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SITE INVESTIGATION REPORT

PRINGLE FARM

PRINGLE WAY

LITTLE STUKELEY

Report Reference No. 131418

On behalf of: -

The Yard Pringle Farm Limited
The Yard
Pringle Farm
Little Stukeley
PE28 4BH

May 2025

THE YARD PRINGLE FARM LIMITED

3D PLANNING LIMITED

PROJECT MANAGERS

REPORT FOR A SITE INVESTIGATION

AT

PRINGLE FARM

PRINGLE WAY

LITTLE STUKELEY

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INTRODUCTION

The Yard Pringle Farm Limited, the client, intend to remove a holiday home only planning restriction on Pringle Farm, Pringle Way, Little Stukeley. An assessment of the nature and extent of contamination beneath the site was required as part of Huntingdonshire District Council's Condition 9 of the Planning Ref. 23/02319/S73 for the long term residential use of the site.

Lucion Ground Engineering Limited was instructed by the client, under the direction of project managers 3D Planning Limited, to carry out a site investigation, comprising a desk study into the history of the site including an environmental records search, and a ground investigation. The desk study has been undertaken following the guidelines set out in Chapter 4 of CIRIA C552 (2001) and the Environment Agency's Land Contamination Risk Management (2023). In addition, a contamination assessment was included within the scope of this investigation.

LOCATION, TOPOGRAPHY, GEOLOGY AND HYDROGEOLOGY

Pringle Farm is located on the western side of Pringle Way in the village of Little Stukeley, near Huntingdon. The site is situated some 20m south of RAF Alconbury and 5km north-west of Huntingdon railway station. The site is centred at National Grid Reference TL 20870 75900. A site location plan is presented at the rear of this report (Page 1, Appendix 2).

The irregularly shaped site has an approximately 45m wide frontage along the western side of Pringle Way, from which it extends for up to 70m to the west. The site is bounded by fields to the south, an orchard to the west and No.33 Pringle Way to the north.

In April 2025 the site was occupied by a brick dwelling with a thatched roof at its eastern end, adjacent Pringle Way, and four brick and wood barns converted for use as holiday accommodation. The remainder of the site comprised grass lawns, a gravel-surfaced driveway and parking area, and footpaths.

The site stands at approximately 40mOD on ground that falls gently southwards, following the course of a tributary of Alconbury Brook.

The 1975 geological map for the area at 1:50,000 scale, Sheet 187, shows the site to be covered by Boulder Clay (Oadby Member) and underlain by the solid geology of the Oxford Clay.

The Environment Agency (EA) designates the Oadby Member as a 'Secondary Undifferentiated' Aquifer, and the underlying Oxford Clay Formation as an 'Unproductive' stratum.

The direction of surface water and groundwater flow would be toward the south.

HISTORY OF THE SITE

Historical maps dating from 1887 have been sourced by Lucion Ground Engineering Limited and reviewed as part of this desk study, together with aerial photographs and internet searches. Selected map extracts are reproduced in Appendix 1.

Map Extract Studied	*Description*
17th to 19th Centuries Internet Research	The Historic England official list entry for Pringle Farmhouse indicates that a timber framed building was constructed on the site in the 17th Century with a red brick addition built in the 18th Century. The building was then cased in 'gault brick' circa 1860.
1887 O.S. Sheet: Huntingdonshire XVII.NE Scale: 1:10,560 **Figure A**	The site was occupied by several buildings comprising a farmstead, 'Pringle Farm', on the western side of an unnamed road (later Pringle Way). The site was bounded to the north, south and west by fields, whilst houses were present to the east of the site, beyond which were more fields. Several small ponds were located on the periphery of fields to the north, east and south of the site. The village of Little Stukeley was present to the south of the site, either side of Ermine Street.
1888 O.S. Sheets: Huntingdonshire XVII.4 & XVII.8 Scale: 1:2500 **Figure B**	In the eastern part of the site, several buildings enclosed a courtyard with a pump at its southern end, whilst a rectangular barn was located in the south-western corner of the site. The surrounding area was unchanged.
1901 O.S. Sheets: Huntingdonshire XVII.4 & XVII.8 Scale: 1:2500 **Figure C**	A small outbuilding had been constructed within the courtyard in the eastern part of the site. Several of the buildings to the east of the site off Pringle Way had been demolished.
1938 Internet Research	An area to the north was selected as the location of a satellite airfield in 1938, with the site operational by September 1939.
1944 Aerial Photograph **Figure D**	Several buildings, presumably the farmstead previously detailed, were present within the site. An airfield, RAF Alconbury (Abbots Ripton), had been constructed to the north of the site, with hangers and dispersal areas located to the north-east, and the main runways to the north and north-west.
1950 O.S. Sheet: Huntingdonshire XVII.NE Scale: 1:10,560 **Figure E**	Several farm buildings within the central and south-western parts of the site had been demolished. New houses were outlined to the west of the site. The airfield to the north of the site was not shown on this map edition.
1950s Internet Research	A building (thought to be associated with the Watch Office) was removed from the nearby airfield and reconstructed in the south-western part of the site for use as a workshop and storage.

Map Extract Studied	*Description*
1957-1959 O.S. Sheets: TL27NW & TL27SW Scale: 1:10,560 **Figure F**	The site was shown as before. Alconbury Airfield was indicated within the fields to the north, west and east of the site.
1974 O.S. Sheets: TL2075 & TL2175 Scale: 1:2500 **Figure G**	Several buildings are shown within the site, including those flanking the western and eastern sides of the courtyard in the eastern part of the site. A barn had been demolished in the south-western part of the site and a new building, the Watch House, constructed adjacent the site's boundary. New residences had been constructed to the east and south-east of the site. Part of RAF Alconbury was shown to the north-east, whilst reservoirs, associated with the airfield, were present to the north and west.
1978 O.S. Sheet: TL27NW Scale: 1:10,000 **Figure H**	The site was unchanged. The layout of the airfield was shown on this map edition, with airstrips, taxiways and dispersal areas to the north and north-west; hangars to the north-east; and airbase accommodation to the west beyond the historical boundary of Little Stukeley.
1990-1994 O.S. Sheets: TL2075, TL2076, TL2175 & TL2176 Scale: 1:2500 **Figure I**	Several new farm buildings had been constructed within the northern part of the site. New residences had been constructed off the eastern side of Pringle Way.
1999 Aerial Photograph Groundsure Report (Page 13, Appendix 2)	The site was shown to be occupied by hardstanding and farm buildings, and contained a rectangular lawn within a courtyard area in its eastern part. The site was bounded by fields to the west and south, and by a small wooded area and an area of grass to the north. Houses comprising the village of Little Stukeley, together with associated private gardens were present to the east. The airfield to the north mainly comprised areas of hardstanding and hangers.
2003 O.S. LandLine Map Scale: 1:1250 **Figure J**	The site was unchanged. New residences had been constructed to the east of the site.
2006-2022 Aerial Photographs Groundsure Report (Pages 9 to 12, Appendix 2)	In 2019 the barns in the northern part of the site were undergoing redevelopment, with the site fully redeveloped and in its current configuration by 2022. A house was constructed on the adjacent plot to the north of the site between 2016 and 2019.
2018-2022 Internet Research	Planning was awarded in 2018 to alter and refurbish the buildings within the site for conversion to holiday lets. A plan included with the planning permission indicates the presence of a tank adjacent to a workshop building in the south-western corner of the site. A second tank, explicitly recorded as a water tank, was present adjacent the western flank of one of the barns.
2025 O.S. Master Map Reproduced not to scale **Figure K**	The farm buildings in the central and northern parts of the site had been extended and a farm building adjacent the site's south-western boundary had been removed. A house, No.33, had been constructed immediately to the north of the site.

In summary, the site has been occupied by a farmstead since before 1887. The farm buildings comprising the site were altered in the mid-20th Century, and once again in 2019 as part of conversion to holiday lets.

The surrounding area comprised fields and the village of Little Stukeley in 1887. The surrounding area remained relatively unchanged until an airfield was developed to the north of the site in 1939. Following the creation of the airfield and its associated infrastructure new residences were built within Little Stukeley in the mid to late 20th Century.

ENVIRONMENTAL SEARCHES

Information derived from Environmental Databases for a radius of up to 250m from the site was sourced by Lucion Ground Engineering Limited and is presented at the rear of this report in Appendix 2. The information contained includes data sets held by Groundsure and contributors include the Environment Agency, Local Authority, British Geological Survey, Ordnance Survey, English Nature and the Coal Authority.

The results obtained within 250m of the site are presented in summary form below, together with a detailed search on selected areas of enquiry based on the summary details.

1.-2. Historical Industrial Land Uses	**On-Site**	**0 - 250m**
Potentially Contaminative Uses (1:10,000/1:10,560 mapping)	2	0
Historical Tank Database	0	3
Historical Energy Features Database	0	4
Historical Petrol Station Database	0	0
Historical Garage Database	0	0
Historical Military Land	0	0
3. Waste & Landfill Sites	**On-Site**	**0 - 250m**
Landfill Sites	0	0
Historical Landfill and Other Waste Sites	0	0
Waste Exemptions	0	0
4. Recent Industrial Land Use	**On-Site**	**0 - 250m**
Recent Potentially Contaminative Industrial Sites	0	6
Current or Recent Petrol Stations	0	0
National Grid Oil/Gas Pipelines & Electricity Cables	0	0
Sites Determined as Contaminated Land under Part IIA EPA 1990	0	0
Records of COMAH and NIHHS Sites	0	0
Regulated Explosive Sites	0	0
Sites Holding Environmental Permits/Authorisations	0	1
Pollution Incidents	0	0
14.-16. Geology	**On-Site**	**0 - 250m**
Artificial Ground or Made Ground records	No	
Superficial Ground and Drift Geology Records	Yes	
Solid Geology Records	Yes	
Linear Features	No	

5.-6. Hydrogeology and Hydrology	On-Site	0 - 250m
Productive strata within superficial geology beneath the site	Yes	
Productive strata within solid geology beneath the site	No	
Abstraction Licences	0	0
Source Protection Zones	0	0
O.S. MasterMap Water Network entries	0	5
Surface Water Features	0	4
7.-9. Flooding		
Risk of flooding from rivers & the sea (RoFRaS) rating within 50m	None identified	
Historical Flood Events within 250m since 1946	0	
Flood defences within 250m of site	0	
Any areas benefitting from flood defences within 250m of site	None Identified	
Flood storage areas within 250m of site	None Identified	
Environment Agency indicative Zone 2 and Zone 3 floodplains within 50m	None Identified	
Surface water flood risk on site	1 in 30 year, 0.3m to 1.0m	
Groundwater flood risk on site	Low	
10.-13. Designations	**On-Site**	**0-250m**
Environmental Designations	2	1
Visual and Cultural Designations	2	6
Agricultural Designations	0	0
Habitat Designations	0	0

17. Natural Ground Subsidence (on-site)

Hazard	Negligible	Very Low	Low	Moderate	High
Shrinking and Swelling Clay	-	-	On-site	-	-
Running Sand	-	On-site	-	-	-
Compressible Deposits	On-site	-	-	-	-
Collapsible Deposits	-	On-site	-	-	-
Landslides	-	On-site	-	-	-
Soluble Rocks	On-site	-	-	-	-

18.-19. Mining, ground workings and natural cavities	On-Site	0 - 250m
BritPits	0	0
Surface Ground Workings	0	4
Underground Workings on and within 250m of site	0	0
Historical Mineral Planning areas	0	0
Non-coal mining areas	0	0
Coal mining areas	0	0
Natural Cavities	0	0
Mining Cavities	0	0
20. Radon		
The property is not within a Radon Affected Area, as less than 1% of properties are above the action level. Radon Protective Measures are not required for new properties or extensions.		
22. Railway Infrastructure & Projects		
Railway Infrastructure & Projects within 250m of site	0	0

Database Summary

There are two (2) historical industrial land uses recorded for the site, both for an airfield, which was present to the north, and did not extend into the site.

There are three (3) records for historical tanks within 250m of the site, all located within RAF Alconbury 247m to 248m to the north-east and east. There are four (4) records for historical energy features within 250m of the site, all for electricity sub-stations, the closest located 166m to the south.

There are six (6) recent industrial land uses recorded within 250m of this site, the closest for an electricity sub-station 167m to the south. The remainder are for three (3) electricity sub-stations; an electricity pylon; and the offices of a marine engineering service.

There is a single (1) record for a hazardous substance storage/use recorded within 250m of the site. This is for an historical consent, with no details of the substance or use, at Alconbury Airfield 245m to the north-east.

The site is recorded as being covered by the Oadby Member, a 'Secondary Undifferentiated' Aquifer, and underlain by the solid geology of the Oxford Clay Formation, an 'Unproductive' stratum.

There are five (5) O.S. MasterMap Water Network records for watercourses within 250m of the site, relating to a southward draining ditch rising immediately to the south of the site.

The site lies within a Nitrate Vulnerable Zone.

There is a low on-site hazard from shrinking and swelling clays, increasing to a moderate hazard 34m to the south of the site; a very low hazard from running sands, collapsible deposits and landslides; and a negligible hazard from compressible deposits and ground dissolution of soluble rocks.

There are four (4) records for surface ground workings within 250m of the site, all associated with reservoirs located 52m to the north-east or 146m to the west.

PRELIMINARY RISK ASSESSMENT

In order to assess the risks associated with the presence of ground contamination the linkages between the sources and potential receptors to contamination need to be established and evaluated. This is in accordance with the Environmental Protection Act 1990, which provides a statutory definition of Contaminated Land. To fall within this definition it is necessary that, as a result of the condition of the land, substances may be present on or under the land such that;

- *Significant harm is being caused or there is a significant possibility of such harm being caused; or*
- *Pollution of controlled waters is being, or is likely to be, caused*

There are three principal factors that are assessed whilst undertaking a qualitative risk assessment for any site. These are the presence of a contamination source, the existence of migration pathways and the presence of a sensitive target(s). It should be noted that it is necessary for each element of source, pathway and target to be present in order for exposure of a human or environmental receptor to occur.

UK Government guidance on the assessment of contaminated land, requires risk to human health and the environment to be reviewed using source – pathway – target relationships. If each of these elements is present, the linkage provides a potential risk to the identified targets. ***Contaminants or potential pollutants*** identified as ***sources*** in relation to the identified previous uses are listed below in Table 1.

Table 1: Identified Potential Contaminant Sources

Contaminant Source	***Comments***
Drainage	Effluent from existing land drains could provide a contaminant source.
Existing Buildings	The existing buildings may have asbestos containing materials within their construction.
Soil Beneath Site	Contamination may be present within any made ground present beneath the site, associated with former use of the site as a farm.
Soil Gas	Potential soil gas generated from made ground and natural sources around the site.
Ground Contamination Outside Site Boundary	Ground contamination migrating from nearby sites, such as the airfield to the north.

A ***Pathway*** is defined as one or more routes through which a receptor is being, or could be, exposed to, or affected by, a given contaminant.

Potential ***Target or Receptors*** fall within the categories of Human Health, Water Environment, Flora and Fauna, and Building Materials.

There are a number of possible pathways for the contaminants identified on the site to impact human and/or environmental receptors and these are summarised in Tables 2 and 3.

Table 2: Human Receptors and Pathways

Human Receptor-Mechanism	***Typical Exposure Pathway***
Human Inhalation	Breathing Dust and Fumes Breathing Gas emissions
Human Ingestion	Eating -contaminated soil, for example by small children -plants grown on contaminated soil Ingesting dust or soil on fruit or vegetables Drinking contaminated water
Human Contact	Direct skin contact with contamination Direct skin contact with contaminated liquids

Table 3: Water Receptors and Pathways

Receptor-Water Environment	***Typical Exposure Pathway***
Groundwater The site is recorded as being covered by the Oadby Member, a 'Secondary Undifferentiated' Aquifer, and underlain by the solid geology of the Oxford Clay Formation, an 'Unproductive' stratum.	Surface infiltration of atmospheric waters into the soils beneath the site could wash or dissolve potential contaminants and migrate to underlying groundwater. Contamination leads to restriction/prevention of use as a resource, for example, drinking water, and can have secondary impacts on other resources, which depend on it.
Surface Water/River Networks A southward draining ditch is located immediately south of the site.	Surface infiltration of atmospheric waters into the soils beneath the site could wash or dissolve potential contaminants and laterally migrate. Contamination leads to a restriction/prevention of use: -as drinking water resource -for amenity use Effects on aquatic life

Table 4: Preliminary Conceptual Model Relative to Construction/Future Use of Site

Receptors	Pathway	Estimated Potential for Linkage with Contaminant Sources				
		Drainage	Buildings	Soil Beneath Site	Soil Gas	Ground Contamination Outside Site Boundary
Human Health – construction workers	Ingestion and Inhalation of contaminated Soil, Dust and Vapour	Likely	Low likelihood	Likely	Low likelihood	Low likelihood
Human Health – users of completed development	Ingestion and Inhalation of contaminated Soil, Dust and Vapour	Low likelihood	Low likelihood	Likely	Low likelihood	Low likelihood
Water Environment	Migration through ground into surface water or groundwater	Unlikely	Unlikely	Low likelihood	Low likelihood	Unlikely
Flora	Vegetation on site growing on contaminated soil	Unlikely	Unlikely	Low likelihood	Low likelihood	Unlikely
Building Materials	Contact with contaminated soil	Unlikely	Unlikely	Low likelihood	Low likelihood	Unlikely

Key to Table 4

Estimated Potential for Linkage with Contaminant Source	Definition
High likelihood	There is a pollution linkage and an event that either appears very likely in the short term, and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place, and is less likely in the shorter term.
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term.

SITE WORK

The site work was undertaken on 16th April 2025 and comprised eight window sample boreholes (WS01 to WS08) undertaken at locations determined by Lucion Ground Engineering Limited. The hole positions are recorded on the exploratory hole location plan at the rear of this report.

The investigation followed the protocols detailed in British Standards (BS) 'Code of Practice for Site Investigations' (BS5930:2015+A1:2020), 'Methods of test for soils for engineering purposes' (BS1377:1990) and 'Investigation of Potentially Contaminated Sites' (BS10175:2001+A2:2017). The site work was undertaken under the supervision of a Geo-environmental Engineer.

Services information was obtained prior to the start of the investigation, was referenced in relation to the exploratory hole positions, and a scan was undertaken using a cable avoidance tool (CAT) prior to excavation/boring.

The exploratory hole records give the descriptions and depths of the various strata encountered, results of the in-situ tests, details of all samples taken, and the groundwater conditions observed during excavation, boring, on completion and subsequently during the return monitoring visit.

Window Sample Boreholes

The window sample boreholes were undertaken using a tracked, super heavy dynamic sampling rig. Prior to boring, a starter pit was dug at each position using hand tools in order to ensure the absence of buried services. Borehole WS05 was abandoned at 0.70m depth after encountering plastic soakaway crates. Boreholes WS02 and WS06 were completed at 1.20m depth, whilst the remaining boreholes were completed at 2.00m or 3.00m below ground level.

The window sampling equipment consisted of 1.00m long drive-in samplers of specially constructed and strengthened 87mm to 57mm diameter steel sample tubes with a plastic

core-liner, advanced within 100mm diameter steel casing. The samplers were driven into the ground from the base of the hole by an automatic trip hammer weighing 63.50kg falling freely through 750mm. Upon extraction a continuous profile of the soil was obtained in the plastic liners (U) inserted in the samplers. The liners were subsequently split and logged by a Geo-environmental Engineer.

Small disturbed (D) and large bulk (B) samples of soil were taken at regular intervals throughout the pits, and placed into polycarbonate pots or plastic bags, respectively. Environmental samples (ES) were taken at regular intervals within made ground soils, and at the top of the naturally deposited soil, and placed into amber glass jars.

Gas and groundwater monitoring standpipes were installed within boreholes WS01, WS04 and WS08 to 2.00m or 3.00m depth. The annulus over the response zone was backfilled with pea gravel with a bentonite seal placed around the top of each installation within 1.00m of ground level. A gas tap was installed in the top of each standpipe and a protective stopcock cover was concreted into the ground, over each installation and flush with the surface.

On completion the remaining boreholes were backfilled with arisings and slabbed.

LABORATORY TESTING

The samples were inspected in the laboratory and assessments of the soil characteristics have been taken into account during preparation of the exploratory hole records. The soil sample descriptions are in accordance with BS5930:2015+A1:2020.

Chemical analysis of selected soil samples recovered from the exploratory holes was undertaken, by an independent laboratory, primarily for characterisation purposes. The chemical testing programme was devised by Lucion Ground Engineering Limited for a broad suite of potential contaminants, outlined by the Environment Agency (EA) and National House Building Council (NHBC) document R&D 66; 2008 'Guidance for the Safe Development of Housing on Land Affected by Contamination'.

The chemical test results are included in Appendix 3 at the rear of this report.

Chemical Testing

Selected soil samples from the exploratory holes were tested for total concentrations of arsenic, cadmium, chromium, lead, mercury, selenium and nickel, together with speciated polyaromatic hydrocarbons (PAH), boron, copper and zinc, phenols, total and free cyanide, hexavalent chromium, sulphate, sulphide and pH. The organic content of the soil samples was also determined. Selected soil samples were also screened for asbestos and tested for total petroleum hydrocarbons (TPH).

GROUND CONDITIONS

The ground conditions encountered by the exploratory holes comprised a cover of made ground mantling superficial glacial deposits of the Oadby Member. The underlying solid geology of the Oxford Clay Formation was not encountered within any of the exploratory holes.

The exploratory holes were generally dry during excavation, boring and on completion. Groundwater was recorded 'perched' within Glaciofluvial Deposits of the Oadby Member at between 1.33m and 2.00m depth in the south-western corner of the site.

Made Ground

The car parking area in the southern part of the site was surfaced with a 0.05m thick layer of light brown, slightly silty gravel, with a gravel fraction of flint. This gravel dressing covered a dark grey, silty sand and gravel sub-base fill. The sub-base had a gravel fraction of igneous rock and asphalt, and was proved to 0.50m below ground level. In borehole WS05 a geotextile membrane at the base of this layer covered a void formed from plastic crates. The void was proved to 0.70m below ground level.

Elsewhere, the site was surfaced with a dark brown, clayey, gravelly sand or dark brown, silty sand and gravel. This coarse-grained fill locally contained concrete, brick and limestone cobbles; had a gravel fraction of flint, quartzite, brick, concrete, mortar, chalk, igneous rock, asphalt and ash; and was proved to depths between 0.45m and 0.85m below ground level.

In borehole WS01 a black, silty gravelly sand was met beneath the coarse-grained fill at 0.85m depth. This sand fill had a gravel fraction of brick, flint, mortar and ash; and was proved to 1.10m below ground level.

A firm or stiff, dark brown or orange brown and grey, slightly sandy, slightly gravelly, silty clay fill was locally met beneath the coarse-grained fill at depths between 0.50m and 1.10m below ground level. This clay fill had a gravel fraction of concrete, limestone, flint, coal, brick and ash; and was proved to depths between 0.70m and 1.20m below ground level.

Buried Topsoil

A firm, brown and dark brown, slightly sandy, slightly gravelly, silty, slightly organic clay was met beneath the made ground in the western part of the site (WS01 and WS03) at 0.45m or 1.20m depth. This 0.25m (WS01) or 0.20m (WS03) thick buried topsoil had a gravel fraction of flint and quartzite, and was proved to depths of 0.70m and 1.40m below ground level.

Oadby Member

The made ground and buried topsoil was underlain, at depths between 0.50m and 1.40m below ground level, by a firm, brown, orange brown and grey mottled, slightly gravelly, silty clay. This Glacial Till of the Oadby Member had a gravel fraction of angular to rounded, chalk, flint and mudstone; was found to at least the base of boreholes WS02 and WS06 at 1.20m below ground level, and boreholes WS01 and WS08 at 3.00m below ground level; and was proved to between 0.70m and 1.20m depth in the remaining boreholes (WS03, WS04 and WS07).

In boreholes WS03, WS04 and WS07, at 0.70m or 1.20m depth, a soft, brown, orange brown and grey, locally slightly gravelly, sandy, silty clay was met beneath the Glacial Till. This glacial deposit had a gravel fraction of angular flint and was proved to between 1.20m and 2.60m depth.

Below 1.20m to 2.60m depth, an orange brown, clayey, gravelly sand, varying to a clayey sand and gravel was met in these three boreholes. This Glaciofluvial Deposit had a gravel fraction of angular to sub-rounded flint; was found to at least the base of borehole WS04 at 2.00m; and was proved to 2.50m and 2.90m below ground level in boreholes WS03 and WS07.

In boreholes WS03 and WS07 a similar Glacial Till to that previously described was met at 2.50m and 2.90m below ground level, and was found to at least the base of these two boreholes at 3.00m depth.

Groundwater

The boreholes were generally dry during excavation, boring and on completion. Groundwater was met, 'perched' within the Glaciofluvial Deposits of the Oadby Member at 2.00m depth in WS04 and as a seepage in WS03. In borehole WS04 the water rose to 1.84m below ground level, where it remained on completion.

During the return monitoring visit on 25th April 2025, the standpipe installations in boreholes WS01 and WS08 were both dry, whilst groundwater was recorded at 1.33m below ground level in the WS04 installation.

Evidence of Contamination

The made ground contained fragments of brick, concrete, mortar, asphalt, glass, coal and ash.

A slight hydrocarbon odour was observed in borehole WS03 between 1.20m and 2.00m depth. A strong hydrocarbon odour was observed in WS04 below 1.70m depth in borehole WS04. No visual or olfactory evidence of petroleum hydrocarbon contamination was observed within the remaining soils beneath the site. During the return monitoring visit no hydrocarbon odours were noted emanating from the standpipe installations.

No suspected asbestos containing material was observed within the exploratory holes during the site work.

COMMENTS ON THE CHEMICAL TEST RESULTS

The results of the laboratory chemical testing on near surface soil samples have primarily been compared to soil screening values (SSVs) produced by Land Quality Management Limited (LQM) and the Chartered Institute for Environmental Health (CIEH) presented in their document 'The LQM/CIEH S4ULs for Human Health Risk Assessment: 2015 (Publication Number S4UL3608)'. The LQM/CIEH S4ULs are intended for use in assessing the potential risks posed to human health by contaminants in soil and are transparently-derived and cautious 'trigger values' above which further assessment of the risks or remedial action may be needed. The S4ULs (Suitable for Use Levels) have been derived, in accordance with UK legislation and Environment Agency policy, using a modified version of the Environment Agency CLEA 1.06 software.

Reference has also been given to AGAC soil screening values produced by Society of Brownfield Risk Assessment (SoBRA) as documented in their July 2020 publication 'Development of Acute Generic Assessment Criteria for Assessing Risks to Human Health from Contaminants in Soil'. With the absence of a S4UL for cyanide, the SoBRA AGAC has been used as the soil screening criteria within this report because the acute dose toxicity thresholds for free cyanide are very close to the chronic dose toxicity thresholds.

In 2014 the Department for Environment Food and Rural Affairs (DEFRA) published, in their document SP1010, Category 4 Screening Levels (C4SL) for several contaminants including lead. The C4SL represent screening levels below which the land could be considered suitable for a specified use and definitely not contaminated land in respect of those determinands. With the absence of S4UL for lead the C4SL has been used as the soil screening criteria within this report.

For each contaminant the adopted soil screening criteria have been calculated for the following land uses:

- Residential use with home grown produce
- Residential use without home grown produce
- Commercial and industrial usage

The intended purpose of the SSVs are as “intervention values” in the regulatory framework for assessment of human health risks in relation to land use. These values are not binding standards, but are intended to inform judgements about the need for action to ensure that a new use of land does not pose any unacceptable risks to the health of the intended users.

Tables 5 and 6 compare the test results for the made ground with the SSVs in relation to the specified uses. The number of test results, which exceed these values, are also provided.

Table 5: Comparison of Chemical Test Results for Made Ground with SSVs

Determinand	Number of Samples	Min Value (mg/kg)	Max Value (mg/kg)	Number of Samples Exceeding SSV for:			Soil Screening Criteria SSV (1% SOM)			
				Residential with home grown produce	Residential without home grown produce	Commercial/ Industrial	Assessment Method	Residential with home grown produce mg/kg	Residential without home grown produce mg/kg	Commercial/ Industrial (mg/kg)
Organic matter	8	2.8%	12%	-	-	-	-	-	-	-
Arsenic	8	7.5	27	0	0	0	S4UL	37	40	640
Cadmium	8	0.11	1.2	0	0	0	S4UL	11	85	190
Total Chromium	8	13	36	0	0	0	S4UL	910	910	8600
Hexavalent Chromium	8	<0.50	<0.50	0	0	0	S4UL	6	6	33
Lead	8	17	460	1	1	0	C4SL	200	310	2330
Mercury	8	<0.05	0.20	0	0	0	S4UL	11	15	320
Selenium	8	0.38	1.2	0	0	0	S4UL	250	430	12,000
Nickel	8	10	35	0	0	0	S4UL	130	180	980
Phenols	8	<0.10	0.12	0	0	0	S4UL	120	440	440
Copper	8	12	64	0	0	0	S4UL	2400	7100	68,000
Zinc	8	49	550	0	0	0	S4UL	3700	40,000	730,000
Free Cyanide	8	<0.50	0.70	0	0	0	AGAC	24	24	24

Notes
S4UL and C4SL for metals were derived using 6% SOM. These values are not sensitive to SOM and would also be applicable for 1% SOM and 2.5% SOM
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AGAC soil screening values produced by Society of Brownfield Risk Assessment (SoBRA) as documented in their July 2020 publication 'Development of Acute Generic Assessment Criteria for Assessing Risks to Human Health from Contaminants in Soil'.

Table 6: Comparison of Chemical Test Results for Made Ground with SSVs

Determinand	Number of Samples	Min Value (mg/kg)	Max Value (mg/kg)	Number of Samples Exceeding SSV for:			Soil Screening Criteria SSV (1% SOM)			
				Residential with home grown produce	Residential without home grown produce	Commercial/ Industrial	Assessment Method	Residential with home grown produce mg/kg	Residential without home grown produce mg/kg	Commercial/ Industrial (mg/kg)
Acenaphthene	8	<0.10	0.84	0	0	0	S4UL	210	3000	84,000
Acenaphthylene	8	<0.10	0.41	0	0	0	S4UL	170	2900	83,000
Anthracene	8	<0.10	5.8	0	0	0	S4UL	2400	3100	520,000
Benzo[a] anthracene	8	<0.10	9.0	1	0	0	S4UL	7.2	11	170
Benzo[a]pyrene	8	<0.10	11	1	1	0	S4UL	2.2	3.2	35
Benzo[b] fluoranthene	8	<0.10	14	1	1	0	S4UL	2.6	3.9	44
Benzo[g,h,i] perylene	8	<0.10	9.7	0	0	0	S4UL	320	360	390
Benzo[k] fluoranthene	8	<0.10	5.4	0	0	0	S4UL	77	110	1200
Chrysene	8	<0.10	9.4	0	0	0	S4UL	15	30	350
Dibenz[a,h] anthracene	8	<0.10	2.9	2	2	0	S4UL	0.24	0.31	3.5
Fluoranthene	8	<0.10	19	0	0	0	S4UL	280	1500	23,000
Fluorene	8	<0.10	0.87	0	0	0	S4UL	170	2800	63,000
Indeno[1,2,3-cd]pyrene	8	<0.10	8.8	0	0	0	S4UL	27	45	500
Naphthalene	8	<0.10	0.15	0	0	0	S4UL	2.3	2.3	190
Phenanthrene	8	<0.10	9.2	0	0	0	S4UL	95	1300	22,000
Pyrene	8	<0.10	19	0	0	0	S4UL	620	3700	54,000

Notes

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Discussion of Results

The results of the laboratory analyses (Tables 5 & 6) indicate that the made ground beneath the site locally contained elevated concentrations of lead and four of the sixteen PAHs tested for (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene and dibenz[a,h]anthracene) that exceeded their respective SSVs for a residential with home grown produce end use. Concentrations of lead and three of the PAHs tested for (benzo[a]pyrene, benzo[b]fluoranthene and dibenz[a,h]anthracene) also locally exceeded their respective SSVs for a residential without home grown produce end use. None of the concentrations of contaminants tested for exceeded their respective SSVs for a commercial/industrial end use.

The elevated concentrations of lead and PAHs that exceeded the SSVs for residential end uses were all found within the coarse-grained fill beneath the car parking area in the south-western part of the site. Within garden areas of the existing properties (WS01, WS02, WS03 and WS06), none of the concentrations of contaminants tested for exceeded their respective SSVs for residential end uses.

Visual and olfactory evidence of hydrocarbon impacted soils was detected within boreholes WS03 and WS04, in the western part of the site, at depths between 1.20m and at least 2.00m below ground level. The TPH results obtained from the tested soil samples were generally between less than 10mg/kg and 700mg/kg, and are considered to reflect the presence of fragments of coke and ash within the made ground, rather than indicating petroleum hydrocarbon contamination. A single result of 1500mg/kg was recorded within borehole WS04 at 0.20m depth and may reflect the presence of a fuel spillage. There is no soil screening value for TPH as human olfactory sensitivity can detect TPH as levels below those considered hazardous for human health.

No asbestos containing materials were observed within the exploratory holes during the site work. No asbestos containing materials were identified within the samples screened by the laboratory.

Based on the results obtained from the chemical analyses, the soils beneath the southern part of the site (WS04, WS05, WS07 and WS08) would not be considered suitable for re-use exposed at the surface within garden areas in a residential without home grown produce setting, representative of the proposed end use. The soils beneath the garden areas in the northern part of

the site would be considered suitable for use exposed at the surface within a residential with home grown produce setting.

SOIL GAS MONITORING RESULTS

A single return monitoring visit to the site, in April 2025, recorded concentrations of landfill type gasses (methane, carbon dioxide and oxygen) in the borehole standpipe installations. The results are presented to the rear of the exploratory hole records. The recorded concentrations of methane were less than 0.1% on all occasions. The carbon dioxide concentrations were between 0.6% and 1.7%. The recorded oxygen concentrations within the standpipes were slightly depleted when compared to atmospheric conditions. The in-situ measurement recorded a steady gas emission flow rate of less than 0.1l/hr in all instances.

Assuming a 'worst case' positive flow rate of 0.1l/hr, the results give a Gas Screening Value (GSV) of 0.0017l/hr. This GSV falls within Characteristic Situation 1 as defined by BS8485:2015+A1:2019 ‘Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings’.

Plotting the gas monitoring results on a ternary plot with zones indicating potential gas sources (excerpt from NF94 Hazardous Ground Gas – an essential guide for housebuilders, April 2023 in Appendix 4) indicates that the carbon dioxide source is likely caused by oxidation of the observed organic material within the soils beneath the site. The location of the results on this plot indicates that there is a low risk of emissions from the ground.

A Wilson and Card Characteristic Situation 1 can be adopted for the site and a very low risk from soil gases would apply to construction workers and future end users of the site.

UPDATED CONCEPTUAL MODEL

An assessment of the potential linkage between ground contamination sources, human and environmental receptors has been based on the desk study and intrusive ground investigation documented in the preceding sections of this report.

A generalised conceptual model, updated following the intrusive works, monitoring and testing, and targeted to provide coverage across the site, relative to the construction phase and completed development, is presented below in Table 7.

Table 7: Updated Conceptual Model Relative to Construction and Future Redevelopment

Receptors	Pathway	Estimated Potential for Linkage with Contaminant Sources				
		Drainage	Buildings	Soil Beneath Site	Soil Gas	Ground Contamination Outside Site Boundary
Human Health – ground workers	Ingestion and Inhalation of contaminated Soil, Dust and Vapour	Moderate Risk	Low Risk	Existing Garden areas – Very Low Risk Car Parking Area – Moderate Risk	Very Low Risk	Very Low Risk
Human Health – users of completed development	Ingestion and Inhalation of contaminated Soil, Dust and Vapour	N/A	N/A	Existing Garden areas – Very Low Risk Car Parking Area – Moderate Risk	Very Low Risk	Very Low Risk
Water Environment	Migration through ground into surface water or groundwater	N/A	N/A	Low Risk	Very Low Risk	Very Low Risk
Flora	Vegetation on site growing on contaminated soil.	N/A	N/A	Low Risk	Very Low Risk	Very Low Risk
Building Materials	Contact with contaminated soil	N/A	N/A	Very Low Risk	Very Low Risk	Very Low Risk

Key to Table 7

RISK	Definition
Very High	There is a high probability that severe harm could arise to a designated receptor from an identified hazard, or, there is evidence that severe harm to a designated receptor is currently happening. The risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required.
High	Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) and remedial works may be necessary in the short term and likely over the long term.
Moderate	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild.
Low	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low	There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.
N/A	Not Applicable because the proposed development will remove the source.

COMMENTS ON GROUND CONTAMINATION IN RELATION TO PROPOSED DEVELOPMENT

It is proposed to remove a holiday home only planning restriction on units at Pringle Farm. It is understood that the layout of the development will be unaltered. This investigation may not have revealed the full extent of contamination on the site and appropriate professional advice should be sought if subsequent site works reveal materials that appear to be contaminated.

Contaminated Soil

The exploratory holes found up to 1.20m of made ground beneath the site. Concentrations of lead and four of the sixteen PAHs tested were found that exceeded their respective SSVs for a residential with home grown produce end use, considered representative of the proposed development. None of the contaminations tested for exceeded their SSVs for a commercial/industrial end use.

Hydrocarbon impacted soils were found in the south-western part of the site, with the strongest odours noted within boreholes WS03 and WS04, undertaken closest to a former tank.

Due to the presence of elevated concentrations of lead and PAHs, together with hydrocarbon impacted soils, there is a moderate risk that the made ground soils in the southern part of the site (car parking area) would affect groundworkers, and future end users of the site where the made ground is exposed, such as in new private gardens and landscaped areas. Within existing garden areas there is a very low risk to groundworkers and future end users of the site, due to the absence of elevated concentrations of contaminants in this area.

Existing Drainage

Redundant foul or surface water drain runs, if present, should be removed from beneath the site and precautions should be in place to ensure that any remaining effluent is directly disposed off-site. The integrity of existing drainage should be checked, and where they are to be

retained, any damaged sections should be replaced prior to redevelopment. The latter measures should remove any future risk to human health and to the water environment.

Existing Buildings

Due to their age, the existing barns and buildings were constructed at a time when asbestos containing materials were a common construction material. Suitable precautions, in line with current best practice, should be put in place to protect workers from the effects of asbestos material, during any future redevelopment.

Human Health - Construction Workers

The presence of elevated levels of lead and PAHs with regard to their respective SSVs for a residential without home grown produce end use, together with petroleum impacted soils, within the made ground soils beneath the site, indicates that there is a moderate risk that a pathway could develop affecting construction workers during any future groundworks.

No special precautions would be required during the development of the site by workers who may come into contact with the soil during groundworks, providing that standard precautions are adopted which should generally include the procedures given by the Health and Safety Executive industry guidance.

For the protection of workers during groundworks the following is recommended:

a) Limit repeated or prolonged skin contact with soils by wearing gloves with sleeves rolled down.

b) Washing facilities should be made available to groundworkers, as to minimise the potential for inadvertent ingestion of soil.

c) If any soils are revealed which are different to those encountered by this ground investigation, the advice of a specialist should be sought in view of classifying the material and ascertaining its risk to groundworkers.

Human Health - Users of Completed Development

The risk of the identified ground contamination affecting the site users within the proposed residential without home grown produce setting, would be moderate, where a pathway is present.

Where present beneath permanent areas of hardstanding, such as the driveway and car parking in the southern part of the site, the risk of the encountered ground contamination affecting the site users would be very low. This is because it would be highly unlikely that the general site users would normally be able to penetrate the floors and hardstanding, which would be necessary for them to uncover any contaminated soils beneath the site.

In the northern part of the site, within the existing garden areas, the soils would be considered suitable for re-use in a residential with home grown produce setting, due to the absence of elevated concentrations of contaminants.

It would be considered prudent to confirm the area of hydrocarbon impacted soils in the south-western corner of the site in order to ensure garden areas remain unaffected by any plume.

If new landscaped areas were to be adopted within the south-western part of the site, the made ground should either be completely removed, or removed and replaced with a surface covering of at least 0.60m of certified 'clean' topsoil over a separator 'no dig' geotextile, which would be considered to provide a suitable pathway break. This should be increased to 1.00m for rear garden areas.

Effects on Services

Consideration should be given to upgrading service materials, particularly for water supply pipes, where they will be in contact with made ground containing elevated concentrations of lead, PAHs or TPH, or ensure that the made ground is not used as a backfill around such water supply pipes. Further guidance on the selection of materials for use as water supply pipes should be sought from the local water supplier.

Soil Gas

According to the environmental database information obtained there are no active landfills within influencing distance of the site. Locally slightly organic soils, associated with buried topsoil, were encountered within the soils beneath the site.

The gas monitoring of the borehole standpipes has determined that a Characteristic Situation 1 would apply, in regards to carbon dioxide and methane soil gases, so the risk to groundworkers and end users would very low. No gas infiltration protection measures would be required, in this regard.

The site lies within an area where radon protection measures are not required for new dwellings in accordance with BR211.

Water Environment

The exploratory holes were generally dry. Groundwater was recorded 'perched' within the Glaciofluvial Deposits of the Oadby Member at depths between 1.33m and 2.00m below ground level in the south-western corner of the site. Elevated concentrations of lead and PAHs were locally found within the soils beneath the site in regard to residential end uses. Olfactory evidence of petroleum hydrocarbon contamination was locally recorded in boreholes WS03 and WS04, the only holes where groundwater was recorded.

Due to the absence of significant and widespread concentrations of contaminants in the soils beneath the site, it is considered that there is a very low risk that the construction of the new development, including foundations, would impact the quality of the water environment beneath this site.

The presence of petroleum hydrocarbon odours within boreholes where groundwater was recorded indicates that there is a low risk that the water environment beneath the site will be impacted by TPH contamination.

CONTAMINATION ASSESSMENT CONCLUSIONS

It is proposed to remove a holiday home only planning restriction on the site. It is understood that the layout of the units, garden areas and areas of hardstanding will not be altered. If any alterations to the configuration of the site are proposed, they will need to be confirmed by the Engineer/Architect in order to clearly identify areas of new soft landscaping or gardens, if envisaged.

Remediation

1. The risk of the encountered ground contamination affecting site users when present beneath buildings and permanent areas of hardstanding would be very low and consequently no formal scheme of remediation is proposed for such areas.

2. Remediation should be carried out where new landscaped areas are to be included, replacing the existing areas of car parking, in the southern part of the site. For the proposed setting, a minimum depth of removal and replacement of 0.60m, or the full thickness of made ground where the made ground is less than this, would be considered appropriate in areas of communal soft landscaping, where soil will be exposed at the surface, and will involve the removal of the made ground and replacement with a suitably thick cover or barrier layer in order to break the pathway between the underlying made ground and the site users. This should be increased to 1.00m for private rear gardens. A high visibility 'no dig' geotextile should be incorporated at the base of any imported topsoil in order to separate it from, and prevent it mixing with, TPH impacted soils.

3. If required to create new areas of landscaping, imported topsoil and subsoil should have appropriate certificates confirming its suitability prior to placement. Where such works are necessary, the local authority should be informed, and information gathered to demonstrate the works.

4. If any soils are revealed which are different to those encountered by this ground investigation, the advice of a specialist should be sought in view of classifying the material and ascertaining its risk to groundworkers.

Validation

Where remediation is undertaken (new landscaping or gardens) it is recommended that the work is fully documented and on completion a validation report is prepared providing a full descriptive record of the process, quantities of material excavated, stored and removed, and the materials imported and placed, together with chemical test results and photographs.

REMEDIATION STATEMENT

Remediation of the soils beneath the existing garden areas in the northern part of the site, in respect of the proposed end use within a long term residential with home grown produce setting, is not considered necessary due to the absence of elevated concentrations of contaminants.

Provided that the car parking and driveway in the southern part of the site remain unaltered, no remediation would be considered necessary. However, if new areas of garden or soft landscaping were to be proposed within this area, the made ground should be removed and replaced with clean imported topsoil with a no dig geotextile at its base. A 'double dig' depth of 0.60m would be considered suitable for communal areas, whilst for private rear gardens an increased depth of 1.00m would be considered suitable.

Due to the presence of olfactory evidence of petroleum hydrocarbons in the south-western part of the site, possibly associated with a former tank adjacent to the existing barn, further work may be required to establish the impact of such contamination on the underlying water environment. As the standpipe installations in boreholes WS01 and WS08 were dry during the return monitoring visit, it is considered unlikely that any associated plume of fuel pollution has spread beneath the garden areas of the site. It should be noted that human olfactory sensitivity for TPH can detect TPH at levels below those considered hazardous for human health.

FURTHER WORKS

It would be considered prudent to undertake further investigation within the south-western part of the site in regards to the presence of total petroleum hydrocarbons within the naturally deposited soils below 1.00m depth. This could be undertaken in a phased approach, initially comprising testing of groundwater samples from the existing borehole installations, and escalating to additional boreholes and standpipes if high concentrations of TPH are detected.

LUCION GROUND ENGINEERING LIMITED

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Proposed Exploratory Hole Location Plan

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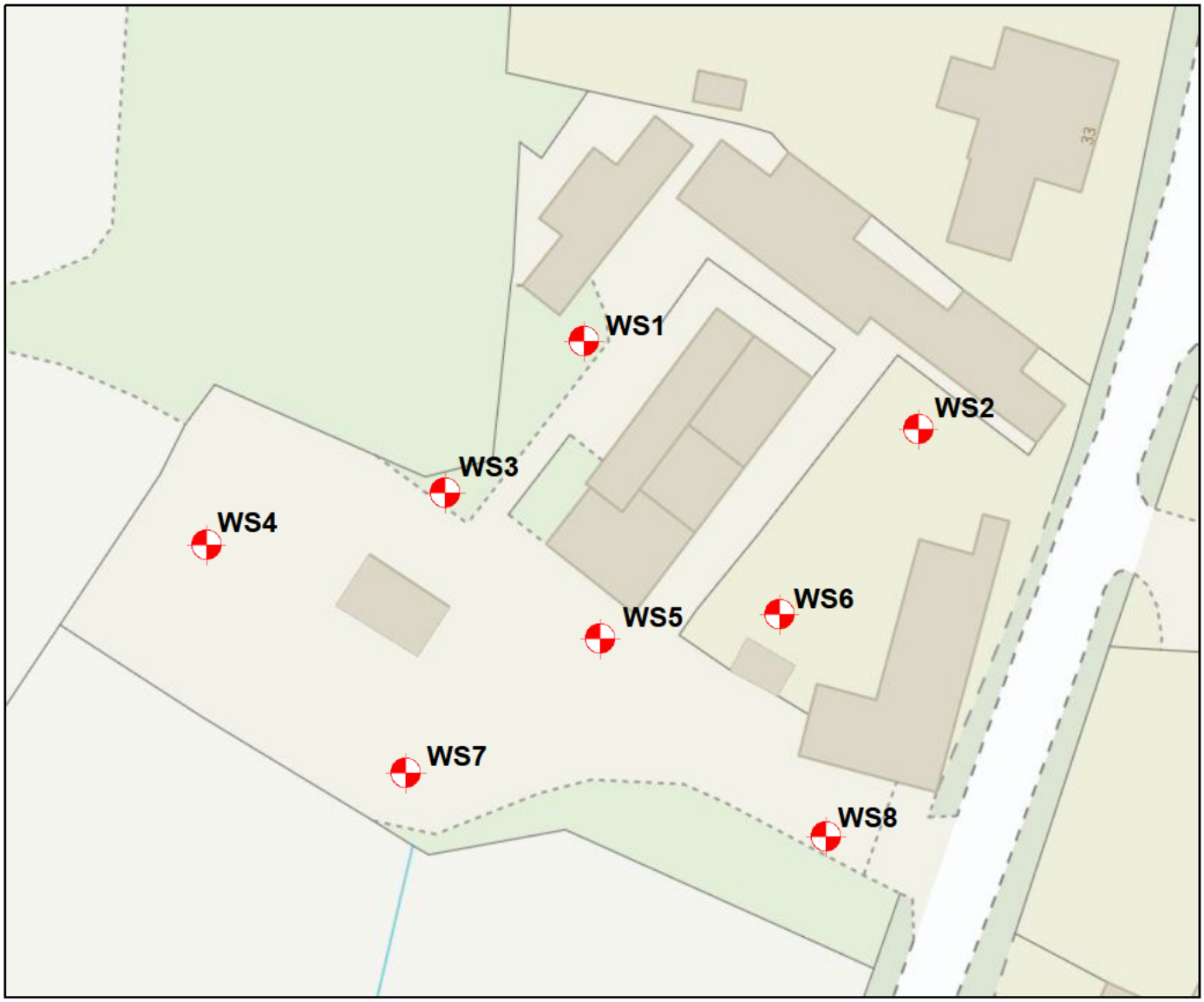

Key

Borehole Position

Not to Scale

Project : Pringle Farm, Pringle Way, Little Stukeley

Client : The Yard Pringle Farm Ltd

Lucion
Protecting people and planet

LUCION GROUND ENGINEERING LIMITED
Peterborough Tel : 01733 566566

Project No.
131418

LUCION GROUND ENGINEERING LTD. Peterborough Tel : 01733 566566	Site: Pringle Farm, Pringle Way, Little Stukeley			WINDOW SAMPLE WS01
	16/04/2025	Final Depth 3.00 m	Equipment Dynamic Sampling Rig	

Sample and In Situ Testing			Water Levels (Casing)	Well	Stratum Description	Legend	Depth (m)
Depth (m)	Type	Results					
0.10 0.10	D1 ES1				MADE GROUND - Dark brown, clayey, gravelly SAND. Gravel of brick, asphalt, concrete, flint, mortar and quartzite.		
0.50 0.50	D2 ES2				MADE GROUND - Light brown, silty, sandy GRAVEL. Gravel of limestone and brick.		0.40
0.90 0.90	D3 ES3				MADE GROUND - Black, silty, gravelly SAND. Gravel of brick, flint, mortar and ash.		0.85
1.20 1.20-2.00	D4 U1				MADE GROUND - Stiff, dark brown, slightly gravelly, silty CLAY. Gravel of concrete, limestone, ash, flint and coal.		1.10 1.20
					BURIED TOPSOIL - Firm, brown, slightly gravelly, silty, slightly organic CLAY. Gravel of flint.		1.40
2.00-3.00	U2				Firm, brown, orange brown and grey, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to rounded chalk and flint. (OADBY MEMBER)		
					End of Borehole at 3.00m		3.00

Remarks
1. Starter pit excavated to 1.20m depth.
2. Live roots observed to 1.40m depth.
3. Gas monitoring standpipe installed to 3.00m depth.

Hole Diameter by Depth	
Depth (m)	Diameter (mm)
2.00	77
3.00	67

Project No. 131418

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KEY
D - Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample
W - Water Sample
S/C - SPT Spoon/Cone
▽ - Water Strike
▼ - Water Rise
MP - Mackintosh Probe
V - Vane Shear Test
N/* - SPT Blows
ES - Environmental Sample
▽ - Level On Completion
▼ - Level Casing Withdrawn
▼ - Standpipe Level

Groundwater Strike				
Strike (m)	Rose To (m)	Casing (m)	Sealed	Remarks

Groundwater Observations			
Date	Depth (m)	Casing (m)	Water (m)
16/04/2025	3.00	2.00	Dry
16/04/2025	3.00		Dry
25/04/2025	3.00	1.00	Dry

LUCION GROUND ENGINEERING LTD. Peterborough Tel : 01733 566566	Site: Pringle Farm, Pringle Way, Little Stukeley			**WINDOW SAMPLE** **WS02**
	16/04/2025	Final Depth 1.20 m	Equipment Hand Tools	

Sample and In Situ Testing			Water Levels (Casing)	Well	Stratum Description	Legend	Depth (m)
Depth (m)	Type	Results					
0.10 0.10	D1 ES1				MADE GROUND - Dark brown, clayey, gravelly SAND. Gravel of brick, flint, quartzite, chalk and ash.		
0.40 0.40	D2 ES2						0.50
0.60 0.60	D3 ES3				MADE GROUND - Firm, brown and orange brown, slightly sandy, slightly gravelly, silty CLAY. Gravel of brick, quartzite and ash.		0.70
0.90 0.90	D4 ES4				Firm, brown, orange brown and grey, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to sub-rounded chalk and flint. (OADBY MEMBER)		
1.20 1.20	D5 ES5				End of Borehole at 1.20m		1.20

Remarks
1. Starter pit excavated to 1.20m depth.
2. Live roots observed to at least 1.20m depth.

Hole Diameter by Depth	
Depth (m)	Diameter (mm)
1.20	300

Project No. 131418

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▼ - Water Rise
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V - Vane Shear Test
N/* - SPT Blows
ES - Environmental Sample
▽ - Level On Completion
▼ - Level Casing Withdrawn
▽ - Standpipe Level

Groundwater Strike				
Strike (m)	Rose To (m)	Casing (m)	Sealed	Remarks

Groundwater Observations			
Date	Depth (m)	Casing (m)	Water (m)
16/04/2025	1.20		Dry

LUCION GROUND ENGINEERING LTD. Peterborough Tel : 01733 566566	Site: Pringle Farm, Pringle Way, Little Stukeley			**WINDOW SAMPLE** **WS03**
	16/04/2025	Final Depth 3.00 m	Equipment Dynamic Sampling Rig	

Sample and In Situ Testing			Water Levels (Casing)	Well	Stratum Description	Legend	Depth (m)
Depth (m)	Type	Results					
0.20 0.20	D1 ES1				MADE GROUND - Light brown, silty SAND AND GRAVEL with occasional concrete cobbles. Gravel of flint, chalk, concrete, brick, limestone and igneous rock.		
					BURIED TOPSOIL - Firm, dark brown, slightly sandy, slightly gravelly, silty, slightly organic CLAY. Gravel of flint and quartzite.		0.45
0.60 0.60	D2 ES2				Firm, brown, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to sub-rounded flint, quartzite and mudstone.		0.70
0.90	D3				(OADBY MEMBER)		
1.20 1.20-2.00	D4 U1				Soft, brown and grey, slightly sandy, silty CLAY with a slight hydrocarbon odour.		1.20
					(OADBY MEMBER)		
2.00-3.00	U2		▼		Brown and orange brown, clayey SAND AND GRAVEL. Gravel of angular to sub-rounded flint.		2.00
					(OADBY MEMBER)		
					Firm, brown, orange brown and grey, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to sub-rounded chalk and flint.		2.50
					(OADBY MEMBER)		
					End of Borehole at 3.00m		3.00

Remarks
1. Starter pit excavated to 1.20m depth.

Hole Diameter by Depth	
Depth (m)	Diameter (mm)
2.00	67
3.00	57

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KEY

D - Disturbed Sample
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▽ - Water Strike
▼ - Water Rise
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V - Vane Shear Test
N/* - SPT Blows
ES - Environmental Sample
▽ - Level On Completion
▼ - Level Casing Withdrawn
▽ - Standpipe Level

Groundwater Strike

Strike (m)	Rose To (m)	Casing (m)	Sealed	Remarks
2.00			Not	Seepage

Groundwater Observations

Date	Depth (m)	Casing (m)	Water (m)
16/04/2025	3.00		Dry

LUCION GROUND ENGINEERING LTD.
Peterborough Tel : 01733 566566

Site: Pringle Farm, Pringle Way, Little Stukeley

WINDOW SAMPLE WS04

16/04/2025 | Final Depth 2.00 m | Equipment Dynamic Sampling Rig

Sample and In Situ Testing			Water Levels (Casing)	Well	Stratum Description	Legend	Depth (m)
Depth (m)	Type	Results					
					MADE GROUND - Light brown, slightly silty GRAVEL. Gravel of flint.		0.05
0.20	D1				MADE GROUND - Dark grey, silty SAND AND GRAVEL. Gravel of igneous rock and asphalt.		
0.20	ES1						
					Firm, brown and orange brown, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to sub-rounded flint and chalk. (OADBY MEMBER)		0.50
0.60	D2						0.70
0.60	ES2				Soft, orange brown, slightly gravelly, sandy, silty CLAY. Gravel of angular flint.		
0.90	D3				(OADBY MEMBER)		
1.20	D4				Orange brown, slightly gravelly, very clayey SAND with a strong hydrocarbon odour below 1.70m depth. Gravel of angular flint.		1.20
1.20-2.00	U1		▼				
			▼		(OADBY MEMBER)		
					End of Borehole at 2.00m		2.00

Remarks
1. Starter pit excavated to 1.20m depth.
2. Live roots observed to 0.60m depth .
3. Gas monitoring standpipe installed to 2.00m depth.

Hole Diameter by Depth

Depth (m)	Diameter (mm)
2.00	67

Project No. 131418

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ES - Environmental Sample
▽ - Level On Completion
▼ - Level Casing Withdrawn
▼ - Standpipe Level

Groundwater Strike

Strike (m)	Rose To (m)	Casing (m)	Sealed	Remarks
2.00	1.84		Not	

Groundwater Observations

Date	Depth (m)	Casing (m)	Water (m)
16/04/2025	2.00		1.84
25/04/2025	2.00	1.00	1.33

LUCION GROUND ENGINEERING LTD.
Peterborough Tel : 01733 566566

Site: Pringle Farm, Pringle Way, Little Stukeley

WINDOW SAMPLE WS05

16/04/2025	Final Depth 0.70 m	Equipment Hand Tools

Sample and In Situ Testing			Water Levels (Casing)	Well	Stratum Description	Legend	Depth (m)
Depth (m)	Type	Results					
0.10	D1				MADE GROUND - Light brown, slightly silty GRAVEL. Gravel of flint.		0.05
0.10	ES1				MADE GROUND - Grey, silty, sandy GRAVEL with a geotextile membrane at base. Gravel of igneous rock.		
0.50	D2				VOID with plastic soakaway crates.		0.50
0.50	ES2				End of Borehole at 0.70m		0.70

Remarks
1. Starter pit excavated to 0.70m depth.
2. Borehole abandoned at 0.70m depth after encountering plastic soakaway crates.

Hole Diameter by Depth

Depth (m)	Diameter (mm)
0.70	300

Project No. 131418

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KEY
D - Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample
W - Water Sample
S/C - SPT Spoon/Cone
▽ - Water Strike
▼ - Water Rise
MP - Mackintosh Probe
V - Vane Shear Test
N/* - SPT Blows
ES - Environmental Sample
▽ - Level On Completion
▼ - Level Casing Withdrawn
▽ - Standpipe Level

Groundwater Strike

Strike (m)	Rose To (m)	Casing (m)	Sealed	Remarks

Groundwater Observations

Date	Depth (m)	Casing (m)	Water (m)
16/04/2025	0.70		Dry

LUCION GROUND ENGINEERING LTD.
Peterborough Tel : 01733 566566

Site: Pringle Farm, Pringle Way, Little Stukeley

WINDOW SAMPLE WS06

16/04/2025 | Final Depth 1.20 m | Equipment Hand Tools

Sample and In Situ Testing			Water Levels (Casing)	Well	Stratum Description	Legend	Depth (m)
Depth (m)	Type	Results					
0.20	D1				MADE GROUND - Brown, clayey, gravelly SAND. Gravel of brick, flint, quartzite, clinker and ash.		
0.20	ES1						0.30
0.50	D2				MADE GROUND - Dark brown and orange brown, clayey, gravelly SAND. Gravel of brick, flint, clinker, coal, ash, quartzite and glass.		
0.50	ES2						0.60
0.70	D3				MADE GROUND - Firm, orange brown and grey, slightly sandy, slightly gravelly, silty CLAY. Gravel of flint, brick, chalk and ash.		
0.70	ES3						0.80
0.90	D4				Firm, becoming soft, grey and brown, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to sub-rounded chalk and flint.		
0.90	ES4				(OADBY MEMBER)		
1.20	D5				End of Borehole at 1.20m		1.20
1.20	ES5						

Remarks
1. Starter pit excavated to 1.20m depth .
2. Live roots observed to 0.30m depth.

Hole Diameter by Depth

Depth (m)	Diameter (mm)
1.20	300

Project No. 131418

1:25 | Page 1/1

KEY
D - Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample
W - Water Sample
S/C - SPT Spoon/Cone
▽ - Water Strike
▼ - Water Rise
MP - Mackintosh Probe
V - Vane Shear Test
N/* - SPT Blows
ES - Environmental Sample
▽ - Level On Completion
▼ - Level Casing Withdrawn
▽ - Standpipe Level

Groundwater Strike

Strike (m)	Rose To (m)	Casing (m)	Sealed	Remarks

Groundwater Observations

Date	Depth (m)	Casing (m)	Water (m)
16/04/2025	1.20		Dry

LUCION GROUND ENGINEERING LTD. Peterborough Tel : 01733 566566	Site: Pringle Farm, Pringle Way, Little Stukeley			**WINDOW SAMPLE** **WS07**
	16/04/2025	Final Depth 3.00 m	Equipment Dynamic Sampling Rig	

Sample and In Situ Testing			Water Levels (Casing)	Well	Stratum Description	Legend	Depth (m)
Depth (m)	Type	Results					
0.10 0.10	D1 ES1				MADE GROUND - Dark brown, silty SAND AND GRAVEL with occasional concrete and limestone cobbles. Gravel of limestone, concrete, brick, igneous rock and asphalt.		
0.60 0.60	D2 ES2						
0.90 0.90	D3 ES3				MADE GROUND - Firm, dark brown, slightly sandy, slightly gravelly, silty CLAY. Gravel of brick and flint.		0.85 0.95
1.20 1.20 1.20-2.00	D4 ES4 U1				Firm, brown, orange brown and grey, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to sub-rounded flint and chalk. (OADBY MEMBER) Firm, becoming soft, brown, orange brown and grey, sandy, silty CLAY. (OADBY MEMBER)		1.20
2.00-3.00	U2				Very soft, orange brown, sandy, silty CLAY. (OADBY MEMBER)		2.00
					Orange brown, clayey, gravelly SAND. Gravel of angular to sub-rounded flint. (OADBY MEMBER)		2.60
					Stiff, brown, orange brown and grey, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to sub-angular flint and chalk. (OADBY MEMBER)		2.90 3.00
					End of Borehole at 3.00m		

Remarks
1. Starter pit excavated to 1.20m depth.
2. Live roots observed to 0.60m depth.

Hole Diameter by Depth	
Depth (m)	Diameter (mm)
2.00	77
3.00	67

Project No. 131418

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KEY
D - Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample
W - Water Sample
S/C - SPT Spoon/Cone
▽ - Water Strike
▼ - Water Rise
MP - Mackintosh Probe
V - Vane Shear Test
N/* - SPT Blows
ES - Environmental Sample
▽ - Level On Completion
▼ - Level Casing Withdrawn
▽ - Standpipe Level

Groundwater Strike				
Strike (m)	Rose To (m)	Casing (m)	Sealed	Remarks

Groundwater Observations			
Date	Depth (m)	Casing (m)	Water (m)
16/04/2025	3.00		Dry

LUCION GROUND ENGINEERING LTD. Peterborough Tel : 01733 566566	Site: Pringle Farm, Pringle Way, Little Stukeley			**WINDOW SAMPLE** **WS08**
	16/04/2025	Final Depth 3.00 m	Equipment Dynamic Sampling Rig	

Sample and In Situ Testing			Water Levels (Casing)	Well	Stratum Description	Legend	Depth (m)
Depth (m)	Type	Results					
0.30 0.30	D1 ES1				MADE GROUND - Dark brown, silty SAND AND GRAVEL with occasional brick and concrete cobbles. Gravel of brick, concrete, chalk, flint and ash.		
0.50 0.50	D2 ES2				MADE GROUND - Light brown, silty, gravelly SAND. Gravel of flint, quartzite and chalk.		0.40
					Stiff, brown, orange brown and grey, slightly sandy, slightly gravelly, silty CLAY. Gravel of angular to rounded chalk and flint.		0.55
1.20 1.20 1.20-2.00	D3 ES3 U1						
2.00-3.00	U2				(OADBY MEMBER)		
					End of Borehole at 3.00m		3.00

Remarks
1. Starter pit excavated to 1.20m depth.
2. Live roots observed to 0.60m depth.
3. Gas monitoring standpipe installed to 3.00m depth.

Hole Diameter by Depth	
Depth (m)	Diameter (mm)
2.00	77
3.00	67

Project No. 131418

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KEY
D - Disturbed Sample
B - Bulk Sample
U - Undisturbed Sample
W - Water Sample
S/C - SPT Spoon/Cone
▽ - Water Strike
▼ - Water Rise
MP - Mackintosh Probe
V - Vane Shear Test
N/* - SPT Blows
ES - Environmental Sample
▽ - Level On Completion
▼ - Level Casing Withdrawn
▼ - Standpipe Level

Groundwater Strike

Strike (m)	Rose To (m)	Casing (m)	Sealed	Remarks

Groundwater Observations

Date	Depth (m)	Casing (m)	Water (m)
16/04/2025	3.00		Dry
25/04/2025	3.00	1.00	Dry

Groundwater/Gas Monitoring Record

Site: Pringle Farm, Pringle Way, Little Stukeley

Report Ref: 131418

Date	Borehole No.	Methane (% v/v)		Carbon Dioxide (% v/v)		Oxygen (% v/v)		Flow Rate (l/hr)	Atmosph. Pressure (mb)	Depth of Well (mbgl)	Depth to Ground Water (mbgl)	Comments
		Peak	Steady	Peak	Steady	Min.	Max.					
25/04/2025	WS01	<0.1	<0.1	0.9	0.9	20.0	20.0	<0.1	1016	3.00	Dry	
25/04/2025	WS04	<0.1	<0.1	0.6	0.6	19.4	19.4	<0.1	1016	2.00	1.33	
25/04/2025	WS08	<0.1	<0.1	1.7	1.7	19.5	19.5	<0.1	1016	3.00	Dry	

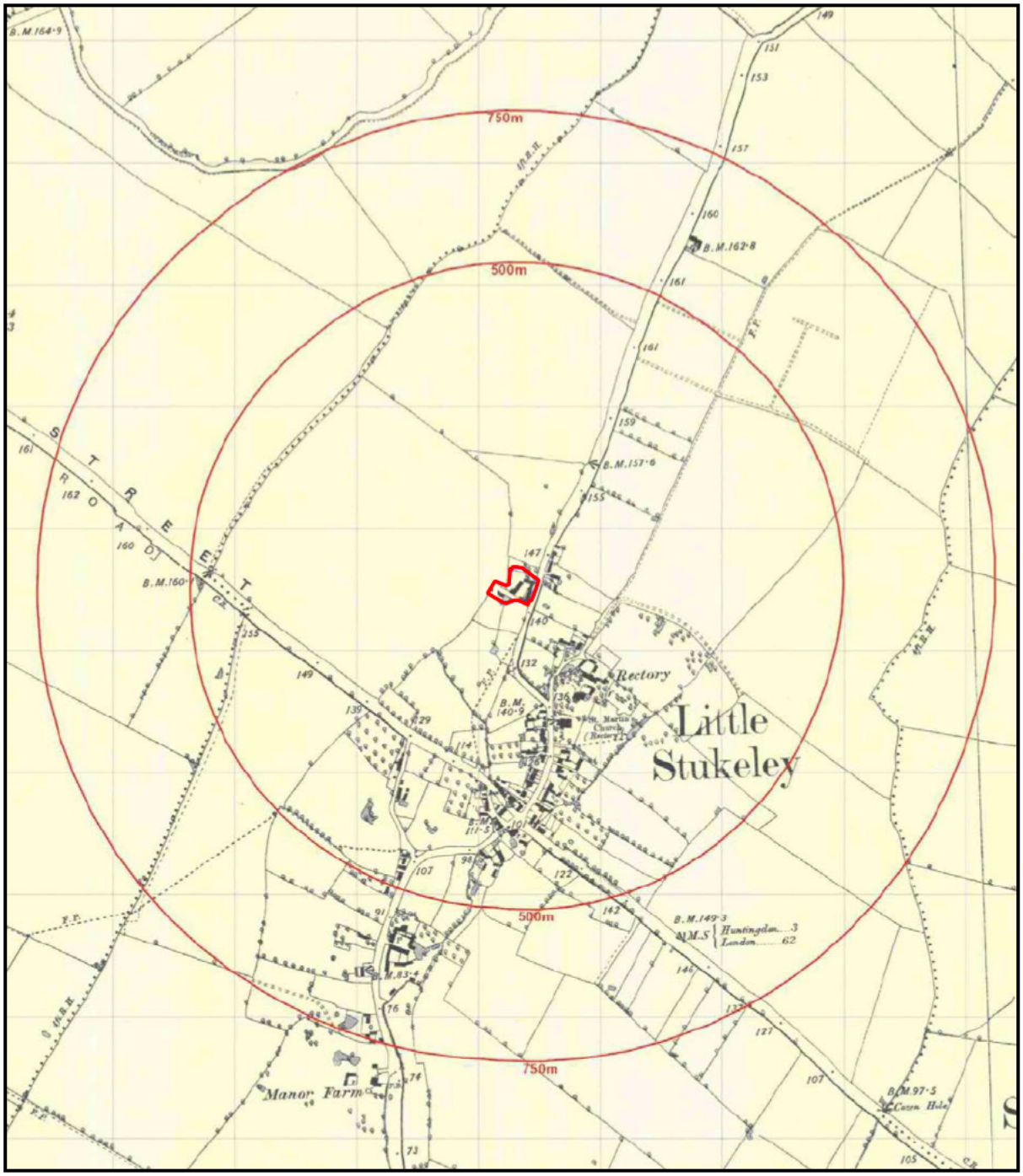
APPENDIX 1

HISTORICAL MAPS

Site History

Figure A

Reproduced from the **1887** edition Ordnance Survey sheet **Huntingdonshire XVII.NE** at **1:10,560** scale



Project : Pringle Farm, Pringle Way, Little Stukeley

Client : The Yard Pringle Farm Limited

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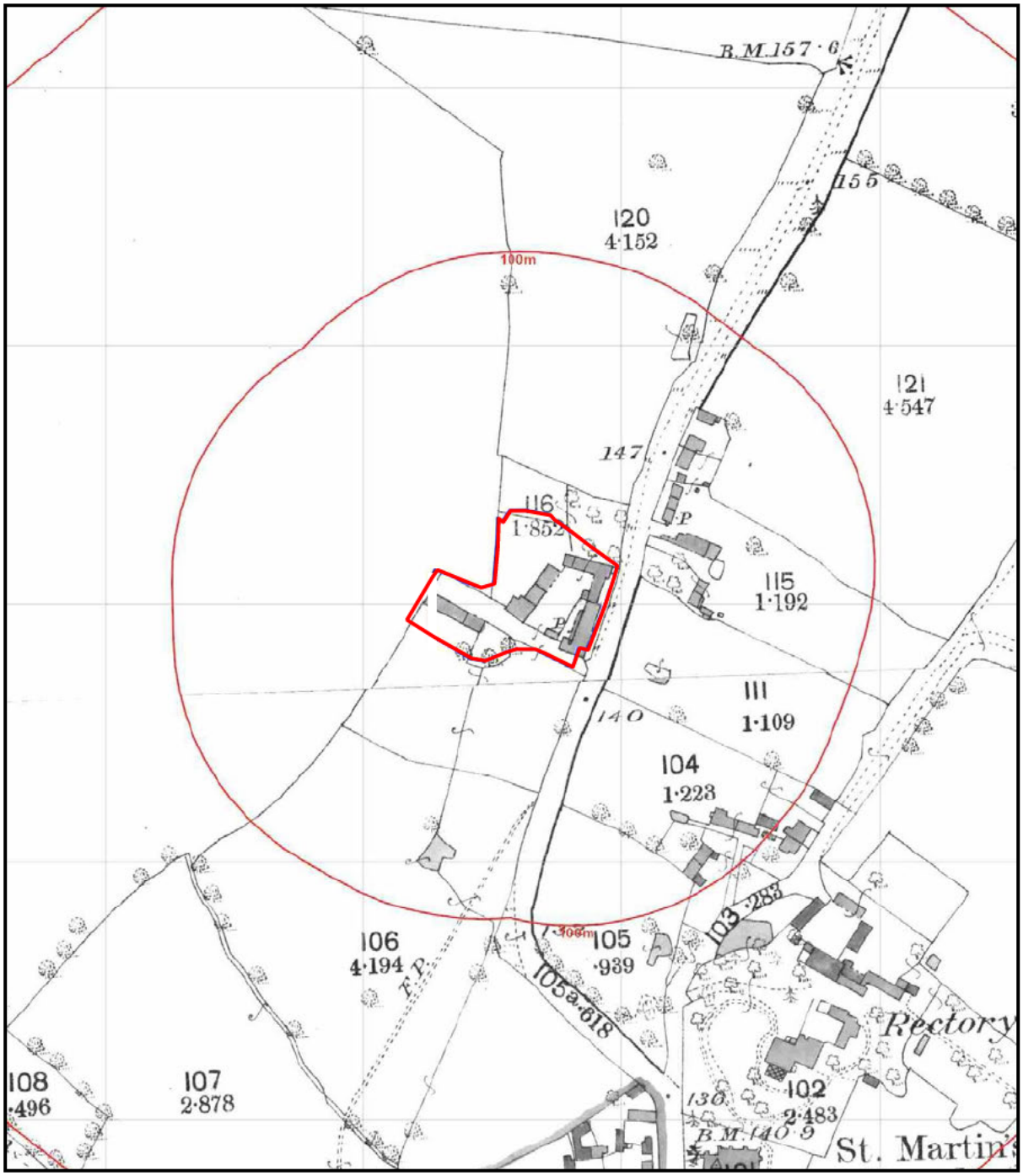
Project No.
131418

Site History

Figure B

Reproduced from the **1888** edition Ordnance Survey sheets **Huntingdonshire XVII.4 & XVII.8** at **1:2500** scale



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Site History

Figure C

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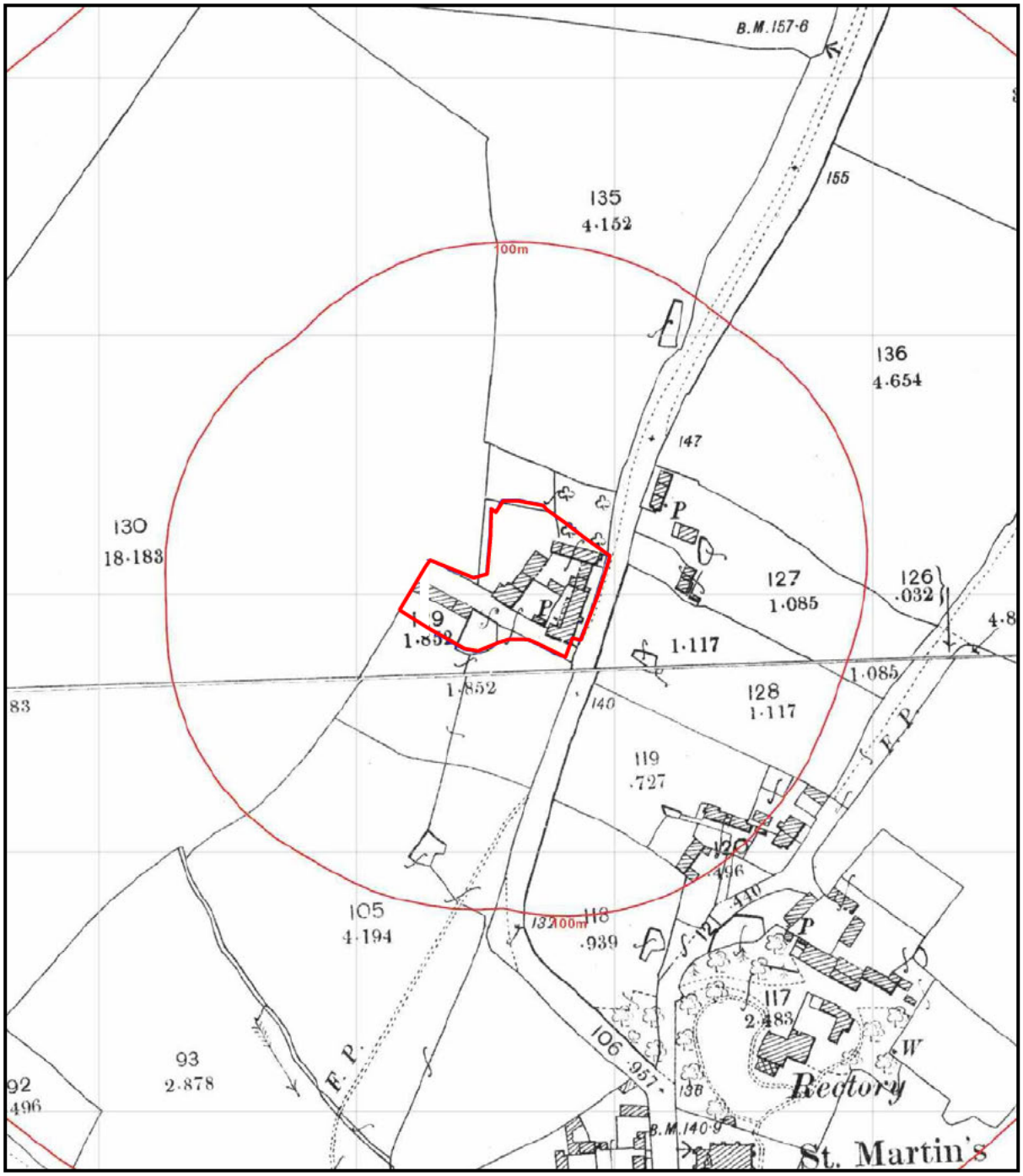

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Site History

Figure D

Reproduced from a **1944** Aerial Photograph



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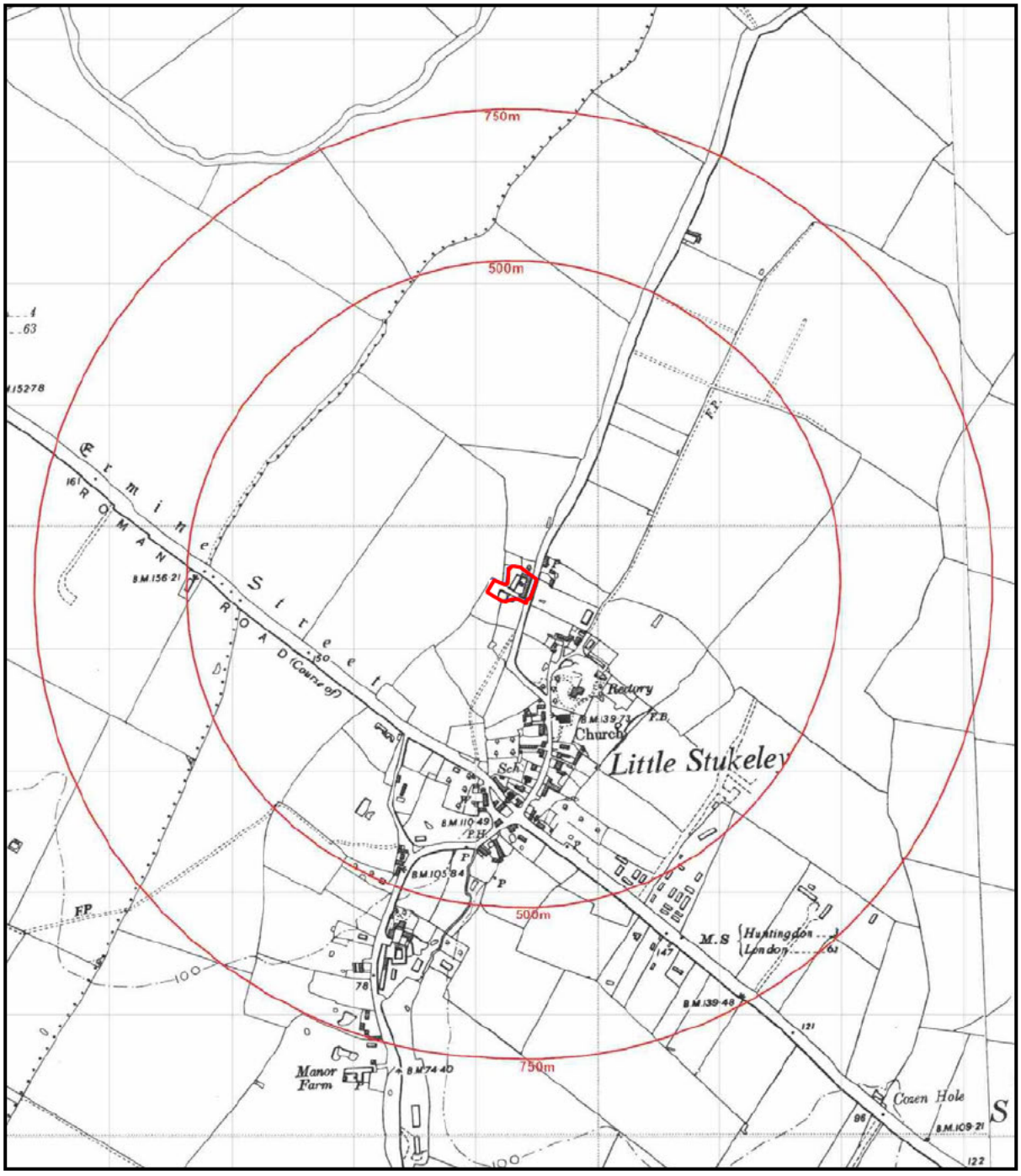
Site History

Figure E

Reproduced from the **1950** edition Ordnance Survey sheet **Huntingdonshire XVII.NE** at **1:10,560** scale



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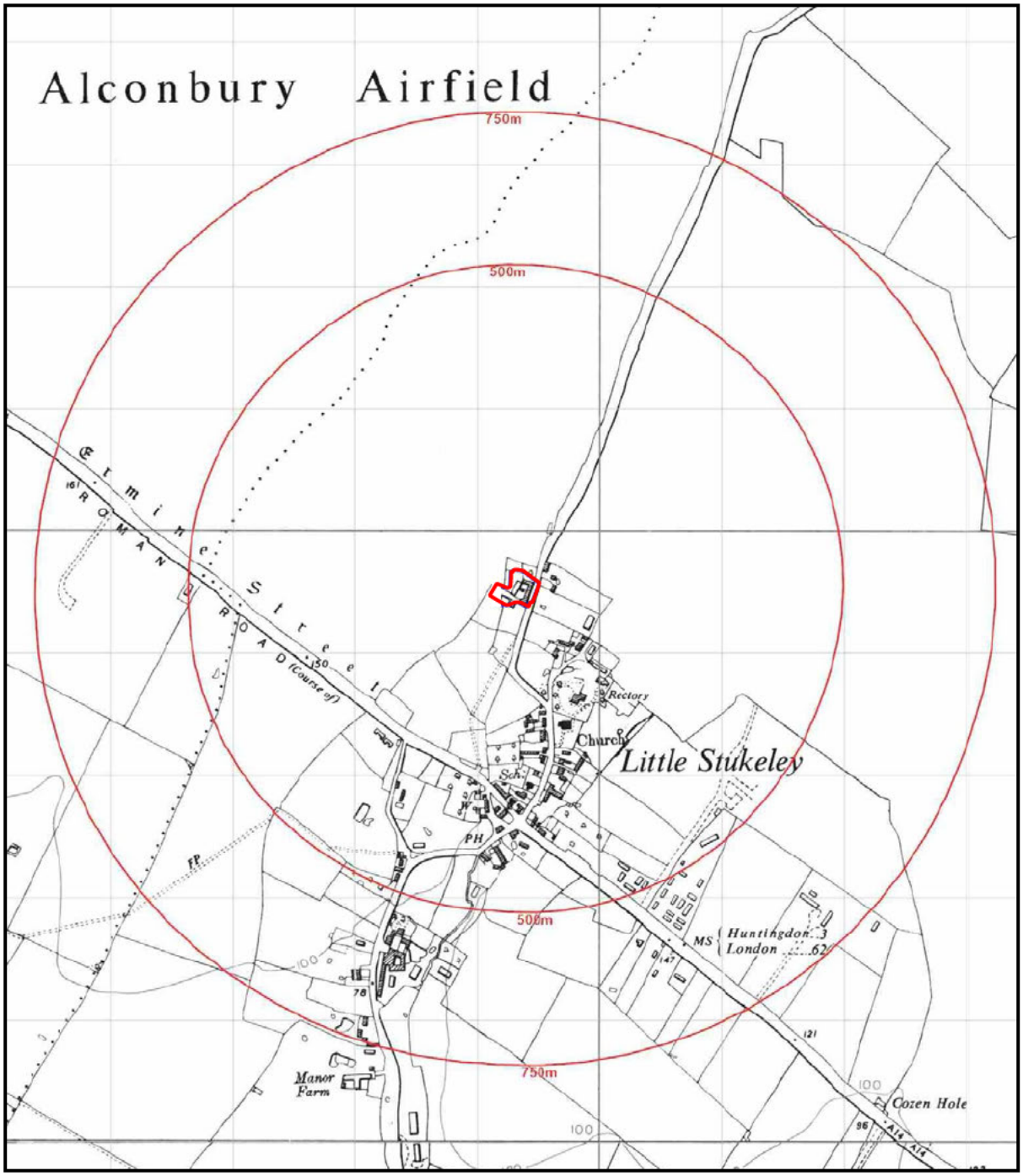
Site History

Figure F

Reproduced from the **1957-1959** editions Ordnance Survey sheets **TL27NW & TL27SW** at **1:10,560** scale



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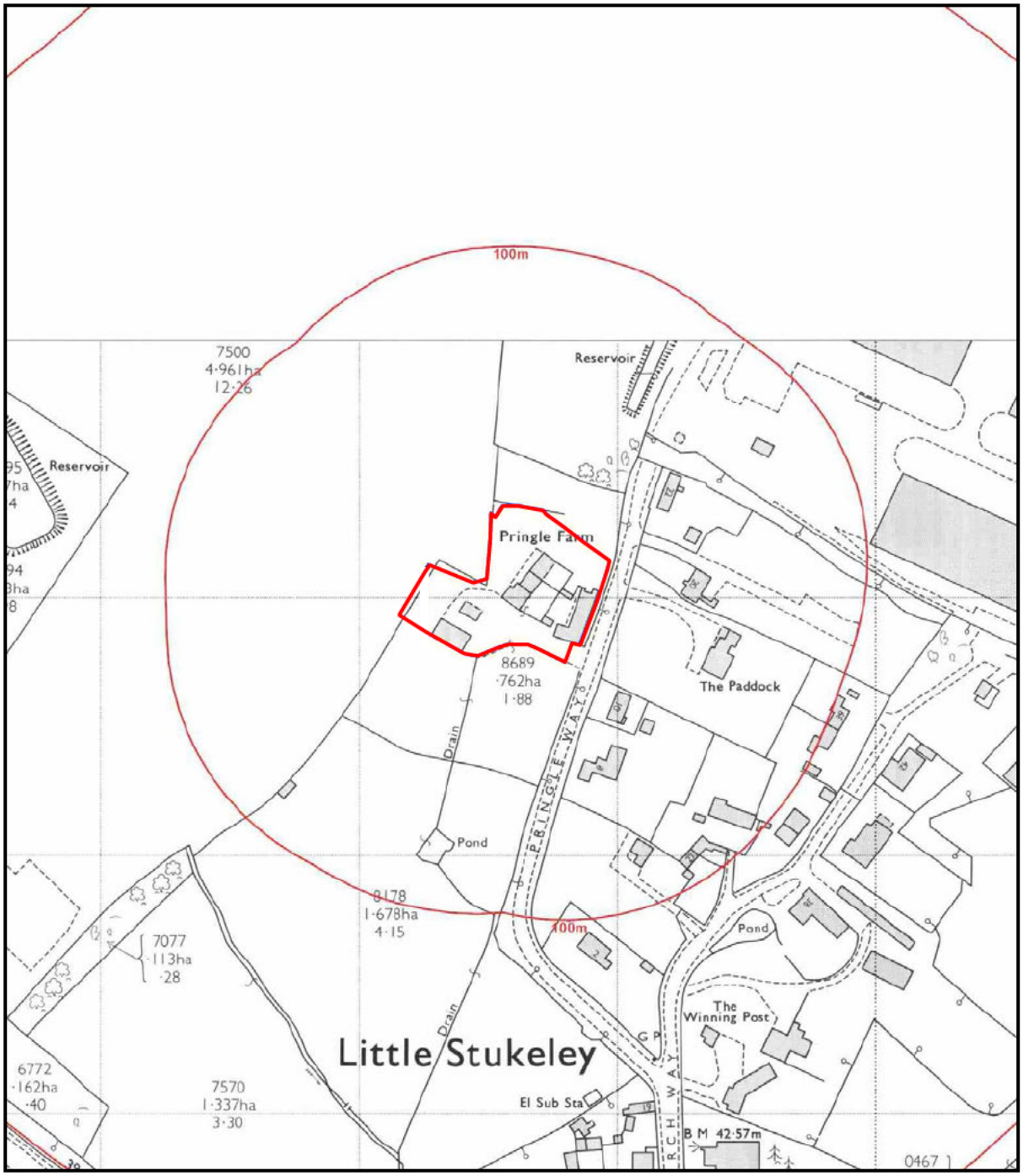
Site History

Figure G

Reproduced from the **1974** edition Ordnance Survey sheets **TL2075 & TL2175** at **1:2500** scale



Project : Pringle Farm, Pringle Way, Little Stukeley

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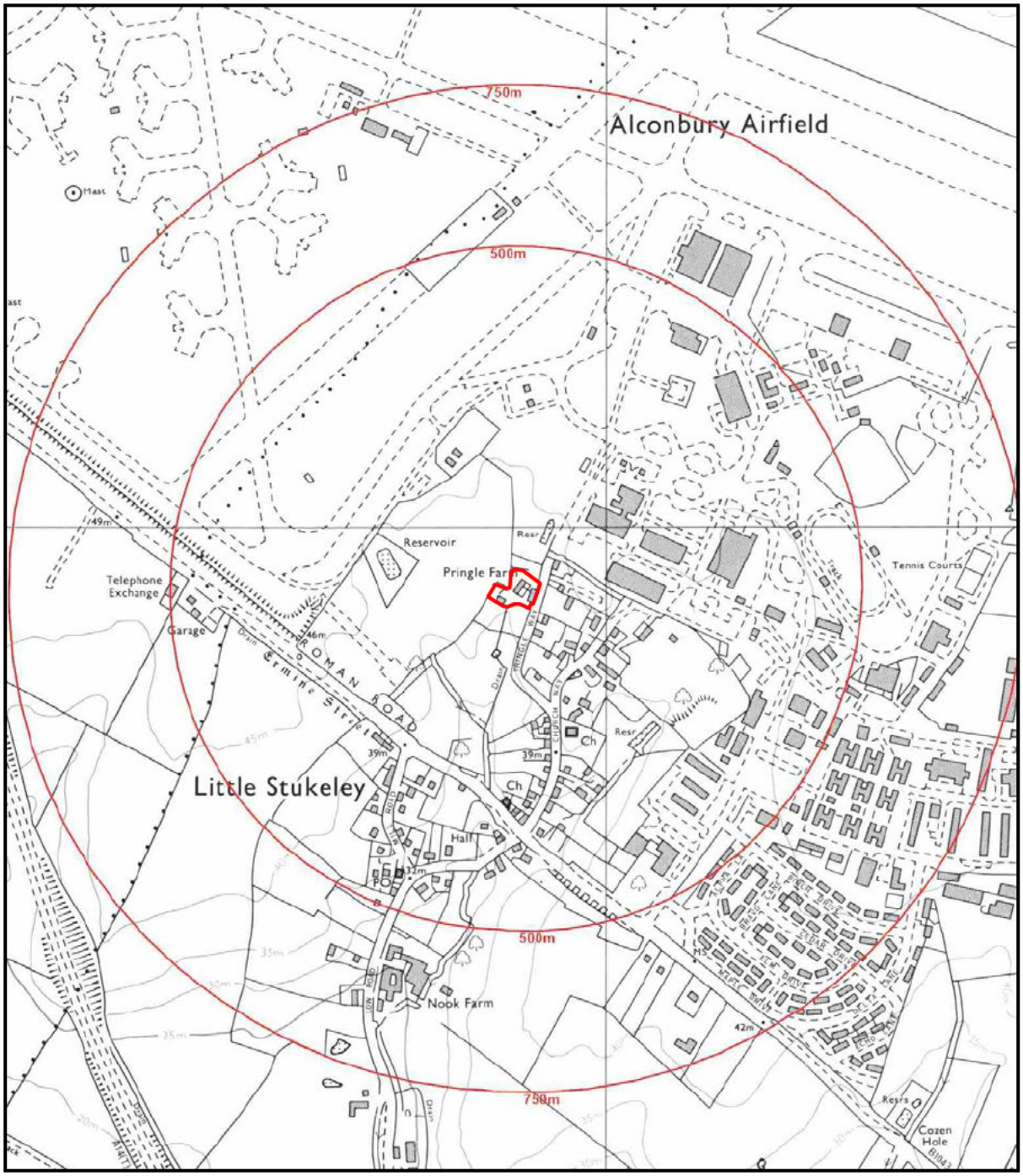
Site History

Figure H

Reproduced from the **1978** edition Ordnance Survey sheet **TL27NW** at **1:10,000** scale



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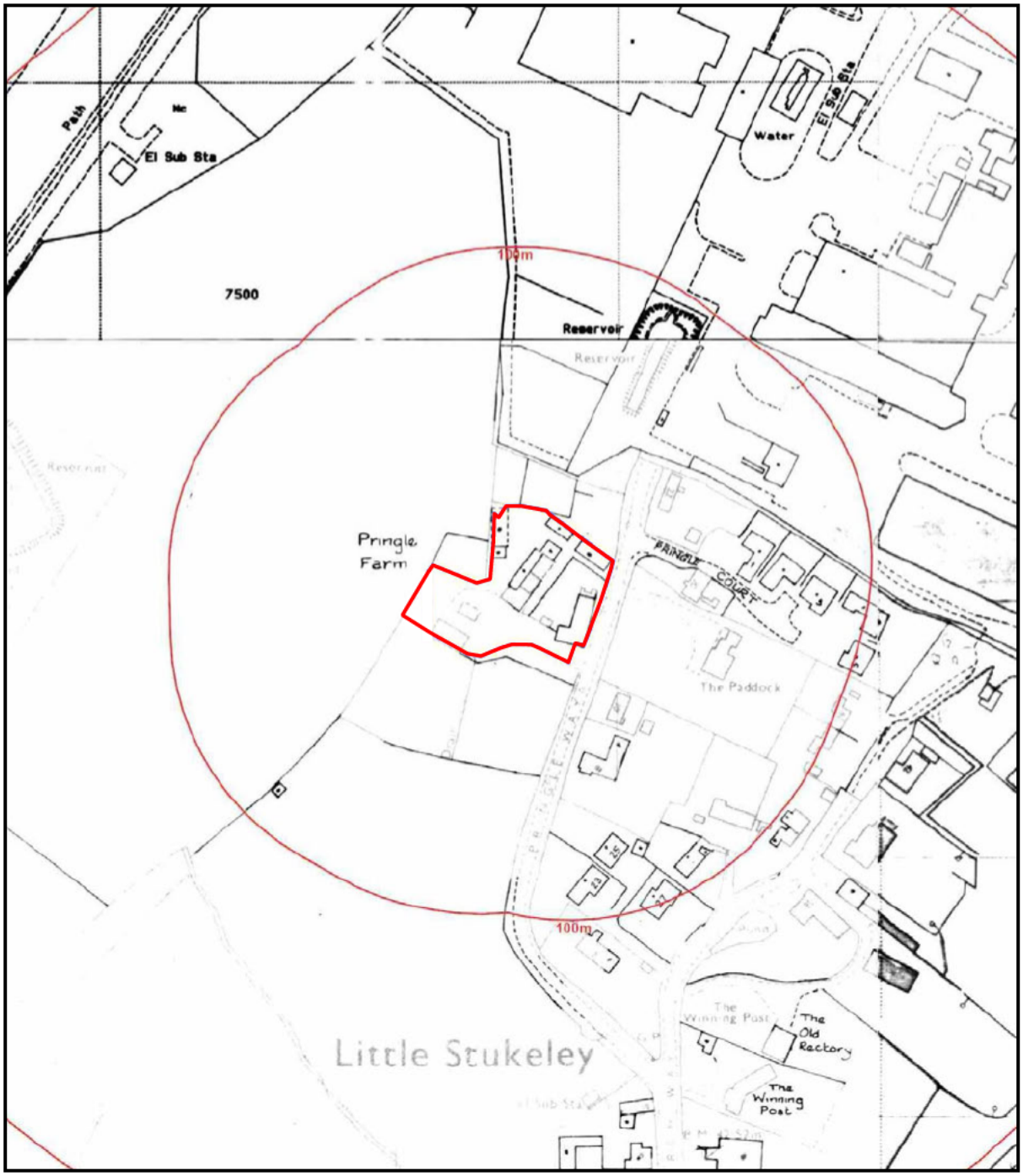
Site History

Figure I

Reproduced from the **1990-1994** editions Ordnance Survey sheets **TL2075, TL2076, TL2175 & TL2176** at **1:2500** scale



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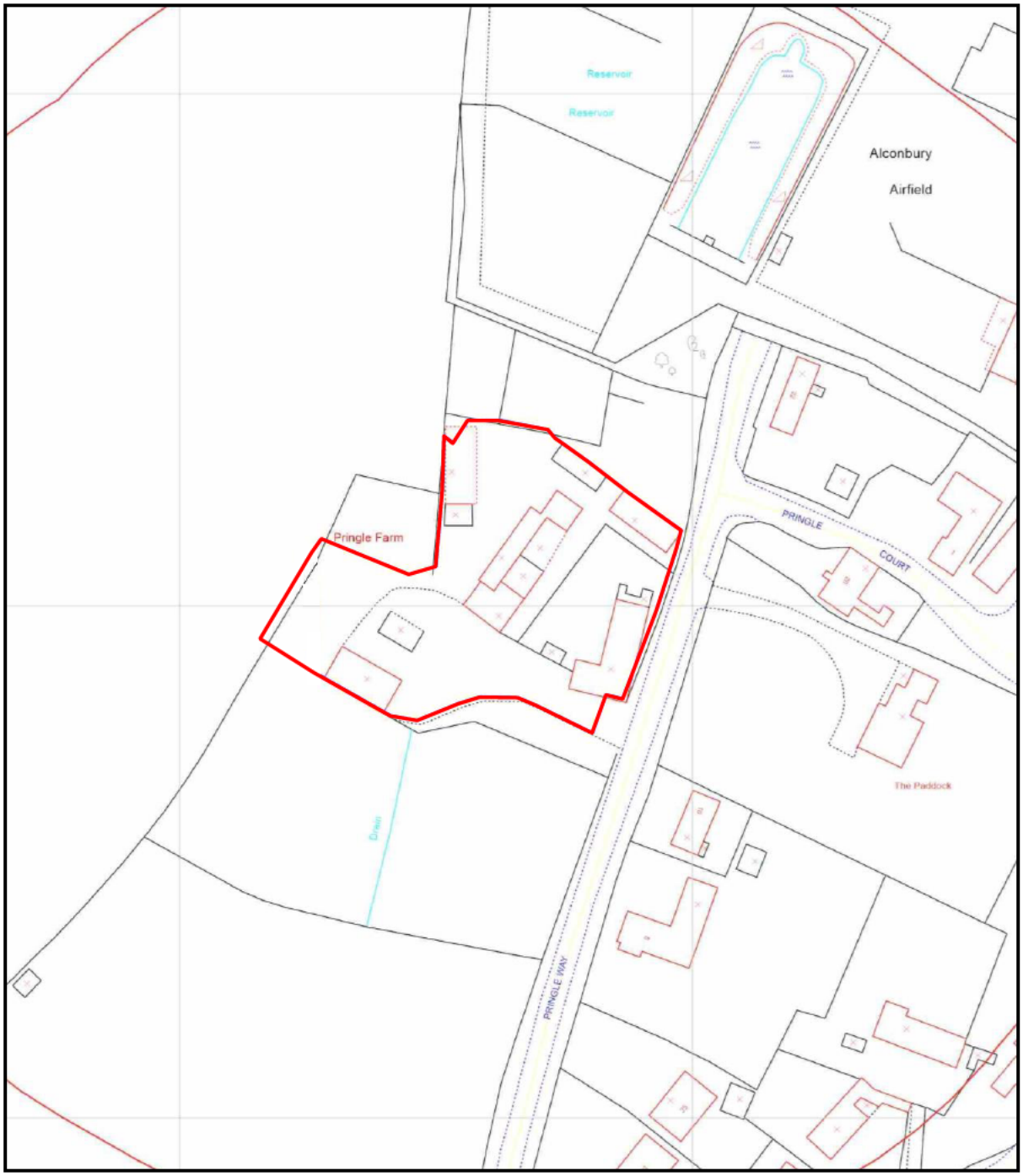
Site History

Figure J

Reproduced from the **2003** Ordnance Survey **LandLine Map** at **1:1250** scale



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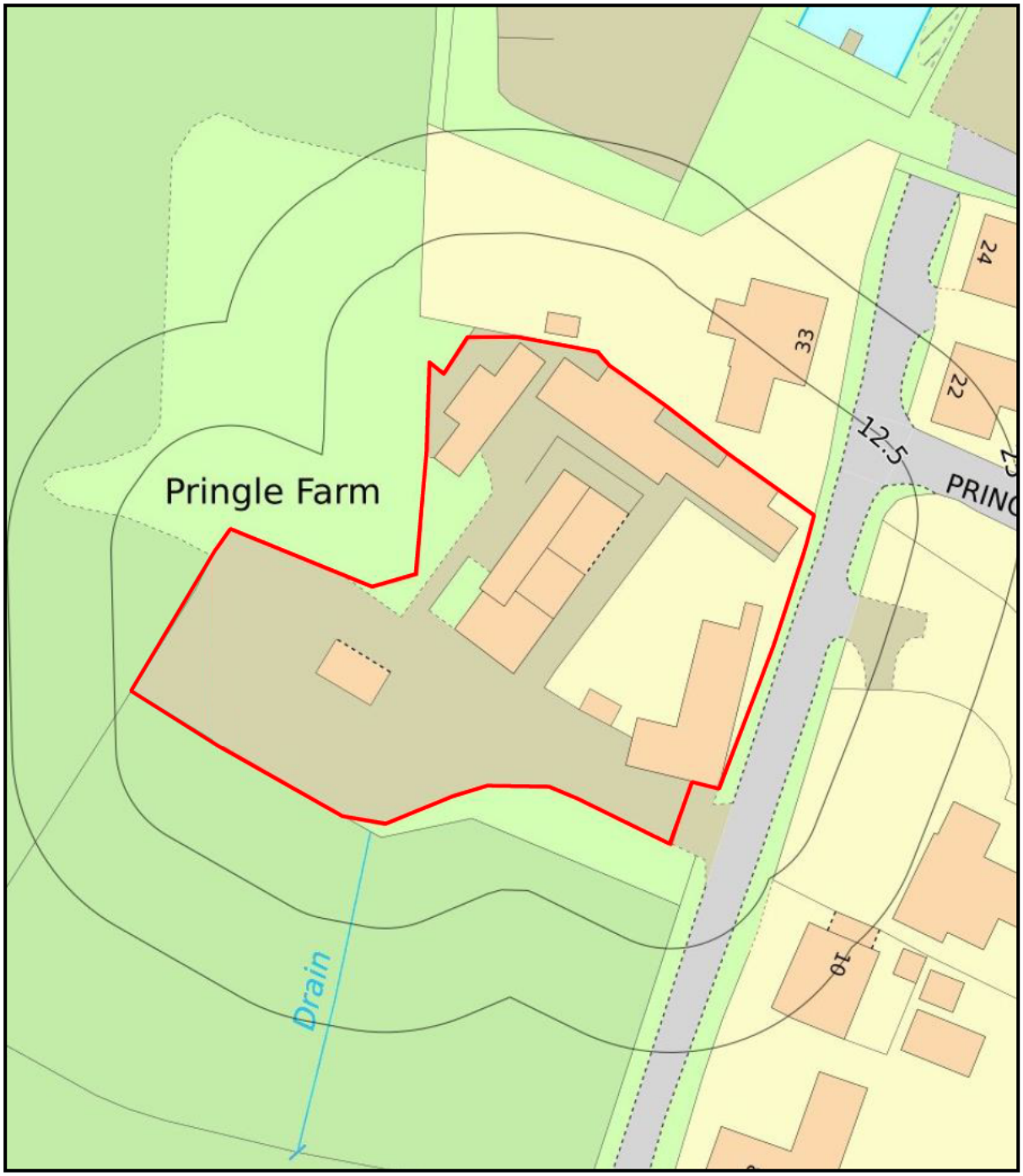
Site History

Figure K

Reproduced from the **2025** Ordnance Survey **MasterMap,** reproduced **not to scale**



Project : Pringle Farm, Pringle Way, Little Stukeley

Client : The Yard Pringle Farm Limited

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Project No.
131418

APPENDIX 2

ENVIRONMENTAL SEARCHES

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

131418 - Pringle Farm, Pringle Way, Little Stukeley

Order Details

Date: 15/04/2025

Your ref: 20943

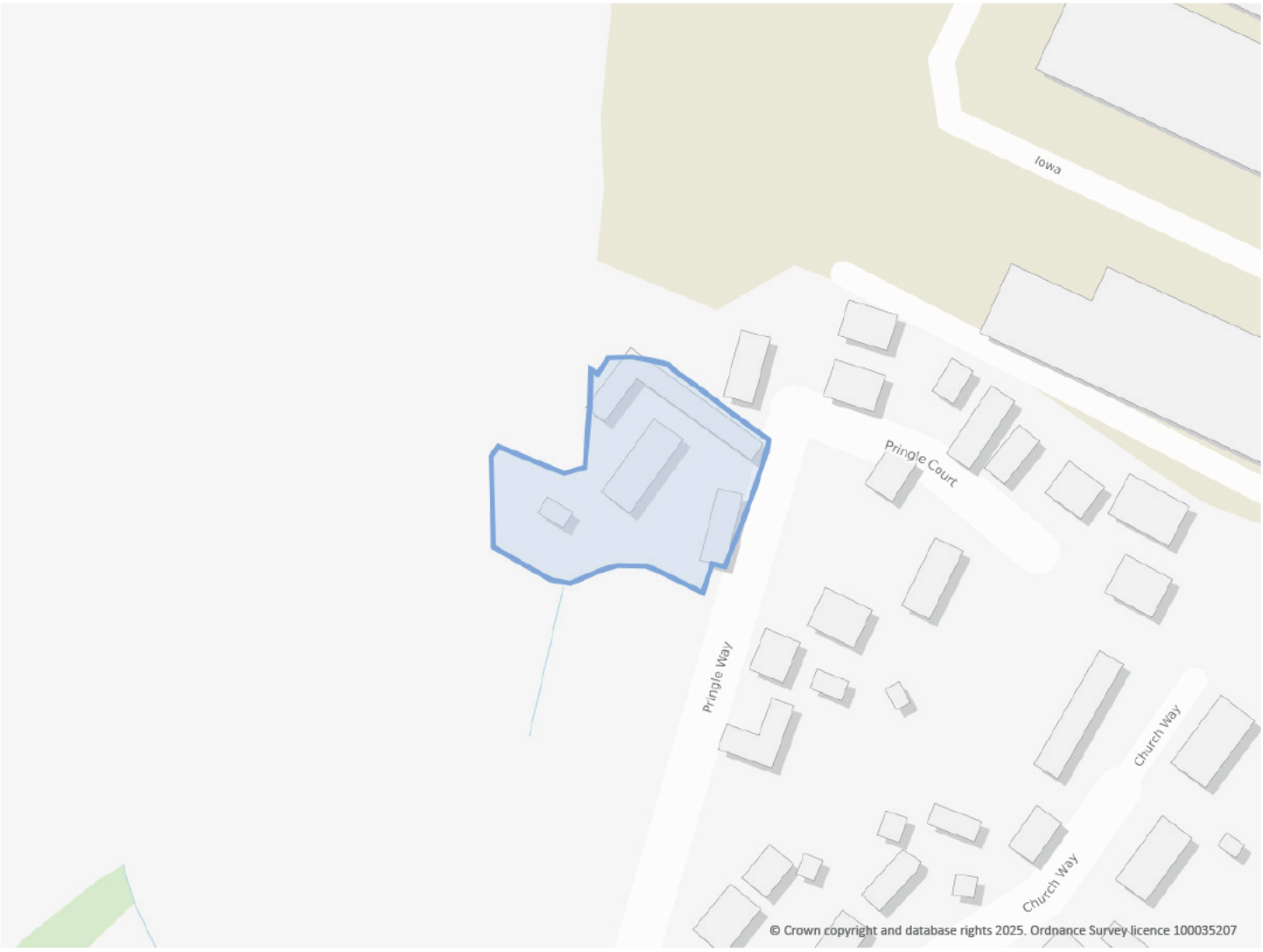
Our Ref: HMD-UGB-ZK2-IFL-7EG

Site Details

Location: 520862 275903

Area: 0.28 ha

Authority: Huntingdonshire District Council ↗



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Summary of findings p. 2 >

OS MasterMap site plan p.14 >

Aerial image p. 9 >

Insight User Guide ↗

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

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
15 >	1.1 >	Historical industrial land uses >	2	0	0	9	-
16 >	1.2 >	Historical tanks >	0	0	3	4	-
17 >	1.3 >	Historical energy features >	0	0	4	0	-
17	1.4	Historical petrol stations	0	0	0	0	-
17 >	1.5 >	Historical garages >	0	0	0	1	-
18	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**
19 >	2.1 >	Historical industrial land uses >	3	0	0	9	-
20 >	2.2 >	Historical tanks >	0	0	3	6	-
21 >	2.3 >	Historical energy features >	0	0	5	0	-
21	2.4	Historical petrol stations	0	0	0	0	-
21 >	2.5 >	Historical garages >	0	0	0	2	-
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 >	0	0	0	15	-
Page	**Section**	**Current industrial land use >**	**On site**	**0-50m**	**50-250m**	**250-500m**	**500-2000m**
26 >	4.1 >	Recent industrial land uses >	0	0	6	-	-
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	-
27	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	1	2	-
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	-
29	4.12	Radioactive Substance Authorisations	0	0	0	0	-
29	4.13	Licensed Discharges to controlled waters	0	0	0	0	-
30	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	0	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)				
33 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
34 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
35	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
35	5.5	Groundwater vulnerability- local information	None (within 0m)				
36 >	5.6 >	Groundwater abstractions >	0	0	0	0	1
37 >	5.7 >	Surface water abstractions >	0	0	0	0	2
38	5.8	Potable abstractions	0	0	0	0	0
38	5.9	Source Protection Zones	0	0	0	0	-
38	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m
39 >	6.1 >	Water Network (OS MasterMap) >	0	2	3	-	-

40 >	6.2 >	Surface water features >	0	1	3	-	-
40 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
41 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
41	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
42	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
42	7.2	Historical Flood Events	0	0	0	-	-
42	7.3	Flood Defences	0	0	0	-	-
43	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
43	7.5	Flood Storage Areas	0	0	0	-	-
44	7.6	Flood Zone 2	None (within 50m)				
44	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
45 >	8.1 >	Surface water flooding >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
47 >	9.1 >	Groundwater flooding >	Low (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
48	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
49	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
49	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
49	10.4	Special Protection Areas (SPA)	0	0	0	0	0
49	10.5	National Nature Reserves (NNR)	0	0	0	0	0
50	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
50 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	3
50	10.8	Biosphere Reserves	0	0	0	0	0
51	10.9	Forest Parks	0	0	0	0	0
51	10.10	Marine Conservation Zones	0	0	0	0	0
51	10.11	Green Belt	0	0	0	0	0
51	10.12	Proposed Ramsar sites	0	0	0	0	0

51	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
52	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
52	10.15	Nitrate Sensitive Areas	0	0	0	0	0
52 >	10.16 >	Nitrate Vulnerable Zones >	1	1	0	2	1
53 >	10.17 >	SSSI Impact Risk Zones >	1	-	-	-	-
54	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
55	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 >	1	1	5	-	-
57 >	11.5 >	Conservation Areas >	1	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 >	Grade 3 (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	0	0	0	-	-
59	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
60	13.1	Priority Habitat Inventory	0	0	0	-	-
60	13.2	Habitat Networks	0	0	0	-	-
60	13.3	Open Mosaic Habitat	0	0	0	-	-
60	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
61 >	14.1 >	10k Availability >	Identified (within 500m)				
62	14.2	Artificial and made ground (10k)	0	0	0	0	-
63	14.3	Superficial geology (10k)	0	0	0	0	-

63	14.4	Landslip (10k)	0	0	0	0	-
64	14.5	Bedrock geology (10k)	0	0	0	0	-
64	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
65 >	15.1 >	**50k Availability** >	Identified (within 500m)				
66	15.2	Artificial and made ground (50k)	0	0	0	0	-
66	15.3	Artificial ground permeability (50k)	0	0	-	-	-
67 >	15.4 >	**Superficial geology (50k)** >	1	0	0	0	-
68 >	15.5 >	**Superficial permeability (50k)** >	Identified (within 50m)				
68	15.6	Landslip (50k)	0	0	0	0	-
68	15.7	Landslip permeability (50k)	None (within 50m)				
69 >	15.8 >	**Bedrock geology (50k)** >	1	0	0	0	-
70 >	15.9 >	**Bedrock permeability (50k)** >	Identified (within 50m)				
70	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	**Boreholes** >	On site	0-50m	50-250m	250-500m	500-2000m
71 >	16.1 >	**BGS Boreholes** >	0	0	57	-	-
Page	Section	**Natural ground subsidence** >					
74 >	17.1 >	**Shrink swell clays** >	Moderate (within 50m)				
75 >	17.2 >	**Running sands** >	Very low (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** >	Negligible (within 50m)				
Page	Section	**Mining and ground workings** >	On site	0-50m	50-250m	250-500m	500-2000m
81	18.1	BritPits	0	0	0	0	-
82 >	18.2 >	**Surface ground workings** >	0	0	4	-	-
82	18.3	Underground workings	0	0	0	0	0
82	18.4	Underground mining extents	0	0	0	0	-
82	18.5	Historical Mineral Planning Areas	0	0	0	0	-

83	18.6	Non-coal mining	0	0	0	0	0
83	18.7	JPB mining areas	None (within 0m)				
83	18.8	The Coal Authority non-coal mining	0	0	0	0	-
83	18.9	Researched mining	0	0	0	0	-
84	18.10	Mining record office plans	0	0	0	0	-
84	18.11	BGS mine plans	0	0	0	0	-
84	18.12	Coal mining	None (within 0m)				
84	18.13	Brine areas	None (within 0m)				
84	18.14	Gypsum areas	None (within 0m)				
85	18.15	Tin mining	None (within 0m)				
85	18.16	Clay mining	None (within 0m)				

Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
86	19.1	Natural cavities	0	0	0	0	-
86	19.2	Mining cavities	0	0	0	0	0
86	19.3	Reported recent incidents	0	0	0	0	-
86	19.4	Historical incidents	0	0	0	0	-

Page	Section	Radon >	
88 >	20.1 >	Radon >	Less than 1% (within 0m)

Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
90 >	21.1 >	BGS Estimated Background Soil Chemistry >	1	0	-	-	-
90	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
90	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-

Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
91	22.1	Underground railways (London)	0	0	0	-	-
91	22.2	Underground railways (Non-London)	0	0	0	-	-
91	22.3	Railway tunnels	0	0	0	-	-
91	22.4	Historical railway and tunnel features	0	0	0	-	-
91	22.5	Royal Mail tunnels	0	0	0	-	-
92	22.6	Historical railways	0	0	0	-	-

92	22.7	Railways	0	0	0	-	-
92	22.8	Crossrail 2	0	0	0	0	-
92	22.9	HS2	0	0	0	0	-

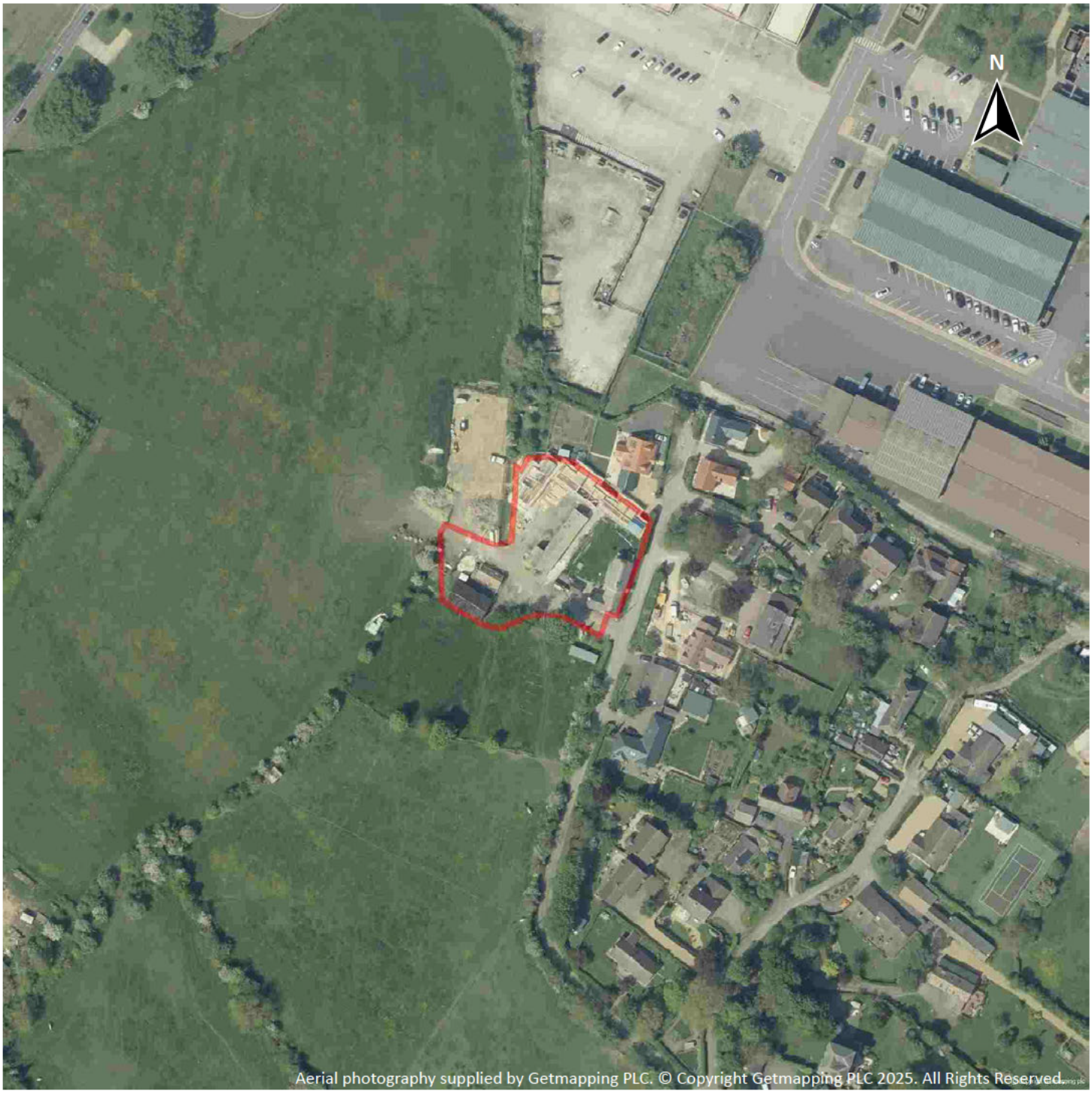
Recent aerial photograph



Capture Date: 14/08/2022

Site Area: 0.28ha

Recent site history - 2019 aerial photograph



Capture Date: 15/05/2019

Site Area: 0.28ha

Recent site history - 2016 aerial photograph



Capture Date: 07/06/2016

Site Area: 0.28ha

Recent site history - 2006 aerial photograph



Capture Date: 12/07/2006

Site Area: 0.28ha

Recent site history - 1999 aerial photograph



Capture Date: 09/06/1999

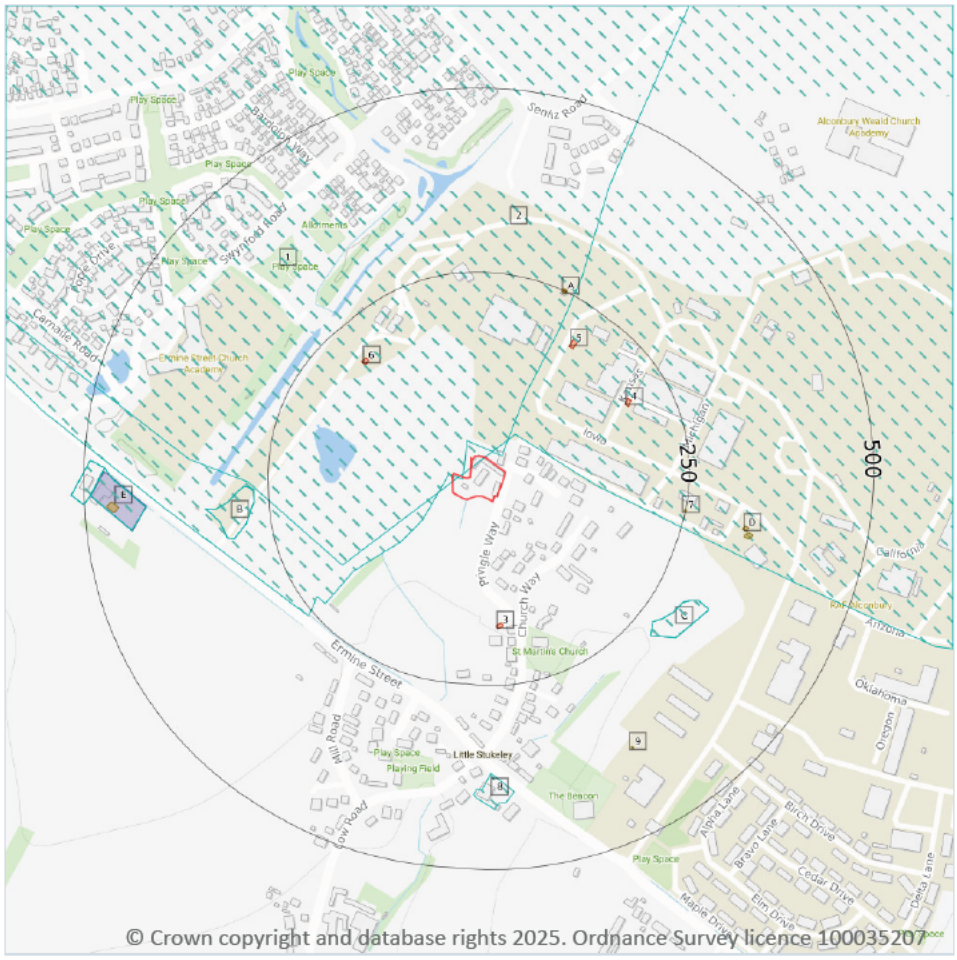
Site Area: 0.28ha

OS MasterMap site plan



Site Area: 0.28ha

1 Past land use



1.1 Historical industrial land uses

Records within 500m	11

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

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

ID	Location	Land use	Dates present	Group ID
1	On site	Airfield	1959	2101576

ID	Location	Land use	Dates present	Group ID
2	**On site**	**Airfield**	**1978 - 1992**	**2144669**
B	270m W	Unspecified Heap	1992	2136857
B	270m W	Unspecified Heap	1978	2152753
C	272m SE	Unspecified Heap	1978	2102162
C	272m SE	Unspecified Heap	1992	2140189
8	369m S	Unspecified Depot	1992	2076138
E	417m W	Garage	1992	2131811
E	417m W	Garage	1978	2138639
E	472m W	Telephone Exchange	1992	2101360
E	472m W	Telephone Exchange	1978	2117416

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m	7

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 15 >

ID	Location	Land use	Dates present	Group ID
A	247m NE	Unspecified Tank	1995	372363
A	248m NE	Unspecified Tank	1990	373542
7	248m E	Unspecified Tank	1994	362310
D	331m E	Tanks	1994	359382
D	336m E	Tanks	1974 - 1990	369360
9	382m SE	Unspecified Tank	1994	362311
E	454m W	Tanks	1974 - 1990	373986

This data is sourced from Ordnance Survey / Groundsure.

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

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

ID	Location	Land use	Dates present	Group ID
3	166m S	Electricity Substation	1974 - 1990	257349
4	187m NE	Electricity Substation	1995	250283
5	189m NE	Electricity Substation	1995	250279
6	190m NW	Electricity Substation	1995	250280

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 15 >**

ID	Location	Land use	Dates present	Group ID
E	417m W	Garage	1974 - 1990	80069

This data is sourced from Ordnance Survey / Groundsure.

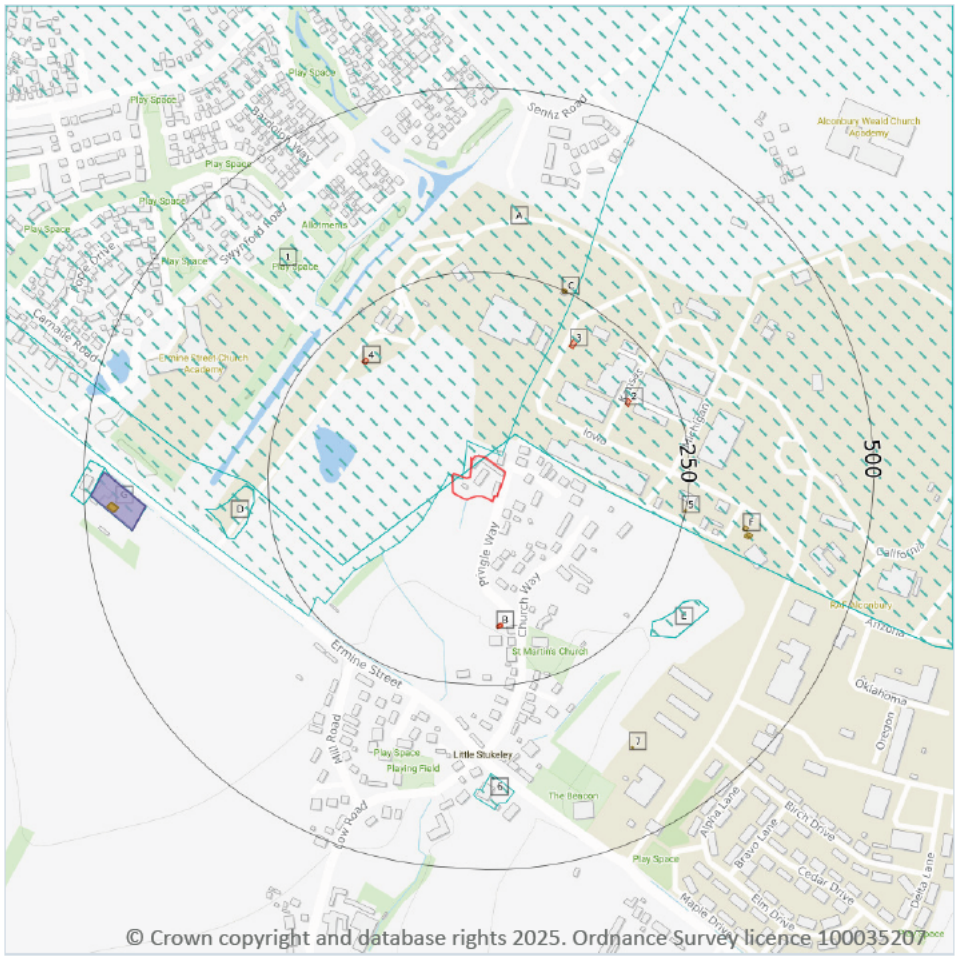
1.6 Historical military land

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	12

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 19 >

ID	Location	Land Use	Date	Group ID
1	On site	Airfield	1959	2101576
A	On site	Airfield	1992	2144669
A	On site	Airfield	1978	2144669

ID	Location	Land Use	Date	Group ID
D	270m W	Unspecified Heap	1992	2136857
D	270m W	Unspecified Heap	1978	2152753
E	272m SE	Unspecified Heap	1992	2140189
E	272m SE	Unspecified Heap	1978	2102162
6	369m S	Unspecified Depot	1992	2076138
G	417m W	Garage	1992	2131811
G	417m W	Garage	1978	2138639
G	472m W	Telephone Exchange	1992	2101360
G	472m W	Telephone Exchange	1978	2117416

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	9

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 19 >

ID	Location	Land Use	Date	Group ID
C	247m NE	Unspecified Tank	1995	372363
C	248m NE	Unspecified Tank	1990	373542
5	248m E	Unspecified Tank	1994	362310
F	331m E	Tanks	1994	359382
F	336m E	Tanks	1990	369360
F	338m E	Tanks	1974	369360
7	382m SE	Unspecified Tank	1994	362311
G	454m W	Tanks	1974	373986
G	456m W	Tanks	1990	373986

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	5

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 19 >

ID	Location	Land Use	Date	Group ID
B	166m S	Electricity Substation	1990	257349
B	166m S	Electricity Substation	1974	257349
2	187m NE	Electricity Substation	1995	250283
3	189m NE	Electricity Substation	1995	250279
4	190m NW	Electricity Substation	1995	250280

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	2

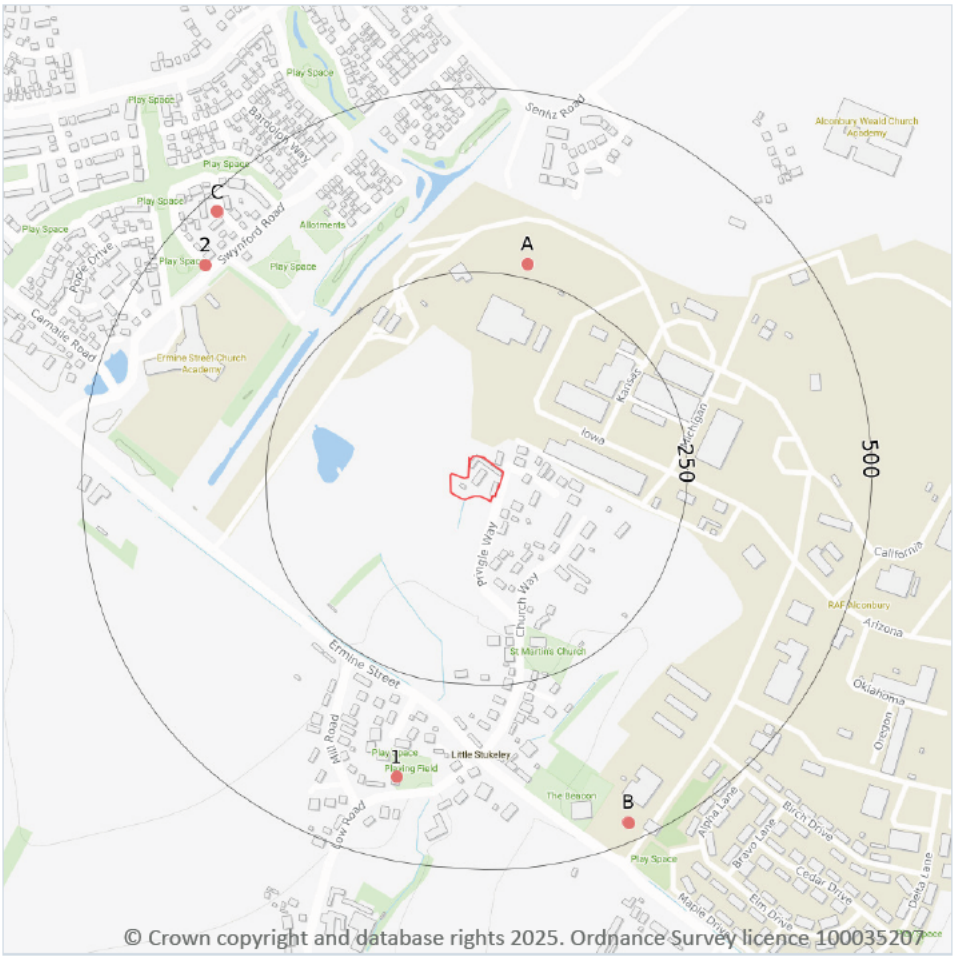
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on page 19 >

ID	Location	Land Use	Date	Group ID
G	417m W	Garage	1974	80069
G	418m W	Garage	1990	80069

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	15

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 >**

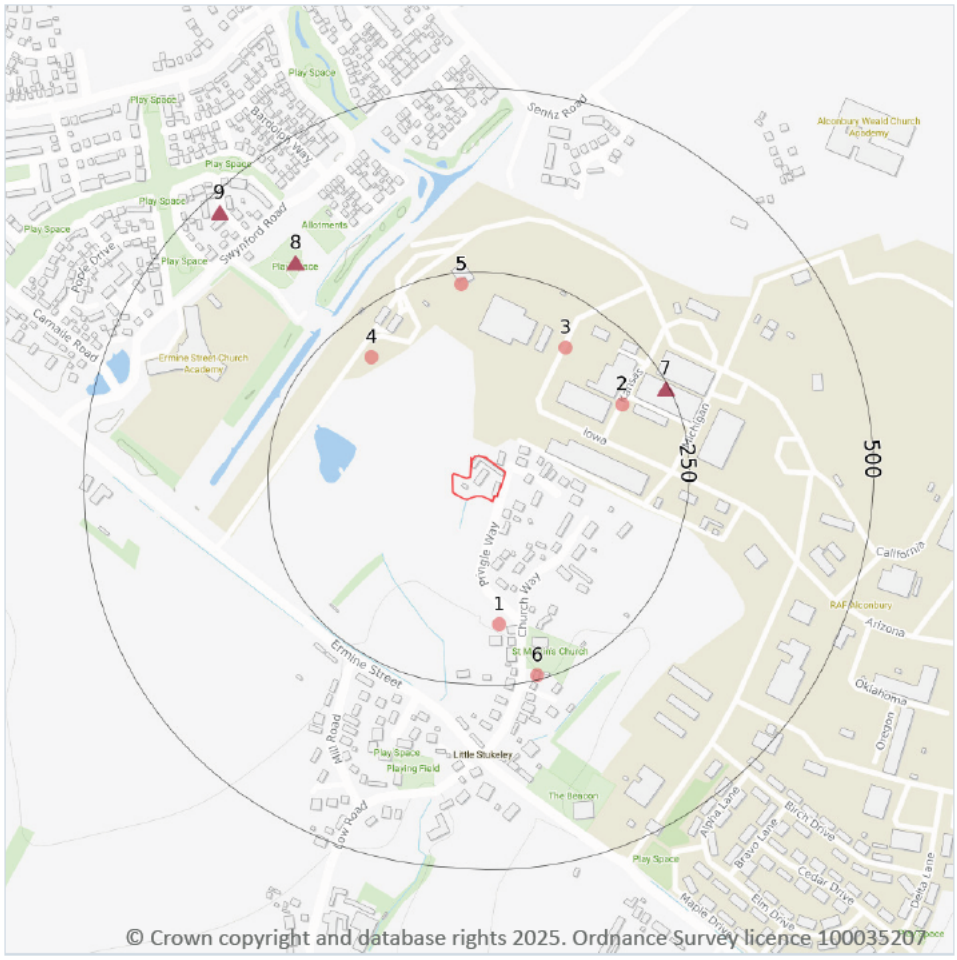
ID	Location	Site	Reference	Category	Sub-Category	Description
A	269m N	Building 3001 Alconbury Airfield Huntingdon Cambridgeshire Pe28 4wx	EPR/AF0301MS/A001	Treating waste exemption	Non-agricultural waste only	Screening and blending of waste

ID	Location	Site	Reference	Category	Sub-Category	Description
A	269m N	Building 3001 Alconbury Airfield Huntingdon Cambridgeshire Pe28 4wx	EPR/AF0301MS/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place
A	269m N	Building 3001 Alconbury Airfield Huntingdon Cambridgeshire Pe28 4wx	EPR/AF0301MS/A001	Using waste exemption	Non-agricultural waste only	Use of waste in construction
1	389m S	14, Low Road, Little Stukeley, Huntingdon, Pe28 4ba	WEX168525	Using waste exemption	Not on a farm	Use of waste in construction
2	438m NW	Alconbury Weald Alconbury Airfield Huntingdon Cambridgeshire Pe28 4wx	EPR/DF0408MY/A001	Using waste exemption	Non-agricultural waste only	Use of waste in construction
B	474m SE	Raf Alconbury Cambridgeshire Pe28 4db	EPR/YE5147LV/A001	Using waste exemption	Non-agricultural waste only	Use of waste in construction
B	476m SE	-	WEX336988	Using waste exemption	Not on a farm	Use of waste in construction
C	476m NW	Jjm Limited, Building 165, Alconbury Weald, Huntingdon, Pe28 4wx	WEX188194	Storing waste exemption	Not on a farm	Storage of waste in secure containers
C	476m NW	Jjm Limited, Building 165, Alconbury Weald, Huntingdon, Pe28 4wx	WEX188194	Using waste exemption	Not on a farm	Use of waste for a specified purpose
C	476m NW	Jjm Limited, Building 165, Alconbury Weald, Huntingdon, Pe28 4wx	WEX188194	Treating waste exemption	Not on a farm	Aerobic composting and associated prior treatment
C	476m NW	Jjm Limited, Building 165, Alconbury Weald, Huntingdon, Pe28 4wx	WEX188194	Using waste exemption	Not on a farm	Use of waste to manufacture finished goods
C	476m NW	Jjm Limited, Building 165, Alconbury Weald, Huntingdon, Pe28 4wx	WEX188194	Treating waste exemption	Not on a farm	Treatment of waste food
C	478m NW	Unit 4101 Alconbury Airfield Cambs Pe28 4wx	EPR/VH0677FY/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in secure containers
C	478m NW	Unit 4101 Alconbury Airfield Cambs Pe28 4wx	EPR/VH0677FY/A001	Storing waste exemption	Non-agricultural waste only	Storage of waste in a secure place

ID	Location	Site	Reference	Category	Sub-Category	Description
C	478m NW	Unit 4101 Alconbury Airfield Cambs Pe28 4wx	EPR/VH0677FY /A001	Treating waste exemption	Non-agricultural waste only	Preparatory treatments (baling, sorting, shredding etc)

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

4 Current industrial land use



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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 26 >

ID	Location	Company	Address	Activity	Category
1	167m S	Electricity Sub Station	Cambridgeshire, PE28	Electrical Features	Infrastructure and Facilities
2	183m NE	Electricity Sub Station	Cambridgeshire, PE28	Electrical Features	Infrastructure and Facilities
3	184m NE	Electricity Sub Station	Cambridgeshire, PE28	Electrical Features	Infrastructure and Facilities

ID	Location	Company	Address	Activity	Category
4	193m NW	Electricity Sub Station	Cambridgeshire, PE28	Electrical Features	Infrastructure and Facilities
5	235m N	Pylon	Cambridgeshire, PE28	Electrical Features	Infrastructure and Facilities
6	244m S	H P C Marine Ltd	20, Church Way, Little Stukeley, Cambridgeshire, PE28 4BQ	Marine Engineers and Services	Engineering Services

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	3

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 26 >

ID	Location	Details	
7	245m NE	Application reference number: No Details Application status: Historical Consent Application date: No Details Address: Chrome Fireworks Ltd, The Old Bomb Dump, Alconbury Airfield, Huntingdon, Cambridgeshire, England	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details
8	357m NW	Application reference number: No Details Application status: Historical Consent Application date: No Details Address: Kimbolton Fireworks (Retail) Limited, Building 4108, Alconbury Airfield, Cambridgeshire, England	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details
9	476m NW	Application reference number: No Details Application status: Approved Application date: No Details Address: IKO Insulations UK Limited, Alconbury Weal Enterprise Park, Alconbury, Huntingdon, Cambridgeshire, England, PE28 4WX	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details

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	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.

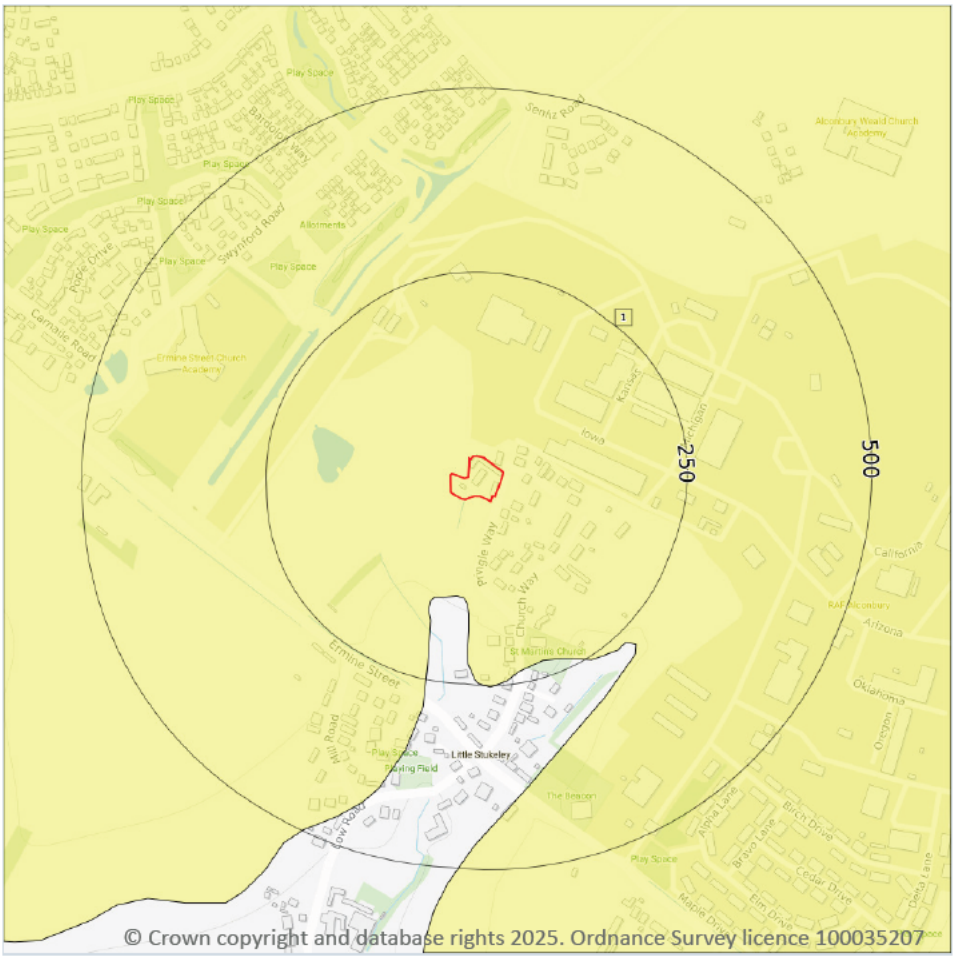
4.21 Pollution inventory radioactive waste

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	1

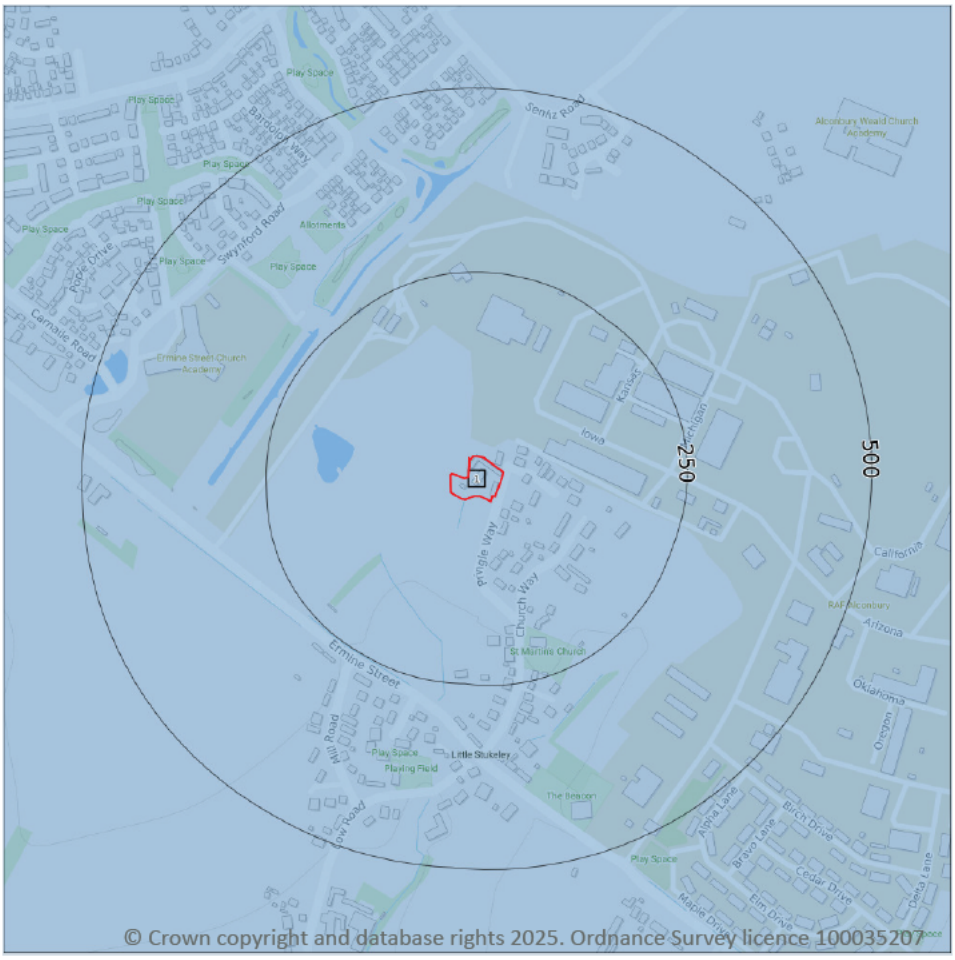
Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on page 32 >

ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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

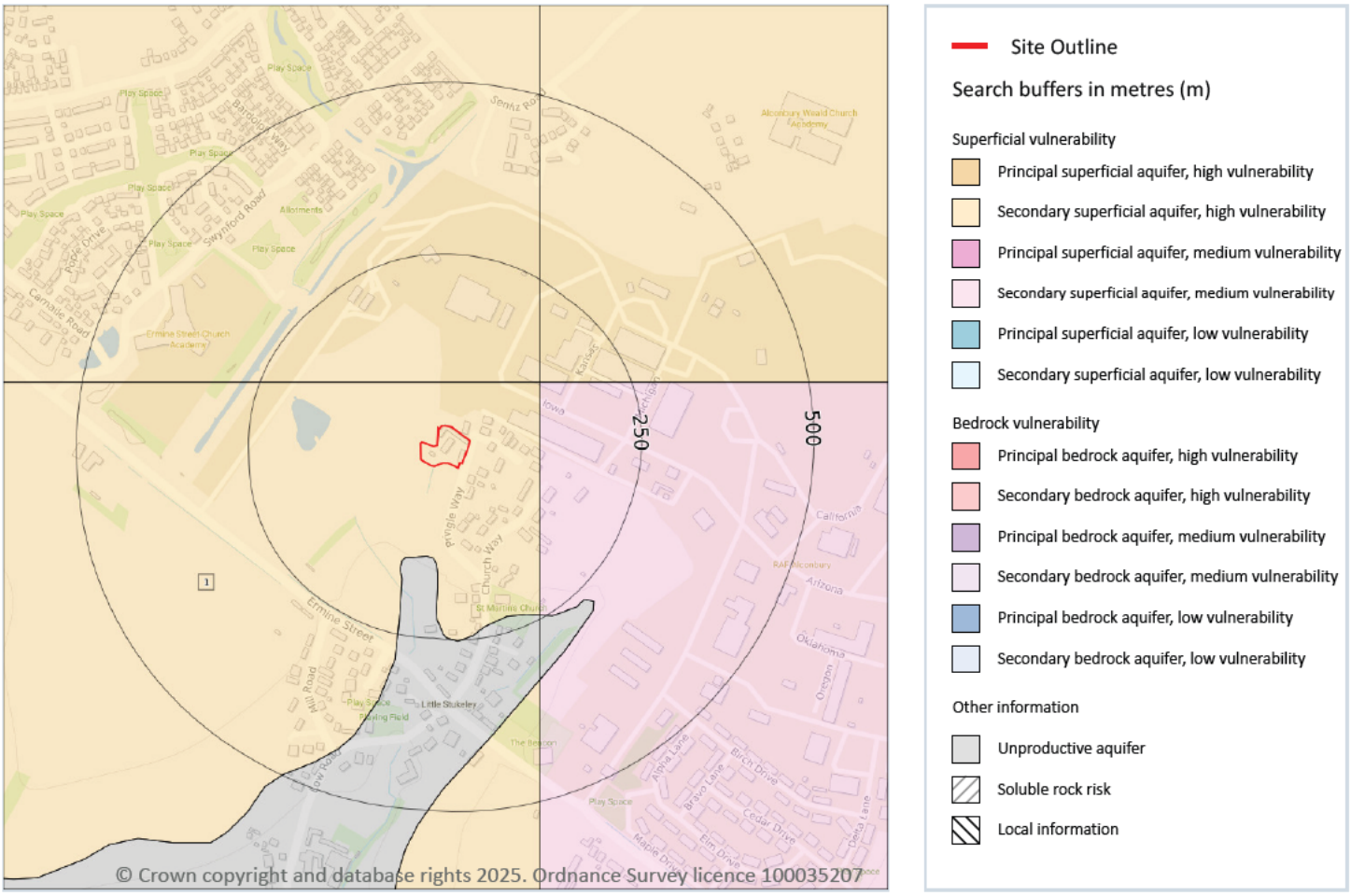
Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on page 33 >

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

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

Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m	1

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

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

Features are displayed on the Groundwater vulnerability map on page 34 >

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	**Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer**	**Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year**	**Vulnerability: High Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: Low**	**Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures**

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

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0

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

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

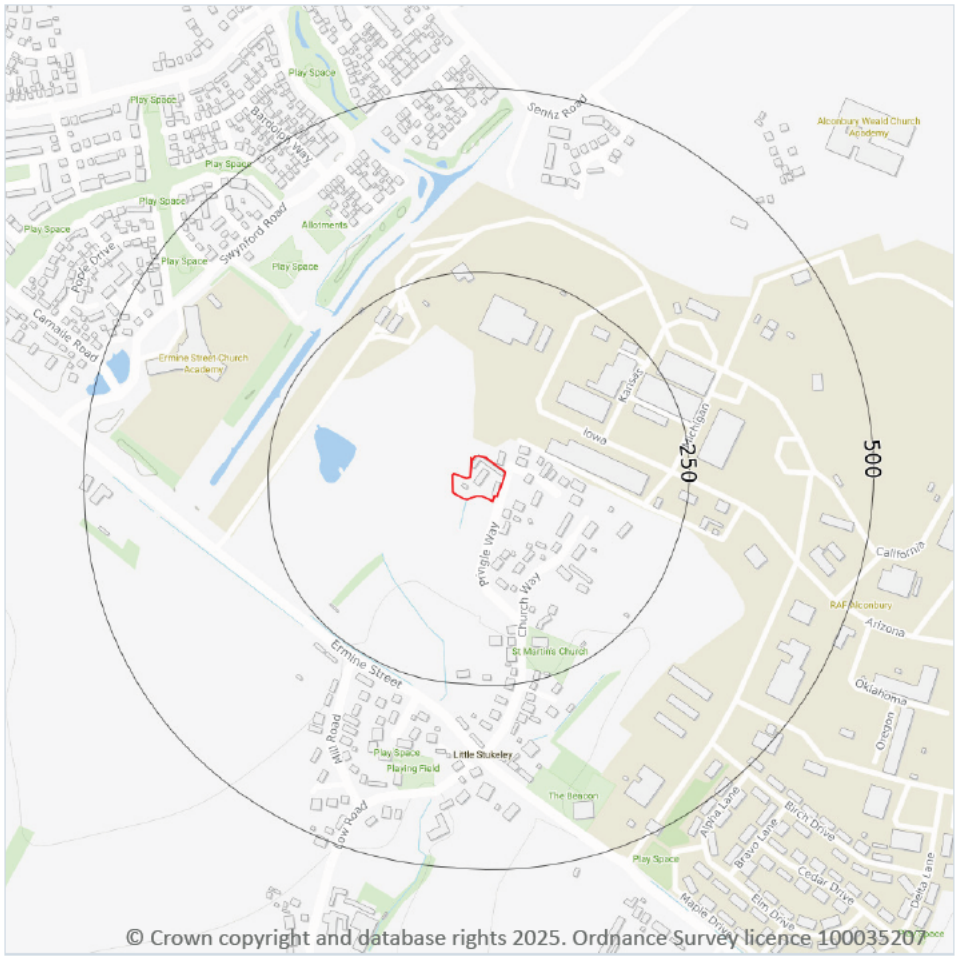
5.5 Groundwater vulnerability- local information

Records on site	0

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

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

Abstractions and Source Protection Zones



Site Outline

Search buffers in metres (m)

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

5.6 Groundwater abstractions

Records within 2000m	1

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	
-	1793m SW	Status: Historical Licence No: 6/33/23/*G/0004 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL 2 S OF ALCONBURY Data Type: Point Name: GREY Easting: 519400 Northing: 274800	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/09/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1967 Version End Date: -

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

5.7 Surface water abstractions

Records within 2000m	2

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

Features are displayed on the Abstractions and Source Protection Zones map on **page 36 >**

ID	Location	Details	
-	1875m NE	Status: Active Licence No: 6/33/53/*S/0154 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: INLET WEIR ON ABBOTS RIPTON BROOK Data Type: Point Name: ABBOTS RIPTON FARMING CO LTD Easting: 522390 Northing: 277050	Annual Volume (m^3): 20093.32 Max Daily Volume (m^3): 20093.32 Original Application No: CV 3711 Original Start Date: 01/12/1969 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2007 Version End Date: -
-	1911m E	Status: Active Licence No: 6/33/53/*S/0116 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: WILD GOOSE RESV + TRIB BROOK Data Type: Line Name: ABBOTS RIPTON FARMING CO LTD Easting: 522800 Northing: 276100	Annual Volume (m^3): 24684 Max Daily Volume (m^3): 1567 Original Application No: - Original Start Date: 01/03/1966 Expiry Date: - Issue No: 100 Version Start Date: 02/05/1989 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	5

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 39 >

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

ID	Location	Type of water feature	Ground level	Permanence	Name
A	41m SW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
C	126m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	180m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
D	181m S	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	4

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 39 >

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	1

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

Features are displayed on the Hydrology map on page 39 >

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	**On site**	**River**	**Alconbury and Brampton Brooks**	**GB105033042790**	**Great Ouse Lower**	**Ouse Upper and Bedford**

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

6.4 WFD Surface water bodies

Records identified	1

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

Features are displayed on the Hydrology map on **page 39 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	2683m SW	River	Alconbury and Brampton Brooks	GB105033042790 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site	0

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

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

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m	0

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

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

7.2 Historical Flood Events

Records within 250m	0

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

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

7.3 Flood Defences

Records within 250m	0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	0

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

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

7.5 Flood Storage Areas

Records within 250m	0

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

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

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m	0

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

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

7.7 Flood Zone 3

Records within 50m	0

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

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

8 Surface water flooding



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 100 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 45 >

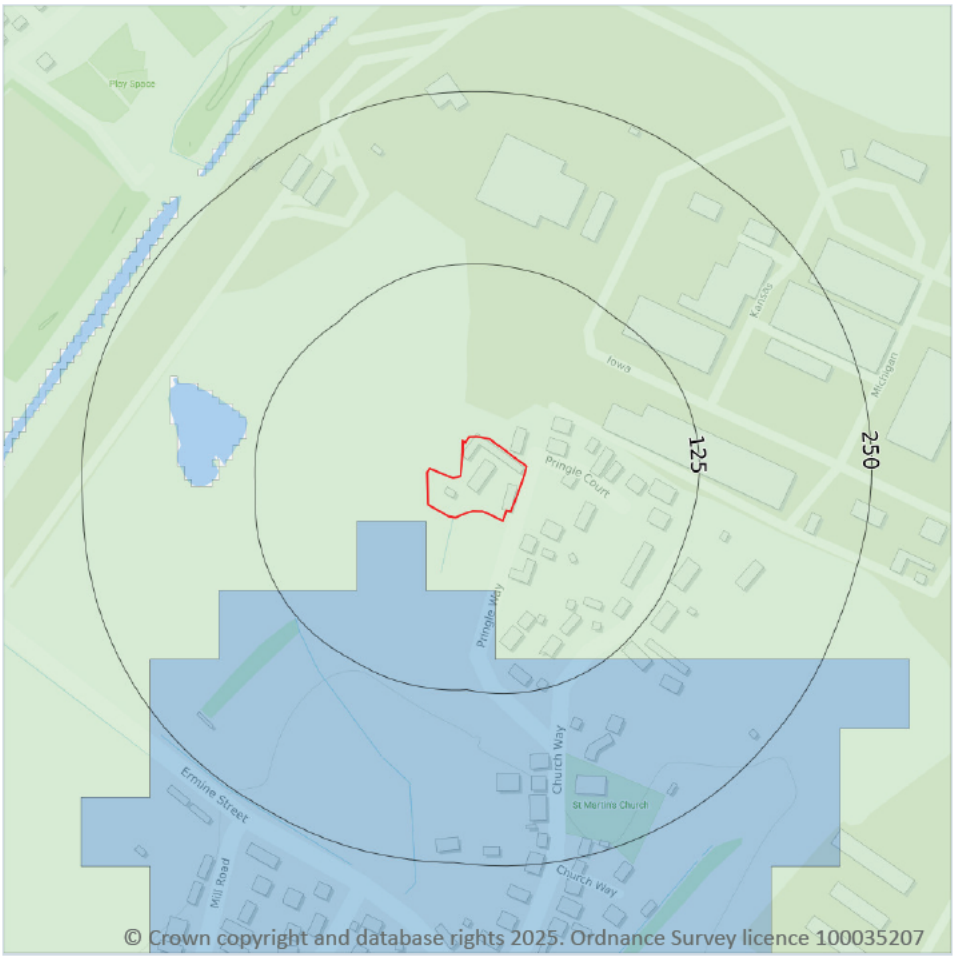
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

Return period	Maximum modelled depth
1 in 1000 year	Between 0.3m 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	Negligible

This data is sourced from Ambiental Risk Analytics.

9 Groundwater flooding



Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

9.1 Groundwater flooding

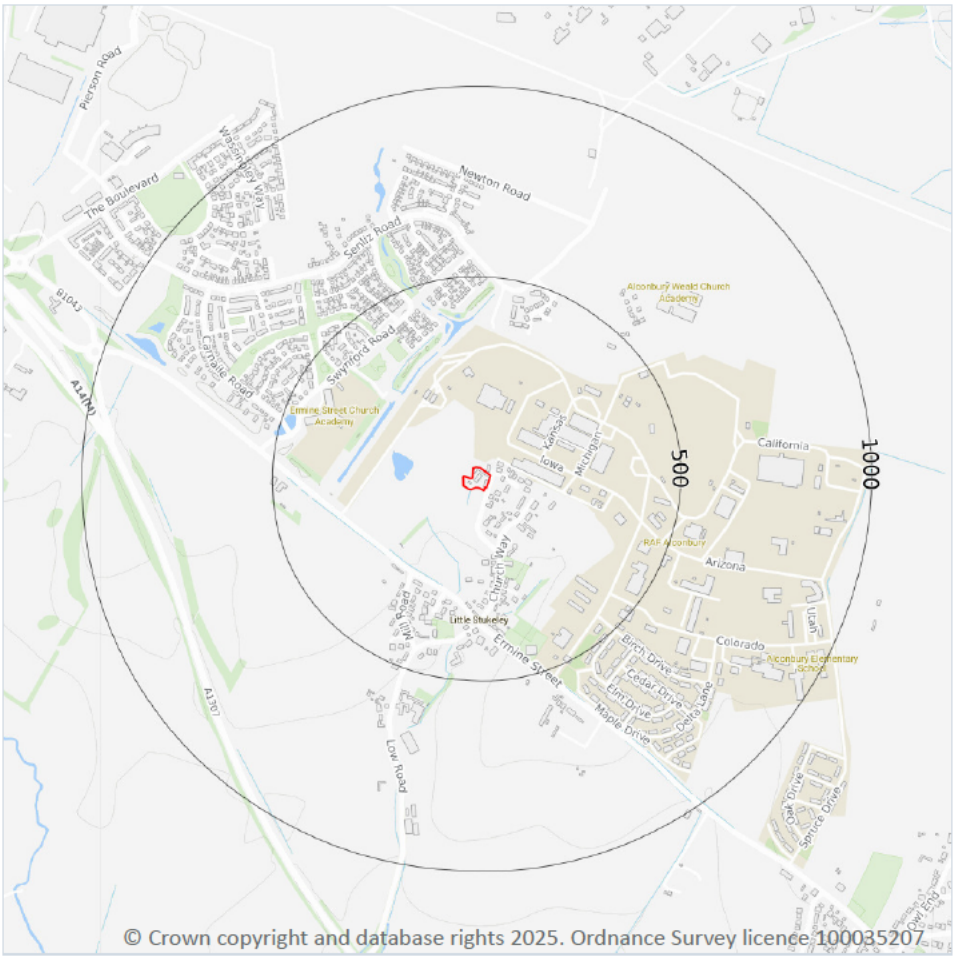
Highest risk on site	**Low**
Highest risk within 50m	**Low**

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

Features are displayed on the Groundwater flooding map on **page 47 >**

This data is sourced from 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	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 48 >**

ID	Location	Name	Woodland Type
-	1738m N	Long Coppice	Ancient & Semi-Natural Woodland
-	1856m NE	Little Less Wood	Ancient & Semi-Natural Woodland
-	1989m NW	Hermitage Wood	Ancient & Semi-Natural Woodland

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

10.8 Biosphere Reserves

Records within 2000m	0

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

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

10.9 Forest Parks

Records within 2000m	0

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m	0

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

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

10.11 Green Belt

Records within 2000m	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

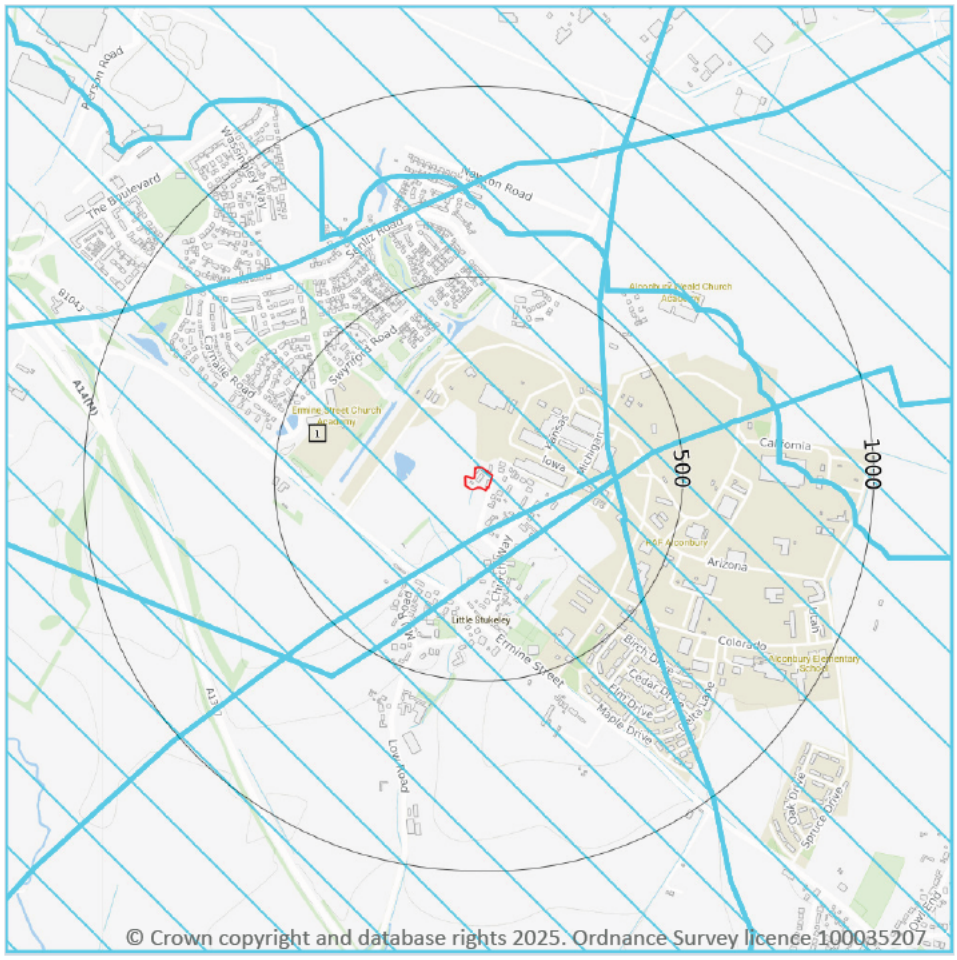
Records within 2000m	5

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	**Great Ouse NVZ**	**Surface Water**	**391**	**Existing**
46m N	Great Ouse NVZ	Surface Water	391	Existing
407m S	Huntingdon River Gravels	Groundwater	144	Existing
429m NW	Middle Level NVZ	Surface Water	386	Existing
554m E	Middle Level NVZ	Surface Water	386	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 53 >

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.** **Combustion - General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.** **Discharges - Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream.**

This data is sourced from Natural England.

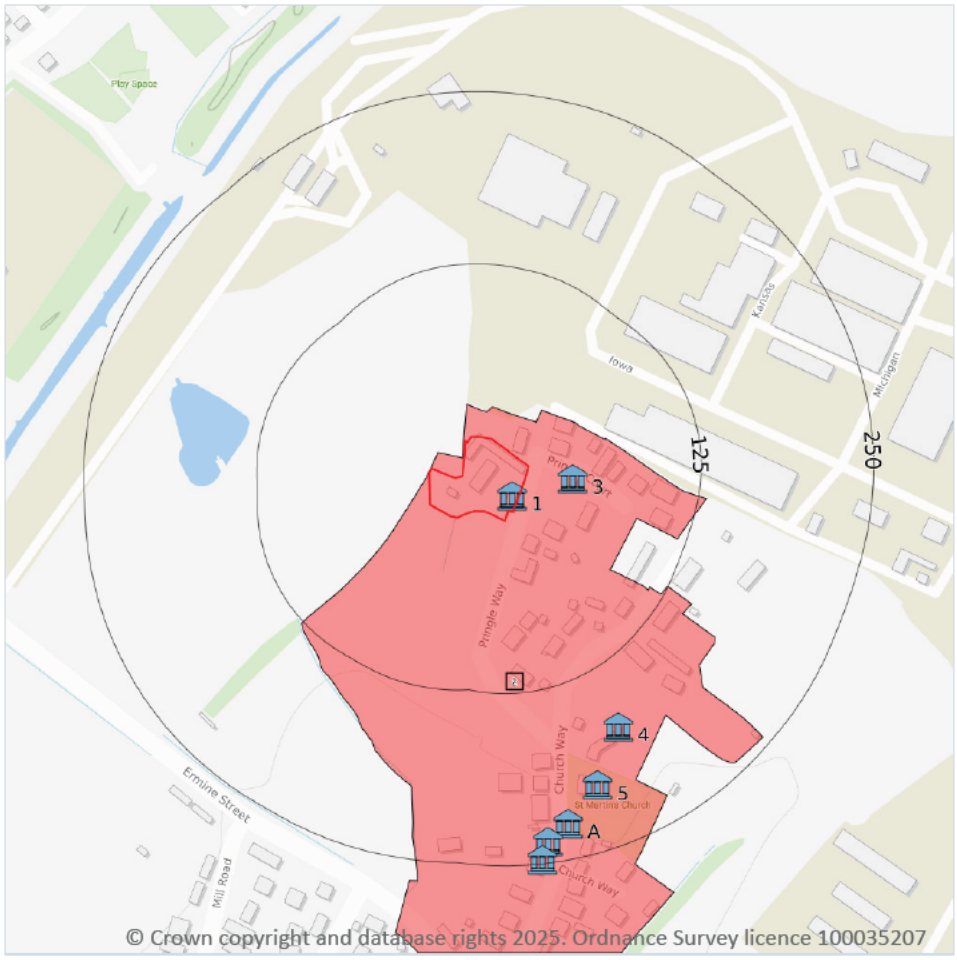
10.18 SSSI Units

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	7

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 55 >

ID	Location	Name	Grade	Reference Number	Listed date
1	**On site**	**Pringle Farmhouse**	**II**	**1130169**	**21/10/1983**
3	33m E	Pinks Cottage	II	1317313	21/10/1983
4	170m SE	The Old Rectory	II	1165424	20/11/1981
5	203m S	Church Of St Martin	II*	1130165	28/01/1958
A	224m S	Little Stukeley War Memorial	II	1439206	01/11/2016
A	234m S	11, Church Way	II	1130166	21/10/1983

ID	Location	Name	Grade	Reference Number	Listed date
A	247m S	9, Church Way	II	1330502	21/10/1983

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 55 >

ID	Location	Name	District	Date of designation
2	**On site**	**Little Stukeley**	**Huntingdonshire**	**unknown**

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.

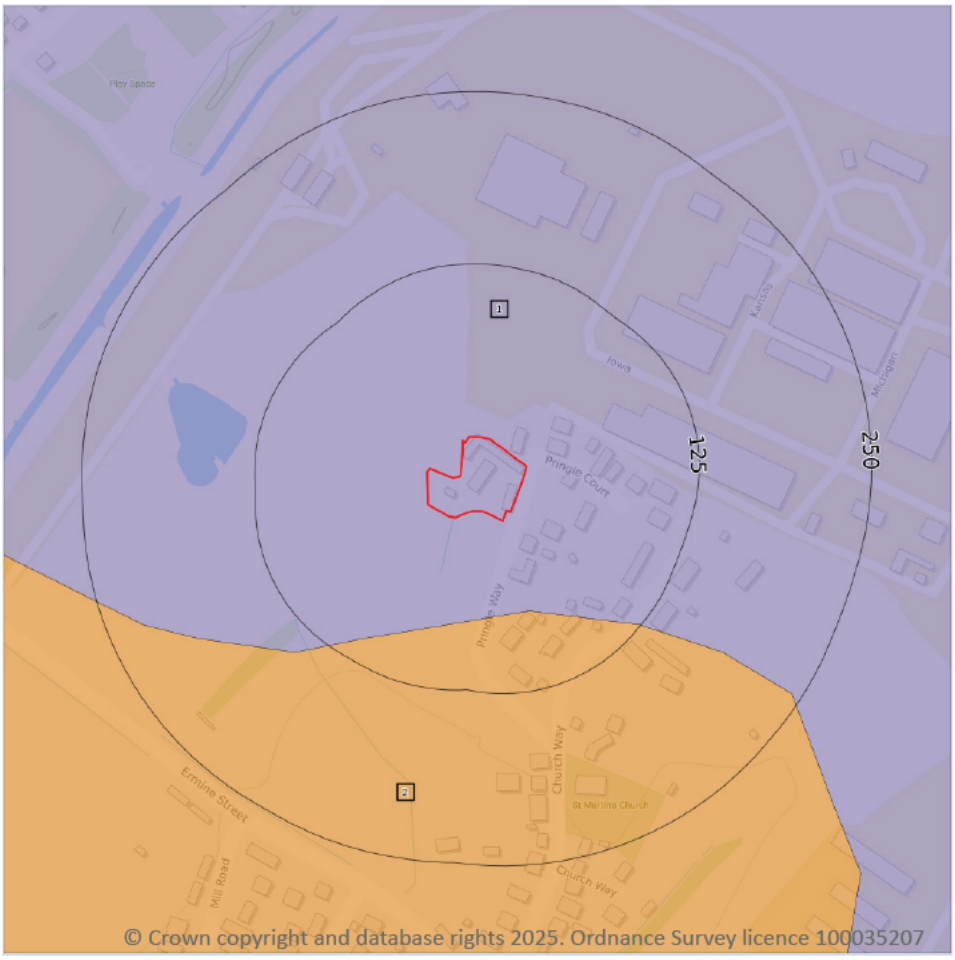
11.7 Registered Parks and Gardens

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	Non Agricultural	Non-agricultural/no quality assigned

ID	Location	Classification	Description
2	68m S	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

This data is sourced from Natural England.

12.2 Open Access Land

Records within 250m	0

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

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

12.3 Tree Felling Licences

Records within 250m	0

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

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m	0

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

This data is sourced from Natural England.

13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m	0

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

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.

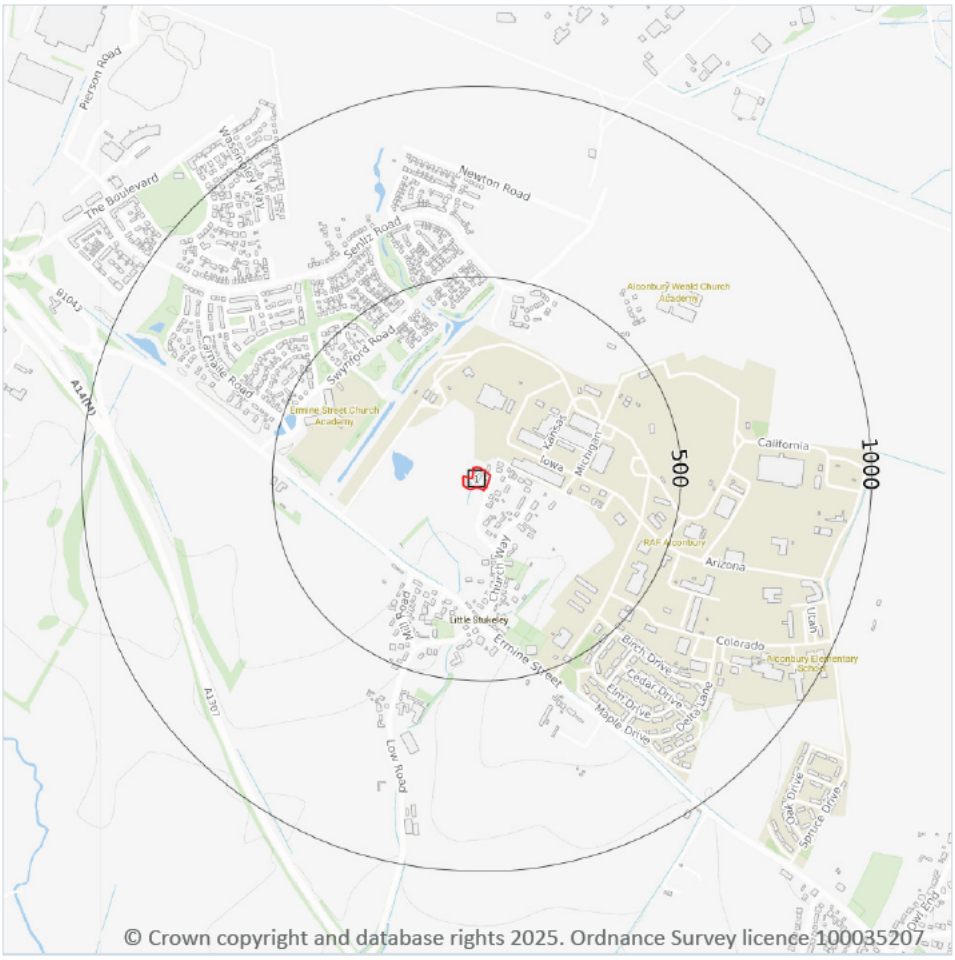
13.4 Limestone Pavement Orders

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 61 >

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.

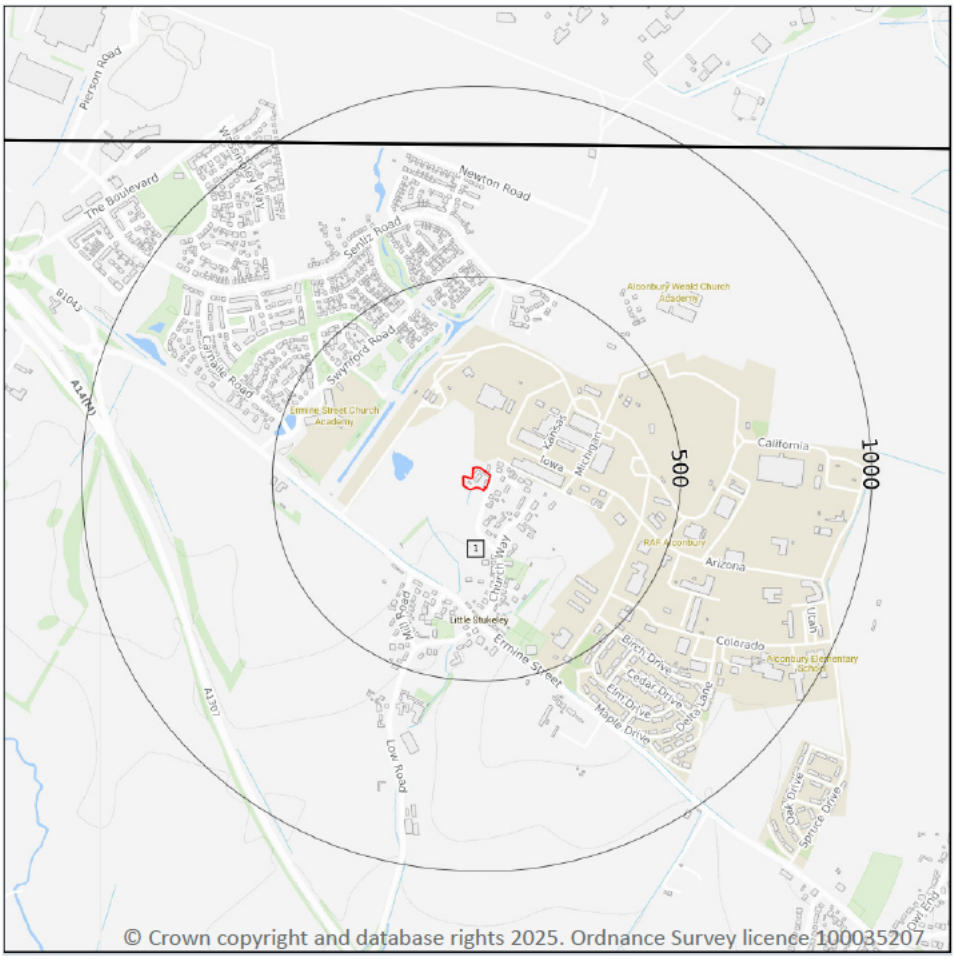
14.6 Bedrock faults and other linear features (10k)

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 65 >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	No coverage	Full	Full	No coverage	EW187_huntingdon_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.

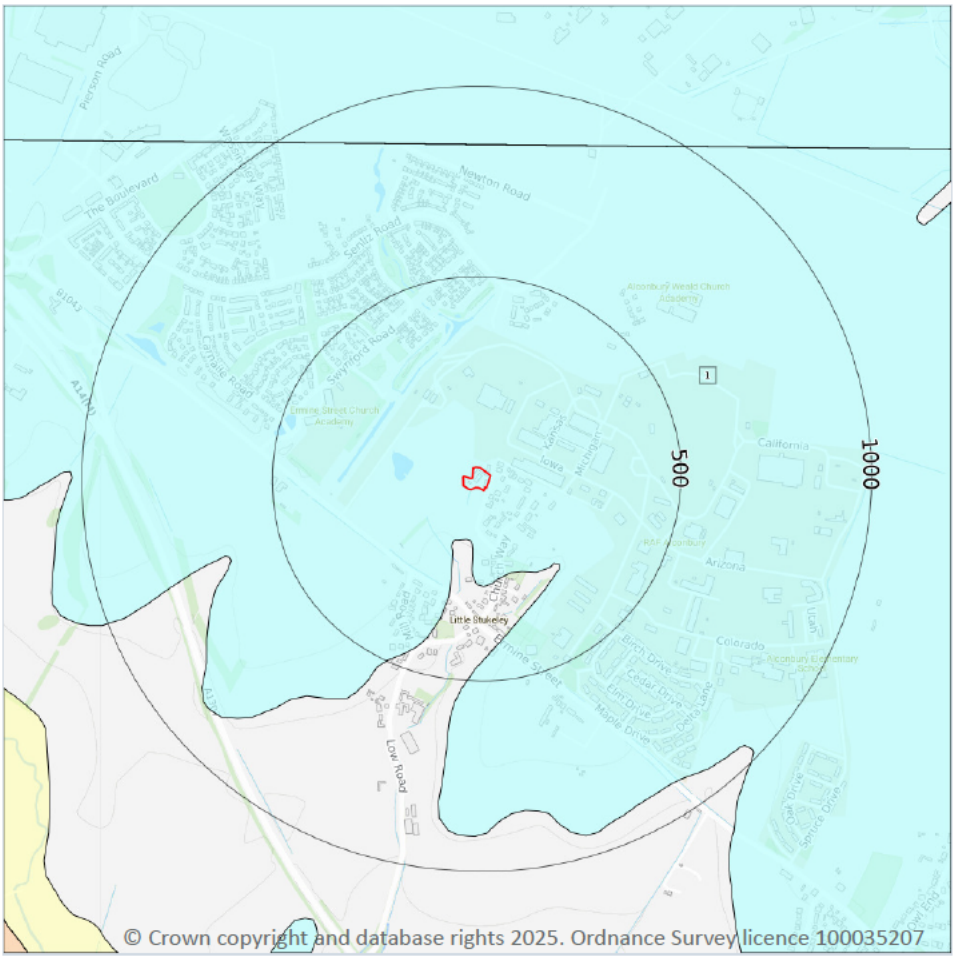
15.3 Artificial ground permeability (50k)

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 67 >

ID	Location	LEX Code	Description	Rock description
1	On site	ODT-DMTN	OADBY MEMBER	DIAMICTON

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	1

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

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

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	0

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

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m	0

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m	1

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

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

ID	Location	LEX Code	Description	Rock age
1	On site	OXC-MDST	OXFORD CLAY FORMATION - MUDSTONE	CALLOVIAN

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**	**Low**	**Very 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	57

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 71 >

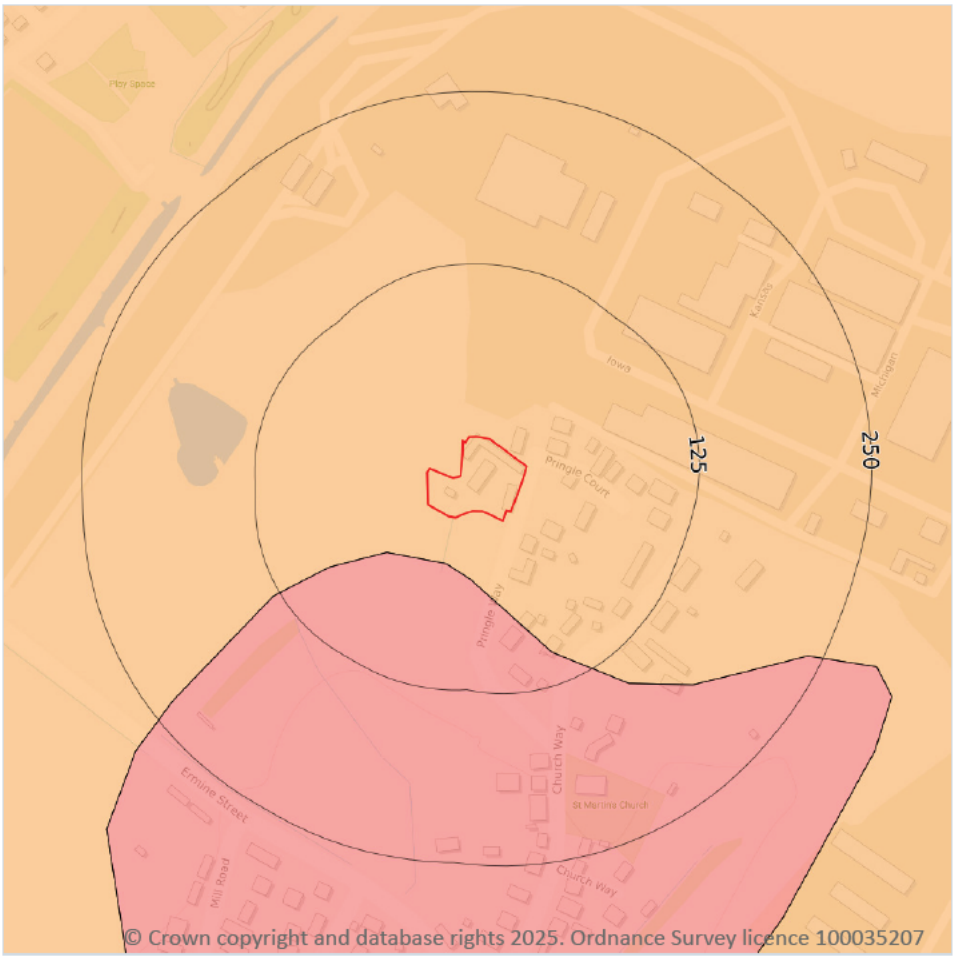
ID	Location	Grid reference	Name	Length	Confidential	Web link
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TRI AIRPORT 4100A	5.0	N	535715 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TRI AIRPORT 4100B	5.0	N	535716 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TRI AIRPORT 4100C	5.0	N	535717 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TRI AIRPORT 4100D	5.0	N	535718 ↗
A	133m NE	521000 276000	RAF ALCONBURY TR1 AIRPORT BH4100E	15.0	N	535719 ↗
A	133m NE	521000 276000	RAF ALCONBURY TR1 AIRPORT BH4101A	5.0	N	535720 ↗
A	133m NE	521000 276000	RAF ALCONBURY TR1 AIRPORT BH4101B	5.0	N	535721 ↗
A	133m NE	521000 276000	1AF ALCONBURY TR1 AIRPORT 4101C	5.0	N	535722 ↗
A	133m NE	521000 276000	1AF ALCONBURY TR1 AIRPORT 4101D	5.0	N	535723 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR 1 SHELTERS BH4101	15.0	N	535724 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4102A	5.0	N	535725 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4102B	5.0	N	535726 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4102C	5.0	N	535727 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4102D	5.0	N	535728 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4102E	15.0	N	535729 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4103A	5.0	N	535730 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4103B	5.0	N	535731 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4103C	5.0	N	535732 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4103D	5.0	N	535733 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4103E	11.0	N	535734 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4104A	5.0	N	535735 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4104B	5.0	N	535736 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4104C	5.0	N	535737 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4104D	5.0	N	535738 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4104E	10.5	N	535739 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4105A	5.0	N	535740 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4105B	5.0	N	535741 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4105C	5.0	N	535742 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4105D	5.0	N	535743 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4105E	15.0	N	535744 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4106A	5.0	N	535745 ↗

ID	Location	Grid reference	Name	Length	Confidential	Web link
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4106B	5.0	N	535746 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4106C	5.0	N	535747 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4106D	5.0	N	535748 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4106E	15.0	N	535749 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4108A	4.0	N	535750 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4108B	5.0	N	535751 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4108C	5.0	N	535752 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4108D	5.0	N	535753 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4108E	15.0	N	535754 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4109A	5.0	N	535755 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4109B	5.0	N	535756 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4109C	5.0	N	535757 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4109D	5.0	N	535758 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4109E	13.5	N	535759 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4110A	5.0	N	535760 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4110B	5.0	N	535761 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4110C	5.0	N	535762 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4110D	5.0	N	535763 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4110E	15.0	N	535764 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS TP 1	2.0	N	535765 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS TP 2	1.0	N	535766 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4111E	12.0	N	535767 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS TP 3	2.0	N	535768 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS TP 4	2.0	N	535769 ↗
A	133m NE	521000 276000	RAF ALCONBURY 13 NO TR1 SHELTERS BH4112E	15.0	N	535770 ↗
1	229m SE	521100 275800	R.A.F. ALCONBURY (LITTLE STUKELEY) BH1-4	6.5	N	535698 ↗

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

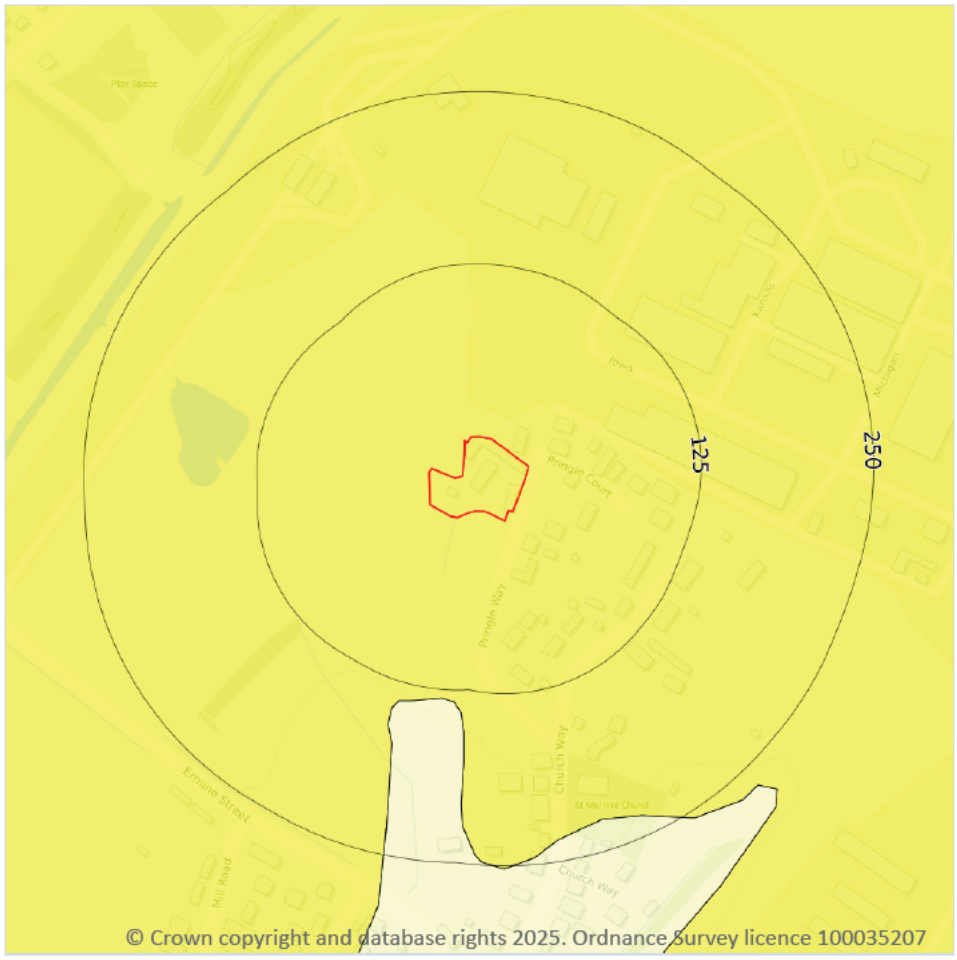
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on page 74 >

Location	Hazard rating	Details
On site	**Low**	**Ground conditions predominantly medium plasticity.**
34m S	Moderate	Ground conditions predominantly high 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

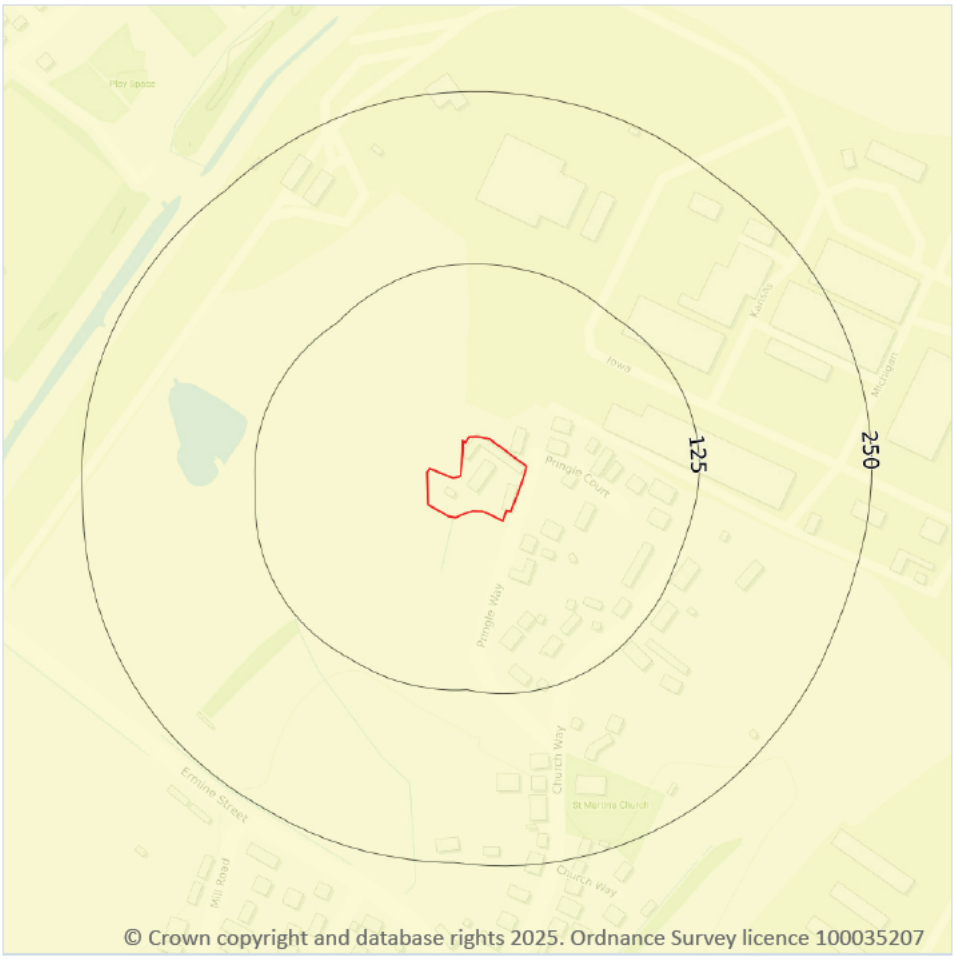
The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on page 75 >

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

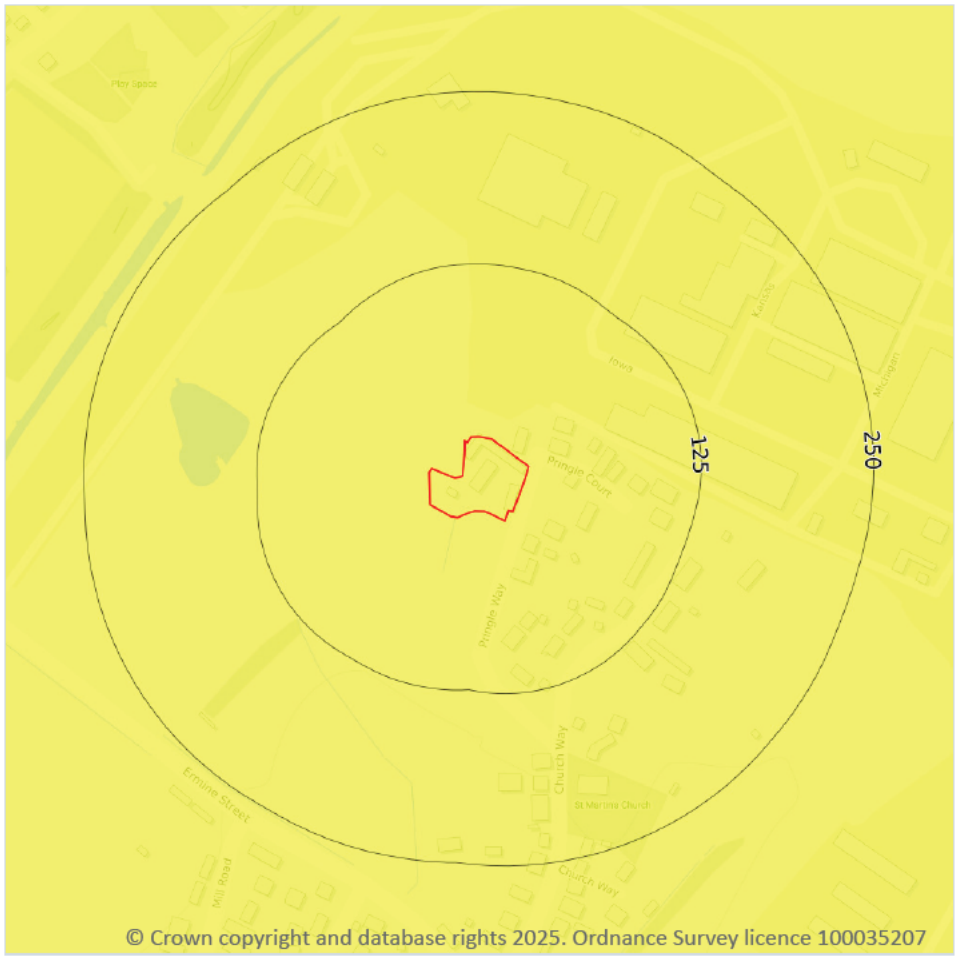
The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

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



Site Outline

Search buffers in metres (m)

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

17.4 Collapsible deposits

Records within 50m	1

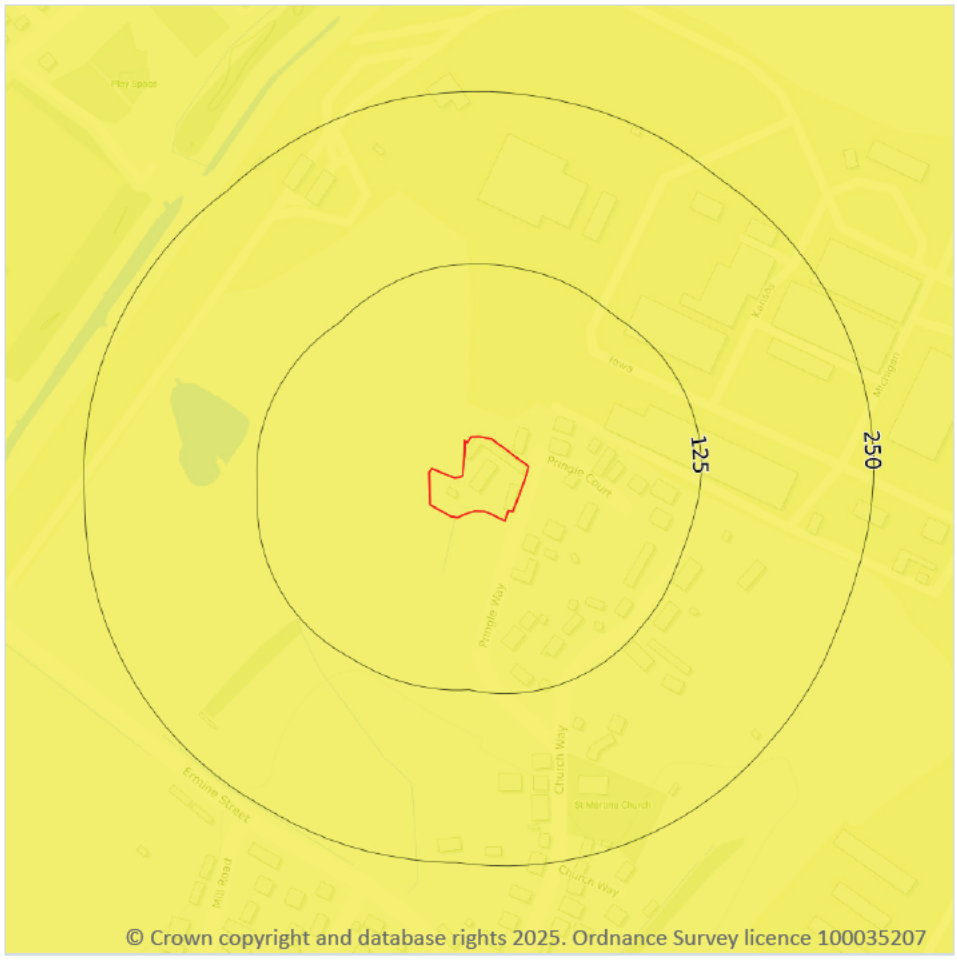
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

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



Site Outline

Search buffers in metres (m)

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

17.5 Landslides

Records within 50m	1

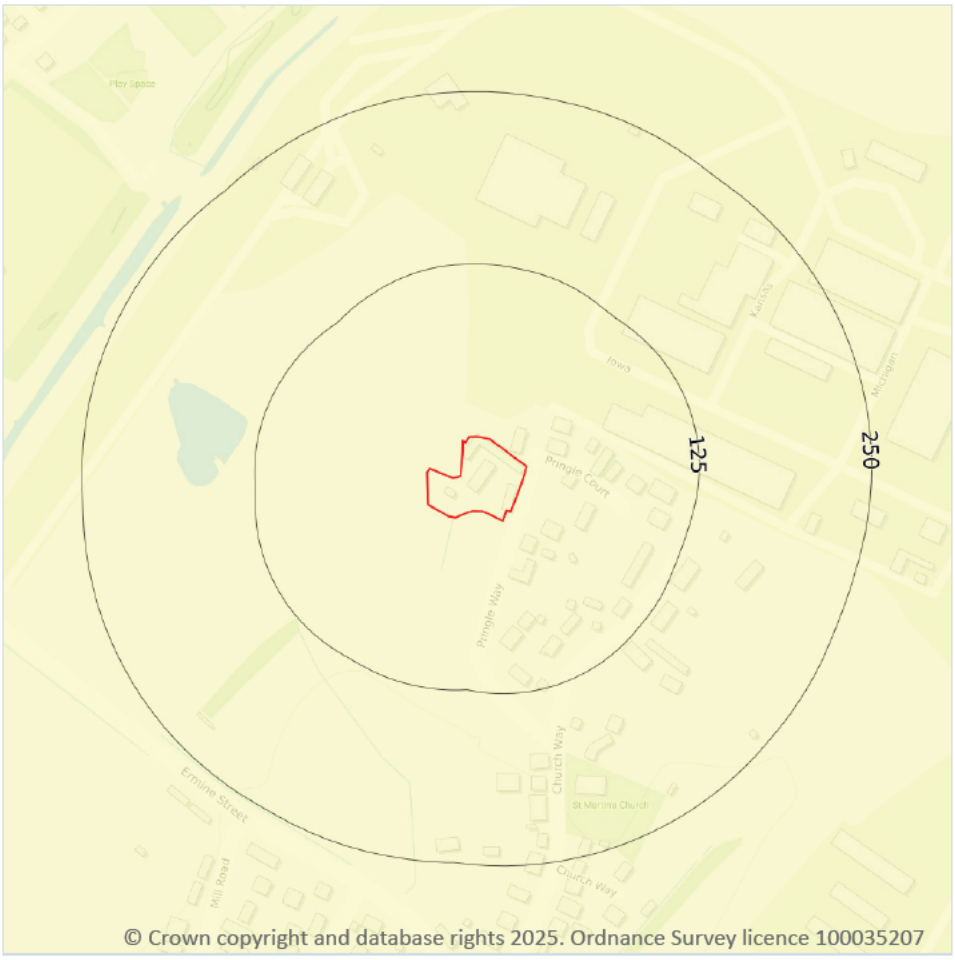
The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

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	1

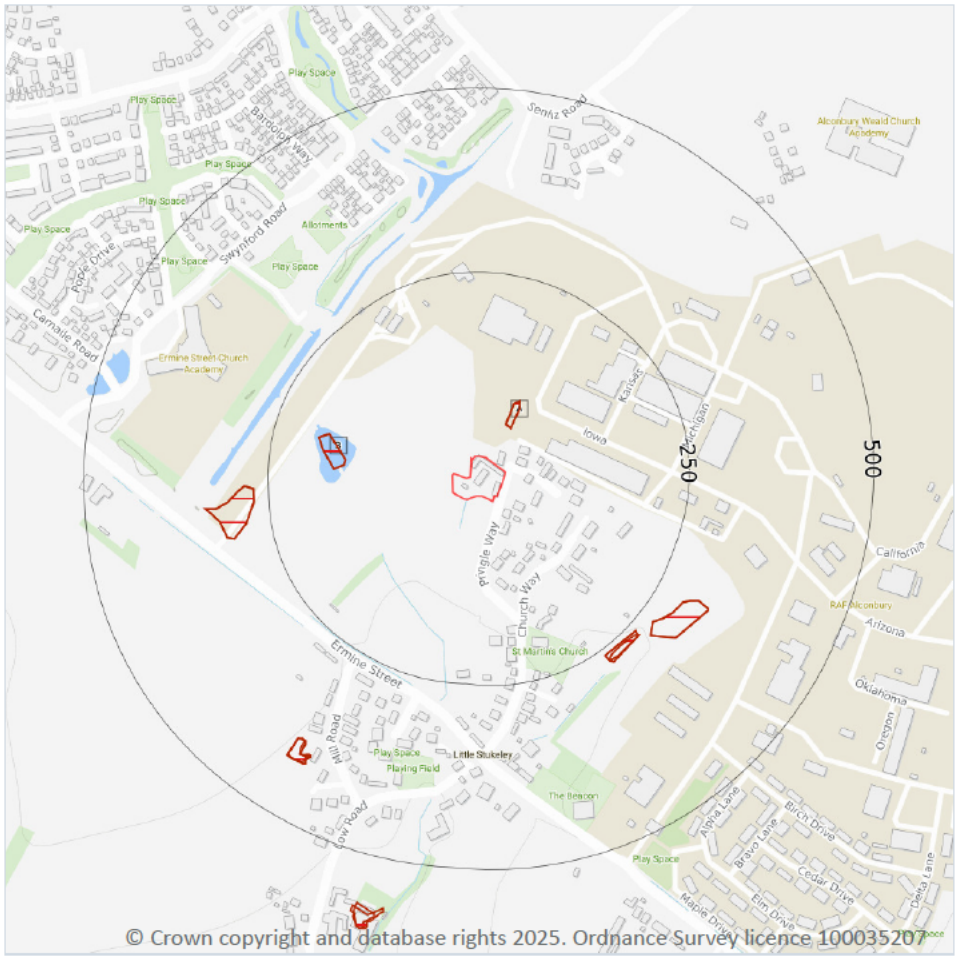
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on page 79 >

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	4

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	52m NE	Reservoir	1992	1:10000
A	52m NE	Reservoir	1978	1:10000
B	146m W	Reservoir	1992	1:10000
B	146m W	Reservoir	1978	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

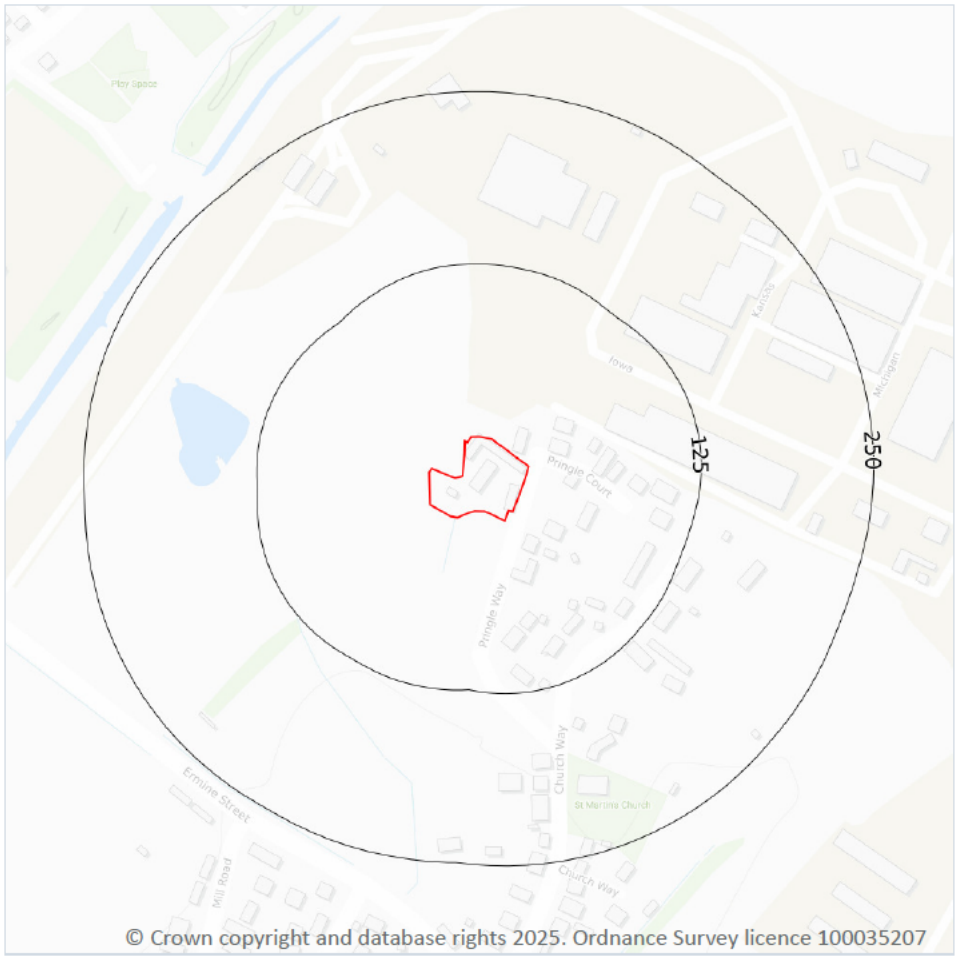
Records within 500m	0

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.

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 88 >

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

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

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	1

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

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

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 2

Records within 500m	0

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

This data is sourced from publicly available information by Groundsure.

22.9 HS2

Records within 500m	0

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

This data is sourced from HS2 ltd.

Data providers

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

Terms and conditions

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

APPENDIX 3

CHEMICAL TEST RESULTS

Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	25-13420-1
Initial Date of Issue:	01-May-2025
Re-Issue Details:	
Client	Lucion Ground Engineering Limited
Client Address:	Newark Road Peterborough Cambridgeshire PE1 5UA
Contact(s):	Admin Ashley Murdoch
Project	Pringle Farm

Quotation No.:	Q24-36851	**Date Received:**	23-Apr-2025
Order No.:	20980	**Date Instructed:**	23-Apr-2025
No. of Samples:	10		
Turnaround (Wkdays):	5	**Results Due:**	29-Apr-2025
Date Approved:	01-May-2025		

[redacted]
David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: Pringle Farm

Client: Lucion Ground Engineering Limited				**Chemtest Job No.:**		25-13420	25-13420	25-13420	25-13420	25-13420	25-13420	25-13420
Quotation No.: Q24-36851				**Chemtest Sample ID.:**		1963883	1963884	1963885	1963886	1963887	1963888	1963889
Order No.: 20980				Client Sample Ref.:		2	3	1	1	2	1	1
				Sample Location:		WS01	WS01	WS02	WS03	WS04	WS05	WS06
				Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):		0.50	0.90	0.10	0.20	0.20	0.10	0.20
				Date Sampled:		16-Apr-2025	16-Apr-2025	16-Apr-2025	16-Apr-2025	16-Apr-2025	16-Apr-2025	16-Apr-2025
				Asbestos Lab:		DURHAM		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**							
pH at 20C		M	2010		4.0		8.0	7.4	8.0	8.0	8.2	
Moisture		N	2030	%	0.020		7.0	16	7.0	6.5	4.6	
Stones and Removed Materials		N	2030	%	0.020		< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40		0.83	1.8	0.94	0.77	0.72	
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010		0.029	0.017	0.14	0.019	0.044	
Cyanide (Free)		M	2300	mg/kg	0.50		< 0.50	< 0.50	0.50	0.60	0.70	
Cyanide (Total)		M	2300	mg/kg	0.50		< 0.50	< 0.50	0.50	0.60	0.70	
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50		6.2	3.2	2.6	11	21	
Arsenic		M	2455	mg/kg	0.5		7.5	17	18	14	7.6	
Cadmium		M	2455	mg/kg	0.10		0.24	0.53	0.35	1.2	0.11	
Chromium		M	2455	mg/kg	0.5		23	19	17	36	15	
Copper		M	2455	mg/kg	0.50		12	32	26	40	14	
Mercury		M	2455	mg/kg	0.05		< 0.05	0.20	0.13	0.09	0.06	
Nickel		M	2455	mg/kg	0.50		10	35	25	20	12	
Lead		M	2455	mg/kg	0.50		17	60	41	460	17	
Selenium		M	2455	mg/kg	0.25		1.2	0.78	0.62	0.42	0.56	
Zinc		M	2455	mg/kg	0.50		63	250	81	550	49	
Chromium (Hexavalent)		N	2490	mg/kg	0.50		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
Organic Matter		M	2625	%	0.40		12	4.8	5.2	13	4.1	
Acenaphthene		M	2700	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	0.84	
Acenaphthylene		M	2700	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	0.41	
Anthracene		M	2700	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	5.8	
Benzo[a]anthracene		M	2700	mg/kg	0.10		< 0.10	0.50	0.46	< 0.10	9.0	
Benzo[a]pyrene		M	2700	mg/kg	0.10		< 0.10	0.76	0.35	< 0.10	11	
Benzo[b]fluoranthene		M	2700	mg/kg	0.10		< 0.10	0.75	0.29	< 0.10	14	
Benzo[g,h,i]perylene		M	2700	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	9.7	
Benzo[k]fluoranthene		M	2700	mg/kg	0.10		< 0.10	0.62	0.35	< 0.10	5.4	
Chrysene		M	2700	mg/kg	0.10		< 0.10	0.60	0.35	< 0.10	9.4	
Dibenz(a,h)Anthracene		M	2700	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	2.9	
Fluoranthene		M	2700	mg/kg	0.10		< 0.10	0.84	0.25	< 0.10	19	
Fluorene		M	2700	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	0.87	
Indeno(1,2,3-c,d)Pyrene		M	2700	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	8.8	
Naphthalene		M	2700	mg/kg	0.10		< 0.10	< 0.10	< 0.10	< 0.10	0.15	
Phenanthrene		M	2700	mg/kg	0.10		< 0.10	0.37	< 0.10	< 0.10	9.2	
Pyrene		M	2700	mg/kg	0.10		< 0.10	0.86	0.48	< 0.10	19	
Total Of 16 PAH's		M	2700	mg/kg	2.0		< 2.0	5.3	2.5	< 2.0	130	
Total Phenols		M	2920	mg/kg	0.10		< 0.10	0.11	< 0.10	< 0.10	< 0.10	

Results - Soil

Project: Pringle Farm

Client: Lucion Ground Engineering Limited						**Chemtest Job No.:**	25-13420	25-13420	25-13420	25-13420	25-13420	25-13420	25-13420
Quotation No.: Q24-36851						**Chemtest Sample ID.:**	1963883	1963884	1963885	1963886	1963887	1963888	1963889
Order No.: 20980						Client Sample Ref.:	2	3	1	1	2	1	1
						Sample Location:	WS01	WS01	WS02	WS03	WS04	WS05	WS06
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0.50	0.90	0.10	0.20	0.20	0.10	0.20
						Date Sampled:	16-Apr-2025	16-Apr-2025	16-Apr-2025	16-Apr-2025	16-Apr-2025	16-Apr-2025	16-Apr-2025
						Asbestos Lab:	DURHAM		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**								
ACM Type		N	2192		N/A		-		-	-	-	-	-
Asbestos Identification		U	2192		N/A		No Asbestos Detected		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Soil Colour		N	2040		N/A			Brown	Brown	Brown	Brown	Brown	
Other Material		N	2040		N/A			Stones and	Stones, Roots and	Stones, Roots and	Stones, Roots and	Stones and	
Soil Texture		N	2040		N/A			Sand	Clay	Sand	Sand	Sand	
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10			700	33	< 10	1500	220	

Results - Soil

Project: Pringle Farm

Client: Lucion Ground Engineering Limited				**Chemtest Job No.:**		25-13420	25-13420	25-13420
Quotation No.: Q24-36851				**Chemtest Sample ID.:**		1963890	1963891	1963892
Order No.: 20980				Client Sample Ref.:		3	2	1
				Sample Location:		WS06	WS07	WS08
				Sample Type:		SOIL	SOIL	SOIL
				Top Depth (m):		0.70	0.60	0.30
				Date Sampled:		16-Apr-2025	16-Apr-2025	16-Apr-2025
				Asbestos Lab:			DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
pH at 20C		M	2010		4.0	8.0	8.5	8.0
Moisture		N	2030	%	0.020	12	16	9.0
Stones and Removed Materials		N	2030	%	0.020	< 0.020	< 0.020	< 0.020
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40	1.1	2.1	1.2
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	0.011	0.069	0.018
Cyanide (Free)		M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Cyanide (Total)		M	2300	mg/kg	0.50	< 0.50	0.60	< 0.50
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	4.2	17	10
Arsenic		M	2455	mg/kg	0.5	27	14	17
Cadmium		M	2455	mg/kg	0.10	0.32	1.2	0.26
Chromium		M	2455	mg/kg	0.5	18	23	13
Copper		M	2455	mg/kg	0.50	32	64	16
Mercury		M	2455	mg/kg	0.05	0.17	0.12	0.11
Nickel		M	2455	mg/kg	0.50	34	27	26
Lead		M	2455	mg/kg	0.50	110	190	38
Selenium		M	2455	mg/kg	0.25	0.74	0.64	0.38
Zinc		M	2455	mg/kg	0.50	110	340	84
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
Organic Matter		M	2625	%	0.40	6.9	11	2.8
Acenaphthene		M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene		M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Anthracene		M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene		M	2700	mg/kg	0.10	0.68	0.56	< 0.10
Benzo[a]pyrene		M	2700	mg/kg	0.10	0.63	0.44	< 0.10
Benzo[b]fluoranthene		M	2700	mg/kg	0.10	0.57	0.79	< 0.10
Benzo[g,h,i]perylene		M	2700	mg/kg	0.10	< 0.10	1.2	< 0.10
Benzo[k]fluoranthene		M	2700	mg/kg	0.10	0.28	0.48	< 0.10
Chrysene		M	2700	mg/kg	0.10	0.64	0.68	< 0.10
Dibenz(a,h)Anthracene		M	2700	mg/kg	0.10	< 0.10	0.77	< 0.10
Fluoranthene		M	2700	mg/kg	0.10	0.62	0.54	< 0.10
Fluorene		M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene		M	2700	mg/kg	0.10	< 0.10	0.74	< 0.10
Naphthalene		M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene		M	2700	mg/kg	0.10	< 0.10	0.31	< 0.10
Pyrene		M	2700	mg/kg	0.10	0.55	0.59	< 0.10
Total Of 16 PAH's		M	2700	mg/kg	2.0	4.0	7.1	< 2.0
Total Phenols		M	2920	mg/kg	0.10	< 0.10	< 0.10	0.12

Results - Soil

Project: Pringle Farm

Client: Lucion Ground Engineering Limited			**Chemtest Job No.:**			25-13420	25-13420	25-13420
Quotation No.: Q24-36851			**Chemtest Sample ID.:**			1963890	1963891	1963892
Order No.: 20980			Client Sample Ref.:			3	2	1
			Sample Location:			WS06	WS07	WS08
			Sample Type:			SOIL	SOIL	SOIL
			Top Depth (m):			0.70	0.60	0.30
			Date Sampled:			16-Apr-2025	16-Apr-2025	16-Apr-2025
			Asbestos Lab:				DURHAM	DURHAM
Determinand	**HWOL Code**	**Accred.**	**SOP**	**Units**	**LOD**			
ACM Type		N	2192		N/A		-	-
Asbestos Identification		U	2192		N/A		No Asbestos Detected	No Asbestos Detected
Soil Colour		N	2040		N/A	Brown	Brown	Brown
Other Material		N	2040		N/A	Stones and	Stones, Roots and	Stones, Roots and
Soil Texture		N	2040		N/A	Clay	Clay	Loam
Total TPH >C6-C40	EH_1D_Total	U	2670	mg/kg	10	21	700	< 10

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Allkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N–dimethyl-p-phenylenediamine.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40	Dichloromethane extraction / GC-FID	
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.
Any comments or interpretations are outside the scope of UKAS accreditation.
The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.
Uncertainty of measurement for the determinands tested are available upon request .
None of the results in this report have been recovery corrected.
All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at ≤ 30°C prior to analysis.
All Asbestos testing is performed at the indicated laboratory .
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

NEW_ASB	Eurofins Chemtest Limited, 11 Depot Road, Newmarket, CB8 0AL
DURHAM	Eurofins Chemtest Limited, Unit A North Wing, Prospect Business Park, Crookhall Lane, Consett, Co Durham, DH8 7PW

Sample Deviation Codes

As a result of any of the below deviations applying, the test results may be unreliable

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - The required amount of sample for analysis was not received
H - Appropriate cooling measures were not taken for sample transportation

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.
All water samples will be retained for 14 days from the date of receipt.
Charges may apply to extended sample storage.

Report Information

Water Sample Category Key for Accreditation

DW - Drinking Water
GW - Ground Water
LE - Land Leachate
NA - Not Applicable
PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

Asbestos Tests LOD = LOQ

Limit of Detection = Limit of Quantification for asbestos results only

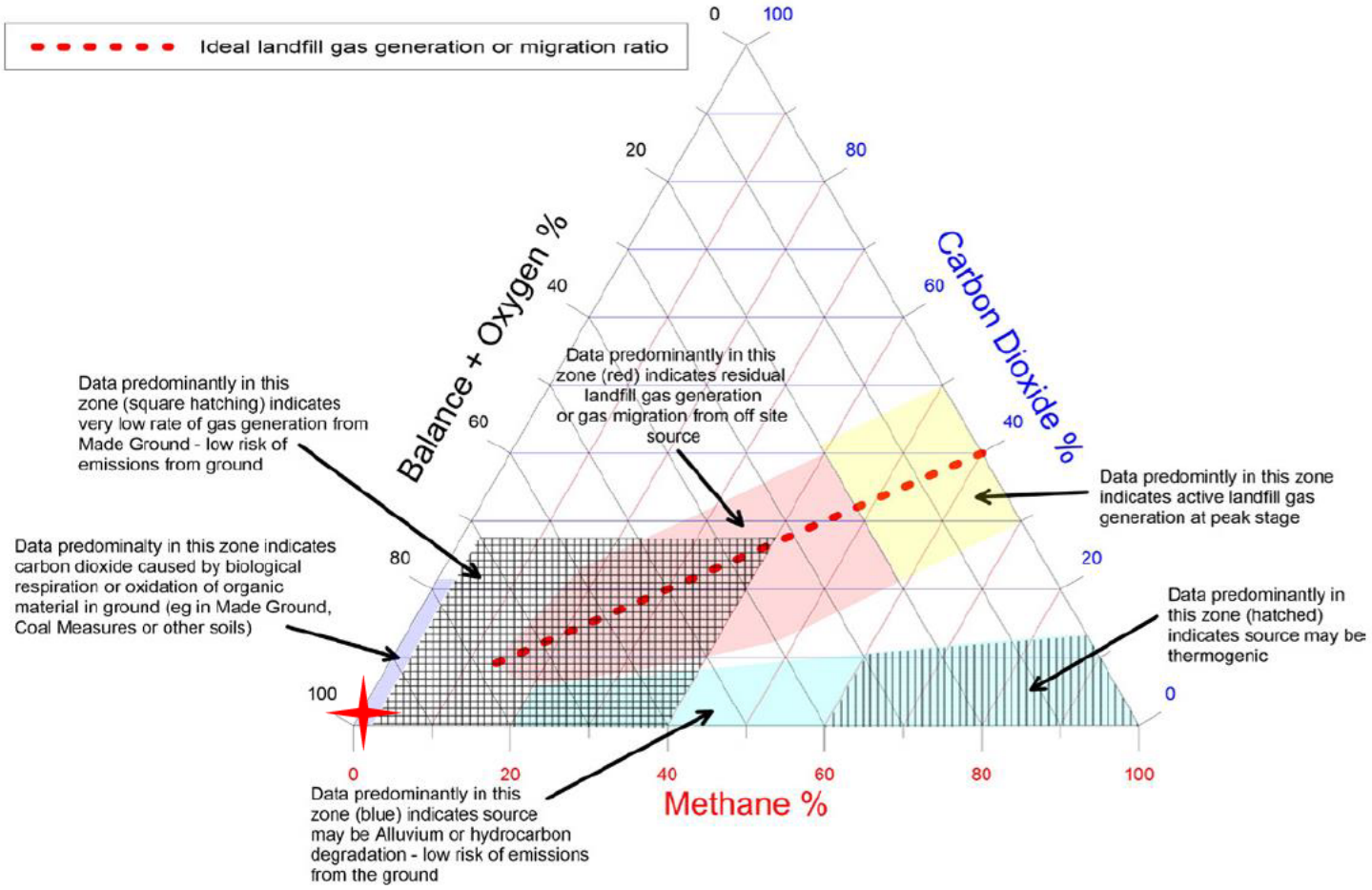
If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

APPENDIX 4

TERNARY PLOT

Ternary plot with zones indicating the potential gas source

Reproduced from Figure 3.2, NF64 - Hazardous Ground Gas – an essential guide for housebuilders (April 2023).



Key

'Worst case' gas monitoring result

Project : Pringle Farm, Pringle Way, Little Stukeley

Client : The Yard Pringle Farm Limited

Lucion
Protecting people and planet

LUCION GROUND ENGINEERING LIMITED
Peterborough Tel : 01733 566566

Project No.
131418