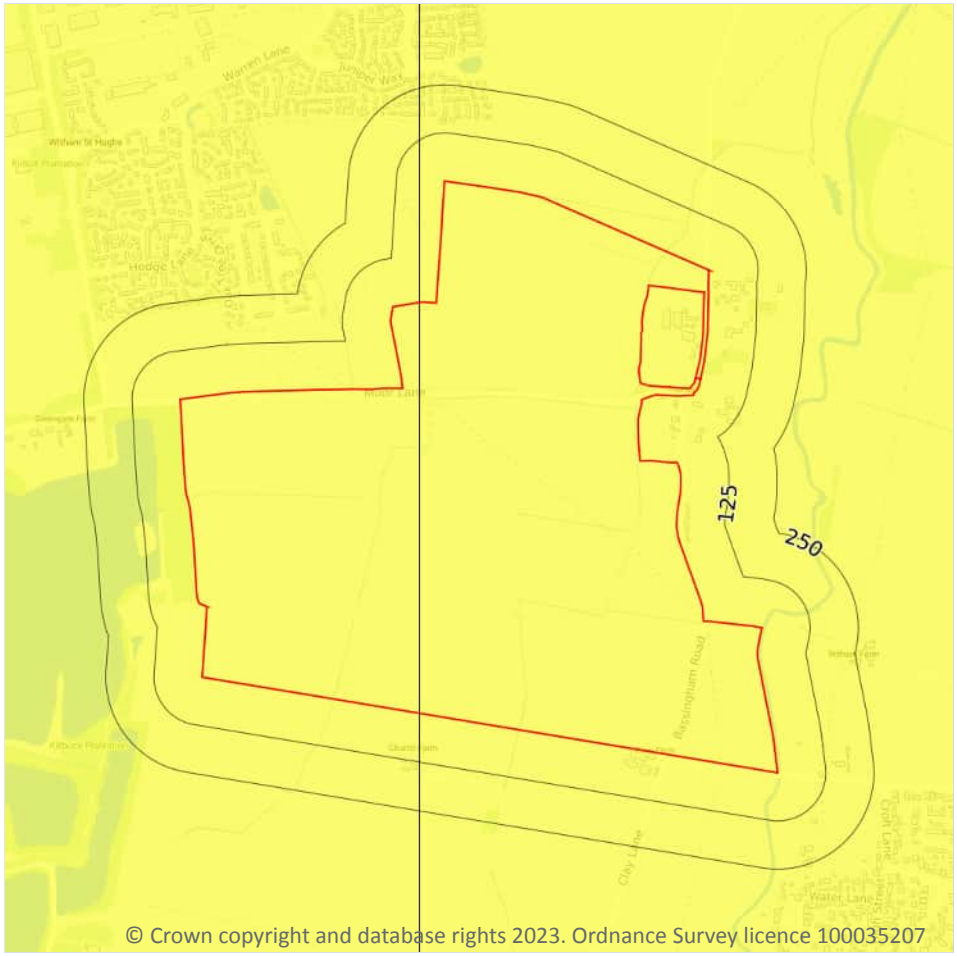
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 96 >**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
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 97 >**

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



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Site Outline

Search buffers in metres (m)

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

17.6 Ground dissolution of soluble rocks

Records within 50m	1

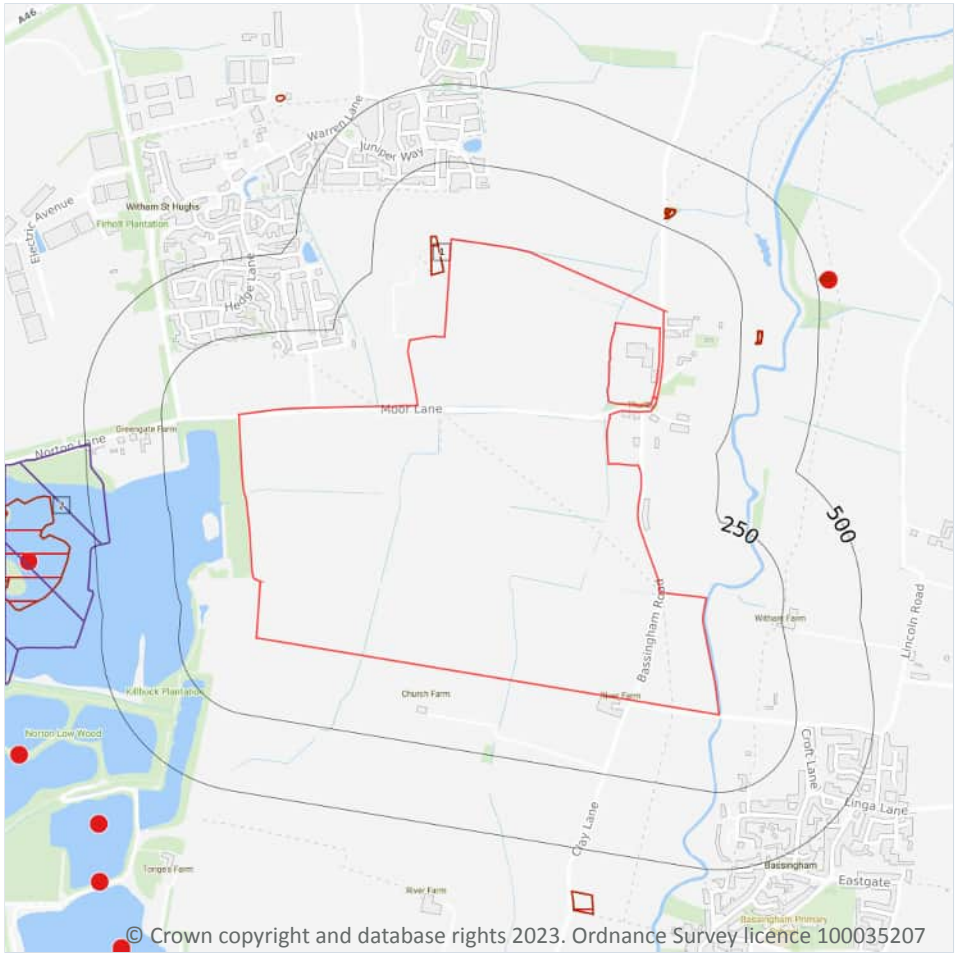
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 98 >**

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

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

BritPits

Surface ground workings

Underground workings

Underground mining extents

Historical mineral planning areas

TCA non-coal mining

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	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	1

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 100 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	17m N	Sewage Works	1979	1:10000

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	1

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.

Features are displayed on the Mining and ground workings map on **page 100 >**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
2	449m W	Thurlby	Sand and gravel	Surface mineral working	Valid	1968

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	0

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).

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	2

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.

Location	Mineral type
230m SW	Stone

Location	Mineral type
434m SW	Stone

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

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

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

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

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

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

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

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

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

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

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

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

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

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

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

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

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

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

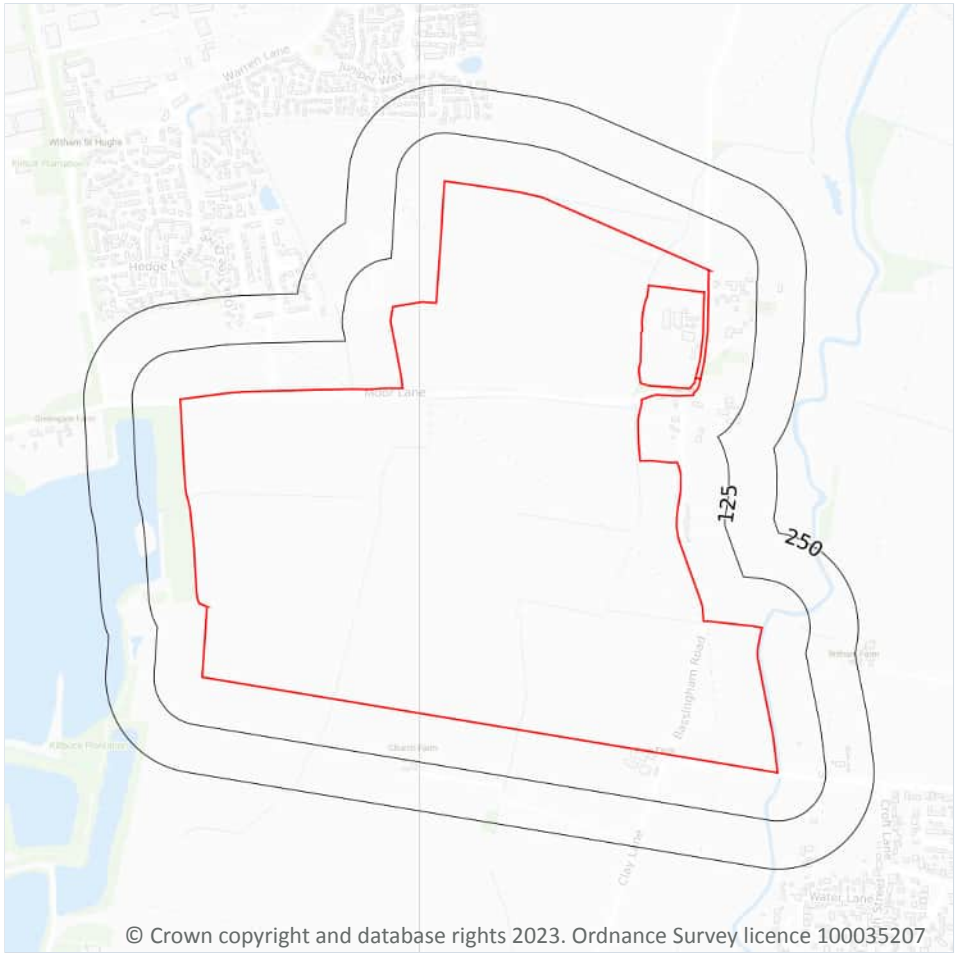
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

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

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

This data is sourced from the British Geological Survey.

20 Radon



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Site Outline

Search buffers in metres (m)

Greater than 30%

Between 10% and 30%

Between 5% and 10%

Between 3% and 5%

Between 1% and 3%

Less than 1%

20.1 Radon

Records on site	1

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

Features are displayed on the Radon map on **page 107 >**

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 **44**

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

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
3m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
7m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
11m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
20m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
24m SE	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

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

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

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

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

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

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

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

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

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

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

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

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 11/10/2023

Your ref: 60700987

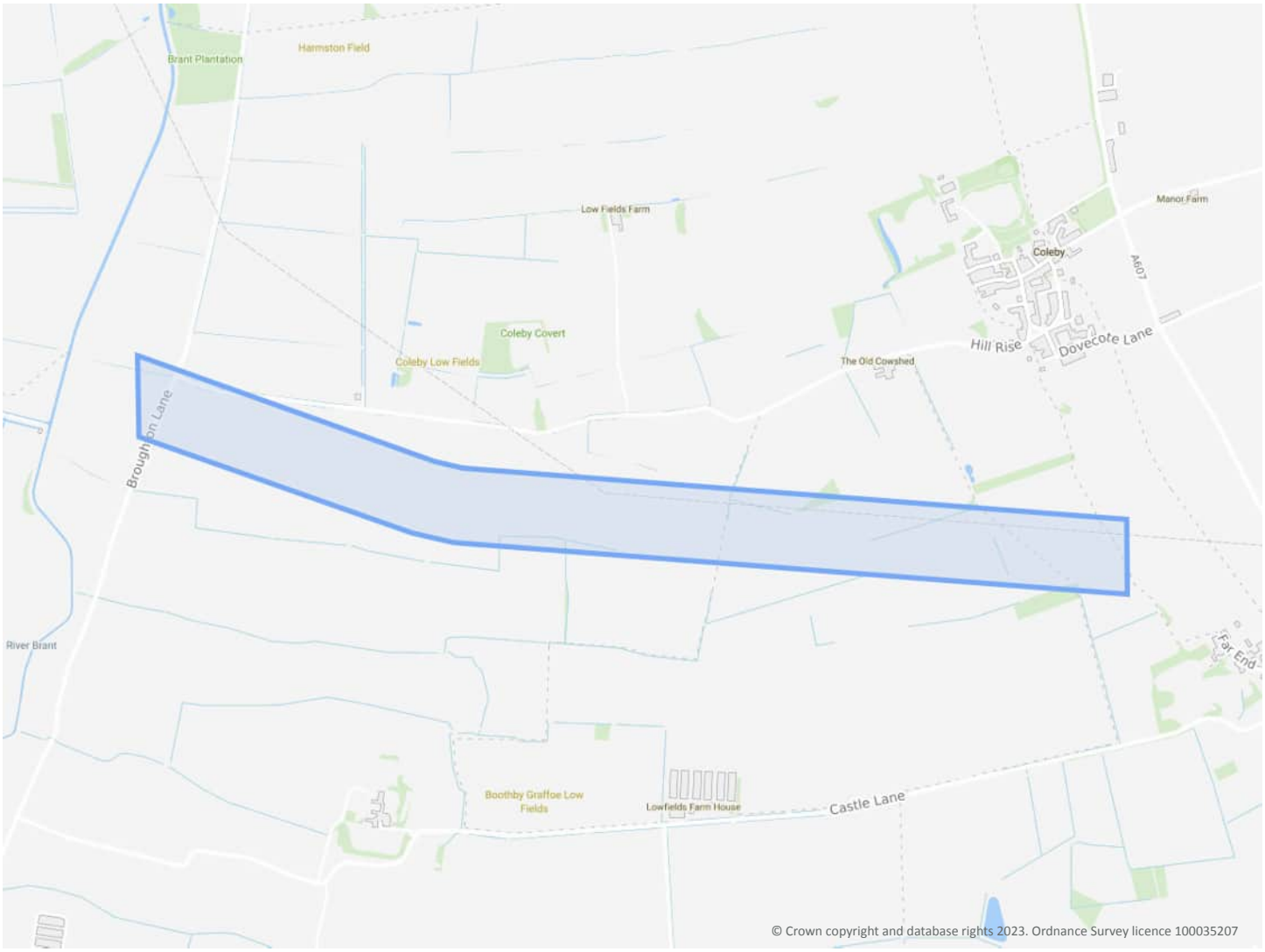
Our Ref: GSIP-2023-14155-15965_E2

Site Details

Location: 495934 359865

Area: 84.18 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

OS MasterMap site plan N/A: >10ha

Aerial image p. 9 >

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

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Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	5	3	7	10	-
16	1.2	Historical tanks	0	0	0	0	-
16	1.3	Historical energy features	0	0	0	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
16	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 >	6	4	8	13	-
20	2.2	Historical tanks	0	0	0	0	-
20	2.3	Historical energy features	0	0	0	0	-
20	2.4	Historical petrol stations	0	0	0	0	-
20	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	0	-
22	3.6	Licensed waste sites	0	0	0	0	-
22 >	3.7 >	Waste exemptions >	1	0	3	33	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
26 >	4.1 >	Recent industrial land uses >	6	0	3	-	-
27	4.2	Current or recent petrol stations	0	0	0	0	-
27	4.3	Electricity cables	0	0	0	0	-
27	4.4	Gas pipelines	0	0	0	0	-
28	4.5	Sites determined as Contaminated Land	0	0	0	0	-

28	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
28	4.7	Regulated explosive sites	0	0	0	0	-
28	4.8	Hazardous substance storage/usage	0	0	0	0	-
28	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
29	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
29	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
29	4.12	Radioactive Substance Authorisations	0	0	0	0	-
29	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
29	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
30	4.15	Pollutant release to public sewer	0	0	0	0	-
30	4.16	List 1 Dangerous Substances	0	0	0	0	-
30	4.17	List 2 Dangerous Substances	0	0	0	0	-
30 >	**4.18 >**	**Pollution Incidents (EA/NRW) >**	0	0	1	0	-
31	4.19	Pollution inventory substances	0	0	0	0	-
31	4.20	Pollution inventory waste transfers	0	0	0	0	-
31	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
32 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
34 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
36 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
38 >	**5.4 >**	**Groundwater vulnerability- soluble rock risk >**	Identified (within 0m)				
39	5.5	Groundwater vulnerability- local information	None (within 0m)				
40	5.6	Groundwater abstractions	0	0	0	0	0
41 >	**5.7 >**	**Surface water abstractions >**	0	0	0	1	5
42	5.8	Potable abstractions	0	0	0	0	0
42 >	**5.9 >**	**Source Protection Zones >**	1	0	0	0	-
43	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
44 >	**6.1 >**	**Water Network (OS MasterMap) >**	19	3	45	-	-

50 >	6.2 >	Surface water features >	1	3	29	-	-
50 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
50 >	6.4 >	WFD Surface water bodies >	0	0	1	-	-
51 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
52 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
53 >	7.2 >	Historical Flood Events >	0	0	1	-	-
53 >	7.3 >	Flood Defences >	0	0	4	-	-
54	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
54 >	7.5 >	Flood Storage Areas >	0	0	1	-	-
55 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
56 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
57 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
59 >	9.1 >	Groundwater flooding >	Moderate-High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
60	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
60	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
60	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
60	10.4	Special Protection Areas (SPA)	0	0	0	0	0
61	10.5	National Nature Reserves (NNR)	0	0	0	0	0
61	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
61	10.7	Designated Ancient Woodland	0	0	0	0	0
61	10.8	Biosphere Reserves	0	0	0	0	0
62	10.9	Forest Parks	0	0	0	0	0
62	10.10	Marine Conservation Zones	0	0	0	0	0
62	10.11	Green Belt	0	0	0	0	0
62	10.12	Proposed Ramsar sites	0	0	0	0	0

62	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
63	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
63	10.15	Nitrate Sensitive Areas	0	0	0	0	0
63 >	**10.16 >**	**Nitrate Vulnerable Zones >**	2	0	0	0	1
64	10.17	SSSI Impact Risk Zones	0	-	-	-	-
64	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
65	11.1	World Heritage Sites	0	0	0	-	-
65	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
65	11.3	National Parks	0	0	0	-	-
65	11.4	Listed Buildings	0	0	0	-	-
66	11.5	Conservation Areas	0	0	0	-	-
66	11.6	Scheduled Ancient Monuments	0	0	0	-	-
66	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
67 >	**12.1 >**	**Agricultural Land Classification >**	Grade 3 (within 250m)				
68	12.2	Open Access Land	0	0	0	-	-
68	12.3	Tree Felling Licences	0	0	0	-	-
68 >	**12.4 >**	**Environmental Stewardship Schemes >**	1	0	0	-	-
69 >	**12.5 >**	**Countryside Stewardship Schemes >**	3	0	2	-	-
Page	Section	**Habitat designations >**	On site	0-50m	50-250m	250-500m	500-2000m
70 >	**13.1 >**	**Priority Habitat Inventory >**	2	0	1	-	-
71	13.2	Habitat Networks	0	0	0	-	-
71	13.3	Open Mosaic Habitat	0	0	0	-	-
71	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
72 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
73	14.2	Artificial and made ground (10k)	0	0	0	0	-
74	14.3	Superficial geology (10k)	0	0	0	0	-

74	14.4	Landslip (10k)	0	0	0	0	-
75	14.5	Bedrock geology (10k)	0	0	0	0	-
75	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
76 >	15.1 >	**50k Availability >**	Identified (within 500m)				
77	15.2	Artificial and made ground (50k)	0	0	0	0	-
77	15.3	Artificial ground permeability (50k)	0	0	-	-	-
78 >	15.4 >	**Superficial geology (50k) >**	1	1	2	1	-
79 >	15.5 >	**Superficial permeability (50k) >**	Identified (within 50m)				
79	15.6	Landslip (50k)	0	0	0	0	-
79	15.7	Landslip permeability (50k)	None (within 50m)				
80 >	15.8 >	**Bedrock geology (50k) >**	4	0	0	0	-
81 >	15.9 >	**Bedrock permeability (50k) >**	Identified (within 50m)				
81	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
82 >	16.1 >	**BGS Boreholes >**	0	0	1	-	-
Page	Section	**Natural ground subsidence >**					
83 >	17.1 >	**Shrink swell clays >**	Low (within 50m)				
84 >	17.2 >	**Running sands >**	Very low (within 50m)				
86 >	17.3 >	**Compressible deposits >**	Negligible (within 50m)				
87 >	17.4 >	**Collapsible deposits >**	Very low (within 50m)				
88 >	17.5 >	**Landslides >**	Low (within 50m)				
90 >	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
92 >	18.1 >	**BritPits >**	1	0	0	2	-
93 >	18.2 >	**Surface ground workings >**	7	4	13	-	-
94	18.3	Underground workings	0	0	0	0	0
95	18.4	Underground mining extents	0	0	0	0	-
95 >	18.5 >	**Historical Mineral Planning Areas >**	0	0	1	0	-

95 >	18.6 >	Non-coal mining >	2	0	2	2	0
96	18.7	JPB mining areas	None (within 0m)				
96	18.8	The Coal Authority non-coal mining	0	0	0	0	-
97	18.9	Researched mining	0	0	0	0	-
97	18.10	Mining record office plans	0	0	0	0	-
97	18.11	BGS mine plans	0	0	0	0	-
97	18.12	Coal mining	None (within 0m)				
97	18.13	Brine areas	None (within 0m)				
98	18.14	Gypsum areas	None (within 0m)				
98	18.15	Tin mining	None (within 0m)				
98	18.16	Clay mining	None (within 0m)				
Page	Section	**Ground cavities and sinkholes** >	On site	0-50m	50-250m	250-500m	500-2000m
99	19.1	Natural cavities	0	0	0	0	-
100 >	19.2 >	Mining cavities >	0	0	0	1	0
100	19.3	Reported recent incidents	0	0	0	0	-
100	19.4	Historical incidents	0	0	0	0	-
101	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon** >					
102 >	20.1 >	Radon >	Between 10% and 30% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
104 >	21.1 >	BGS Estimated Background Soil Chemistry >	16	8	-	-	-
105	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
106	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
107	22.1	Underground railways (London)	0	0	0	-	-
107	22.2	Underground railways (Non-London)	0	0	0	-	-
108	22.3	Railway tunnels	0	0	0	-	-
108 >	22.4 >	Historical railway and tunnel features >	0	0	1	-	-
108	22.5	Royal Mail tunnels	0	0	0	-	-

108 >	22.6 >	Historical railways >	1	0	0	-	-
109	22.7	Railways	0	0	0	-	-
109	22.8	Crossrail 1	0	0	0	0	-
109	22.9	Crossrail 2	0	0	0	0	-
109	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 84.18ha

Recent site history - 2018 aerial photograph



Capture Date: 03/05/2018

Site Area: 84.18ha

Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 84.18ha

Recent site history - 2007 aerial photograph



Capture Date: 18/09/2007

Site Area: 84.18ha

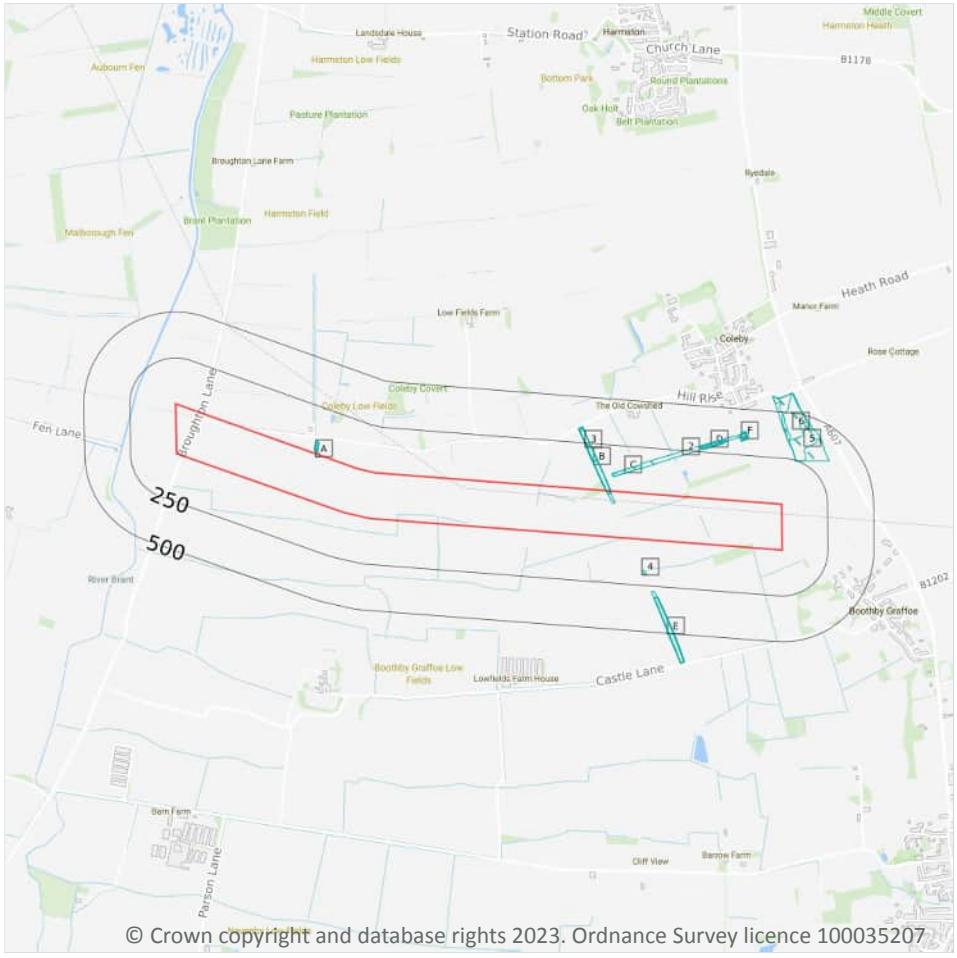
Recent site history - 1999 aerial photograph



Capture Date: 30/04/1999

Site Area: 84.18ha

1 Past land use



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Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	25

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

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Cuttings**	**1953**	**1617812**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Sand Pit**	**1886**	**1563611**
B	**On site**	**Cutting Works**	**1948**	**1577254**
B	**On site**	**Cuttings**	**1906 - 1946**	**1689003**
B	**On site**	**Cuttings**	**1886**	**1710860**
A	9m W	Sand Pit	1951	1650555
A	13m W	Sand Pit	1946 - 1948	1677354
A	14m W	Sand Pit	1906	1702781
C	78m E	Unspecified Heap	1948	1721705
C	80m E	Unspecified Heap	1906	1675528
2	135m E	Old Tramway Sidings	1886	1606682
3	155m E	Cuttings	1951	1664883
4	166m SE	Cuttings	1886	1562262
5	250m E	Unspecified Disused Quarry	1973	1606519
6	250m E	Unspecified Quarry	1951	1618387
D	262m E	Unspecified Heap	1951	1675385
D	266m E	Unspecified Heap	1904 - 1948	1665536
D	269m E	Cuttings	1886	1562263
E	277m SE	Cuttings	1886	1708711
E	303m SE	Cuttings	1953	1717112
E	306m SE	Cuttings	1904 - 1948	1732762
F	325m E	Unspecified Old Quarry	1904 - 1948	1684256
F	325m E	Unspecified Old Quarry	1951	1723656
F	327m E	Unspecified Old Quarry	1886	1749945
7	350m E	Unspecified Quarry	1948	1653662

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

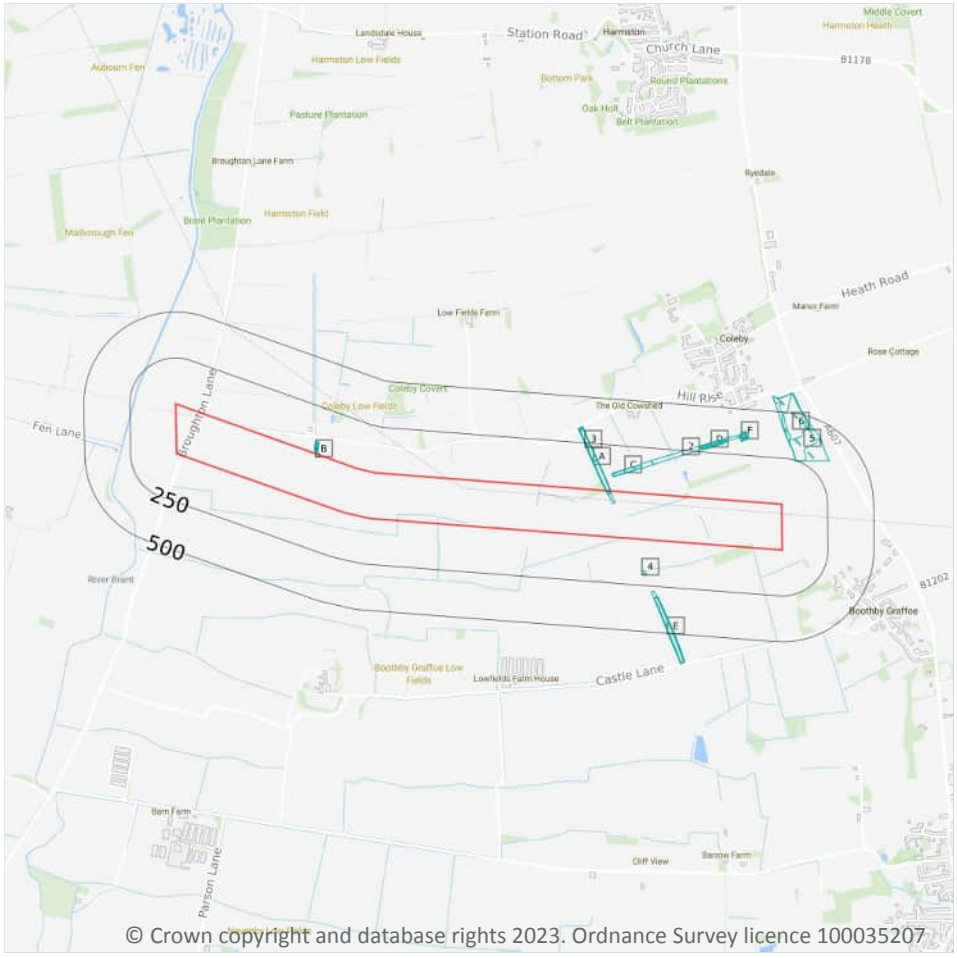
1.6 Historical military land

Records within 500m	0

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

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

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

2.1 Historical industrial land uses

Records within 500m	31

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

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

ID	Location	Land Use	Date	Group ID
1	**On site**	**Cuttings**	**1953**	**1617812**
A	**On site**	**Cutting Works**	**1948**	**1577254**
A	**On site**	**Cuttings**	**1946**	**1689003**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Cuttings**	**1886**	**1710860**
A	**On site**	**Cuttings**	**1906**	**1689003**
B	**On site**	**Sand Pit**	**1886**	**1563611**
B	9m W	Sand Pit	1951	1650555
B	13m W	Sand Pit	1948	1677354
B	13m W	Sand Pit	1946	1677354
B	14m W	Sand Pit	1906	1702781
C	78m E	Unspecified Heap	1948	1721705
C	80m E	Unspecified Heap	1906	1675528
C	80m E	Unspecified Heap	1906	1675528
2	135m E	Old Tramway Sidings	1886	1606682
3	155m E	Cuttings	1951	1664883
4	166m SE	Cuttings	1886	1562262
5	250m E	Unspecified Disused Quarry	1973	1606519
6	250m E	Unspecified Quarry	1951	1618387
D	262m E	Unspecified Heap	1951	1675385
D	266m E	Unspecified Heap	1948	1665536
D	266m E	Unspecified Heap	1904	1665536
D	269m E	Cuttings	1886	1562263
E	277m SE	Cuttings	1886	1708711
E	303m SE	Cuttings	1953	1717112
E	306m SE	Cuttings	1948	1732762
E	306m SE	Cuttings	1904	1732762
F	325m E	Unspecified Old Quarry	1948	1684256
F	325m E	Unspecified Old Quarry	1904	1684256
F	325m E	Unspecified Old Quarry	1951	1723656
F	327m E	Unspecified Old Quarry	1886	1749945
7	350m E	Unspecified Quarry	1948	1653662

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

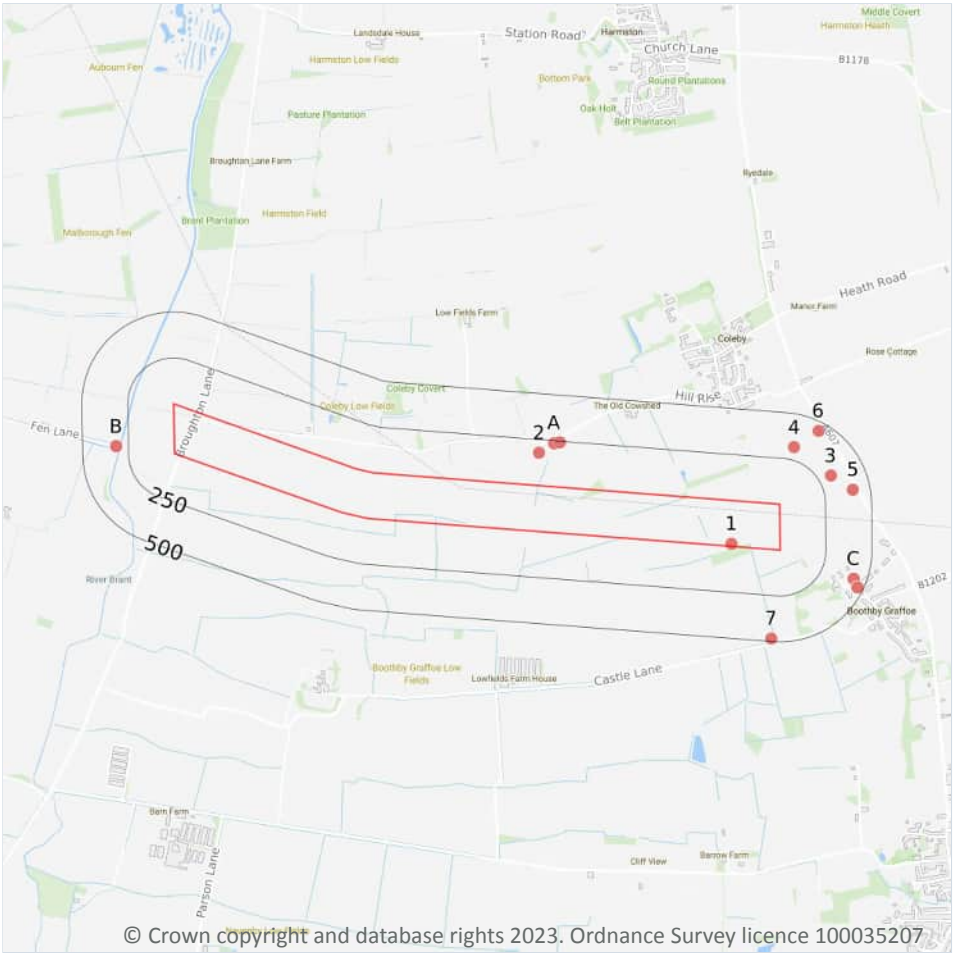
2.5 Historical garages

Records within 500m	0

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

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



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Site Outline

Search buffers in metres (m)

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	0

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

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	37

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

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

ID	Location	Site	Reference	Category	Sub-Category	Description
1	**On site**	**Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY**	**EPR/JF0706VN/A001**	**Storing waste exemption**	**Non-Agricultural Waste Only**	**Storage of sludge**

ID	Location	Site	Reference	Category	Sub-Category	Description
2	175m NE	Stockpile	WEX265902	Storing waste exemption	On a farm	Storage of sludge
A	236m NE	-	WEX147450	Storing waste exemption	On a Farm	Storage of sludge
A	241m NE	-	WEX293572	Storing waste exemption	On a Farm	Storage of sludge
3	314m E	Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY	EPR/LF0604WF/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
4	316m E	Stockpile	WEX265883	Storing waste exemption	On a farm	Storage of sludge
B	320m W	-	WEX247782	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters
B	320m W	-	WEX247782	Treating waste exemption	Not on a farm	Treatment of waste aerosol cans
B	320m W	-	WEX247782	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	320m W	-	WEX247782	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
B	320m W	-	WEX247782	Using waste exemption	Not on a farm	Use of mulch
B	320m W	-	WEX247782	Using waste exemption	Not on a farm	Use of waste in construction
5	405m E	Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY	EPR/FF0700VJ/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Disposing of waste exemption	On a Farm	Burning waste in the open
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Using waste exemption	On a Farm	Use of waste in construction
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Treating waste exemption	On a Farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Disposing of waste exemption	On a farm	Burning waste in the open
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Using waste exemption	On a farm	Use of waste in construction
C	428m E	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	428m E	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
C	428m E	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
C	428m E	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
C	428m E	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	428m E	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction

ID	Location	Site	Reference	Category	Sub-Category	Description
C	428m E	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Using waste exemption	Both agricultural and non-agricultural waste	Burning of waste as a fuel in a small appliance
C	428m E	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste for a specified purpose
6	448m E	-	WEX250300	Storing waste exemption	On a farm	Storage of sludge
C	465m E	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Using waste exemption	On a farm	Use of waste in construction
C	465m E	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	465m E	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	465m E	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	465m E	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Disposing of waste exemption	On a farm	Burning waste in the open
7	487m SE	Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY	EPR/QF0306VZ/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge

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

4 Current industrial land use



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Site Outline

Search buffers in metres (m)

Recent industrial land uses

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	9

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 26 >**

ID	Location	Company	Address	Activity	Category
1	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**
2	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**
3	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**

ID	Location	Company	Address	Activity	Category
4	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**
5	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**
6	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**
7	102m NW	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities
8	203m E	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities
10	238m NW	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

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

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

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

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

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

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

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

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

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

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

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

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

Records within 500m	0

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

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

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

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

4.13 Licensed Discharges to controlled waters

Records within 500m	0

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

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

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

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

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

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

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

4.16 List 1 Dangerous Substances

Records within 500m	0

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

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

4.17 List 2 Dangerous Substances

Records within 500m	0

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

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

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1

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

Features are displayed on the Current industrial land use map on **page 26 >**

ID	Location	Details	
9	231m N	Incident Date: 22/04/2002 Incident Identification: 75420 Pollutant: Inorganic Chemicals/Products Pollutant Description: Other Inorganic Chemical or Product	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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

4.19 Pollution inventory substances

Records within 500m	0

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

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

4.20 Pollution inventory waste transfers

Records within 500m	0

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

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

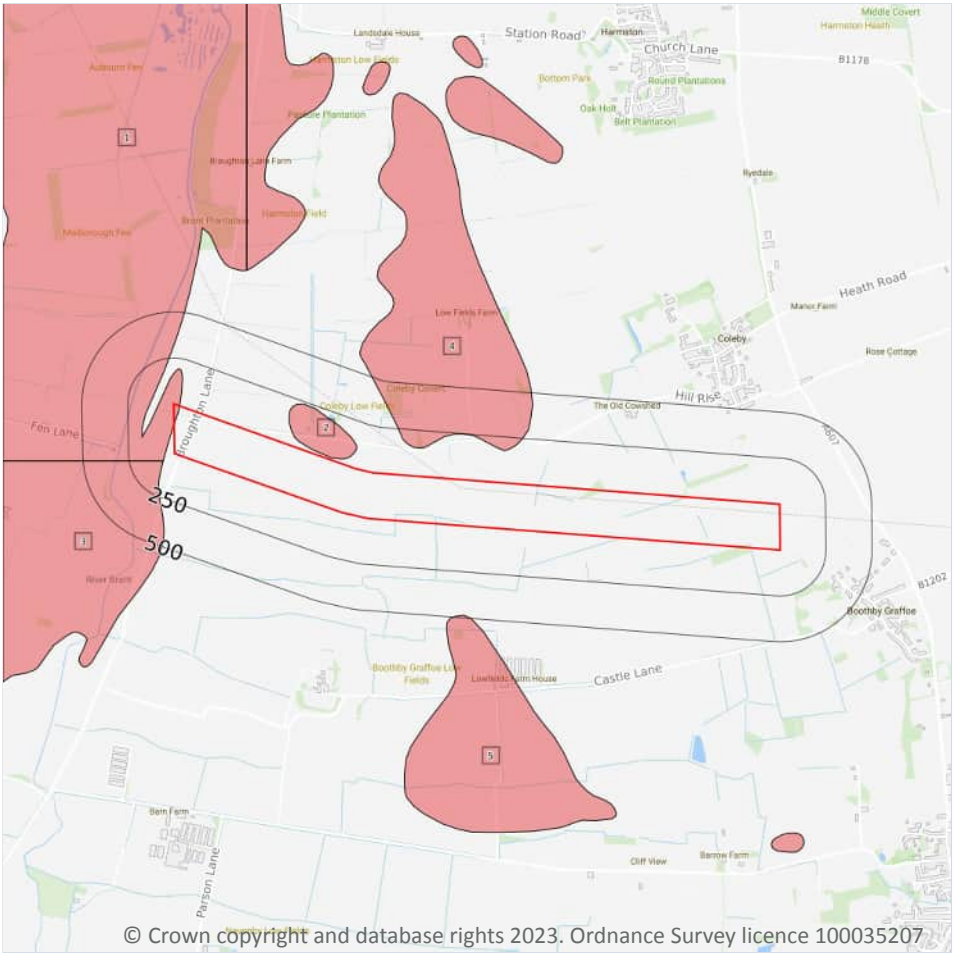
4.21 Pollution inventory radioactive waste

Records within 500m	0

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

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

5 Hydrogeology - Superficial aquifer



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Site Outline

Search buffers in metres (m)

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

5.1 Superficial aquifer

Records within 500m	5

Aquifer status of groundwater held within superficial geology.

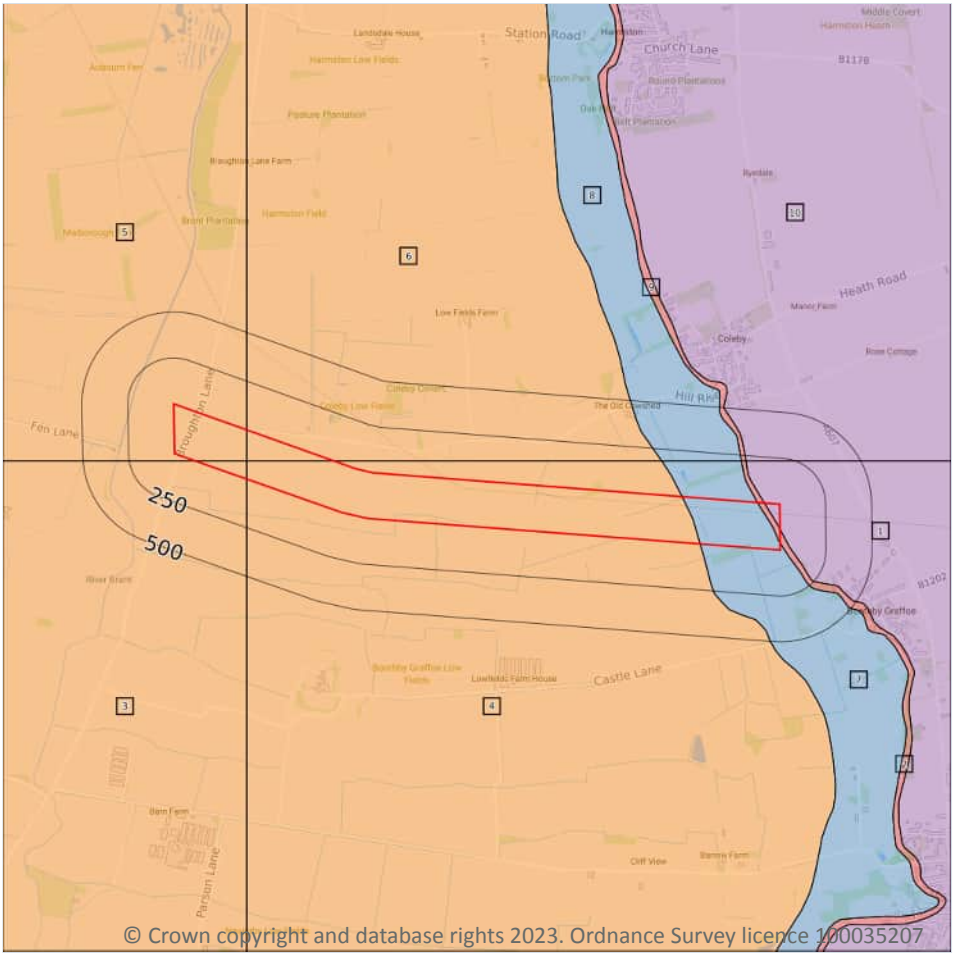
Features are displayed on the Hydrogeology map on **page 32 >**

ID	Location	Designation	Description
1	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
2	11m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ID	Location	Designation	Description
3	73m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	154m NW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
5	486m S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	10

Aquifer status of groundwater held within bedrock geology.

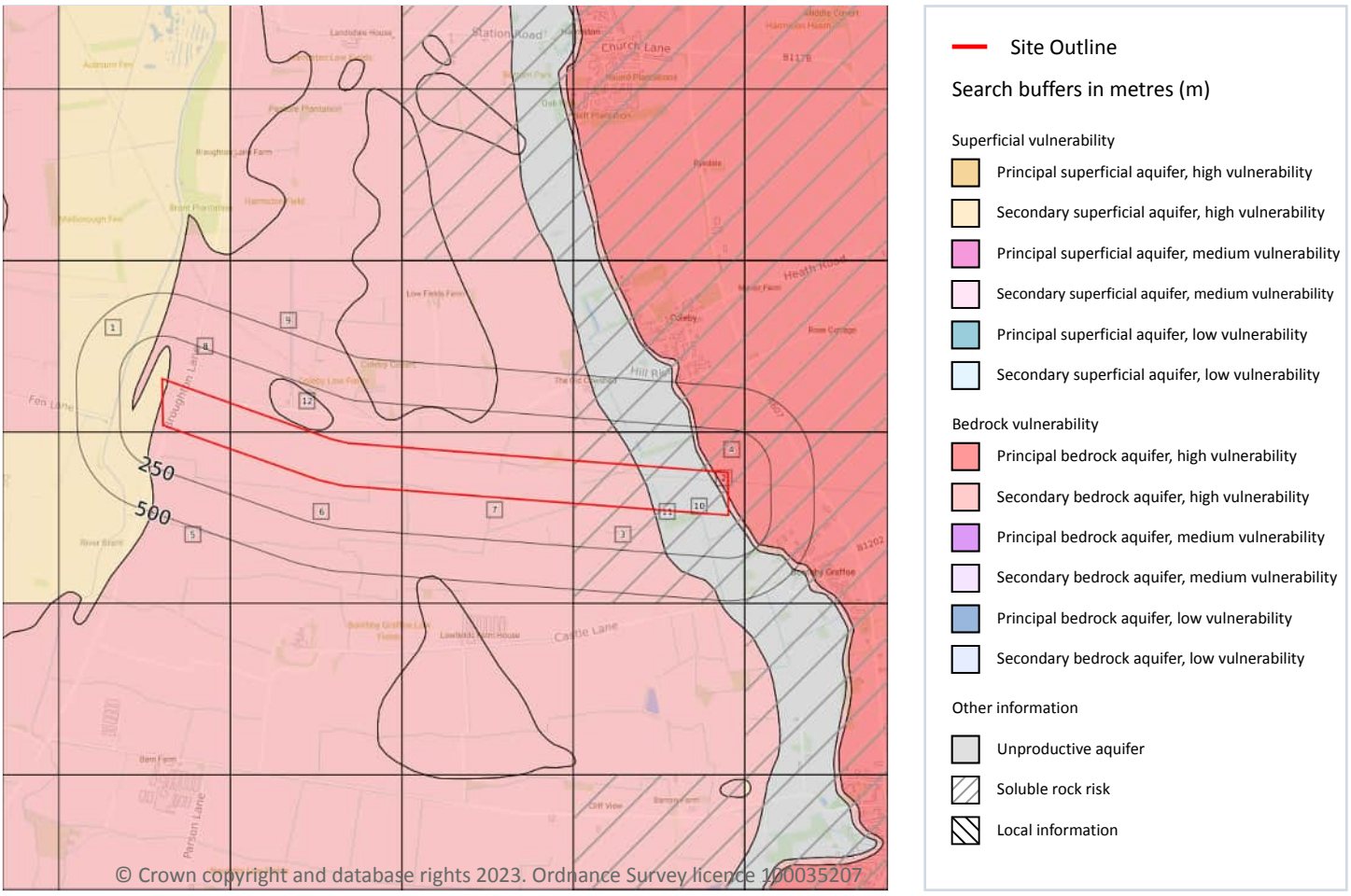
Features are displayed on the Bedrock aquifer map on **page 34 >**

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
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ID	Location	Designation	Description
3	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
4	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
5	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
6	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
7	**On site**	**Unproductive**	**These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow**
8	186m E	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
9	220m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
10	222m E	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	11

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 36 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
7	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
8	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: >90% Recharge potential: High**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
9	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
10	**On site**	**Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures**
12	11m W	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary 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
11	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**8.0%**

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

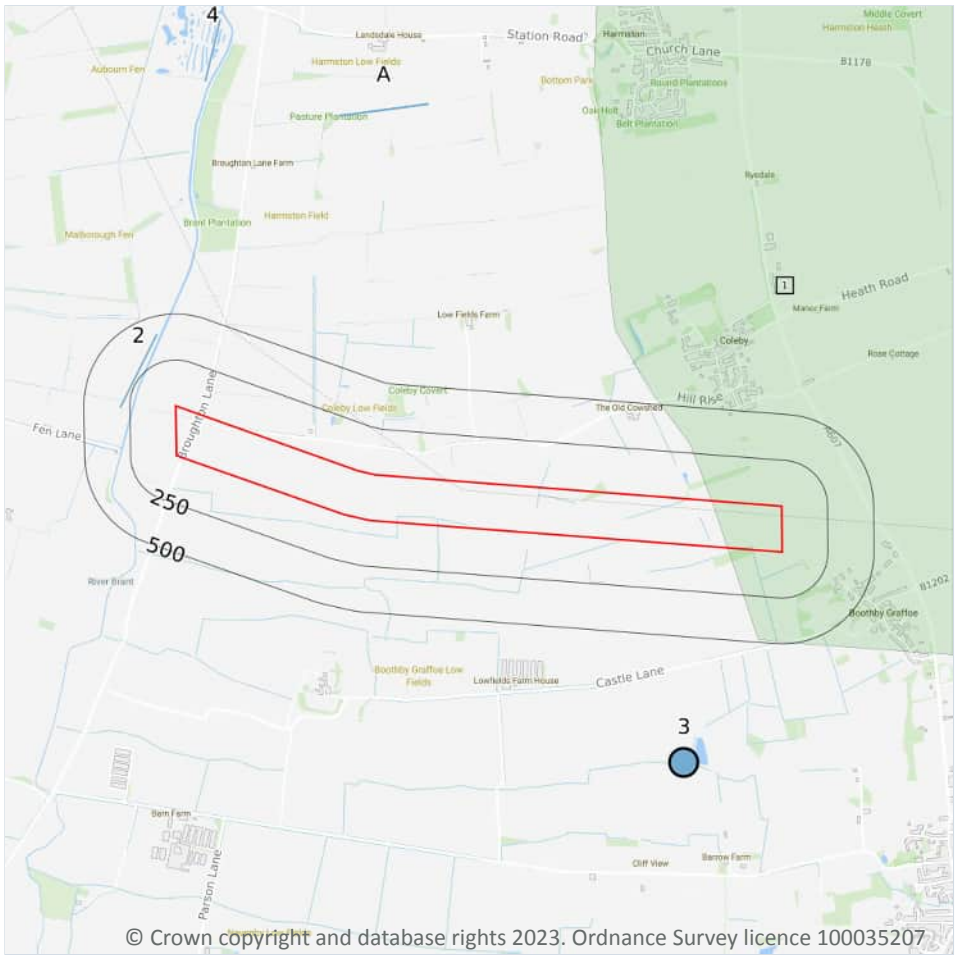
5.5 Groundwater vulnerability- local information

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



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Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	0

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

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

5.7 Surface water abstractions

Records within 2000m	**6**

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 40 >**

ID	Location	Details	
2	266m W	Status: Historical Licence No: 4/30/03/*S/0065 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER BRANT - COLEBY Data Type: Line Name: C A MOTTRAM & SONS Easting: 494300 Northing: 360300	Annual Volume (m^3): 22730 Max Daily Volume (m^3): 546 Original Application No: - Original Start Date: 01/08/1984 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1986 Version End Date: -
3	1181m SE	Status: Historical Licence No: 4/30/04/*S/0032 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: TRIB R BRANT, BOOTHBY-GRAFFOE Data Type: Point Name: SHARPES INTERNATIONAL SEEDS LTD Easting: 497370 Northing: 358370	Annual Volume (m^3): 18000 Max Daily Volume (m^3): 984 Original Application No: - Original Start Date: 01/04/1997 Expiry Date: 31/03/2018 Issue No: 100 Version Start Date: 01/04/2004 Version End Date: -
4	1774m NW	Status: Active Licence No: AN/030/0004/002 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER BRANT AT BLACKMOOR BRIDGE Data Type: Line Name: H & J NEVILE & SON Easting: 494845 Northing: 362415	Annual Volume (m^3): 36368 Max Daily Volume (m^3): 1023 Original Application No: NPS/WR/015330 Original Start Date: 06/05/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 06/05/2014 Version End Date: -
A	1785m N	Status: Active Licence No: AN/030/0004/003 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: UNNAMED DRAIN Data Type: Line Name: C A MOTTRAM & SONS Easting: 495489 Northing: 361889	Annual Volume (m^3): 45400 Max Daily Volume (m^3): 378 Original Application No: NPS/WR/031482 Original Start Date: 13/03/2020 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 13/03/2020 Version End Date: -

ID	Location	Details	
A	1785m N	Status: Active Licence No: AN/030/0004/003 Details: Trickle Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: UNNAMED DRAIN Data Type: Line Name: C A MOTTRAM & SONS Easting: 495489 Northing: 361889	Annual Volume (m^3): 45400 Max Daily Volume (m^3): 378 Original Application No: NPS/WR/031482 Original Start Date: 13/03/2020 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 13/03/2020 Version End Date: -
-	1833m NW	Status: Active Licence No: 4/30/03/*S/0082 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: AUBOURN PUMP DRAIN WEST Data Type: Point Name: H & J NEVILE & SON Easting: 493300 Northing: 361600	Annual Volume (m^3): 7290 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 01/01/1990 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2004 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 40 >**

ID	Location	Type	Description
1	**On site**	**3**	**Total catchment**

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

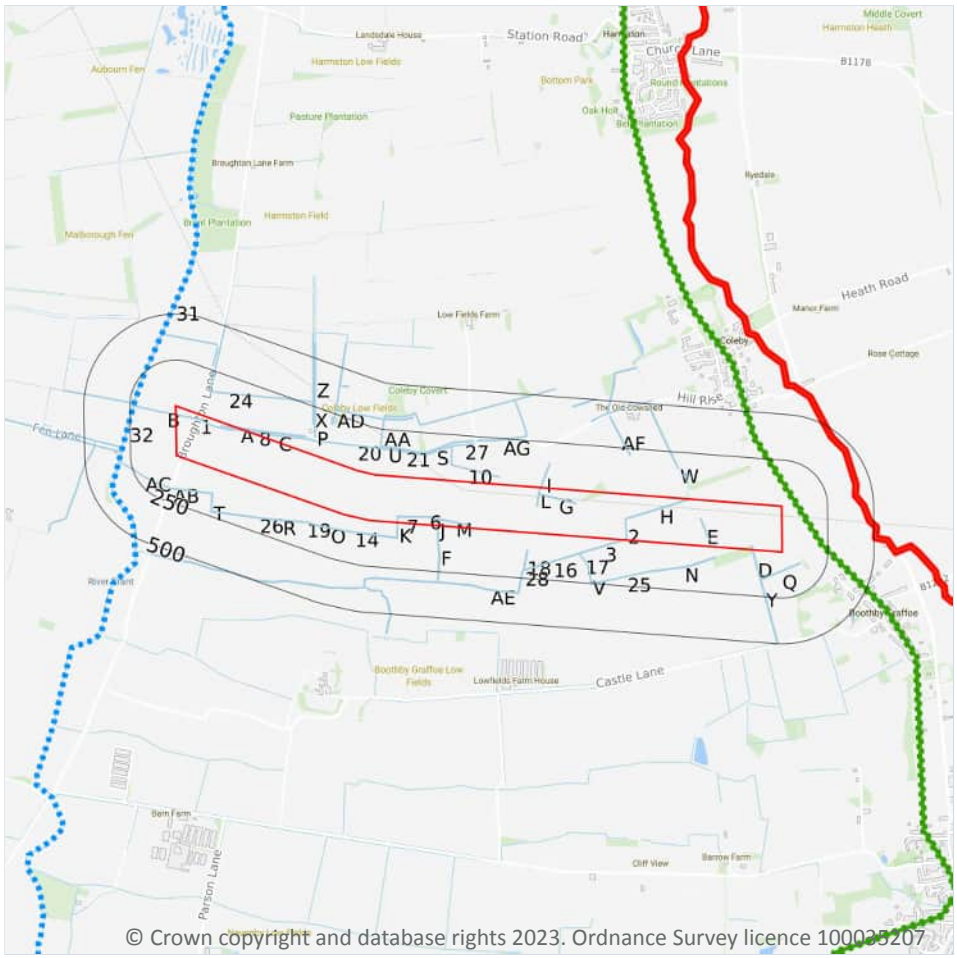
5.10 Source Protection Zones (confined aquifer)

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



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Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	67

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

Features are displayed on the Hydrology map on **page 44 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	-

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
K	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
L	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
L	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
L	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
M	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
8	22m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	22m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
10	41m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	54m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
14	81m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
O	83m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	92m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
16	92m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
17	92m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	94m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
18	94m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
19	106m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
R	111m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
20	127m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
21	127m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	129m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
24	137m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	140m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	153m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	155m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	155m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
W	157m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	157m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	157m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	158m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
Y	160m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	162m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
25	162m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	165m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AA	168m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	170m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
26	171m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
W	174m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AB	175m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
AC	177m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AB	177m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AB	177m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
27	187m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	188m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
28	205m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AE	211m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AF	212m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	213m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
W	216m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
31	222m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Brant
AG	227m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
32	228m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Brant

ID	Location	Type of water feature	Ground level	Permanence	Name
AD	233m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**33**

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

Features are displayed on the Hydrology map on **page 44 >**

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 44 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
6	**On site**	**River**	**Brant - Lower**	**GB105030056770**	**Witham Upper**	**Witham**

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 44 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
30	219m W	River	Brant - Lower	GB105030056770 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	**1**

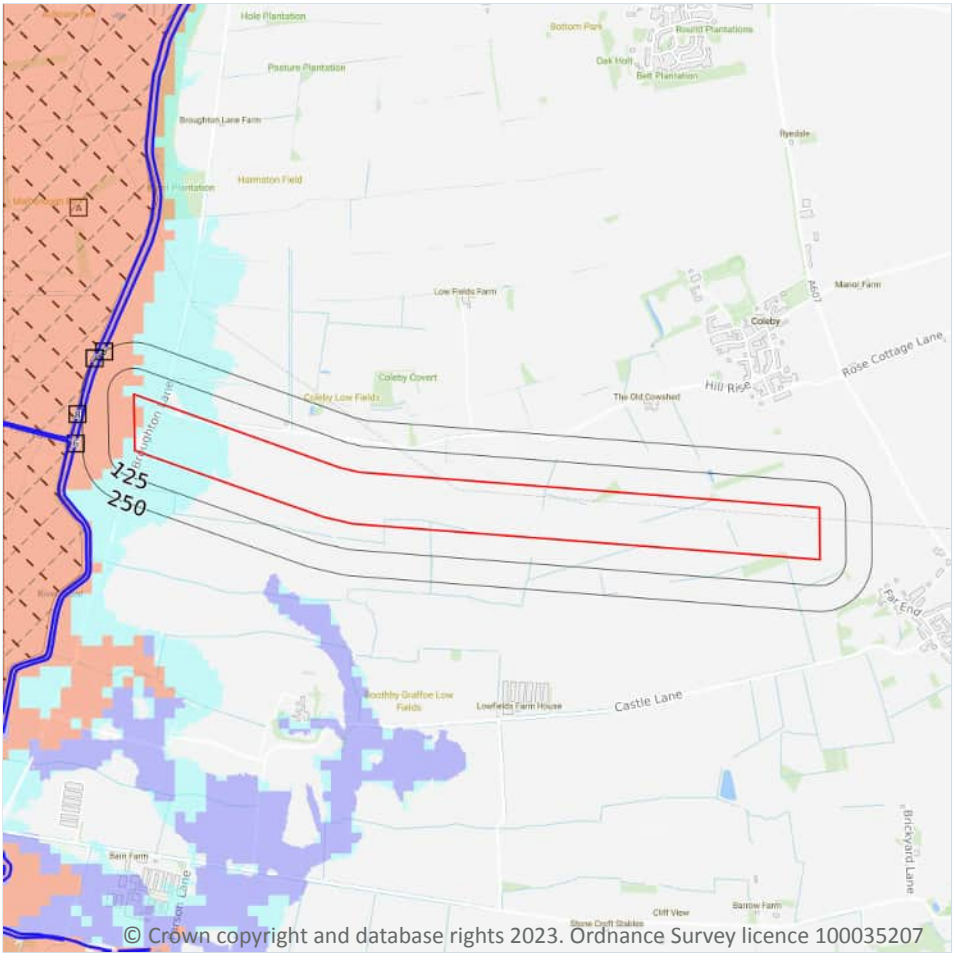
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 44 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
7	**On site**	**Witham Lias**	**GB40502G401400 ↗**	**Good**	**Good**	**Good**	**2019**

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

7 River and coastal flooding



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Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	3

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).

Features are displayed on the River and coastal flooding map on **page 52 >**

Distance	Flood risk category
On site	**High**
0 - 50m	High

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

7.2 Historical Flood Events

Records within 250m	**1**

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.

Features are displayed on the River and coastal flooding map on **page 52 >**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
A	236m W	Lna_2000_11_River Witham Washland	2000-11-07 2000-11-09	Main river	Other	Fluvial

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

7.3 Flood Defences

Records within 250m	**4**

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.

Features are displayed on the River and coastal flooding map on **page 52 >**

ID	Location	Update
5	211m W	08/11/2022
6	219m W	08/11/2022
7	238m W	08/11/2022
8	244m W	08/11/2022

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	1

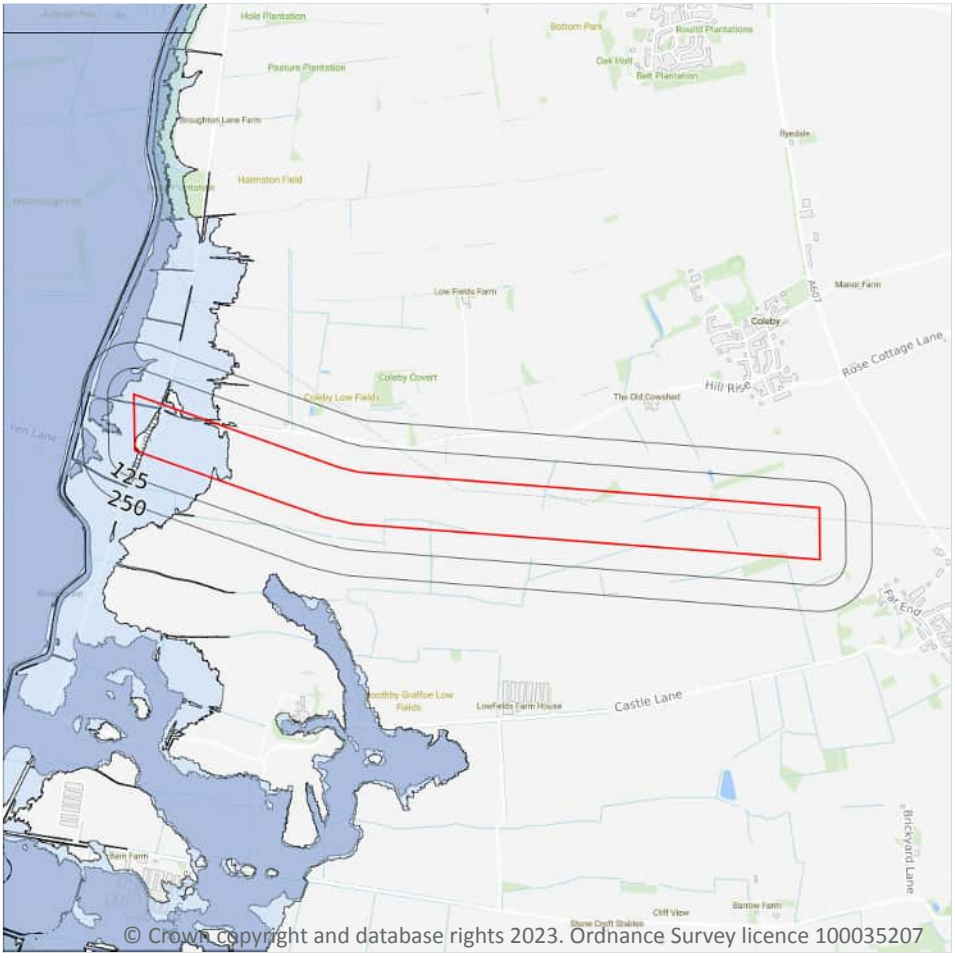
Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

Features are displayed on the River and coastal flooding map on **page 52 >**

ID	Location	Update
A	248m W	Flood Storage Area

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

River and coastal flooding - Flood Zones



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Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

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.

Features are displayed on the River and coastal flooding map on **page 52 >**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

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

7.7 Flood Zone 3

Records within 50m	1

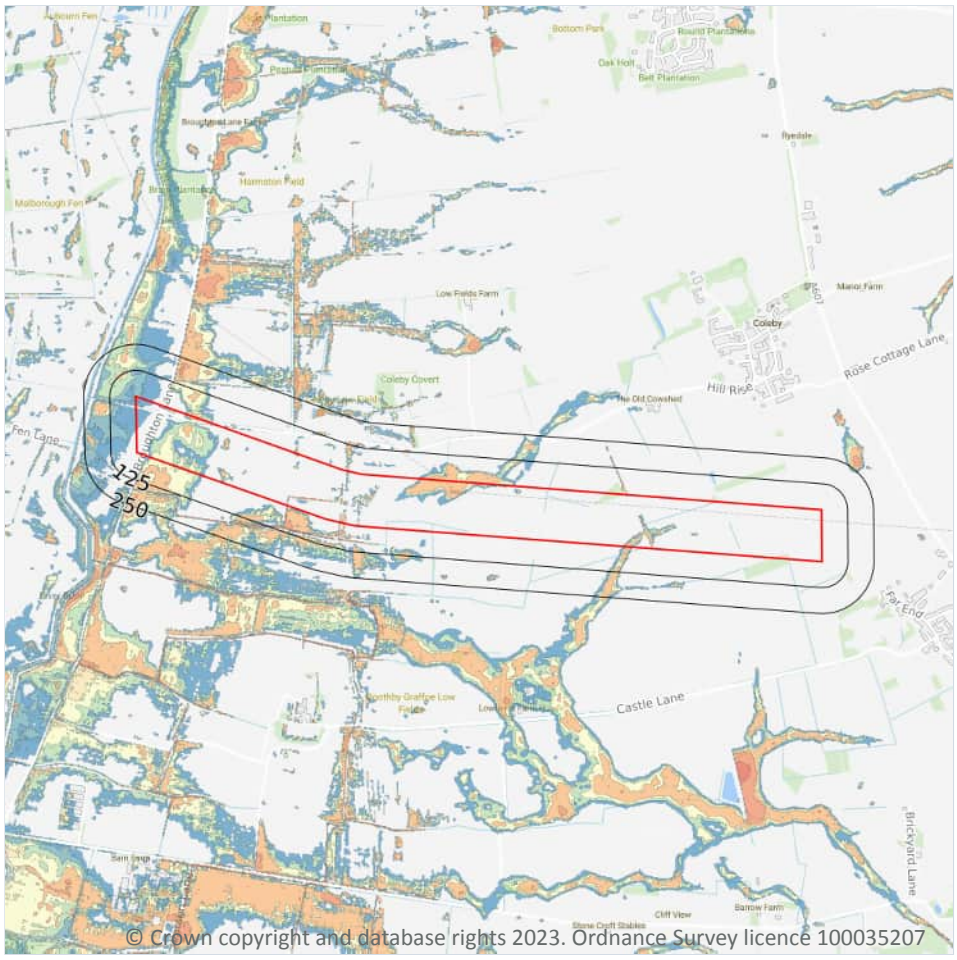
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 52 >**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

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

8 Surface water flooding



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 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 57 >**

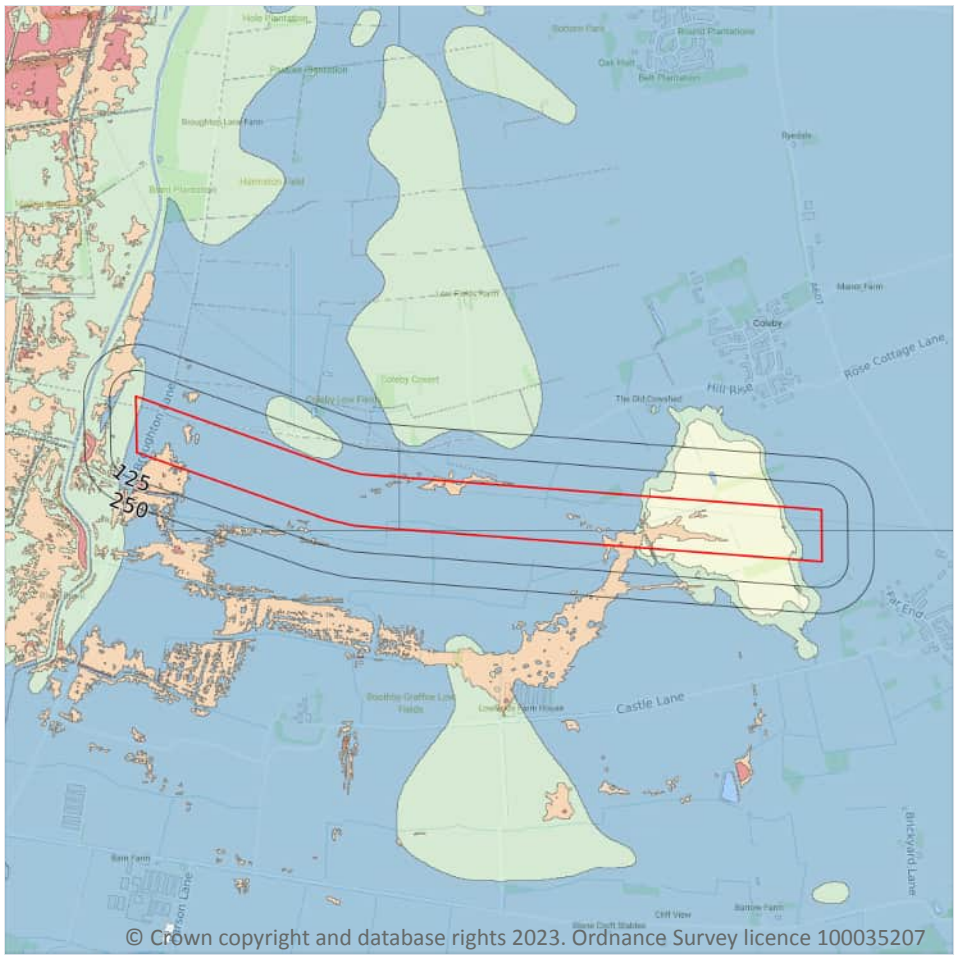
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

Highest risk on site	**Moderate-High**
Highest risk within 50m	**Moderate-High**

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 59 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations

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	0

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.

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	0

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

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

10.12 Proposed Ramsar sites

Records within 2000m	0

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

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	3

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	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
On site	**Lincolnshire Limestone**	**Groundwater**	**69**	**Existing**
510m W	Lower Witham NVZ	Surface Water	375	Existing

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

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

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.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

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

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

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m	0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

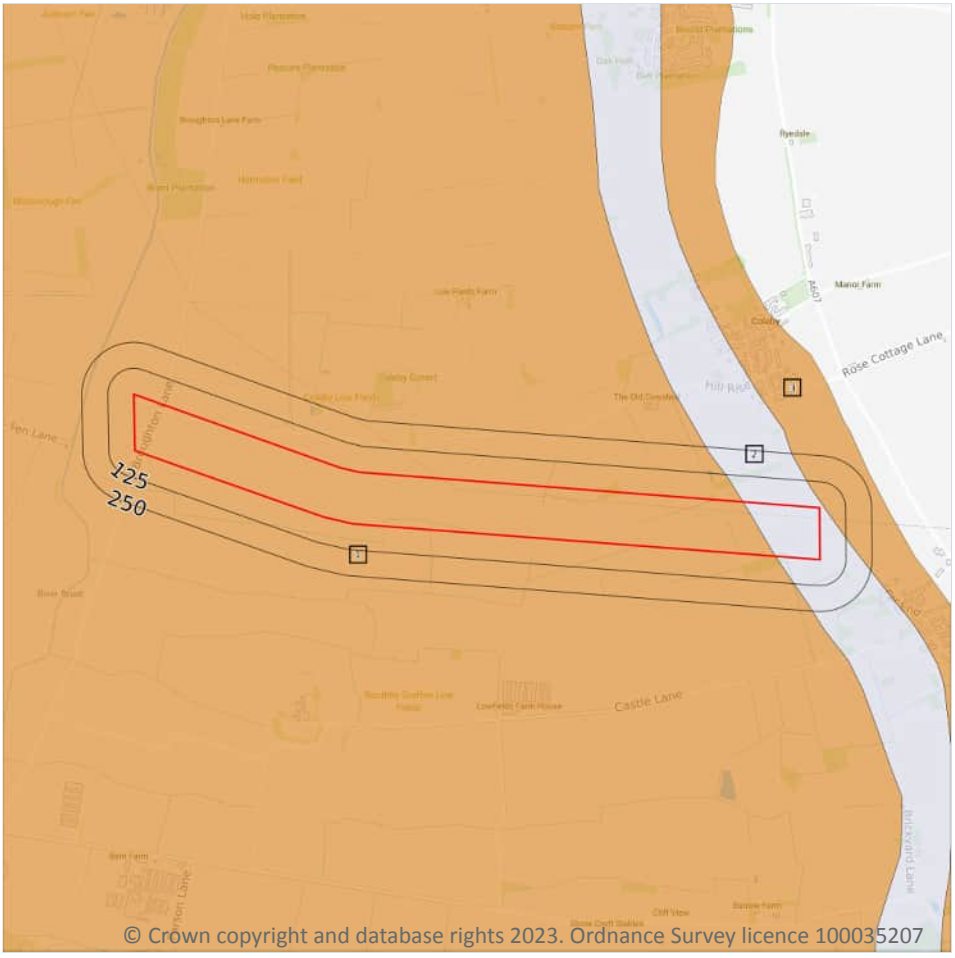
11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



Site Outline
Search buffers in metres (m)
Grade 1 - excellent quality
Grade 2 - very good quality
Grade 3 - good to moderate quality
Grade 3a - good quality
Grade 3b - moderate quality
Grade 4 - poor quality
Grade 5 - very poor quality
Non-agricultural land
Urban land
Exclusion land
Tree felling licences
Open Access land

12.1 Agricultural Land Classification

Records within 250m	3

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 67 >**

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

ID	Location	Classification	Description
2	**On site**	**Grade 4**	**Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.**
3	20m E	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	**0**

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	**1**

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	**AG00335009**	**Entry Level plus Higher Level Stewardship**	**01/10/2011**	**30/09/2023**

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	**5**

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	**491137**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**611139**	**Countryside Stewardship (Middle Tier)**	**01/01/2019**	**31/12/2023**
On site	**611139**	**Countryside Stewardship (Middle Tier)**	**01/01/2019**	**31/12/2023**
73m E	611139	Countryside Stewardship (Middle Tier)	01/01/2019	31/12/2023
227m W	493402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022

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 70 >**

ID	Location	Main Habitat	Other habitats
1	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
2	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
3	239m E	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.

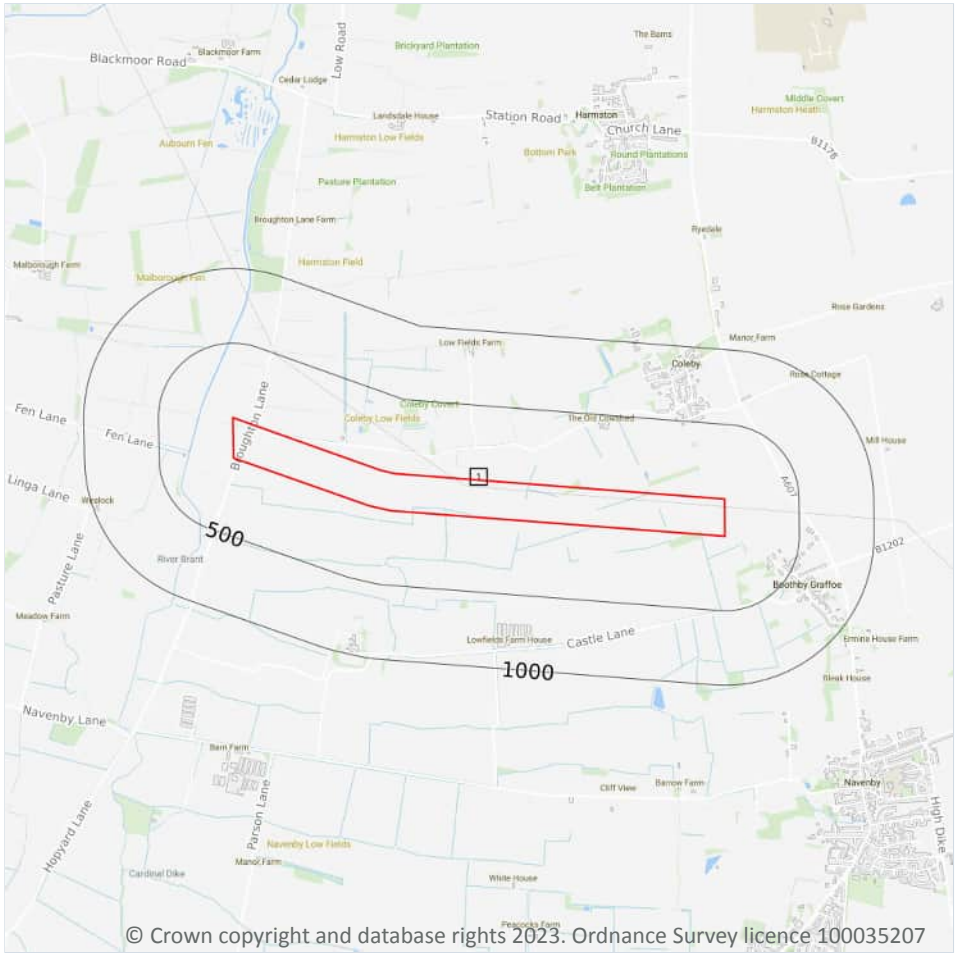
13.4 Limestone Pavement Orders

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 72 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

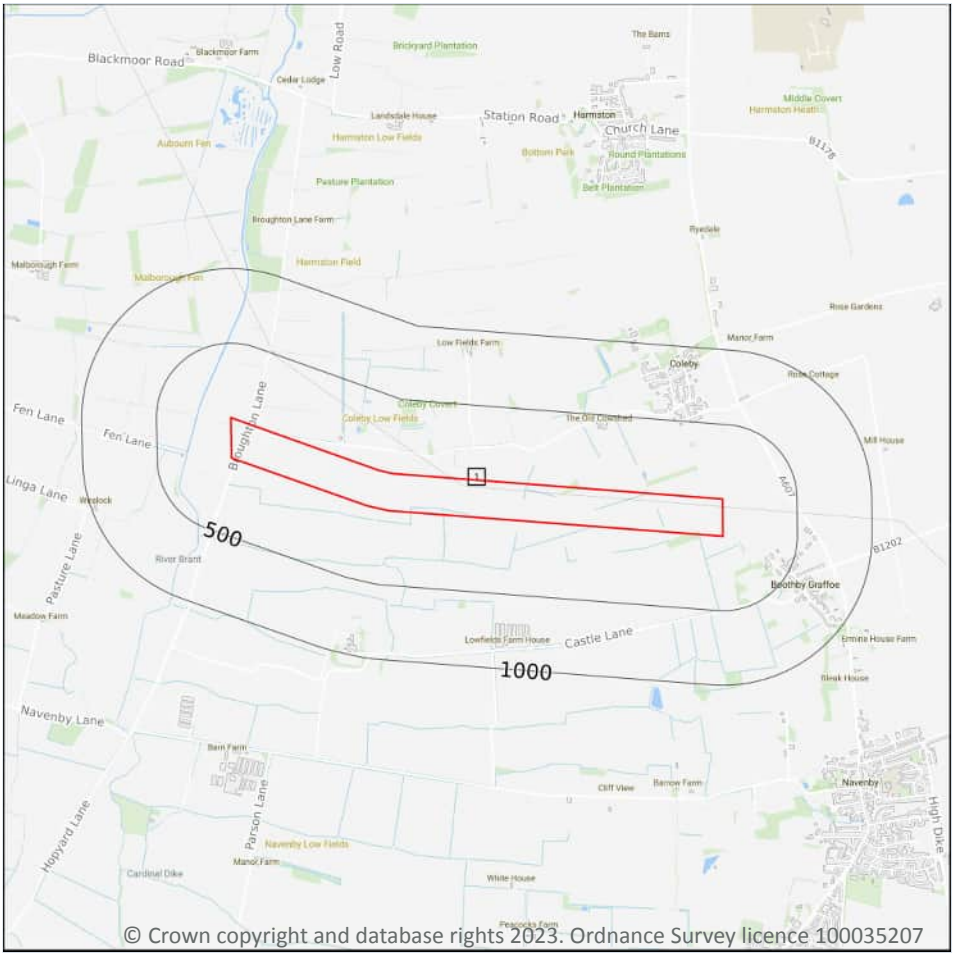
14.6 Bedrock faults and other linear features (10k)

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 76 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_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.

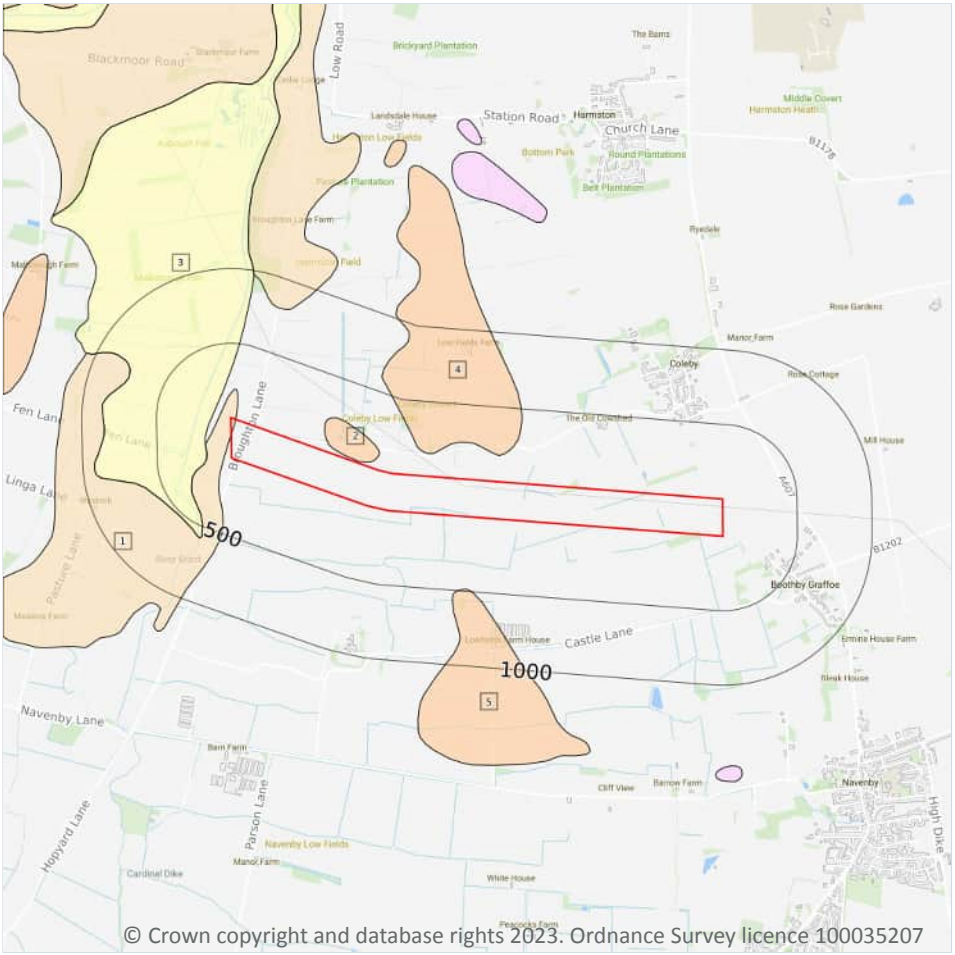
15.3 Artificial ground permeability (50k)

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	5

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 78 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**FULB-XSV**	**FULBECK SAND AND GRAVEL MEMBER**	**SAND AND GRAVEL**
2	11m W	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL
3	119m W	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL
4	154m NW	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL

ID	Location	LEX Code	Description	Rock description
5	486m S	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	**2**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**Very High**	**High**
11m W	Intergranular	Very High	High

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.

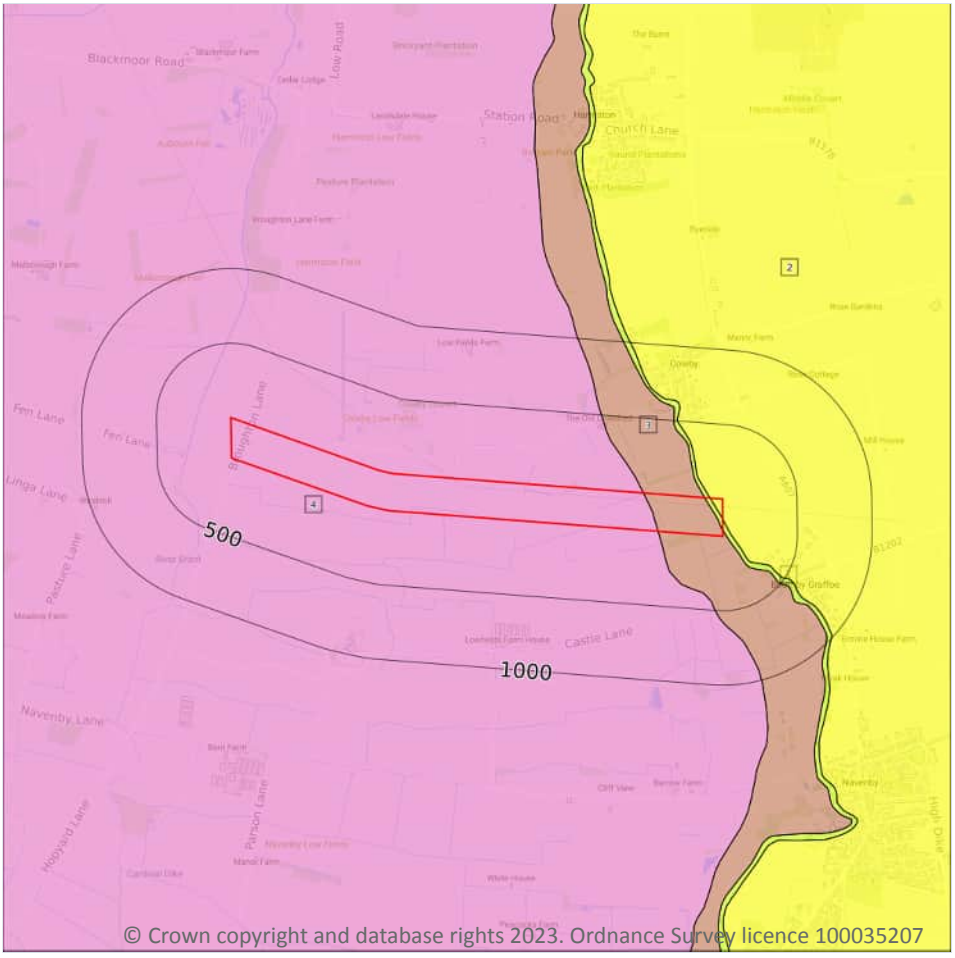
15.7 Landslip permeability (50k)

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	4

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 80 >**

ID	Location	LEX Code	Description	Rock age
1	On site	GRFN-SDIR	GRANTHAM FORMATION AND NORTHAMPTON SAND FORMATION (UNDIFFERENTIATED) - SANDSTONE AND IRONSTONE	AALENIAN
2	On site	LLL-LMST	LOWER LINCOLNSHIRE LIMESTONE MEMBER - LIMESTONE	BAJOCIAN

ID	Location	LEX Code	Description	Rock age
3	**On site**	**WHM-MDST**	**WHITBY MUDSTONE FORMATION - MUDSTONE**	**TOARCIAN**
4	**On site**	**CHAM-MDST**	**CHARMOUTH MUDSTONE FORMATION - MUDSTONE**	**SINEMURIAN**

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**7**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Low**	**Low**
On site	**Mixed**	**High**	**Moderate**
On site	**Fracture**	**Low**	**Low**
On site	**Fracture**	**Low**	**Low**
On site	**Fracture**	**Low**	**Low**
On site	**Fracture**	**Low**	**Low**
On site	**Fracture**	**Very High**	**Very High**

This data is sourced from the British Geological Survey.

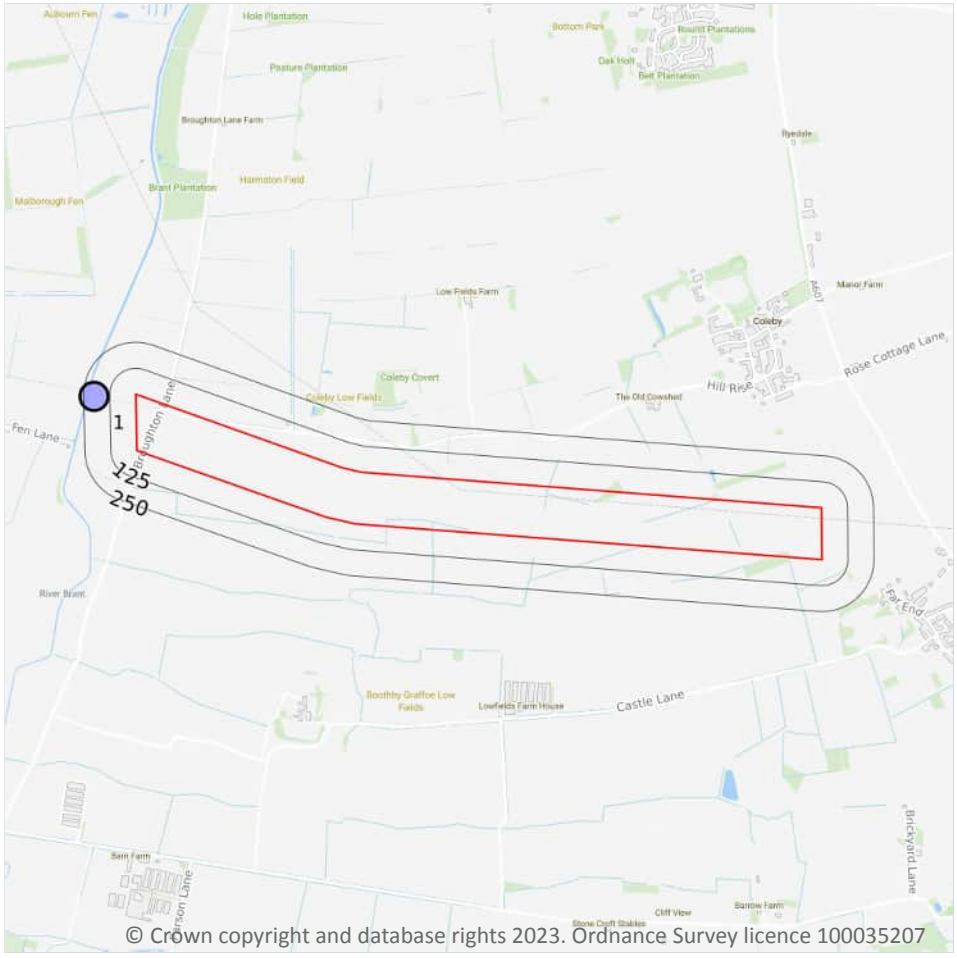
15.10 Bedrock faults and other linear features (50k)

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

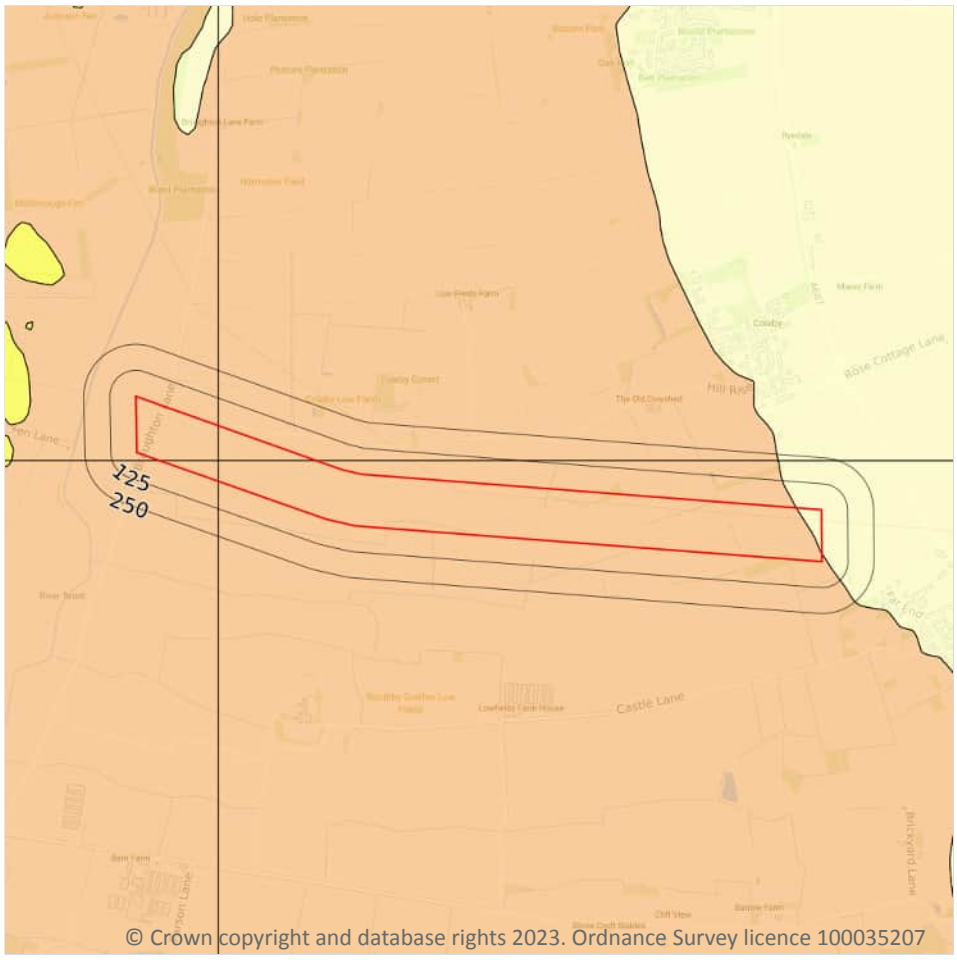
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 82 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	203m W	494400 360300	COLEBY BRIDGE BH3	7.62	N	250723 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	2

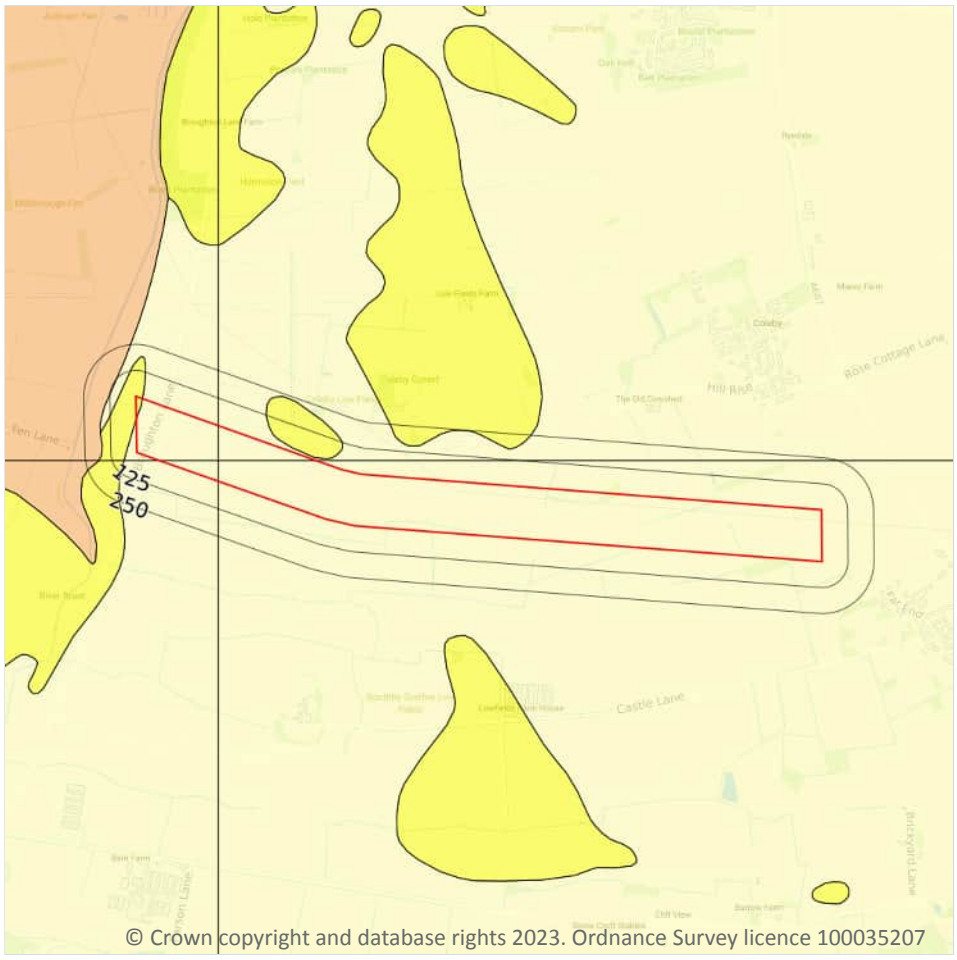
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 83 >**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Low**	**Ground conditions predominantly medium plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	3

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.

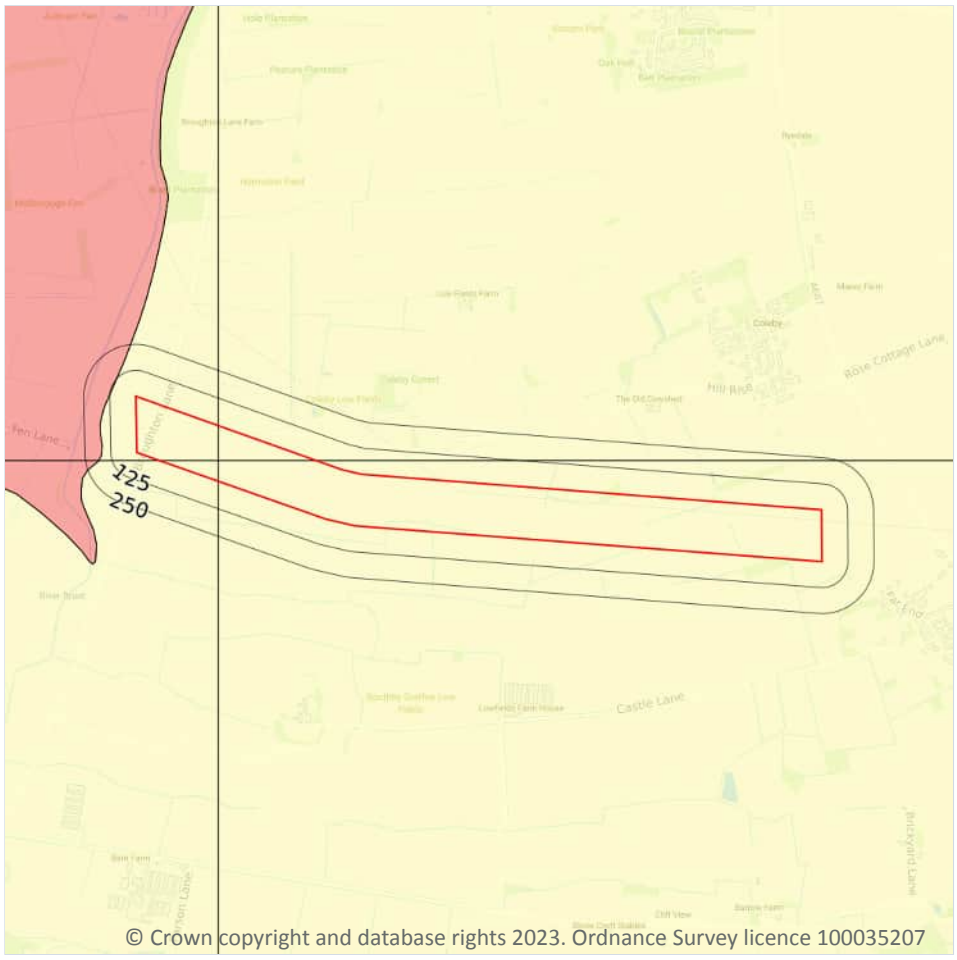
Features are displayed on the Natural ground subsidence - Running sands map on **page 84 >**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

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.**
11m W	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



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	1

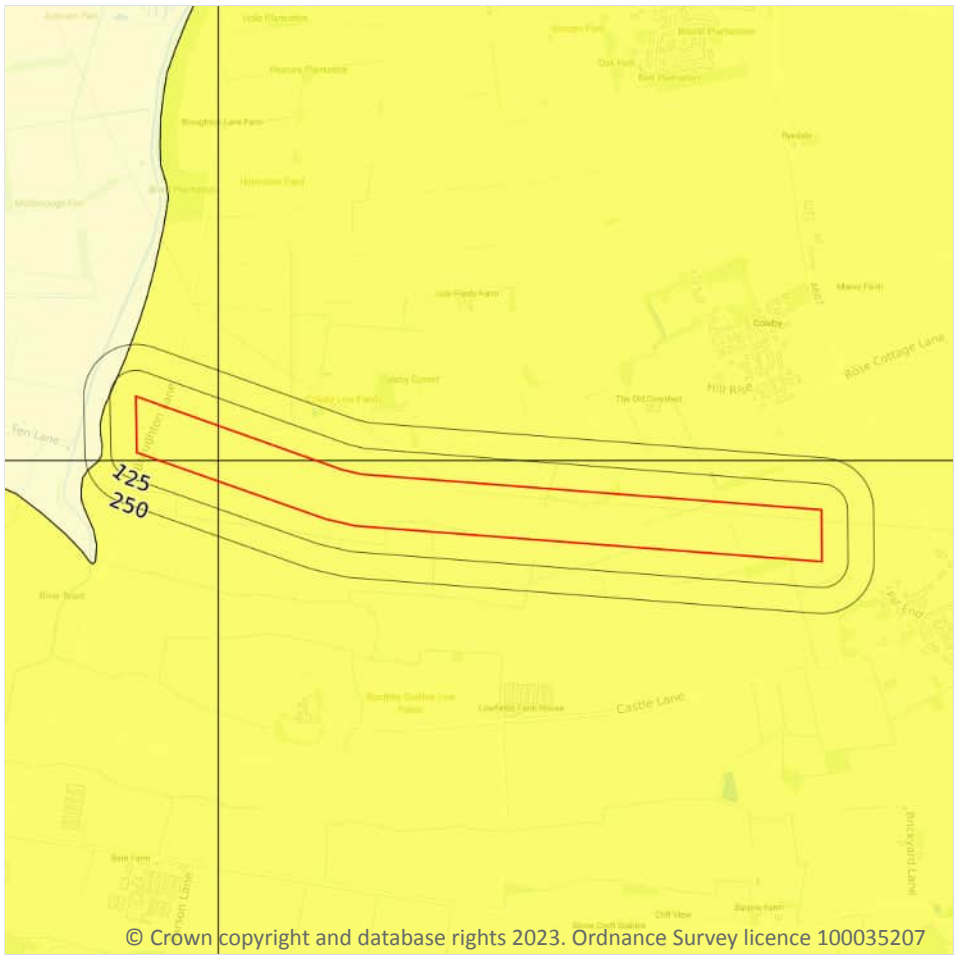
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 86 >**

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

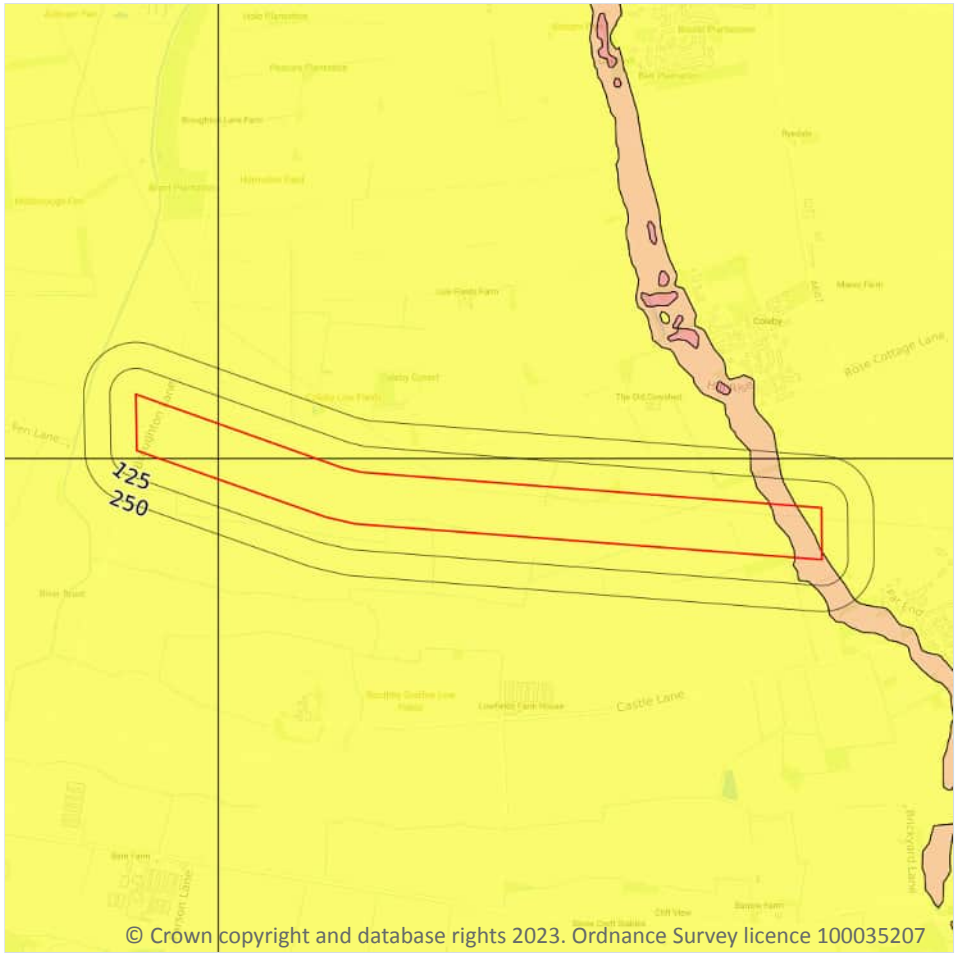
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 87 >**

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	2

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.

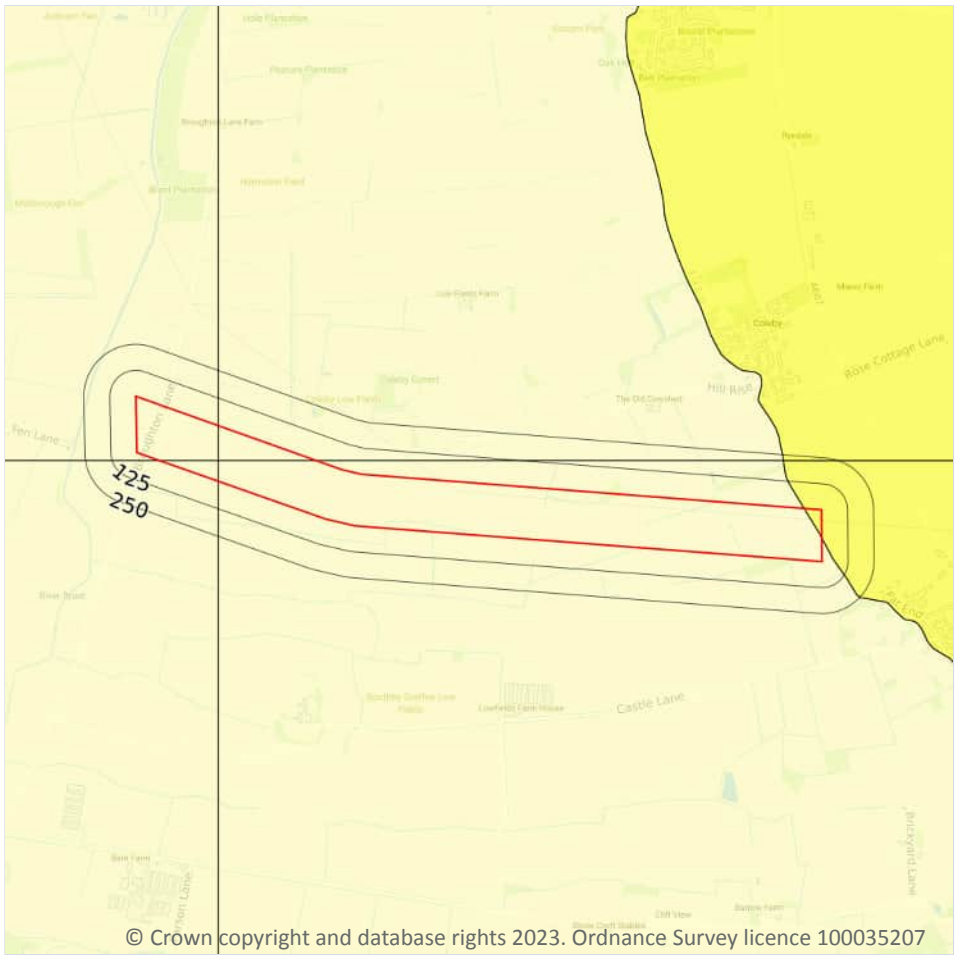
Features are displayed on the Natural ground subsidence - Landslides map on **page 88 >**

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.**

Location	Hazard rating	Details
On site	**Low**	**Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



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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.

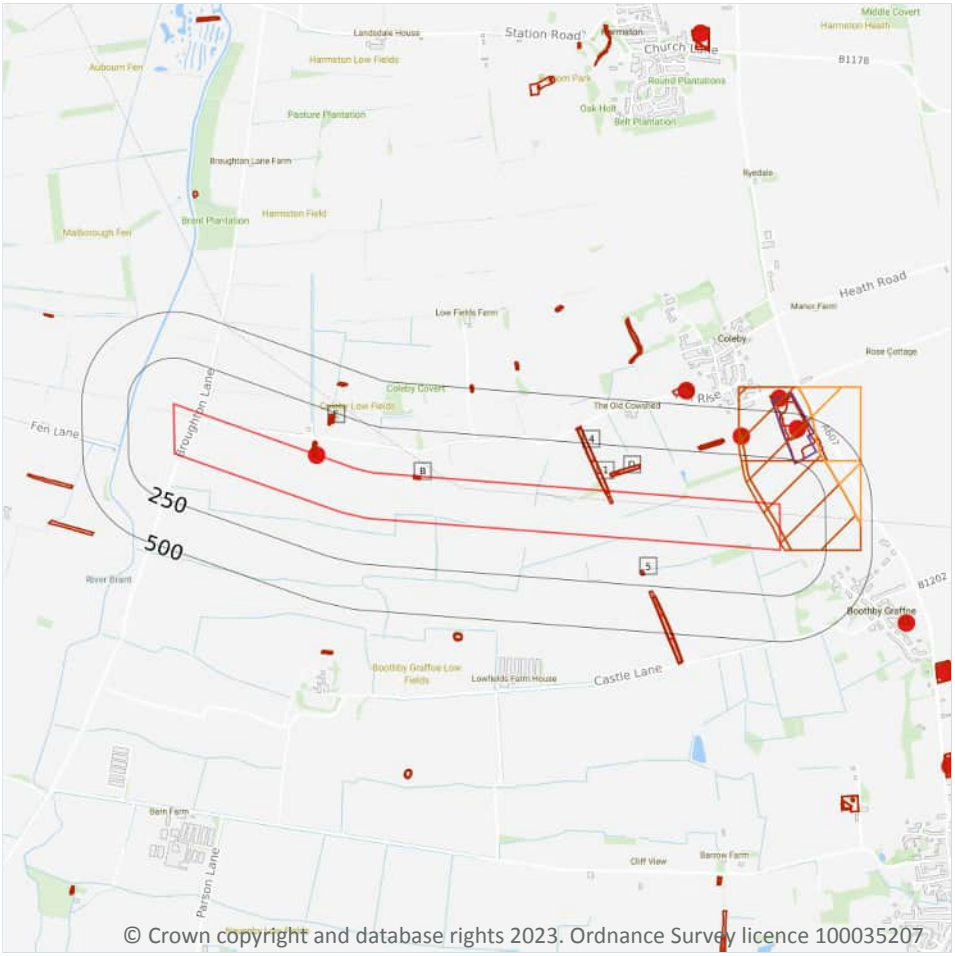
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 90 >**

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
On site	**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



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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	3

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on **page 92 >**

ID	Location	Details	Description
A	**On site**	**Name: Coleby Low Field Sand Pit Address: Coleby, LINCOLN, Lincolnshire Commodity: Sand Status: Ceased**	**Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority**
I	355m E	Name: Coleby Address: Coleby, LINCOLN, Lincolnshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
F	422m E	Name: Coleby Address: Coleby, LINCOLN, Lincolnshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	**24**

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 92 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Cuttings**	**1953**	**1:10560**
A	**On site**	**Sand Pit**	**1886**	**1:10560**
B	**On site**	**Pond**	**1886**	**1:10560**
B	**On site**	**Pond**	**1906**	**1:10560**
C	**On site**	**Cuttings**	**1886**	**1:10560**
C	**On site**	**Cuttings**	**1906**	**1:10560**
C	**On site**	**Cuttings**	**1946**	**1:10560**

ID	Location	Land Use	Year of mapping	Mapping scale
A	9m W	Sand Pit	1951	1:10560
A	13m W	Sand Pit	1948	1:10560
A	13m W	Sand Pit	1946	1:10560
A	14m W	Sand Pit	1906	1:10560
D	78m E	Unspecified Heap	1948	1:10560
D	80m E	Unspecified Heap	1906	1:10560
D	80m E	Unspecified Heap	1906	1:10560
4	155m E	Cuttings	1951	1:10560
5	166m SE	Cuttings	1886	1:10560
E	174m NW	Pond	1951	1:10560
E	178m NW	Pond	1948	1:10560
E	179m NW	Pond	1906	1:10560
E	179m NW	Ponds	1946	1:10560
E	184m NW	Ponds	1886	1:10560
E	186m NW	Pond	1973	1:10000
F	250m E	Unspecified Disused Quarry	1973	1:10000
F	250m E	Unspecified Quarry	1951	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	1

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.

Features are displayed on the Mining and ground workings map on **page 92 >**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
F	237m E	Coleby	Limestone	Surface mineral working	Valid	21/5/48

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	6

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 92 >**

ID	Location	Name	Commodity	Class	Likelihood
2	**On site**	**Coleby**	**Iron Ore (Bedded)**	**D**	**Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.**

ID	Location	Name	Commodity	Class	Likelihood
3	**On site**	**Coleby**	**Iron Ore (Bedded)**	**D**	**Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.**
6	220m E	Coleby	Iron Ore (Bedded)	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
7	222m E	Coleby	Iron Ore (Bedded)	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
8	333m E	Coleby	Iron Ore (Bedded)	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
9	341m E	Coleby	Iron Ore (Bedded)	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

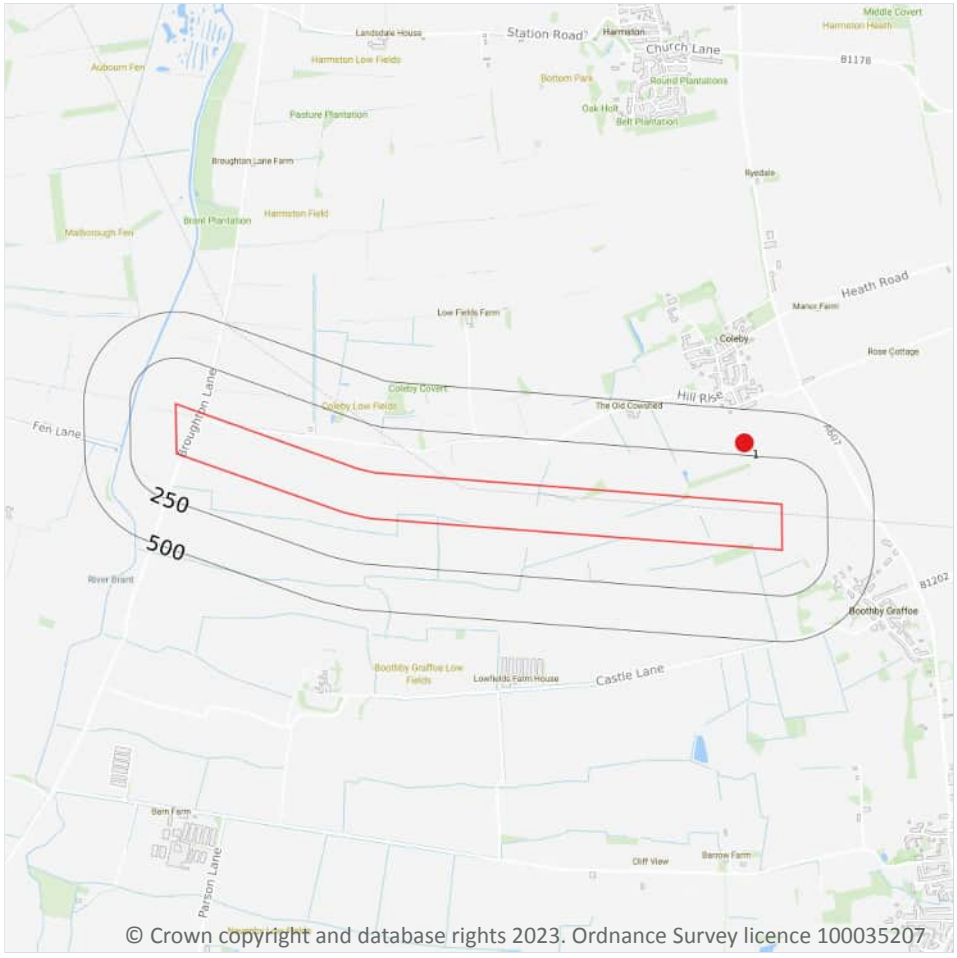
18.16 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes



Site Outline

Search buffers in metres (m)

- Natural cavities (Area)
- Natural cavities (Point)
- Mining cavities
- Reported recent incidents
- Historical incidents
- BGS karst database (Point)
- BGS karst database (Line)
- BGS karst database (Area)

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	1

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.

Features are displayed on the Ground cavities and sinkholes map on **page 99 >**

ID	Location	Mine Address	Mineral	Data source	Publisher
1	320m E	Coleby Mine, Coleby, Lincolnshire	Magnatite, Marcasite, Siderite, Ironstone	'The Ironstone Quarries of the Midlands- Part II: The Oxfordshire Field	Runpast Publishing

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

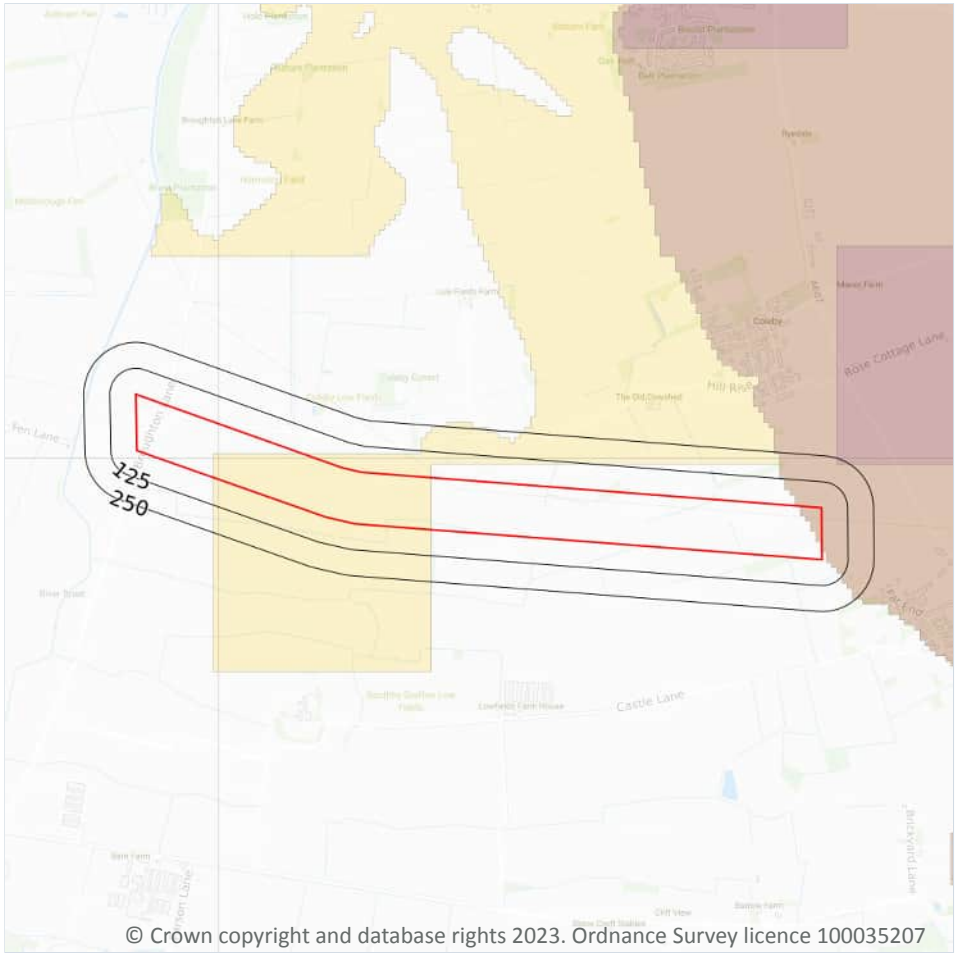
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

20.1 Radon

Records on site	3

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 102 >**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 1% and 3%**	**None**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 10% and 30%**	**Full**
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	**24**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**1 mg/kg**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**1 mg/kg**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**

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**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**1 mg/kg**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
9m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
9m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
11m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
14m E	15 - 25 mg/kg	1 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
20m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
37m E	15 mg/kg	1 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
45m E	15 - 25 mg/kg	1 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
46m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	**0**

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects



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- Site Outline
- Search buffers in metres (m)
- Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

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	1

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.

Features are displayed on the Railway infrastructure and projects map on **page 107 >**

Location	Land Use	Year of mapping	Mapping scale
135m E	Old Tramway Sidings	1886	10560

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	1

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

Features are displayed on the Railway infrastructure and projects map on **page 107 >**

Location	Description
On site	**Abandoned**

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

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Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 11/10/2023

Your ref: 60700987

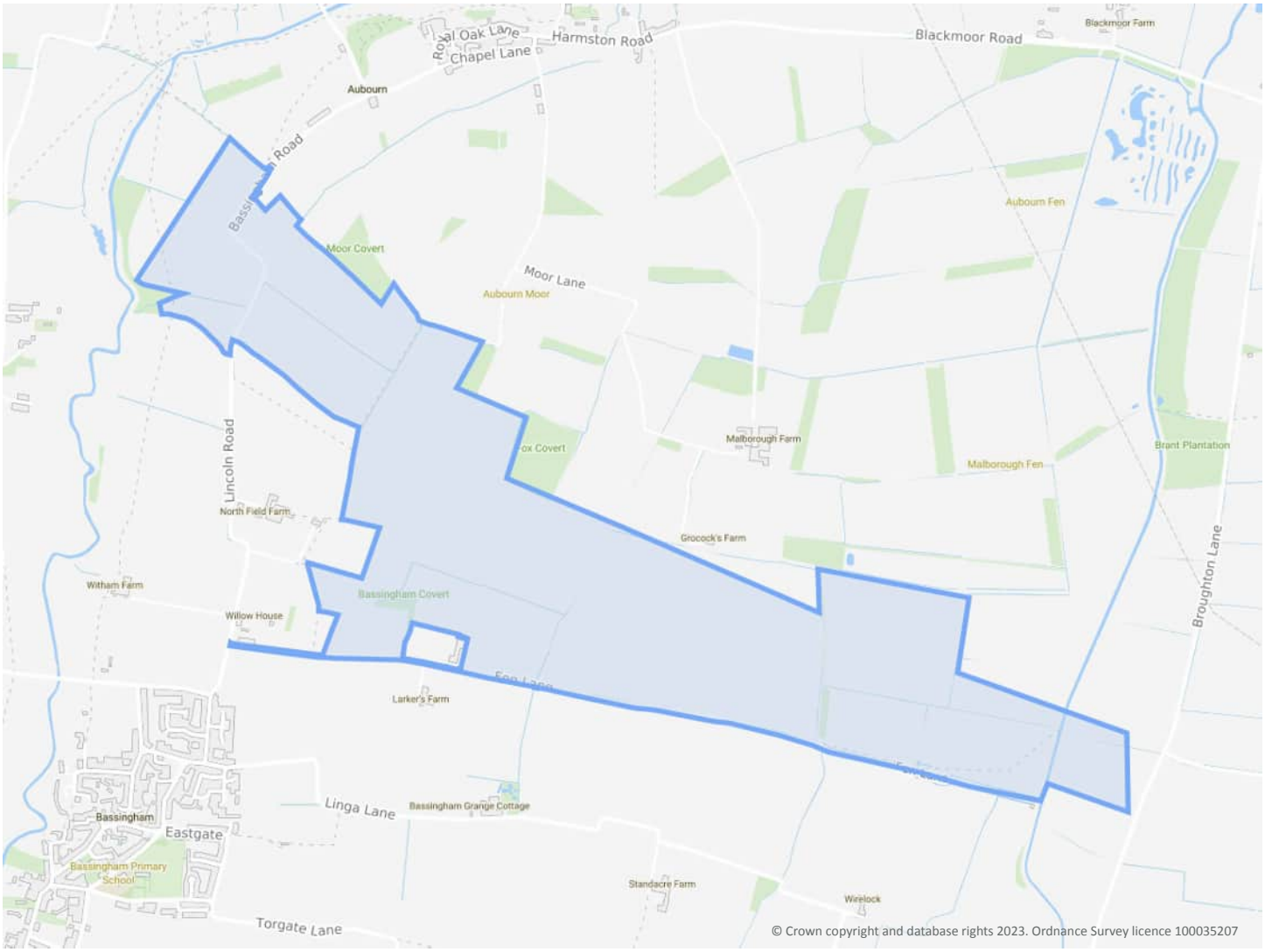
Our Ref: GSIP-2023-14155-15965_F2

Site Details

Location: 492085 361211

Area: 208.79 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

OS MasterMap site plan N/A: >10ha

Aerial image p. 9 >

groundsure.com/insightuserguide ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

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Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	3	0	7	8	-
15 >	1.2 >	Historical tanks >	0	0	1	1	-
16 >	1.3 >	Historical energy features >	0	0	0	3	-
16	1.4	Historical petrol stations	0	0	0	0	-
16 >	1.5 >	Historical garages >	0	0	0	1	-
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 >	4	0	9	10	-
19 >	2.2 >	Historical tanks >	0	0	1	2	-
20 >	2.3 >	Historical energy features >	0	0	0	4	-
20	2.4	Historical petrol stations	0	0	0	0	-
20 >	2.5 >	Historical garages >	0	0	0	1	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
22	3.1	Active or recent landfill	0	0	0	0	-
22	3.2	Historical landfill (BGS records)	0	0	0	0	-
23	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
23	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
23	3.5	Historical waste sites	0	0	0	0	-
23	3.6	Licensed waste sites	0	0	0	0	-
23 >	3.7 >	Waste exemptions >	4	32	47	145	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
41 >	4.1 >	Recent industrial land uses >	0	1	0	-	-
42	4.2	Current or recent petrol stations	0	0	0	0	-
42	4.3	Electricity cables	0	0	0	0	-
42	4.4	Gas pipelines	0	0	0	0	-
42	4.5	Sites determined as Contaminated Land	0	0	0	0	-

42	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
43	4.7	Regulated explosive sites	0	0	0	0	-
43	4.8	Hazardous substance storage/usage	0	0	0	0	-
43	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
43	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
43	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
44	4.12	Radioactive Substance Authorisations	0	0	0	0	-
44 >	**4.13 >**	**Licensed Discharges to controlled waters >**	0	0	2	1	-
44	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
45	4.15	Pollutant release to public sewer	0	0	0	0	-
45	4.16	List 1 Dangerous Substances	0	0	0	0	-
45	4.17	List 2 Dangerous Substances	0	0	0	0	-
45	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
45	4.19	Pollution inventory substances	0	0	0	0	-
46	4.20	Pollution inventory waste transfers	0	0	0	0	-
46	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
47 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
49 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
51 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
55	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
55	5.5	Groundwater vulnerability- local information	None (within 0m)				
56	5.6	Groundwater abstractions	0	0	0	0	0
57 >	**5.7 >**	**Surface water abstractions >**	2	1	3	0	12
61	5.8	Potable abstractions	0	0	0	0	0
61	5.9	Source Protection Zones	0	0	0	0	-
61	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
62 >	**6.1 >**	**Water Network (OS MasterMap) >**	54	20	31	-	-

71 >	6.2 >	Surface water features >	1	9	16	-	-
71 >	6.3 >	WFD Surface water body catchments >	2	-	-	-	-
71 >	6.4 >	WFD Surface water bodies >	1	1	0	-	-
72 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
73 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
74 >	7.2 >	Historical Flood Events >	1	0	0	-	-
74 >	7.3 >	Flood Defences >	13	1	4	-	-
75	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
75 >	7.5 >	Flood Storage Areas >	1	0	0	-	-
77 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
78 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
79 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
81 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
82	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
82	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
82	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
82	10.4	Special Protection Areas (SPA)	0	0	0	0	0
83	10.5	National Nature Reserves (NNR)	0	0	0	0	0
83	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
83	10.7	Designated Ancient Woodland	0	0	0	0	0
83	10.8	Biosphere Reserves	0	0	0	0	0
84	10.9	Forest Parks	0	0	0	0	0
84	10.10	Marine Conservation Zones	0	0	0	0	0
84	10.11	Green Belt	0	0	0	0	0
84	10.12	Proposed Ramsar sites	0	0	0	0	0

84	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
85	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
85	10.15	Nitrate Sensitive Areas	0	0	0	0	0
85 >	**10.16 >**	**Nitrate Vulnerable Zones >**	2	0	0	0	0
86	10.17	SSSI Impact Risk Zones	0	-	-	-	-
86	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
87	11.1	World Heritage Sites	0	0	0	-	-
88	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
88	11.3	National Parks	0	0	0	-	-
88 >	**11.4 >**	**Listed Buildings >**	0	1	0	-	-
89	11.5	Conservation Areas	0	0	0	-	-
89	11.6	Scheduled Ancient Monuments	0	0	0	-	-
89	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
90 >	**12.1 >**	**Agricultural Land Classification >**	Grade 3 (within 250m)				
91	12.2	Open Access Land	0	0	0	-	-
91 >	**12.3 >**	**Tree Felling Licences >**	1	0	0	-	-
91 >	**12.4 >**	**Environmental Stewardship Schemes >**	5	2	0	-	-
92 >	**12.5 >**	**Countryside Stewardship Schemes >**	6	2	3	-	-
Page	Section	**Habitat designations >**	On site	0-50m	50-250m	250-500m	500-2000m
93 >	**13.1 >**	**Priority Habitat Inventory >**	3	2	6	-	-
94	13.2	Habitat Networks	0	0	0	-	-
94	13.3	Open Mosaic Habitat	0	0	0	-	-
94	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
96 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
97	14.2	Artificial and made ground (10k)	0	0	0	0	-
98	14.3	Superficial geology (10k)	0	0	0	0	-

98	14.4	Landslip (10k)	0	0	0	0	-
99	14.5	Bedrock geology (10k)	0	0	0	0	-
99	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
100 >	**15.1 >**	**50k Availability >**	Identified (within 500m)				
101	15.2	Artificial and made ground (50k)	0	0	0	0	-
101	15.3	Artificial ground permeability (50k)	0	0	-	-	-
102 >	**15.4 >**	**Superficial geology (50k) >**	4	0	1	1	-
103 >	**15.5 >**	**Superficial permeability (50k) >**	Identified (within 50m)				
103	15.6	Landslip (50k)	0	0	0	0	-
103	15.7	Landslip permeability (50k)	None (within 50m)				
104 >	**15.8 >**	**Bedrock geology (50k) >**	2	0	0	0	-
105 >	**15.9 >**	**Bedrock permeability (50k) >**	Identified (within 50m)				
105	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
106 >	**16.1 >**	**BGS Boreholes >**	5	1	2	-	-
Page	Section	**Natural ground subsidence >**					
108 >	**17.1 >**	**Shrink swell clays >**	Low (within 50m)				
110 >	**17.2 >**	**Running sands >**	Low (within 50m)				
112 >	**17.3 >**	**Compressible deposits >**	Moderate (within 50m)				
114 >	**17.4 >**	**Collapsible deposits >**	Very low (within 50m)				
116 >	**17.5 >**	**Landslides >**	Very low (within 50m)				
118 >	**17.6 >**	**Ground dissolution of soluble rocks >**	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
120 >	**18.1 >**	**BritPits >**	1	0	0	0	-
121 >	**18.2 >**	**Surface ground workings >**	5	0	3	-	-
121	18.3	Underground workings	0	0	0	0	0
122	18.4	Underground mining extents	0	0	0	0	-
122	18.5	Historical Mineral Planning Areas	0	0	0	0	-

122	18.6	Non-coal mining	0	0	0	0	0
122	18.7	JPB mining areas	None (within 0m)				
122	18.8	The Coal Authority non-coal mining	0	0	0	0	-
123	18.9	Researched mining	0	0	0	0	-
123	18.10	Mining record office plans	0	0	0	0	-
123	18.11	BGS mine plans	0	0	0	0	-
123	18.12	Coal mining	None (within 0m)				
124	18.13	Brine areas	None (within 0m)				
124	18.14	Gypsum areas	None (within 0m)				
124	18.15	Tin mining	None (within 0m)				
124	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
125	19.1	Natural cavities	0	0	0	0	-
125	19.2	Mining cavities	0	0	0	0	0
125	19.3	Reported recent incidents	0	0	0	0	-
125	19.4	Historical incidents	0	0	0	0	-
126	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon** >					
127 >	**20.1** >	**Radon** >	Less than 1% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
129 >	**21.1** >	**BGS Estimated Background Soil Chemistry** >	52	12	-	-	-
133	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
133	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
134	22.1	Underground railways (London)	0	0	0	-	-
134	22.2	Underground railways (Non-London)	0	0	0	-	-
134	22.3	Railway tunnels	0	0	0	-	-
134	22.4	Historical railway and tunnel features	0	0	0	-	-
134	22.5	Royal Mail tunnels	0	0	0	-	-

135	22.6	Historical railways	0	0	0	-	-
135	22.7	Railways	0	0	0	-	-
135	22.8	Crossrail 1	0	0	0	0	-
135	22.9	Crossrail 2	0	0	0	0	-
135	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 208.79ha

Recent site history - 2018 aerial photograph



Capture Date: 03/05/2018

Site Area: 208.79ha

Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 208.79ha

Recent site history - 2007 aerial photograph



Capture Date: 18/09/2007

Site Area: 208.79ha

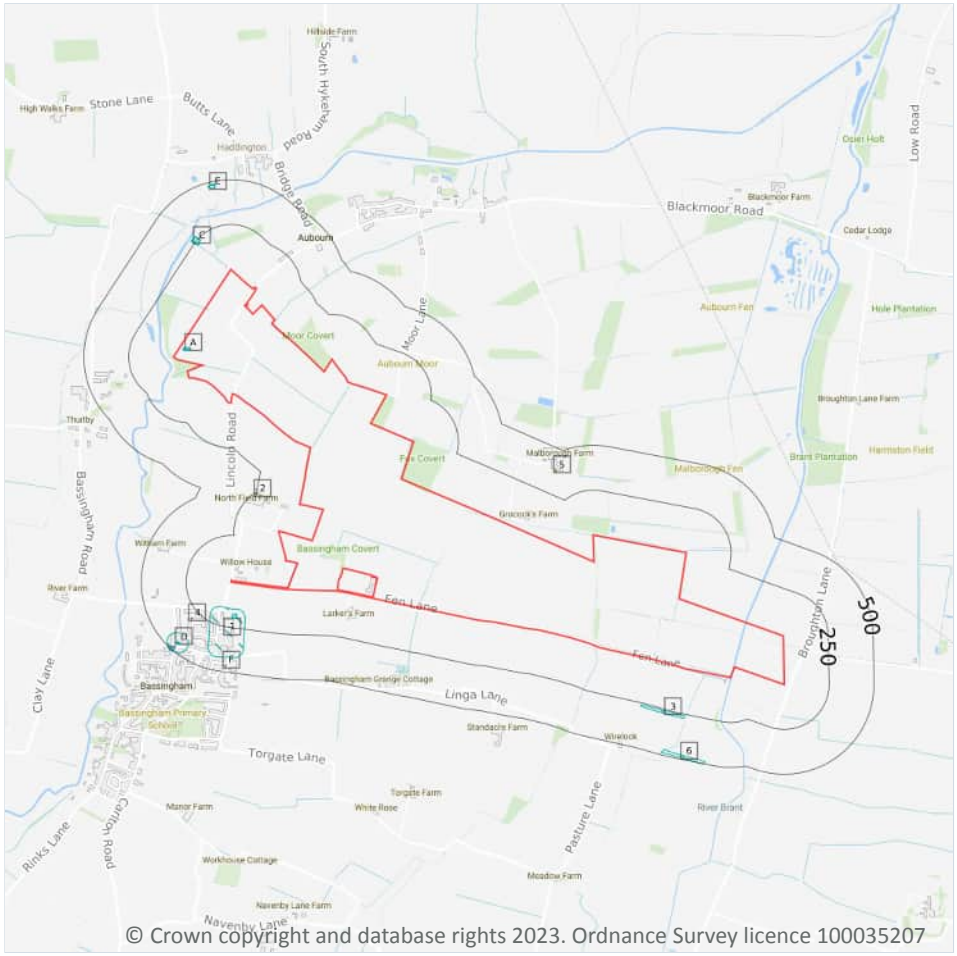
Recent site history - 1999 aerial photograph



Capture Date: 05/06/1999

Site Area: 208.79ha

1 Past land use



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Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

1.1 Historical industrial land uses

Records within 500m	18

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Gravel Pit**	**1955**	**1637974**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Gravel Pit**	**1904 - 1948**	**1661945**
A	**On site**	**Gravel Pit**	**1904**	**1741591**
1	144m SW	Windmill	1904 - 1948	1641218
B	173m SW	Flour Windmill	1886	1589041
B	174m SW	Unspecified Windmill	1904	1579949
C	227m NW	Unspecified Mill	1904	1726173
C	228m NW	Unspecified Mill	1904 - 1948	1702684
C	230m NW	Unspecified Disused Mill	1955	1595187
C	233m NW	Corn Mill	1886	1590200
3	257m SE	Unspecified Heap	1948	1570045
D	394m SW	Smithy	1948	1737997
D	444m SW	Smithy	1904	1742349
D	445m SW	Smithy	1955	1740223
E	462m NW	Unspecified Pit	1904 - 1948	1684706
E	464m NW	Unspecified Pit	1979	1639942
E	464m NW	Unspecified Pit	1955	1707388
6	469m SE	Unspecified Heap	1948	1570047

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**2**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
2	235m W	Unspecified Tanks	1975	262253

ID	Location	Land use	Dates present	Group ID
5	376m NE	Unspecified Tank	1975 - 1996	274221

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	3

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
4	296m W	Electricity Substation	1997	149428
F	462m SW	Electricity Substation	1988 - 1990	163820
F	468m SW	Electricity Substation	1997	149429

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	1

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-

grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
D	474m SW	Garage	1975	47556

This data is sourced from Ordnance Survey / Groundsure.

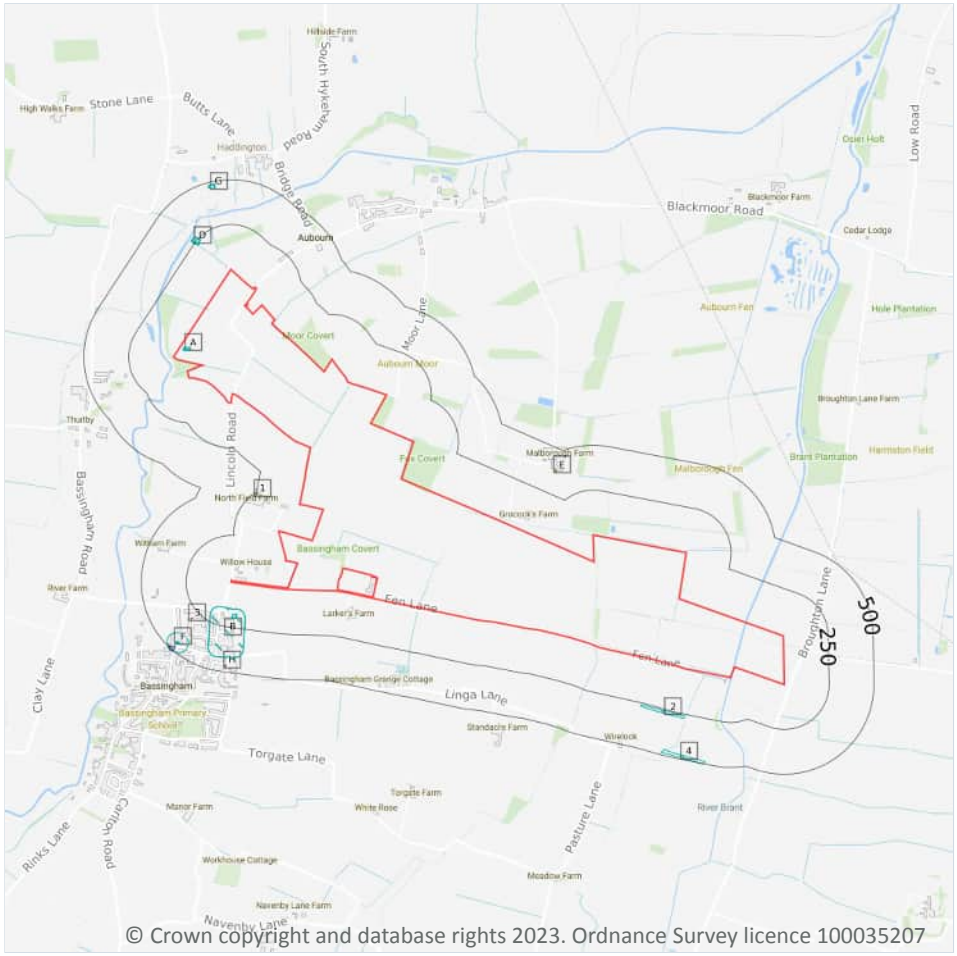
1.6 Historical military land

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



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Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

2.1 Historical industrial land uses

Records within 500m	23

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Gravel Pit**	**1955**	**1637974**
A	**On site**	**Gravel Pit**	**1904**	**1741591**
A	**On site**	**Gravel Pit**	**1948**	**1661945**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Gravel Pit**	**1904**	**1661945**
B	144m SW	Windmill	1948	1641218
B	144m SW	Windmill	1904	1641218
C	173m SW	Flour Windmill	1886	1589041
C	174m SW	Unspecified Windmill	1904	1579949
D	227m NW	Unspecified Mill	1904	1726173
D	228m NW	Unspecified Mill	1948	1702684
D	228m NW	Unspecified Mill	1904	1702684
D	230m NW	Unspecified Disused Mill	1955	1595187
D	233m NW	Corn Mill	1886	1590200
2	257m SE	Unspecified Heap	1948	1570045
F	394m SW	Smithy	1948	1737997
F	444m SW	Smithy	1904	1742349
F	444m SW	Smithy	1904	1742349
F	445m SW	Smithy	1955	1740223
G	462m NW	Unspecified Pit	1948	1684706
G	462m NW	Unspecified Pit	1904	1684706
G	464m NW	Unspecified Pit	1955	1707388
G	464m NW	Unspecified Pit	1979	1639942
4	469m SE	Unspecified Heap	1948	1570047

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**3**

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	235m W	Unspecified Tanks	1975	262253
E	376m NE	Unspecified Tank	1975	274221
E	378m NE	Unspecified Tank	1996	274221

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**4**

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'.

Features are displayed on the Past land use - un-grouped map on **page 18 >**

ID	Location	Land Use	Date	Group ID
3	296m W	Electricity Substation	1997	149428
H	462m SW	Electricity Substation	1988	163820
H	462m SW	Electricity Substation	1990	163820
H	468m SW	Electricity Substation	1997	149429

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	**1**

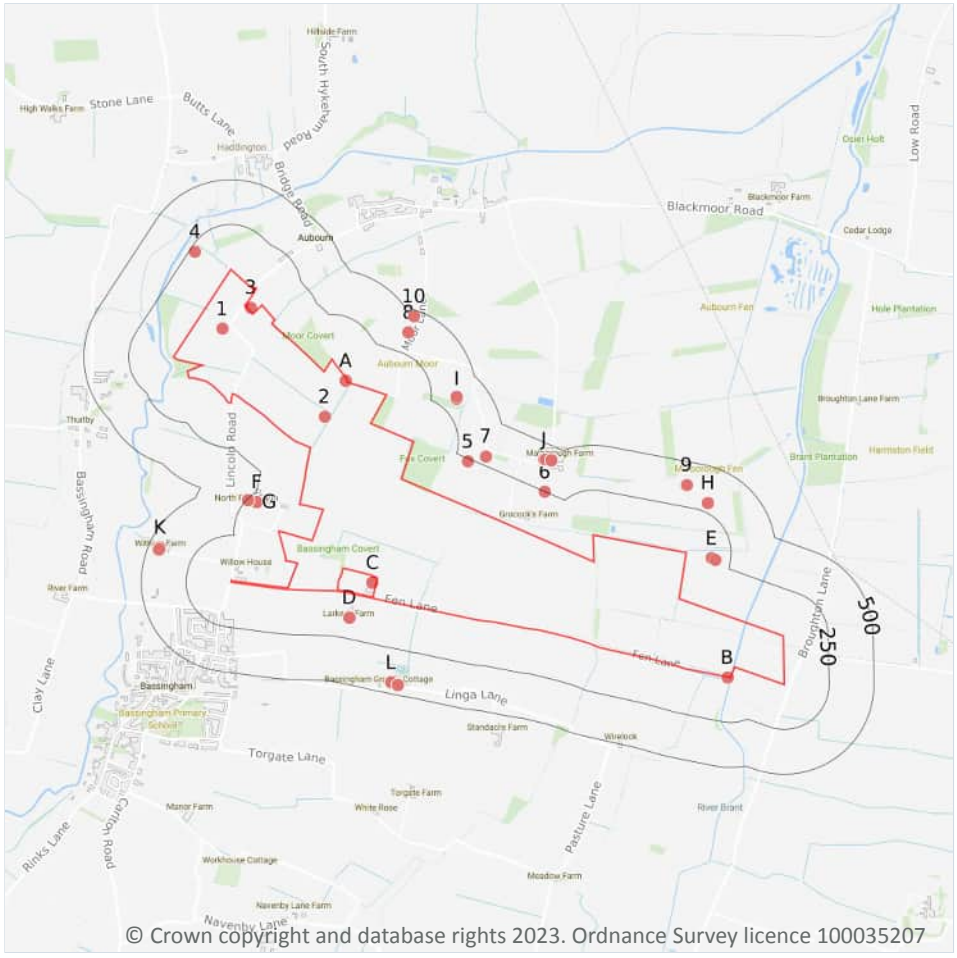
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18 >**

ID	Location	Land Use	Date	Group ID
F	474m SW	Garage	1975	47556

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



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Site Outline

Search buffers in metres (m)

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	0

Waste site records derived from Local Authority planning records and high detail historical mapping.

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	228

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 22 >**

ID	Location	Site	Reference	Category	Sub-Category	Description
1	**On site**	**-**	**WEX156073**	**Storing waste exemption**	**On a Farm**	**Storage of sludge**

ID	Location	Site	Reference	Category	Sub-Category	Description
2	**On site**	**-**	**WEX156082**	**Storing waste exemption**	**On a Farm**	**Storage of sludge**
A	**On site**	**Land at SK92166173**	**EPR/QE5646GF/A001**	**Storing waste exemption**	**Non-Agricultural Waste Only**	**Storage of sludge**
A	**On site**	**Land at NGR: SK9216061730**	**EPR/PE5945KA/A001**	**Storing waste exemption**	**Non-Agricultural Waste Only**	**Storage of sludge**
B	6m SE	-	WEX247782	Disposing of waste exemption	Not on a farm	Deposit of waste from dredging of inland waters
B	6m SE	-	WEX247782	Treating waste exemption	Not on a farm	Treatment of waste aerosol cans
B	6m SE	-	WEX247782	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
B	6m SE	-	WEX247782	Using waste exemption	Not on a farm	Spreading of plant matter to confer benefit
B	6m SE	-	WEX247782	Using waste exemption	Not on a farm	Use of mulch
B	6m SE	-	WEX247782	Using waste exemption	Not on a farm	Use of waste in construction
3	13m NW	-	WEX156080	Storing waste exemption	On a Farm	Storage of sludge
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX171382	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX171382	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX171382	Disposing of waste exemption	On a farm	Burning waste in the open
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX171382	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX012882	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX012882	Disposing of waste exemption	On a farm	Burning waste in the open
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX012882	Treating waste exemption	On a farm	Cleaning, washing, spraying or coating relevant waste
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX012882	Treating waste exemption	On a farm	Aerobic composting and associated prior treatment
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX012882	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX012882	Using waste exemption	On a farm	Use of waste in construction
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX012882	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX012882	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX012882	Using waste exemption	On a farm	Use of waste for a specified purpose
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX304280	Disposing of waste exemption	On a farm	Burning waste in the open

ID	Location	Site	Reference	Category	Sub-Category	Description
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX304280	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX304280	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
C	21m SW	LOWFIELD FARM, THE BARN, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX304280	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	25m SW	The Barn Lowfield Farm Fen Lane LINCOLN LN5 9LF	EPR/JH0177PT /A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
C	25m SW	The Barn Lowfield Farm Fen Lane LINCOLN LN5 9LF	EPR/JH0177PT /A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
C	25m SW	The Barn Lowfield Farm Fen Lane LINCOLN LN5 9LF	EPR/JH0177PT /A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
C	25m SW	The Barn Lowfield Farm Fen Lane LINCOLN LN5 9LF	EPR/JH0177PT /A001	Treating waste exemption	Agricultural Waste Only	Aerobic composting and associated prior treatment
C	25m SW	The Barn Lowfield Farm Fen Lane LINCOLN LN5 9LF	EPR/JH0177PT /A001	Treating waste exemption	Agricultural Waste Only	Preparatory treatments (baling, sorting, shredding etc)
C	25m SW	The Barn Lowfield Farm Fen Lane LINCOLN LN5 9LF	EPR/JH0177PT /A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
C	25m SW	The Barn Lowfield Farm Fen Lane LINCOLN LN5 9LF	EPR/JH0177PT /A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit
C	25m SW	The Barn Lowfield Farm Fen Lane LINCOLN LN5 9LF	EPR/JH0177PT /A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
D	136m SW	Larkers Farm Fen Lane LINCOLN LN5 9LF	EPR/XH0578RF /A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
D	136m SW	Larkers Farm Fen Lane LINCOLN LN5 9LF	EPR/XH0578RF /A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from a portable sanitary convenience
D	136m SW	Larkers Farm Fen Lane LINCOLN LN5 9LF	EPR/XH0578RF /A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open

ID	Location	Site	Reference	Category	Sub-Category	Description
D	136m SW	Larkers Farm Fen Lane LINCOLN LN5 9LF	EPR/XH0578RF/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
D	136m SW	Larkers Farm Fen Lane LINCOLN LN5 9LF	EPR/XH0578RF/A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit
D	136m SW	Larkers Farm Fen Lane LINCOLN LN5 9LF	EPR/XH0578RF/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
D	137m SW	LARKERS FARM, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX035932	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
D	137m SW	LARKERS FARM, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX035932	Disposing of waste exemption	On a farm	Deposit of waste from a portable sanitary convenience
D	137m SW	LARKERS FARM, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX035932	Disposing of waste exemption	On a farm	Burning waste in the open
D	137m SW	LARKERS FARM, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX035932	Using waste exemption	On a farm	Use of waste in construction
D	137m SW	LARKERS FARM, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX035932	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
D	137m SW	LARKERS FARM, FEN LANE, BASSINGHAM, LINCOLN, LN5 9LF	WEX035932	Using waste exemption	On a farm	Use of waste for a specified purpose
E	143m E	-	WEX156369	Storing waste exemption	On a Farm	Storage of sludge
E	164m E	-	WEX321931	Storing waste exemption	On a farm	Storage of sludge
F	202m W	NORTHFIELD FARM, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX209295	Storing waste exemption	On a Farm	Storage of sludge
F	202m W	NORTHFIELD FARM, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX209295	Storing waste exemption	On a Farm	Storage of waste in secure containers
F	202m W	NORTHFIELD FARM, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX209295	Storing waste exemption	On a Farm	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
F	202m W	7C, ENTERPRISE WAY, VALE PARK, EVESHAM, WR11 1GS	WEX094450	Using waste exemption	On a farm	Use of waste in construction
F	202m W	NORTHFIELD FARM, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX064222	Storing waste exemption	On a farm	Storage of waste in secure containers
F	202m W	NORTHFIELD FARM, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX064222	Storing waste exemption	On a farm	Storage of waste in a secure place
F	202m W	NORTHFIELD FARM, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX064222	Storing waste exemption	On a farm	Storage of sludge
F	202m W	NORTHFIELD FARM, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX339347	Storing waste exemption	On a farm	Storage of sludge
F	202m W	NORTHFIELD FARM, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX339347	Storing waste exemption	On a farm	Storage of waste in a secure place
F	202m W	NORTHFIELD FARM, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX339347	Storing waste exemption	On a farm	Storage of waste in secure containers
4	221m NW	-	WEX111023	Storing waste exemption	On a farm	Storage of sludge
5	231m N	-	WEX283305	Storing waste exemption	On a Farm	Storage of sludge
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Disposing of waste exemption	Agricultural Waste Only	Disposal by incineration

ID	Location	Site	Reference	Category	Sub-Category	Description
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in secure containers
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Treating waste exemption	Agricultural Waste Only	Aerobic composting and associated prior treatment
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Using waste exemption	Agricultural Waste Only	Use of mulch
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Using waste exemption	Agricultural Waste Only	Spreading of plant matter to confer benefit
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Using waste exemption	Agricultural Waste Only	Incorporation of ash into soil
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Using waste exemption	Agricultural Waste Only	Pig and poultry ash
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Using waste exemption	Agricultural Waste Only	Burning of waste as a fuel in a small appliance
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Using waste exemption	Agricultural Waste Only	Use of waste derived biodiesel as fuel
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Using waste exemption	Agricultural Waste Only	Use of waste to manufacture finished goods
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Anaerobic digestion at premises used for agriculture and burning of resultant biogas
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Screening and blending of waste

ID	Location	Site	Reference	Category	Sub-Category	Description
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
G	243m W	Northfield Farm Aubourn Road LINCOLN LN5 9LE	EPR/QE5082FA/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
6	245m E	-	WEX284401	Storing waste exemption	On a Farm	Storage of sludge
7	297m NE	-	WEX102060	Storing waste exemption	On a farm	Storage of sludge
H	300m E	-	WEX235996	Storing waste exemption	On a Farm	Storage of sludge
H	300m E	-	WEX238394	Storing waste exemption	On a farm	Storage of sludge
I	337m N	-	WEX111016	Storing waste exemption	On a farm	Storage of sludge
I	344m N	-	WEX322954	Storing waste exemption	On a farm	Storage of sludge
I	344m N	-	WEX322959	Storing waste exemption	On a farm	Storage of sludge
8	366m N	-	WEX102101	Storing waste exemption	On a farm	Storage of sludge
9	369m E	-	WEX211558	Storing waste exemption	On a Farm	Storage of sludge
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Using waste exemption	On a Farm	Use of waste in construction
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Using waste exemption	On a Farm	Burning of waste as a fuel in a small appliance
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Using waste exemption	On a Farm	Use of waste for a specified purpose
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Using waste exemption	On a Farm	Spreading waste on non-agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Using waste exemption	On a Farm	Use of mulch
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Using waste exemption	On a Farm	Spreading of plant matter to confer benefit
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Using waste exemption	On a Farm	Pig and poultry ash
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Treating waste exemption	On a Farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Treating waste exemption	On a Farm	Treatment of non-hazardous pesticide washings by carbon filtration for disposal
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Treating waste exemption	On a Farm	Treatment of waste in a biobed or biofilter
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Disposing of waste exemption	On a Farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Disposing of waste exemption	On a Farm	Disposal by incineration
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Disposing of waste exemption	On a Farm	Burning waste in the open
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Storing waste exemption	On a Farm	Storage of waste in secure containers
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Storing waste exemption	On a Farm	Storage of waste in a secure place
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX195301	Storing waste exemption	On a Farm	Storage of sludge
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Using waste exemption	On a farm	Use of waste in construction
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Using waste exemption	On a farm	Burning of waste as a fuel in a small appliance
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Using waste exemption	On a farm	Use of waste for a specified purpose

ID	Location	Site	Reference	Category	Sub-Category	Description
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Using waste exemption	On a farm	Spreading waste on non-agricultural land to confer benefit
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Using waste exemption	On a farm	Use of mulch
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Using waste exemption	On a farm	Pig and poultry ash
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Treating waste exemption	On a farm	Treatment of non-hazardous pesticide washings by carbon filtration for disposal
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Treating waste exemption	On a farm	Treatment of waste in a biobed or biofilter
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Disposing of waste exemption	On a farm	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Disposing of waste exemption	On a farm	Disposal by incineration
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Disposing of waste exemption	On a farm	Burning waste in the open
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Storing waste exemption	On a farm	Storage of waste in secure containers
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Storing waste exemption	On a farm	Storage of waste in a secure place
J	410m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX322000	Storing waste exemption	On a farm	Storage of sludge

ID	Location	Site	Reference	Category	Sub-Category	Description
J	410m NE	Malborough Farm, Aubourn, LN5 9DY	WEX297659	Storing waste exemption	On a Farm	Storage of sludge
J	410m NE	Malborough Farm, Aubourn, LN5 9DY	WEX297659	Storing waste exemption	On a Farm	Storage of waste in a secure place
J	410m NE	Malborough Farm, Aubourn, LN5 9DY	WEX297659	Disposing of waste exemption	On a Farm	Burning waste in the open
J	410m NE	Malborough Farm, Aubourn, LN5 9DY	WEX297659	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
J	410m NE	Malborough Farm, Aubourn, LN5 9DY	WEX297659	Using waste exemption	On a Farm	Spreading of plant matter to confer benefit
J	410m NE	Malborough Farm, Aubourn, LN5 9DY	WEX297659	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit
J	410m NE	Malborough Farm, Aubourn, LN5 9DY	WEX297659	Using waste exemption	On a Farm	Burning of waste as a fuel in a small appliance
J	410m NE	Malborough Farm, Aubourn, LN5 9DY	WEX297659	Using waste exemption	On a Farm	Use of waste in construction
J	412m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX041330	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
J	412m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX041330	Disposing of waste exemption	On a farm	Burning waste in the open
J	412m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX041330	Storing waste exemption	On a farm	Storage of waste in secure containers
J	412m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX041330	Storing waste exemption	On a farm	Storage of sludge
J	412m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX041330	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
J	412m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX041330	Using waste exemption	On a farm	Use of waste in construction
J	412m NE	Malborough Farm, Aubourn, Lincoln, LN5 9DY	WEX041330	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
J	421m NE	Malborough Farm, Aubourn, LN5 9DY	WEX159951	Using waste exemption	On a Farm	Use of waste in construction
J	421m NE	Malborough Farm, Aubourn, LN5 9DY	WEX159951	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit
J	421m NE	Malborough Farm, Aubourn, LN5 9DY	WEX159951	Using waste exemption	On a Farm	Spreading of plant matter to confer benefit
J	421m NE	Malborough Farm, Aubourn, LN5 9DY	WEX159951	Using waste exemption	On a Farm	Burning of waste as a fuel in a small appliance
J	421m NE	Malborough Farm, Aubourn, LN5 9DY	WEX159951	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
J	421m NE	Malborough Farm, Aubourn, LN5 9DY	WEX159951	Disposing of waste exemption	On a Farm	Burning waste in the open
J	421m NE	Malborough Farm, Aubourn, LN5 9DY	WEX159951	Storing waste exemption	On a Farm	Storage of waste in a secure place
J	421m NE	Malborough Farm, Aubourn, LN5 9DY	WEX159951	Storing waste exemption	On a Farm	Storage of sludge
J	422m NE	Malborough Farm Lincoln Lincolnshire LN5 9DY	EPR/JH0873JT/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
J	422m NE	Malborough Farm Lincoln Lincolnshire LN5 9DY	EPR/JH0873JT/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
J	422m NE	Malborough Farm Lincoln Lincolnshire LN5 9DY	EPR/JH0873JT/A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in secure containers
J	422m NE	Malborough Farm Lincoln Lincolnshire LN5 9DY	EPR/JH0873JT/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
J	422m NE	Malborough Farm Lincoln Lincolnshire LN5 9DY	EPR/JH0873JT/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
J	422m NE	Malborough Farm Lincoln Lincolnshire LN5 9DY	EPR/JH0873JT/A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit
J	422m NE	Malborough Farm Lincoln Lincolnshire LN5 9DY	EPR/JH0873JT/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge

ID	Location	Site	Reference	Category	Sub-Category	Description
K	439m W	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
K	439m W	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
K	439m W	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
K	439m W	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
K	439m W	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
K	439m W	Witham Farm Bassingham LN5 9LE	EPR/KE5452DE/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
K	440m W	WITHAM FARMHOUSE, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX170246	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
K	440m W	WITHAM FARMHOUSE, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX009172	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
K	440m W	WITHAM FARMHOUSE, AUBOURN ROAD, BASSINGHAM, LINCOLN, LN5 9LE	WEX304118	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX220222	Treating waste exemption	On a Farm	Preparatory treatments (baling, sorting, shredding etc)
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX220222	Using waste exemption	On a Farm	Spreading of plant matter to confer benefit
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX220222	Using waste exemption	On a Farm	Spreading waste on non-agricultural land to confer benefit
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX220222	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX220222	Using waste exemption	On a Farm	Use of waste in construction
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX220222	Disposing of waste exemption	On a Farm	Burning waste in the open
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX220222	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX220222	Treating waste exemption	On a Farm	Manual treatment of waste
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX220222	Treating waste exemption	On a Farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX069851	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX069851	Disposing of waste exemption	On a farm	Burning waste in the open
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX069851	Treating waste exemption	On a farm	Manual treatment of waste
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX069851	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX069851	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX069851	Using waste exemption	On a farm	Use of waste in construction
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX069851	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX069851	Using waste exemption	On a farm	Spreading waste on non-agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
L	443m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX069851	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
L	443m S	Grange Farm Bassingham lincs LN5 9LD	EPR/BF0032LB /A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
L	443m S	Grange Farm Bassingham lincs LN5 9LD	EPR/BF0032LB /A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in secure containers
L	443m S	Grange Farm Bassingham lincs LN5 9LD	EPR/BF0032LB /A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
L	443m S	Grange Farm Bassingham lincs LN5 9LD	EPR/BF0032LB /A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit
L	443m S	Grange Farm Bassingham lincs LN5 9LD	EPR/BF0032LB /A001	Disposing of waste exemption	Non-Agricultural Waste Only	Burning waste in the open
L	443m S	Grange Farm Bassingham lincs LN5 9LD	EPR/BF0032LB /A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
L	443m S	Grange Farm Bassingham lincs LN5 9LD	EPR/BF0032LB /A001	Treating waste exemption	Non-Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
L	443m S	-	WEX351319	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
L	443m S	-	WEX351319	Using waste exemption	On a farm	Use of waste in construction
L	443m S	-	WEX351319	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
L	443m S	-	WEX351319	Using waste exemption	On a farm	Spreading waste on non-agricultural land to confer benefit
L	443m S	-	WEX351319	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
L	443m S	-	WEX351319	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

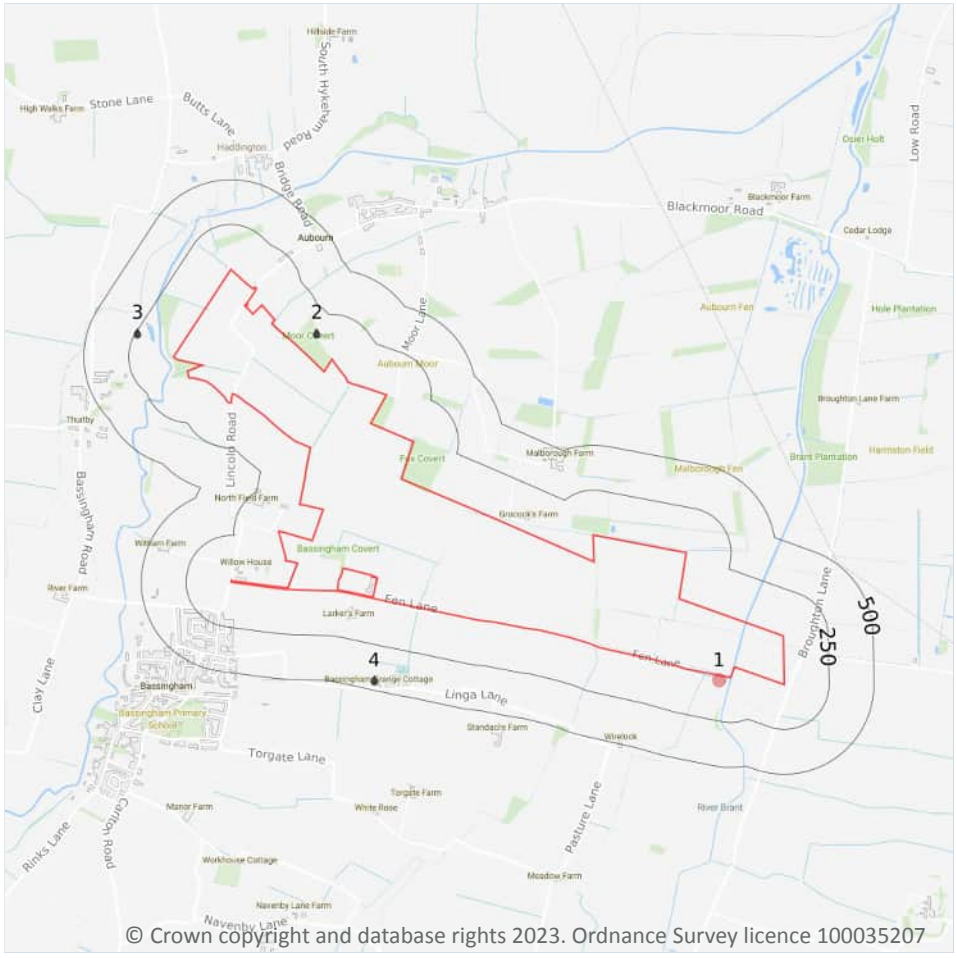
ID	Location	Site	Reference	Category	Sub-Category	Description
L	443m S	-	WEX351319	Treating waste exemption	On a farm	Manual treatment of waste
L	443m S	-	WEX351319	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
L	443m S	-	WEX351319	Disposing of waste exemption	On a farm	Burning waste in the open
L	443m S	-	WEX353616	Using waste exemption	On a farm	Use of waste in construction
L	443m S	-	WEX353616	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
L	443m S	-	WEX353616	Using waste exemption	On a farm	Spreading waste on non-agricultural land to confer benefit
L	443m S	-	WEX353616	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
L	443m S	-	WEX353616	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
L	443m S	-	WEX353616	Treating waste exemption	On a farm	Manual treatment of waste
L	443m S	-	WEX353616	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
L	443m S	-	WEX353616	Disposing of waste exemption	On a farm	Burning waste in the open
L	443m S	-	WEX353645	Using waste exemption	On a farm	Use of waste in construction
L	443m S	-	WEX353645	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
L	443m S	-	WEX353645	Using waste exemption	On a farm	Spreading waste on non-agricultural land to confer benefit

ID	Location	Site	Reference	Category	Sub-Category	Description
L	443m S	-	WEX353645	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
L	443m S	-	WEX353645	Treating waste exemption	On a farm	Preparatory treatments (baling, sorting, shredding etc)
L	443m S	-	WEX353645	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
L	443m S	-	WEX353645	Treating waste exemption	On a farm	Manual treatment of waste
L	443m S	-	WEX353645	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
L	443m S	-	WEX353645	Disposing of waste exemption	On a farm	Burning waste in the open
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Disposing of waste exemption	On a farm	Burning waste in the open
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Storing waste exemption	On a farm	Storage of waste in secure containers
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Storing waste exemption	On a farm	Storage of waste in a secure place
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Storing waste exemption	On a farm	Storage of sludge
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Treating waste exemption	On a farm	Crushing and emptying waste vehicle oil filters
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Using waste exemption	On a farm	Use of waste in construction
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
L	447m S	GRANGE FARM, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	WEX064489	Using waste exemption	On a farm	Use of waste for a specified purpose
10	461m N	-	WEX322939	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



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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 41 >**

ID	Location	Company	Address	Activity	Category
1	28m SE	Pumping Station	Lincolnshire, LN5	Water Pumping Stations	Industrial Features

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	0

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	3

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 41 >**

ID	Location	Address	Details	
2	128m NW	AUBOURN, LINCOLN, LN5 9DZ	Effluent Type: AGRICULTURE - UNSPECIFIED Permit Number: PR3NFA1173 Permit Version: 1 Receiving Water: -	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 04/06/1963 Effective Date: 04/06/1963 Revocation Date: 15/03/1991
3	241m NW	ELMTREE, HADDINGTON	Effluent Type: UNSPECIFIED Permit Number: PR3NFA1190 Permit Version: 1 Receiving Water: -	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 07/06/1963 Effective Date: 07/06/1963 Revocation Date: 12/03/1991
4	446m SW	GRANGE FARM COTTAGE, GRANGE FARM COTTAGE, LINGA LANE, BASSINGHAM, LINCOLN, LN5 9LD	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRGB3097VL Permit Version: 1 Receiving Water: DITCH LEADING TO RIVER WITHAM	Status: NEW ISSUED UNDER EPR 2010 Issue date: 08/05/2017 Effective Date: 08/05/2017 Revocation Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	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.

4.19 Pollution inventory substances

Records within 500m	0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

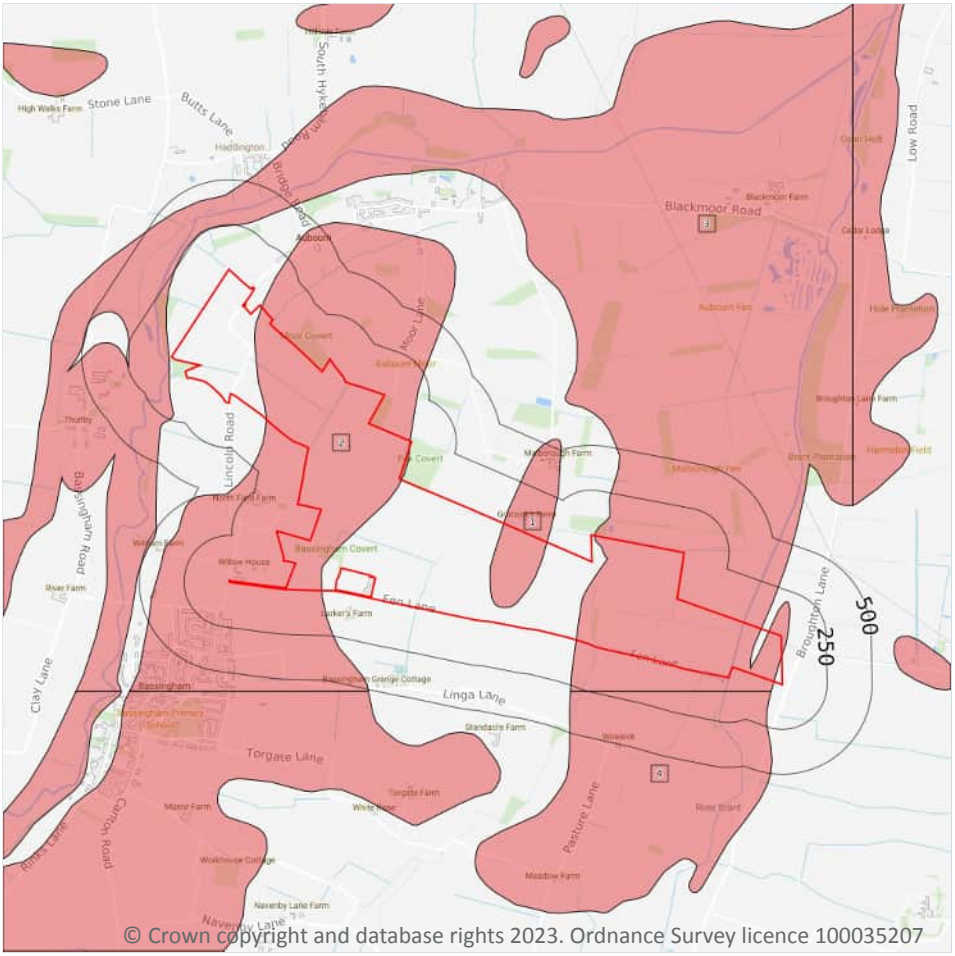
4.21 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive
- Unknown

5.1 Superficial aquifer

Records within 500m	4

Aquifer status of groundwater held within superficial geology.

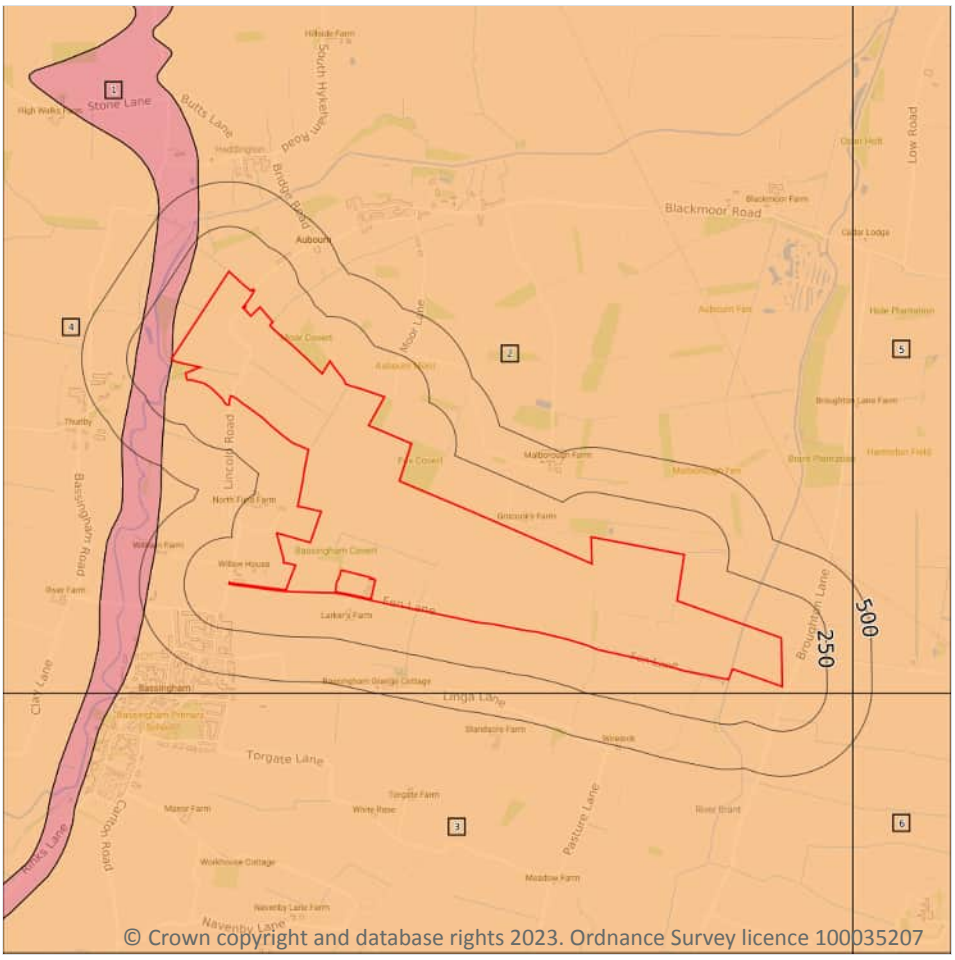
Features are displayed on the Hydrogeology map on **page 47 >**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ID	Location	Designation	Description
3	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
4	57m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	6

Aquifer status of groundwater held within bedrock geology.

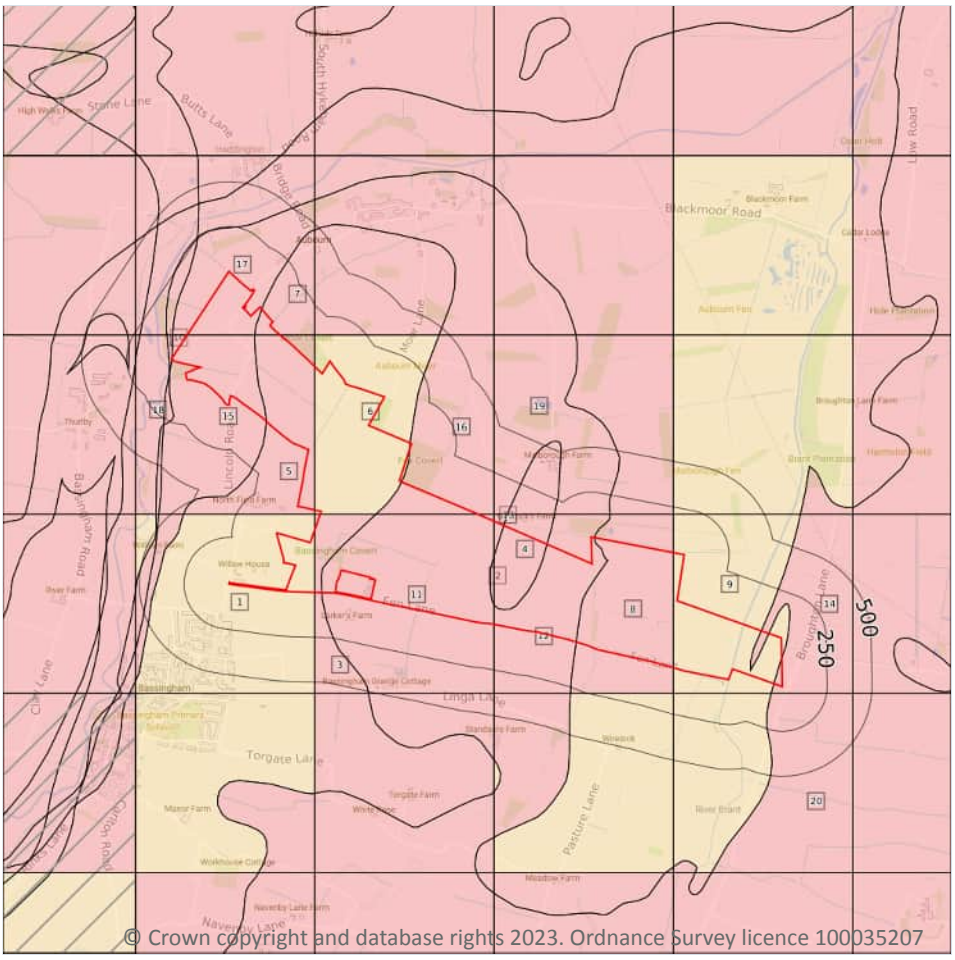
Features are displayed on the Bedrock aquifer map on **page 49 >**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

ID	Location	Designation	Description
3	39m SE	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
4	198m NW	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
5	393m E	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
6	395m SE	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability
- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability
- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information
- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	20

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 51 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
7	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
8	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
11	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
12	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
13	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
14	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: >90% Recharge potential: High**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
15	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
16	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
17	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
18	13m NW	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
19	36m E	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
20	38m SE	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

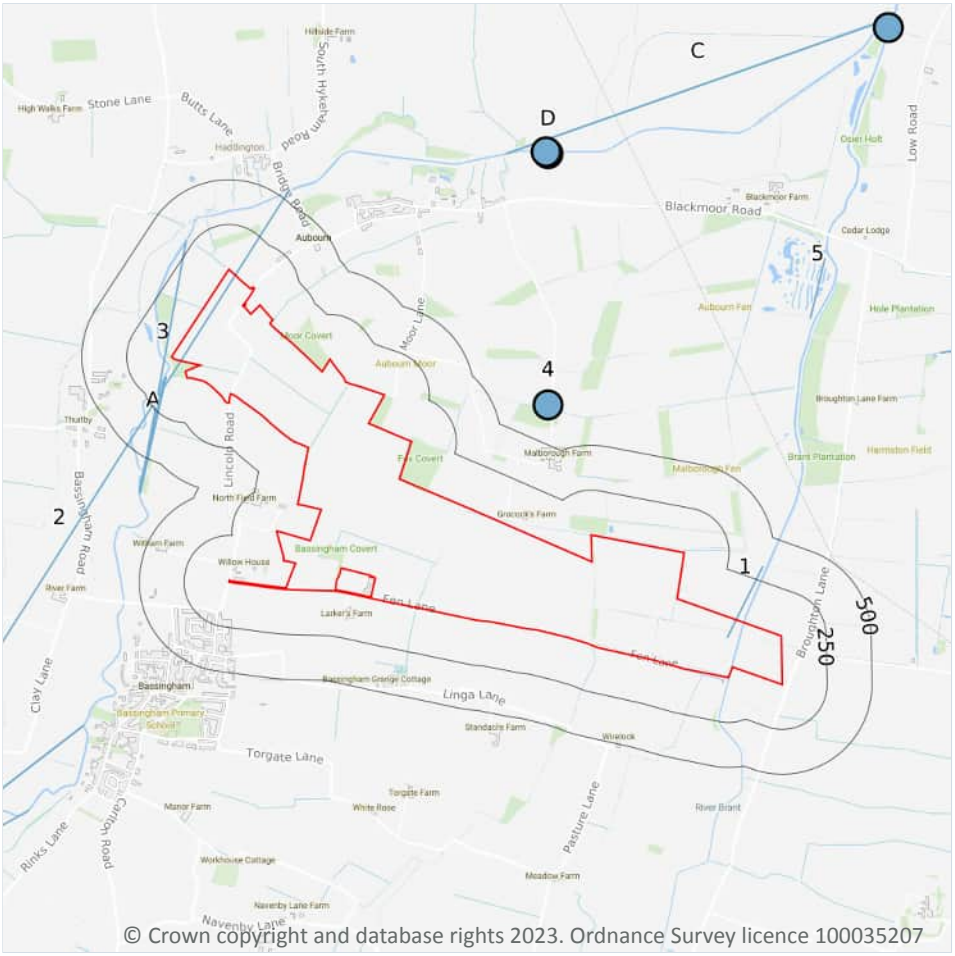
5.5 Groundwater vulnerability- local information

Records on site	0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	0

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	**18**

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 56 >**

ID	Location	Details	
1	**On site**	**Status: Historical** **Licence No: 4/30/03/*S/0065** **Details: Spray Irrigation - Direct** **Direct Source: SURFACE WATER SOURCE OF SUPPLY** **Point: RIVER BRANT - COLEBY** **Data Type: Line** **Name: C A MOTTRAM & SONS** **Easting: 494300** **Northing: 360300**	**Annual Volume (m^3): 22730** **Max Daily Volume (m^3): 546** **Original Application No: -** **Original Start Date: 01/08/1984** **Expiry Date: -** **Issue No: 100** **Version Start Date: 01/08/1986** **Version End Date: -**
2	**On site**	**Status: Historical** **Licence No: 4/30/03/*S/0102** **Details: Spray Irrigation - Direct** **Direct Source: SURFACE WATER SOURCE OF SUPPLY** **Point: RIVER WITHAM - SCOTWATER TO AUBOURN BR** **Data Type: Line** **Name: H W SMITH & SONS (CARLTON) LTD** **Easting: 489290** **Northing: 358750**	**Annual Volume (m^3): 91000** **Max Daily Volume (m^3): 1500** **Original Application No: -** **Original Start Date: 21/05/2002** **Expiry Date: 31/03/2022** **Issue No: 4** **Version Start Date: 16/12/2011** **Version End Date: -**
3	37m NW	Status: Active Licence No: AN/030/0003/007 Details: Trickle Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BETWEEN POINTS E AND F, RIVER WITHAM, BASSINGHAM Data Type: Line Name: J & J Burnett Limited Easting: 491024 Northing: 361105	Annual Volume (m^3): 18920 Max Daily Volume (m^3): 1000 Original Application No: NPS/NA/000192 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -

ID	Location	Details	
A	107m NW	Status: Historical Licence No: 4/30/03/*S/0102 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
A	107m NW	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
A	126m NW	Status: Historical Licence No: 4/30/03/*S/0059 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 491020 Northing: 361120	Annual Volume (m^3): 20457 Max Daily Volume (m^3): 900 Original Application No: - Original Start Date: 01/06/1983 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1993 Version End Date: -
4	705m NE	Status: Active Licence No: 4/30/03/*S/0082 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: AUBOURN PUMP DRAIN WEST Data Type: Point Name: H & J NEVILE & SON Easting: 493300 Northing: 361600	Annual Volume (m^3): 7290 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 01/01/1990 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2004 Version End Date: -
B	1138m SW	Status: Historical Licence No: 4/30/03/*S/0102 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - NORTON DISNEY TO BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 489296 Northing: 358716	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -

ID	Location	Details	
B	1138m SW	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - NORTON DISNEY TO BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 489296 Northing: 358716	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
5	1480m NE	Status: Active Licence No: AN/030/0004/002 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER BRANT AT BLACKMOOR BRIDGE Data Type: Line Name: H & J NEVILE & SON Easting: 494845 Northing: 362415	Annual Volume (m^3): 36368 Max Daily Volume (m^3): 1023 Original Application No: NPS/WR/015330 Original Start Date: 06/05/2014 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 06/05/2014 Version End Date: -
C	1508m N	Status: Active Licence No: 4/30/03/*S/0021 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM, AUBOURN Data Type: Line Name: H & J NEVILE & SON Easting: 493070 Northing: 363000	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 764 Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1997 Version End Date: -
C	1508m N	Status: Active Licence No: 4/30/03/*S/0078 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - AUBOURN Data Type: Line Name: H & J NEVILE & SON Easting: 493070 Northing: 363000	Annual Volume (m^3): 36368 Max Daily Volume (m^3): 1023 Original Application No: NPS/WR/015027 Original Start Date: 01/07/1987 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2020 Version End Date: -
-	1609m SW	Status: Historical Licence No: 4/30/03/*S/0097 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: TRIB R WITHAM, NORTON DISNEY Data Type: Line Name: C A SHAW FARMS Easting: 489910 Northing: 359360	Annual Volume (m^3): 9091 Max Daily Volume (m^3): 1091 Original Application No: - Original Start Date: 01/09/1994 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1994 Version End Date: -

ID	Location	Details	
D	1625m N	Status: Historical Licence No: 4/30/03/*S/0008 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM SOUTH HYKEHAM Data Type: Point Name: LARGE Easting: 493300 Northing: 363000	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 545.53 Original Application No: - Original Start Date: 01/11/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1995 Version End Date: -
D	1627m N	Status: Active Licence No: 4/30/03/*S/0008 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM SOUTH HYKEHAM Data Type: Point Name: LARGE Easting: 493290 Northing: 363010	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 545.53 Original Application No: NA568 Original Start Date: 29/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 12/01/2008 Version End Date: -
7	1696m SW	Status: Active Licence No: AN/030/0003/007 Details: Trickle Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: BETWEEN POINTS C AND D, RIVER WITHAM, BASSINGHAM Data Type: Line Name: J & J Burnett Limited Easting: 489298 Northing: 358720	Annual Volume (m^3): 18920 Max Daily Volume (m^3): 1000 Original Application No: NPS/NA/000192 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
E	1811m E	Status: Active Licence No: AN/030/0004/003 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: UNNAMED DRAIN Data Type: Line Name: C A MOTTRAM & SONS Easting: 495489 Northing: 361889	Annual Volume (m^3): 45400 Max Daily Volume (m^3): 378 Original Application No: NPS/WR/031482 Original Start Date: 13/03/2020 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 13/03/2020 Version End Date: -
E	1811m E	Status: Active Licence No: AN/030/0004/003 Details: Trickle Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: UNNAMED DRAIN Data Type: Line Name: C A MOTTRAM & SONS Easting: 495489 Northing: 361889	Annual Volume (m^3): 45400 Max Daily Volume (m^3): 378 Original Application No: NPS/WR/031482 Original Start Date: 13/03/2020 Expiry Date: 31/03/2025 Issue No: 1 Version Start Date: 13/03/2020 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

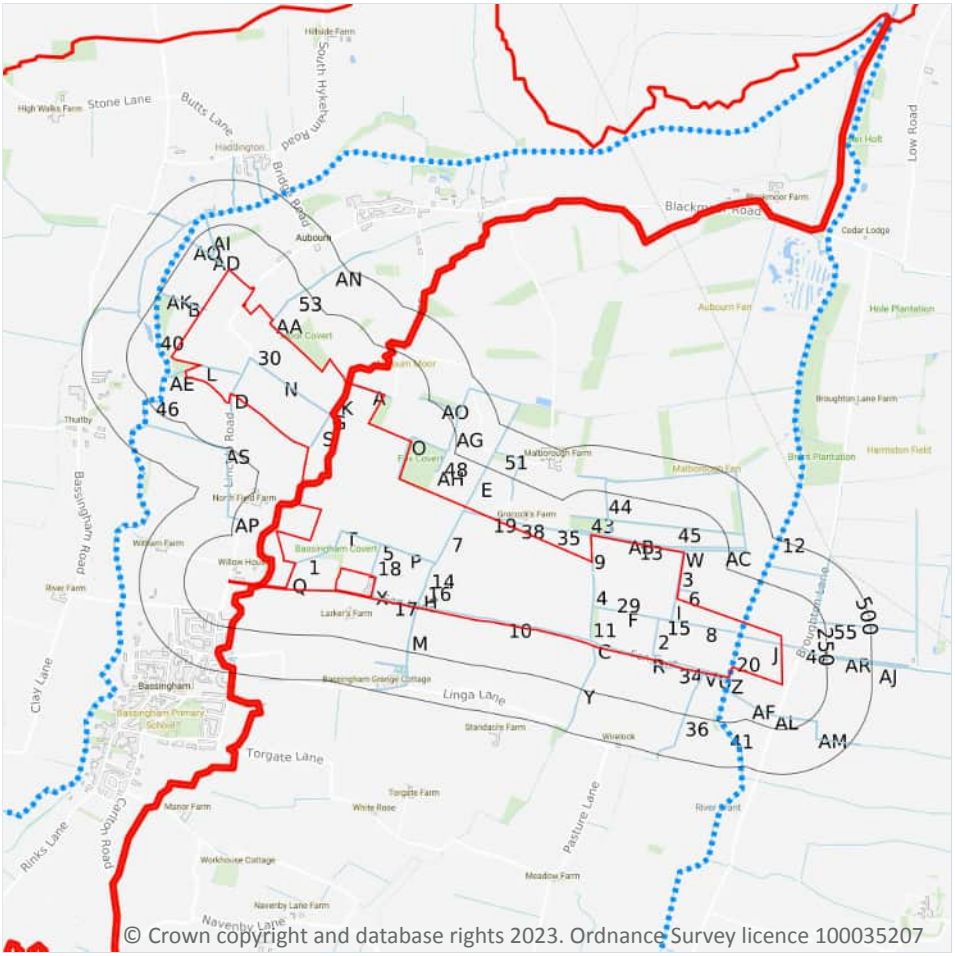
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	105

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 62 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	**On site**	**Inland river not influenced by normal tidal action.**	**Not provided**	**Watercourse contains water year round (in normal circumstances)**	-

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
8	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
9	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
10	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
11	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
12	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Brant
13	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
14	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
15	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
16	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
17	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
18	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
19	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
20	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Brant
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	West Brant Syke
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Brant Syke
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
R	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Brant Syke
R	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
R	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	West Brant Syke
V	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
V	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
X	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
Y	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**West Brant Syke**
Z	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**River Brant**
V	1m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AA	1m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	3m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
34	5m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
35	6m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	9m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
36	11m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Sand Syke
U	11m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AB	11m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AC	14m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
Z	19m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Brant
R	19m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	20m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AD	22m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	26m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AC	28m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
38	33m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
40	40m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
41	68m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Brant
Z	68m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AF	80m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AE	91m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
43	93m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
44	100m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
45	100m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
46	101m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
47	114m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AH	117m N	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AH	119m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
48	122m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AI	123m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AJ	130m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
51	133m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AL	177m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AL	178m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AL	179m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
AM	179m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
53	185m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AN	189m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AO	193m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
55	203m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AG	203m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	218m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AP	222m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	226m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AQ	229m NW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
AK	241m NW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
AR	245m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AS	249m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	26

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 62 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	2

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 62 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
29	**On site**	**River**	**Brant - Lower**	**GB105030056770**	**Witham Upper**	**Witham**
30	**On site**	**River**	**Witham - conf Cringle Bk to conf Brant**	**GB105030056780**	**Witham Upper**	**Witham**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	2

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 62 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
31	**On site**	**River**	**Brant - Lower**	**GB105030056770** ↗	**Moderate**	**Fail**	**Moderate**	**2019**
39	38m NW	River	Witham - conf Cringle Bk to conf Brant	GB105030056780 ↗	Moderate	Fail	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	**1**

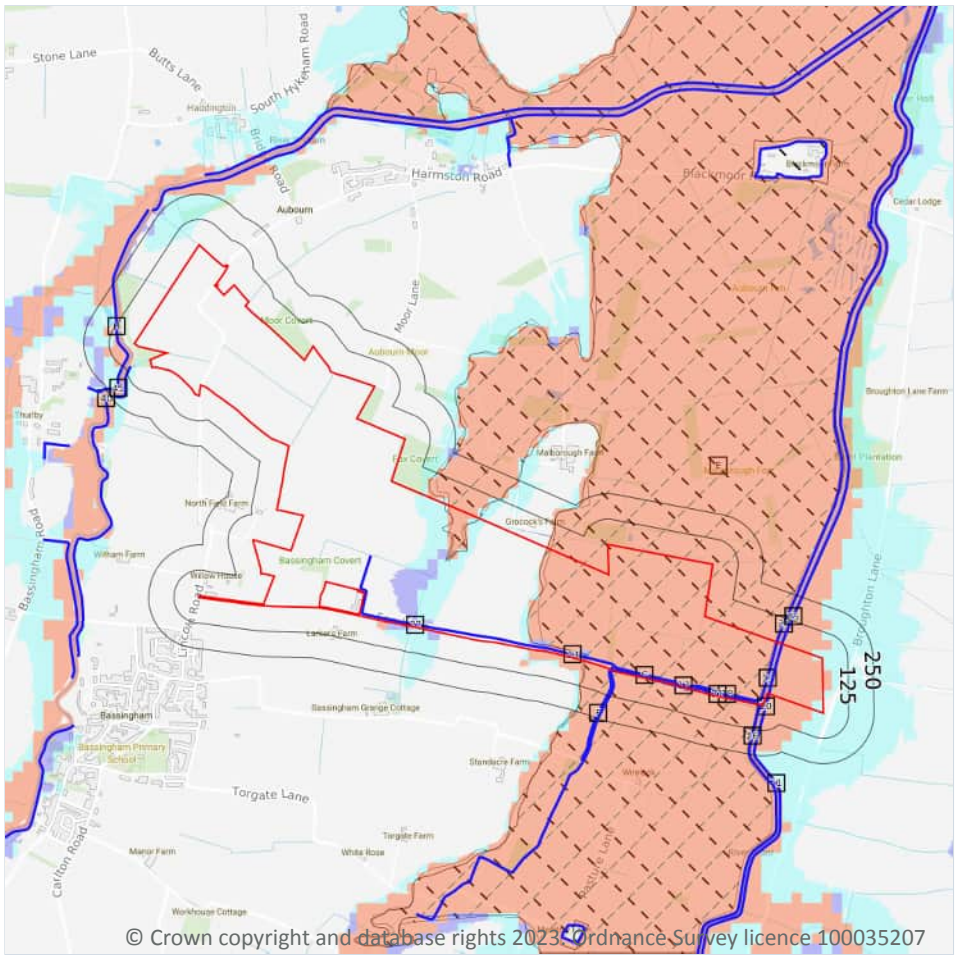
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 62 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
E	**On site**	**Witham Lias**	**GB40502G401400** ↗	**Good**	**Good**	**Good**	**2019**

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	67

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).

Features are displayed on the River and coastal flooding map on **page 73 >**

Distance	Flood risk category
On site	**High**
0 - 50m	High

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m	**1**

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.

Features are displayed on the River and coastal flooding map on **page 73 >**

ID	Location	Event name	Date of flood	Flood source	Flood cause	Type of flood
E	**On site**	**Lna_2000_11_River Witham Washland**	**2000-11-07 2000-11-09**	**Main river**	**Other**	**Fluvial**

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m	**18**

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.

Features are displayed on the River and coastal flooding map on **page 73 >**

ID	Location	Update
17	**On site**	**08/11/2022**
18	**On site**	**08/11/2022**
19	**On site**	**08/11/2022**
20	**On site**	**08/11/2022**
21	**On site**	**08/11/2022**

ID	Location	Update
22	**On site**	**08/11/2022**
23	**On site**	**08/11/2022**
24	**On site**	**08/11/2022**
25	**On site**	**08/11/2022**
F	**On site**	**08/11/2022**
F	**On site**	**08/11/2022**
G	**On site**	**08/11/2022**
G	**On site**	**08/11/2022**
26	1m SE	08/11/2022
H	58m NW	08/11/2022
40	101m NW	08/11/2022
45	132m NW	08/11/2022
61	243m SE	08/11/2022

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	**1**

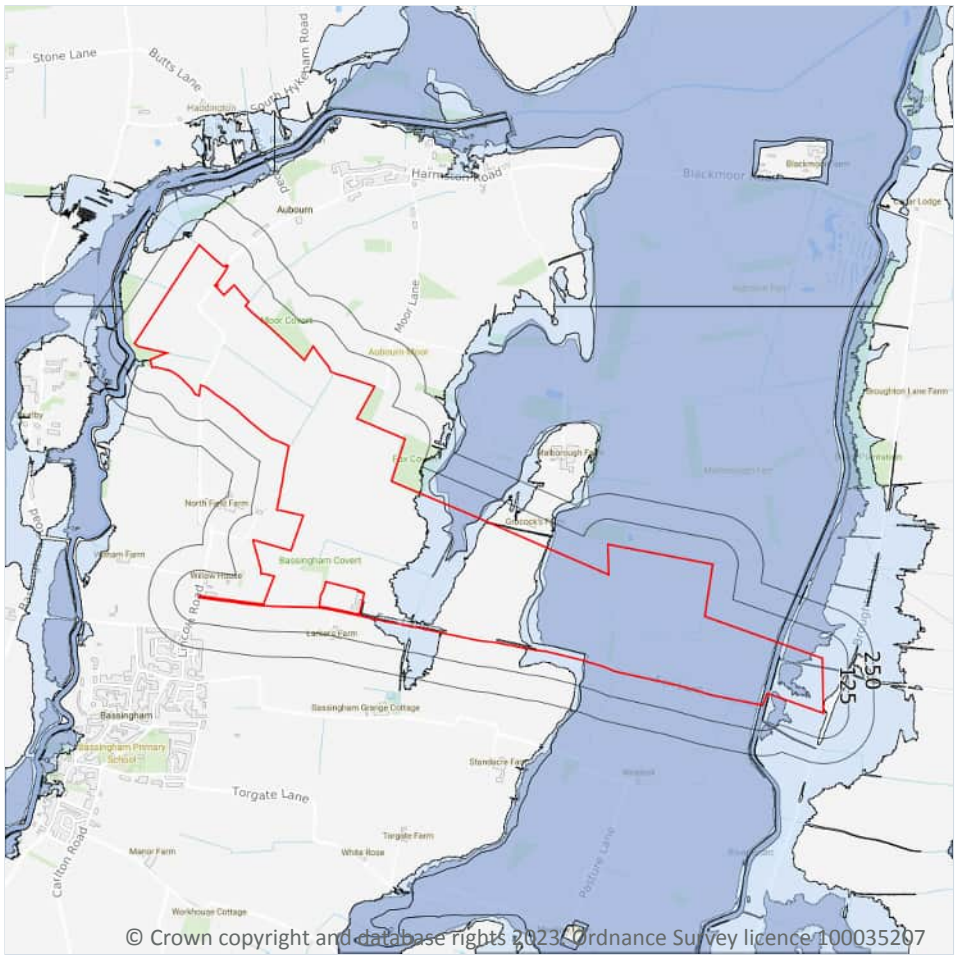
Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

Features are displayed on the River and coastal flooding map on **page 73 >**

ID	Location	Update
E	**On site**	**Flood Storage Area**

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

7.6 Flood Zone 2

Records within 50m	1

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.

Features are displayed on the River and coastal flooding map on **page 73 >**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m	1

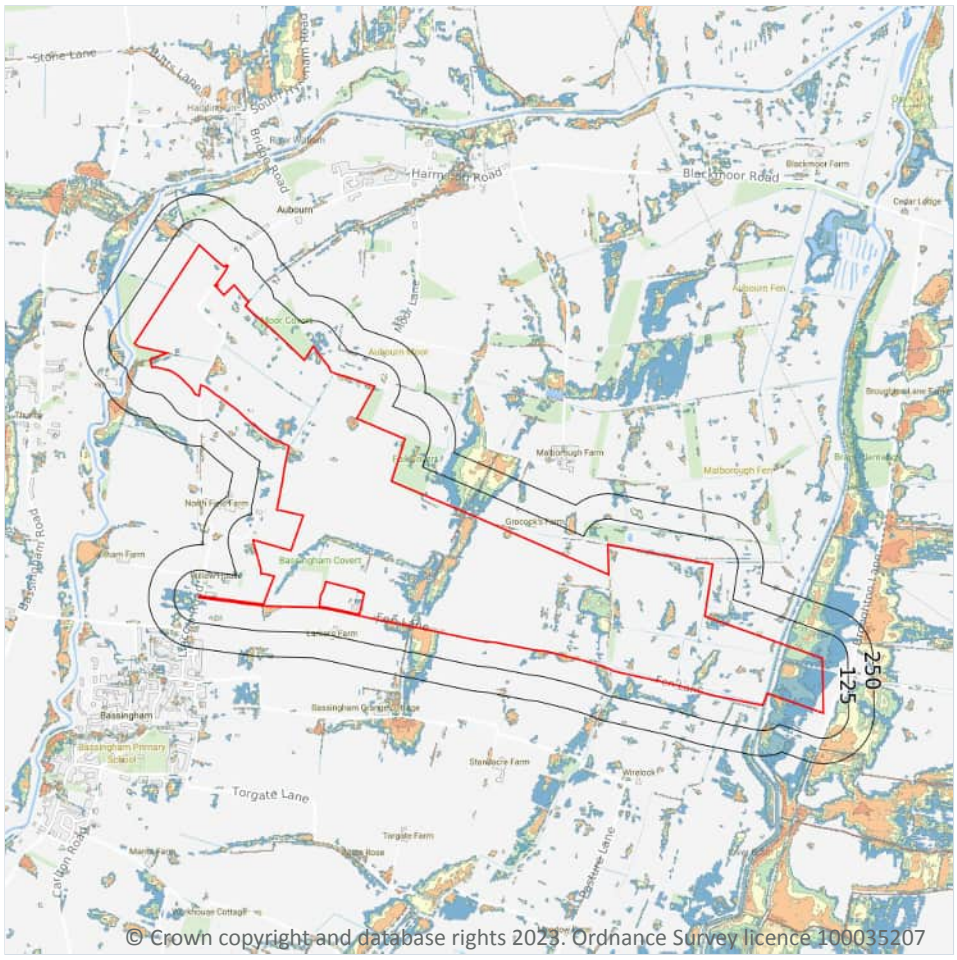
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 73 >**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

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 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 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 79 >**

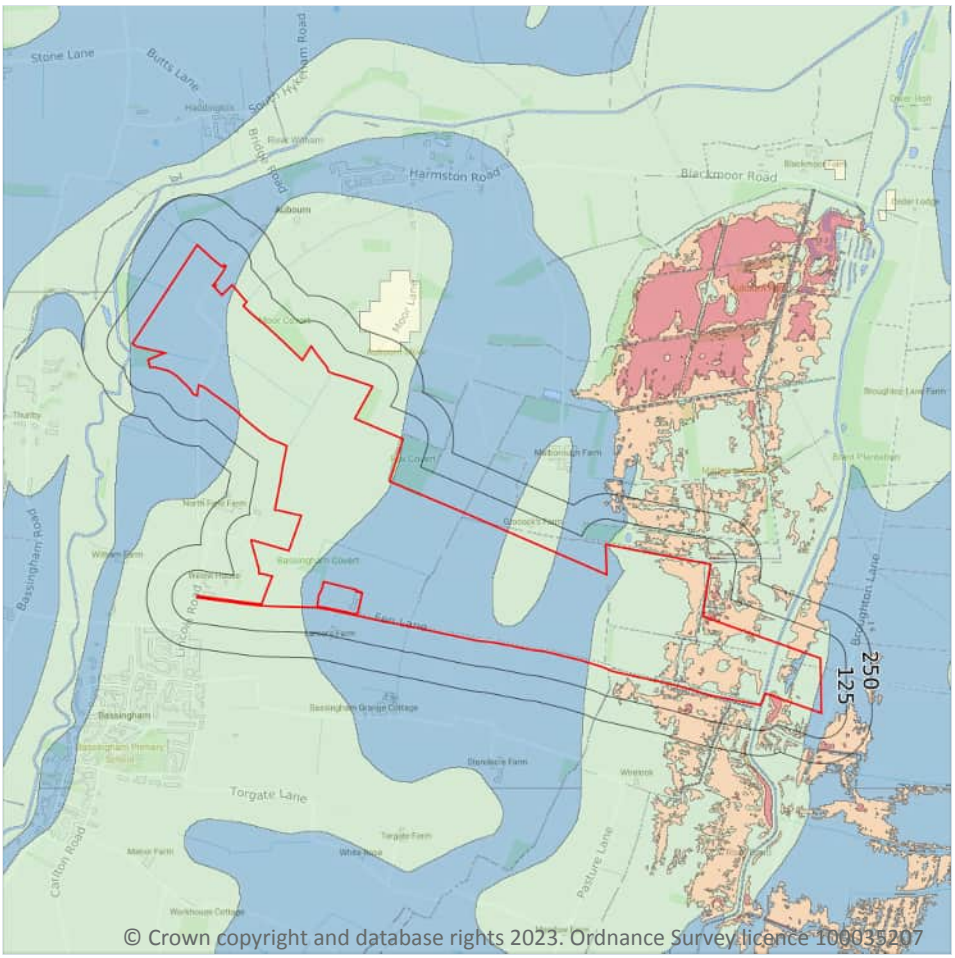
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



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Site Outline

Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site	**High**
Highest risk within 50m	**High**

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 81 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations

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	0

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.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	2

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
On site	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

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.

This data is sourced from Natural England.

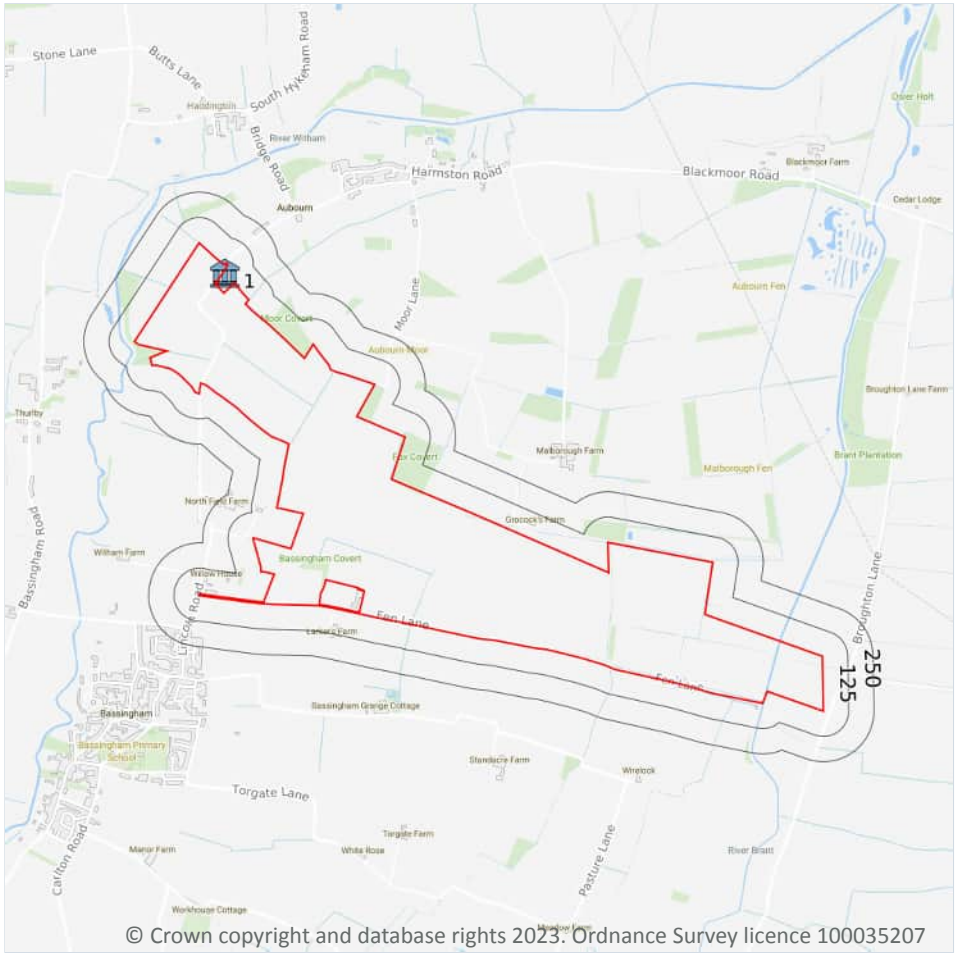
10.18 SSSI Units

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



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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	1

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 87 >**

ID	Location	Name	Grade	Reference Number	Listed date
1	7m NW	Grange Cottage	II	1061951	22/12/1983

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

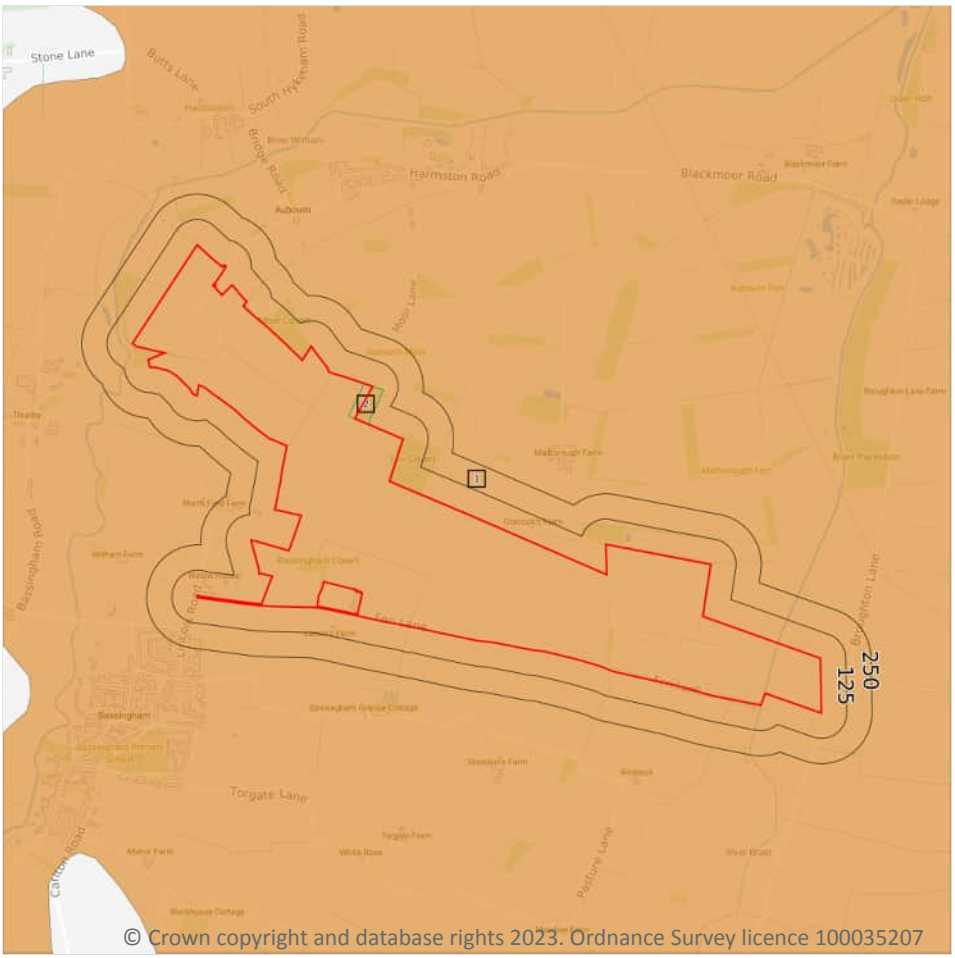
11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	1

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on **page 90 >**

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	1

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.

Features are displayed on the Agricultural designations map on **page 90 >**

ID	Location	Description	Reference	Application date
2	**On site**	**Selective Fell/Thin (Unconditional)**	**014/179/11-12**	**21/03/2012**

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	7

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	**AG00306132**	**Entry Level plus Higher Level Stewardship**	**01/05/2010**	**30/04/2023**
On site	**AG00267841**	**Entry Level plus Higher Level Stewardship**	**01/08/2008**	**31/07/2018**
On site	**AG00267841**	**Entry Level plus Higher Level Stewardship**	**01/08/2008**	**31/07/2018**
On site	**AG00267841**	**Entry Level plus Higher Level Stewardship**	**01/08/2008**	**31/07/2018**
On site	**AG00267841**	**Entry Level plus Higher Level Stewardship**	**01/08/2008**	**31/07/2018**
13m SE	AG00267841	Entry Level plus Higher Level Stewardship	01/08/2008	31/07/2018
37m W	AG00267841	Entry Level plus Higher Level Stewardship	01/08/2008	31/07/2018

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

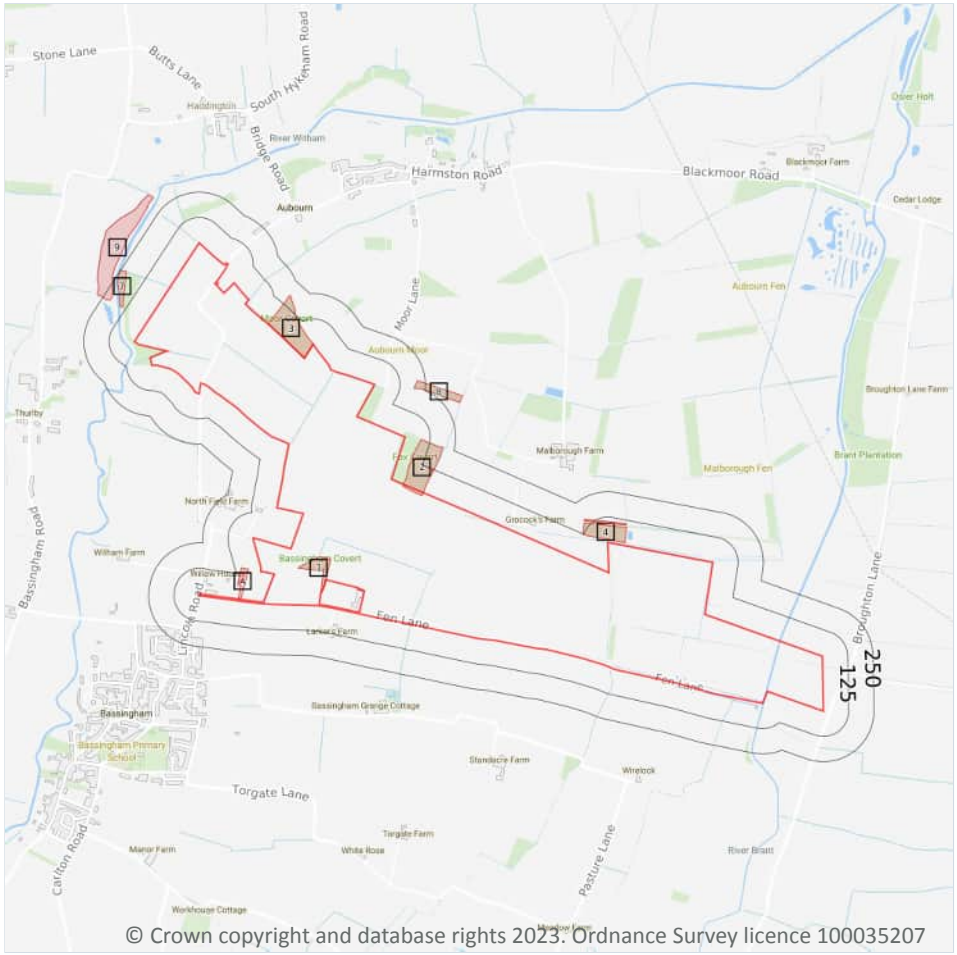
Records within 250m	**11**

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	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**646407**	**Countryside Stewardship (Middle Tier)**	**01/01/2019**	**31/12/2023**
On site	**646407**	**Countryside Stewardship (Middle Tier)**	**01/01/2019**	**31/12/2023**
On site	**646407**	**Countryside Stewardship (Middle Tier)**	**01/01/2019**	**31/12/2023**
13m SE	646407	Countryside Stewardship (Middle Tier)	01/01/2019	31/12/2023
37m W	646407	Countryside Stewardship (Middle Tier)	01/01/2019	31/12/2023
65m NW	1021048	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025
137m E	491137	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022
173m NW	493402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022

This data is sourced from Natural England.

13 Habitat designations



Site Outline

Search buffers in metres (m)

- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders

Habitat Networks

- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m	11

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on **page 93 >**

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
A	4m W	No main habitat but additional habitats present	Additional: TORCH (INV 50%)
4	13m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	84m W	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
5	95m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	114m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	140m NW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	194m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	212m NW	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%); Additional: GQSIG (FEP 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

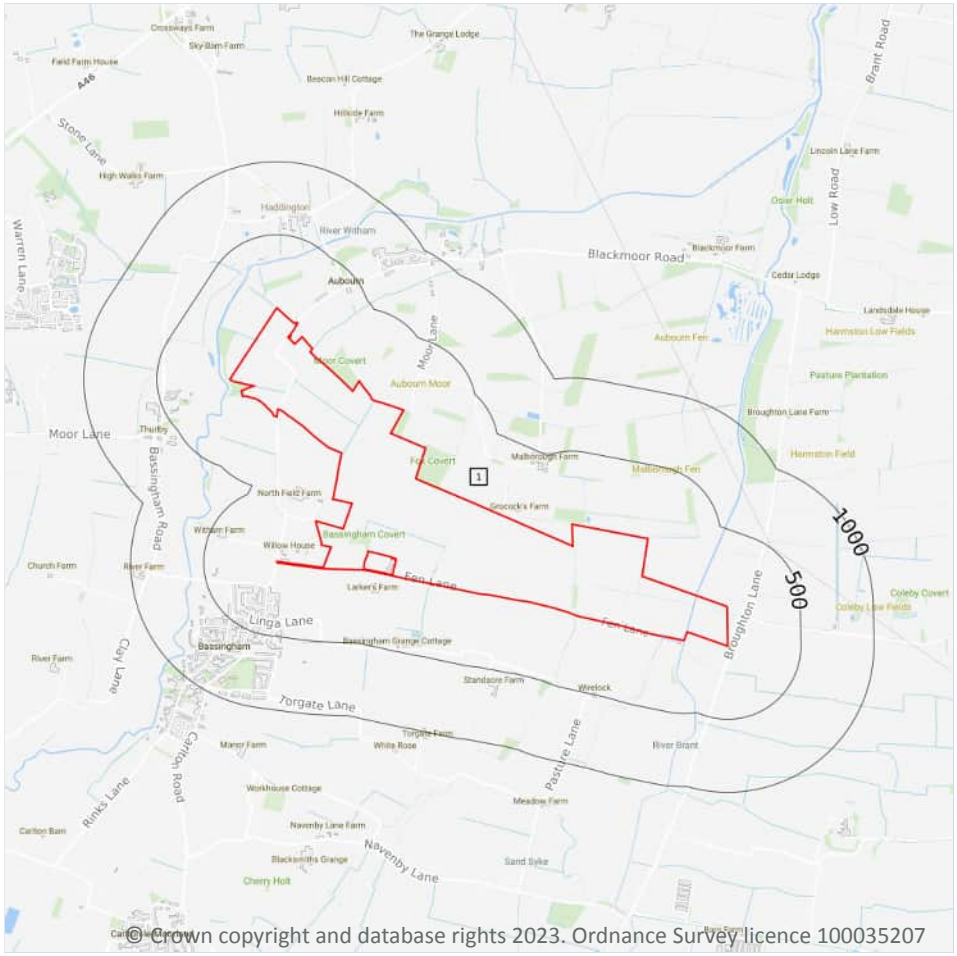
Records within 250m	**0**

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



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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 96 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

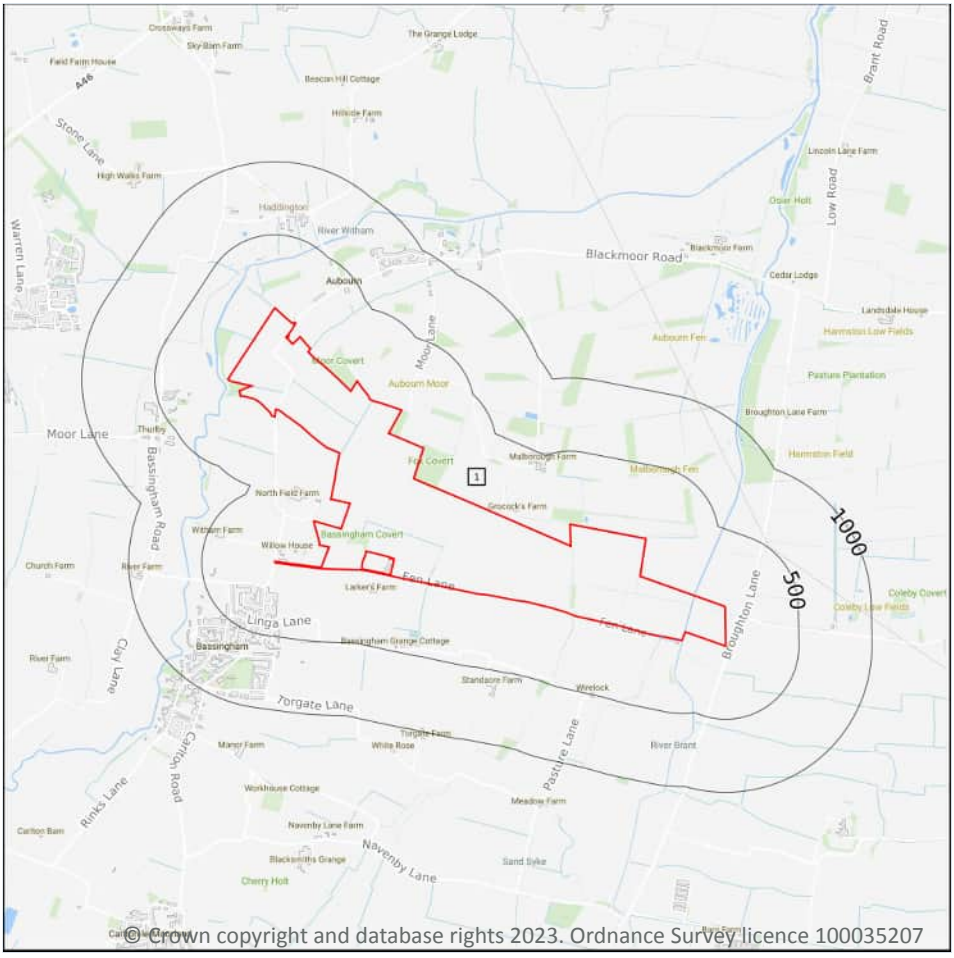
14.6 Bedrock faults and other linear features (10k)

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 100 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_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.

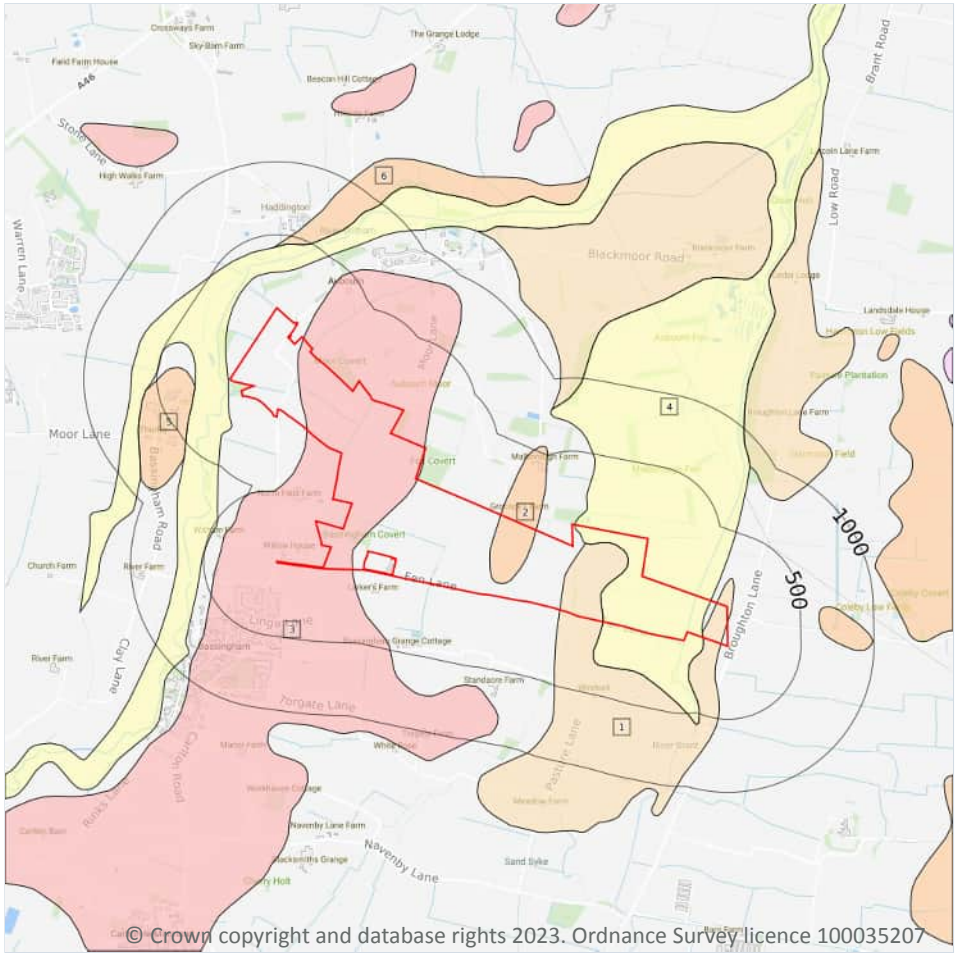
15.3 Artificial ground permeability (50k)

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 **6**

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 102 >**

ID	Location	LEX Code	Description	Rock description
1	On site	FULB-XSV	FULBECK SAND AND GRAVEL MEMBER	SAND AND GRAVEL
2	On site	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL
3	On site	BDTN-XSV	BALDERTON SAND AND GRAVEL MEMBER	SAND AND GRAVEL
4	On site	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

ID	Location	LEX Code	Description	Rock description
5	246m NW	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL
6	413m NW	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	**5**

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	**Intergranular**	**High**	**Very Low**
On site	**Intergranular**	**Very High**	**High**
On site	**Intergranular**	**Very High**	**High**
On site	**Intergranular**	**Very High**	**High**
On site	**Intergranular**	**Very High**	**High**

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.

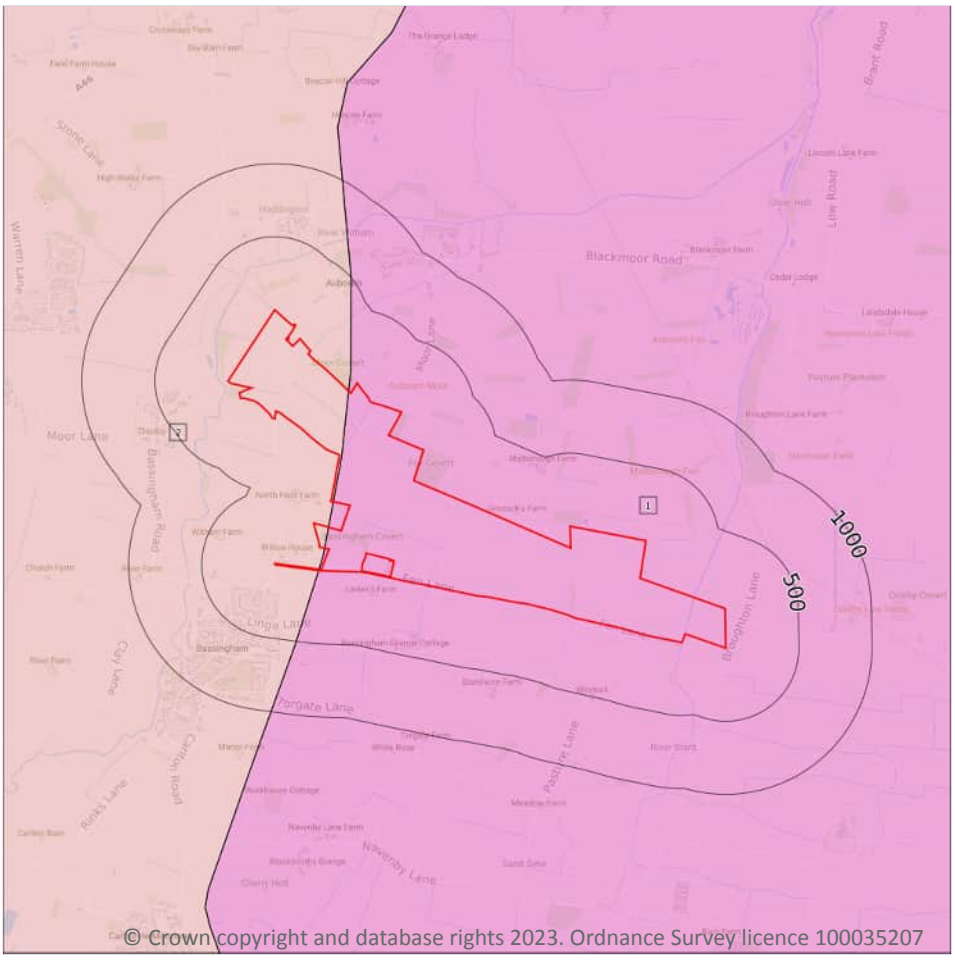
15.7 Landslip permeability (50k)

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	2

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 104 >**

ID	Location	LEX Code	Description	Rock age
1	On site	CHAM-MDST	CHARMOUTH MUDSTONE FORMATION - MUDSTONE	SINEMURIAN
2	On site	SMD-MDLM	SCUNTHORPE MUDSTONE FORMATION - MUDSTONE AND LIMESTONE, INTERBEDDED	RHAETIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	3

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**	**High**	**Low**
On site	**Fracture**	**Low**	**Low**
39m SE	Fracture	Low	Low

This data is sourced from the British Geological Survey.

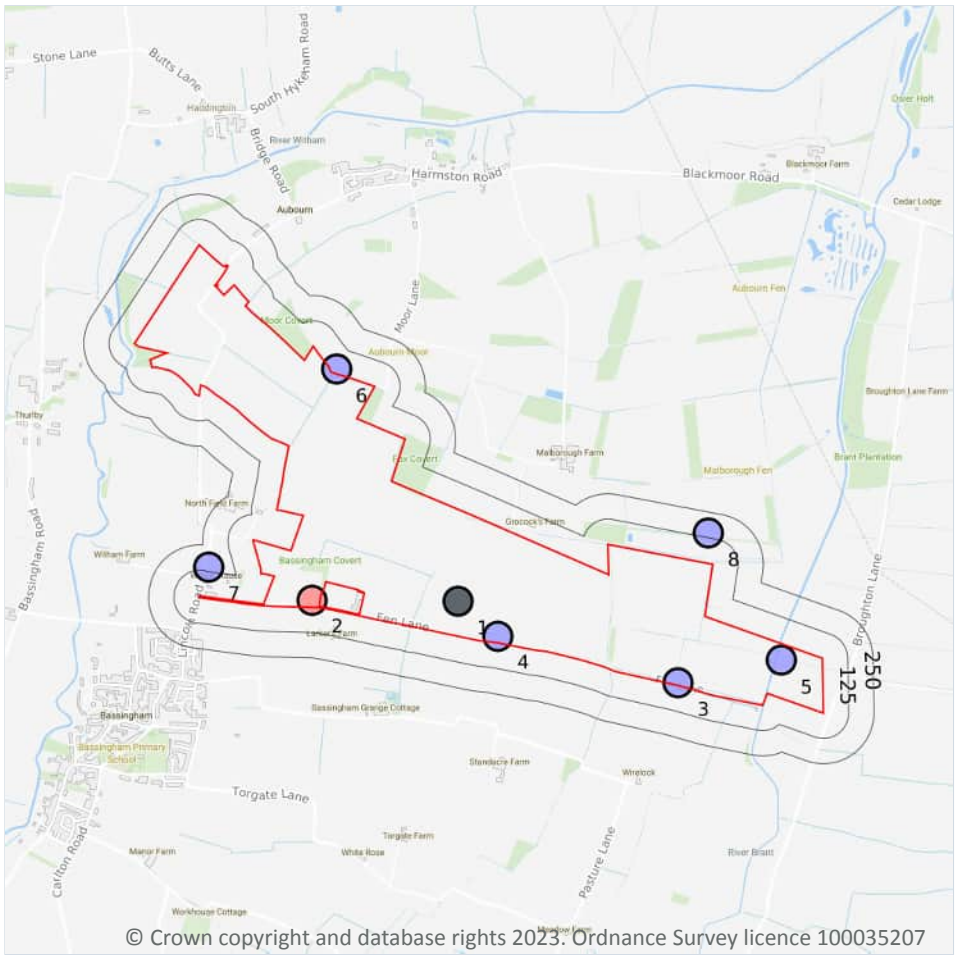
15.10 Bedrock faults and other linear features (50k)

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	8

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.

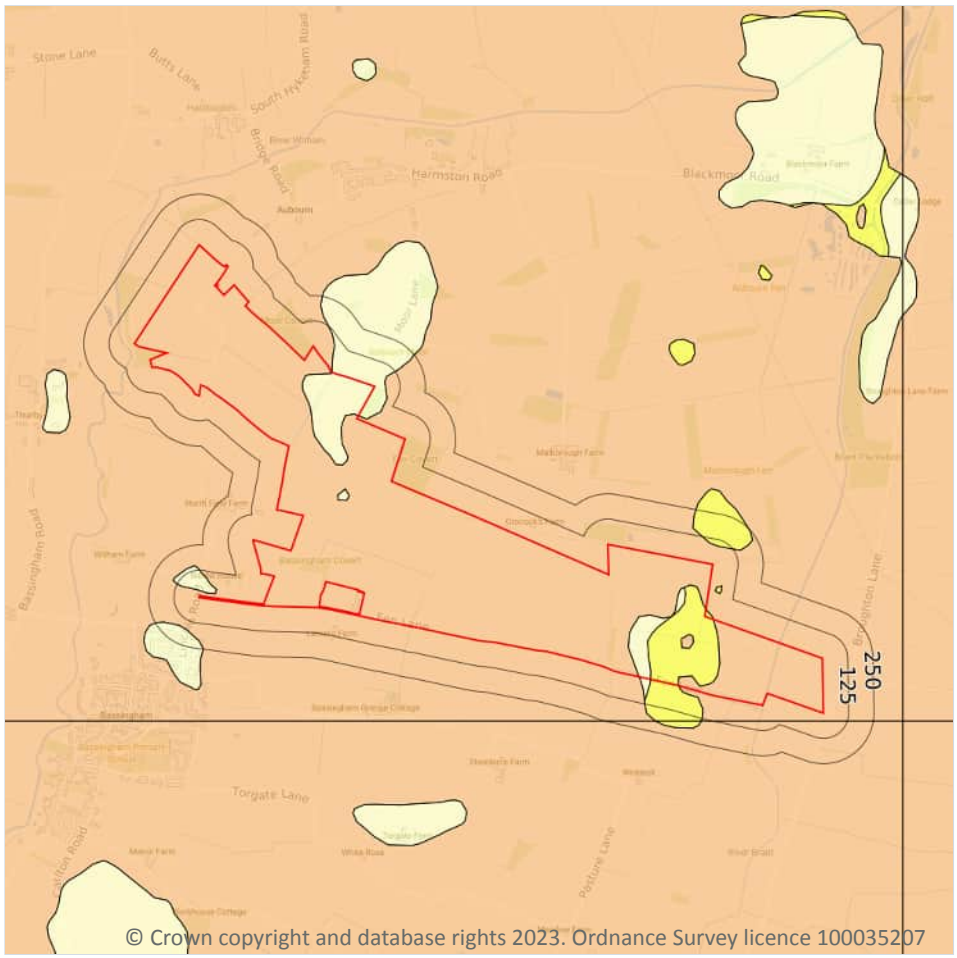
Features are displayed on the Boreholes map on **page 106 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	492800 360590	FEN LANE BH	-	Y	N/A
2	On site	492080 360598	BASSINGHAM 1	1402.0	N	250736 ↗
3	On site	493890 360190	A.W.A. LINCOLN F.A.S. 25	8.0	N	250745 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	**On site**	**493000 360420**	**A.W.A. LINCOLN F.A.S. 26**	**8.0**	**N**	**250744** ↗
5	**On site**	**494400 360300**	**COLEBY BRIDGE BH3**	**7.62**	**N**	**250723** ↗
6	23m NW	492200 361740	AUBURN IGS LT96-20	4.0	N	250729 ↗
7	147m W	491570 360760	BASSINMGHAM IGS LT96-23	4.0	N	250731 ↗
8	149m E	494040 360930	AUBOURN IGS LT96-24	5.0	N	250732 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



17.1 Shrink swell clays

Records within 50m	6

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).

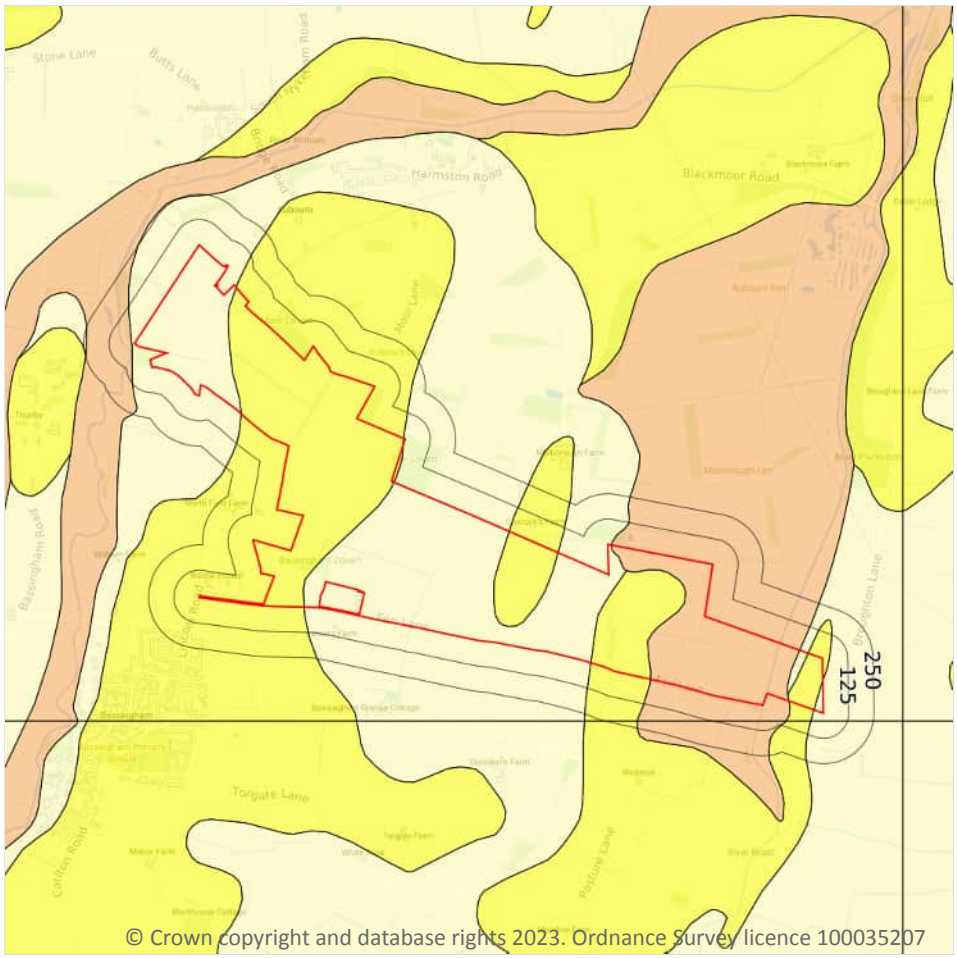
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 108 >**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Very low**	**Ground conditions predominantly low plasticity.**
On site	**Low**	**Ground conditions predominantly medium plasticity.**

Location	Hazard rating	Details
20m W	Negligible	Ground conditions predominantly non-plastic.
32m E	Very low	Ground conditions predominantly low plasticity.
39m SE	Low	Ground conditions predominantly medium plasticity.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	4

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.

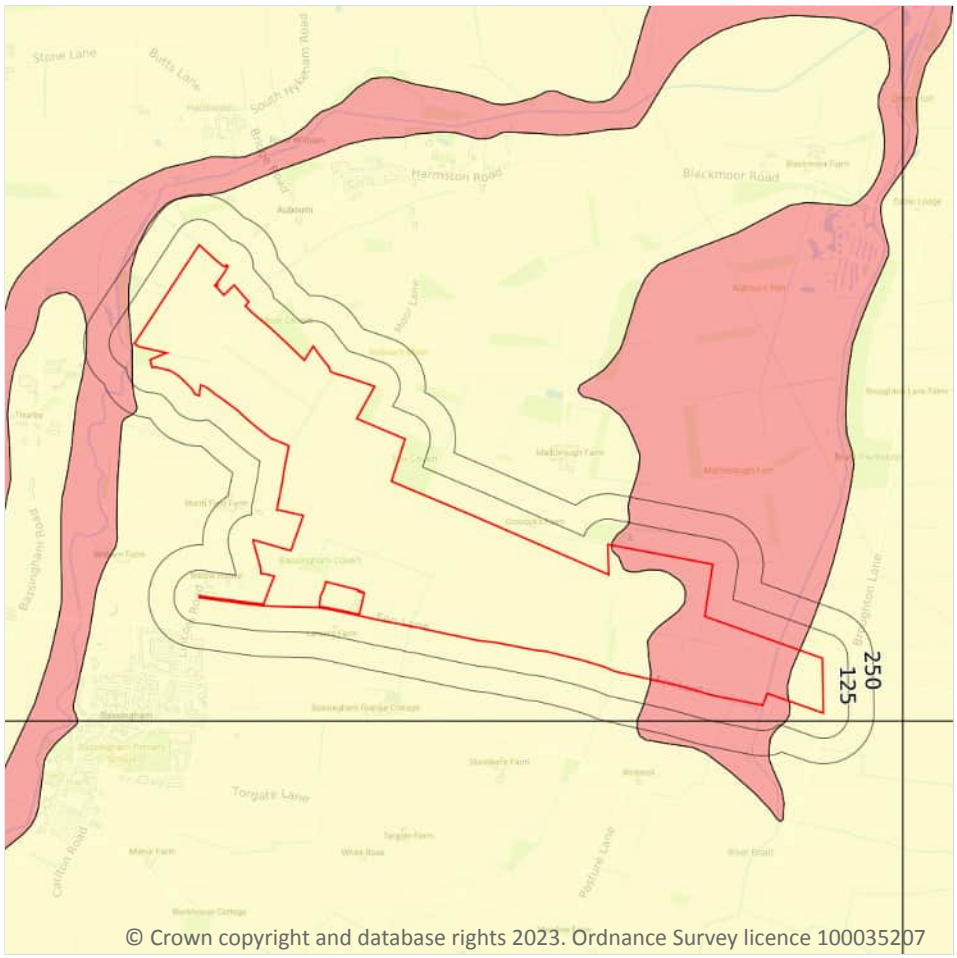
Features are displayed on the Natural ground subsidence - Running sands map on **page 110 >**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

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.**
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**
39m SE	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	3

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.

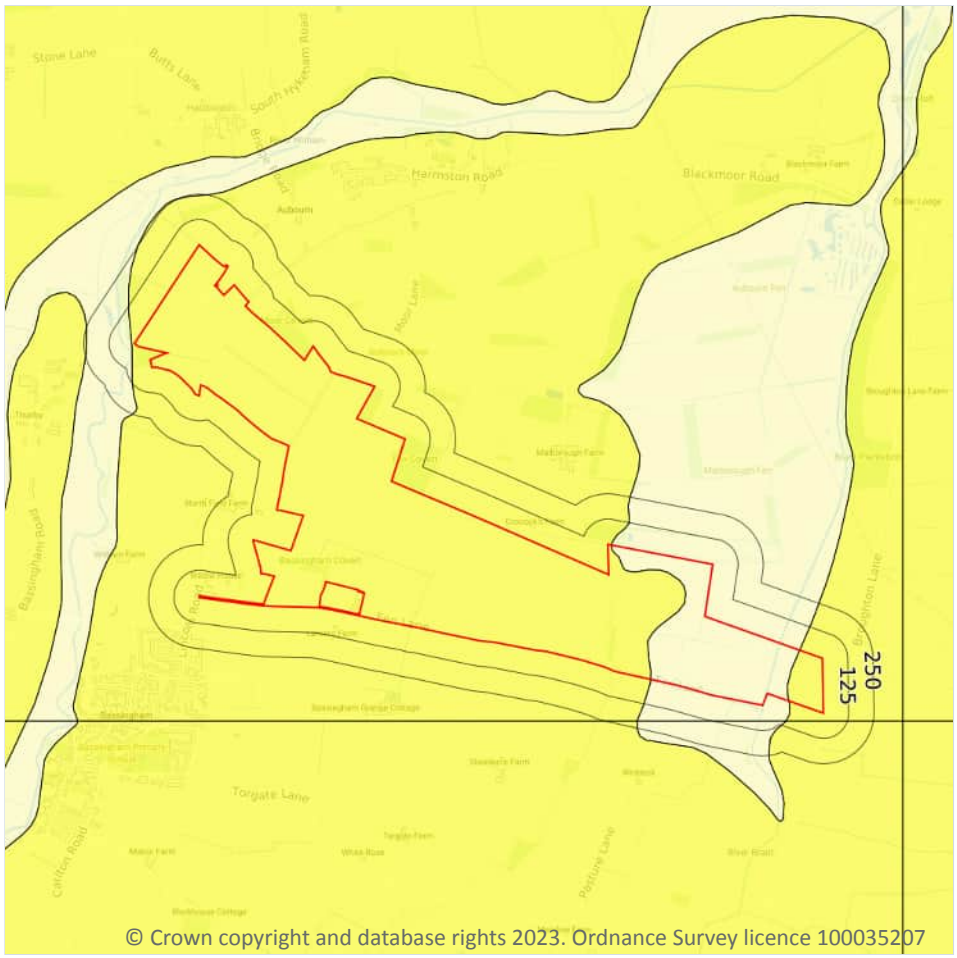
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 112 >**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**

Location	Hazard rating	Details
39m SE	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	3

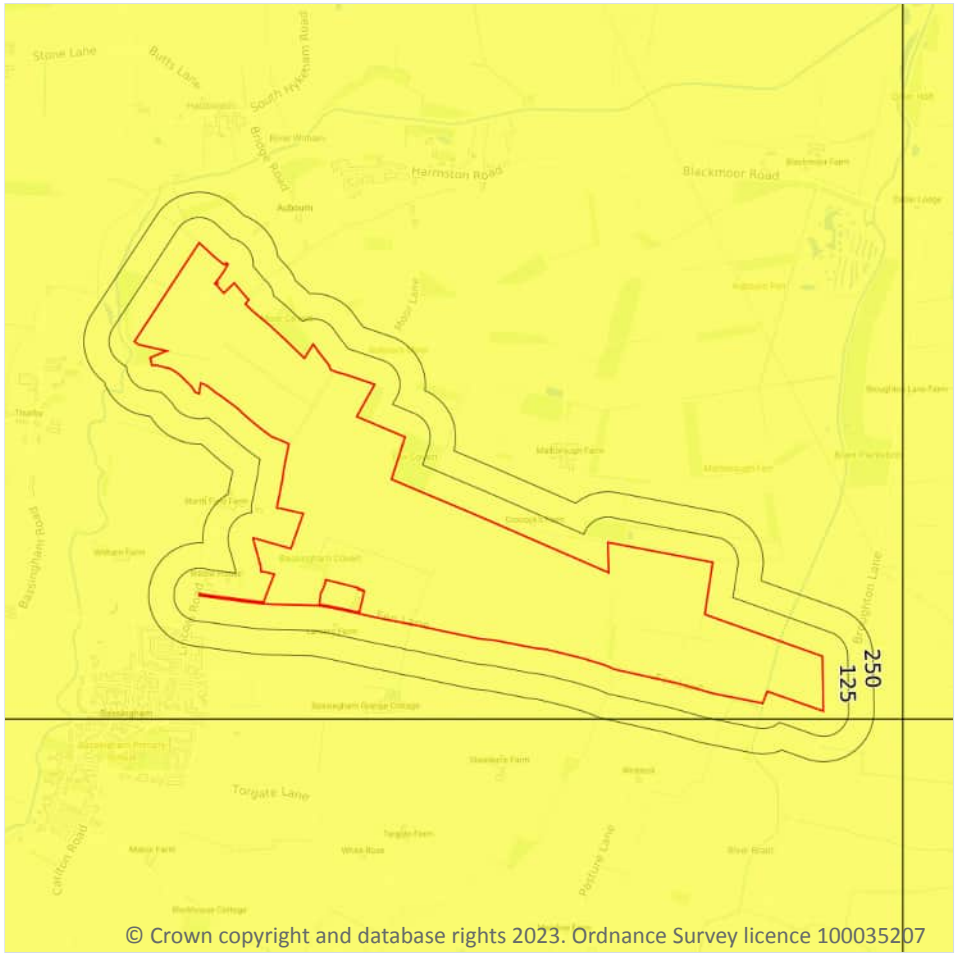
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 114 >**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
On site	**Very low**	**Deposits with potential to collapse when loaded and saturated are unlikely to be present.**
39m SE	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	2

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.

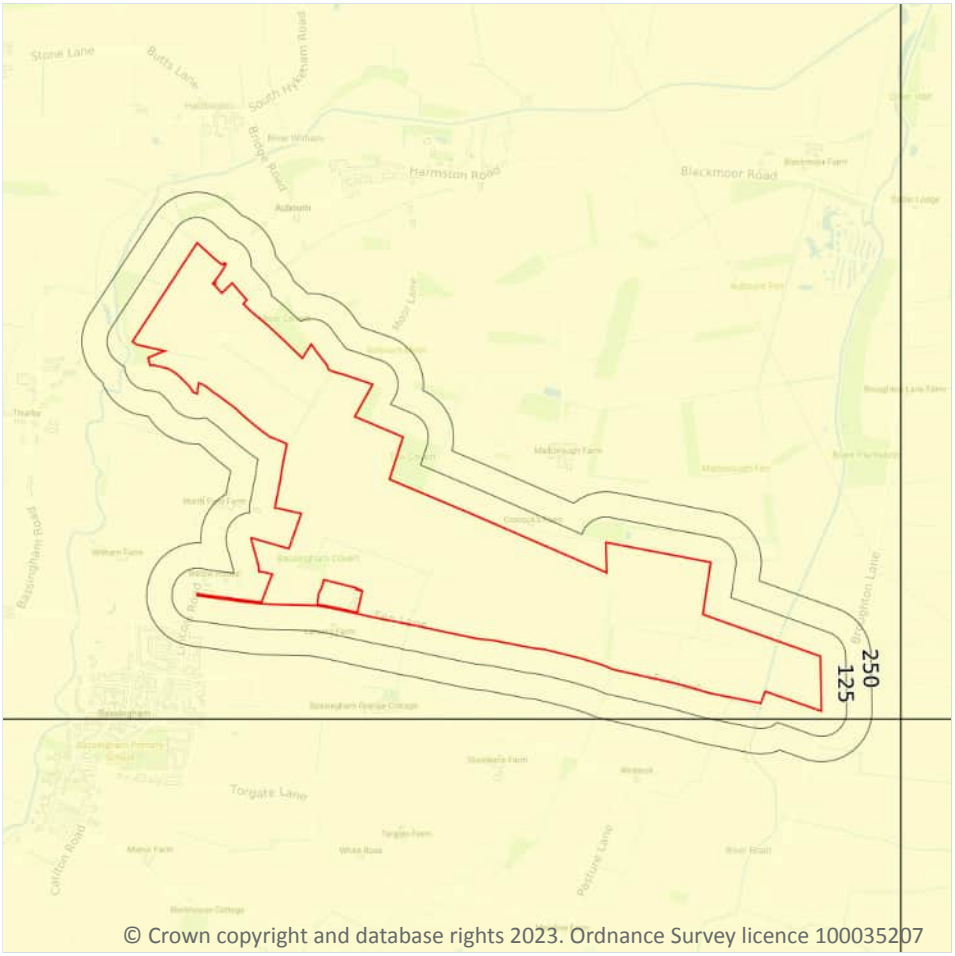
Features are displayed on the Natural ground subsidence - Landslides map on **page 116 >**

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.**

Location	Hazard rating	Details
39m SE	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



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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.

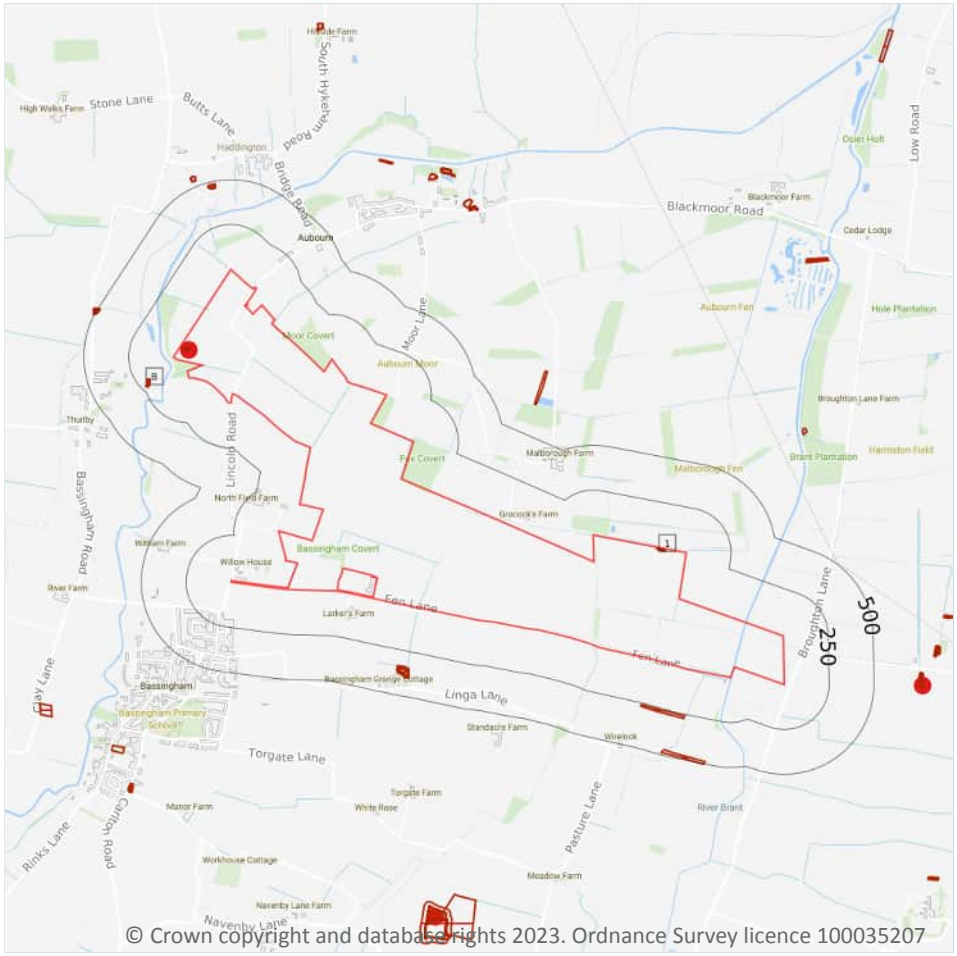
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 118 >**

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
39m SE	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

BritPits

Surface ground workings

Underground workings

Underground mining extents

Historical mineral planning areas

TCA non-coal mining

Non Coal Mining

Sporadic underground mining of restricted extent possible

Localised small scale underground mining possible

Small scale mining possible

Underground mining known or likely within or in close proximity

Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	1

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on **page 120 >**

ID	Location	Details	Description
A	**On site**	**Name: Thurlby Gall Gravel Pit Address: Thurlby, ALFORD, Lincolnshire Commodity: Sand & Gravel Status: Ceased**	**Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority**

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	**8**

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 120 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Pond**	**1886**	**1:10560**
A	**On site**	**Gravel Pit**	**1955**	**1:10560**
A	**On site**	**Gravel Pit**	**1948**	**1:10560**
A	**On site**	**Gravel Pit**	**1904**	**1:10560**
A	**On site**	**Gravel Pit**	**1904**	**1:10560**
B	184m NW	Pond	1955	1:10560
B	184m NW	Pond	1979	1:10000
B	184m NW	Pond	1904	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	0

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).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the

Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

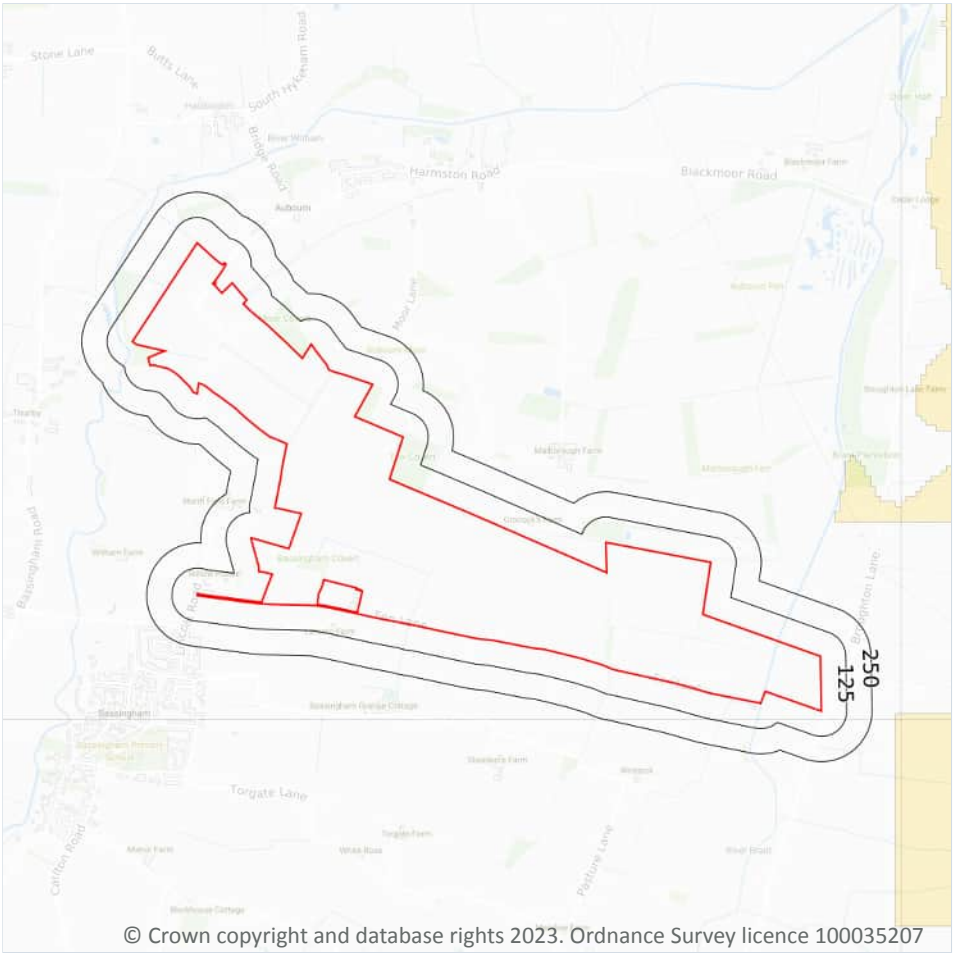
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon



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Site Outline

Search buffers in metres (m)

Greater than 30%

Between 10% and 30%

Between 5% and 10%

Between 3% and 5%

Between 1% and 3%

Less than 1%

20.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 127 >**

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 **64**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**90 - 120 mg/kg**	**30 - 45 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
14m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
14m NW	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
22m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
23m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
23m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
24m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
36m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
36m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
36m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
36m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
39m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
39m SE	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 km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

Terms and conditions

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LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 10/10/2023

Your ref: 60700987

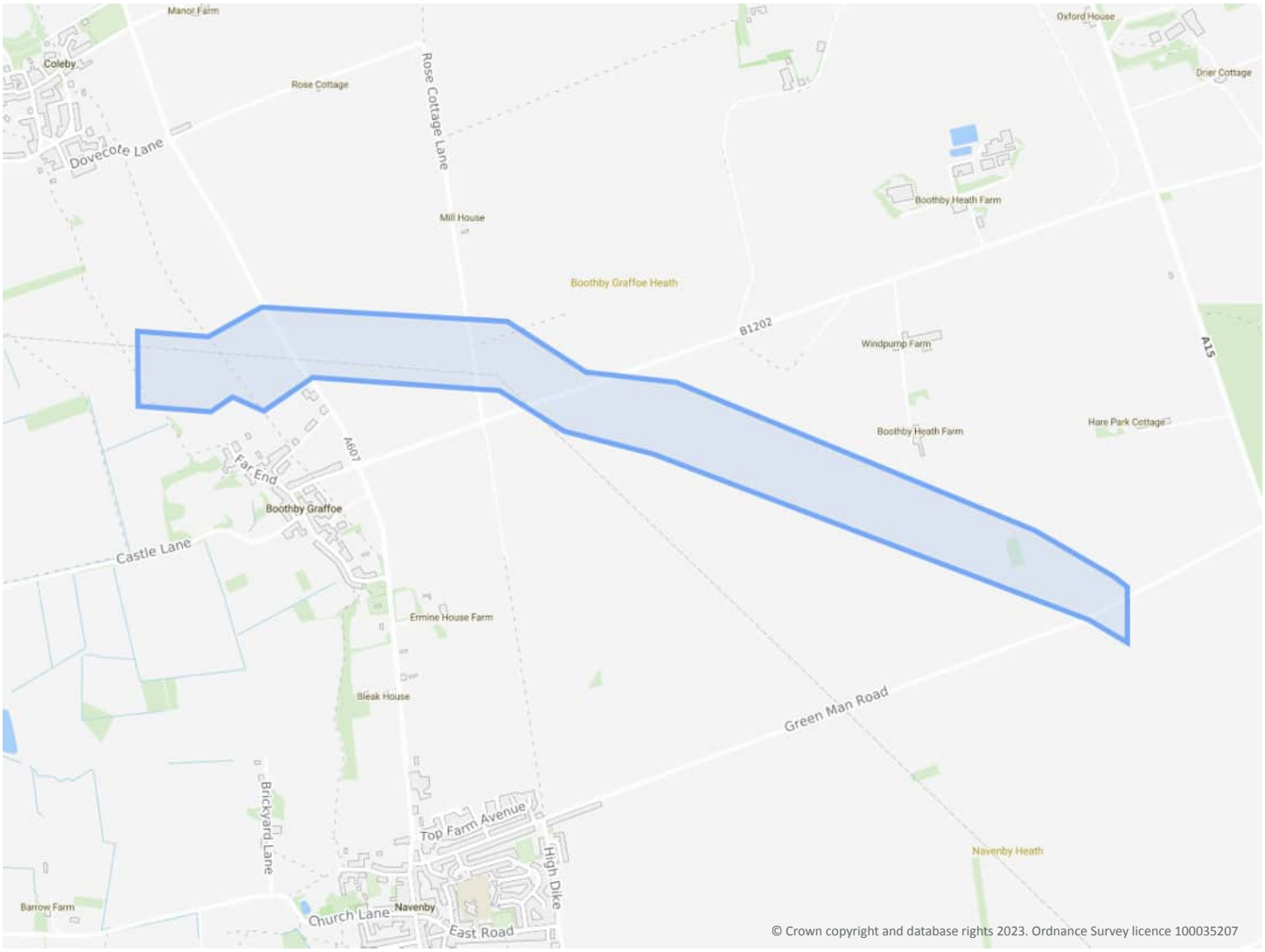
Our Ref: GSIP-2023-14155-15965_G

Site Details

Location: 499328 359414

Area: 79.96 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

Aerial image p. 9 >

OS MasterMap site plan N/A: >10ha

groundsure.com/insightuserguide ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	1	0	3	17	-
15	1.2	Historical tanks	0	0	0	0	-
16	1.3	Historical energy features	0	0	0	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
16	1.5	Historical garages	0	0	0	0	-
16	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
17 >	2.1 >	Historical industrial land uses >	1	0	3	24	-
19	2.2	Historical tanks	0	0	0	0	-
19	2.3	Historical energy features	0	0	0	0	-
19	2.4	Historical petrol stations	0	0	0	0	-
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	0	0	0	-
21 >	3.6 >	Licensed waste sites >	0	0	2	0	-
22 >	3.7 >	Waste exemptions >	7	7	43	57	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
31 >	4.1 >	Recent industrial land uses >	4	1	2	-	-
32	4.2	Current or recent petrol stations	0	0	0	0	-
32	4.3	Electricity cables	0	0	0	0	-
32	4.4	Gas pipelines	0	0	0	0	-
32	4.5	Sites determined as Contaminated Land	0	0	0	0	-

33	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
33	4.7	Regulated explosive sites	0	0	0	0	-
33	4.8	Hazardous substance storage/usage	0	0	0	0	-
33	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
33 >	**4.10 >**	**Licensed industrial activities (Part A(1)) >**	0	0	2	1	-
34	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
34	4.12	Radioactive Substance Authorisations	0	0	0	0	-
34 >	**4.13 >**	**Licensed Discharges to controlled waters >**	0	0	0	1	-
35	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
35	4.15	Pollutant release to public sewer	0	0	0	0	-
35	4.16	List 1 Dangerous Substances	0	0	0	0	-
35	4.17	List 2 Dangerous Substances	0	0	0	0	-
36	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
36 >	**4.19 >**	**Pollution inventory substances >**	0	0	0	4	-
37 >	**4.20 >**	**Pollution inventory waste transfers >**	0	0	0	1	-
38	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
39	5.1	Superficial aquifer	None (within 500m)				
40 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
42 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
44 >	**5.4 >**	**Groundwater vulnerability- soluble rock risk >**	Identified (within 0m)				
45	5.5	Groundwater vulnerability- local information	None (within 0m)				
46 >	**5.6 >**	**Groundwater abstractions >**	0	0	0	0	4
47 >	**5.7 >**	**Surface water abstractions >**	0	0	0	0	1
48 >	**5.8 >**	**Potable abstractions >**	0	0	0	0	1
48 >	**5.9 >**	**Source Protection Zones >**	1	0	0	0	-
49	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
50 >	**6.1 >**	**Water Network (OS MasterMap) >**	0	0	3	-	-

51 >	6.2 >	Surface water features >	0	0	3	-	-
51 >	6.3 >	WFD Surface water body catchments >	2	-	-	-	-
52 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
52 >	6.5 >	WFD Groundwater bodies >	2	-	-	-	-

Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
53	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
53	7.2	Historical Flood Events	0	0	0	-	-
53	7.3	Flood Defences	0	0	0	-	-
54	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
54	7.5	Flood Storage Areas	0	0	0	-	-
55	7.6	Flood Zone 2	None (within 50m)				
55	7.7	Flood Zone 3	None (within 50m)				

Page	Section	Surface water flooding >	
56 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)

Page	Section	Groundwater flooding >	
58 >	9.1 >	Groundwater flooding >	High (within 50m)

Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
59	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
59	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
59	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
59	10.4	Special Protection Areas (SPA)	0	0	0	0	0
60	10.5	National Nature Reserves (NNR)	0	0	0	0	0
60	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
60	10.7	Designated Ancient Woodland	0	0	0	0	0
60	10.8	Biosphere Reserves	0	0	0	0	0
61	10.9	Forest Parks	0	0	0	0	0
61	10.10	Marine Conservation Zones	0	0	0	0	0
61	10.11	Green Belt	0	0	0	0	0
61	10.12	Proposed Ramsar sites	0	0	0	0	0

61	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
62	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
62	10.15	Nitrate Sensitive Areas	0	0	0	0	0
62 >	**10.16 >**	**Nitrate Vulnerable Zones >**	2	0	0	0	0
63	10.17	SSSI Impact Risk Zones	0	-	-	-	-
63	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
64	11.1	World Heritage Sites	0	0	0	-	-
65	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
65	11.3	National Parks	0	0	0	-	-
65 >	**11.4 >**	**Listed Buildings >**	0	0	1	-	-
66 >	**11.5 >**	**Conservation Areas >**	0	0	1	-	-
66	11.6	Scheduled Ancient Monuments	0	0	0	-	-
66	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
67 >	**12.1 >**	**Agricultural Land Classification >**	Grade 3 (within 250m)				
68	12.2	Open Access Land	0	0	0	-	-
68	12.3	Tree Felling Licences	0	0	0	-	-
69 >	**12.4 >**	**Environmental Stewardship Schemes >**	3	3	1	-	-
69 >	**12.5 >**	**Countryside Stewardship Schemes >**	1	0	0	-	-
Page	Section	**Habitat designations >**	On site	0-50m	50-250m	250-500m	500-2000m
70 >	**13.1 >**	**Priority Habitat Inventory >**	0	0	6	-	-
71	13.2	Habitat Networks	0	0	0	-	-
71	13.3	Open Mosaic Habitat	0	0	0	-	-
71	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
72 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
73	14.2	Artificial and made ground (10k)	0	0	0	0	-
74	14.3	Superficial geology (10k)	0	0	0	0	-

74	14.4	Landslip (10k)	0	0	0	0	-
75	14.5	Bedrock geology (10k)	0	0	0	0	-
75	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
76 >	15.1 >	**50k Availability >**	Identified (within 500m)				
77	15.2	Artificial and made ground (50k)	0	0	0	0	-
77	15.3	Artificial ground permeability (50k)	0	0	-	-	-
78	15.4	Superficial geology (50k)	0	0	0	0	-
78	15.5	Superficial permeability (50k)	None (within 50m)				
78	15.6	Landslip (50k)	0	0	0	0	-
78	15.7	Landslip permeability (50k)	None (within 50m)				
79 >	15.8 >	**Bedrock geology (50k) >**	4	0	0	1	-
80 >	15.9 >	**Bedrock permeability (50k) >**	Identified (within 50m)				
80	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
81 >	16.1 >	**BGS Boreholes >**	1	0	2	-	-
Page	Section	**Natural ground subsidence >**					
83 >	17.1 >	**Shrink swell clays >**	Low (within 50m)				
84 >	17.2 >	**Running sands >**	Negligible (within 50m)				
85 >	17.3 >	**Compressible deposits >**	Negligible (within 50m)				
86 >	17.4 >	**Collapsible deposits >**	Very low (within 50m)				
87 >	17.5 >	**Landslides >**	Low (within 50m)				
89 >	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
91 >	18.1 >	**BritPits >**	1	0	0	3	-
92 >	18.2 >	**Surface ground workings >**	1	0	2	-	-
93	18.3	Underground workings	0	0	0	0	0
93	18.4	Underground mining extents	0	0	0	0	-
93 >	18.5 >	**Historical Mineral Planning Areas >**	0	0	1	0	-

93 >	18.6 >	Non-coal mining >	3	0	2	1	0
94	18.7	JPB mining areas	None (within 0m)				
95	18.8	The Coal Authority non-coal mining	0	0	0	0	-
95	18.9	Researched mining	0	0	0	0	-
95	18.10	Mining record office plans	0	0	0	0	-
95	18.11	BGS mine plans	0	0	0	0	-
96	18.12	Coal mining	None (within 0m)				
96	18.13	Brine areas	None (within 0m)				
96	18.14	Gypsum areas	None (within 0m)				
96	18.15	Tin mining	None (within 0m)				
96	18.16	Clay mining	None (within 0m)				
Page	Section	**Ground cavities and sinkholes** >	On site	0-50m	50-250m	250-500m	500-2000m
97	19.1	Natural cavities	0	0	0	0	-
98 >	19.2 >	Mining cavities >	0	0	0	1	0
98	19.3	Reported recent incidents	0	0	0	0	-
98	19.4	Historical incidents	0	0	0	0	-
99	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon** >					
100 >	20.1 >	Radon >	Between 10% and 30% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
102 >	21.1 >	BGS Estimated Background Soil Chemistry >	20	8	-	-	-
104	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
104	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
105	22.1	Underground railways (London)	0	0	0	-	-
105	22.2	Underground railways (Non-London)	0	0	0	-	-
105	22.3	Railway tunnels	0	0	0	-	-
105	22.4	Historical railway and tunnel features	0	0	0	-	-
105	22.5	Royal Mail tunnels	0	0	0	-	-

106	22.6	Historical railways	0	0	0	-	-
106	22.7	Railways	0	0	0	-	-
106	22.8	Crossrail 1	0	0	0	0	-
106	22.9	Crossrail 2	0	0	0	0	-
106	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 79.96ha

Recent site history - 2018 aerial photograph



Capture Date: 03/05/2018

Site Area: 79.96ha

Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 79.96ha

Recent site history - 2007 aerial photograph



Capture Date: 18/09/2007

Site Area: 79.96ha

Recent site history - 1999 aerial photograph



Capture Date: 28/04/1999

Site Area: 79.96ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	21

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Unspecified Old Quarry**	**1886**	**1601157**

ID	Location	Land use	Dates present	Group ID
2	212m NW	Unspecified Disused Quarry	1973	1606519
3	237m NE	Airfield	1951	2366634
4	240m W	Unspecified Quarry	1951	1618387
A	281m NW	Unspecified Mill	1904 - 1973	1688053
B	283m W	Smithy	1953	1721859
B	286m W	Smithy	1904 - 1948	1706841
A	287m NW	Flour Mill	1886	1589806
A	291m NW	Old Windmill	1951	1601981
5	350m NW	Unspecified Quarry	1948	1653662
6	393m N	Disused Airfield	1973	2368008
C	400m W	Unspecified Old Quarry	1951	1723656
C	402m W	Unspecified Old Quarry	1904 - 1948	1684256
C	403m W	Unspecified Old Quarry	1886	1749945
7	432m W	Old Tramway Sidings	1886	1606682
8	439m NE	Disused Airfield	1951	1748988
9	441m W	Unspecified Old Quarry	1886	1601156
D	457m W	Unspecified Heap	1904 - 1948	1665536
D	458m W	Unspecified Heap	1951	1675385
D	462m W	Cuttings	1886	1562263
10	498m E	Unspecified Old Quarry	1951	2032030

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

2.1 Historical industrial land uses

Records within 500m	28

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17 >**

ID	Location	Land Use	Date	Group ID
1	**On site**	**Unspecified Old Quarry**	**1886**	**1601157**
2	212m NW	Unspecified Disused Quarry	1973	1606519
3	237m NE	Airfield	1951	2366634

ID	Location	Land Use	Date	Group ID
4	240m W	Unspecified Quarry	1951	1618387
A	281m NW	Unspecified Mill	1951	1688053
A	281m NW	Unspecified Mill	1973	1688053
B	283m W	Smithy	1953	1721859
B	286m W	Smithy	1948	1706841
B	286m W	Smithy	1904	1706841
A	287m NW	Flour Mill	1886	1589806
A	287m NW	Unspecified Mill	1948	1688053
A	287m NW	Unspecified Mill	1904	1688053
A	291m NW	Old Windmill	1951	1601981
5	350m NW	Unspecified Quarry	1948	1653662
6	393m N	Disused Airfield	1973	2368008
C	400m W	Unspecified Old Quarry	1951	1723656
C	402m W	Unspecified Old Quarry	1948	1684256
C	402m W	Unspecified Old Quarry	1904	1684256
C	403m W	Unspecified Old Quarry	1886	1749945
7	432m W	Old Tramway Sidings	1886	1606682
8	439m NE	Disused Airfield	1951	1748988
9	441m W	Unspecified Old Quarry	1886	1601156
D	457m W	Unspecified Heap	1948	1665536
D	457m W	Unspecified Heap	1904	1665536
D	458m W	Unspecified Heap	1951	1675385
D	462m W	Cuttings	1886	1562263
10	492m NE	Airfield	1951	2366634
11	498m E	Unspecified Old Quarry	1951	2032030

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

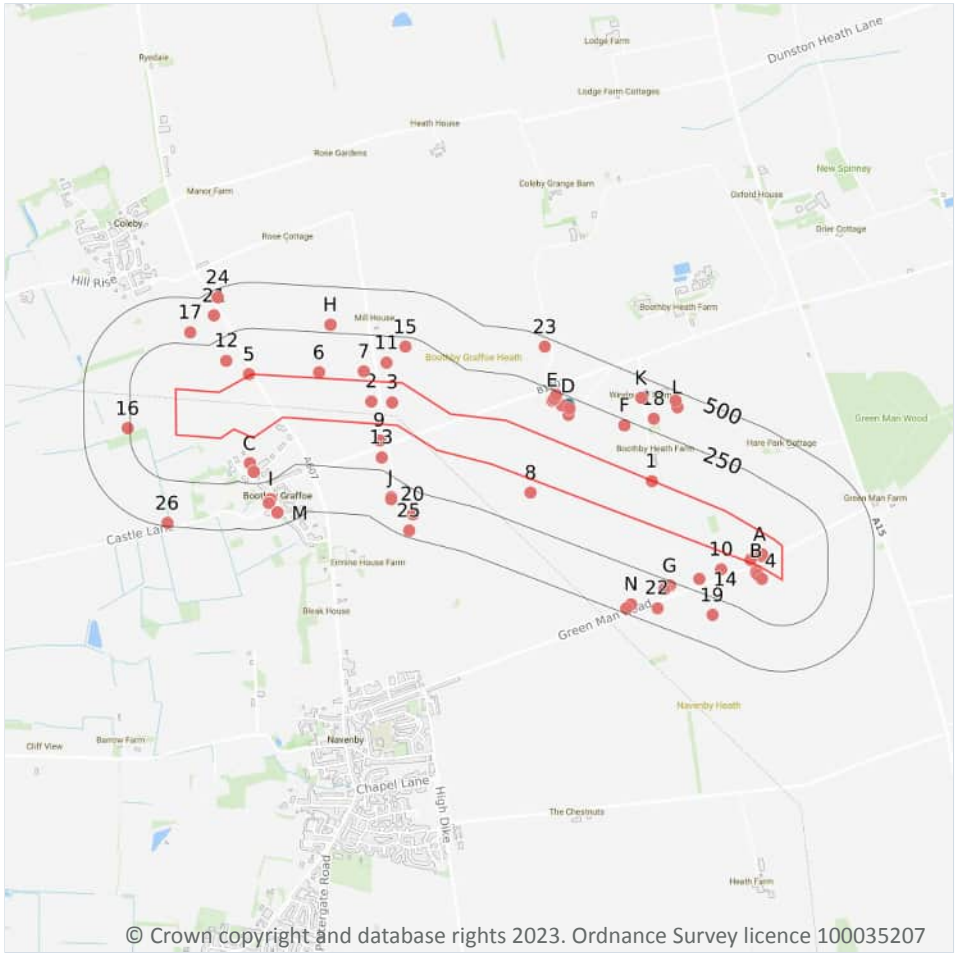
2.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



Site Outline

Search buffers in metres (m)

Licensed 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	0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m	2

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 20 >**

ID	Location	Details		
D	197m NE	Site Name: Wind Pump Farm Site Address: The Heath, Boothby Graffoe, Lincoln, Lincolnshire, LN5 0AS Correspondence Address: -	Type of Site: Sewage sludge treatment Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: DRM001 EPR reference: EA/EPR/GB3205UW/A001 Operator: Digit Resource Management Ltd Waste Management licence No: 404815 Annual Tonnage: 250000	Issue Date: 12/07/2018 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
D	197m NE	Site Name: Wind Pump Farm Site Address: Enva Resource Management Limited, The Heath, The Heath, Boothby Graffoe, Lincoln, Lincolnshire, LN5 0AS Correspondence Address: -	Type of Site: Sewage sludge treatment Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 638308 EPR reference: EA/EPR/GB3205UW Operator: Enva Resource Management Limited Waste Management licence No: 404815 Annual Tonnage: 0	Issue Date: 12/07/2018 Effective Date: 12/07/2018 Modified: - Surrendered Date: 12/07/2018 Expiry Date: - Cancelled Date: 12/07/2018 Status: Surrendered

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m **114**

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
1	**On site**	**-**	**WEX224659**	**Storing waste exemption**	**On a Farm**	**Storage of sludge**
2	**On site**	**Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY**	**EPR/WF0107EP/A001**	**Storing waste exemption**	**Non-Agricultural Waste Only**	**Storage of sludge**
3	**On site**	**-**	**WEX238606**	**Storing waste exemption**	**On a farm**	**Storage of sludge**
4	**On site**	**-**	**WEX323148**	**Storing waste exemption**	**On a farm**	**Storage of sludge**
A	**On site**	**-**	**WEX110831**	**Storing waste exemption**	**On a farm**	**Storage of sludge**
A	**On site**	**Land at Grid Ref: TF 0109 5885**	**EPR/AE5884JS/A001**	**Storing waste exemption**	**Non-Agricultural Waste Only**	**Storage of sludge**
A	**On site**	**-**	**WEX243476**	**Storing waste exemption**	**On a farm**	**Storage of sludge**

ID	Location	Site	Reference	Category	Sub-Category	Description
5	5m W	Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY	EPR/FF0700VJ/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
6	27m NW	-	WEX349796	Storing waste exemption	On a farm	Storage of sludge
B	35m SE	Land at TF01065877	EPR/UE5141CE/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
B	35m SE	Land at NGR: TF0106058770	EPR/BE5644HW/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
B	43m SE	-	WEX071139	Storing waste exemption	On a farm	Storage of sludge
B	47m SE	-	WEX219960	Storing waste exemption	On a Farm	Storage of sludge
7	47m NW	-	WEX348741	Storing waste exemption	On a farm	Storage of sludge
B	54m SE	-	WEX356653	Storing waste exemption	On a farm	Storage of sludge
8	73m SE	-	WEX116810	Storing waste exemption	On a farm	Storage of sludge
9	90m W	Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY	EPR/WF0900VR/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
10	93m SE	-	WEX164681	Storing waste exemption	On a Farm	Storage of sludge
11	102m NW	-	WEX347992	Storing waste exemption	On a farm	Storage of sludge
12	130m W	Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY	EPR/LF0604WF/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Disposing of waste exemption	On a Farm	Burning waste in the open
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Using waste exemption	On a Farm	Use of waste in construction

ID	Location	Site	Reference	Category	Sub-Category	Description
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Treating waste exemption	On a Farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX212521	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Disposing of waste exemption	On a farm	Burning waste in the open
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Using waste exemption	On a farm	Use of waste in construction
C	145m W	BRANKLEY HOUSE, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX058977	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	145m W	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
C	145m W	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
C	145m W	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
C	145m W	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
C	145m W	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
C	145m W	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Using waste exemption	Both agricultural and non-agricultural waste	Burning of waste as a fuel in a small appliance
C	145m W	Brankley House Far End LINCOLN LN5 0LG	EPR/AE5087GZ/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste for a specified purpose
D	155m E	-	WEX160307	Storing waste exemption	On a Farm	Storage of sludge
13	182m W	-	WEX238615	Storing waste exemption	On a farm	Storage of sludge
14	182m SE	-	WEX250052	Storing waste exemption	On a farm	Storage of sludge
D	183m NE	Land at Grid Ref: TF00045965	EPR/LE5859VK/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
D	186m NE	Land at Grid Ref: TF00005967	EPR/LE5559VS/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
C	188m W	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Using waste exemption	On a farm	Use of waste in construction
C	188m W	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
C	188m W	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	188m W	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	188m W	Langford Cottage, FAR END, BOOTHBY GRAFFOE, LINCOLN, LN5 0LG	WEX342060	Disposing of waste exemption	On a farm	Burning waste in the open

ID	Location	Site	Reference	Category	Sub-Category	Description
D	189m NE	-	WEX158955	Storing waste exemption	On a Farm	Storage of sludge
15	194m NW	-	WEX349337	Storing waste exemption	On a farm	Storage of sludge
E	195m NE	-	WEX224674	Storing waste exemption	On a Farm	Storage of sludge
E	205m NE	-	WEX082367	Storing waste exemption	On a farm	Storage of sludge
E	208m NE	Land at NGR: SK9996059710	EPR/VE5447PQ/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
E	208m NE	Land AT SK99965971 SK99965971	EPR/YE5242SE/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
F	219m E	WILLOUGHBY HOUSE WILLOUGHBY HILLS LINCOLNSHIRE PE21 9SA	EPR/AH0072DP/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
F	219m E	WILLOUGHBY HOUSE WILLOUGHBY HILLS LINCOLNSHIRE PE21 9SA	EPR/AH0072DP/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
F	219m E	WILLOUGHBY HOUSE WILLOUGHBY HILLS LINCOLNSHIRE PE21 9SA	EPR/AH0072DP/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
E	230m NE	Stockpile	WEX263435	Storing waste exemption	On a farm	Storage of sludge
16	266m W	Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY	EPR/JF0706VN/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
G	277m SE	-	WEX292409	Storing waste exemption	On a farm	Storage of sludge
H	291m NW	-	WEX285212	Using waste exemption	Not on a farm	Use of waste in construction
H	291m NW	-	WEX285212	Treating waste exemption	Not on a farm	Screening and blending of waste
G	293m SE	-	WEX148904	Storing waste exemption	On a Farm	Storage of sludge
G	306m SE	Land at TF00565867	EPR/UE5641CB/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge

ID	Location	Site	Reference	Category	Sub-Category	Description
G	306m SE	Land at NGR: TF0056058670	EPR/BE5244HT/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
17	311m NW	Stockpile	WEX265883	Storing waste exemption	On a farm	Storage of sludge
18	312m E	Stockpile	WEX263498	Storing waste exemption	On a farm	Storage of sludge
19	344m SE	-	WEX222330	Storing waste exemption	On a Farm	Storage of sludge
I	348m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX235904	Disposing of waste exemption	On a Farm	Burning waste in the open
I	348m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX235904	Disposing of waste exemption	On a Farm	Disposal by incineration
I	348m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX235904	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
I	348m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX235904	Using waste exemption	On a Farm	Pig and poultry ash
I	348m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX235904	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit
I	348m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX235904	Using waste exemption	On a Farm	Use of waste in construction
J	356m SW	-	WEX164693	Storing waste exemption	On a Farm	Storage of sludge
J	356m SW	-	WEX250074	Storing waste exemption	On a farm	Storage of sludge
J	364m SW	Land AT SK99075916	EPR/ME5487QR/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
I	367m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX089942	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
I	367m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX089942	Disposing of waste exemption	On a farm	Disposal by incineration

ID	Location	Site	Reference	Category	Sub-Category	Description
I	367m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX089942	Disposing of waste exemption	On a farm	Burning waste in the open
I	367m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX089942	Using waste exemption	On a farm	Use of waste in construction
I	367m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX089942	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
I	367m W	Castle Lane Farm, Castle Lane, Boothby Graffoe, Lincolnshire, LN5 0LF	WEX089942	Using waste exemption	On a farm	Pig and poultry ash
20	376m SW	Stockpile	WEX263445	Storing waste exemption	On a farm	Storage of sludge
21	376m NW	-	WEX250300	Storing waste exemption	On a farm	Storage of sludge
K	389m E	WIND PUMP FARM, THE HEATH, BOOTHBY GRAFFOE, LINCOLN, LN5 0AS	WEX013715	Disposing of waste exemption	On a farm	Burning waste in the open
K	389m E	WIND PUMP FARM, THE HEATH, BOOTHBY GRAFFOE, LINCOLN, LN5 0AS	WEX013715	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
K	389m E	WIND PUMP FARM, THE HEATH, BOOTHBY GRAFFOE, LINCOLN, LN5 0AS	WEX013715	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
K	389m E	WIND PUMP FARM, THE HEATH, BOOTHBY GRAFFOE, LINCOLN, LN5 0AS	WEX013715	Using waste exemption	On a farm	Pig and poultry ash
22	414m SE	-	WEX213898	Storing waste exemption	On a Farm	Storage of sludge
L	417m E	Land at TF0063059660	EPR/XE5188NQ/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX217690	Storing waste exemption	On a Farm	Storage of sludge

ID	Location	Site	Reference	Category	Sub-Category	Description
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX217690	Using waste exemption	On a Farm	Use of waste in construction
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX217690	Using waste exemption	On a Farm	Spreading waste on agricultural land to confer benefit
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX217690	Using waste exemption	On a Farm	Spreading of plant matter to confer benefit
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX217690	Using waste exemption	On a Farm	Pig and poultry ash
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX217690	Treating waste exemption	On a Farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX217690	Disposing of waste exemption	On a Farm	Deposit of waste from dredging of inland waters
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX217690	Disposing of waste exemption	On a Farm	Burning waste in the open
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX340979	Using waste exemption	On a farm	Use of waste in construction
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX340979	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX340979	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX340979	Using waste exemption	On a farm	Pig and poultry ash
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX340979	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX340979	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters

ID	Location	Site	Reference	Category	Sub-Category	Description
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX340979	Disposing of waste exemption	On a farm	Burning waste in the open
M	430m W	MANOR FARM, CASTLE LANE, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	WEX340979	Storing waste exemption	On a farm	Storage of sludge
N	445m SE	Land at TF0038058590	EPR/WE5145VD/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
N	445m SE	Land at TF0038058590	EPR/XE5288NB/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
23	448m NE	-	WEX224683	Storing waste exemption	On a Farm	Storage of sludge
L	451m E	Land at Grid Ref: TF00625970	EPR/LE5659VM/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
24	456m NW	-	WEX238591	Storing waste exemption	On a farm	Storage of sludge
25	467m SW	-	WEX116805	Storing waste exemption	On a farm	Storage of sludge
N	477m SE	-	WEX294731	Storing waste exemption	On a Farm	Storage of sludge
26	487m W	Chapel Farm Main Street NEWARK Nottinghamshire NG23 5SY	EPR/QF0306VZ/A001	Storing waste exemption	Non-Agricultural Waste Only	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

Part A(1) industrial activities

Licensed Discharges to controlled waters

Pollution inventory substances

Pollution inventory waste transfers

4.1 Recent industrial land uses

Records within 250m	7

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 31 >**

ID	Location	Company	Address	Activity	Category
1	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**
2	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**
3	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**

ID	Location	Company	Address	Activity	Category
4	**On site**	**Pylon**	**Lincolnshire, LN5**	**Electrical Features**	**Infrastructure and Facilities**
5	41m W	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities
6	61m SW	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities
7	244m S	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	**0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	**0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	**0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	**0**

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	3

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 31 >**

ID	Location	Details	
A	140m E	Operator: PATRICK DEAN LTD Installation Name: Boothby Heath Farm EPR/BT4150IX Process: INTENSIVE FARMING; > 2,000 PIGS (PRODUCTION PIGS) Permit Number: PP3538YB Original Permit Number: BT4150IX	EPR Reference: - Issue Date: 31/07/2017 Effective Date: 31/07/2017 Last date noted as effective: 21/03/2023 Status: Superceded
A	140m E	Operator: PATRICK DEAN LTD Installation Name: Boothby Heath Farm Process: INTENSIVE FARMING; > 2,000 PIGS (PRODUCTION PIGS) Permit Number: TP3632CY Original Permit Number: BT4150IX	EPR Reference: - Issue Date: 17/04/2014 Effective Date: 17/04/2014 Last date noted as effective: 21/03/2023 Status: Superceded
B	348m W	Operator: G. E. Porter & Sons Limited Installation Name: Castle Lane Farm EPR/ZP3730TA Process: INTENSIVE FARMING; > 40,000 POULTRY Permit Number: RP3007BZ Original Permit Number: ZP3730TA	EPR Reference: - Issue Date: 19/02/2021 Effective Date: 19/02/2021 Last date noted as effective: 21/03/2023 Status: Effective

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	0

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	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 31 >**

ID	Location	Address	Details	
8	438m W	BOOTHBY GRAFFOE PS, BOOTHBY GRAFFOE, LINCOLN, LN5 0LF	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: AW3NF802 Permit Version: 1 Receiving Water: Unknown Trib. River Brant	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 01/08/1989 Effective Date: 01/08/1989 Revocation Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	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.

4.19 Pollution inventory substances

Records within 500m	4

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.

Features are displayed on the Current industrial land use map on **page 31 >**

ID: B, Location: 349m W, Permit: ZP3730TA
Operator: G. E. Porter and Sons Limited
Activity: INTENSIVE FARMING; > 40,000 POULTRY
Address: Castle Lane Farm Lincolnshire LN5 0LF
Sector: Agriculture, Sub-sector: Intensive Farming
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Nitrogen oxides (NO and NO2) as NO2	100000kg	Below Reporting Threshold

ID: B, Location: 349m W, Permit: ZP3730TA
Operator: G. E. Porter and Sons Limited
Activity: INTENSIVE FARMING; > 40,000 POULTRY
Address: Castle Lane Farm Lincolnshire LN5 0LF
Sector: Agriculture, Sub-sector: Intensive Farming
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Methane	10000kg	21035kg

ID: B, Location: 349m W, Permit: ZP3730TA
Operator: G. E. Porter and Sons Limited
Activity: INTENSIVE FARMING; > 40,000 POULTRY
Address: Castle Lane Farm Lincolnshire LN5 0LF
Sector Agriculture, Sub-sector: Intensive Farming
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Particulate matter - PM10	1000kg	8990kg

ID: B, Location: 349m W, Permit: ZP3730TA
Operator: G. E. Porter and Sons Limited
Activity: INTENSIVE FARMING; > 40,000 POULTRY
Address: Castle Lane Farm Lincolnshire LN5 0LF
Sector Agriculture, Sub-sector: Intensive Farming
Releases:

Route	Substance	Reporting threshold (kg)	Quantity (kg)
Air	Ammonia	1000kg	9169kg

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	**1**

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.

Features are displayed on the Current industrial land use map on **page 31 >**

ID: B, Location: 349m W, Permit: ZP3730TA
Operator: G. E. Porter and Sons Limited
Activity: INTENSIVE FARMING; > 40,000 POULTRY
Address: Castle Lane Farm Lincolnshire LN5 0LF
Sector Agriculture, Sub-sector: Intensive Farming
Releases:

Route	Route description	Quantity (tonnes)	Release level	EWC code	EWC description	Hazardous waste
D1	Deposit into or onto land (eg landfill, etc.)	-	brt	02 01 04	waste plastics (except packaging)	No
D1	Deposit into or onto land (eg landfill, etc.)	-	brt	15 01 01	paper and cardboard packaging	No
D1	Deposit into or onto land (eg landfill, etc.)	-	brt	15 01 03	wooden packaging	No
D1	Deposit into or onto land (eg landfill, etc.)	-	brt	15 01 06	mixed packaging	No
D1	Deposit into or onto land (eg landfill, etc.)	-	brt	15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02	No
R10	Land treatment resulting in benefit to agriculture or ecological improvement	-	brt	19 01 12	bottom ash and slag other than those mentioned in 19 01 11	No

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory radioactive waste

Records within 500m	**0**

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer

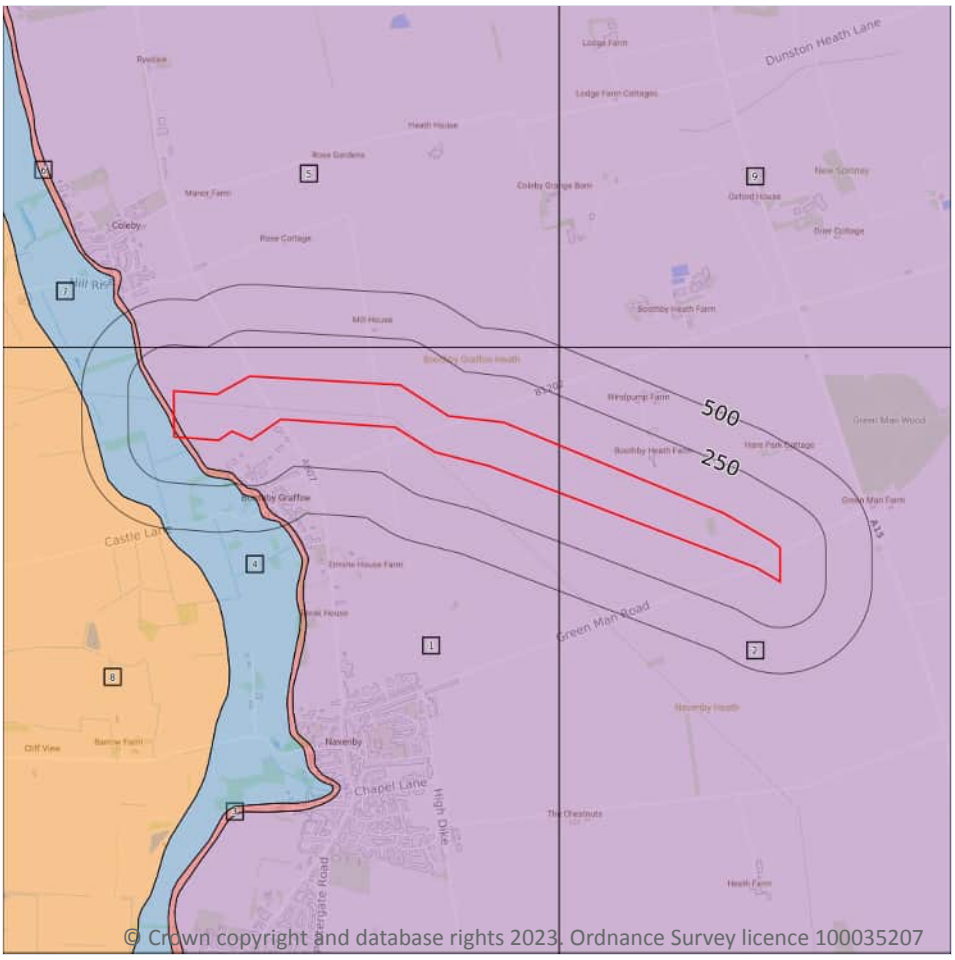
5.1 Superficial aquifer

Records within 500m	0

Aquifer status of groundwater held within superficial geology.

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	9

Aquifer status of groundwater held within bedrock geology.

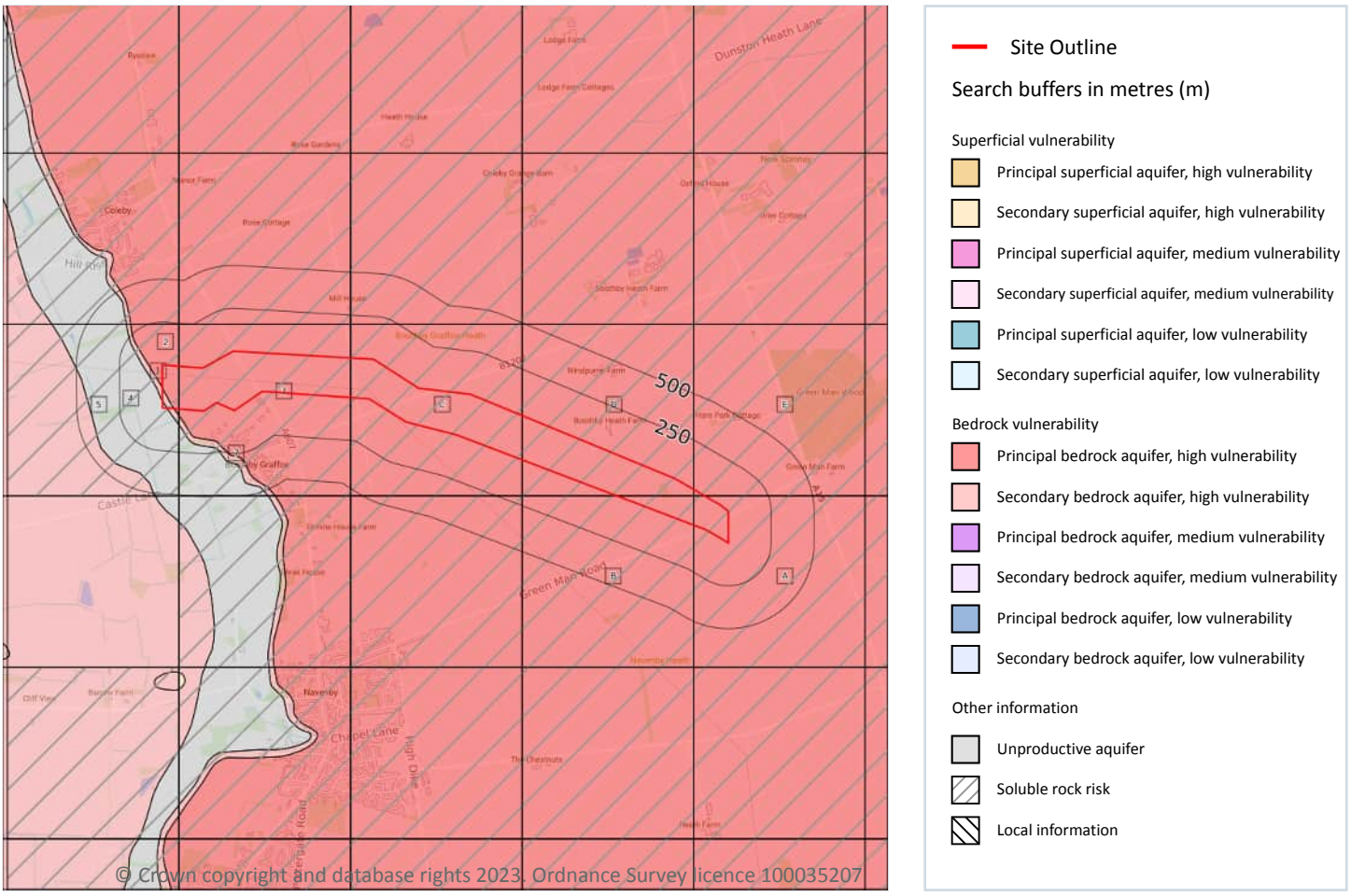
Features are displayed on the Bedrock aquifer map on **page 40 >**

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
2	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

ID	Location	Designation	Description
3	**On site**	**Secondary A**	**Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers**
4	**On site**	**Unproductive**	**These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow**
5	156m NW	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
6	299m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
7	315m W	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
8	402m W	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers
9	491m NE	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



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5.3 Groundwater vulnerability

Records within 50m	10

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 42 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
3	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
4	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
A	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
B	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
C	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
D	**On site**	**Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures**
E	**On site**	**Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures**
7	39m W	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary 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	**7**

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
5	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**8.0%**
6	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**87.0%**
A	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**100.0%**
B	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**100.0%**
C	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**100.0%**
D	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**100.0%**

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
E	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**100.0%**

This data is sourced from the British Geological Survey and the Environment Agency.

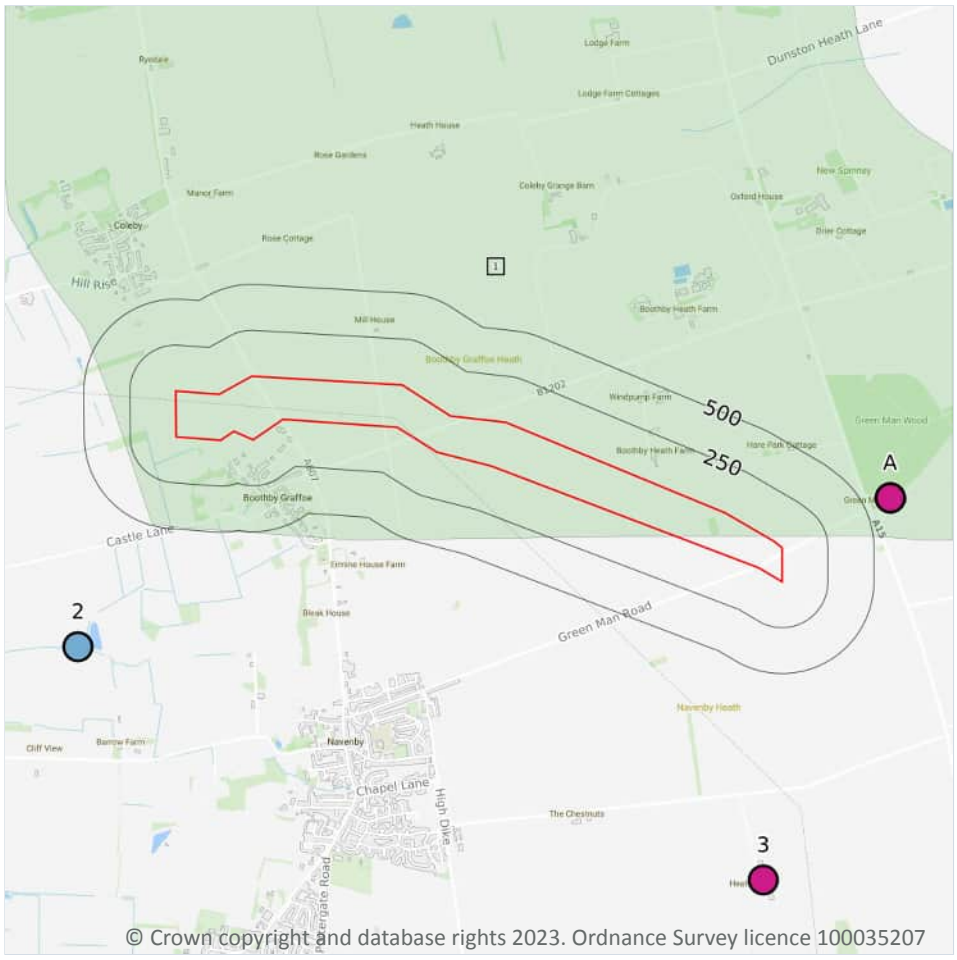
5.5 Groundwater vulnerability- local information

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
- 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	4

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 46 >**

ID	Location	Details	
A	646m E	Status: Historical Licence No: 4/30/09/*G/0011 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE B - BLANKNEY Data Type: Point Name: BLANKNEY ESTATES LTD Easting: 501790 Northing: 359180	Annual Volume (m^3): 102336 Max Daily Volume (m^3): 4549.5 Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1998 Version End Date: -
A	646m E	Status: Historical Licence No: 4/30/09/*G/0011 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE B - BLANKNEY Data Type: Point Name: BLANKNEY ESTATES LTD Easting: 501790 Northing: 359180	Annual Volume (m^3): 102336 Max Daily Volume (m^3): 4549.5 Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1998 Version End Date: -
A	646m E	Status: Historical Licence No: 4/30/09/*G/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE B - BLANKNEY Data Type: Point Name: BLANKNEY ESTATES LTD Easting: 501790 Northing: 359180	Annual Volume (m^3): 102336 Max Daily Volume (m^3): 4549.5 Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1998 Version End Date: -
3	1629m SE	Status: Historical Licence No: 4/30/09/*G/0061 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: W.HAYWARD & SONS BORE NAVENBY Data Type: Point Name: W HAYWARD & SONS Easting: 501100 Northing: 357100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1966 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	**1**

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 46 >**

ID	Location	Details	
2	1262m SW	Status: Historical Licence No: 4/30/04/*S/0032 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: TRIB R BRANT, BOOTHBY-GRAFFOE Data Type: Point Name: SHARPES INTERNATIONAL SEEDS LTD Easting: 497370 Northing: 358370	Annual Volume (m^3): 18000 Max Daily Volume (m^3): 984 Original Application No: - Original Start Date: 01/04/1997 Expiry Date: 31/03/2018 Issue No: 100 Version Start Date: 01/04/2004 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	**1**

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 46 >**

ID	Location	Details	
A	646m E	Status: Historical Licence No: 4/30/09/*G/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE B - BLANKNEY Data Type: Point Name: BLANKNEY ESTATES LTD Easting: 501790 Northing: 359180	Annual Volume (m^3): 102336 Max Daily Volume (m^3): 4549.5 Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1998 Version End Date: -

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 46 >**

ID	Location	Type	Description
1	**On site**	**3**	**Total catchment**

This data is sourced from the Environment Agency and Natural Resources Wales.

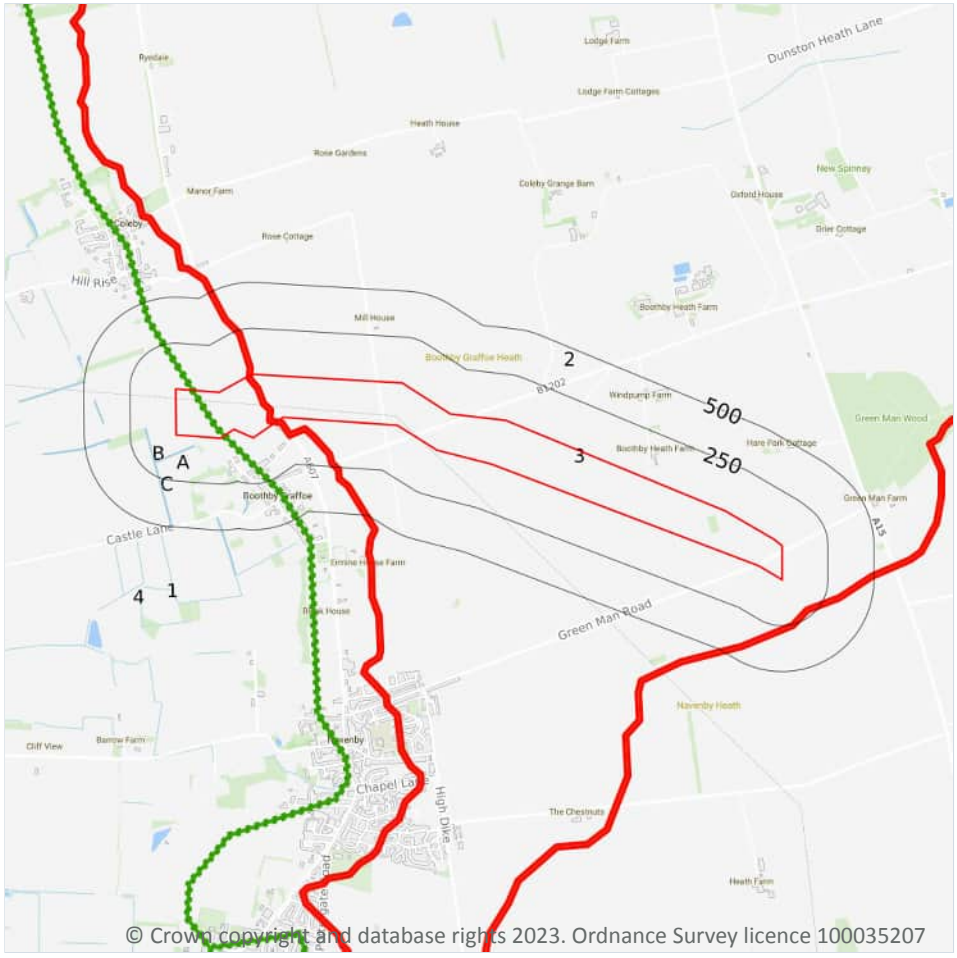
5.10 Source Protection Zones (confined aquifer)

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 MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	3

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 50 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	52m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
B	152m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	191m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	**3**

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 50 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**2**

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 50 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Brant - Lower**	**GB105030056770**	**Witham Upper**	**Witham**
2	**On site**	**River**	**Dunston Beck**	**GB105030056230**	**Witham Lower**	**Witham**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	2

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 50 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	3471m W	River	Brant - Lower	GB105030056770 ↗	Moderate	Fail	Moderate	2019
-	4182m NE	River	Dunston Beck	GB105030056230 ↗	Bad	Fail	Bad	2019

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 50 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
3	**On site**	**Witham Limestone Unit A**	**GB40501G444800 ↗**	**Poor**	**Poor**	**Poor**	**2019**
4	**On site**	**Witham Lias**	**GB40502G401400 ↗**	**Good**	**Good**	**Good**	**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.

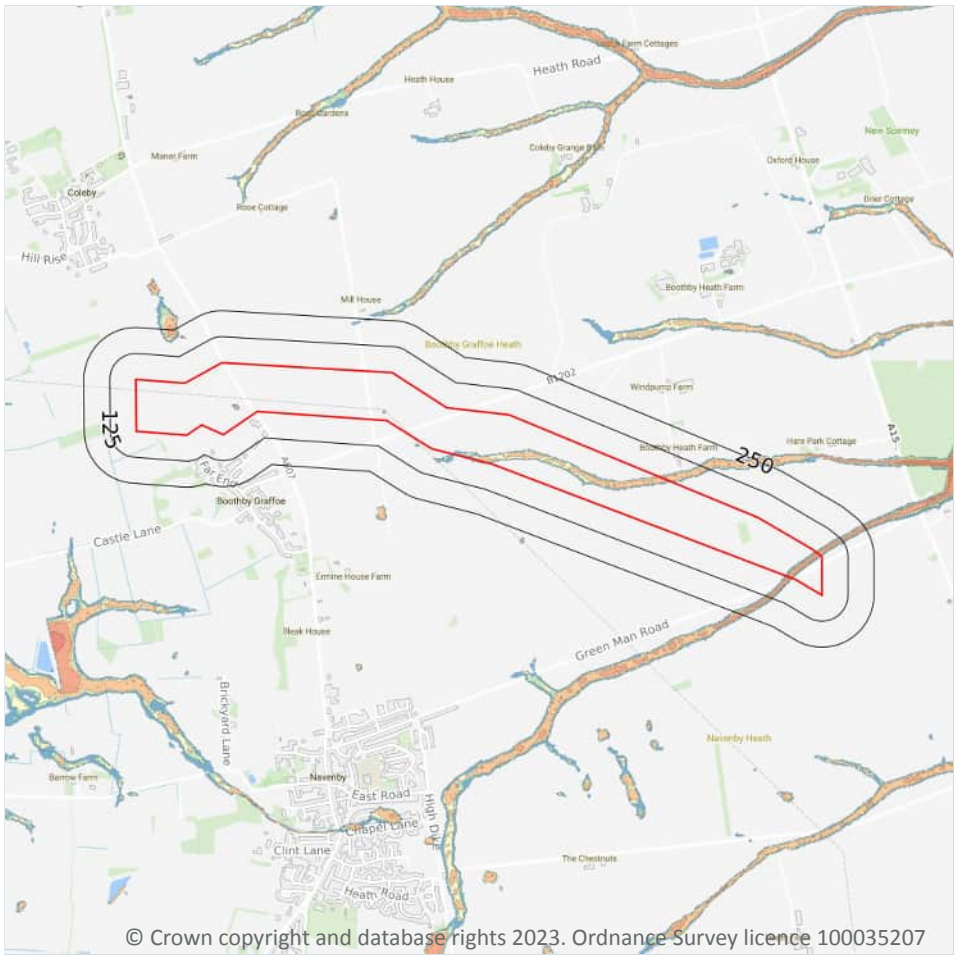
7.7 Flood Zone 3

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



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
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 56 >**

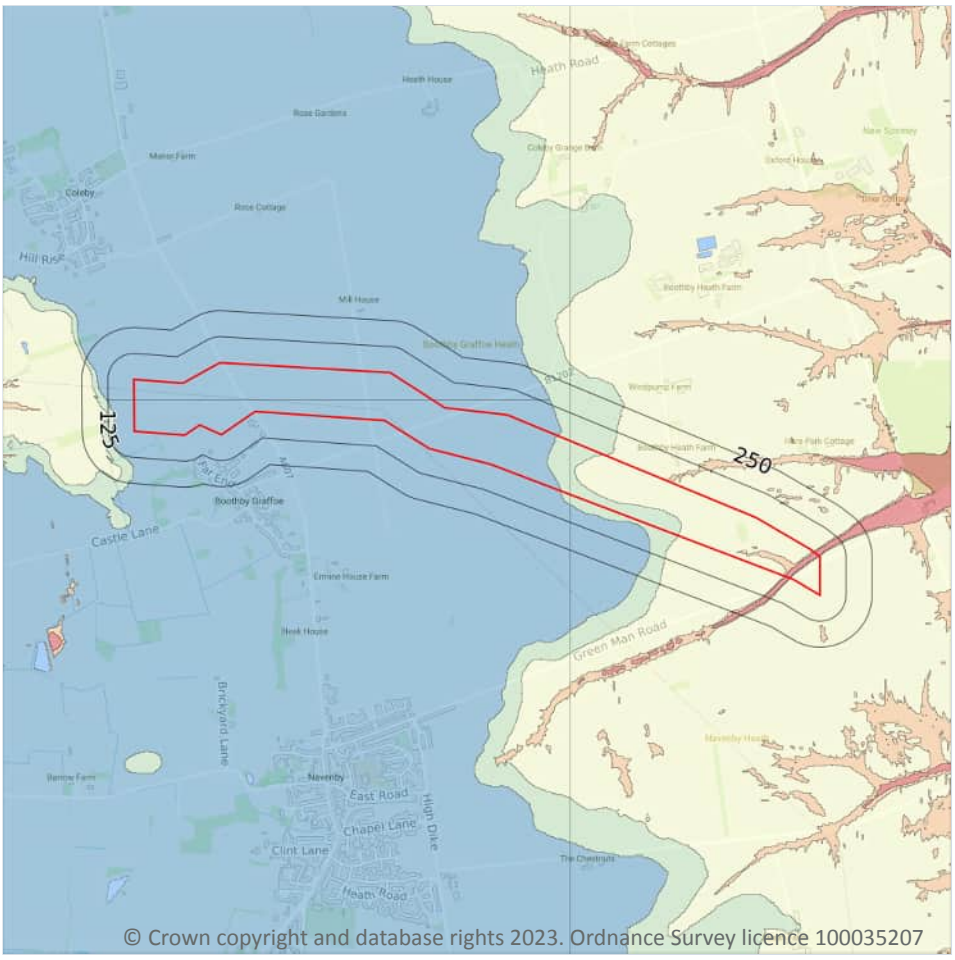
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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 0.3m and 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

Highest risk on site	**High**
Highest risk within 50m	**High**

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 58 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations

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	0

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.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	2

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
On site	**Lincolnshire Limestone**	**Groundwater**	**69**	**Existing**

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

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.

This data is sourced from Natural England.

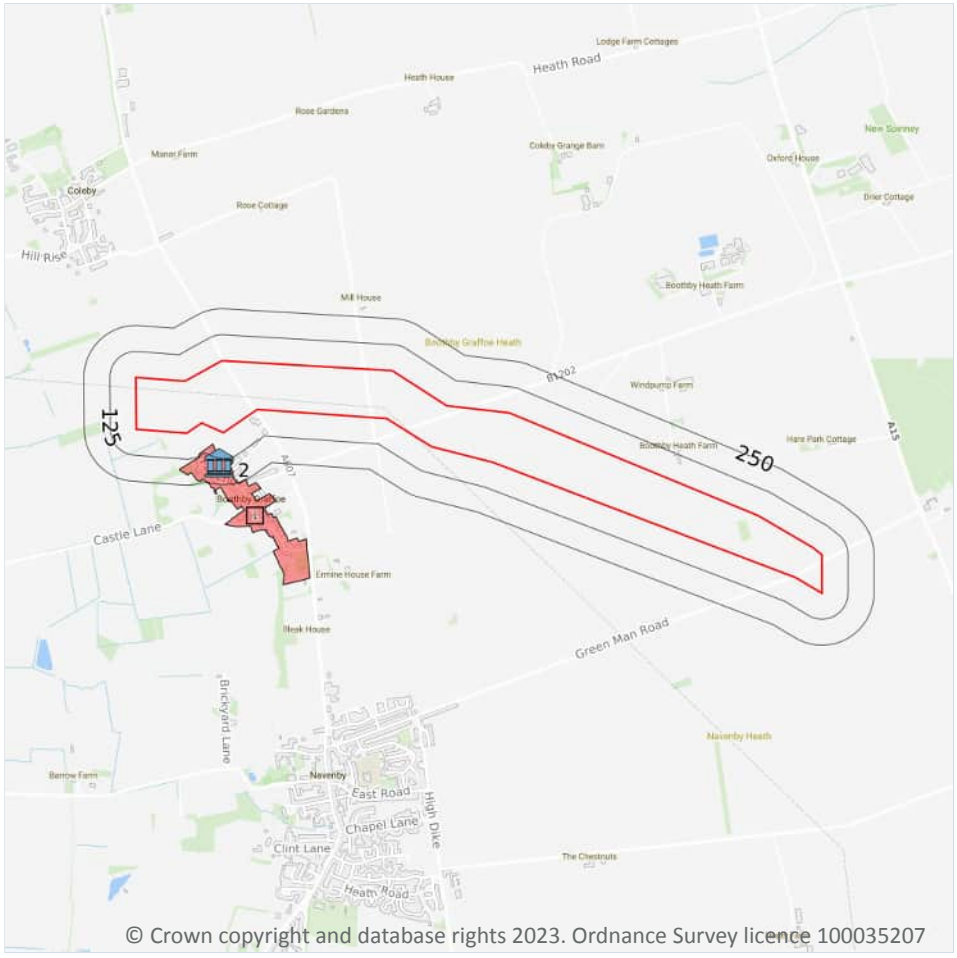
10.18 SSSI Units

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	1

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 64 >**

ID	Location	Name	Grade	Reference Number	Listed date
2	145m W	Brankley House	II	1360512	23/08/1967

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 64 >**

ID	Location	Name	District	Date of designation
1	72m W	Boothby Graffoe	North Kesteven	06/12/1977

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.

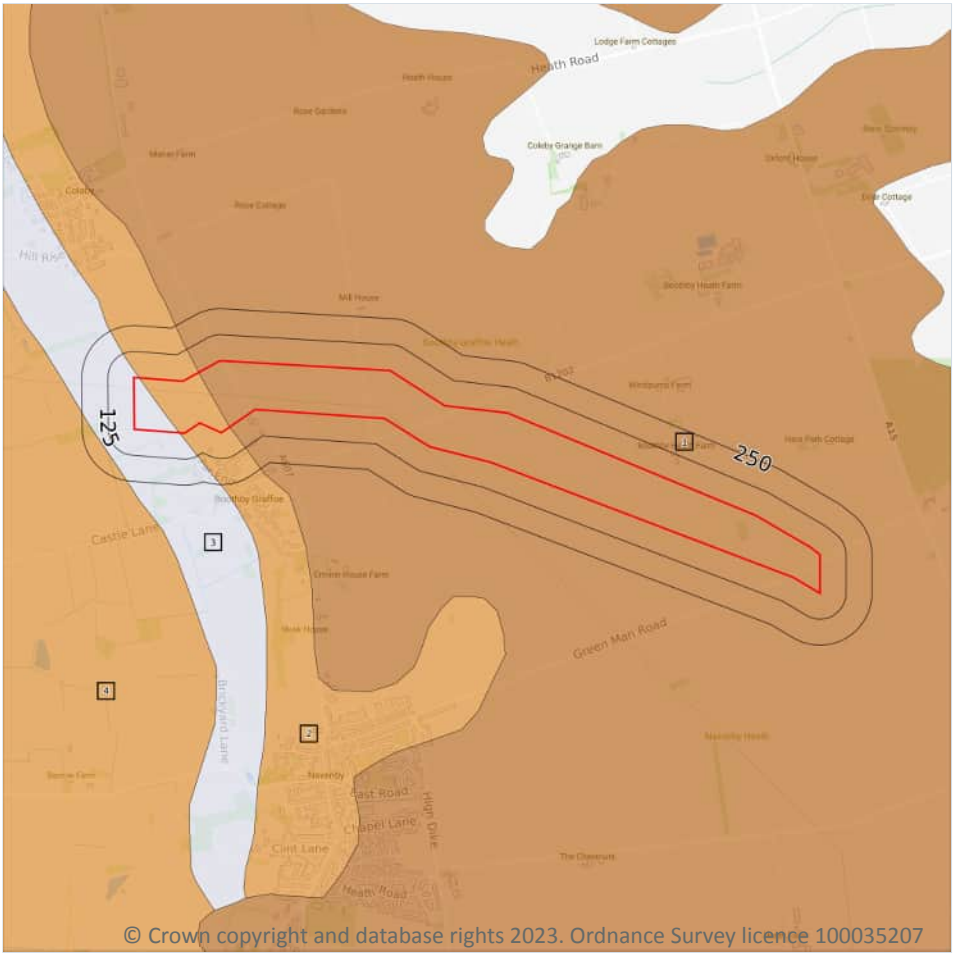
11.7 Registered Parks and Gardens

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	4

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 67 >**

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.**
3	**On site**	**Grade 4**	**Poor quality agricultural land. Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.**
4	168m W	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	**0**

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	**7**

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	**AG00335009**	**Entry Level plus Higher Level Stewardship**	**01/10/2011**	**30/09/2023**
On site	**AG00343729**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2023**
On site	**AG00389126**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2022**
5m W	AG00335009	Entry Level plus Higher Level Stewardship	01/10/2011	30/09/2023
11m E	AG00343729	Entry Level plus Higher Level Stewardship	01/03/2012	28/02/2023
12m E	AG00389126	Entry Level plus Higher Level Stewardship	01/03/2012	28/02/2022
229m NE	AG00335009	Entry Level plus Higher Level Stewardship	01/10/2011	30/09/2023

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

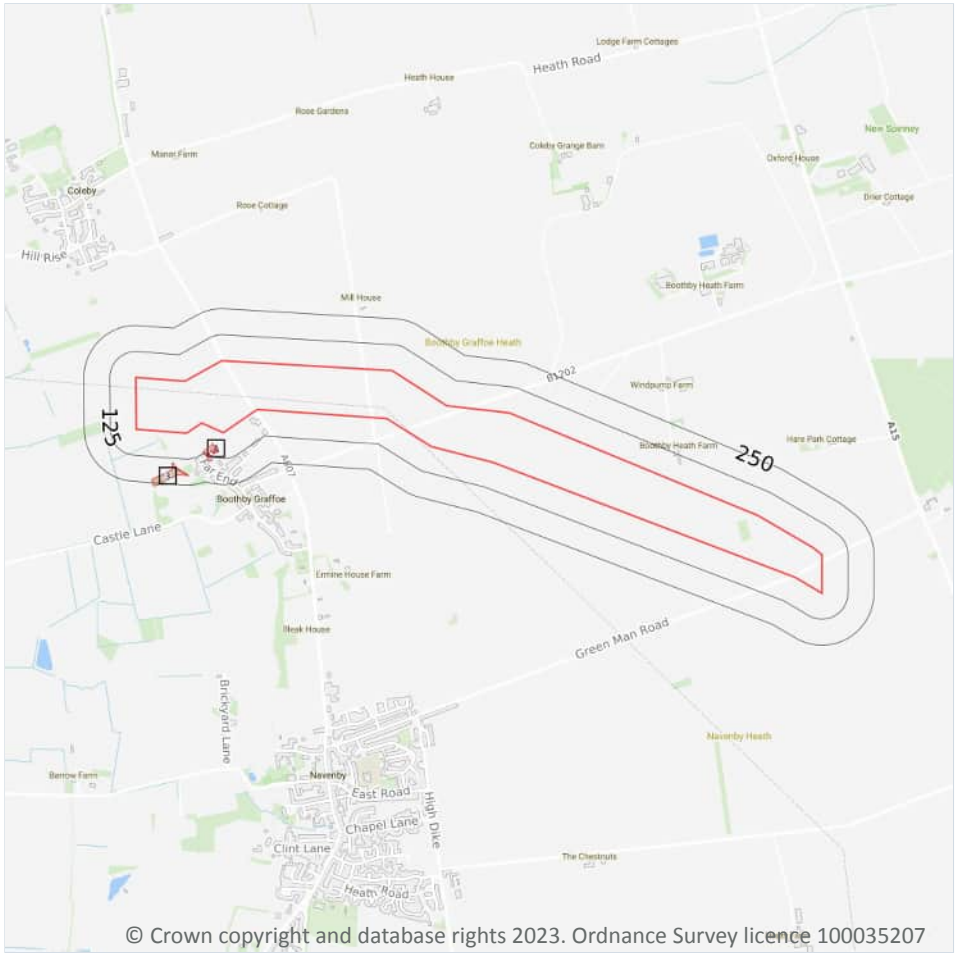
Records within 250m	**1**

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	**472683**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**

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	6

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 70 >**

ID	Location	Main Habitat	Other habitats
1	72m W	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
A	72m W	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset
A	92m W	Traditional orchard	Main habitat: TORCH (INV > 50%)
2	119m W	Traditional orchard	Overruled by Traditional Orchards HAP Inventory dataset

ID	Location	Main Habitat	Other habitats
3	147m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	175m 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.

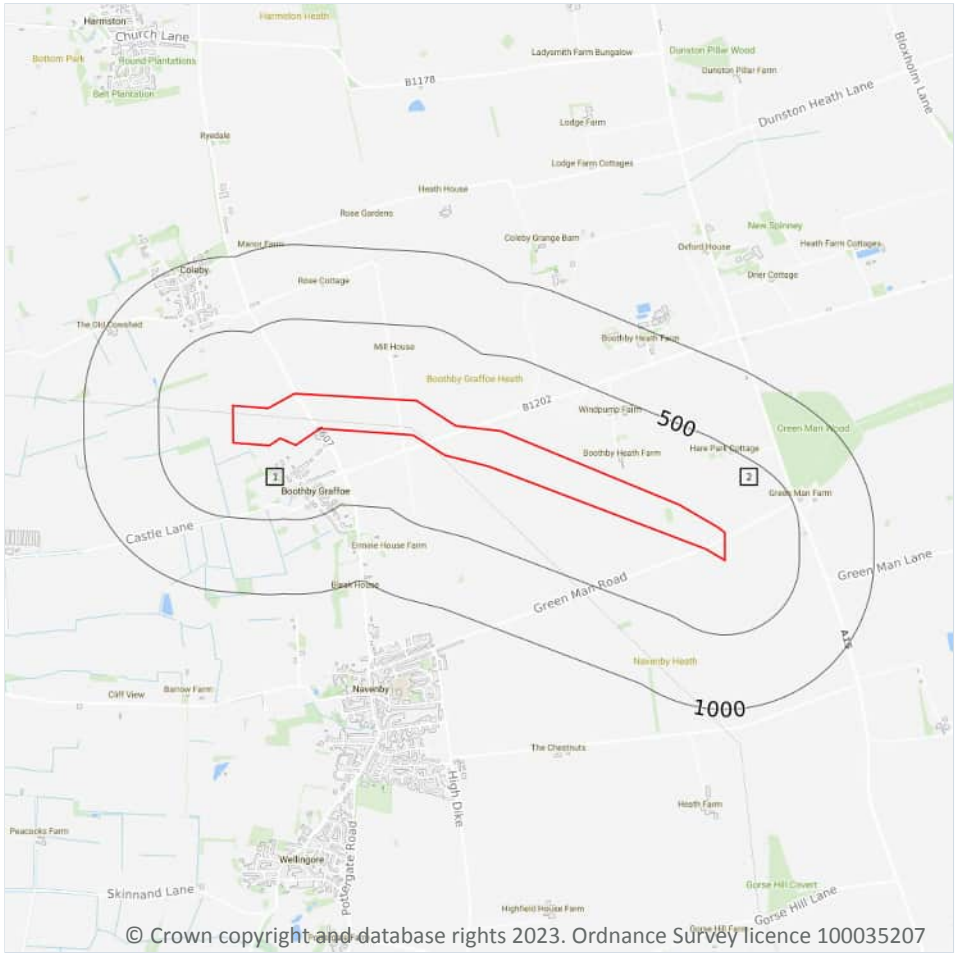
13.4 Limestone Pavement Orders

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



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14.1 10k Availability

Records within 500m	2

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 72 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	No coverage	No coverage	No coverage	NoCov
2	On site	No coverage	No coverage	No coverage	No coverage	NoCov

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

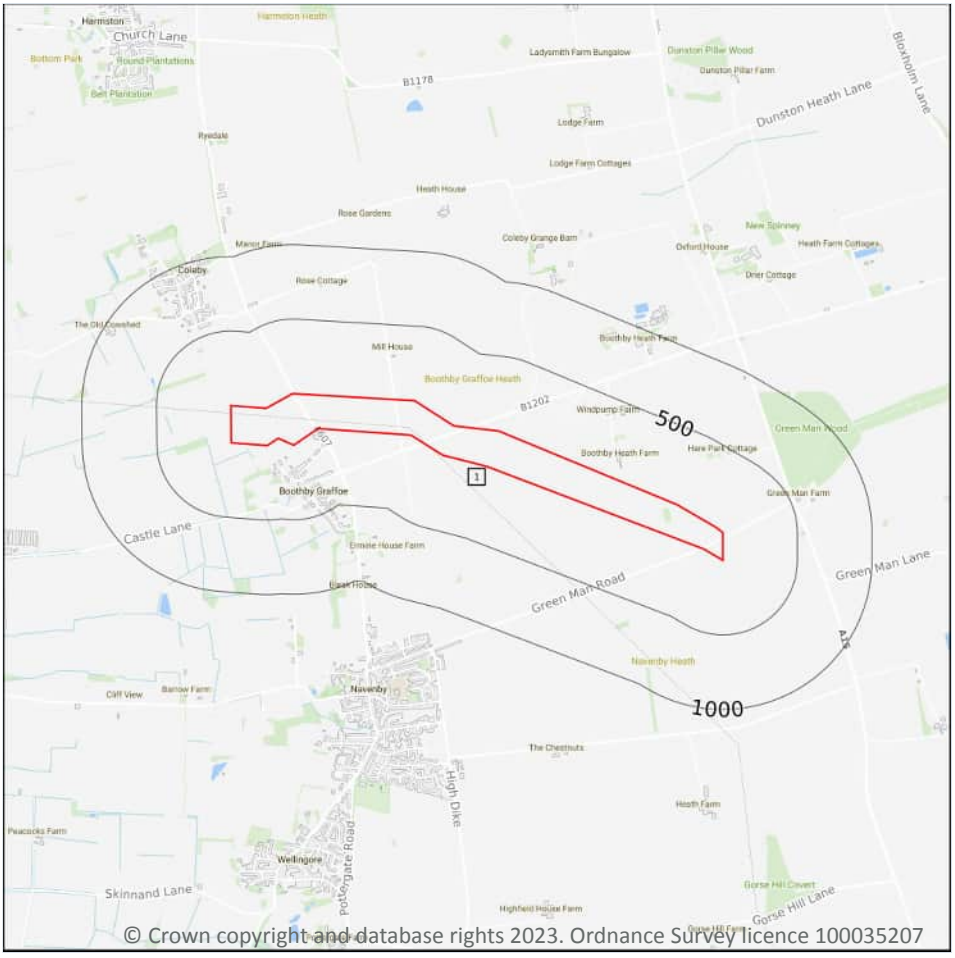
14.6 Bedrock faults and other linear features (10k)

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 76 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground

15.2 Artificial and made ground (50k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial

15.4 Superficial geology (50k)

Records within 500m	0

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

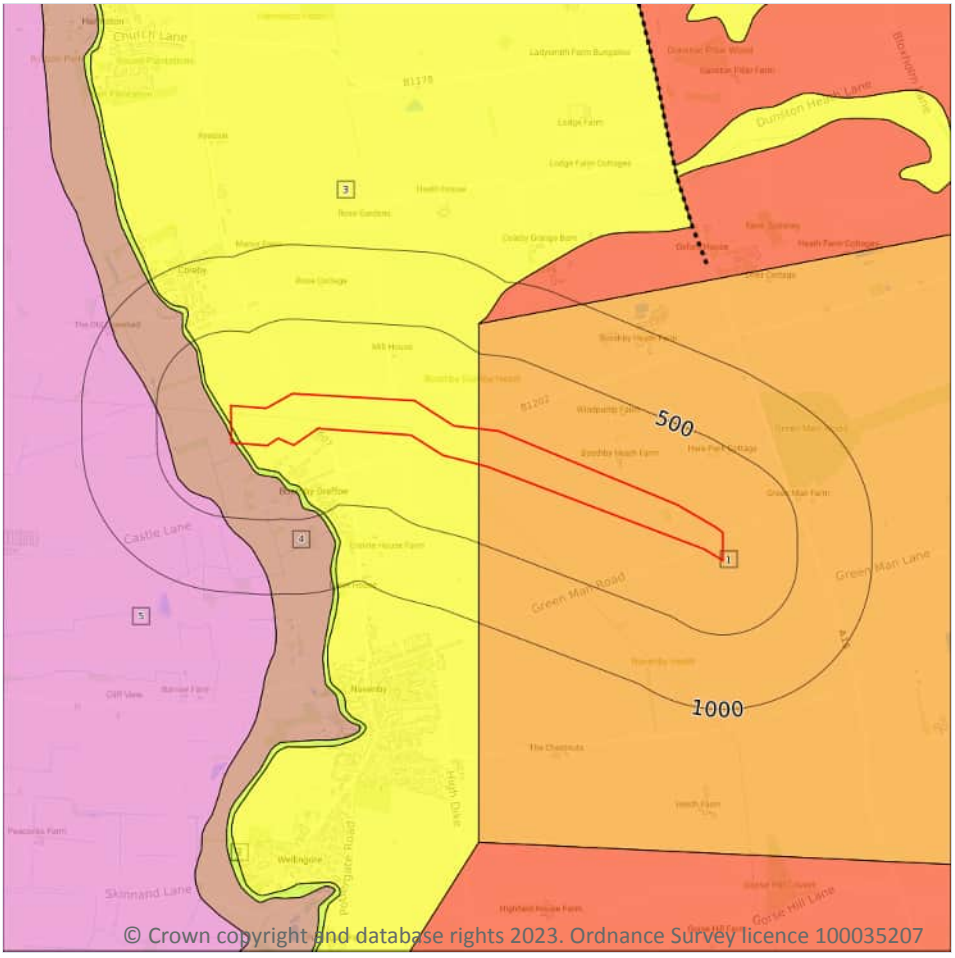
15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



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	5

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 79 >**

ID	Location	LEX Code	Description	Rock age
1	On site	LL-LMST	LINCOLNSHIRE LIMESTONE FORMATION - LIMESTONE	BAJOCIAN
2	On site	GRFN-SDIR	GRANTHAM FORMATION AND NORTHAMPTON SAND FORMATION (UNDIFFERENTIATED) - SANDSTONE AND IRONSTONE	AALENIAN
3	On site	LLL-LMST	LOWER LINCOLNSHIRE LIMESTONE MEMBER - LIMESTONE	BAJOCIAN

ID	Location	LEX Code	Description	Rock age
4	**On site**	**WHM-MDST**	**WHITBY MUDSTONE FORMATION - MUDSTONE**	**TOARCIAN**
5	402m W	CHAM-MDST	CHARMOUTH MUDSTONE FORMATION - MUDSTONE	SINEMURIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	**5**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Low**	**Low**
On site	**Mixed**	**High**	**Moderate**
On site	**Fracture**	**Very High**	**Very High**
On site	**Fracture**	**Very High**	**Very High**
On site	**Fracture**	**Very High**	**Very High**

This data is sourced from the British Geological Survey.

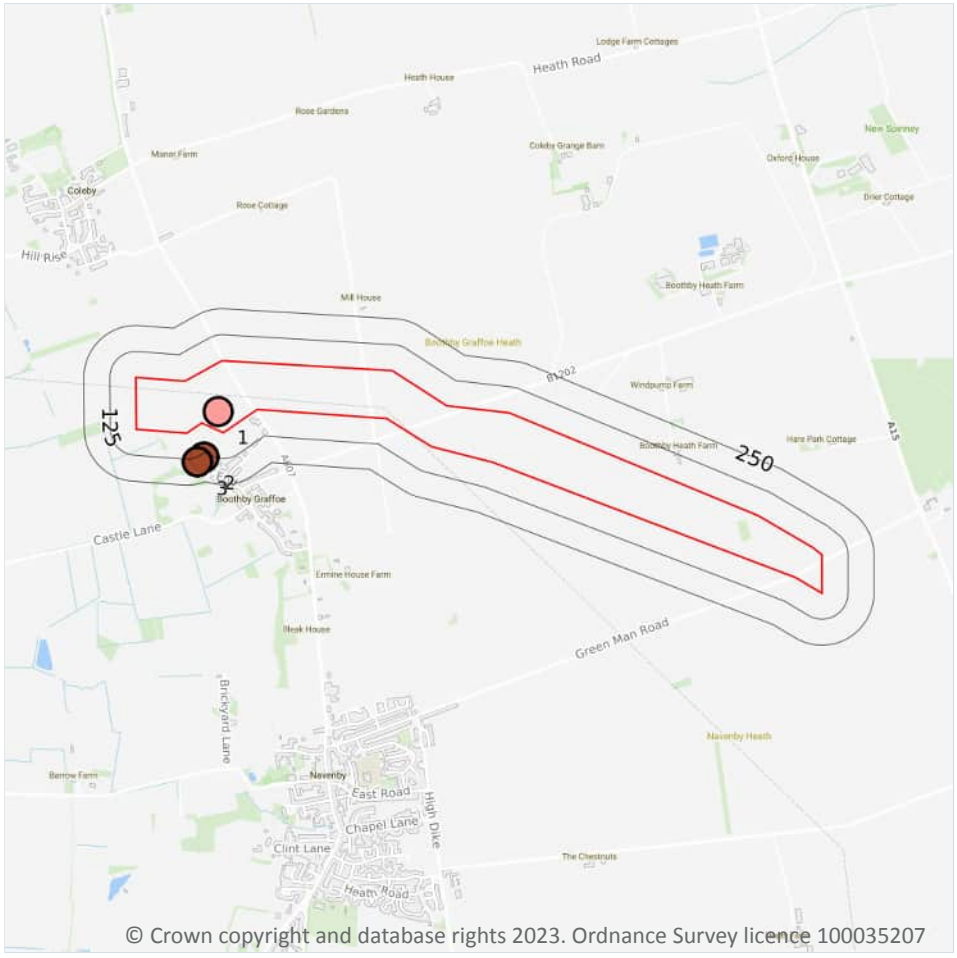
15.10 Bedrock faults and other linear features (50k)

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	3

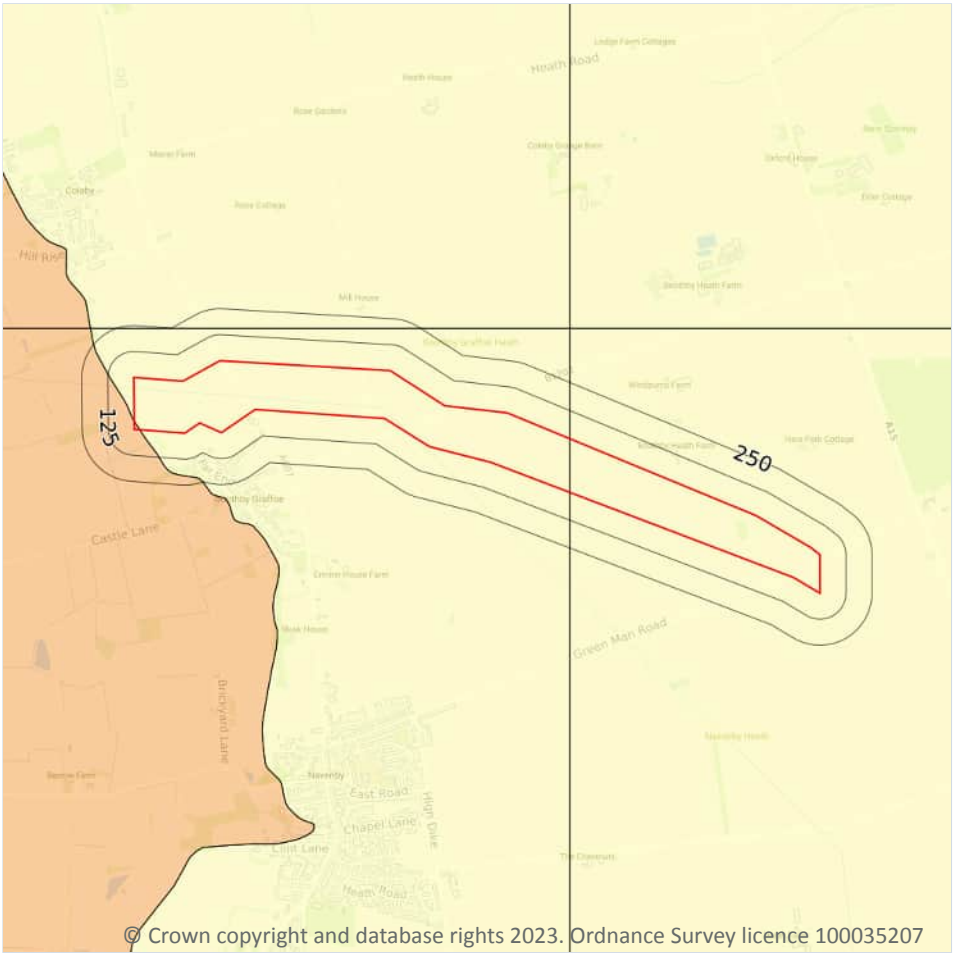
The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 81 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	**On site**	**498297 359600**	**BOOTHBY GRAFFOE**	**53.64**	**N**	**249942** ↗
2	142m W	498232 359382	NORTH OF BOOTHBY GRAFFOE HALL	-1.0	N	249940 ↗
3	147m W	498197 359358	NORTH OF BOOTHBY GRAFFOE HALL	-1.0	N	249941 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.1 Shrink swell clays

Records within 50m	2

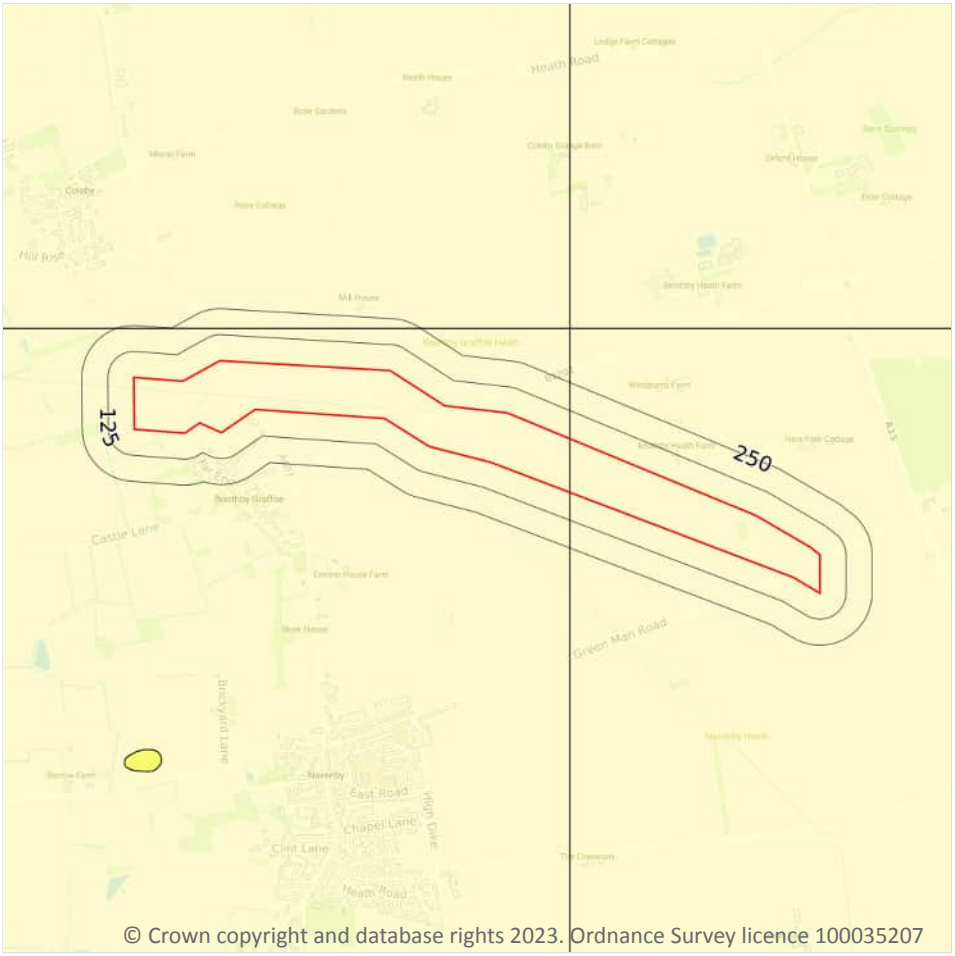
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 83 >**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**
On site	**Low**	**Ground conditions predominantly medium plasticity.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.2 Running sands

Records within 50m	1

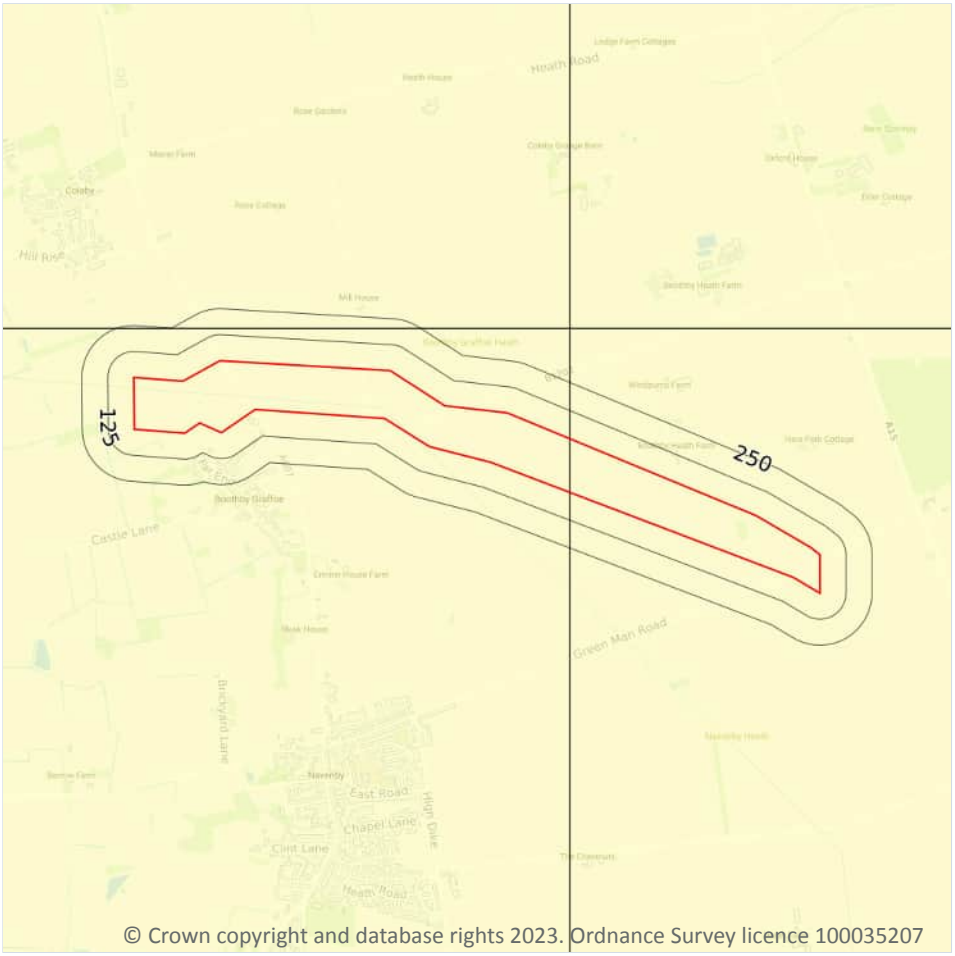
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 84 >**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	1

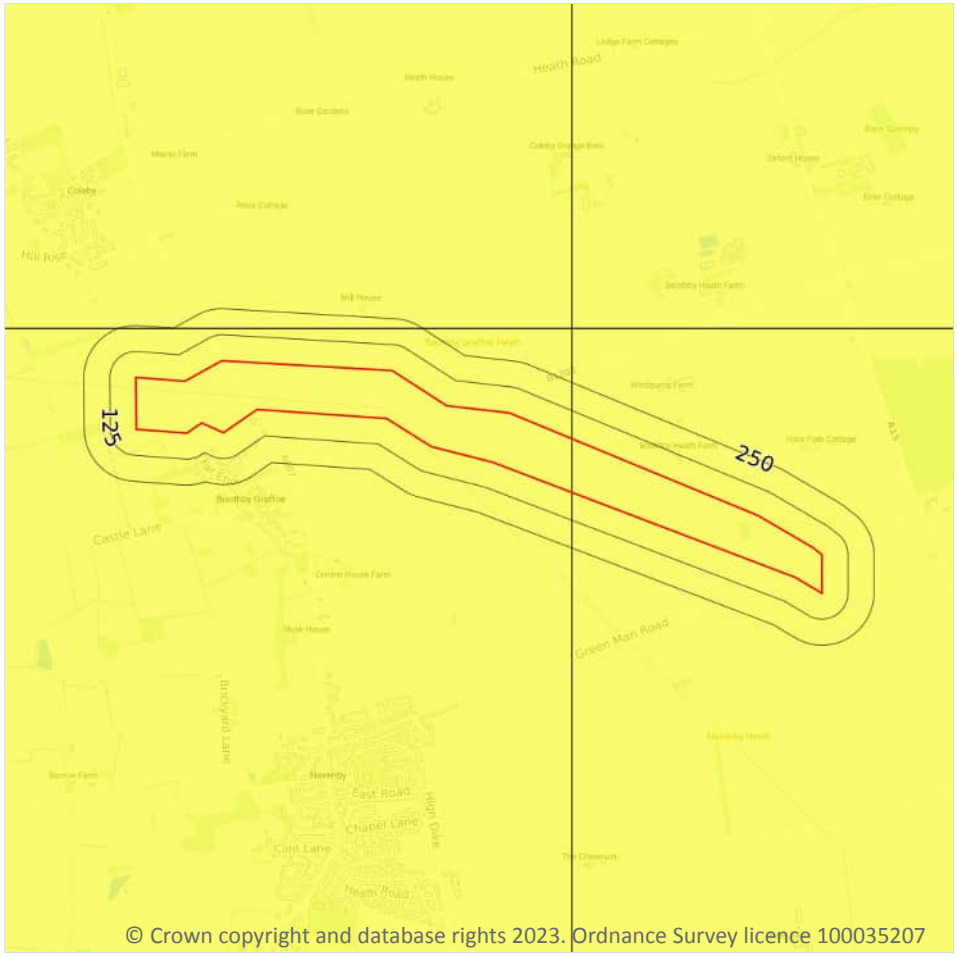
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 85 >**

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



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	**1**

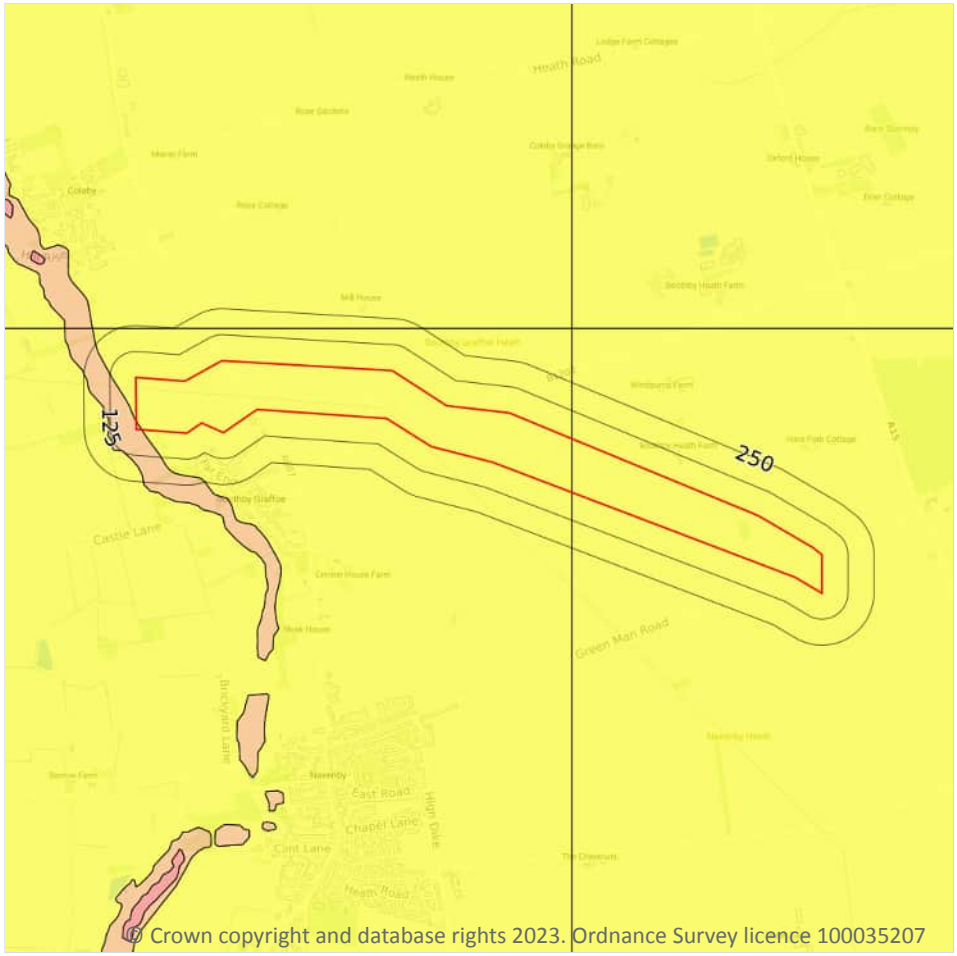
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 86 >**

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	2

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.

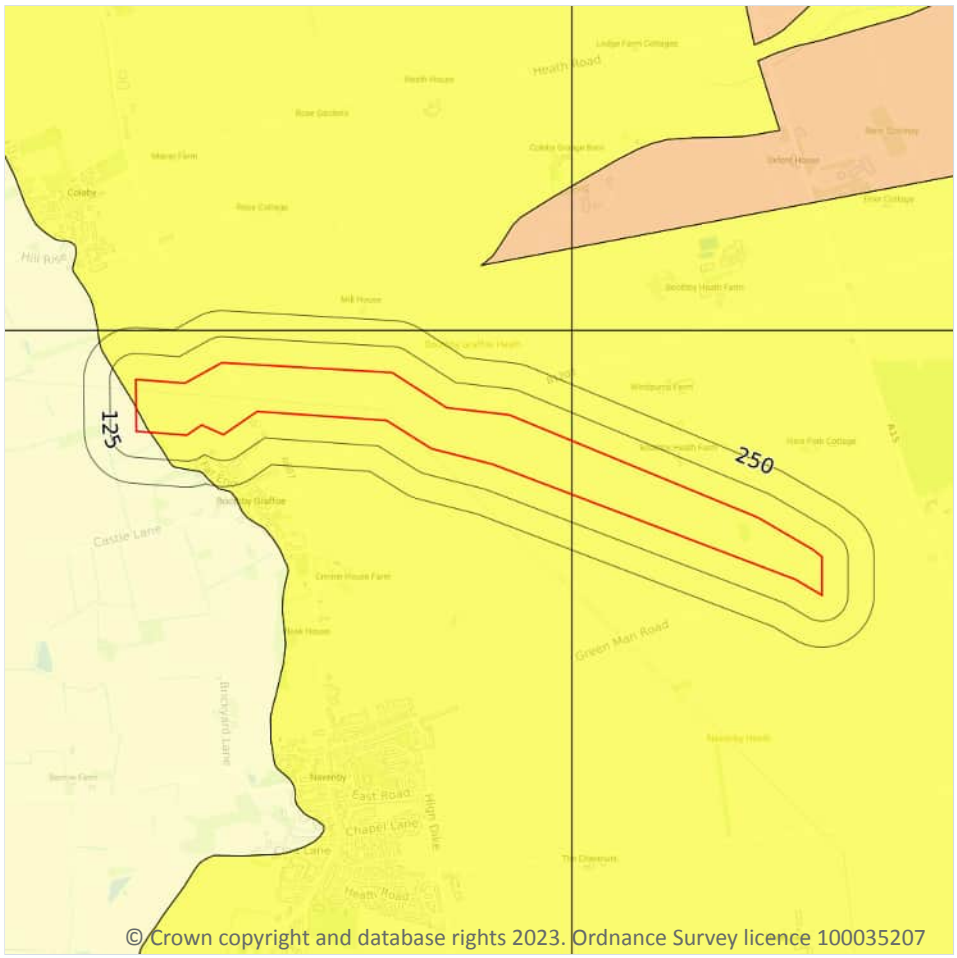
Features are displayed on the Natural ground subsidence - Landslides map on **page 87 >**

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.**

Location	Hazard rating	Details
On site	**Low**	**Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.**

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.

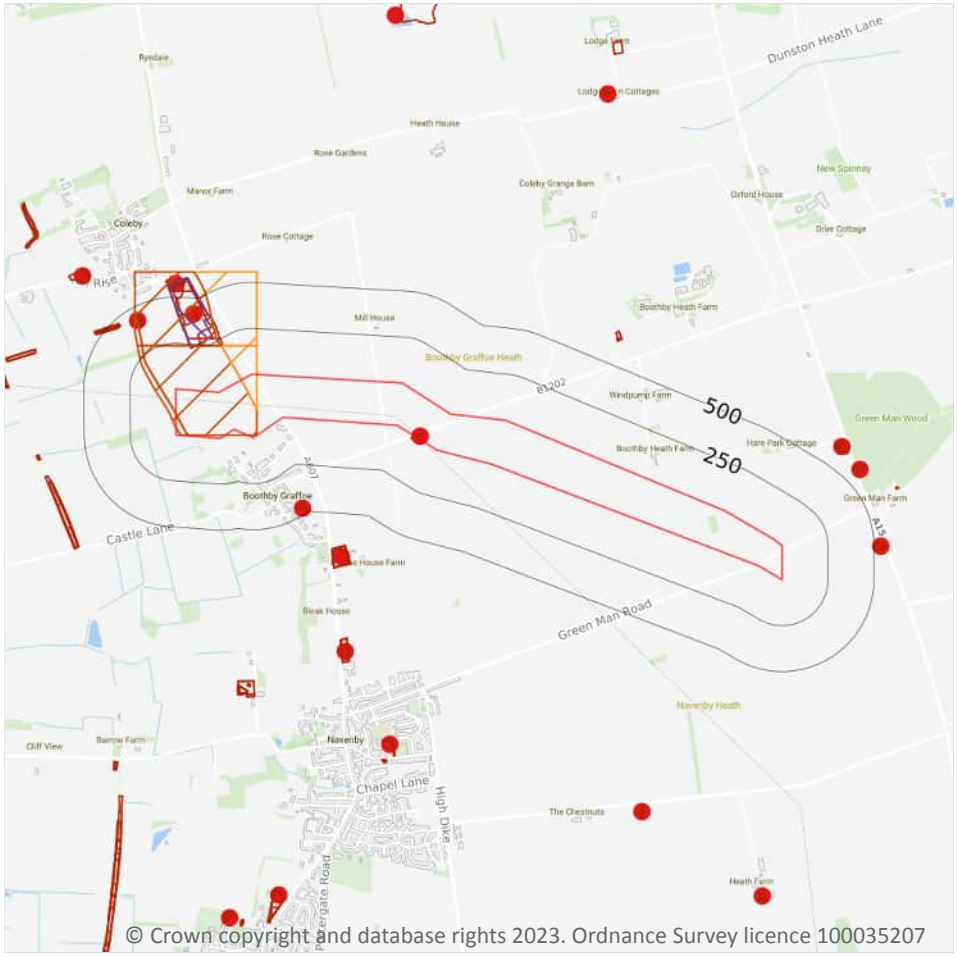
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 89 >**

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
On site	**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	4

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on **page 91 >**

ID	Location	Details	Description
A	**On site**	**Name: Boothby Graffoe Address: Boothby Graffoe, LINCOLN, Lincolnshire Commodity: Limestone Status: Ceased**	**Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority**
B	417m NW	Name: Coleby Address: Coleby, LINCOLN, Lincolnshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
C	425m W	Name: Coleby Address: Coleby, LINCOLN, Lincolnshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
D	465m W	Name: Boothby Graffoe Address: Boothby Graffoe, LINCOLN, Lincolnshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m **3**

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 91 >**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Unspecified Old Quarry**	**1886**	**1:10560**
B	212m NW	Unspecified Disused Quarry	1973	1:10000
B	240m W	Unspecified Quarry	1951	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	1

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.

Features are displayed on the Mining and ground workings map on **page 91 >**

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
B	227m W	Coleby	Limestone	Surface mineral working	Valid	21/5/48

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m	6

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 91 >**

ID	Location	Name	Commodity	Class	Likelihood
1	**On site**	**Coleby**	**Iron Ore (Bedded)**	**D**	**Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.**
2	**On site**	**Coleby**	**Iron Ore (Bedded)**	**D**	**Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.**
3	**On site**	**Coleby**	**Iron Ore (Bedded)**	**C**	**Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.**
4	156m NW	Coleby	Iron Ore (Bedded)	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
5	218m NW	Coleby	Iron Ore (Bedded)	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
6	299m W	Coleby	Iron Ore (Bedded)	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes



Site Outline

Search buffers in metres (m)

- Natural cavities (Area)
- Natural cavities (Point)
- Mining cavities
- Reported recent incidents
- Historical incidents
- BGS karst database (Point)
- BGS karst database (Line)
- BGS karst database (Area)

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	1

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.

Features are displayed on the Ground cavities and sinkholes map on **page 97 >**

ID	Location	Mine Address	Mineral	Data source	Publisher
1	393m W	Coleby Mine, Coleby, Lincolnshire	Magnatite, Marcasite, Siderite, Ironstone	'The Ironstone Quarries of the Midlands- Part II: The Oxfordshire Field	Runpast Publishing

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

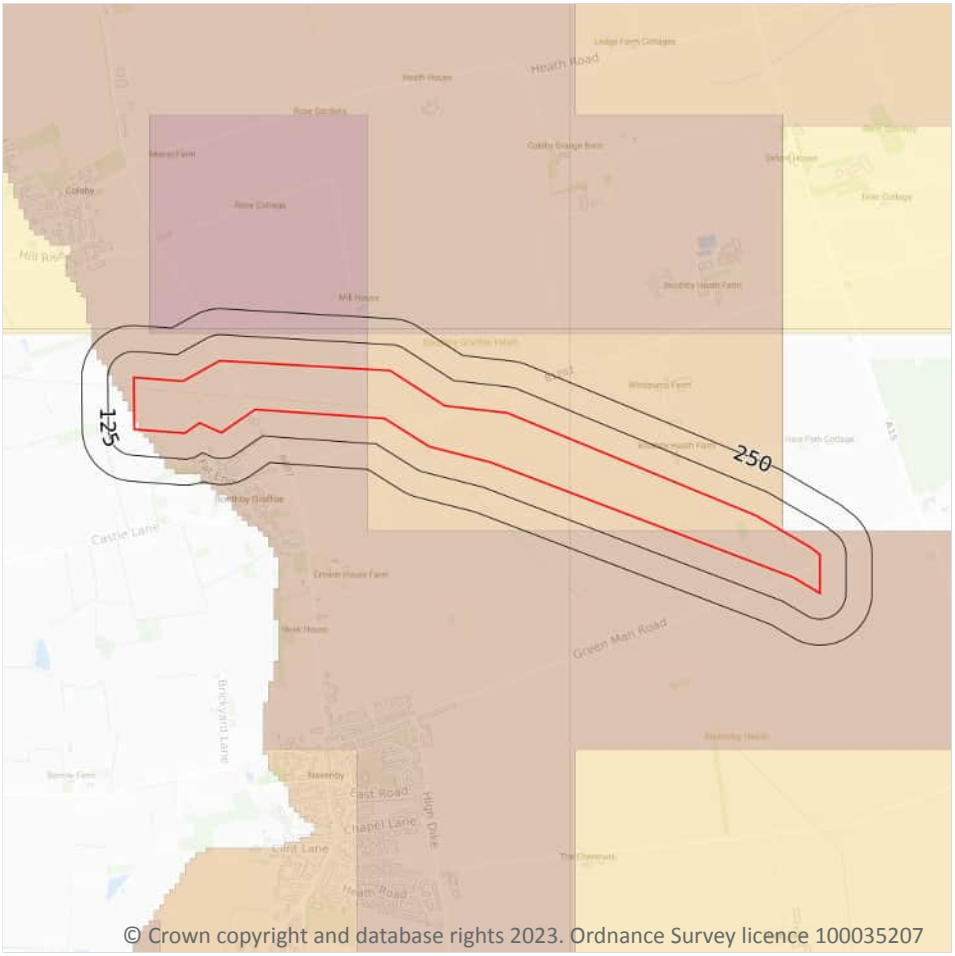
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon



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Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

20.1 Radon

Records on site	3

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 100 >**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 5% and 10%**	**Basic**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 10% and 30%**	**Full**
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	**28**

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**1 mg/kg**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**

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**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**1 mg/kg**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
7m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
7m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
9m W	15 mg/kg	1 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
11m W	15 - 25 mg/kg	1 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
19m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
29m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
40m W	15 mg/kg	1 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
40m W	15 - 25 mg/kg	1 mg/kg	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

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Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 10/10/2023

Your ref: 60700987

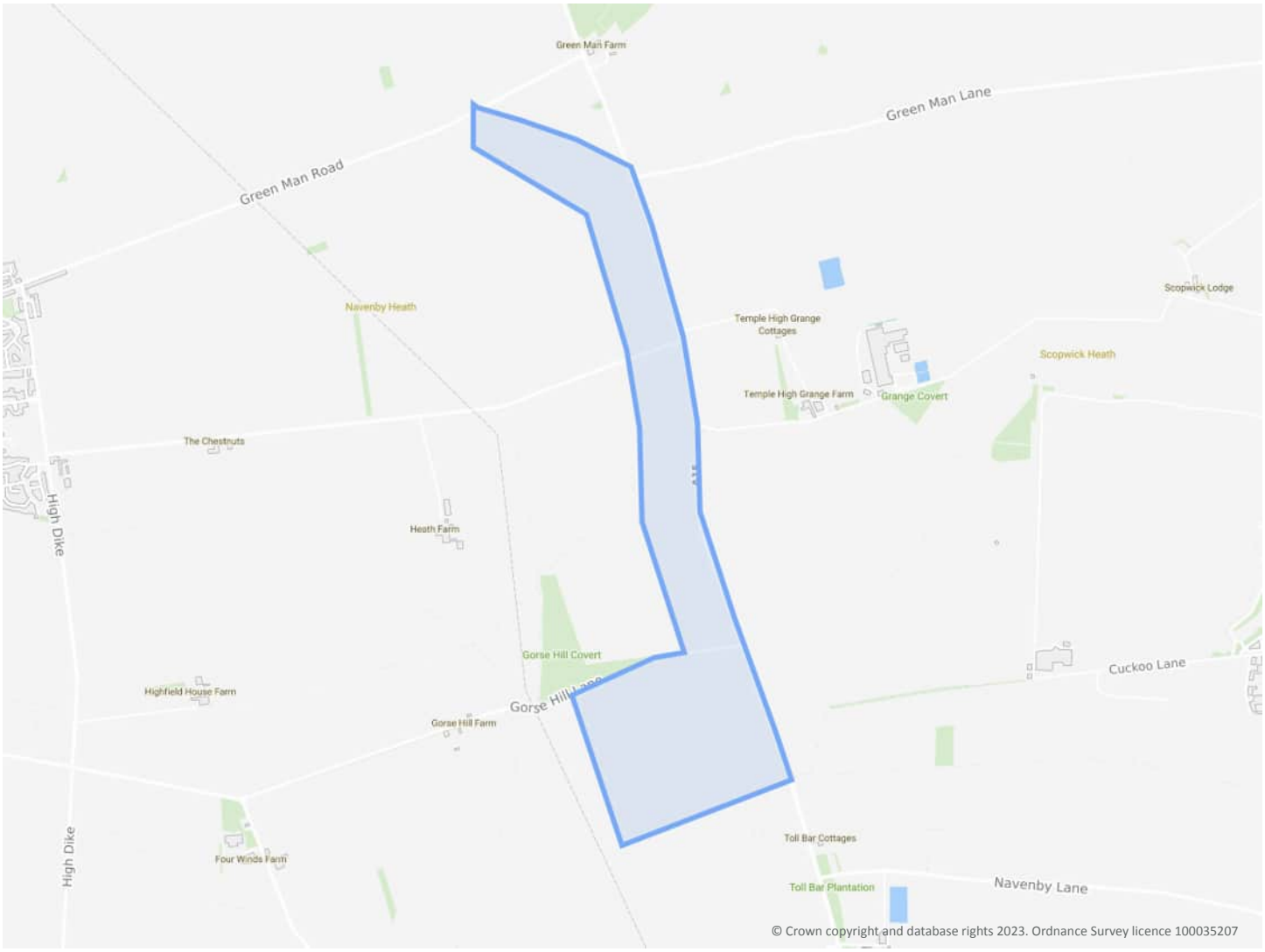
Our Ref: GSIP-2023-14155-15965_H

Site Details

Location: 501874 357559

Area: 119.16 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

OS MasterMap site plan N/A: >10ha

Aerial image p. 9 >

groundsure.com/insightuserguide ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

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Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	6	0	3	3	-
15	1.2	Historical tanks	0	0	0	0	-
15	1.3	Historical energy features	0	0	0	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
16	1.5	Historical garages	0	0	0	0	-
16	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
17 >	2.1 >	Historical industrial land uses >	8	0	4	5	-
18	2.2	Historical tanks	0	0	0	0	-
18	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	0	0	0	-
21	3.6	Licensed waste sites	0	0	0	0	-
21 >	3.7 >	Waste exemptions >	0	0	10	10	-
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	5	-	-
25	4.2	Current or recent petrol stations	0	0	0	0	-
25	4.3	Electricity cables	0	0	0	0	-
25	4.4	Gas pipelines	0	0	0	0	-
25	4.5	Sites determined as Contaminated Land	0	0	0	0	-

26	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
26	4.7	Regulated explosive sites	0	0	0	0	-
26	4.8	Hazardous substance storage/usage	0	0	0	0	-
26	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
26	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
27 >	**4.11 >**	**Licensed pollutant release (Part A(2)/B) >**	0	0	0	1	-
27	4.12	Radioactive Substance Authorisations	0	0	0	0	-
27 >	**4.13 >**	**Licensed Discharges to controlled waters >**	0	0	0	2	-
28	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
28	4.15	Pollutant release to public sewer	0	0	0	0	-
28	4.16	List 1 Dangerous Substances	0	0	0	0	-
28	4.17	List 2 Dangerous Substances	0	0	0	0	-
28	4.18	Pollution Incidents (EA/NRW)	0	0	0	0	-
29	4.19	Pollution inventory substances	0	0	0	0	-
29	4.20	Pollution inventory waste transfers	0	0	0	0	-
29	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
30	5.1	Superficial aquifer	None (within 500m)				
31 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
32 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
34 >	**5.4 >**	**Groundwater vulnerability- soluble rock risk >**	Identified (within 0m)				
35	5.5	Groundwater vulnerability- local information	None (within 0m)				
36 >	**5.6 >**	**Groundwater abstractions >**	0	0	0	5	5
39	5.7	Surface water abstractions	0	0	0	0	0
39 >	**5.8 >**	**Potable abstractions >**	0	0	0	1	0
39 >	**5.9 >**	**Source Protection Zones >**	0	0	1	0	-
40	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
41	6.1	Water Network (OS MasterMap)	0	0	0	-	-

41	6.2	Surface water features	0	0	0	-	-
42 >	6.3 >	WFD Surface water body catchments >	3	-	-	-	-
42 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
43 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
44	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
44	7.2	Historical Flood Events	0	0	0	-	-
44	7.3	Flood Defences	0	0	0	-	-
45	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
45	7.5	Flood Storage Areas	0	0	0	-	-
46	7.6	Flood Zone 2	None (within 50m)				
46	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
47 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
49 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
50	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
50	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
50	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
50	10.4	Special Protection Areas (SPA)	0	0	0	0	0
51	10.5	National Nature Reserves (NNR)	0	0	0	0	0
51	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
51	10.7	Designated Ancient Woodland	0	0	0	0	0
51	10.8	Biosphere Reserves	0	0	0	0	0
52	10.9	Forest Parks	0	0	0	0	0
52	10.10	Marine Conservation Zones	0	0	0	0	0
52	10.11	Green Belt	0	0	0	0	0
52	10.12	Proposed Ramsar sites	0	0	0	0	0

52	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
53	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
53	10.15	Nitrate Sensitive Areas	0	0	0	0	0
53 >	**10.16 >**	**Nitrate Vulnerable Zones >**	4	0	0	0	4
55	10.17	SSSI Impact Risk Zones	0	-	-	-	-
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	-	-
56	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
56	11.3	National Parks	0	0	0	-	-
56	11.4	Listed Buildings	0	0	0	-	-
57	11.5	Conservation Areas	0	0	0	-	-
57	11.6	Scheduled Ancient Monuments	0	0	0	-	-
57	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
58 >	**12.1 >**	**Agricultural Land Classification >**	Non Agricultural (within 250m)				
59	12.2	Open Access Land	0	0	0	-	-
59	12.3	Tree Felling Licences	0	0	0	-	-
59 >	**12.4 >**	**Environmental Stewardship Schemes >**	11	0	1	-	-
60 >	**12.5 >**	**Countryside Stewardship Schemes >**	1	0	1	-	-
Page	Section	**Habitat designations >**	On site	0-50m	50-250m	250-500m	500-2000m
61 >	**13.1 >**	**Priority Habitat Inventory >**	0	1	2	-	-
62 >	**13.2 >**	**Habitat Networks >**	1	0	1	-	-
62	13.3	Open Mosaic Habitat	0	0	0	-	-
62	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
63 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
64	14.2	Artificial and made ground (10k)	0	0	0	0	-
65	14.3	Superficial geology (10k)	0	0	0	0	-

65	14.4	Landslip (10k)	0	0	0	0	-
66	14.5	Bedrock geology (10k)	0	0	0	0	-
66	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
67 >	15.1 >	**50k Availability >**	Identified (within 500m)				
68	15.2	Artificial and made ground (50k)	0	0	0	0	-
68	15.3	Artificial ground permeability (50k)	0	0	-	-	-
69	15.4	Superficial geology (50k)	0	0	0	0	-
69	15.5	Superficial permeability (50k)	None (within 50m)				
69	15.6	Landslip (50k)	0	0	0	0	-
69	15.7	Landslip permeability (50k)	None (within 50m)				
70 >	15.8 >	**Bedrock geology (50k) >**	2	0	0	0	-
71 >	15.9 >	**Bedrock permeability (50k) >**	Identified (within 50m)				
71	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
72 >	16.1 >	**BGS Boreholes >**	1	2	0	-	-
Page	Section	**Natural ground subsidence >**					
74 >	17.1 >	**Shrink swell clays >**	Negligible (within 50m)				
75 >	17.2 >	**Running sands >**	Negligible (within 50m)				
76 >	17.3 >	**Compressible deposits >**	Negligible (within 50m)				
77 >	17.4 >	**Collapsible deposits >**	Very low (within 50m)				
78 >	17.5 >	**Landslides >**	Very low (within 50m)				
79 >	17.6 >	**Ground dissolution of soluble rocks >**	Low (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
81 >	18.1 >	**BritPits >**	2	0	1	0	-
82 >	18.2 >	**Surface ground workings >**	8	0	4	-	-
83	18.3	Underground workings	0	0	0	0	0
83	18.4	Underground mining extents	0	0	0	0	-
83	18.5	Historical Mineral Planning Areas	0	0	0	0	-

84	18.6	Non-coal mining	0	0	0	0	0
84	18.7	JPB mining areas	None (within 0m)				
84	18.8	The Coal Authority non-coal mining	0	0	0	0	-
84	18.9	Researched mining	0	0	0	0	-
85	18.10	Mining record office plans	0	0	0	0	-
85	18.11	BGS mine plans	0	0	0	0	-
85	18.12	Coal mining	None (within 0m)				
85	18.13	Brine areas	None (within 0m)				
85	18.14	Gypsum areas	None (within 0m)				
86	18.15	Tin mining	None (within 0m)				
86	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
87	19.1	Natural cavities	0	0	0	0	-
87	19.2	Mining cavities	0	0	0	0	0
87	19.3	Reported recent incidents	0	0	0	0	-
87	19.4	Historical incidents	0	0	0	0	-
88	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon** >					
89 >	**20.1** >	**Radon** >	Between 10% and 30% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
91 >	**21.1** >	**BGS Estimated Background Soil Chemistry** >	32	1	-	-	-
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 1	0	0	0	0	-
95	22.9	Crossrail 2	0	0	0	0	-
95	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 119.16ha

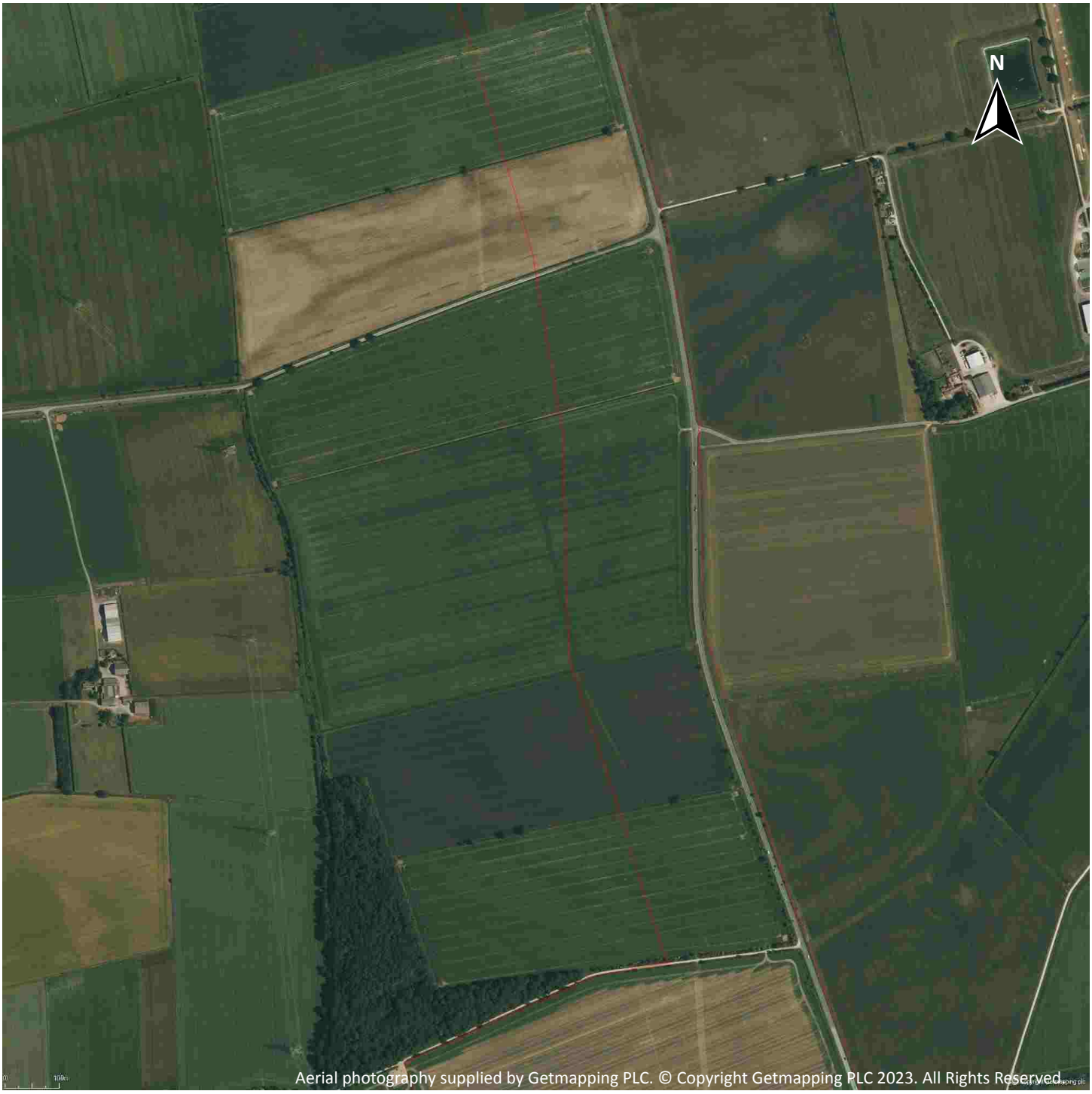
Recent site history - 2019 aerial photograph



Capture Date: 14/05/2019

Site Area: 119.16ha

Recent site history - 2015 aerial photograph



Capture Date: 30/06/2015

Site Area: 119.16ha

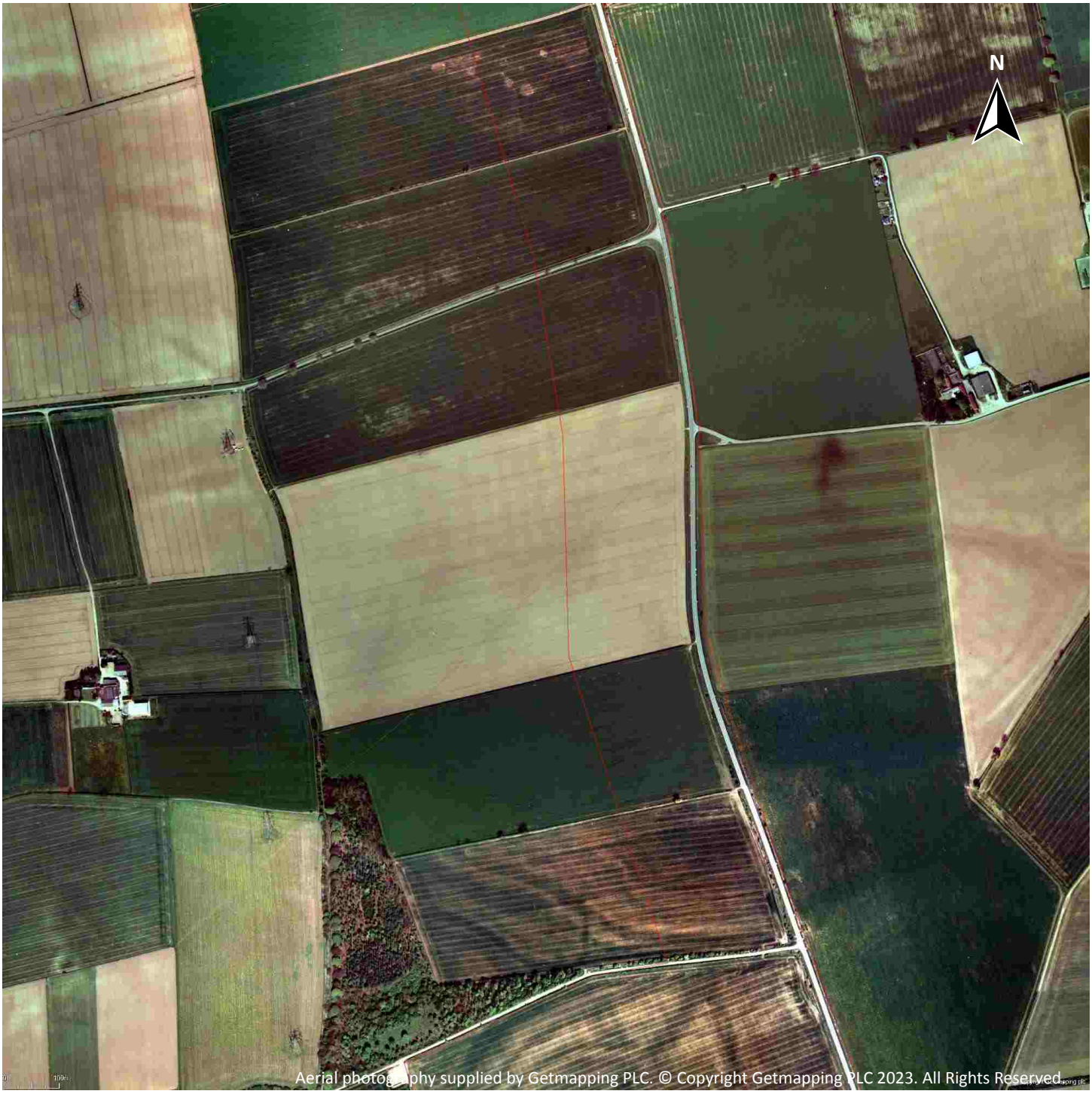
Recent site history - 2006 aerial photograph



Capture Date: 29/10/2006

Site Area: 119.16ha

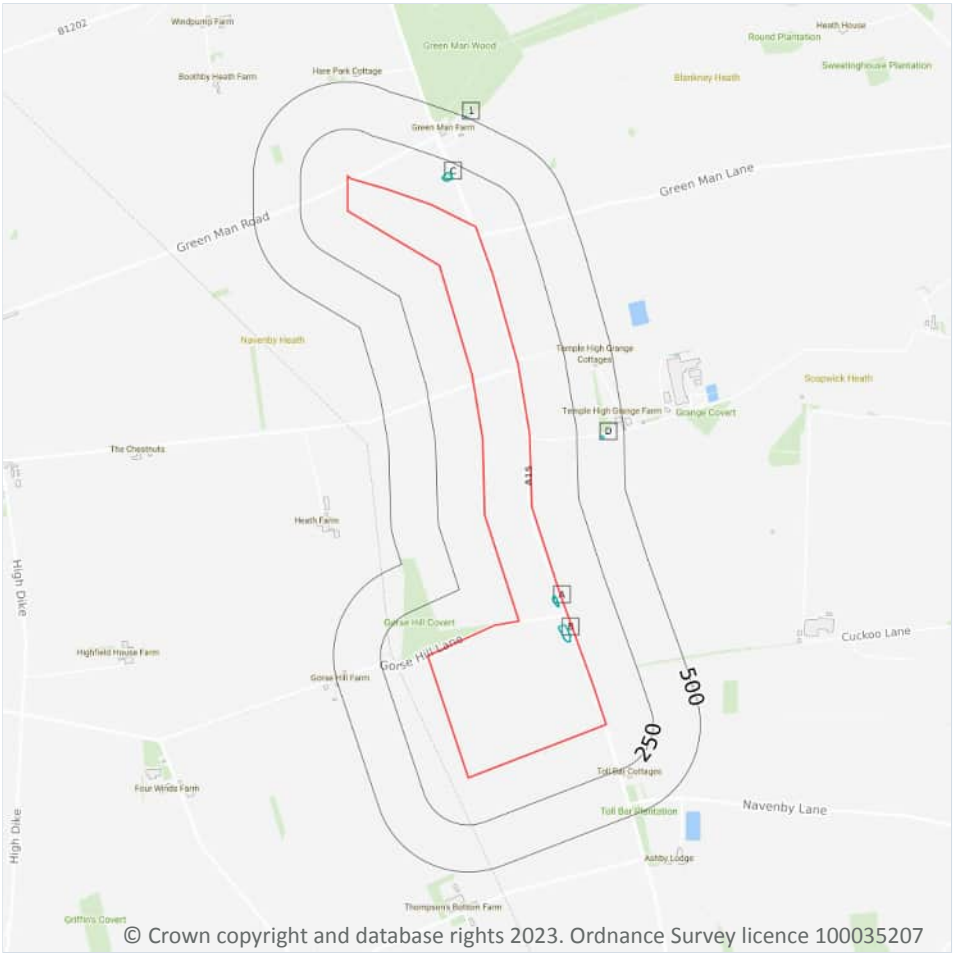
Recent site history - 1999 aerial photograph



Capture Date: 28/04/1999

Site Area: 119.16ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

1.1 Historical industrial land uses

Records within 500m	12

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Quarry**	**1904 - 1947**	**2018005**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Quarry**	**1951**	**2023839**
A	**On site**	**Unspecified Quarry**	**1887**	**2027627**
B	**On site**	**Unspecified Old Quarry**	**1951**	**2024945**
B	**On site**	**Unspecified Old Quarry**	**1904 - 1947**	**2025589**
B	**On site**	**Unspecified Old Quarry**	**1887**	**2032306**
C	145m N	Unspecified Old Quarry	1951	2032030
C	148m N	Unspecified Old Quarry	1904 - 1948	2016049
C	148m N	Unspecified Old Quarry	1886	2030360
D	375m NE	Unspecified Tank	1951	2030671
D	378m NE	Unspecified Tank	1904 - 1947	2039150
1	495m N	Saw Pit	1886	2014525

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	0

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	0

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

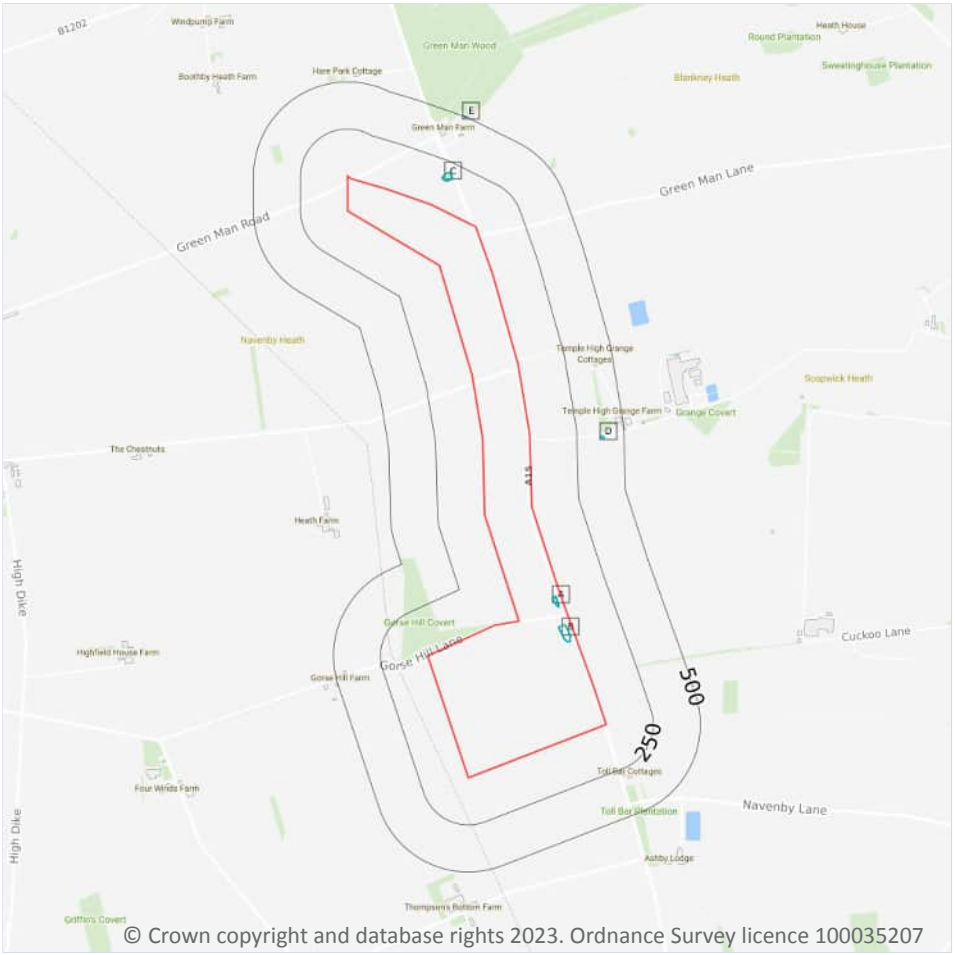
1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



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Site Outline

Search buffers in metres (m)

Historical industrial land uses

2.1 Historical industrial land uses

Records within 500m	17

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 17 >**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Quarry**	**1951**	**2023839**
A	**On site**	**Unspecified Quarry**	**1947**	**2018005**
A	**On site**	**Unspecified Quarry**	**1904**	**2018005**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Quarry**	**1887**	**2027627**
B	**On site**	**Unspecified Old Quarry**	**1951**	**2024945**
B	**On site**	**Unspecified Old Quarry**	**1947**	**2025589**
B	**On site**	**Unspecified Old Quarry**	**1904**	**2025589**
B	**On site**	**Unspecified Old Quarry**	**1887**	**2032306**
C	145m N	Unspecified Old Quarry	1951	2032030
C	148m N	Unspecified Old Quarry	1948	2016049
C	148m N	Unspecified Old Quarry	1904	2016049
C	148m N	Unspecified Old Quarry	1886	2030360
D	375m NE	Unspecified Tank	1951	2030671
D	378m NE	Unspecified Tank	1947	2039150
D	378m NE	Unspecified Tank	1904	2039150
E	495m N	Saw Pit	1886	2014525
E	495m N	Saw Pit	1886	2014525

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**0**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**0**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

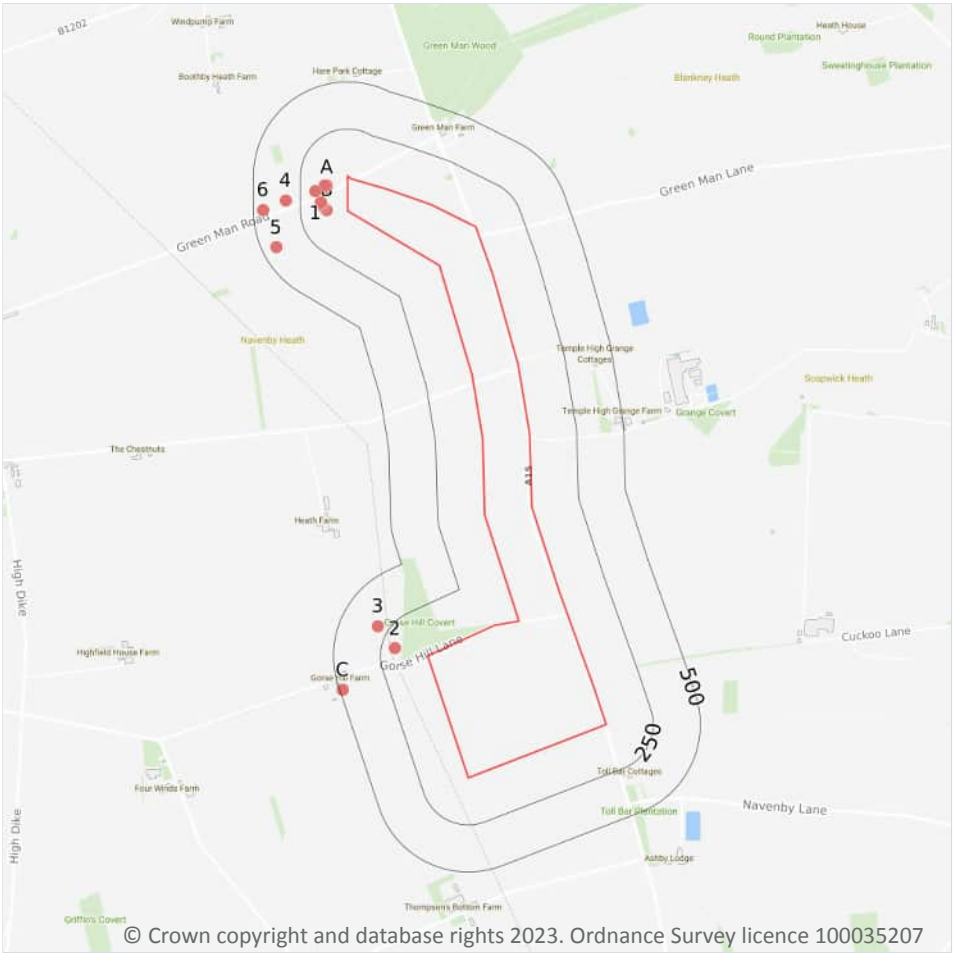
2.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

3 Waste and landfill



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Site Outline

Search buffers in metres (m)

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	0

Waste site records derived from Local Authority planning records and high detail historical mapping.

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	20

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 >**

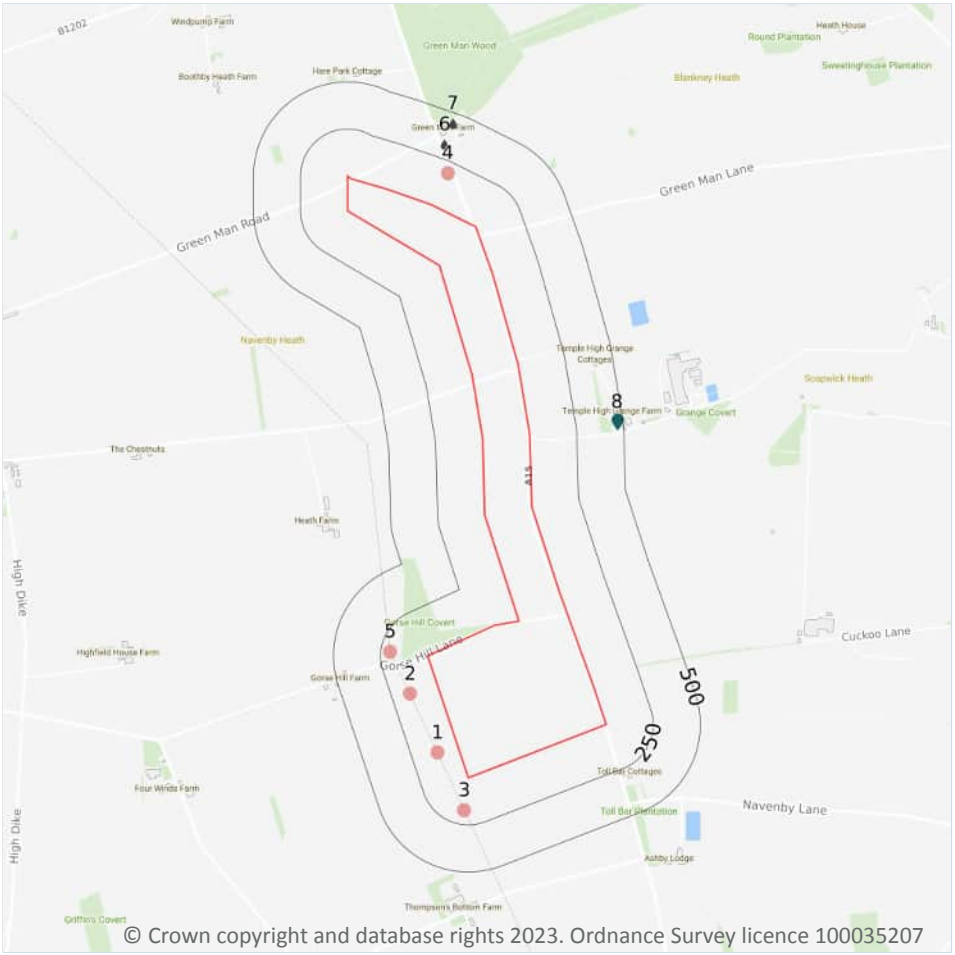
ID	Location	Site	Reference	Category	Sub-Category	Description
A	112m NW	Land at Grid Ref: TF 0109 5885	EPR/AE5884JS /A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge

ID	Location	Site	Reference	Category	Sub-Category	Description
A	112m NW	-	WEX243476	Storing waste exemption	On a farm	Storage of sludge
B	112m NW	-	WEX356653	Storing waste exemption	On a farm	Storage of sludge
A	122m NW	-	WEX110831	Storing waste exemption	On a farm	Storage of sludge
B	132m NW	-	WEX219960	Storing waste exemption	On a Farm	Storage of sludge
B	142m NW	-	WEX071139	Storing waste exemption	On a farm	Storage of sludge
B	142m NW	Land at TF01065877	EPR/UE5141CE/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
B	142m NW	Land at NGR: TF0106058770	EPR/BE5644HW/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
1	172m NW	-	WEX323148	Storing waste exemption	On a farm	Storage of sludge
2	181m SW	-	WEX238618	Storing waste exemption	On a farm	Storage of sludge
3	310m SW	-	WEX239545	Storing waste exemption	On a farm	Storage of sludge
4	332m NW	-	WEX164681	Storing waste exemption	On a Farm	Storage of sludge
5	430m NW	-	WEX222330	Storing waste exemption	On a Farm	Storage of sludge
6	452m NW	-	WEX250052	Storing waste exemption	On a farm	Storage of sludge
C	489m SW	Gorsehill Farm Gorse Hill Lane Lincoln Lincolnshire LN5 0BY	EPR/AE5187GE/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
C	489m SW	Gorsehill Farm Gorse Hill Lane Lincoln Lincolnshire LN5 0BY	EPR/AE5187GE/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
C	489m SW	Gorsehill Farm Gorse Hill Lane Lincoln Lincolnshire LN5 0BY	EPR/AE5187GE/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
C	489m SW	Gorsehill Farm Gorse Hill Lane Lincoln Lincolnshire LN5 0BY	EPR/AE5187GE/A001	Using waste exemption	Both agricultural and non-agricultural waste	Use of waste in construction
C	489m SW	Gorsehill Farm Gorse Hill Lane Lincoln Lincolnshire LN5 0BY	EPR/AE5187GE/A001	Using waste exemption	Both agricultural and non-agricultural waste	Burning of waste as a fuel in a small appliance
C	489m SW	Gorsehill Farm Gorse Hill Lane Lincoln Lincolnshire LN5 0BY	EPR/AE5187GE/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste for a specified purpose

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



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Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed pollutant release (Part A(2)/B)

Licensed Discharges to controlled waters

4.1 Recent industrial land uses

Records within 250m	5

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	114m S	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities
2	153m SW	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities
3	175m S	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
4	189m N	Workings (Dis)	Lincolnshire, LN5	Unspecified Quarries Or Mines	Extractive Industries
5	201m SW	Pylon	Lincolnshire, LN5	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	1

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.

Features are displayed on the Current industrial land use map on **page 24 >**

ID	Location	Address	Details	
8	467m NE	Blankney Estates Limited, Grange Farm, Navenby, LN5 0AX	Process: Vegetable Matter Drying Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	2

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	
6	325m N	GREENMAN CLUBHOUSE, GREENMAN FARM, SLEAFORD ROAD, NAVENBY, LINCOLN, LN5 0AT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPREB3494AX Permit Version: 1 Receiving Water: GROUNDWATER	Status: NEW ISSUED UNDER EPR 2010 Issue date: 10/06/2016 Effective Date: 10/06/2016 Revocation Date: -
7	443m N	UNITS 1,2 & 3 GREEN MAN FARM, UNITS 1,2 & 3 GREEN MAN FARM, SLEAFORD ROAD, NAVENBY, LINCOLN, LN5 0AT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPREB3894VF Permit Version: 1 Receiving Water: GROUNDWATER	Status: NEW ISSUED UNDER EPR 2010 Issue date: 14/10/2016 Effective Date: 14/10/2016 Revocation Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	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.

4.19 Pollution inventory substances

Records within 500m	0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer

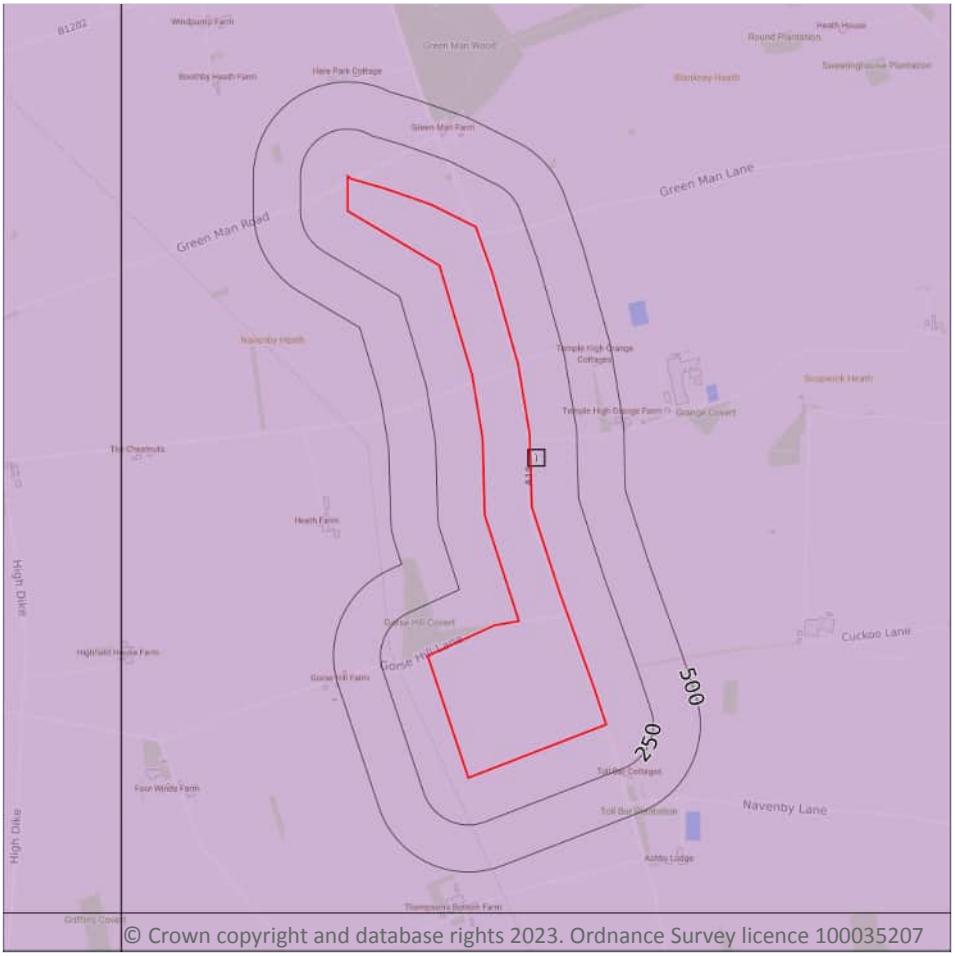
5.1 Superficial aquifer

Records within 500m	0

Aquifer status of groundwater held within superficial geology.

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Bedrock aquifer



Site Outline

Search buffers in metres (m)

- Principal
- Secondary A
- Secondary B
- Secondary Undifferentiated
- Unproductive

5.2 Bedrock aquifer

Records within 500m	1

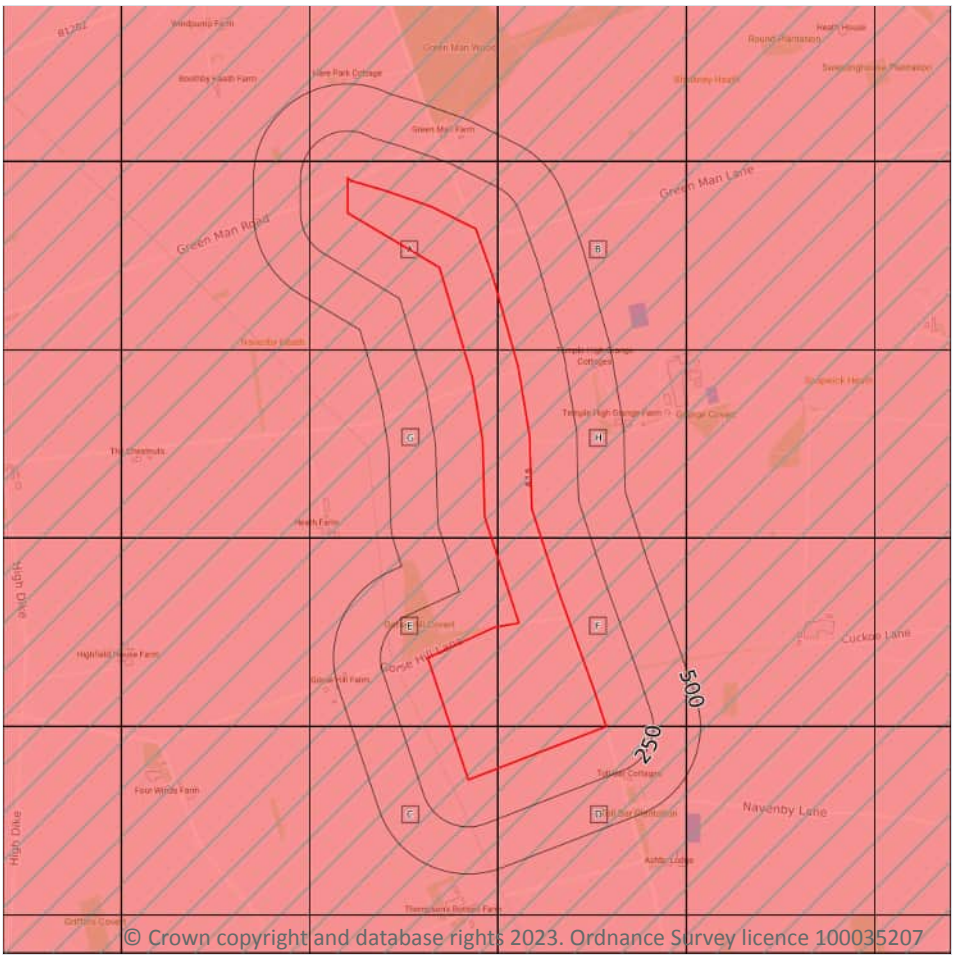
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 31 >**

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



Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	8

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 32 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
A	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
B	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
C	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
D	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
E	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
F	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
G	On site	Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
H	**On site**	**Summary Classification: Principal bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High 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	**8**

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	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**100.0%**
B	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**100.0%**
C	**Significant soluble rocks are likely to be present. Low possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow.**	**100.0%**
D	**Significant soluble rocks are likely to be present. Low possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow.**	**100.0%**
E	**Significant soluble rocks are likely to be present. Low possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow.**	**74.0%**
F	**Significant soluble rocks are likely to be present. Low possibility of localised subsidence or dissolution-related degradation of bedrock occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow.**	**70.0%**
G	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**100.0%**
H	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**100.0%**

This data is sourced from the British Geological Survey and the Environment Agency.

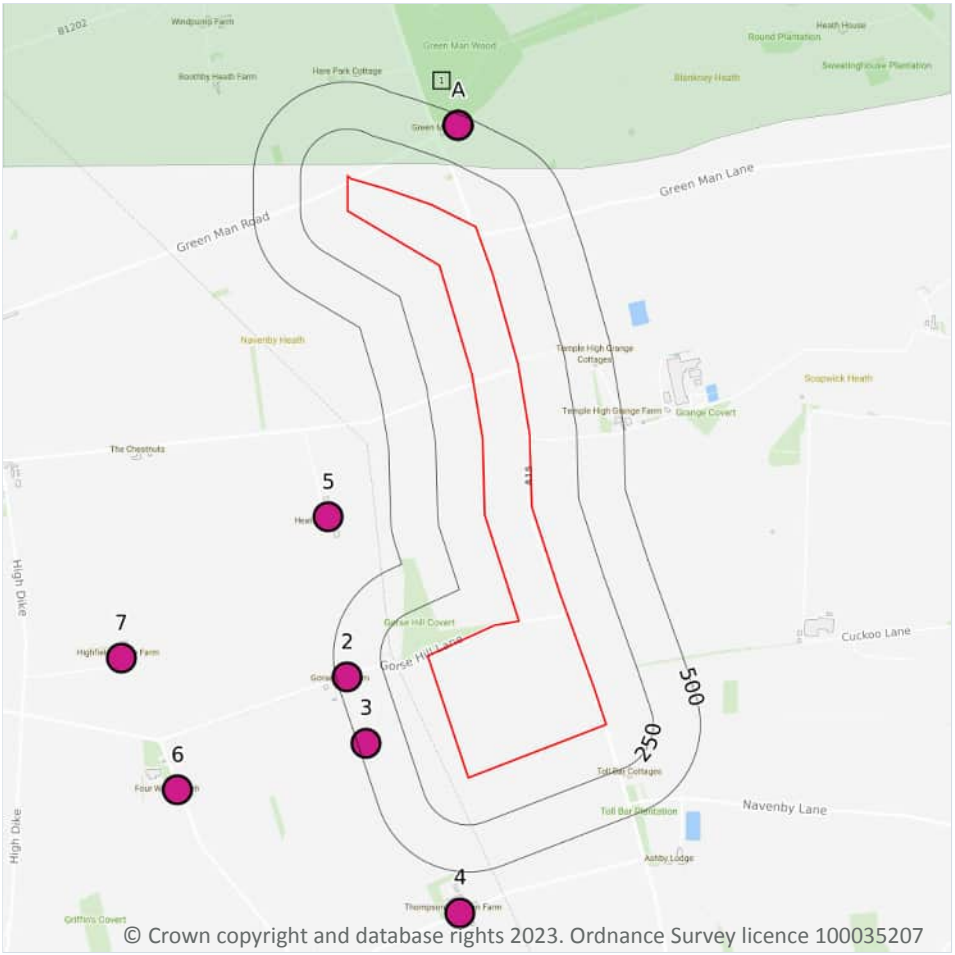
5.5 Groundwater vulnerability- local information

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



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5.6 Groundwater abstractions

Records within 2000m	10

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 36 >**

ID	Location	Details	
2	442m SW	Status: Historical Licence No: 4/30/09/*G/0077 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: A.L.&D.F.BELL BORE WELLINGORE Data Type: Point Name: BELL Easting: 501200 Northing: 356250	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1966 Version End Date: -
A	444m N	Status: Historical Licence No: 4/30/09/*G/0011 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE B - BLANKNEY Data Type: Point Name: BLANKNEY ESTATES LTD Easting: 501790 Northing: 359180	Annual Volume (m^3): 102336 Max Daily Volume (m^3): 4549.5 Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1998 Version End Date: -
A	444m N	Status: Historical Licence No: 4/30/09/*G/0011 Details: Process Water Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE B - BLANKNEY Data Type: Point Name: BLANKNEY ESTATES LTD Easting: 501790 Northing: 359180	Annual Volume (m^3): 102336 Max Daily Volume (m^3): 4549.5 Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1998 Version End Date: -
A	444m N	Status: Historical Licence No: 4/30/09/*G/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE B - BLANKNEY Data Type: Point Name: BLANKNEY ESTATES LTD Easting: 501790 Northing: 359180	Annual Volume (m^3): 102336 Max Daily Volume (m^3): 4549.5 Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1998 Version End Date: -
3	457m SW	Status: Historical Licence No: 4/30/09/*G/0028 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: H.N.NEVILE BORE1 TEMPLE BRUER Data Type: Point Name: NEVILE Easting: 501300 Northing: 355900	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1966 Version End Date: -

ID	Location	Details	
4	717m S	Status: Historical Licence No: 4/30/09/*G/0028 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: H.N.NEVILE WELL2 TEMPLE BRUER Data Type: Point Name: NEVILE Easting: 501800 Northing: 355000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1966 Version End Date: -
5	829m W	Status: Historical Licence No: 4/30/09/*G/0061 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: W.HAYWARD & SONS BORE NAVENBY Data Type: Point Name: W HAYWARD & SONS Easting: 501100 Northing: 357100	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1966 Version End Date: -
6	1484m SW	Status: Historical Licence No: 4/30/09/*G/0041 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: H.N.NEVILE BORE WELLINGORE HTH Data Type: Point Name: NEVILE Easting: 500300 Northing: 355650	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1976 Version End Date: -
7	1627m W	Status: Historical Licence No: 4/30/09/*G/0058 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: F.N.THEAKER WELL WELLINGORE Data Type: Point Name: THEAKER Easting: 500000 Northing: 356350	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1966 Version End Date: -
-	1716m S	Status: Historical Licence No: 4/30/09/*G/0028 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: H.N.NEVILE WELL3 TEMPLE BRUER Data Type: Point Name: NEVILE Easting: 501800 Northing: 354000	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1966 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	0

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.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	1

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 36 >**

ID	Location	Details	
A	444m N	Status: Historical Licence No: 4/30/09/*G/0011 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE B - BLANKNEY Data Type: Point Name: BLANKNEY ESTATES LTD Easting: 501790 Northing: 359180	Annual Volume (m^3): 102336 Max Daily Volume (m^3): 4549.5 Original Application No: - Original Start Date: 01/05/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1998 Version End Date: -

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 36 >**

ID	Location	Type	Description
1	63m NW	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 MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	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	0

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	3

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 41 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
1	**On site**	**River**	**Dorrington Dike**	**GB105030056175**	**Witham Lower**	**Witham**
2	**On site**	**River**	**Metheringham Beck**	**GB105030056210**	**Witham Lower**	**Witham**
3	**On site**	**River**	**Dunston Beck**	**GB105030056230**	**Witham Lower**	**Witham**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified	3

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 41 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	4037m N	River	Dunston Beck	GB105030056230 ↗	Bad	Fail	Bad	2019
-	6432m NE	River	Metheringham Beck	GB105030056210 ↗	Moderate	Fail	Moderate	2019
-	8078m E	River	Dorrington Dike	GB105030056175 ↗	Poor	Fail	Poor	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site	1

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 41 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
4	**On site**	**Witham Limestone Unit A**	**GB40501G444800** ↗	**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.

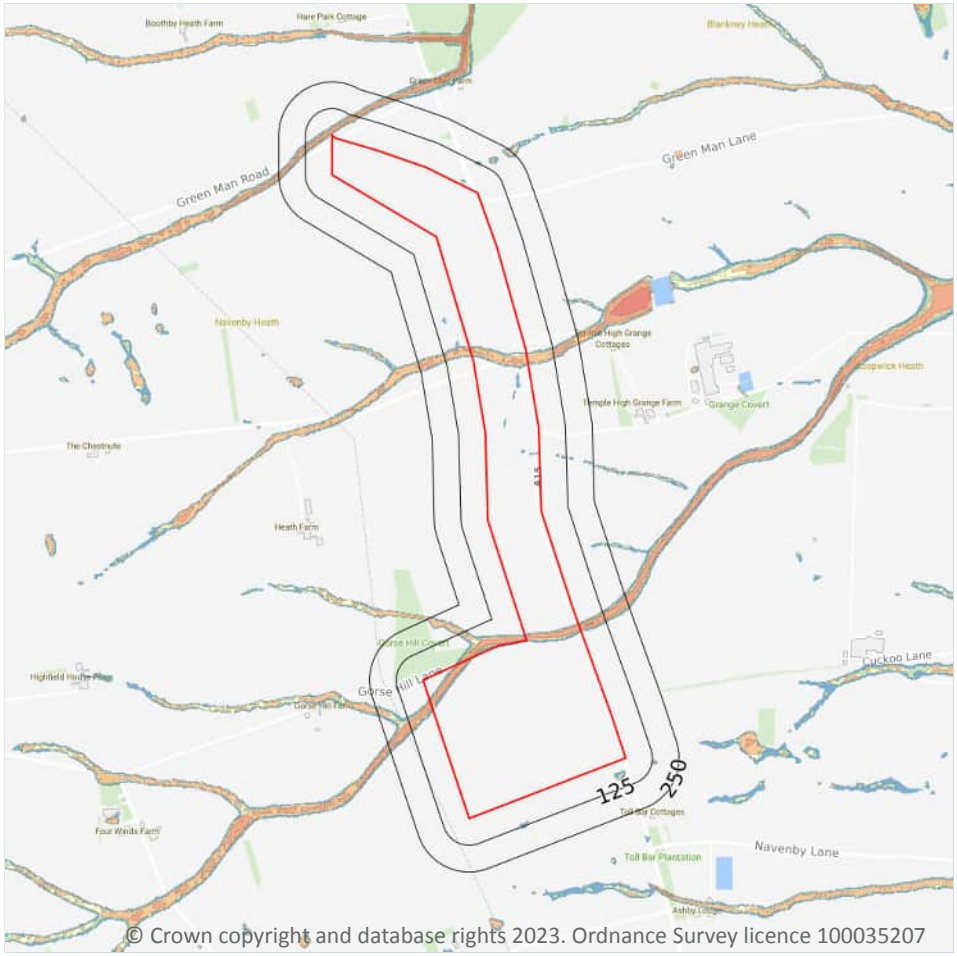
7.7 Flood Zone 3

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



Site Outline

Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, 0.3m - 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 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 47 >**

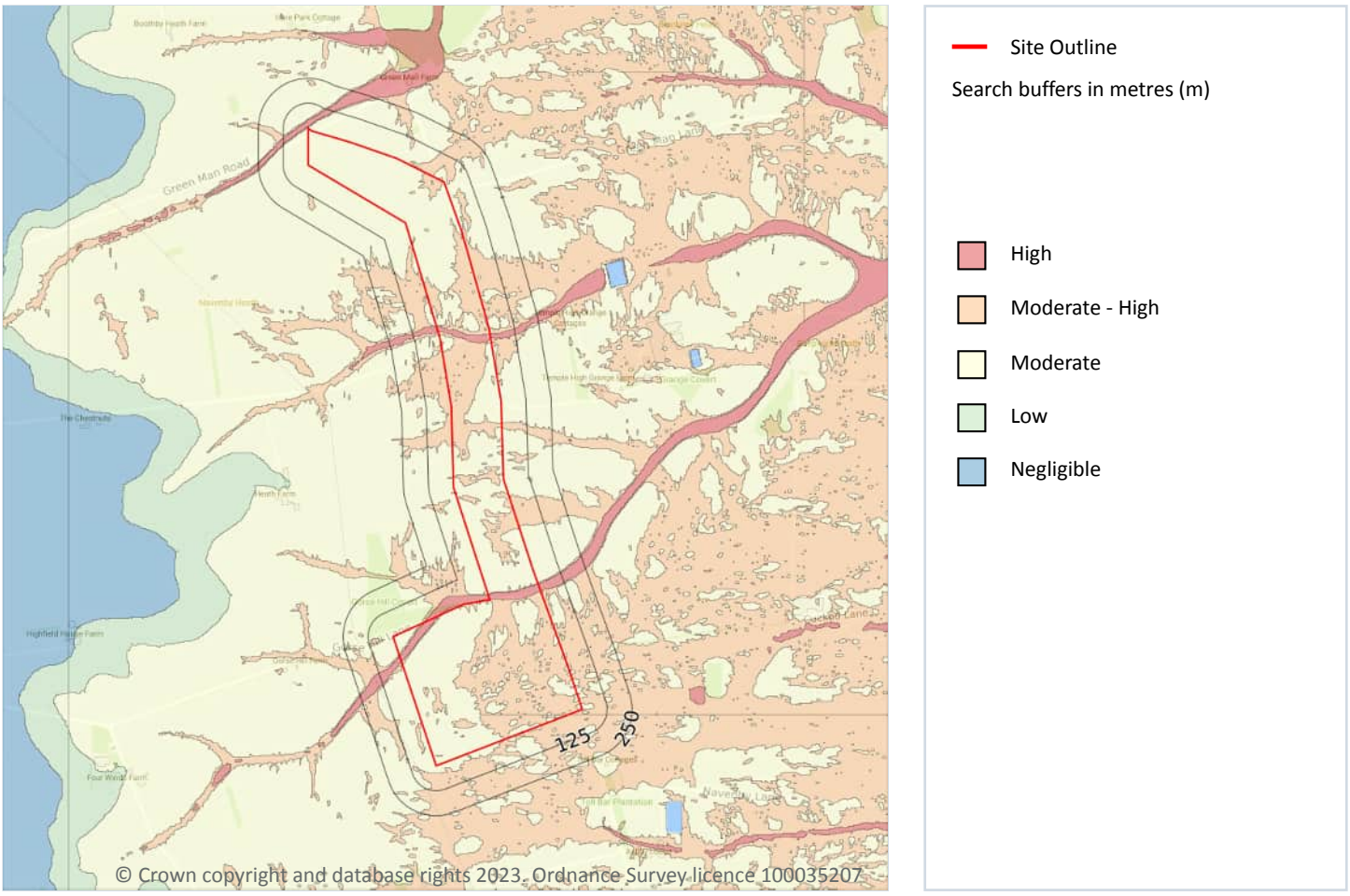
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site	**High**
Highest risk within 50m	**High**

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 49 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations

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	0

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.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	8

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	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
On site	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
On site	**Lincolnshire Limestone**	**Groundwater**	**69**	**Existing**
On site	**Lincolnshire Limestone**	**Groundwater**	**69**	**Existing**
1517m SE	Lower Witham NVZ	Surface Water	375	Existing
1517m SE	Lincolnshire Limestone	Groundwater	69	Existing
1517m SE	Lower Witham NVZ	Surface Water	375	Existing
1517m SE	Lincolnshire Limestone	Groundwater	69	Existing

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

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.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m	0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m	0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

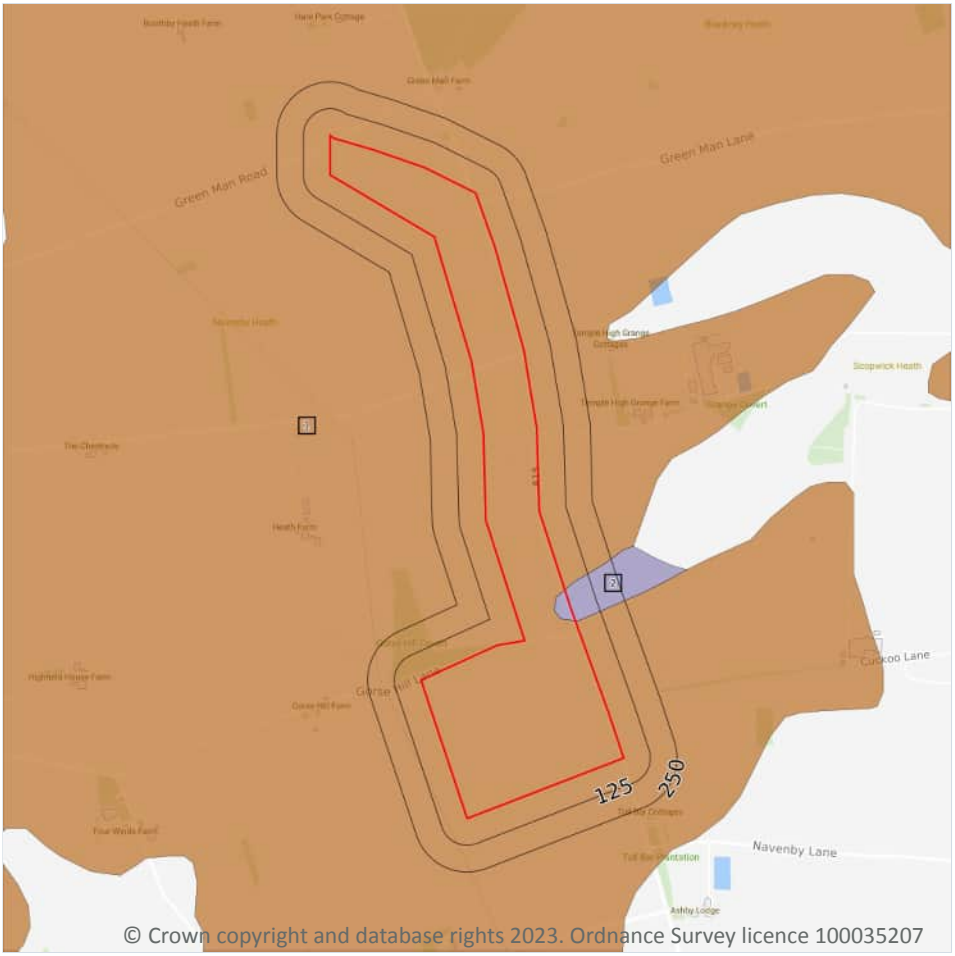
11.7 Registered Parks and Gardens

Records within 250m	0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	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 58 >**

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**	**Non Agricultural**	**-**

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	**0**

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	**0**

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	**12**

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	**AG00343729**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2023**
On site	**AG00343729**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2023**

Location	Reference	Scheme	Start Date	End date
On site	**AG00343729**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2023**
On site	**AG00343729**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2023**
On site	**AG00343729**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2023**
On site	**AG00343729**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2023**
On site	**AG00343729**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2023**
On site	**AG00389126**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2022**
On site	**AG00389126**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2022**
On site	**AG00389126**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2022**
On site	**AG00389126**	**Entry Level plus Higher Level Stewardship**	**01/03/2012**	**28/02/2022**
75m SE	AG00343729	Entry Level plus Higher Level Stewardship	01/03/2012	28/02/2023

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

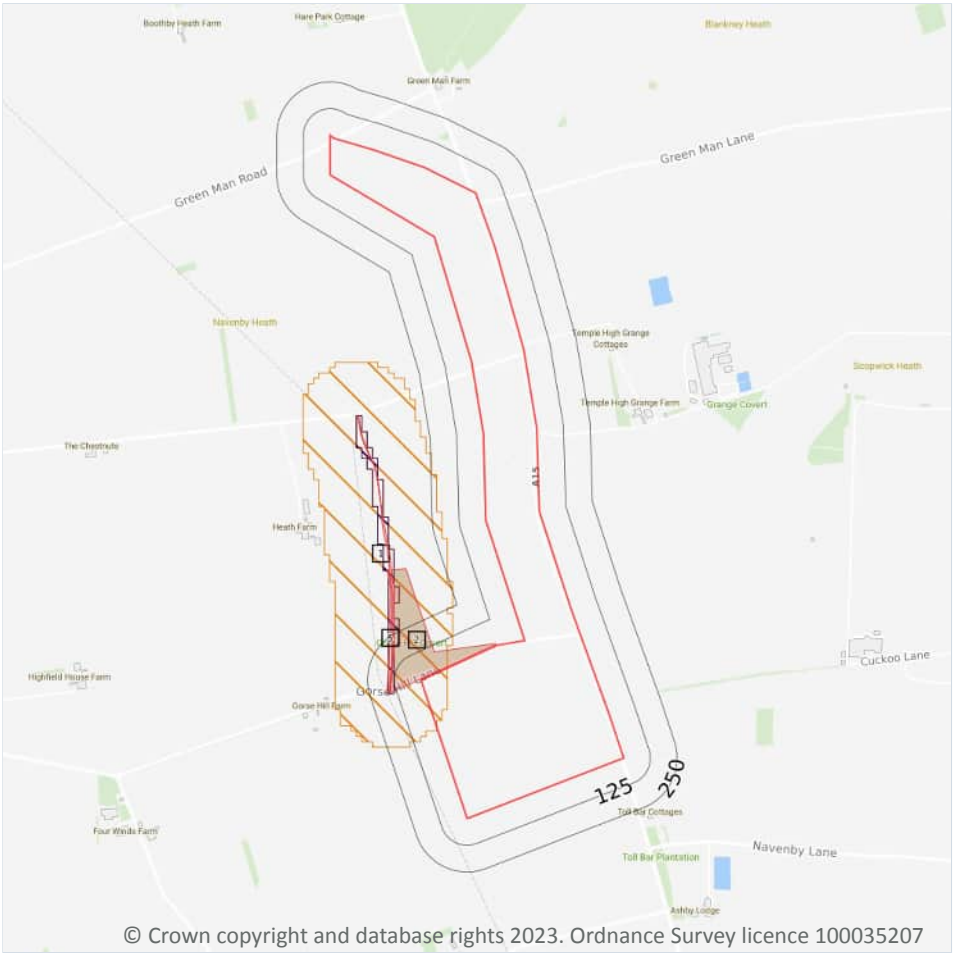
Records within 250m	**2**

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	**472683**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
222m NW	1053697	Countryside Stewardship (Middle Tier)	01/01/2021	31/12/2025

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 61 >**

ID	Location	Main Habitat	Other habitats
2	4m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	139m SW	Lowland calcareous grassland	Main habitat: LCGRA (INV > 50%); Additional: DWOOD (INV 50%)
5	144m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); LCGRA (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	2

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.

Features are displayed on the Habitat designations map on **page 61 >**

ID	Location	Type	Habitat
1	**On site**	**Network Enhancement Zone 1**	**Not specified**
3	127m SW	Primary Habitat	Lowland calcareous grassland

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.

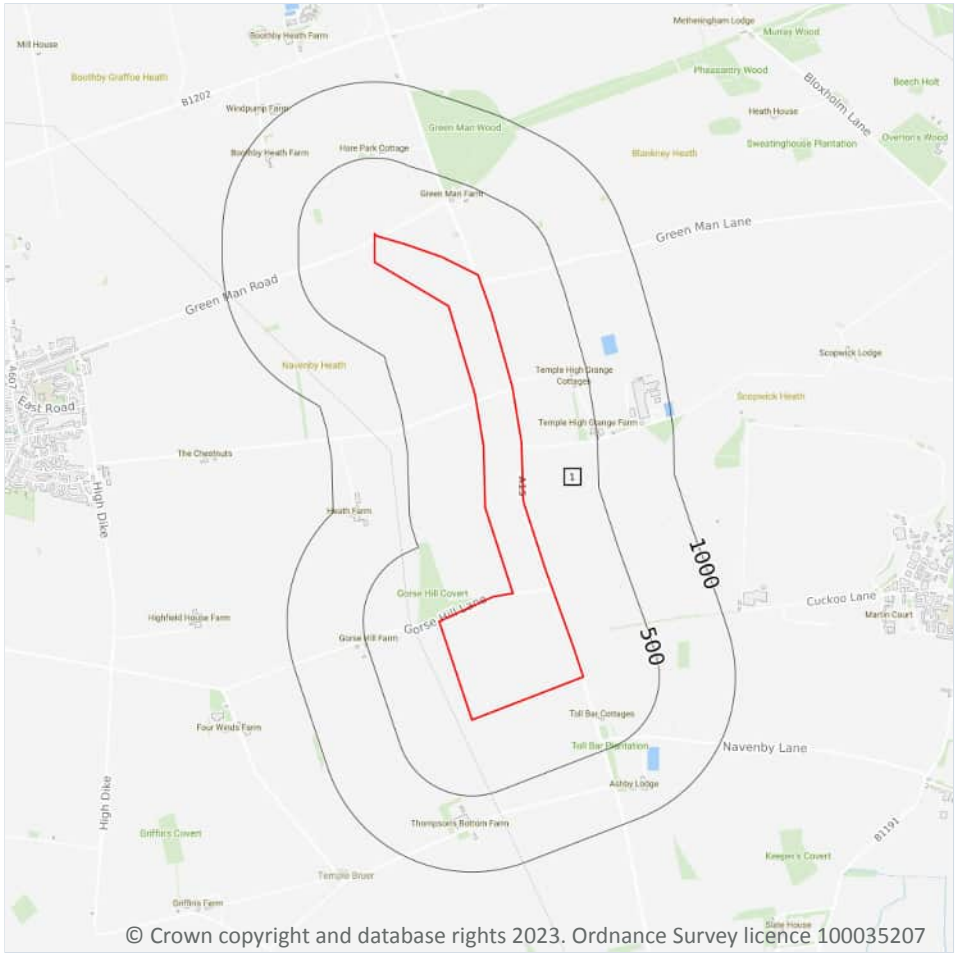
13.4 Limestone Pavement Orders

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



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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 63 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

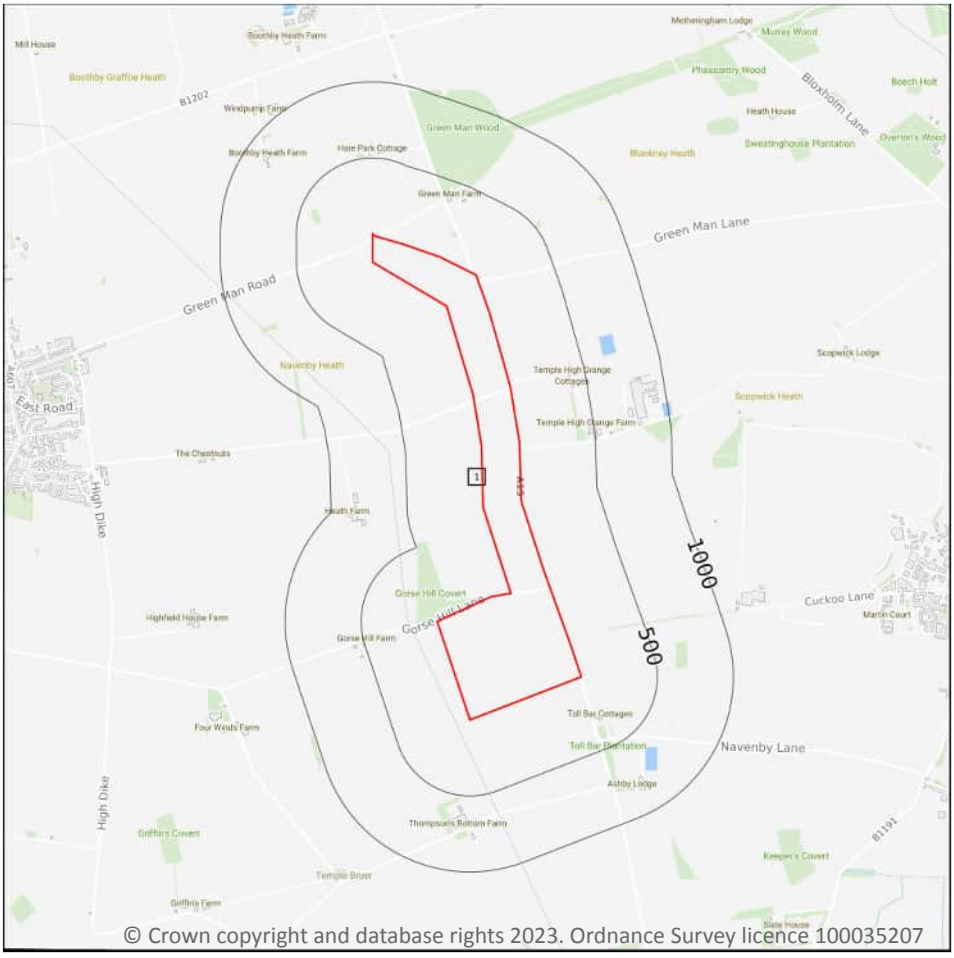
14.6 Bedrock faults and other linear features (10k)

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 67 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_v4**

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground

15.2 Artificial and made ground (50k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Superficial

15.4 Superficial geology (50k)

Records within 500m	0

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

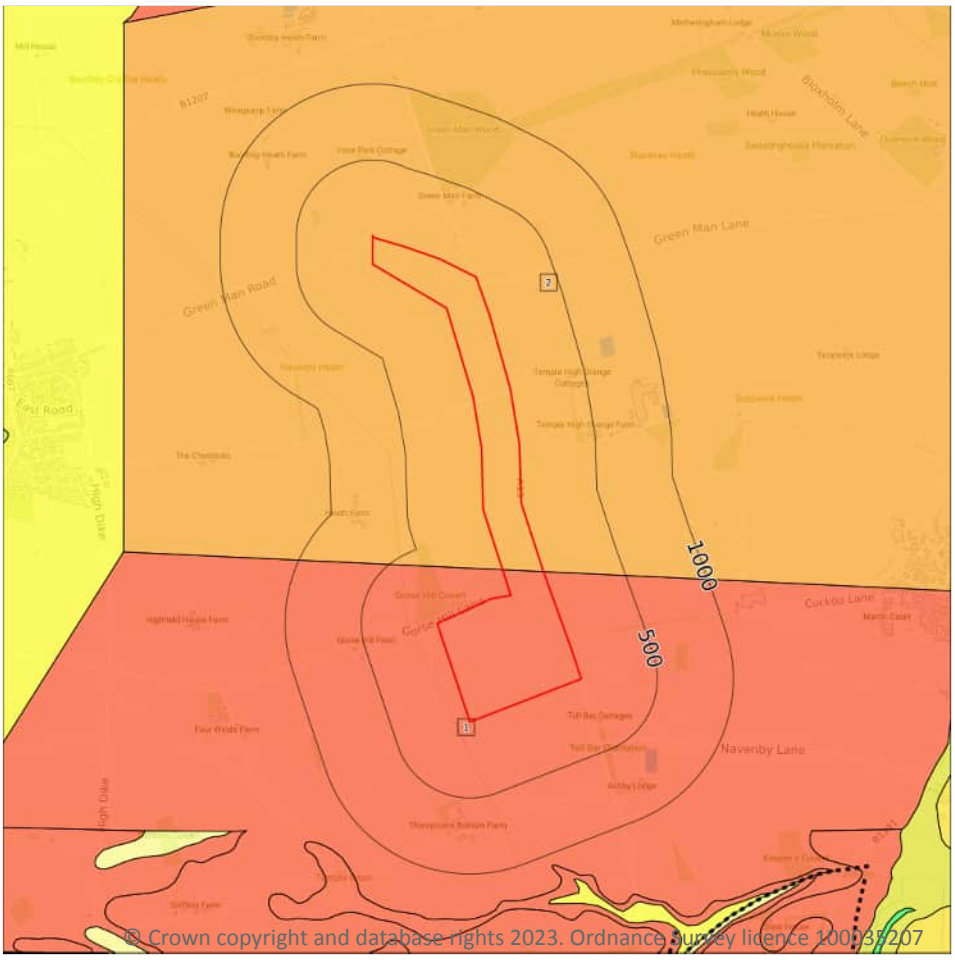
15.7 Landslip permeability (50k)

Records within 50m	0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



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Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m	2

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 70 >**

ID	Location	LEX Code	Description	Rock age
1	On site	ULL-LMST	UPPER LINCOLNSHIRE LIMESTONE MEMBER - LIMESTONE	BAJOCIAN
2	On site	LL-LMST	LINCOLNSHIRE LIMESTONE FORMATION - LIMESTONE	BAJOCIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**Very High**	**Very High**
On site	**Fracture**	**Very High**	**Very High**

This data is sourced from the British Geological Survey.

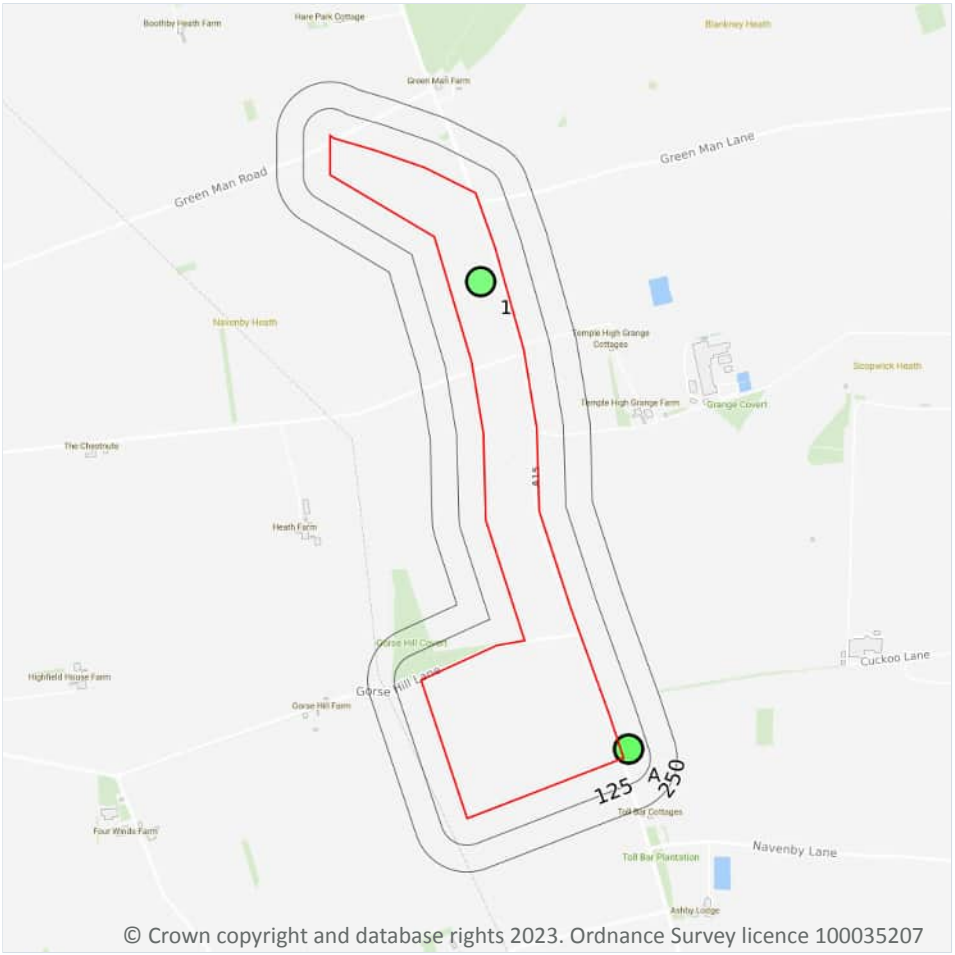
15.10 Bedrock faults and other linear features (50k)

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 **3**

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 72 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	**On site**	**501908 358228**	**TEMPLE HIGH GRANGE 21**	**16.76**	**N**	**469079** ↗
A	35m SE	502598 356041	ASHBY DE LA LAUNDE	28.7	N	469084 ↗
A	37m SE	502600 356040	ASHBY LL8	28.71	N	469106 ↗

This data is sourced from the British Geological Survey.

17 Natural ground subsidence - Shrink swell clays



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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 74 >**

Location	Hazard rating	Details
On site	**Negligible**	**Ground conditions predominantly non-plastic.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



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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 75 >**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Compressible deposits



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.3 Compressible deposits

Records within 50m	1

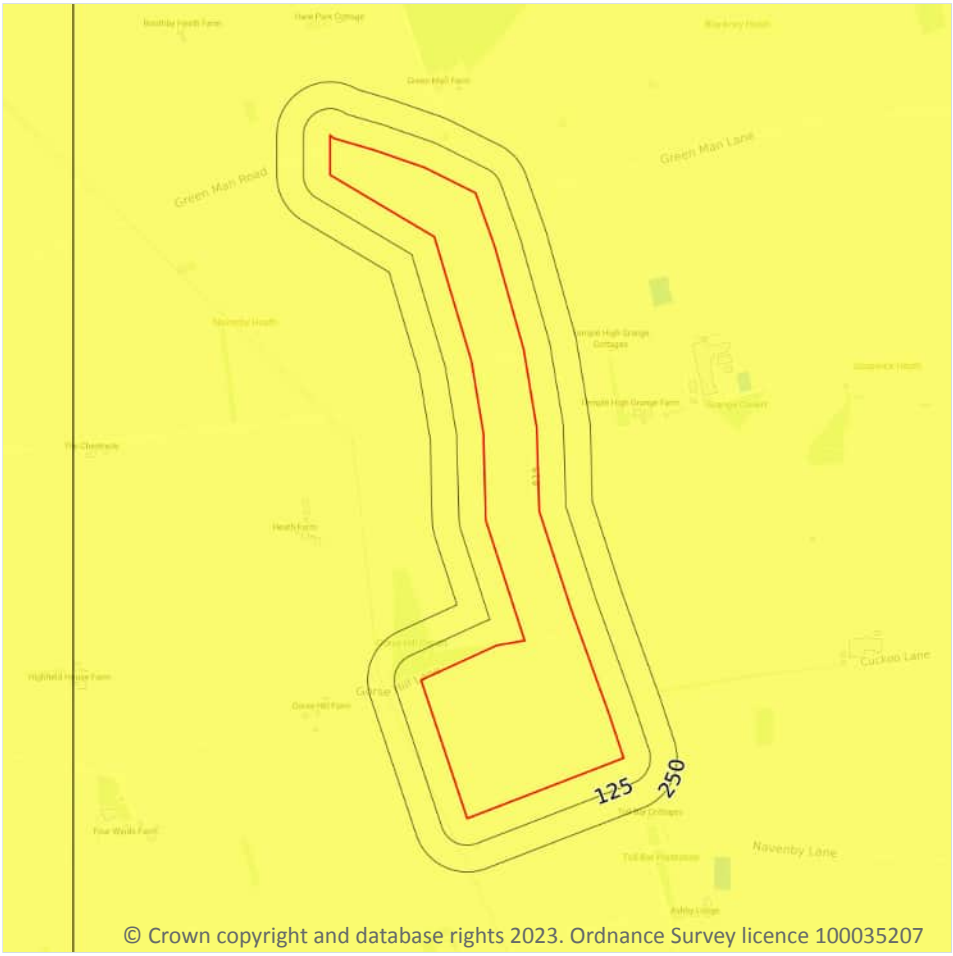
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 76 >**

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



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.4 Collapsible deposits

Records within 50m	1

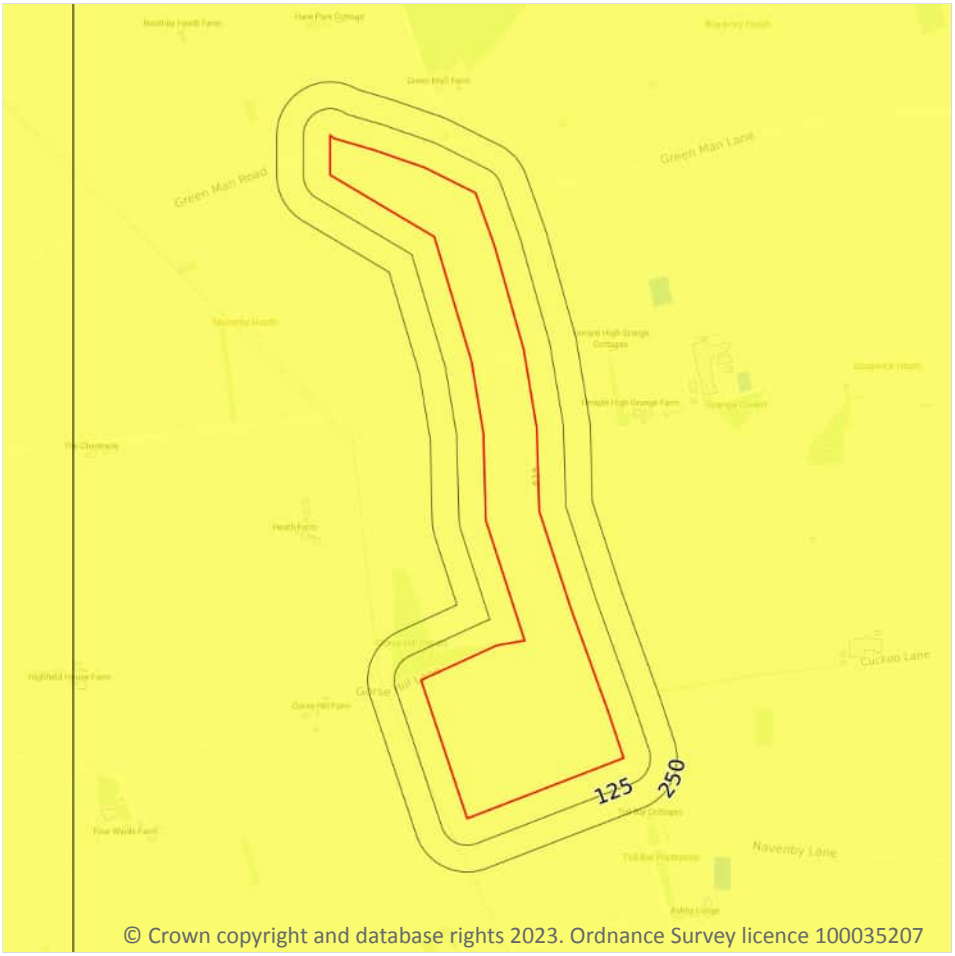
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 77 >**

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



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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.5 Landslides

Records within 50m	1

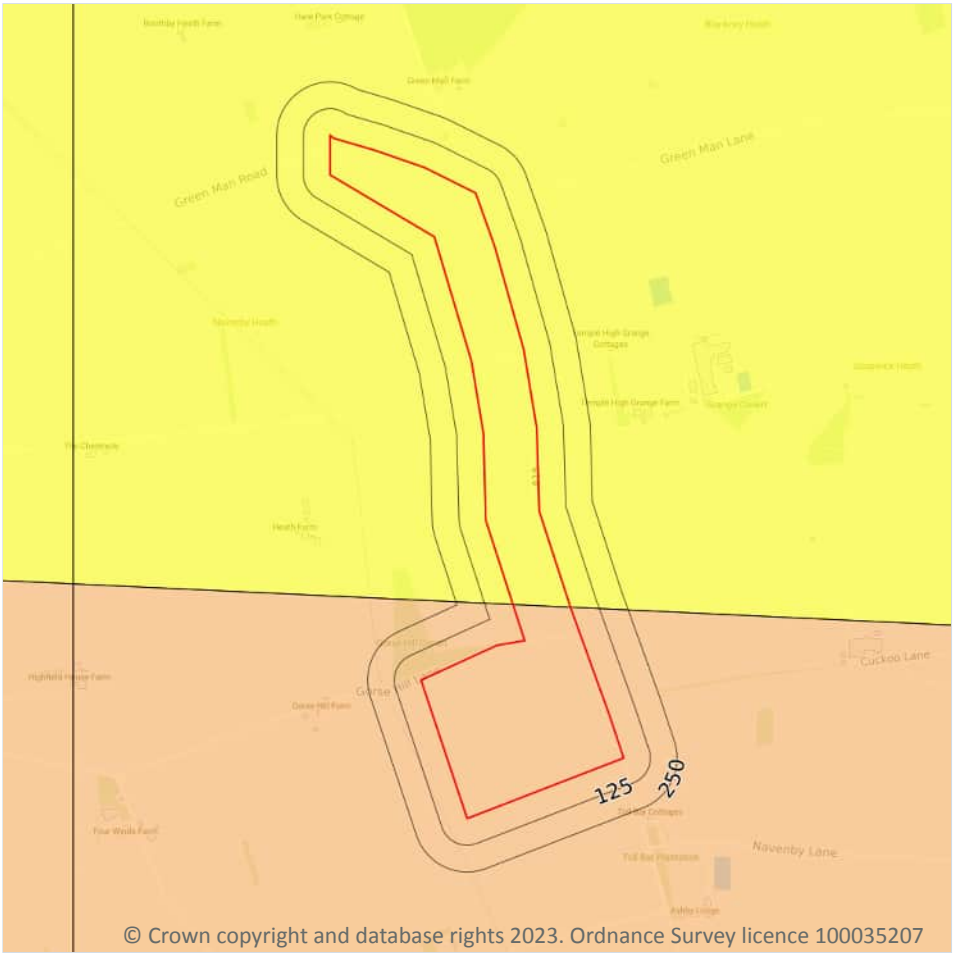
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 78 >**

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.

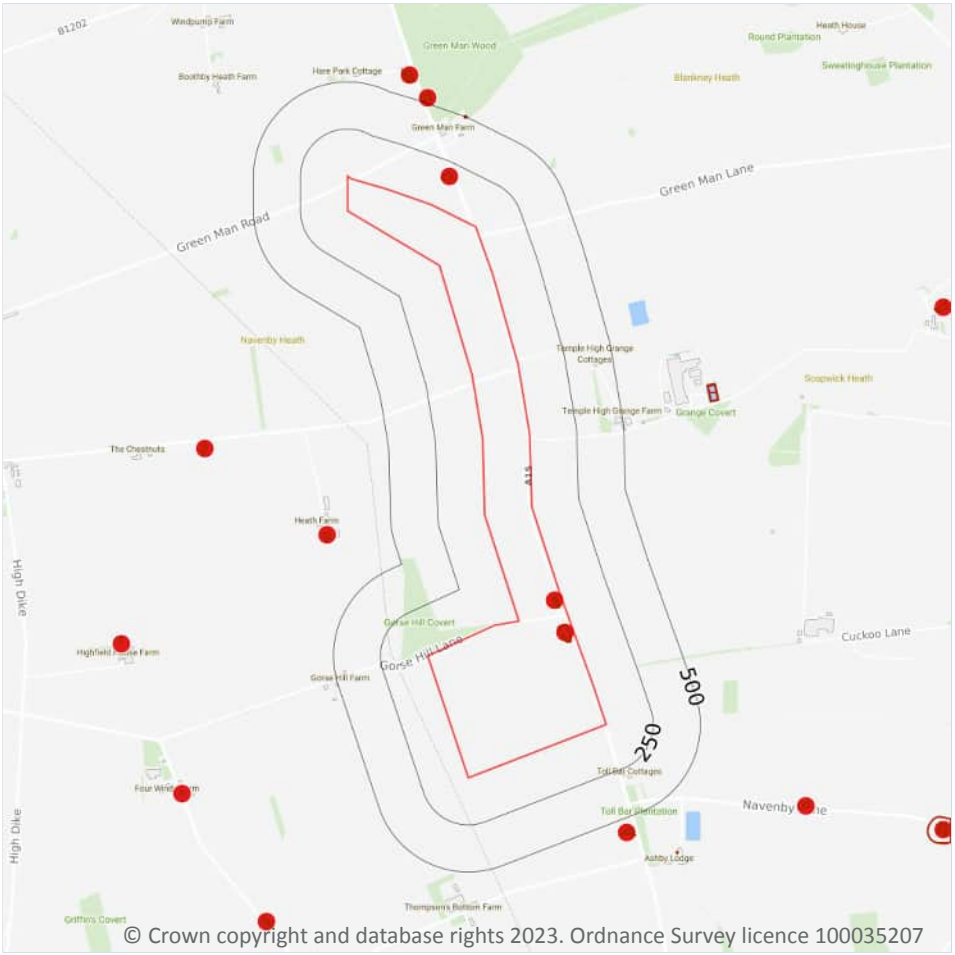
Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 79 >**

Location	Hazard rating	Details
On site	**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.**

Location	Hazard rating	Details
On site	**Low**	**Soluble rocks are present within the ground. Some dissolution features may be present. Potential for difficult ground conditions are at a level where they may be considered, localised subsidence need not be considered except in exceptional circumstances.**

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	3

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on **page 81 >**

ID	Location	Details	Description
A	**On site**	**Name: Scopwick Heath Address: Scopwick Heath, LINCOLN, Lincolnshire Commodity: Limestone Status: Ceased**	**Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority**
B	**On site**	**Name: Scopwick Heath Address: Scopwick Heath, LINCOLN, Lincolnshire Commodity: Limestone Status: Ceased**	**Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority**
C	176m N	Name: Green Man Wood Address: Navenby, LINCOLN, Lincolnshire Commodity: Limestone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	**12**

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 81 >**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Unspecified Old Quarry**	**1951**	**1:10560**
A	**On site**	**Unspecified Old Quarry**	**1947**	**1:10560**
A	**On site**	**Unspecified Old Quarry**	**1904**	**1:10560**
A	**On site**	**Unspecified Old Quarry**	**1887**	**1:10560**
B	**On site**	**Unspecified Quarry**	**1951**	**1:10560**
B	**On site**	**Unspecified Quarry**	**1947**	**1:10560**
B	**On site**	**Unspecified Quarry**	**1904**	**1:10560**

ID	Location	Land Use	Year of mapping	Mapping scale
B	**On site**	**Unspecified Quarry**	**1887**	**1:10560**
C	145m N	Unspecified Old Quarry	1951	1:10560
C	148m N	Unspecified Old Quarry	1948	1:10560
C	148m N	Unspecified Old Quarry	1904	1:10560
C	148m N	Unspecified Old Quarry	1886	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	0

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).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

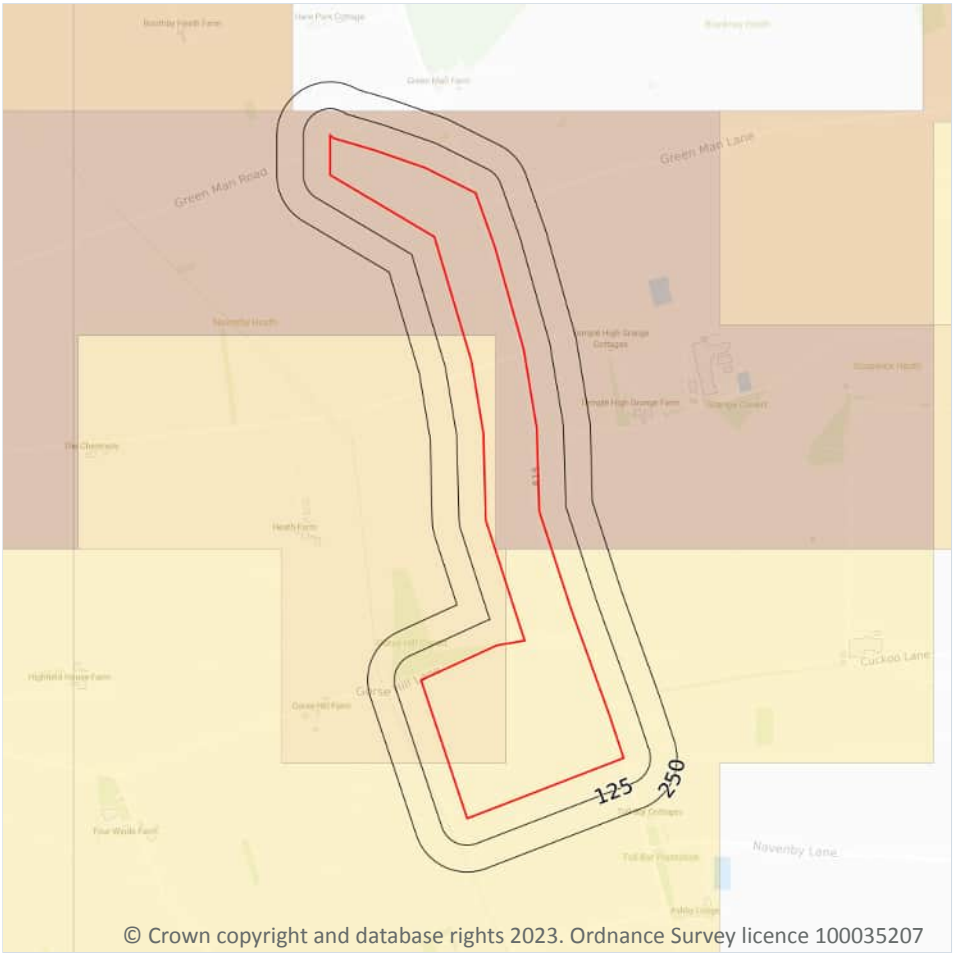
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

20.1 Radon

Records on site	3

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 89 >**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 10% and 30%**	**Full**

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 3% and 5%**	**Basic**
On site	**Between 1% and 3%**	**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	33

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**

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	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 - 30 mg/kg**
42m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	**0**

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	**0**

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

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Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

Housham Solar Farm

Order Details

Date: 10/10/2023

Your ref: 60700987

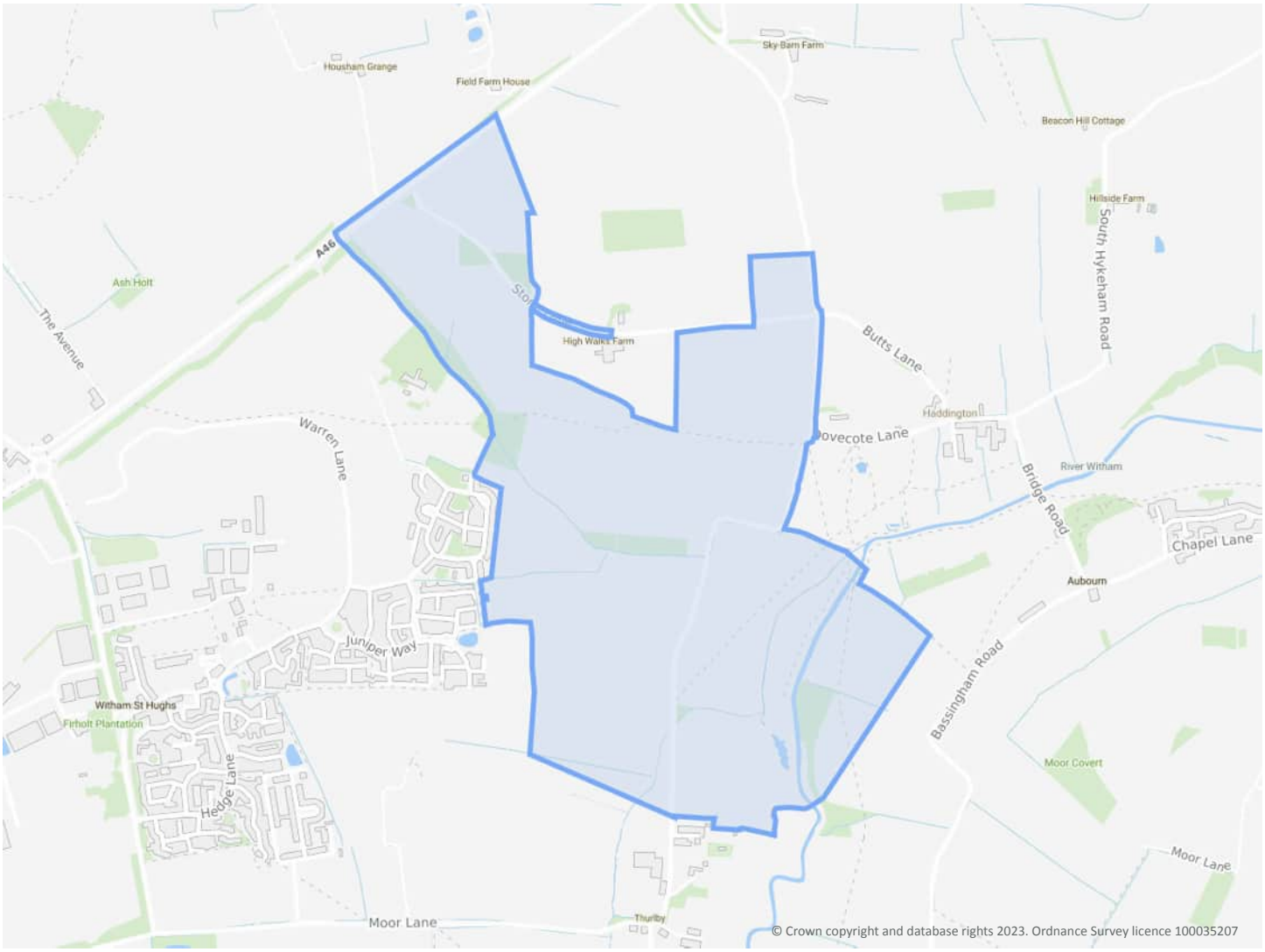
Our Ref: GSIP-2023-14155-15965_I

Site Details

Location: 490663 362842

Area: 168.88 ha

Authority: North Kesteven District Council ↗



Summary of findings p. 2 >

OS MasterMap site plan N/A: >10ha

Aerial image p. 9 >

groundsure.com/insightuserguide ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	6	3	3	6	-
15 >	1.2 >	Historical tanks >	0	0	0	3	-
16 >	1.3 >	Historical energy features >	0	0	2	0	-
16	1.4	Historical petrol stations	0	0	0	0	-
16	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 >	7	4	4	8	-
19 >	2.2 >	Historical tanks >	0	0	0	3	-
20 >	2.3 >	Historical energy features >	0	0	2	0	-
20	2.4	Historical petrol stations	0	0	0	0	-
20	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
21	3.1	Active or recent landfill	0	0	0	0	-
21	3.2	Historical landfill (BGS records)	0	0	0	0	-
22	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
22	3.4	Historical landfill (EA/NRW records)	0	0	0	0	-
22	3.5	Historical waste sites	0	0	0	0	-
22 >	3.6 >	Licensed waste sites >	0	0	0	4	-
23 >	3.7 >	Waste exemptions >	7	0	22	6	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
27 >	4.1 >	Recent industrial land uses >	0	2	3	-	-
28	4.2	Current or recent petrol stations	0	0	0	0	-
28	4.3	Electricity cables	0	0	0	0	-
28	4.4	Gas pipelines	0	0	0	0	-
28	4.5	Sites determined as Contaminated Land	0	0	0	0	-

29	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
29	4.7	Regulated explosive sites	0	0	0	0	-
29	4.8	Hazardous substance storage/usage	0	0	0	0	-
29	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
29	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
30	4.11	Licensed pollutant release (Part A(2)/B)	0	0	0	0	-
30	4.12	Radioactive Substance Authorisations	0	0	0	0	-
30 >	**4.13 >**	**Licensed Discharges to controlled waters >**	1	8	2	1	-
32	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
32	4.15	Pollutant release to public sewer	0	0	0	0	-
32	4.16	List 1 Dangerous Substances	0	0	0	0	-
33 >	**4.17 >**	**List 2 Dangerous Substances >**	0	0	0	2	-
33 >	**4.18 >**	**Pollution Incidents (EA/NRW) >**	0	1	0	0	-
33	4.19	Pollution inventory substances	0	0	0	0	-
34	4.20	Pollution inventory waste transfers	0	0	0	0	-
34	4.21	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	**Hydrogeology >**	On site	0-50m	50-250m	250-500m	500-2000m
35 >	**5.1 >**	**Superficial aquifer >**	Identified (within 500m)				
37 >	**5.2 >**	**Bedrock aquifer >**	Identified (within 500m)				
39 >	**5.3 >**	**Groundwater vulnerability >**	Identified (within 50m)				
44 >	**5.4 >**	**Groundwater vulnerability- soluble rock risk >**	Identified (within 0m)				
44	5.5	Groundwater vulnerability- local information	None (within 0m)				
45 >	**5.6 >**	**Groundwater abstractions >**	0	0	0	0	3
46 >	**5.7 >**	**Surface water abstractions >**	1	1	3	0	7
49	5.8	Potable abstractions	0	0	0	0	0
49	5.9	Source Protection Zones	0	0	0	0	-
50	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	**Hydrology >**	On site	0-50m	50-250m	250-500m	500-2000m
51 >	**6.1 >**	**Water Network (OS MasterMap) >**	38	8	26	-	-

57 >	6.2 >	Surface water features >	1	5	15	-	-
57 >	6.3 >	WFD Surface water body catchments >	2	-	-	-	-
58 >	6.4 >	WFD Surface water bodies >	1	0	0	-	-
58 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
59 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
60	7.2	Historical Flood Events	0	0	0	-	-
60 >	7.3 >	Flood Defences >	3	0	3	-	-
61	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
61	7.5	Flood Storage Areas	0	0	0	-	-
62 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
63 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
64 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
66 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
67	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
68	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
68	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
68	10.4	Special Protection Areas (SPA)	0	0	0	0	0
68	10.5	National Nature Reserves (NNR)	0	0	0	0	0
69	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
69 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	1
69	10.8	Biosphere Reserves	0	0	0	0	0
69	10.9	Forest Parks	0	0	0	0	0
70	10.10	Marine Conservation Zones	0	0	0	0	0
70	10.11	Green Belt	0	0	0	0	0
70	10.12	Proposed Ramsar sites	0	0	0	0	0

70	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
70	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
71	10.15	Nitrate Sensitive Areas	0	0	0	0	0
71 >	**10.16 >**	**Nitrate Vulnerable Zones >**	1	1	0	0	0
72	10.17	SSSI Impact Risk Zones	0	-	-	-	-
72	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
73	11.1	World Heritage Sites	0	0	0	-	-
74	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
74	11.3	National Parks	0	0	0	-	-
74 >	**11.4 >**	**Listed Buildings >**	0	1	3	-	-
75	11.5	Conservation Areas	0	0	0	-	-
75 >	**11.6 >**	**Scheduled Ancient Monuments >**	1	0	1	-	-
75	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
76 >	**12.1 >**	**Agricultural Land Classification >**	Grade 3 (within 250m)				
77	12.2	Open Access Land	0	0	0	-	-
77	12.3	Tree Felling Licences	0	0	0	-	-
77	12.4	Environmental Stewardship Schemes	0	0	0	-	-
78 >	**12.5 >**	**Countryside Stewardship Schemes >**	8	0	1	-	-
Page	Section	**Habitat designations >**	On site	0-50m	50-250m	250-500m	500-2000m
79 >	**13.1 >**	**Priority Habitat Inventory >**	6	2	6	-	-
80	13.2	Habitat Networks	0	0	0	-	-
80	13.3	Open Mosaic Habitat	0	0	0	-	-
80	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
82 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
83	14.2	Artificial and made ground (10k)	0	0	0	0	-
84	14.3	Superficial geology (10k)	0	0	0	0	-

84	14.4	Landslip (10k)	0	0	0	0	-
85	14.5	Bedrock geology (10k)	0	0	0	0	-
85	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
86 >	15.1 >	**50k Availability >**	Identified (within 500m)				
87	15.2	Artificial and made ground (50k)	0	0	0	0	-
87	15.3	Artificial ground permeability (50k)	0	0	-	-	-
88 >	15.4 >	**Superficial geology (50k) >**	3	0	0	2	-
89 >	15.5 >	**Superficial permeability (50k) >**	Identified (within 50m)				
89	15.6	Landslip (50k)	0	0	0	0	-
89	15.7	Landslip permeability (50k)	None (within 50m)				
90 >	15.8 >	**Bedrock geology (50k) >**	1	0	0	0	-
91 >	15.9 >	**Bedrock permeability (50k) >**	Identified (within 50m)				
91	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
92 >	16.1 >	**BGS Boreholes >**	3	2	2	-	-
Page	Section	**Natural ground subsidence >**					
94 >	17.1 >	**Shrink swell clays >**	Low (within 50m)				
95 >	17.2 >	**Running sands >**	Low (within 50m)				
97 >	17.3 >	**Compressible deposits >**	Moderate (within 50m)				
99 >	17.4 >	**Collapsible deposits >**	Very low (within 50m)				
100 >	17.5 >	**Landslides >**	Very low (within 50m)				
101 >	17.6 >	**Ground dissolution of soluble rocks >**	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
103 >	18.1 >	**BritPits >**	0	1	0	0	-
104 >	18.2 >	**Surface ground workings >**	4	7	8	-	-
105	18.3	Underground workings	0	0	0	0	0
105	18.4	Underground mining extents	0	0	0	0	-
105	18.5	Historical Mineral Planning Areas	0	0	0	0	-

105	18.6	Non-coal mining	0	0	0	0	0
106	18.7	JPB mining areas	None (within 0m)				
106	18.8	The Coal Authority non-coal mining	0	0	0	0	-
106	18.9	Researched mining	0	0	0	0	-
106	18.10	Mining record office plans	0	0	0	0	-
107	18.11	BGS mine plans	0	0	0	0	-
107	18.12	Coal mining	None (within 0m)				
107	18.13	Brine areas	None (within 0m)				
107	18.14	Gypsum areas	None (within 0m)				
107	18.15	Tin mining	None (within 0m)				
108	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
109	19.1	Natural cavities	0	0	0	0	-
109	19.2	Mining cavities	0	0	0	0	0
109	19.3	Reported recent incidents	0	0	0	0	-
109	19.4	Historical incidents	0	0	0	0	-
110	19.5	National karst database	0	0	0	0	-
Page	Section	**Radon** >					
111 >	**20.1** >	**Radon** >	Less than 1% (within 0m)				
Page	Section	**Soil chemistry** >	On site	0-50m	50-250m	250-500m	500-2000m
113 >	**21.1** >	**BGS Estimated Background Soil Chemistry** >	43	5	-	-	-
116	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
116	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
117	22.1	Underground railways (London)	0	0	0	-	-
117	22.2	Underground railways (Non-London)	0	0	0	-	-
117	22.3	Railway tunnels	0	0	0	-	-
117	22.4	Historical railway and tunnel features	0	0	0	-	-
117	22.5	Royal Mail tunnels	0	0	0	-	-

118	22.6	Historical railways	0	0	0	-	-
118	22.7	Railways	0	0	0	-	-
118	22.8	Crossrail 1	0	0	0	0	-
118	22.9	Crossrail 2	0	0	0	0	-
118	22.10	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 31/05/2021

Site Area: 168.88ha

Recent site history - 2018 aerial photograph



Capture Date: 15/05/2018

Site Area: 168.88ha

Recent site history - 2015 aerial photograph



Capture Date: 03/07/2015

Site Area: 168.88ha

Recent site history - 2007 aerial photograph



Capture Date: 18/09/2007

Site Area: 168.88ha

Recent site history - 1999 aerial photograph



Capture Date: 11/07/1999

Site Area: 168.88ha

1 Past land use



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

1.1 Historical industrial land uses

Records within 500m	18

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Airfield**	**1955**	**1573815**

ID	Location	Land use	Dates present	Group ID
2	**On site**	**Pump House**	**1979**	**1613257**
A	**On site**	**Corn Mill**	**1886**	**1590200**
A	**On site**	**Unspecified Disused Mill**	**1955**	**1595187**
A	**On site**	**Unspecified Mill**	**1904 - 1948**	**1702684**
A	**On site**	**Unspecified Mill**	**1904**	**1726173**
B	20m SE	Gravel Pit	1904	1741591
B	20m SE	Gravel Pit	1904 - 1948	1661945
B	21m SE	Gravel Pit	1955	1637974
C	238m E	Unspecified Pit	1979	1639942
C	238m E	Unspecified Pit	1955	1707388
C	240m E	Unspecified Pit	1904 - 1948	1684706
D	285m SW	Sewage Works	1979	1577568
D	288m SW	Unspecified Tanks	1979	1580754
7	442m NE	Unspecified Depot	1979	1583592
E	485m S	Smithy	1955	1720522
E	486m S	Smithy	1886 - 1904	1746822
E	486m S	Smithy	1904 - 1948	1683016

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	**3**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
D	319m SW	Unspecified Tank	1975	256672

ID	Location	Land use	Dates present	Group ID
5	332m S	Unspecified Tanks	1975	262250
6	408m NW	Unspecified Tank	1975	256671

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	2

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14 >**

ID	Location	Land use	Dates present	Group ID
3	92m W	Electricity Substation	1975	149435
4	100m W	Electricity Substation	1975	149436

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m	0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.5 Historical garages

Records within 500m	0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-

grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m	0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

This data is sourced from Ordnance Survey / Groundsure / other sources.

2 Past land use - un-grouped



Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

2.1 Historical industrial land uses

Records within 500m	23

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 18 >**

ID	Location	Land Use	Date	Group ID
1	**On site**	**Airfield**	**1955**	**1573815**
2	**On site**	**Pump House**	**1979**	**1613257**
A	**On site**	**Unspecified Mill**	**1948**	**1702684**

ID	Location	Land Use	Date	Group ID
A	**On site**	**Unspecified Mill**	**1904**	**1702684**
A	**On site**	**Corn Mill**	**1886**	**1590200**
A	**On site**	**Unspecified Mill**	**1904**	**1726173**
A	**On site**	**Unspecified Disused Mill**	**1955**	**1595187**
B	20m SE	Gravel Pit	1904	1741591
B	20m SE	Gravel Pit	1948	1661945
B	20m SE	Gravel Pit	1904	1661945
B	21m SE	Gravel Pit	1955	1637974
C	238m E	Unspecified Pit	1955	1707388
C	238m E	Unspecified Pit	1979	1639942
C	240m E	Unspecified Pit	1948	1684706
C	240m E	Unspecified Pit	1904	1684706
D	285m SW	Sewage Works	1979	1577568
D	288m SW	Unspecified Tanks	1979	1580754
7	442m NE	Unspecified Depot	1979	1583592
E	485m S	Smithy	1955	1720522
E	486m S	Smithy	1904	1746822
E	486m S	Smithy	1948	1683016
E	486m S	Smithy	1904	1683016
E	487m S	Smithy	1886	1746822

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**3**

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
D	319m SW	Unspecified Tank	1975	256672
5	332m S	Unspecified Tanks	1975	262250
6	408m NW	Unspecified Tank	1975	256671

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	2

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'.

Features are displayed on the Past land use - un-grouped map on **page 18 >**

ID	Location	Land Use	Date	Group ID
3	92m W	Electricity Substation	1975	149435
4	100m W	Electricity Substation	1975	149436

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.

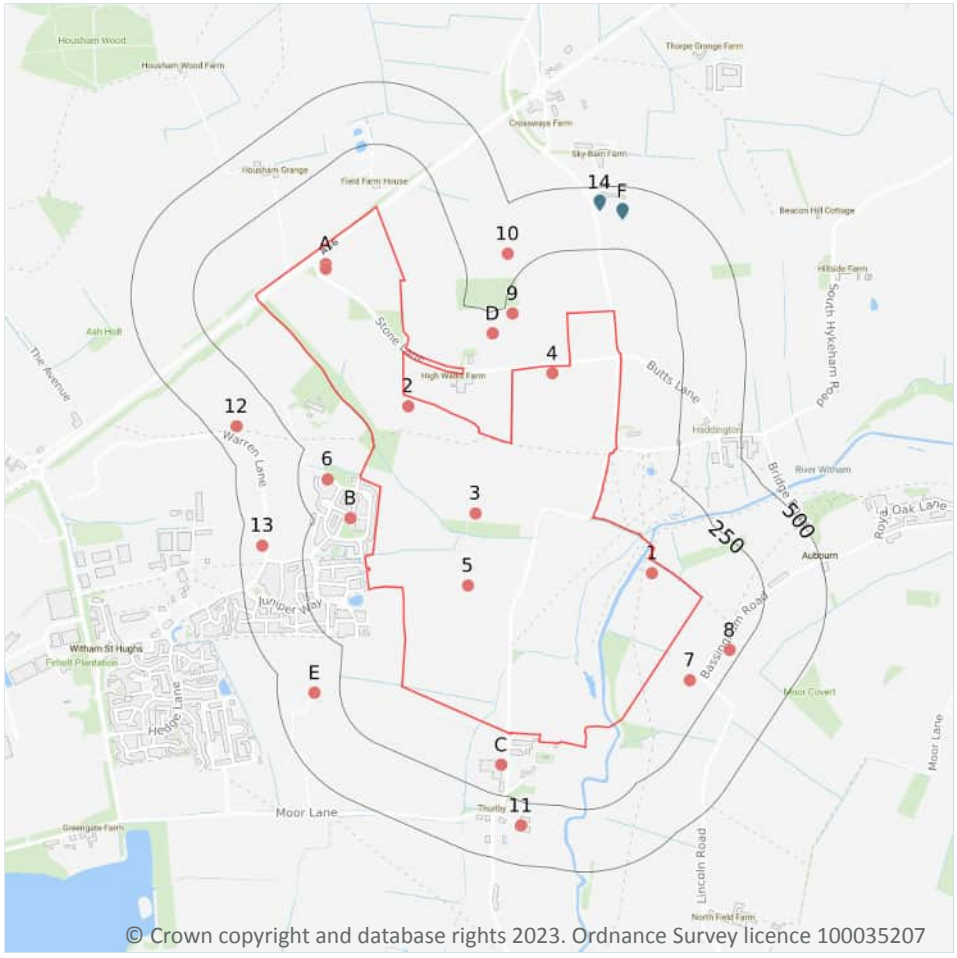
2.5 Historical garages

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)

Licensed 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	0

Waste site records derived from Local Authority planning records and high detail historical mapping.

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m	4

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 21 >**

ID	Location	Details		
F	398m NE	Site Name: Haddington Lane (Transfer Station) Site Address: Haddington Lane, Auborn, Nr Lincoln, Lincs, LN5 9EL Correspondence Address: L C R Highways, Haddington Lane, Aubourn, Lincoln, Lincs, LN5 9FE	Type of Site: Transfer Station taking Non-Biodegradable Wastes Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LIN028 EPR reference: - Operator: Lincolnshire County Council Waste Management licence No: 73090 Annual Tonnage: 5000	Issue Date: 28/07/2000 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

ID	Location	Details		
F	398m NE	Site Name: Haddington Lane (Transfer Station) Site Address: Sky Lane, Auborn, Lincoln, Lincolnshire, LN5 9FE Correspondence Address: -	Type of Site: Transfer Station taking Non-Biodegradable Wastes Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LCR002 EPR reference: EA/EPR/SP3292NU/V003 Operator: Lcr Highways Ltd Waste Management licence No: 73090 Annual Tonnage: 5000	Issue Date: 28/07/2000 Effective Date: 15/07/2004 Modified: 03/05/2005 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
F	398m NE	Site Name: Haddington Lane (Transfer Station) Site Address: L C R Highways Limited, Sky Lane, Aubourn, Lincoln, Lincolnshire, LN5 9FE Correspondence Address: -	Type of Site: Transfer Station taking Non-Biodegradable Wastes Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 645187 EPR reference: EA/EPR/SP3292NU Operator: L C R Highways Limited Waste Management licence No: 73090 Annual Tonnage: 5000	Issue Date: 28/07/2000 Effective Date: 28/07/2000 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: 28/07/2000 Status: Expired
14	435m N	Site Name: Sky Lane Site Address: Ringway Infrastructure Services Limited, (formerly Sky Lane, Sky Lane, Aubourn, Lincoln, Lincolnshire, LN5 9FE Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 646511 EPR reference: EA/EPR/HP3092NN Operator: Ringway Infrastructure Services Limited Waste Management licence No: 73198 Annual Tonnage: 0	Issue Date: 04/05/2005 Effective Date: 04/05/2005 Modified: - Surrendered Date: 04/05/2005 Expiry Date: - Cancelled Date: 04/05/2005 Status: Surrendered

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m	**35**

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 21 >**

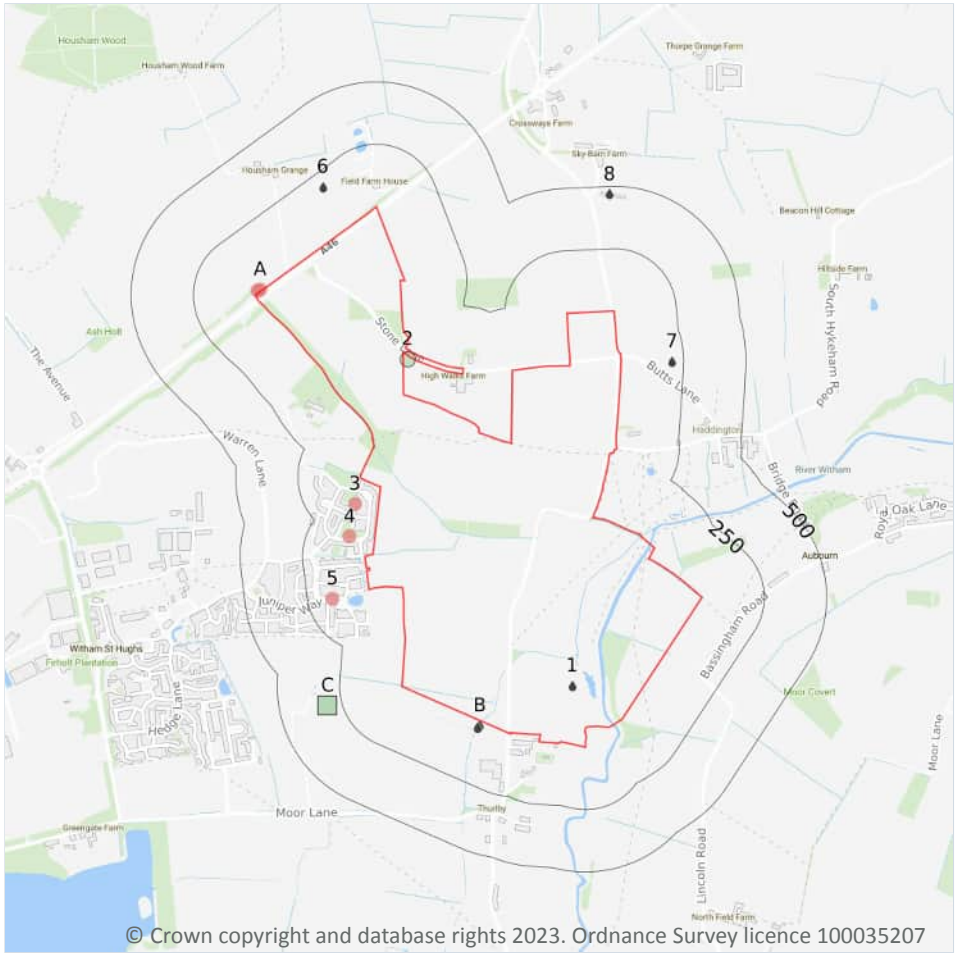
ID	Location	Site	Reference	Category	Sub-Category	Description
1	**On site**	**-**	**WEX111023**	**Storing waste exemption**	**On a farm**	**Storage of sludge**
2	**On site**	**-**	**WEX111124**	**Storing waste exemption**	**On a farm**	**Storage of sludge**
3	**On site**	**-**	**WEX102048**	**Storing waste exemption**	**On a farm**	**Storage of sludge**
4	**On site**	**Land at SK9092063250**	**EPR/CE5046EG/A001**	**Storing waste exemption**	**Non-Agricultural Waste Only**	**Storage of sludge**
5	**On site**	**Land at SK9058062400**	**EPR/CE5346EZ/A001**	**Storing waste exemption**	**Non-Agricultural Waste Only**	**Storage of sludge**
A	**On site**	**Land at SK9001063690**	**EPR/FE5746EP/A001**	**Storing waste exemption**	**Non-Agricultural Waste Only**	**Storage of sludge**
A	**On site**	**-**	**WEX322896**	**Storing waste exemption**	**On a farm**	**Storage of sludge**
B	107m W	10 Cheshire Lane Lincoln Lincolnshire LN6 9GE	EPR/CF0902WM/A001	Disposing of waste exemption	Non-Agricultural Waste Only	Burning waste in the open
B	107m W	10 Cheshire Lane Lincoln Lincolnshire LN6 9GE	EPR/CF0902WM/A001	Treating waste exemption	Non-Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of agricultural waste consisting of plant tissue under a Plant Health notice
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Treating waste exemption	Agricultural Waste Only	Aerobic composting and associated prior treatment

ID	Location	Site	Reference	Category	Sub-Category	Description
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Treating waste exemption	Agricultural Waste Only	Treatment of sheep dip for disposal
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Use of waste in construction
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Spreading waste on agricultural land to confer benefit
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Spreading of plant matter to confer benefit
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Incorporation of ash into soil
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Pig and poultry ash
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Burning of waste as a fuel in a small appliance
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
C	133m S	Middle Farm LINCOLN LN5 9EG	EPR/FE5653JJ/A001	Using waste exemption	Agricultural Waste Only	Use of waste to manufacture finished goods
6	135m W	49, GIBSON GREEN, WITHAM ST. HUGHS, LINCOLN, LN6 9GA	WEX158957	Disposing of waste exemption	Not on a Farm	Burning waste in the open
7	140m SE	-	WEX156073	Storing waste exemption	On a Farm	Storage of sludge
D	167m N	-	WEX239190	Storing waste exemption	On a farm	Storage of sludge
D	167m N	-	WEX249646	Storing waste exemption	On a farm	Storage of sludge
8	208m SE	-	WEX156080	Storing waste exemption	On a Farm	Storage of sludge
9	220m N	-	WEX102057	Storing waste exemption	On a farm	Storage of sludge
10	337m N	-	WEX210981	Storing waste exemption	On a Farm	Storage of sludge
11	346m S	SOUTH FARM, THURLBY, LINCOLN, LN5 9EG	WEX208124	Using waste exemption	On a Farm	Use of waste in construction

ID	Location	Site	Reference	Category	Sub-Category	Description
E	353m SW	Swinderby STW Off Moor Lane Lincoln LN69QB	EPR/UE5581NN/A001	Treating waste exemption	Non-Agricultural Waste Only	Screening and blending of waste
E	353m SW	Swinderby STW Off Moor Lane Lincoln LN69QB	EPR/UE5581NN/A001	Using waste exemption	Non-Agricultural Waste Only	Use of waste in construction
12	412m W	-	WEX274732	Using waste exemption	Not on a farm	Use of waste in construction
13	416m W	-	WEX274210	Using waste exemption	Not on a farm	Use of waste in construction

This data is sourced from the Environment Agency and Natural Resources Wales.

4 Current industrial land use



Site Outline

Search buffers in metres (m)

Recent industrial land uses

Licensed Discharges to controlled waters

List 2 Dangerous Substances

Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m	5

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Company	Address	Activity	Category
A	8m NW	Pylon	Lincolnshire, LN6	Electrical Features	Infrastructure and Facilities
A	10m NW	Mast	Lincolnshire, LN6	Telecommunications Features	Infrastructure and Facilities
3	95m W	Electricity Sub Station	Lincolnshire, LN6	Electrical Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
4	101m W	Electricity Sub Station	Lincolnshire, LN6	Electrical Features	Infrastructure and Facilities
5	152m SW	Electricity Sub Station	Lincolnshire, LN6	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.4 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m	0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m	0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m	0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m	0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m	0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	0

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m	0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m	12

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 27 >**

ID	Location	Address	Details	
1	**On site**	**ELMTREE, HADDINGTON**	**Effluent Type: UNSPECIFIED** **Permit Number: PR3NFA1190** **Permit Version: 1** **Receiving Water: -**	**Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY)** **Issue date: 07/06/1963** **Effective Date: 07/06/1963** **Revocation Date: 12/03/1991**
B	19m S	SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 2 Receiving Water: unnamed tributary River Witham	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 14/10/2008 Effective Date: 01/04/2009 Revocation Date: 28/03/2010
B	19m S	SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 5 Receiving Water: unnamed tributary River Witham	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/03/2010 Effective Date: 01/01/2013 Revocation Date: 30/03/2015

ID	Location	Address	Details	
B	19m S	SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 3 Receiving Water: unnamed tributary River Witham	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/03/2010 Effective Date: 29/03/2010 Revocation Date: 31/12/2012
B	19m S	SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 1 Receiving Water: unnamed tributary River Witham	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 24/10/1997 Effective Date: 24/10/1997 Revocation Date: 31/03/2009
B	32m S	SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 4 Receiving Water: unnamed tributary River Witham	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/03/2010 Effective Date: 31/03/2015 Revocation Date: 11/01/2017
B	32m S	SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 4 Receiving Water: unnamed tributary River Witham	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/03/2010 Effective Date: 31/03/2015 Revocation Date: 11/01/2017
B	32m S	SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 6 Receiving Water: unnamed tributary River Witham	Status: VARIED UNDER EPR 2010 Issue date: 12/01/2017 Effective Date: 12/01/2017 Revocation Date: -
B	32m S	SWINDERBY(EXRAF) STW, SWINDERBY, LINCS, LN5 9EG	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: ANNNF13397 Permit Version: 6 Receiving Water: unnamed tributary River Witham	Status: VARIED UNDER EPR 2010 Issue date: 12/01/2017 Effective Date: 12/01/2017 Revocation Date: -

ID	Location	Address	Details	
6	192m NW	HOUSE AT FIELD HOUSE FARM, THE FOSSE WAY, AUBOURN, LINCOLN	Effluent Type: UNSPECIFIED Permit Number: PR3LFU1040 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 17/05/1979 Effective Date: 17/05/1979 Revocation Date: 01/10/1996
7	202m NE	WATER SPORTS CENTRE, MOOR LANE, THORPE ON THE HILL, LINCS	Effluent Type: UNSPECIFIED Permit Number: PR3LF8 Permit Version: 1 Receiving Water: Into Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 14/09/1984 Effective Date: 14/09/1984 Revocation Date: 15/05/1997
8	467m N	LINCS C C HIGHWAYS DEP, AUBOURN, LINCOLNSHIRE, LN5 9FE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRNNF01279 Permit Version: 1 Receiving Water: Unnamed watercourse	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 20/07/1989 Effective Date: 20/07/1989 Revocation Date: 04/02/1992

This data is sourced from the Environment Agency and Natural Resources Wales.

4.14 Pollutant release to surface waters (Red List)

Records within 500m	**0**

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m	**0**

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m	**0**

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m	2

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.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Name	Status	Receiving Water	Authorised Substances
C	308m SW	Danwood Group Limited	Not Active	Na	pH
C	308m SW	Swinderby(exraf) Stw	Not Active	-	-

This data is sourced from the Environment Agency and Natural Resources Wales.

4.18 Pollution Incidents (EA/NRW)

Records within 500m	1

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 27 >**

ID	Location	Details	
2	12m NW	Incident Date: 04/07/2001 Incident Identification: 13679 Pollutant: Specific Waste Materials Pollutant Description: Household Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m	0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

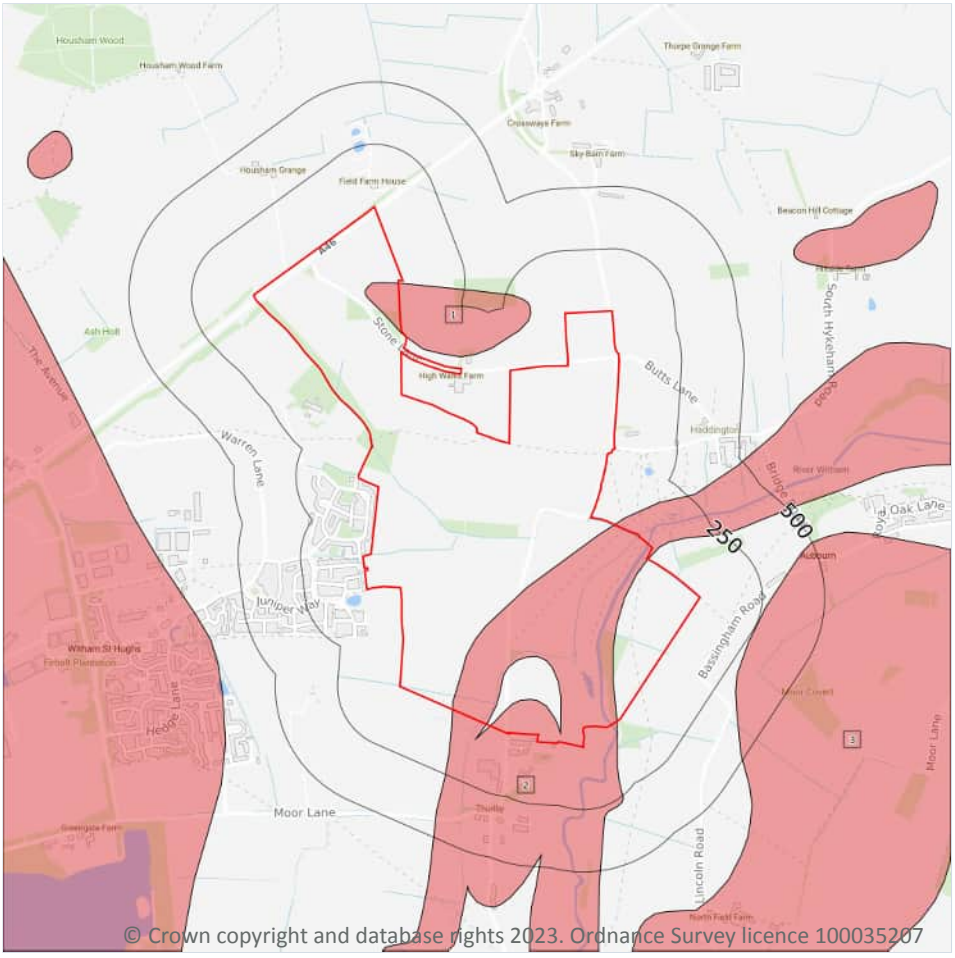
4.21 Pollution inventory radioactive waste

Records within 500m	0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

5 Hydrogeology - Superficial aquifer



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.

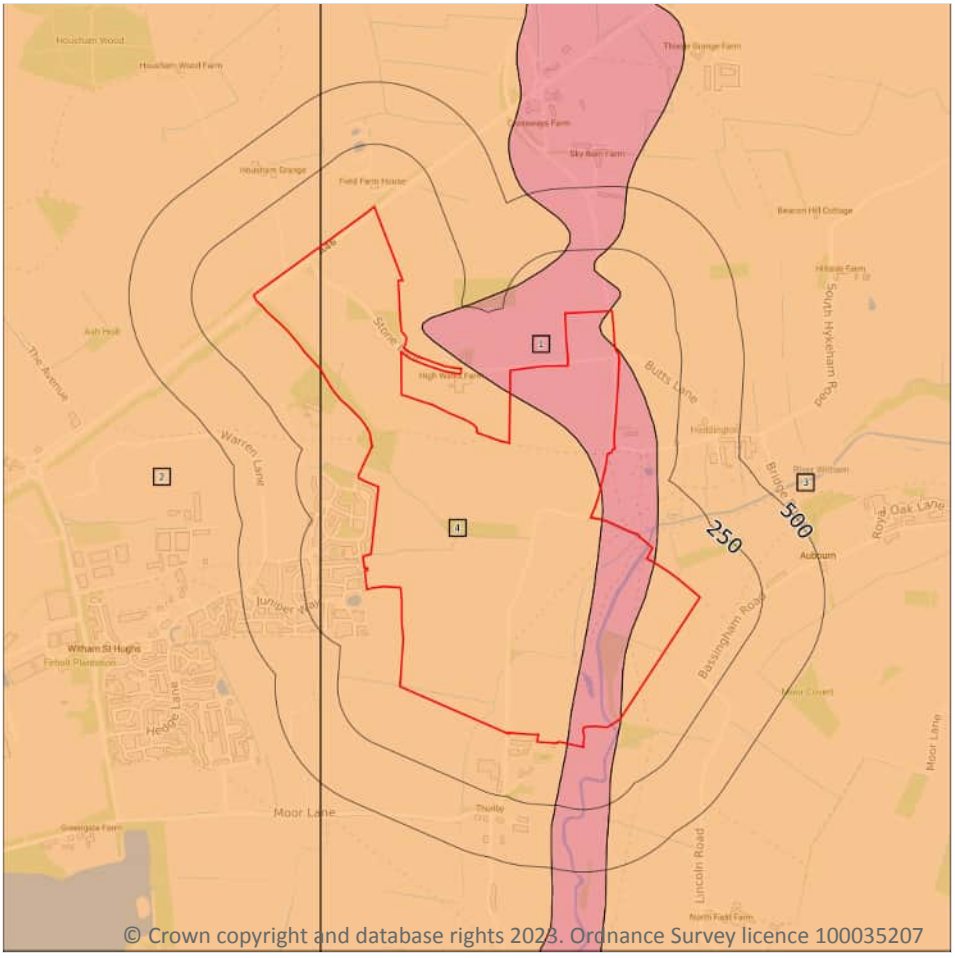
Features are displayed on the Hydrogeology map on **page 35 >**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

ID	Location	Designation	Description
3	254m SE	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

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	4

Aquifer status of groundwater held within bedrock geology.

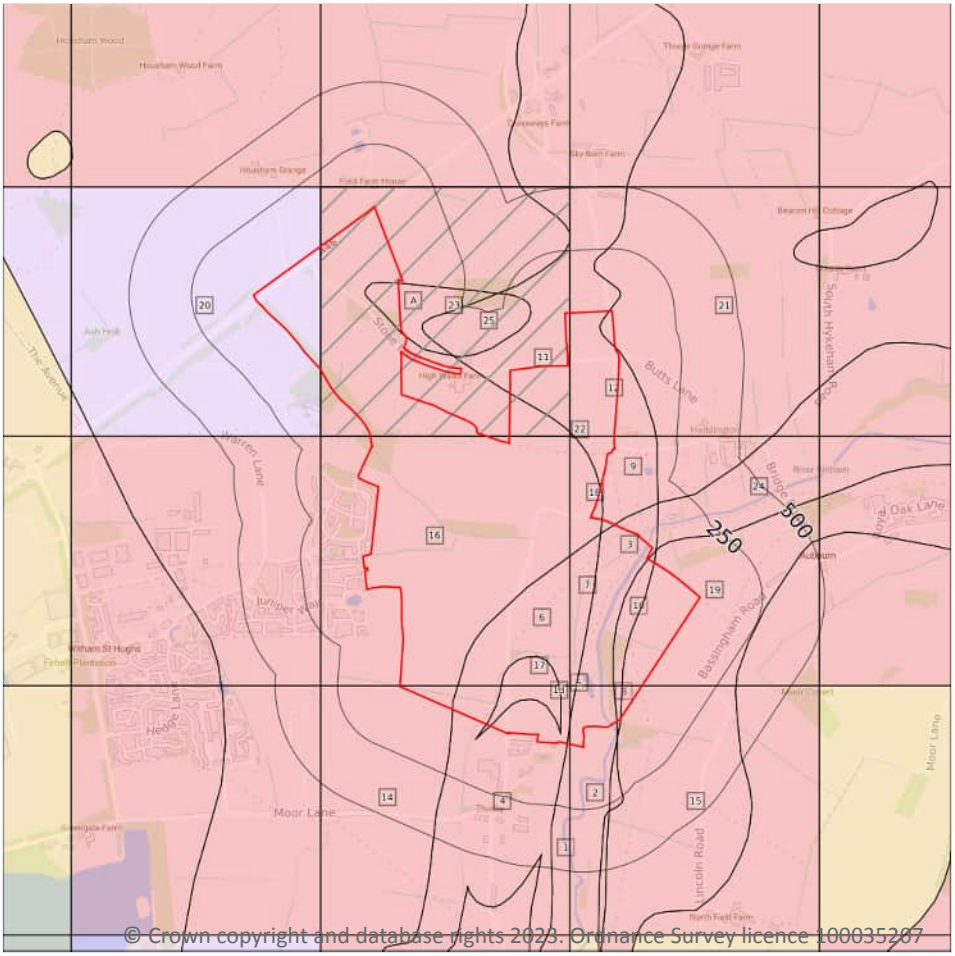
Features are displayed on the Bedrock aquifer map on **page 37 >**

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers

ID	Location	Designation	Description
3	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**
4	**On site**	**Secondary B**	**Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeablehorizons and weathering. These are generally the water-bearing parts of the former non-aquifers**

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Groundwater vulnerability



Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

5.3 Groundwater vulnerability

Records within 50m	26

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 39 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
7	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
8	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
11	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
12	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
13	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
14	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
15	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
16	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
17	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
18	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
19	On site	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
20	On site	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
21	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
22	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
A	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
A	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year**	**Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
24	15m E	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
25	46m N	Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: High Aquifer type: Secondary 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
23	**Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.**	**7.000000000000001%**

This data is sourced from the British Geological Survey and the Environment Agency.

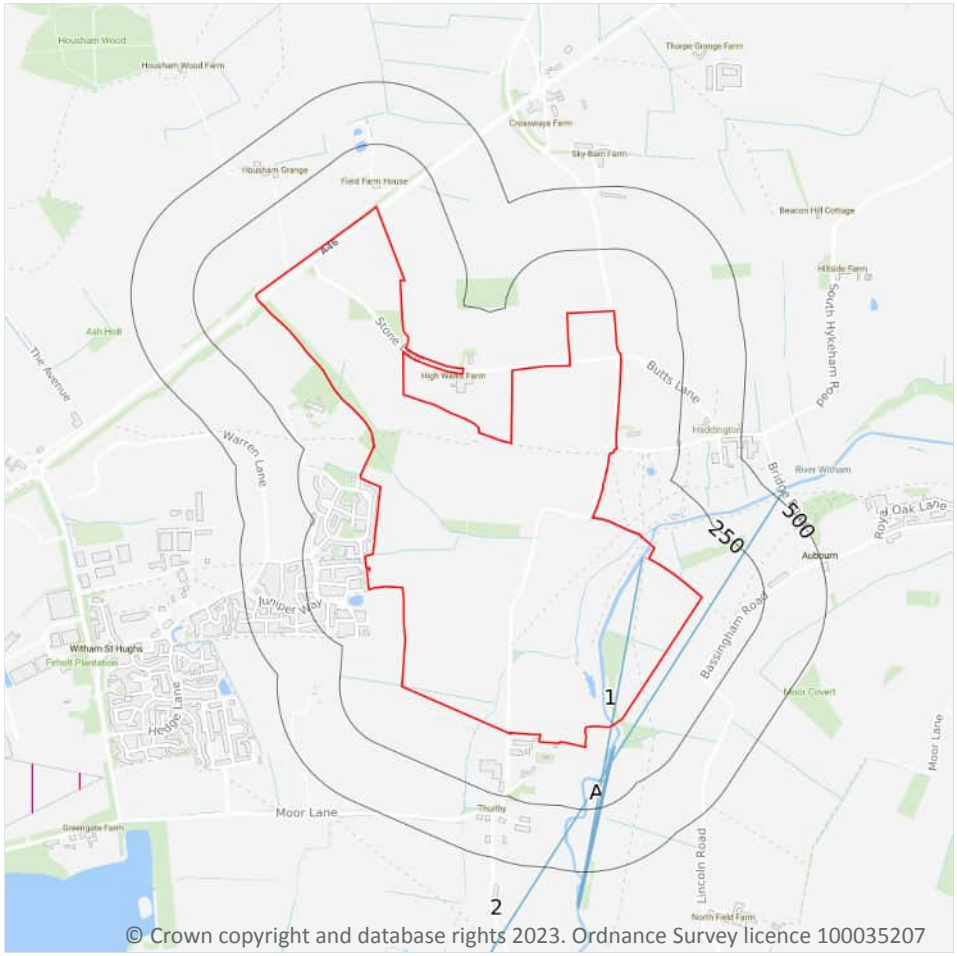
5.5 Groundwater vulnerability- local information

Records on site	0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk ↗.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

- Source Protection Zone 1 — Inner catchment
- Source Protection Zone 2 — Outer catchment
- Source Protection Zone 3 — Total catchment
- Source Protection Zone 4 — Zone of Special Interest
- Source Protection Zone 1c — Inner catchment - confined aquifer
- Source Protection Zone 2c — Outer catchment - confined aquifer
- Source Protection Zone 3c — Total catchment - confined aquifer
- Drinking water abstraction licences
- Drinking water abstraction licences — Polygon features
- Drinking water abstraction licences — Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m	3

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 45 >**

ID	Location	Details	
3	1252m SW	Status: Active Licence No: MD/028/0069/038 Details: Dewatering Direct Source: Groundwater Midlands Region Point: ABSTRACTION AREA EDGED IN RED AT SWINDERBY QUARRY Data Type: Poly4 Name: CEMEX UK MATERIALS LIMITED Easting: 487181 Northing: 361591	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: NPS/NA/000078 Original Start Date: 14/03/2022 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 14/03/2022 Version End Date: -
-	1853m N	Status: Historical Licence No: 4/30/03/*G/0022 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: RICHARDSON WELL THORPE-O-T-H. Data Type: Point Name: RICHARDSON Easting: 491000 Northing: 365600	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/12/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1965 Version End Date: -
-	1970m N	Status: Historical Licence No: 4/30/03/*G/0109 Details: Spray Irrigation - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: CATCHPIT - THORPE ON THE HILL Data Type: Point Name: SHELDON Easting: 489868 Northing: 365860	Annual Volume (m^3): 35000 Max Daily Volume (m^3): 1380 Original Application No: - Original Start Date: 22/04/2005 Expiry Date: 31/03/2016 Issue No: 2 Version Start Date: 16/08/2012 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	**12**

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 45 >**

ID	Location	Details	
1	**On site**	**Status: Active** **Licence No: AN/030/0003/007** **Details: Trickle Irrigation - Direct** **Direct Source: SURFACE WATER SOURCE OF SUPPLY** **Point: BETWEEN POINTS E AND F, RIVER WITHAM, BASSINGHAM** **Data Type: Line** **Name: J & J Burnett Limited** **Easting: 491024** **Northing: 361105**	**Annual Volume (m^3): 18920** **Max Daily Volume (m^3): 1000** **Original Application No: NPS/NA/000192** **Original Start Date: 14/03/2022** **Expiry Date: 31/03/2028** **Issue No: 1** **Version Start Date: 14/03/2022** **Version End Date: -**
2	47m SE	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - SCOTWATER TO AUBOURN BR Data Type: Line Name: H W SMITH & SONS (CARLTON) LTD Easting: 489290 Northing: 358750	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 4 Version Start Date: 16/12/2011 Version End Date: -
A	80m SE	Status: Historical Licence No: 4/30/03/*S/0102 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
A	80m SE	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM -THURLBY Data Type: Line Name: C A SHAW FARMS Easting: 491025 Northing: 361104	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
A	94m SE	Status: Historical Licence No: 4/30/03/*S/0059 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 491020 Northing: 361120	Annual Volume (m^3): 20457 Max Daily Volume (m^3): 900 Original Application No: - Original Start Date: 01/06/1983 Expiry Date: - Issue No: 100 Version Start Date: 01/12/1993 Version End Date: -

ID	Location	Details	
-	1678m E	Status: Active Licence No: 4/30/03/*S/0021 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM, AUBOURN Data Type: Line Name: H & J NEVILE & SON Easting: 493070 Northing: 363000	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 764 Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1997 Version End Date: -
-	1678m E	Status: Active Licence No: 4/30/03/*S/0078 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - AUBOURN Data Type: Line Name: H & J NEVILE & SON Easting: 493070 Northing: 363000	Annual Volume (m^3): 36368 Max Daily Volume (m^3): 1023 Original Application No: NPS/WR/015027 Original Start Date: 01/07/1987 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2020 Version End Date: -
-	1886m E	Status: Active Licence No: 4/30/03/*S/0008 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM SOUTH HYKEHAM Data Type: Point Name: LARGE Easting: 493290 Northing: 363010	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 545.53 Original Application No: NA568 Original Start Date: 29/11/1965 Expiry Date: - Issue No: 101 Version Start Date: 12/01/2008 Version End Date: -
-	1892m E	Status: Historical Licence No: 4/30/03/*S/0008 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM SOUTH HYKEHAM Data Type: Point Name: LARGE Easting: 493300 Northing: 363000	Annual Volume (m^3): 9092 Max Daily Volume (m^3): 545.53 Original Application No: - Original Start Date: 01/11/1965 Expiry Date: - Issue No: 100 Version Start Date: 01/08/1995 Version End Date: -
-	1932m SE	Status: Active Licence No: 4/30/03/*S/0082 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: AUBOURN PUMP DRAIN WEST Data Type: Point Name: H & J NEVILE & SON Easting: 493300 Northing: 361600	Annual Volume (m^3): 7290 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 01/01/1990 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2004 Version End Date: -

ID	Location	Details	
-	1970m S	Status: Historical Licence No: 4/30/03/*S/0102 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - NORTON DISNEY TO BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 489296 Northing: 358716	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -
-	1970m S	Status: Historical Licence No: 4/30/03/*S/0102 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER WITHAM - NORTON DISNEY TO BASSINGHAM Data Type: Line Name: C A SHAW FARMS Easting: 489296 Northing: 358716	Annual Volume (m^3): 91000 Max Daily Volume (m^3): 1500 Original Application No: - Original Start Date: 21/05/2002 Expiry Date: 31/03/2022 Issue No: 5 Version Start Date: 16/07/2018 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	0

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m	0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

This data is sourced from the Environment Agency and Natural Resources Wales.

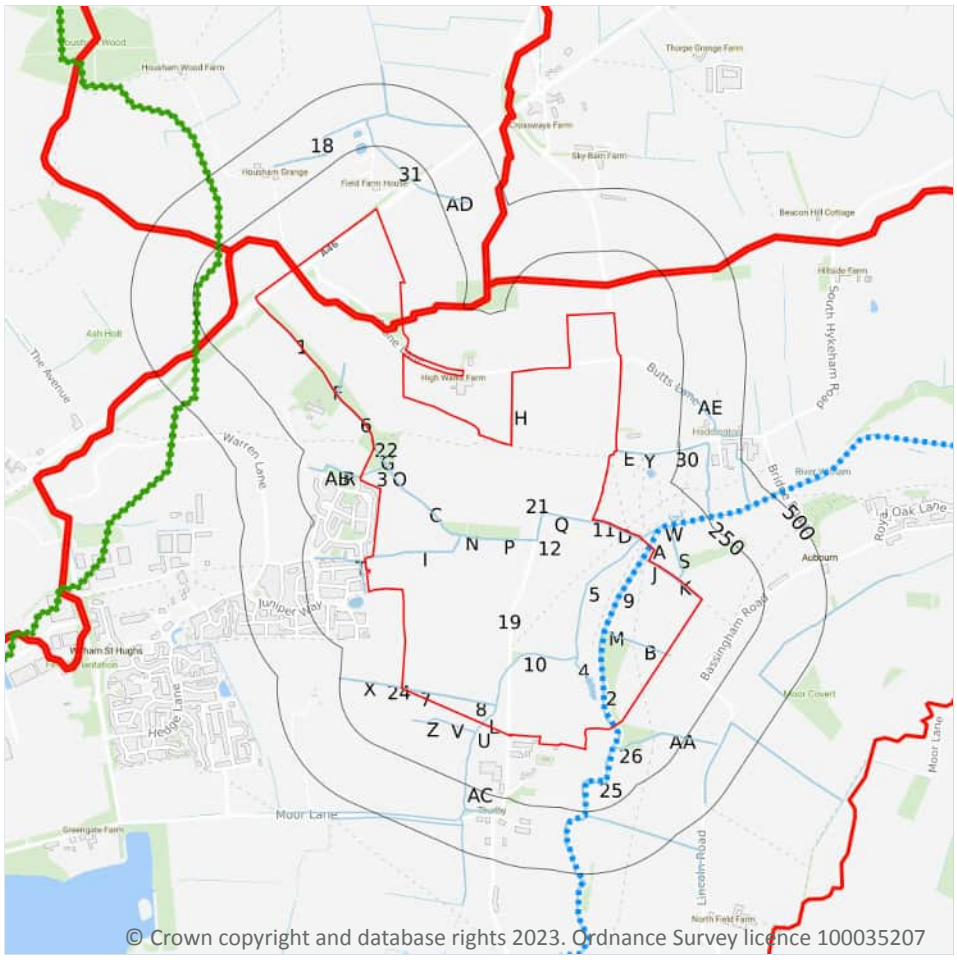
5.10 Source Protection Zones (confined aquifer)

Records within 500m	0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.

6 Hydrology



Site Outline

Search buffers in metres (m)

Water Network (OS MasterMap)

Surface water features (wider than 5m)

Surface water features (narrower than 5m)

WFD River, canal and surface water transfer water bodies

WFD Lake water bodies

WFD Transitional and coastal water bodies

WFD Surface water body catchments boundaries

WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m	**72**

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 51 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
1	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	-

ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
3	On site	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
4	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
8	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
9	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
10	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
11	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
12	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
M	**On site**	**Inland river not influenced by normal tidal action.**	**Not provided**	**Watercourse contains water year round (in normal circumstances)**	**-**
M	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
M	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
N	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
N	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
N	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
N	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
O	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
O	**On site**	**Inland river not influenced by normal tidal action.**	**Underground**	**Watercourse contains water year round (in normal circumstances)**	**-**
P	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
Q	**On site**	**Inland river not influenced by normal tidal action.**	**On ground surface**	**Watercourse contains water year round (in normal circumstances)**	**-**
R	1m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
22	2m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
S	5m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	16m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	41m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	41m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	43m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
V	43m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	64m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
24	66m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
25	71m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
26	71m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
X	71m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Y	72m NE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
Z	85m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
Z	87m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	88m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AA	91m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	92m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	114m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	River Witham
Y	130m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	134m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	146m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AB	149m W	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Y	154m E	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
Y	156m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AB	158m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	167m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
U	171m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AC	178m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
30	179m E	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
31	179m N	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
AD	192m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AE	219m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m	21

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 51 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	2

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 51 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
18	**On site**	**River**	**Boultham Catchwater Drain**	**GB105030062380**	**Witham Upper**	**Witham**
19	**On site**	**River**	**Witham - conf Cringle Bk to conf Brant**	**GB105030056780**	**Witham Upper**	**Witham**

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified **2**

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 51 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
20	**On site**	**River**	**Witham - conf Cringle Bk to conf Brant**	**GB105030056780 ↗**	**Moderate**	**Fail**	**Moderate**	**2019**
-	7434m NE	River	Boultham Catchwater Drain	GB105030062380 ↗	Moderate	Fail	Moderate	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site **1**

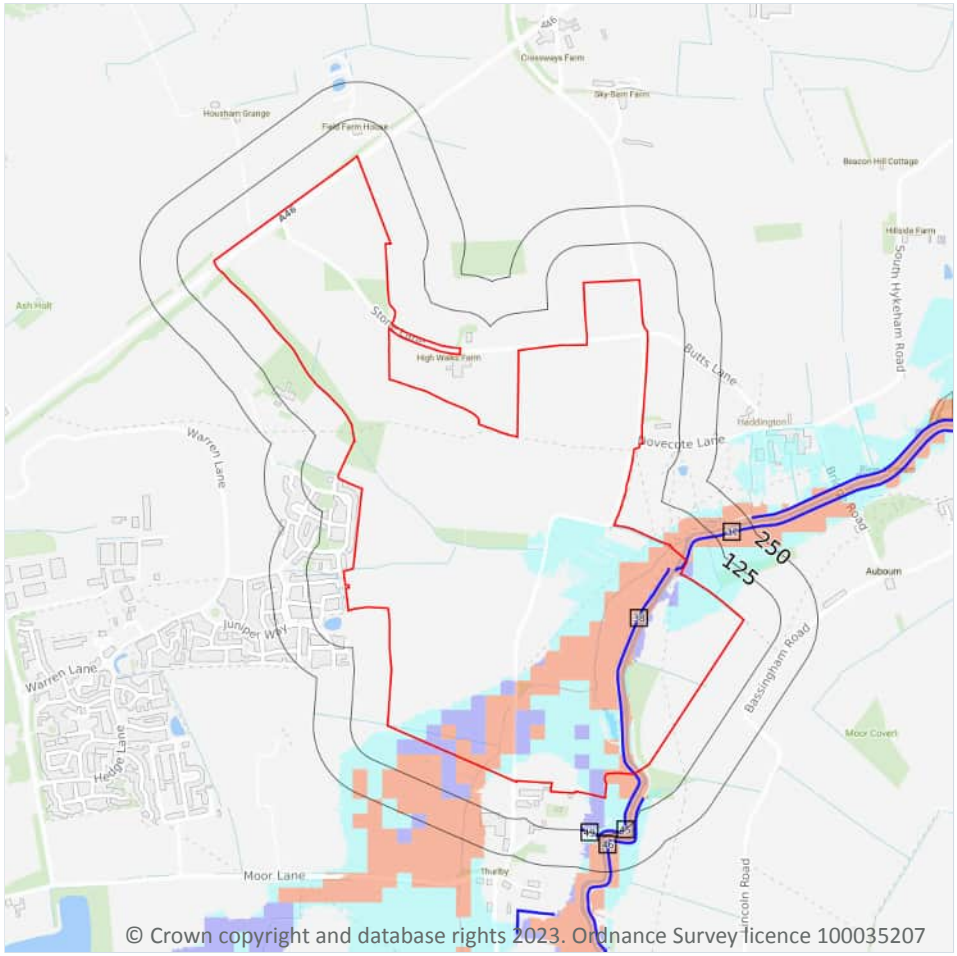
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

Features are displayed on the Hydrology map on **page 51 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
21	**On site**	**Witham Lias**	**GB40502G401400 ↗**	**Good**	**Good**	**Good**	**2019**

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

River and coastal flooding:

- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

7.1 Risk of flooding from rivers and the sea

Records within 50m	46

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).

Features are displayed on the River and coastal flooding map on **page 59 >**

Distance	Flood risk category
On site	**High**
0 - 50m	High

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	**6**

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.

Features are displayed on the River and coastal flooding map on **page 59 >**

ID	Location	Update
37	**On site**	**08/11/2022**
38	**On site**	**08/11/2022**
A	**On site**	**08/11/2022**
45	82m SE	08/11/2022
46	88m SE	08/11/2022
49	121m S	08/11/2022

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.

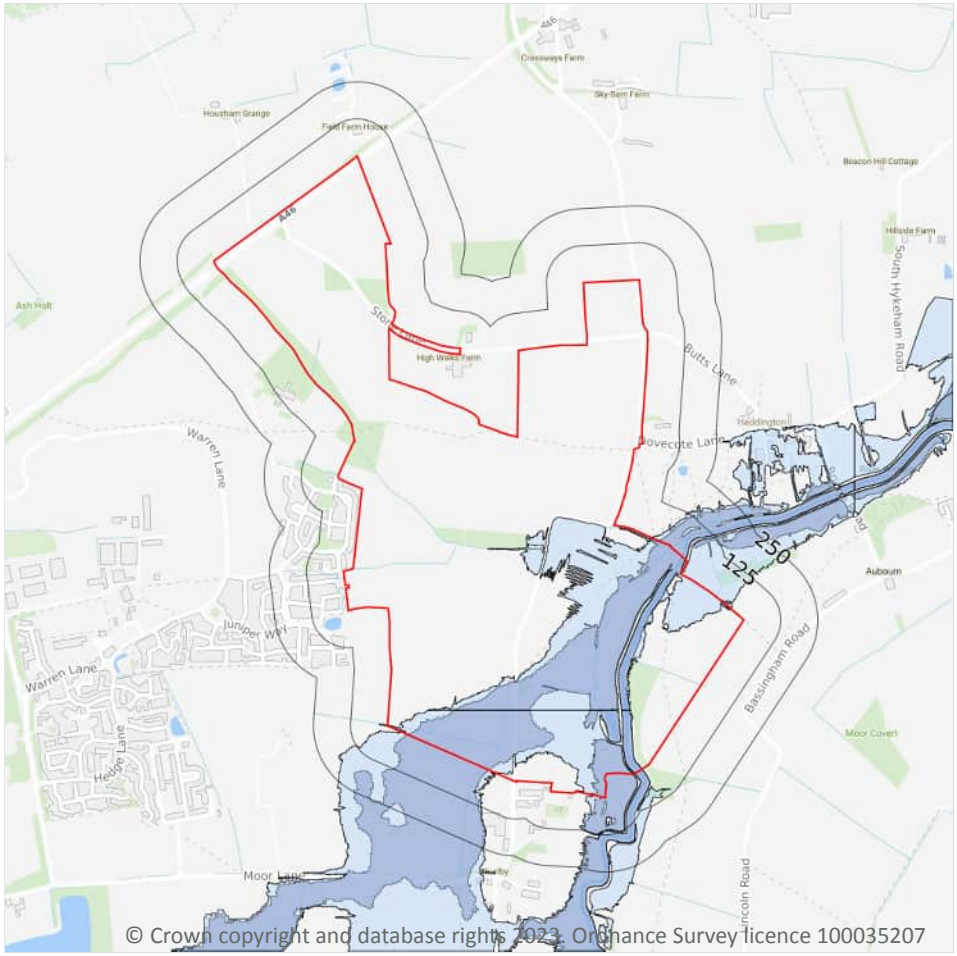
7.5 Flood Storage Areas

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	1

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.

Features are displayed on the River and coastal flooding map on **page 59 >**

Location	Type
On site	**Zone 2 - (Fluvial /Tidal Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

Records within 50m	1

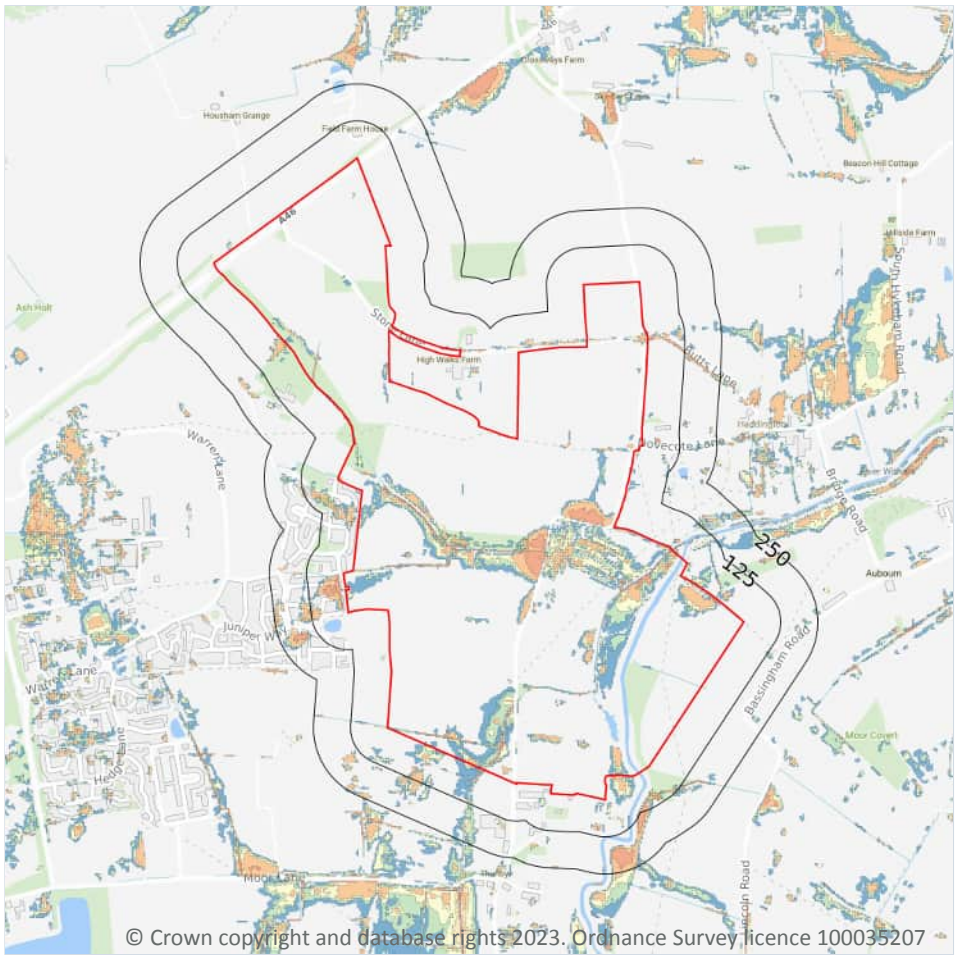
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 59 >**

Location	Type
On site	**Zone 3 - (Fluvial Models)**

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding



Site Outline
Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site	**1 in 30 year, Greater than 1.0m**
Highest risk within 50m	**1 in 30 year, Greater than 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 64 >**

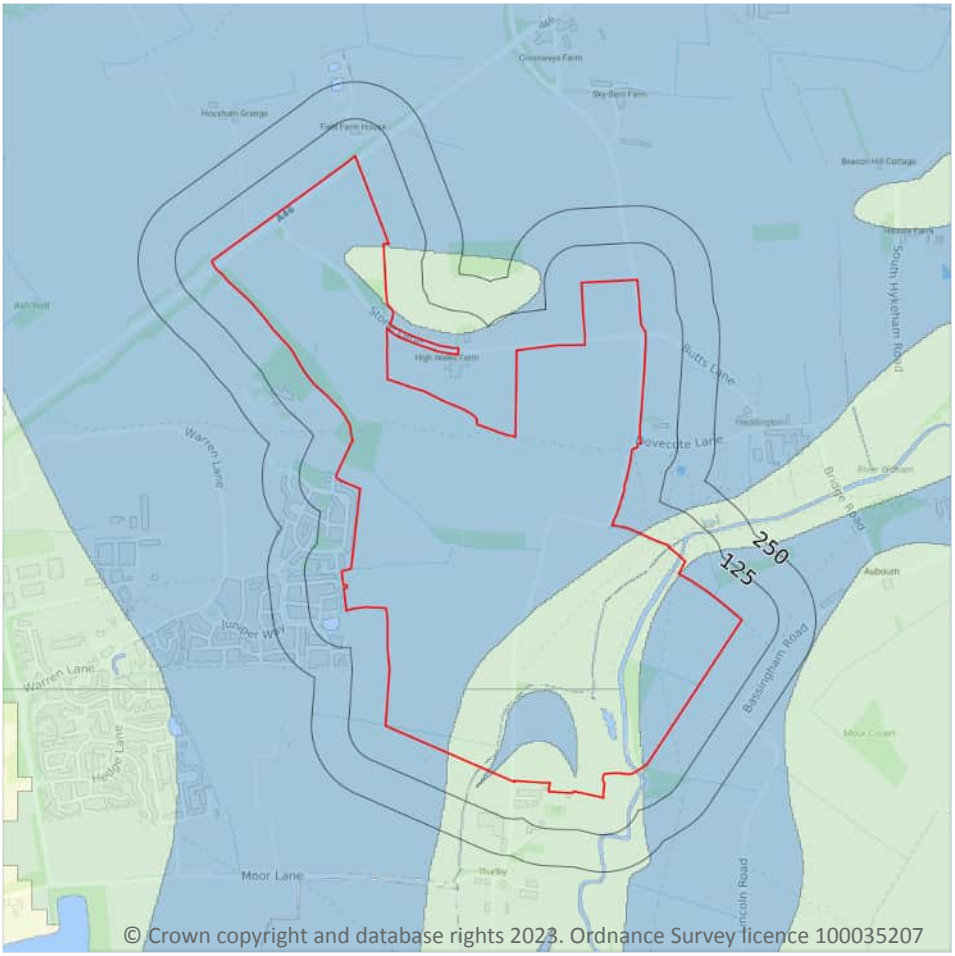
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



9.1 Groundwater flooding

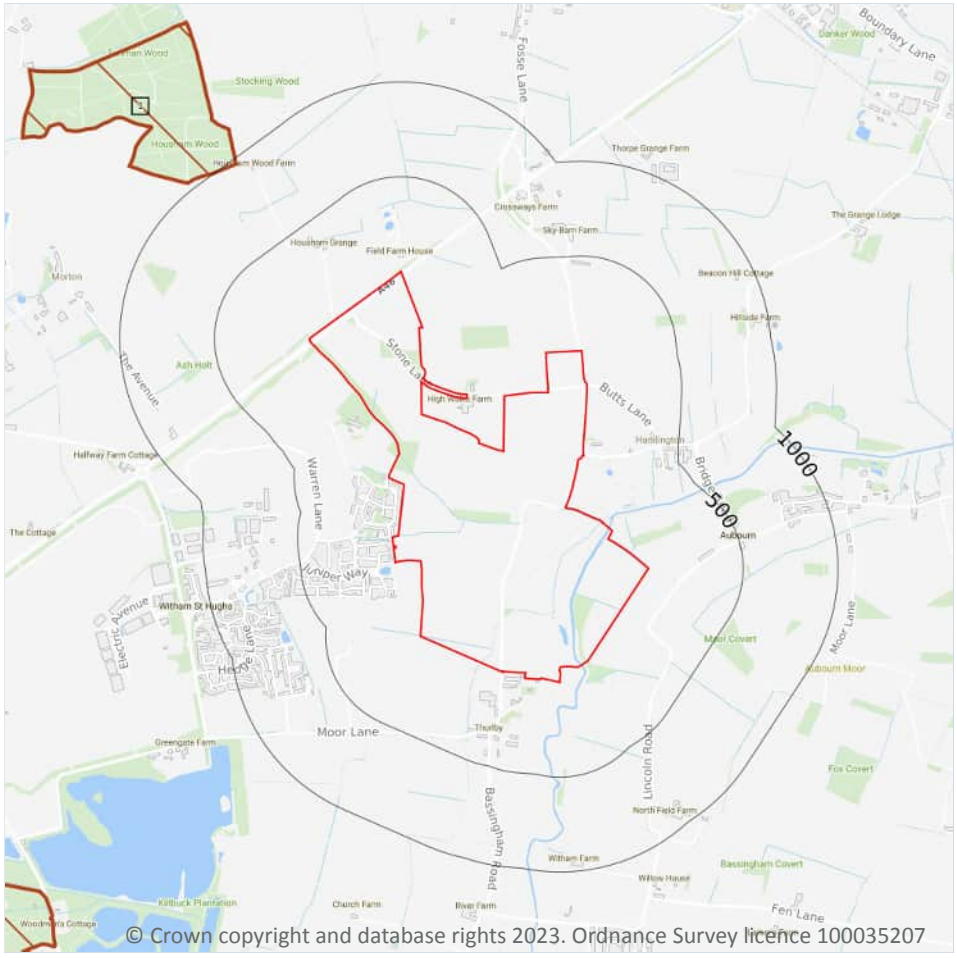
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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 66 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



Site Outline

Search buffers in metres (m)

Local Nature Reserves (LNR)

Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m	0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m	0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m	0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m	0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m	0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m	1

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 67 >**

ID	Location	Name	Woodland Type
1	972m NW	Tunman/housham Woods	Ancient Replanted Woodland

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m	0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m	0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m	0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m	0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m	0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m	0

Special Protection Areas (SPAs) are areas designated (or ‘classified’) under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m	0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m	2

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	**Lower Witham NVZ**	**Surface Water**	**375**	**Existing**
29m NW	The Fleet Lower Catchment (trib of Trent) NVZ	Surface Water	338	Existing

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units

10.17 SSSI Impact Risk Zones

Records on site	0

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.

This data is sourced from Natural England.

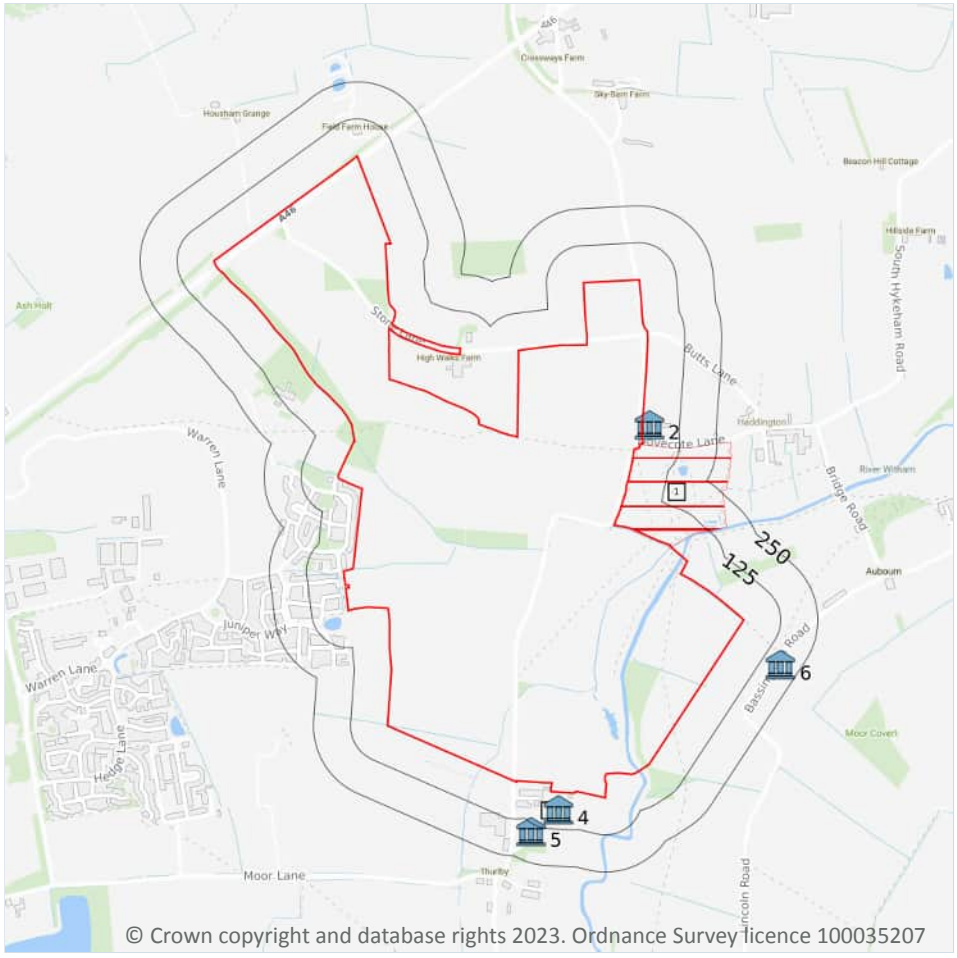
10.18 SSSI Units

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	4

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 73 >**

ID	Location	Name	Grade	Reference Number	Listed date
2	24m NE	Corner Farmhouse	II	1061953	22/12/1983
4	60m S	Church Of St Germain	II*	1061972	23/08/1967
5	151m S	Thurlby Hall And Outbuildings	II	1317332	23/08/1967
6	187m SE	Grange Cottage	II	1061951	22/12/1983

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m	0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m	2

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.

Features are displayed on the Visual and cultural designations map on **page 73 >**

ID	Location	Ancient monument name	Reference number
1	**On site**	**Hall Close: a medieval and post-medieval hall complex south of Dovecote Lane, with dovecote, gardens, fishponds, churchyard and cultivation remains**	**1021080**
3	57m S	Churchyard cross, St Germain's churchyard	1013082

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

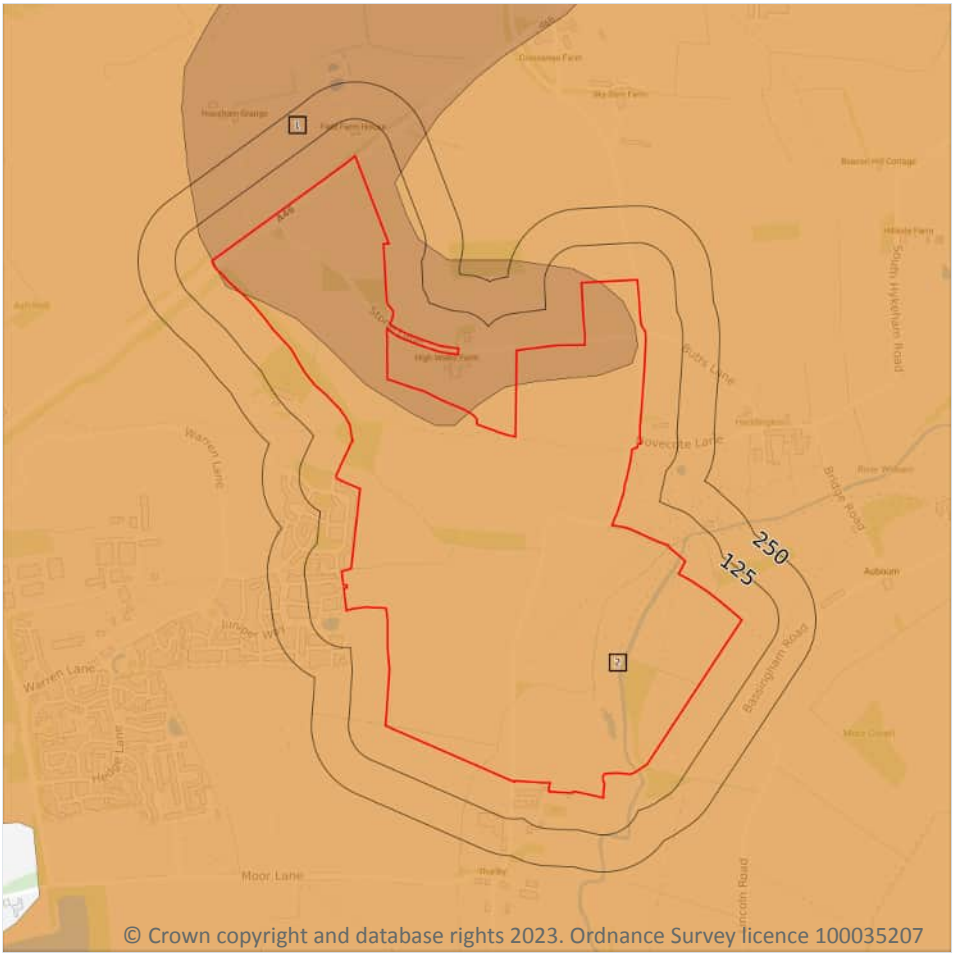
11.7 Registered Parks and Gardens

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


250
125
Warren Lane
Moor Lane
Bridge Road
Basingham Road
Dovecote Lane
Burrs Lane
South Hykeham Road
Ashbourn
Moor Green
Thurlby
Fulbeck
Fulbeck Heath
Fulbeck Fen
Fulbeck Fen Road
Housham Grange
Housham Farm
Boston Hill Cottage
Crossdyke Farm
Sky Barn Farm
Hall Farm House
Hall Farm
Hall Farm Cottages
Hall Farm Barn
Hall Farm Bungalow
Hall Farm Cottage
Hall Farm Lodge
Hall Farm Stables
Hall Farm Workshop
Hall Farm Yard
Hall Farm Yard Cottage
Hall Farm Yard Workshop
Hall Farm Yard Workshop
Hall Farm Yard Workshop

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	0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m	0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

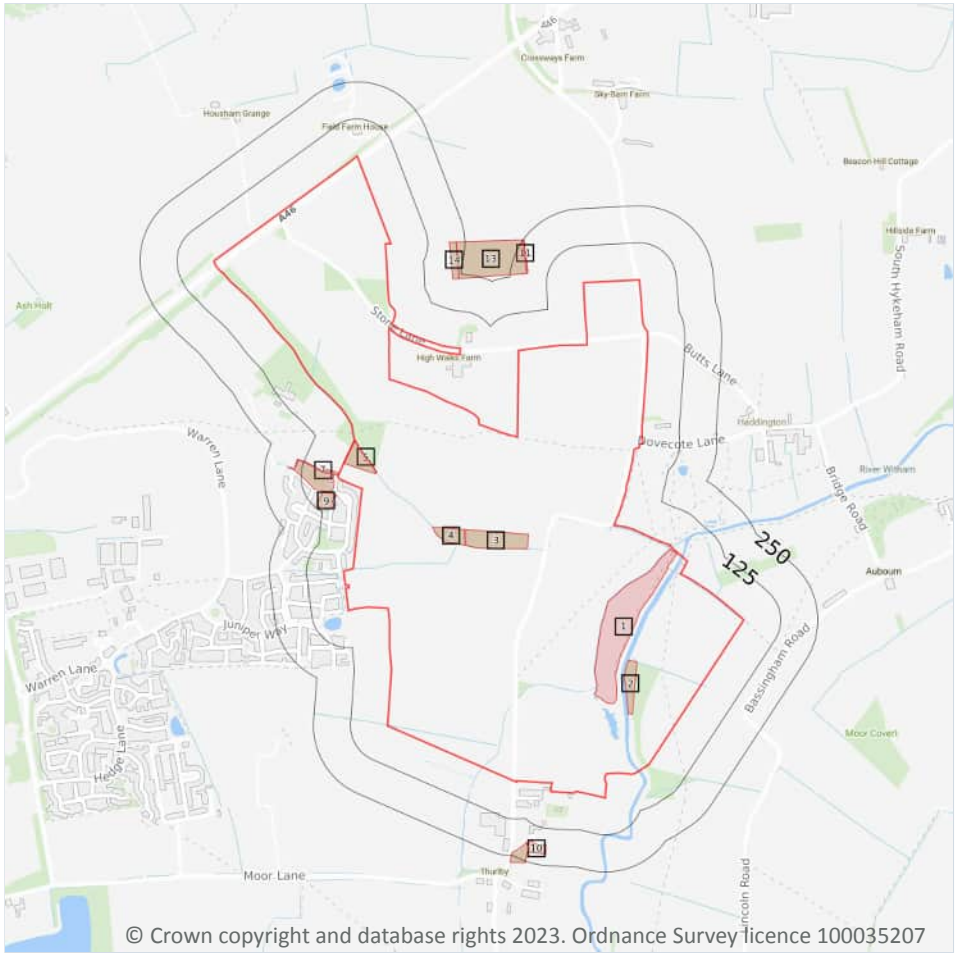
Records within 250m **9**

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	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**493402**	**Countryside Stewardship (Middle Tier)**	**01/01/2018**	**31/12/2022**
On site	**1021048**	**Countryside Stewardship (Middle Tier)**	**01/01/2021**	**31/12/2025**
On site	**1021048**	**Countryside Stewardship (Middle Tier)**	**01/01/2021**	**31/12/2025**
165m SE	493402	Countryside Stewardship (Middle Tier)	01/01/2018	31/12/2022

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	14

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 79 >**

ID	Location	Main Habitat	Other habitats
1	On site	Coastal and floodplain grazing marsh	Main habitat: CFPGM (INV > 50%); Additional: GQSIG (FEP 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

ID	Location	Main Habitat	Other habitats
5	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
6	**On site**	**Deciduous woodland**	**Main habitat: DWOOD (INV > 50%)**
7	1m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	16m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	54m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	175m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	191m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	193m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	195m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
14	198m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	**0**

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	**0**

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

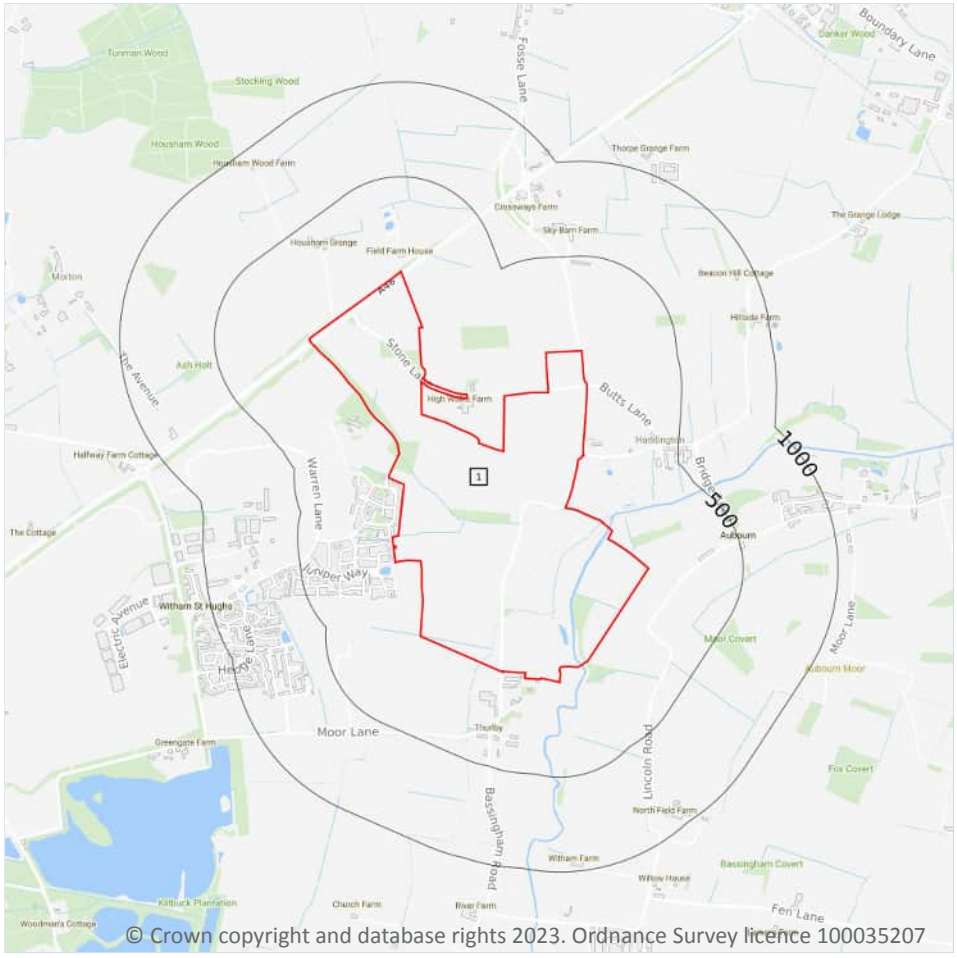
Records within 250m	**0**

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs

which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



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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 82 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**No coverage**	**No coverage**	**No coverage**	**No coverage**	**NoCov**

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Artificial and made ground

14.2 Artificial and made ground (10k)

Records within 500m	0

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Superficial

14.3 Superficial geology (10k)

Records within 500m	0

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m	0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

Geology 1:10,000 scale - Bedrock

14.5 Bedrock geology (10k)

Records within 500m	0

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.

This data is sourced from the British Geological Survey.

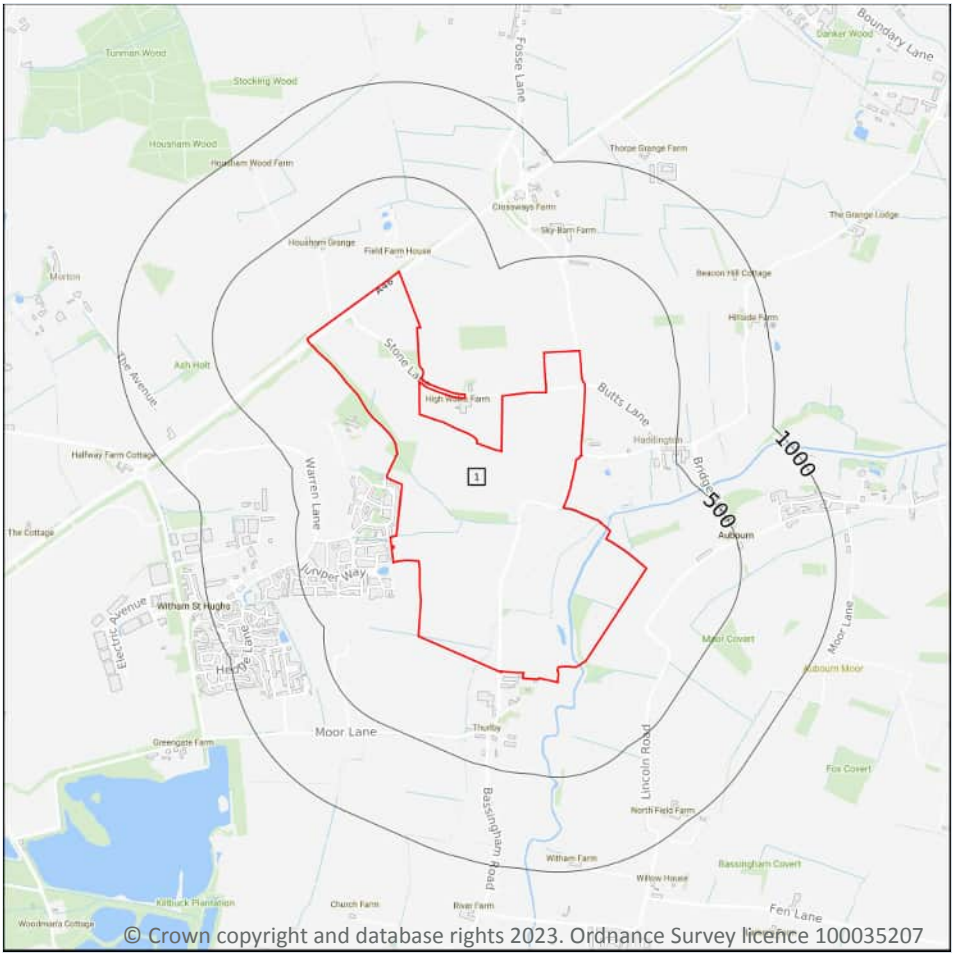
14.6 Bedrock faults and other linear features (10k)

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 86 >**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	**On site**	**Full**	**Full**	**Full**	**No coverage**	**EW114_lincoln_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.

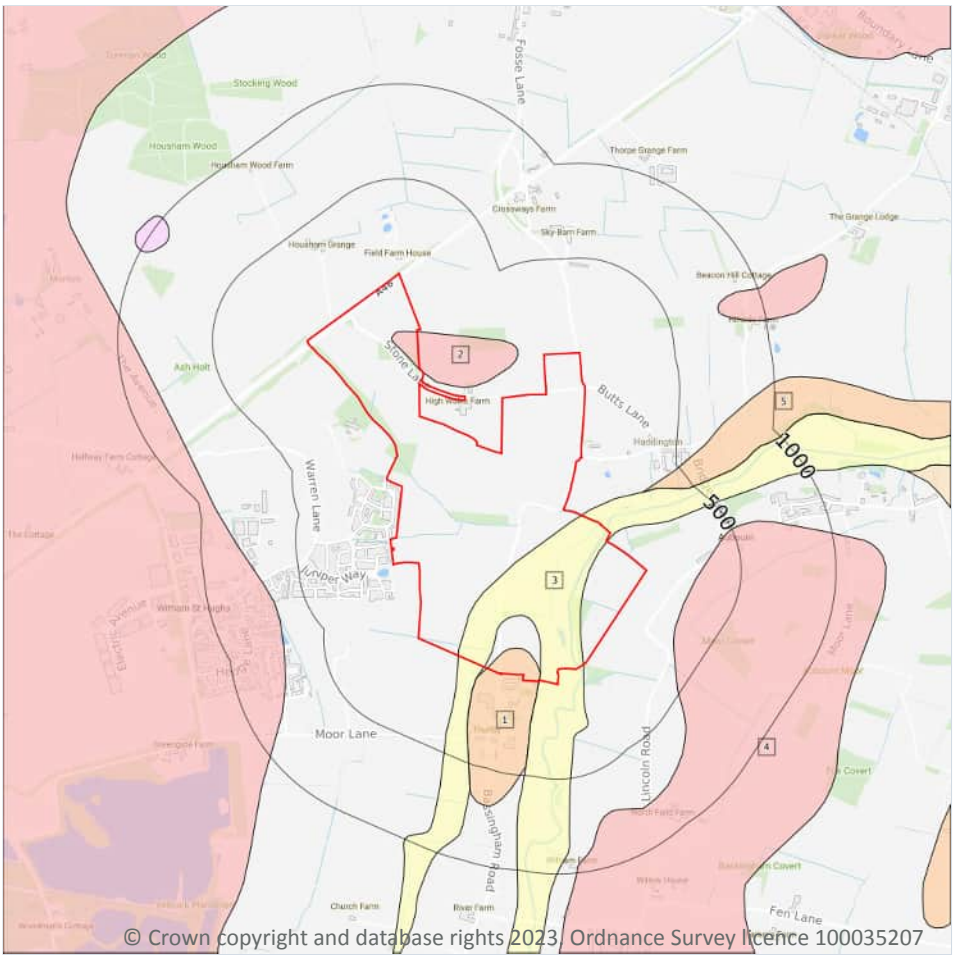
15.3 Artificial ground permeability (50k)

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	5

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 88 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**RTDU-XSV**	**RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)**	**SAND AND GRAVEL**
2	**On site**	**BDTN-XSV**	**BALDERTON SAND AND GRAVEL MEMBER**	**SAND AND GRAVEL**
3	**On site**	**ALV-XCZSV**	**ALLUVIUM**	**CLAY, SILT, SAND AND GRAVEL**
4	254m SE	BDTN-XSV	BALDERTON SAND AND GRAVEL MEMBER	SAND AND GRAVEL

ID	Location	LEX Code	Description	Rock description
5	274m E	RTDU-XSV	RIVER TERRACE DEPOSITS (UNDIFFERENTIATED)	SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	**3**

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	**Intergranular**	**High**	**Very Low**
On site	**Intergranular**	**Very High**	**High**
On site	**Intergranular**	**Very High**	**High**

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.

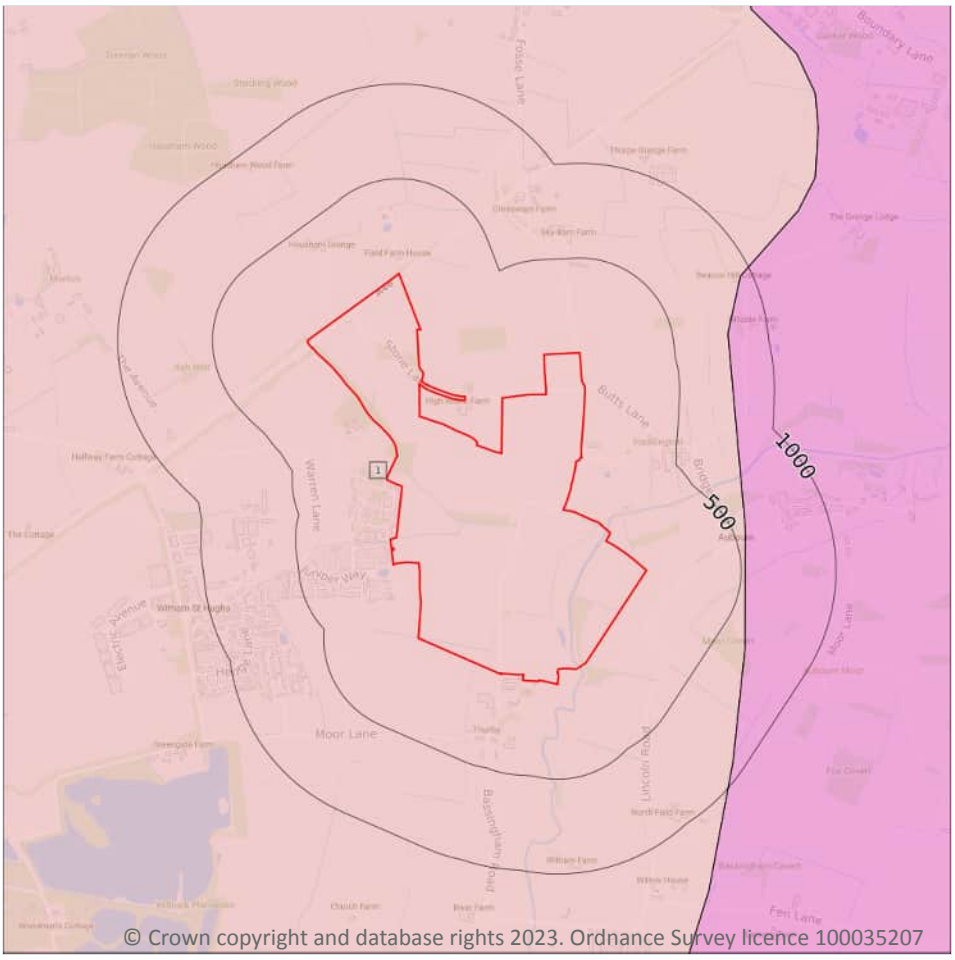
15.7 Landslip permeability (50k)

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 90 >**

ID	Location	LEX Code	Description	Rock age
1	**On site**	**SMD-MDLM**	**SCUNTHORPE MUDSTONE FORMATION - MUDSTONE AND LIMESTONE, INTERBEDDED**	**RHAETIAN**

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m	2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Fracture**	**High**	**Low**
On site	**Fracture**	**High**	**Low**

This data is sourced from the British Geological Survey.

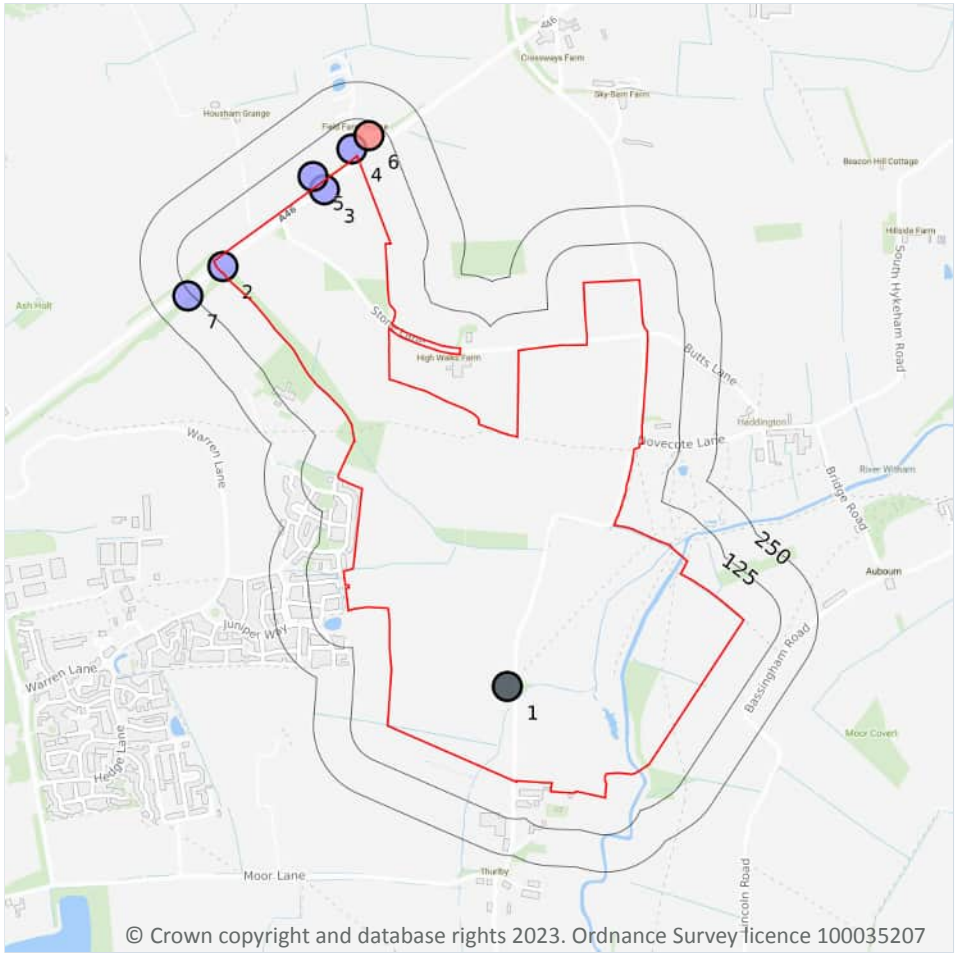
15.10 Bedrock faults and other linear features (50k)

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	7

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.

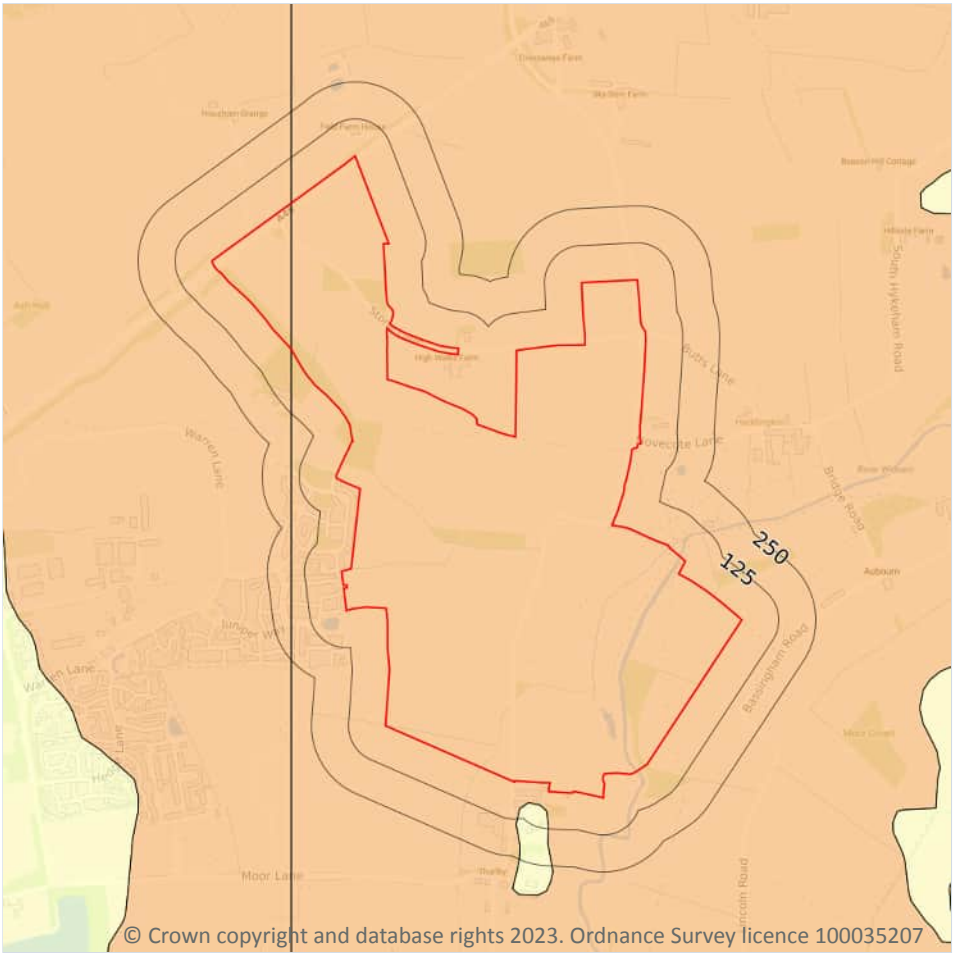
Features are displayed on the Boreholes map on **page 92 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	490724 362128	THURLBY	-	Y	N/A
2	On site	489761 363549	A46 NEWARK-LINCOLN IMPRO TP 71	2.0	N	243449 ↗
3	On site	490105 363808	A46 NEWARK-LINCOLN IMPRO TP73A	3.0	N	250752 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	31m N	490197 363945	A46 NEWARK-LINCOLN IMPRO TP 75	3.0	N	250753 ↗
5	32m NW	490068 363851	A46 NEWARK-LINCOLN IMPRO TP 73	2.0	N	250751 ↗
6	79m N	490254 363990	BLACK CAT 1	1003.04	N	250737 ↗
7	137m NW	489643 363449	A46 NEWARK-LINCOLN IMPRO 70	6.0	N	243435 ↗

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

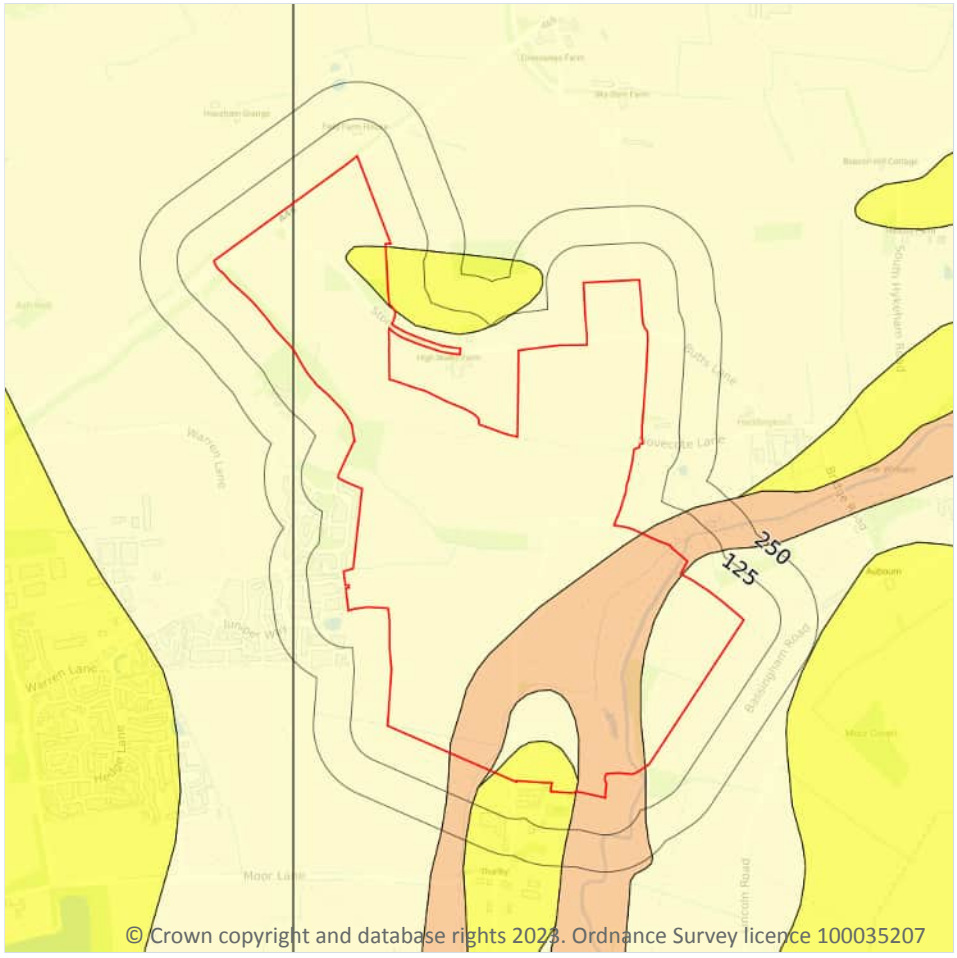
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 94 >**

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	3

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.

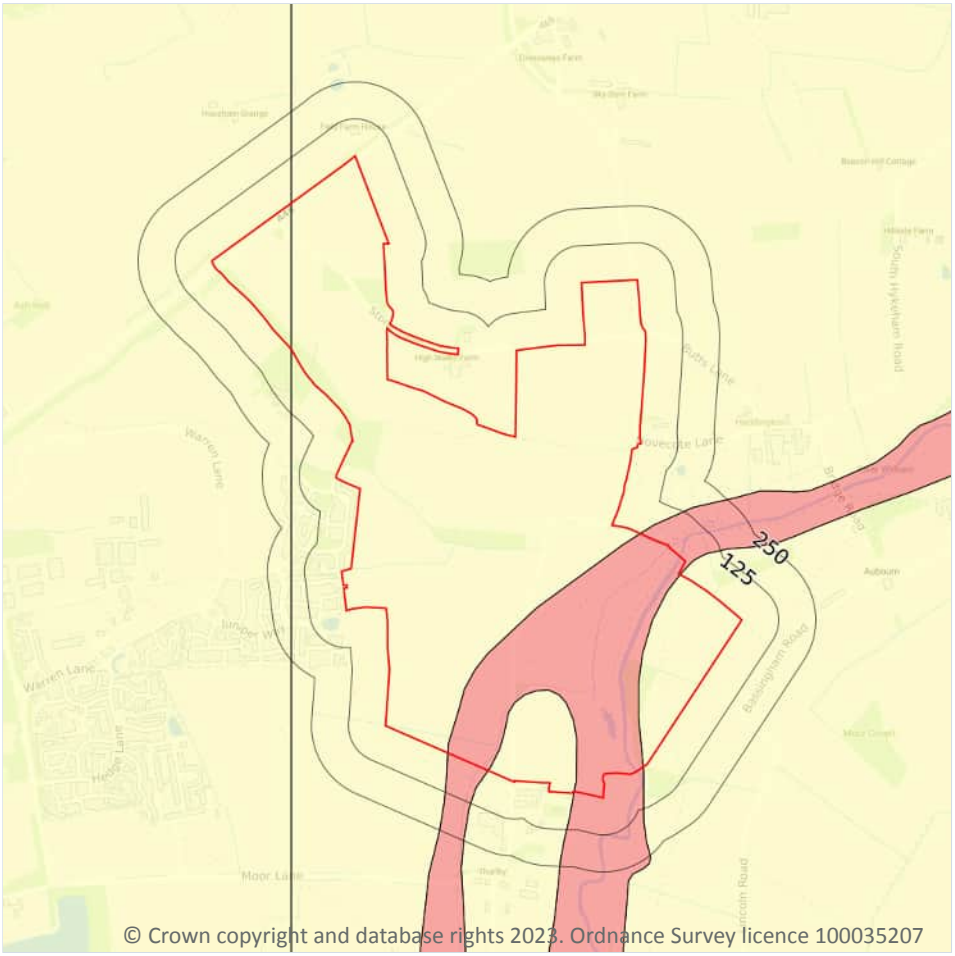
Features are displayed on the Natural ground subsidence - Running sands map on **page 95 >**

Location	Hazard rating	Details
On site	**Negligible**	**Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.**

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.**
On site	**Low**	**Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.**

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	2

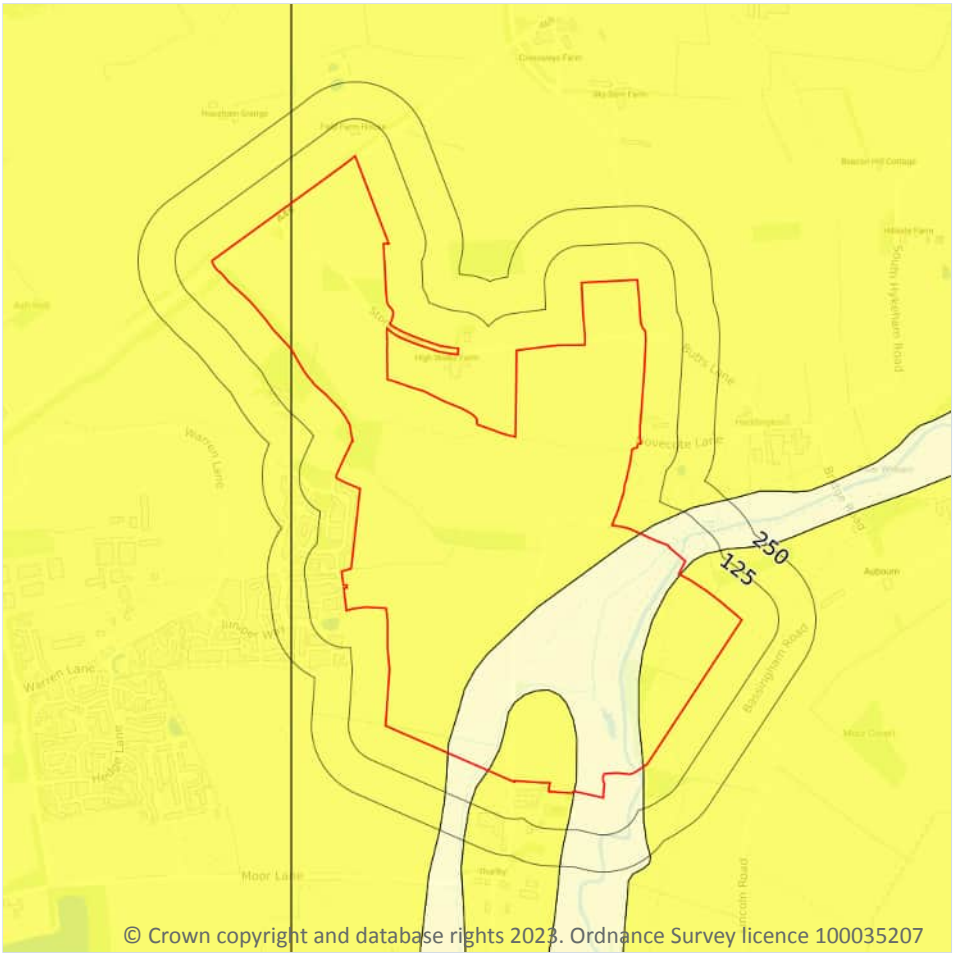
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 97 >**

Location	Hazard rating	Details
On site	**Negligible**	**Compressible strata are not thought to occur.**
On site	**Moderate**	**Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.**

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	2

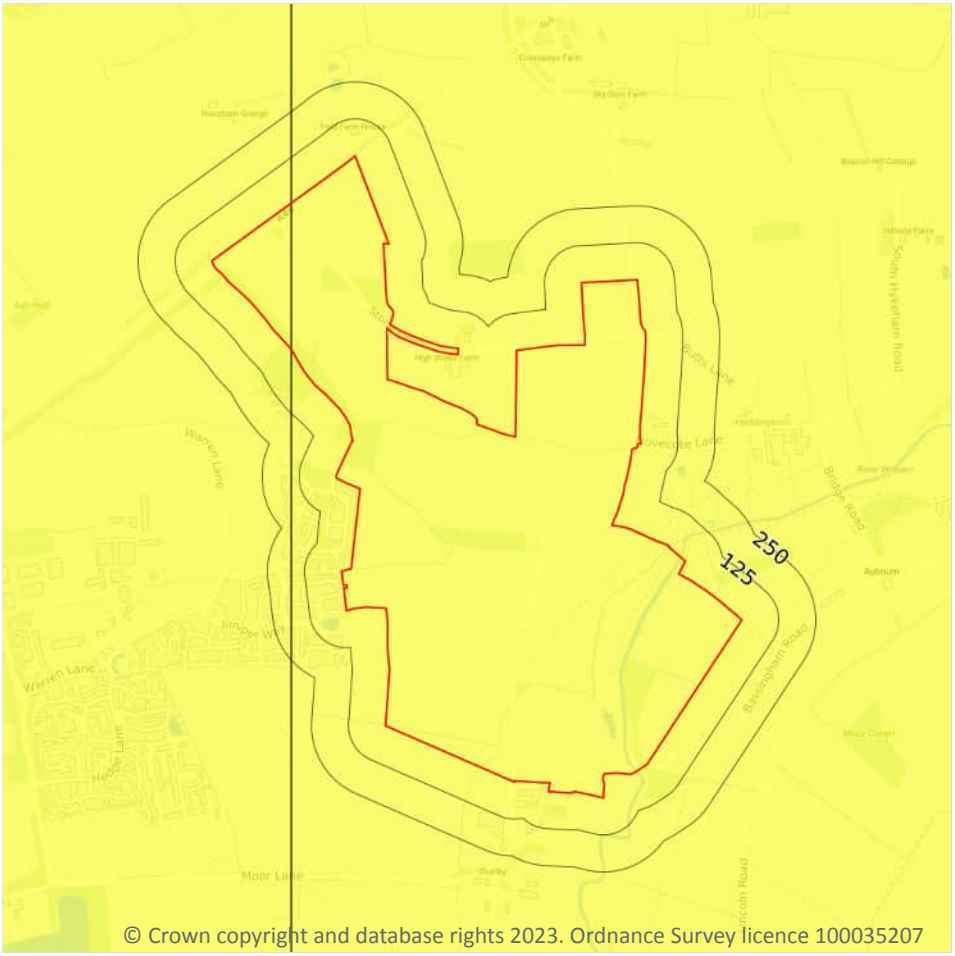
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 99 >**

Location	Hazard rating	Details
On site	**Negligible**	**Deposits with potential to collapse when loaded and saturated are believed not to be present.**
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

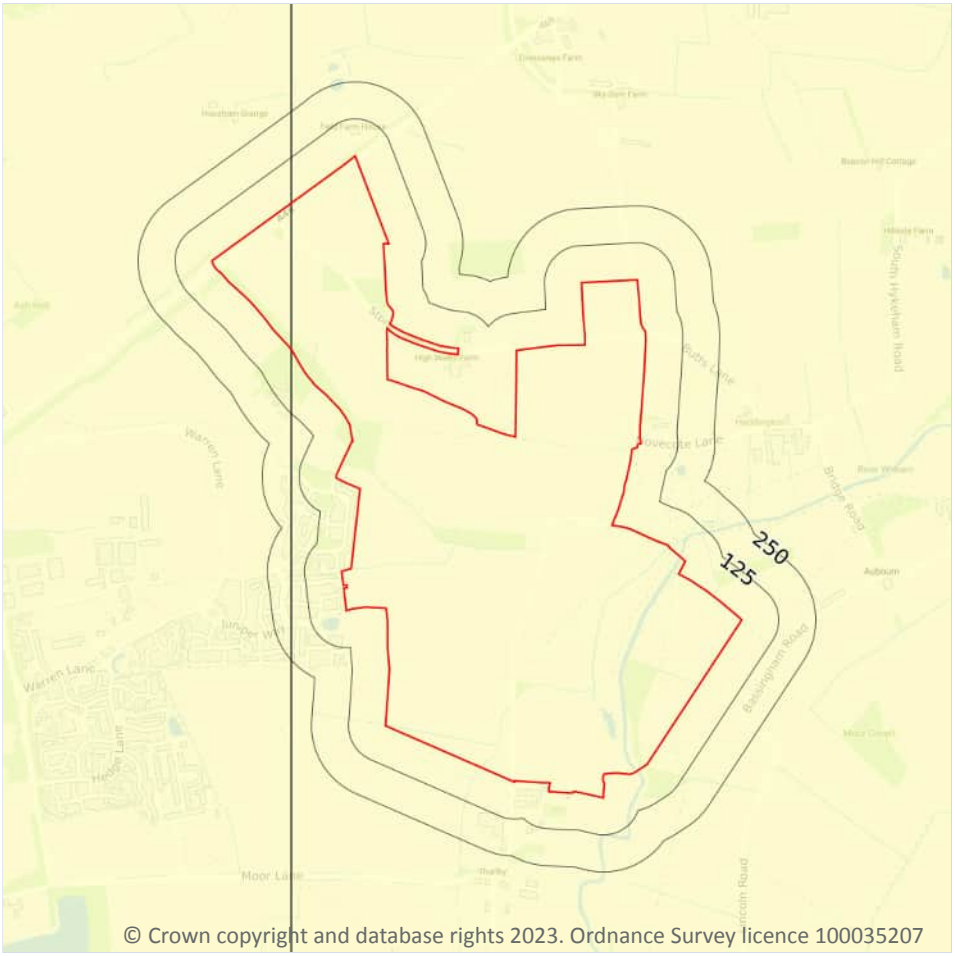
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on **page 100 >**

Location	Hazard rating	Details
On site	**Very low**	**Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.**

This data is sourced from the British Geological Survey.

Natural ground subsidence - Ground dissolution of soluble rocks



Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

17.6 Ground dissolution of soluble rocks

Records within 50m	1

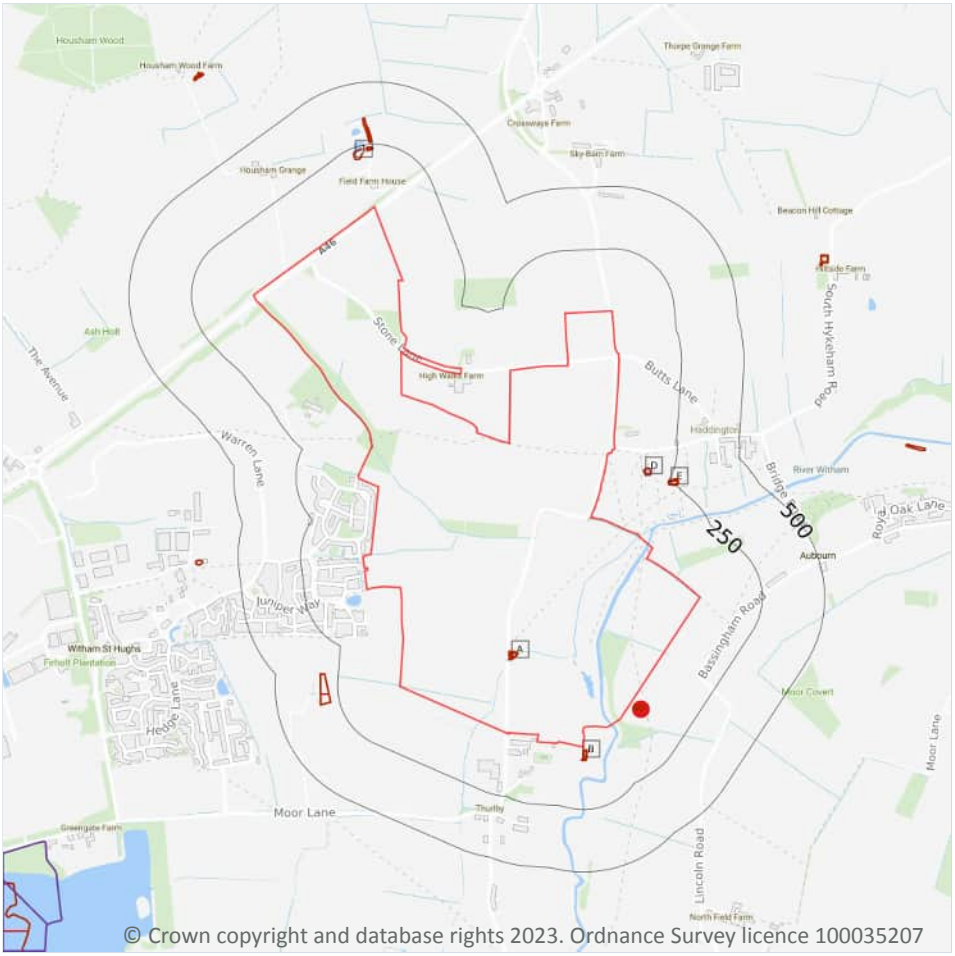
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 101 >**

Location	Hazard rating	Details
On site	**Negligible**	**Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.**

This data is sourced from the British Geological Survey.

18 Mining and ground workings



Site Outline

Search buffers in metres (m)

- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining

Non Coal Mining

- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 BritPits

Records within 500m	1

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on **page 103 >**

ID	Location	Details	Description
C	46m SE	Name: Thurlby Gall Gravel Pit Address: Thurlby, ALFORD, Lincolnshire Commodity: Sand & Gravel Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m **19**

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 103 >**

ID	Location	Land Use	Year of mapping	Mapping scale
A	**On site**	**Pond**	**1955**	**1:10560**
A	**On site**	**Pond**	**1948**	**1:10560**
A	**On site**	**Pond**	**1904**	**1:10560**
A	**On site**	**Pond**	**1904**	**1:10560**
B	12m S	Pond	1955	1:10560
B	12m S	Pond	1979	1:10000
B	13m S	Pond	1904	1:10560
C	20m SE	Gravel Pit	1904	1:10560
C	20m SE	Gravel Pit	1948	1:10560
C	20m SE	Gravel Pit	1904	1:10560
C	21m SE	Gravel Pit	1955	1:10560
D	145m E	Pond	1955	1:10560
D	145m E	Pond	1979	1:10000
1	200m N	Ponds	1979	1:10000
E	238m E	Unspecified Pit	1955	1:10560
E	238m E	Unspecified Pit	1979	1:10000

ID	Location	Land Use	Year of mapping	Mapping scale
E	239m E	Pond	1886	1:10560
E	240m E	Unspecified Pit	1948	1:10560
E	240m E	Unspecified Pit	1904	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	0

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).

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	0

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 Coal mining

Records on site	0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site	0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site	0

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

19.2 Mining cavities

Records within 1000m	0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m	0

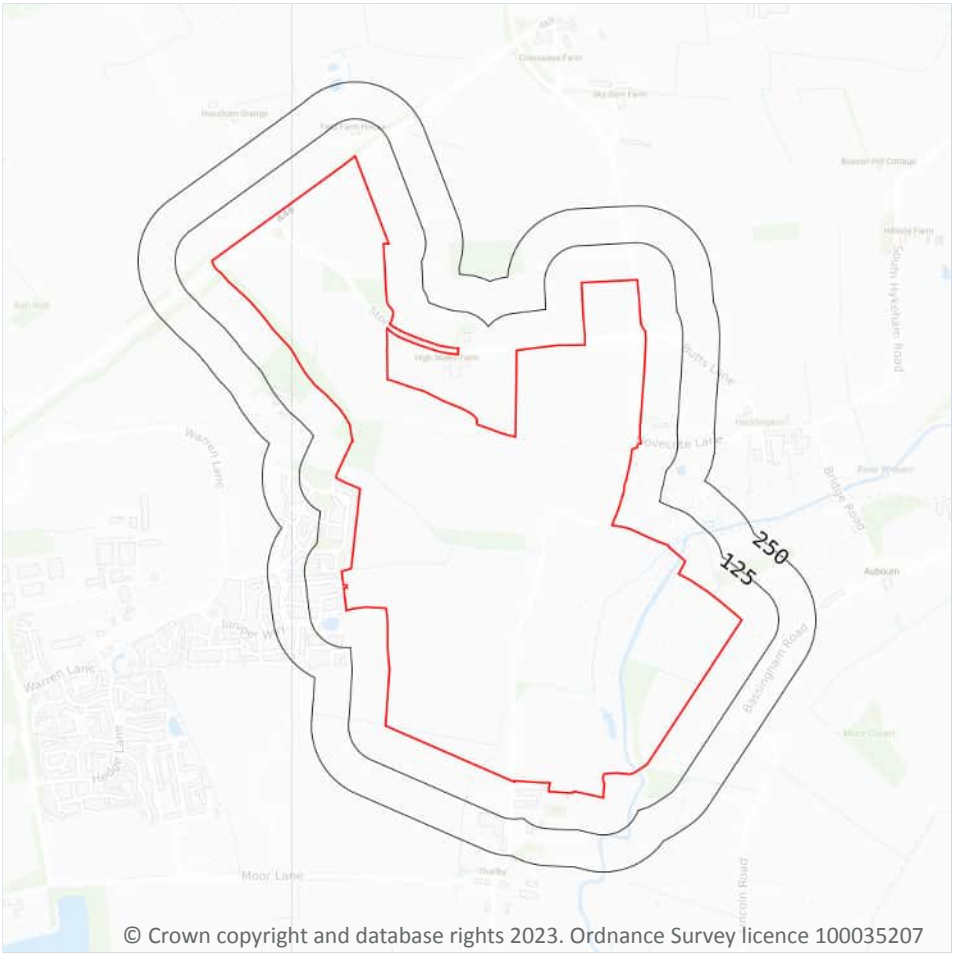
This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

This data is sourced from the British Geological Survey.

20 Radon



Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

20.1 Radon

Records on site	1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 111 >**

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	48

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg

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	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
6m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
7m E	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
15m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
45m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 mg/kg
46m N	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: https://www.groundsure.com/terms-and-conditions-april-2023/ ↗.

Annex C Exploratory Boreholes Records

British Geological Survey

BGS ID: 243395 : BGS Reference: SK86SE7
British National Grid (27700) : 488415,364050

IGS 2A 2000 7/71

Institute of Geological Sciences

RECORD OF SHAFT OR BOREHOLE

6-in or 1:10 000 Map Registration No.: SK 86 SE/7

National Grid Reference: 8841 6406

1-in or 1:50 000 New Series Map No.:

Enter 'C' if Confidential: C

Name and Number of Shaft or Borehole: TV 86 66

For whom made: I.G.S.

Town or Village: Swinderby *County*:

Exact site (reference to a fixed point on 1-in or 1:50 000 Map:: Morton Manor

Purpose for which made: sand and gravel survey

Ground level at shaft bore relative to O.D. ____ *m. If not ground level give O.D. of beginning of shaft bore* ____ *m.*

Made by: Foraky *Date of sinking*: 22.2.72.

~~Information~~ from: J R Gozzard *~~Examined~~ by*: finished 23.2.72.

Examined

Specimen Numbers and Additional Notes

66/1	silty slightly gravelly sand	0.2 - 1.2
66/2	silty sand	1.2 - 2.4
66/3	gravelly sand	2.4 - 2.7
66/4	clay	2.7 - 5.1
66/5	gravelly sand	5.1 - 5.9
66/6	Mudstone	5.9 - 8.0

Geological Classification	Description of Strata	Thickness *metres*	Depth *metres*
	Soil sandy brown		0.20
	Silty slightly gravelly sand		
	gravel LPS 2 x 2 x 3		
	quartz quartzite fine to medium grained		
	cubic tabular sub angular to well rounded		
	sand quartz fine to coarse grained cubic		
	tabular, sub angular to well rounded.		
	chert angular to sub rounded irregular fine to		
	coarse grained.	3.98'	3.94'
	silt leached light grey	1.00	1.20
	Silty sand		
	sand as above	3.94'	7.87'
	silt light brown with leached colour intermixed	1.20	2.40
	C/F		7.87' 2.40

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey

BGS ID: 243395 : BGS Reference: SK86SE7
British National Grid (27700) : 488415,364050

IGS 2b 5000 7/71

Name and Number of Shaft or Borehole :

TV 86 66

6-in or 1:10 000 Map Registration No.
SK 86 SE/7

National Grid Reference
8841 6406

Geological Classification	Description of Strata	Thickness *metres*	Depth *metres*
	Brought Forward	7.87'	2.40
	gravelly sand		
	gravel LPS 3 x 3 x 4 quartz quartzite		
	sub angular to well rounded		
	fine to medium grained		
	chert angular to sub rounded irregular fine		
	to medium grained		8.86'
	sand as gravel but fine to coarse grained	.30 0.9'	2.70
	Clay	7.87'	16.73
	dark brown invariably silty	2.40	5.10
	gravelly sand	2.62'	19.35'
	as above	.80	5.90
	Mudstone		
	dark grey lias - not too sure to start with but confirmed later	6.89' 2.10	26.24' 8.00
	Hole finished		

Contact BGS: ngdc@bgs.ac.uk

British Geological Survey
BGS ID: 250726 : BGS Reference: SK96SW6
British National Grid (27700) : 492350,363250

SK 96 SW 6 9235 6325 Haddington Block E

Surface level (+7.3 m) +24 ft
Water level +5.8 m (+19 ft)
November 1973

Overburden 0.4 m (1.5 ft)
Mineral 3.2 m (10.5 ft)
Bedrock 1.2 m+ (4.0 ft+)

LOG

		Thickness m	(ft)	Depth m	(ft)
	Soil	0.4	(1.5)	0.4	(1.5)
River Terrace Deposits (Flood-plain Terrace)	a) Sand: medium and fine, rounded to well rounded quartz	1.0	(3.5)	1.4	(4.5)
	b) 'Clayey' sandy gravel Gravel: fine, rounded to well rounded quartzite with quartz, chert and shell fragments Sand: medium, quartz	2.2	(7.0)	3.6	(12.0)
Lower Lias	Mudstone, grey, laminated	1.2+	(4.0+)	4.8	(15.5)

GRADING

Mean for Deposit

	%	mm	%
Gravel	30	+16	8
		-16 + 4	22
Sand	61	-4 + 1	10
		-1 + ¼	27
		-¼ + 1/16	24
Fines	9	-1/16	9

Bulk Samples

	Depth below surface (m)	Percentages Fines	Sand	Gravel
a)	0.4 - 1.4	4	95	1
b)	1.4 - 2.4	23	50	27
	2.4 - 3.6	0	41	59

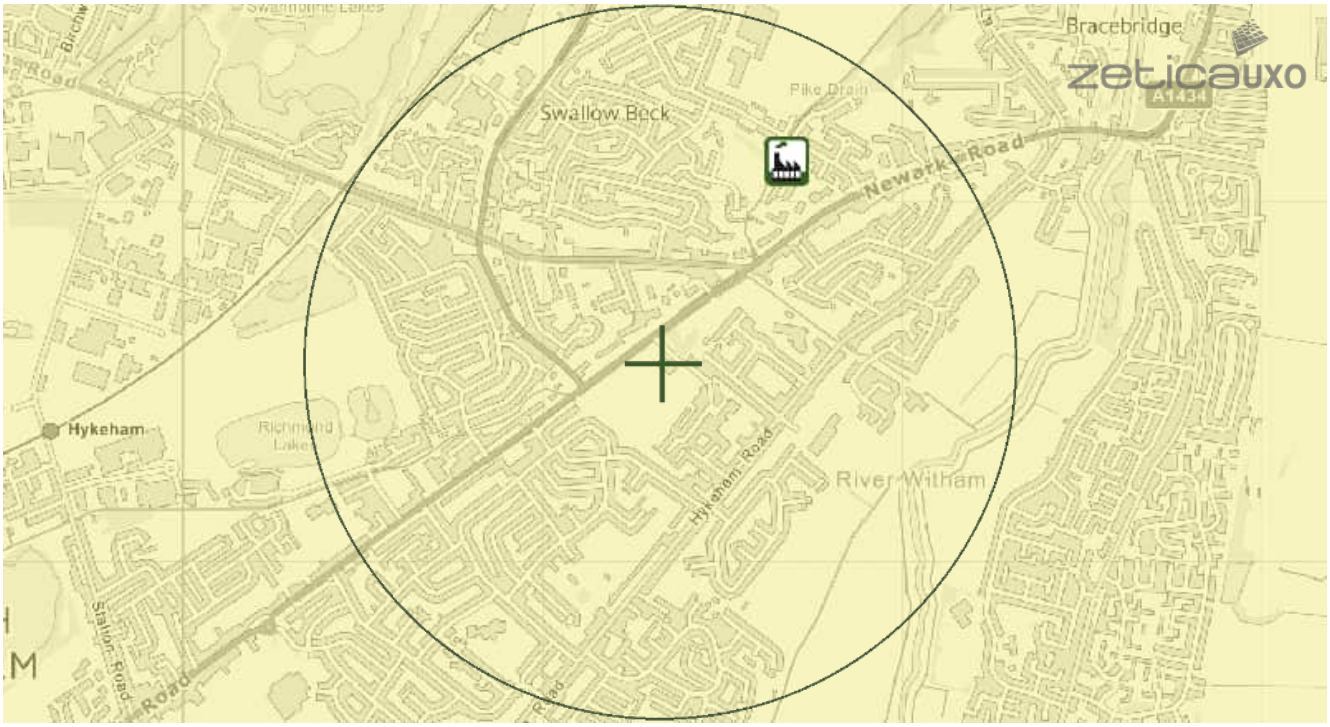
Contact BGS: ngdc@bgs.ac.uk

Annex D Zetica UXO Map

UNEXPLODED BOMB RISK MAP

SITE LOCATION

Location: LN6 8RN,
Map Centre: 495340,367549



LEGEND

High: Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.

Moderate: Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.

Low: Areas indicated as having 15 bombs per 1000acre or less.

miltary | **industry** | **UXO find**
transport | **dock** | **Luftwaffe targets**
utilities | **Bombing decoy** | **other**

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: **(https://zeticauxo.com/downloads-and-resources/risk-maps/)**

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

Annex E Photolog

PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 1a	Date: 24/10/23

Direction Photo Taken:

South

Description

Agricultural land in the southeastern section of the Cable Corridor.



Photo No. 1b	Date: 24/10/23

Direction Photo Taken:

West

Description

Access track (Gorse Hill Lane) through agricultural land to the west of the southeastern section of the Cable Corridor.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 1c	Date: 24/10/23

Direction Photo Taken:

North

Description

Agricultural land to the north of the southeastern section of the Cable Corridor.



Photo No. 1d	Date: 24/10/23

Direction Photo Taken:

East

Description

Access track (Green Man Lane) leading to A15 in the southeastern section of the Cable Corridor.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 2a	Date: 24/10/23

Direction Photo Taken:

South

Description

Fly tipping in layby to the east of the Cable Corridor.



Photo No. 2b	Date: 24/10/23

Direction Photo Taken:

South

Description

Agricultural land to the east of the Cable Corridor.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 2c	Date: 24/10/23

Direction Photo Taken:

North

Description

Sheep field to the east of the Cable Corridor.



Photo No. 2d	Date: 24/10/23

Direction Photo Taken:

West

Description

Road leading to the A15, on the eastern boundary of the Cable Corridor.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 3a	Date: 24/10/23

Direction Photo Taken:

South

Description

Agricultural land to the southeast of the Cable Corridor.



Photo No. 3b	Date: 24/10/23

Direction Photo Taken:

West

Description

Lane through agricultural land in the southeastern section of the Cable Corridor.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 3c	Date: 24/10/23

Direction Photo Taken:

North

Description

Agricultural land in the southeastern section of the Cable Corridor.



Photo No. 3d	Date: 24/10/23

Direction Photo Taken:

East

Description

Unnamed road leading to A15 in the southeastern section of the Cable Corridor.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 4a	Date: 24/10/23

Direction Photo Taken:

South

Description

Pylon and associated structure within arable field in the southeastern section of the Cable Corridor.



Photo No. 4b	Date: 24/10/23

Direction Photo Taken:

South

Description

Unclassified county road and footpath running in a north-south orientation in the southeastern section of the Cable Corridor.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 4c	Date: 24/10/23

Direction Photo Taken:

West

Description

Unnamed road with overhead transmission lines to the west of the southeastern section of the Cable Corridor.



Photo No. 4d	Date: 24/10/23

Direction Photo Taken:

North

Description

Agricultural land in the southeastern section of the Cable Corridor, north of Heath Lane



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 5a	Date: 24/10/23

Direction Photo Taken:

Southwest

Description

Agricultural land in the southeastern section of the Cable Corridor, south of Heath Lane.



Photo No. 6a	Date: 24/10/23

Direction Photo Taken:

North

Description

Agricultural land in the southeastern section of the Cable Corridor, south of Heath Lane.



AECOM

PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 6b	Date: 24/10/23

Direction Photo Taken:

South

Description

Heras fencing and blue pipes in the southeastern section of the Cable Corridor, north of Heath Lane.



Photo No. 6c	Date: 24/10/23

Direction Photo Taken:

South

Description

Inside heras fencing in southeastern section of the Cable Corridor, pit with blue pipes and a structure and bulk bags, north of Heath Lane.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 7a	Date: 24/10/23

Direction Photo Taken:

Northeast

Description

Second blue pipework and structure, surrounded with heras fencing with "Construction Site" and "CDM Boundary" sign affixed, to the south of the southeastern section of the Cable Corridor, north of Green Man Road.



Photo No. 7b	Date: 24/10/23

Direction Photo Taken:

Northeast

Description

Second view of blue pipework and structure construction site, north of Green Man Road.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 7c	Date: 24/10/23

Direction Photo Taken:

Northeast

Description

View northeast of construction site, agricultural land, north of Green Man Road.



Photo No. 8a	Date: 24/10/23

Direction Photo Taken:

North

Description

Agricultural land in the southeastern section of the Cable Corridor, north of Green Man Road.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 8b	Date: 24/10/23

Direction Photo Taken:

East

Description

Agricultural land in the southeastern section of the Cable Corridor, along Green Man Road towards the A15.



Photo No. 8c	Date: 24/10/23

Direction Photo Taken:

South

Description

Agricultural land in the southeastern section of the Cable Corridor, south Green Man Road



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 8d	Date: 24/10/23

Direction Photo Taken:

West

Description

Agricultural land in the southeastern section of the Cable Corridor, west along Green Man Road.



Photo No. 9a	Date: 24/10/23

Direction Photo Taken:

West

Description

Flooded agricultural land west of Broughton Lane, towards the western part of the Cable Corridor.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 9b	Date: 24/10/23

Direction Photo Taken:

West Southwest

Description

Flooded agricultural land southwest of Broughton Lane, towards the western part of the Cable Corridor.



Photo No. 10a	Date: 24/10/23

Direction Photo Taken:

North

Description

Surface water drainage ditch bordering Fen Lane to the north, in central belt of the DCO Site.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 10b	Date: 24/10/23

Direction Photo Taken:

North

Description

Waterlogged agricultural land beyond drainage ditch north of Fen Lane, in central belt of the DCO Site.



Photo No. 10c	Date: 24/10/23

Direction Photo Taken:

East

Description

Drainage ditch and agricultural land, east along Fen Lane, in central belt of the DCO Site.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 10d	Date: 24/10/23

Direction Photo Taken:

West

Description

Drainage ditch and agricultural land, west along Fen Lane, in central belt of the DCO Site.



Photo No. 11a	Date: 24/10/23

Direction Photo Taken:

North

Description

Agricultural land to the north of Fen Lane, in central belt of the DCO Site.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 12a	Date: 24/10/23

Direction Photo Taken:

Southeast

Description

Flooded footpath/access track connecting Haddington Lane to the River Witham



Photo No. 12b	Date: 24/10/23

Direction Photo Taken:

East

Description

Flooded field where River Witham has burst its banks, on footpath connecting Haddington Lane to River Witham.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 12c	Date: 24/10/23

Direction Photo Taken:

East

Description

Flooded field and gate south of River Witham, in central section of the Solar PV Array Area.



Photo No. 13a	Date: 24/10/23

Direction Photo Taken:

North

Description

Haddington Lane, bordered by trees and hedges to the west and agricultural land to the east.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 13b	Date: 24/10/23

Direction Photo Taken:

East

Description

Agricultural land to the east of Haddington Lane, in the central section of the of the Solar PV Array Area.



Photo No. 13c	Date: 24/10/23

Direction Photo Taken:

South

Description

Intersection between Haddington Lane, Stone Lane and Butts Lane, in the central extent of the of the Solar PV Array Area.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 13d	Date: 24/10/23

Direction Photo Taken:

West

Description

Waterlogged agricultural land to the west of Haddington Lane, in the central section of the Solar PV Array Area.



Photo No. 14a	Date: 24/10/23

Direction Photo Taken:

Southwest

Description

Gate and access track through waterlogged agricultural land immediately north of the A46, along the eastern border of Fosse Way.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 14b	Date: 24/10/23

Direction Photo Taken:

North

Description

Haddington Lane immediately north of the A46 overpass.



Photo No. 14c	Date: 24/10/23

Direction Photo Taken:

East

Description

Intersection between Fosse Lane and Haddington Lane.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 15a	Date: 24/10/23

Direction Photo Taken:

West

Description

Waterlogged agricultural land to the west of Lincoln Lane and Station Road and south of Eagle Lane, along the northern boundary of the northwestern section of the Solar PV Array Area.



Photo No. 15b	Date: 24/10/23

Direction Photo Taken:

North

Description

North along unnamed access track through agricultural land to the west of Lincoln Lane and Station Road and south of Eagle Lane, along the northern boundary of the Solar PV Array Area.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 15c	Date: 24/10/23

Direction Photo Taken:

East

Description

East along unnamed access track through agricultural land to the west of Lincoln Lane and Station Road and south of Eagle Lane, along the northern boundary of the Solar PV Array Area.



Photo No. 15d	Date: 24/10/23

Direction Photo Taken:

South

Description

Waterlogged agricultural land to the west of Lincoln Lane and Station Road and south of Eagle Lane, along the northern boundary of the Solar PV Array Area.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 16a	Date: 24/10/23

Direction Photo Taken:

Northwest

Description

Abandoned building (formerly the Dovecot), partially bordered by heras fencing on the Avenue in the northwestern section of the Solar PV Array Area.



Photo No. 16b	Date: 24/10/23

Direction Photo Taken:

Northwest

Description

Land appearing to be a car park for the Dovecot, bordered by heras fencing along the Avenue, in the northwestern section of the Solar PV Array Area.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 17a	Date: 24/10/23

Direction Photo Taken:

East

Description

Barns and farming machinery along the Avenue/Morton Lane to the east of the northwestern site boundary.



Photo No. 17b	Date: 24/10/23

Direction Photo Taken:

South

Description

Barns and residential buildings along the Avenue/Morton Lane along the northwestern site boundary, to the south.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 17c	Date: 24/10/23

Direction Photo Taken:

West

Description

Residential buildings and farming machinery just west of the northwestern site boundary.



Photo No. 17d	Date: 24/10/23

Direction Photo Taken:

North

Description

Barns and residential buildings along the Avenue/Morton Lane along the northwestern site boundary, to the north.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 18a	Date: 24/10/23

Direction Photo Taken:

East

Description

Footpath and fencing along the inner northern boundary of Embryo Fishing, Norton Disney, along the western boundary of the southwestern section of the site.



Photo No. 18b	Date: 24/10/23

Direction Photo Taken:

South

Description

Scrubland beyond the southern boundary of Embryo Fishing land, beyond the southern boundary of the southwestern section of the Solar PV Array Area.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 18c	Date: 24/10/23

Direction Photo Taken:

Northwest

Description

Fishing Lake within Embryo Fishing land, towards the west, beyond the southwestern boundary of the Solar PV Array Area.



Photo No. 19a	Date: 24/10/23

Direction Photo Taken:

Northwest

Description

Waterlogged agricultural land to the north of the southwestern boundary of the Solar PV Array Area, north of Clay Lane.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 19b	Date: 24/10/23

Direction Photo Taken:

East

Description

Clay Lane through waterlogged agricultural land, to the west. Along the southern boundary of the southwestern section of the Solar PV Array Area.



Photo No. 19c	Date: 24/10/23

Direction Photo Taken:

Southeast

Description

Agricultural land with some flooding, to the south of Clay Lane, beyond the southern boundary of the southwestern section of the Solar PV Array Area.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 19d	Date: 24/10/23

Direction Photo Taken:

Southwest

Description

Clay Lane through waterlogged agricultural land, to the east. Along the southern boundary of the southwestern section of the Solar PV Array Area.



Photo No. 20a	Date: 24/10/23

Direction Photo Taken:

East

Description

Water logged corner of agricultural land, along the southern boundary of a sewage treatment works, to the west of Clay Lane.



AECOM

PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 20b	Date: 24/10/23

Direction Photo Taken:

East

Description

Waterlogged hardstanding, in the sewage treatment works to the east of Clay Lane, in the southwestern section of the Solar PV Array Area.



Photo No. 20c	Date: 24/10/23

Direction Photo Taken:

Southeast

Description

Sewage Treatment Works to the east of Clay Lane, along the southernboundary of the Solar PV Array Area.



AECOM

PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 20d	Date: 24/10/23

Direction Photo Taken:

Southeast

Description

Entrance to the Anglian Water Sewage Treatment Works to the east of Clay Lane, along the southern boundary of the Solar PV Array Area.



Photo No. 20e	Date: 24/10/23

Direction Photo Taken:

Northwest

Description

Large tanks within sewage treatment works, to the east of Clay Lane, along the southern boundary of the Solar PV Array Area.



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 21f	Date: 24/10/23

Direction Photo Taken:

South

Description

Waterlogged agricultural land to west of Clay Lane, opposite the sewage treatment works, in the southwestern section of the Solar PV Array Area.



Photo No. 21a	Date: 24/10/23

Direction Photo Taken:

South

Description

Fallen tree in agricultural land to the south of Moor Lane, in the central section of the Solar PV Array Area



PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 21b	Date: 24/10/23

Direction Photo Taken:

North

Description

Agricultural land to the north of Moor Lane, in the central section of the Solar PV Array Area.



Photo No. 22a	Date: 24/10/23

Direction Photo Taken:

Southwest

Description

Overgrown Anglian Water works, within padlocked gate, to the east of Bassingham Road, in the central section of the Solar PV Array Area.



AECOM

PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 22b	Date: 24/10/23

Direction Photo Taken:

Southwest

Description

Further Anglian Water works, to the east of Bassingham Road, in the southwestern section of the PV Solar Array Area.



Photo No. 23a	Date: 24/10/23

Direction Photo Taken:

Southwest

Description

Waterlogged agricultural land and A46 from Haddington Lane overpass, to the southwest in the northeastern section of the PV Solar Array Area.



AECOM

PHOTOGRAPHIC LOG

Client Name: Fosse Green Energy	Site Location: Bassingham, Lincoln	Project No. 60700987

Photo No. 23b	Date: 24/10/23

Direction Photo Taken:

South

Description

Agricultural land to the south, from the Haddington Lane overpass, in the northeastern section of the PV Solar Array Area.



Photo No. 23c	Date: 24/10/23

Direction Photo Taken:

North

Description

Verge and hedges to the north of the A46, from the Haddington Lane overpass, in the northeastern section of the PV Solar Array Area.

