



Geo-Environmental

DESK STUDY REPORT

for the land at

MILL LANE, HITCHIN,

HERTFORDSHIRE, SG4 7NN,

on behalf of

MARTIN GRANT HOMES

Report:	DESK STUDY REPORT
Site:	MILL LANE, HITCHIN, HERTS, SG47NN
Client:	MARTIN GRANT HOMES
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APPENDICES

APPENDIX A	Desk Study Information
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1.0 INTRODUCTION

1.1 General

Geo-Environmental Services Limited (Geo-Environmental) was instructed by Martin Grant Homes to undertake a Phase I desk study into the geotechnical and geo-environmental factors pertaining to the planned redevelopment of the land at Mill Lane, Hitchin, Hertfordshire, SG4 7NN, herein referred to as 'the site'. The site's location is presented in Figure 1.

1.2 Form of Development

It is understood that a residential development is proposed, including detached, semi-detached and terraced housing, areas of soft landscaping, access roads and associated infrastructure.

A preliminary proposed development site plan is presented in Figure 2.

1.3 Objectives

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

A preliminary Risk Assessment (PRA) was to be undertaken as part of the desk study in accordance with CLR11. The objective of the risk assessment was to evaluate plausible pollutant linkages with respect to the proposed development, adjacent land uses, and the wider environment, in the context of planning, immediate liabilities under the Environment Act 1990, and risks posed to Controlled Waters under the Water Resources Act.

1.4 Standards

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

- National Planning Policy Framework – March 2012;
- Planning Policy Statement 23 – Planning and Pollution Control;
- Model Procedures for the Management of Contaminated Land, CLR11, DEFRA and Environment Agency 2004;
- Environment Agency Guidance on Requirements for Land Contamination Reports, Version 1 dated July 2005;
- BS10175:2011 - Investigation of Potentially Contaminated Sites - Code of Practice, BSI 2011;
- BS5930: 2015 - Code of Practice for Site Investigations, BSI 2015;
- EN ISO 14688 Geotechnical Investigation and Testing Part 1-2002 and Part 2-2004;
- BS1377: 1990 - Soils for Civil Engineering Purposes, BSI1990;
- NHBC Standards Chapter 4.1 Land Quality - Managing Ground Conditions;
- NHBC Standards Chapter 4.2 Building Near Trees;
- CIRIA C665 – Assessing risks posed by hazardous ground gases to buildings (2007);



- NHBC 10627-R01(04)- Guidance on evaluation of development proposals on sites where methane and carbon dioxide are present (2007);
- BS8485:2007 Code of practice for the characterisation and remediation from ground gas in affected developments;
- Department of Environment - Industry Profiles (1995 - 1996).

1.5 Conditions

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

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2.0 DESK STUDY

The findings of the Phase I desk study are presented in the following section. A copy of the information obtained as part of the desk study is presented in Appendix A.

2.1 Site Description

The site generally comprised two rectangular shaped pasture fields that were overgrown and partially wooded, centred over National Grid Reference 519059, 227425 and measured 3.33ha in area. Topographically, whilst localised undulations were noted, the majority of the site sloped down gently in a southerly direction. The larger of the two fields was located on the eastern part of the central portion of the site, and was mostly covered in overgrown grass, scrub and brambles, with an occasional scattering of mature and semi-mature trees. The remaining field, located on the western side, was heavily overgrown with dense scrub, grass and an abundance of semi-mature trees and bushes. The two fields were linked by a small area of heavily vegetated land on the southern boundary. Parts of the site, particularly the north-eastern boundary and southwestern boundary were significantly overgrown with brambles and scrub such that access to these areas was very limited.

The site was bounded to the north by a line of trees and a hedge, with the grounds of a care home (St Ippolyts) and Mill Lane beyond; to the east by a hedge and trees with London Road beyond, set at a slightly lower elevation than the site; to the south by a hedge, trees and brambles with an arable field beyond set at an elevation of approximately 1.0m lower than the site at its boundary; and to the west by densely overgrown tree lines hedge with residential properties beyond.

A shallow overgrown ditch was observed on the lowest part of the eastern boundary with London Road, close to the southern extremity of the site.

Photographs taken during the walkover survey are presented in Appendix A, with a sketch plan of the view direction of the photographs.

The site was accessed via a footpath on the northern boundary immediately adjacent to the western boundary of the neighbouring care home.

2.2 Geology

British Geological Survey geological mapping indicated the geology of the site to comprise superficial Glaciofluvial Deposits over the solid geology of the Zig Zag Chalk Formation.

The Glaciofluvial Deposits were deposited by melt water flows during periods of ice retreat to the north and comprises water rounded pebbles and sand. During the final retreat of the ice a large glacial lake was formed that occupied extensive areas of the lowlands. Within the lake sand and silt accumulated to form the Glacial Lake Deposits.

The Zig Zag Chalk Formation (formerly known as Lower Chalk) comprises mostly firm, pale grey to off-white blocky chalk with a lower part characterised by rhythmic alternations of marls and marly chalks with firm white chalk.

**Desk Study Report**

The nearest BGS borehole record with any relevant information was located some 237m to the north of the site. The borehole record is presented in Appendix A, and a screen snip is presented below.

HITCHIN		
BH 3. Close to the old brick-pit east of New England. Height of surface, about 235 feet.		
	Soil	Feet.
	Brickearth and small stones	2
	Gravelly brickearth	1
Paleolithic ?	Coarse loamy and gravelly sand	1½
	Hard sandy and gravelly brickearth	2
	Loamy gravel	1
		7
No attempt to go deeper was made at this spot.		
191.278		
BH 4. Preliminary trial in old brickpit N.N.E. of Maydencroft Farm (south side of the Charlton Road). Level about 260 feet.		
	Brickearth (dug 11 feet, bored 2 feet)	Feet.
Paleolithic.	White marl with freshwater shells	13
Ancient alluvium.	Blackish loamy sand	4
	Black loam, with freshwater shells and traces of plants....	1½
		18½
For lower beds see BH 8.		
185.277		

2.3 Hydrogeology

With reference to information provided by the Groundsure Dataset, the superficial geology of the site was indicated to be classified as a Secondary A Aquifer. The underlying Zig Zag Chalk Formation was indicated to be classified as a Principle Aquifer.

Secondary A Aquifers are permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

Principle Aquifers are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

In addition, the eastern part of the site was indicated to be within a Source Protection Zone 3 (Total Catchment), whilst the western portion was indicated to be within a Source Protection Zone 2 (Outer Catchment).

No discharge consents to groundwater were recorded within a 500m radius of the subject site.



No groundwater aquifer or surface water abstractions were recorded within 500m radius of the site.

2.4 Hydrology

The nearest surface feature was identified as an inland river not influenced by normal tidal action, and was located some 156m to the north-east of the site. A total of 7No. Pollution Incidents to controlled waters were identified within a 500m radius of the site.

Location	Incident Date	Pollutant/Pollutant Description	Impact
79m E	09/07/2002	Sewage Materials/Storm Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
194m NE	09/12/2001	Sewage Materials/Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
251m NE	02/01/2003	Sewage Materials/Storm Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
309m NE	29/12/2002	Sewage Materials/Crude Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
309m NE	24/12/2002	Sewage Materials/Crude Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
309m NE	02/09/2002	Sewage Materials/Crude Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
309m NE	07/11/2002	Sewage Materials/Crude Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

Table 2.1: Pollution Incidents within a 500m Radius of Site

A total of 8 Licenced Discharges to controlled waters were recorded within a 500m Radius of Site.

Location	Address	Effluent Type	Receiving Water	Status
249m NE	Pound Farm Pumping Station	Sewage Discharge	Ippollitts Brook	NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 01/12/1999 Effective Date: 26/11/1999 Revocation Date: 01/12/1999
249m NE	Pound Farm Pumping Station	Sewage Discharge	not stated	PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 11/02/1966 Effective Date: 11/02/1966 Revocation Date: -



249m NE	Pound Farm Pumping Station	Sewage Discharge	Ippollitts Brook	POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 13/10/2000 Effective Date: 26/11/1999 Revocation Date: -
323m NE	Land off London Road, Hitchin	Sewage Discharge	Ippollitts Brook	POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 14/01/2000 Revocation Date: 19/01/2000
323m NE	Land off London Road, Hitchin	Sewage Discharges	Land	POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 26/04/1990 Revocation Date: 10/02/1992
323m NE	Land off London Road, Hitchin	Sewage Discharges	Ippollitts Brook	POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 26/04/1990 Revocation Date: 24/09/1999
323m NE	Land off London Road, Hitchin	Sewage Discharges	Ippollitts Brook	POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 25/09/1999 Revocation Date: 13/01/2000
323m NE	Land off London Road, Hitchin	Sewage Discharges	Ippollitts Brook	POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 20/01/2000 Revocation Date: -

Table 2.2: Licenced Discharges to Controlled Waters within 500m Radius of the Site

The site was indicated to be located outside an area designated as being at risk from flooding from rivers or sea without defences.

The site has a negligible risk of surface water flooding caused by extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding, with the exception of the most extreme western boundary, which is indicated to be at risk from 1 in 30 year return period rainfall event and depth between 0.1m and 0.3m.

The site was indicated to be located within an area designated as a Nitrate Vulnerable Zone. These are defined as 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.

No licensed surface water abstractions were recorded within a 500m radius of the site.



2.5 Radon

Based on data supplied, the estimated probability of the property being above the Action Level for radon is: between 1% and 3%. The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain.

2.6 Environmental Data

Searches of other various environmental databases were made as part of the desk study, including air pollution control sites, Part IIA contaminated land, Integrated Pollution Control (IPC) and Integrated Pollution Prevention and Control (IPPC) sites, registered radioactive substances, COMAH sites, explosives sites, Notification of Installations Handling Hazardous Substances (NIHHS) sites, planning permissions for sites involving hazardous substances, fuel station registers, points of interest – commercial services and points of interest – manufacturing and production. No Contaminated Land Register entries or Integrated Pollution Controls were recorded within a 500m radius of the site.

A total of 19No. historical industrial land uses were noted within a 500m radius of site, Table 2.3 provides a summary of those within a 400m radius of site.

Location	Land Use	Date
On-Site	Unspecified Pit	1897-1946
On-Site	Unspecified Pit	1884
On-Site	Unspecified Groundworkings	1946
35m E	Sewage Works	1991
134m NE	Nurseries	1980-1991

Table 2.3: Historical Industrial Land Uses within a 400m Radius of Site.

A total of 5No. recent industrial land uses were recorded within a 250m radius of the site, these are presented in Table 2.4 below:-

Location	Company	Activity	Category
141m E	Pumping Station	Water Pumping Station	Industrial Feature
157m S	Electricity sub-station	Electrical Features	Infrastructure and Facilities
180 SE	Electricity Sub Station	Electrical Features	Infrastructure and Facilities
193m E	Telecommunications Mast	Telecommunications Features	Infrastructure and Facilities
236m N	Electricity Sub Station	Electrical Features	Infrastructure and Facilities

Table 2.4: Recent Industrial Lane Uses within a 250m Radius of Site.

A total of 21No. historical energy features were recorded within a 500m radius of site, Table 2.5 provides a summary of those within a 200m radius of site.

Location	Land Use	Date
152m S	Electricity Substation	1981
153m S	Electricity Substation	1995
177m SE	Electricity Substation	1981

Table 2.5: Historical Energy Features within a 100m Radius of Site.



No Historical garages, historical petrol stations or currently operational or recent petrol stations were recorded within a 500m radius of the site.

No historical tanks were noted within a radius of 250m of the site.

2.7 Soil Chemistry

Data obtained as part of the desk study provides details on the estimated soil chemistry for the natural soils in the vicinity of the site. The estimated soil quality on the subject site is presented Table 2.6.

Contaminant	Estimated Concentration (mg/kg)
Arsenic	15-25
Cadmium	1.8
Chromium	40-90
Lead	100
Nickel	30-45

Table 2.6: Estimated Soil Concentrations on site

The natural background concentrations were below respective published Soil Guideline Values, Generic Assessment Criteria and Category 4 Screening Levels for the protection of human health under a residential with plant uptake land use, i.e. the most conservative end use proposed.

However, these values are not necessarily representative of the site's soil chemistry. Furthermore, some SGVs and GACs are dependent on pH and soil organic matter content. Therefore, concentrations of specific determinants and the utilised SGV/GAC cannot be determined without site specific investigation and analysis.

2.8 Sensitive Land Uses

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

Whilst the site was indicated to be within the London Green Belt and an SSSI Impact Risk Zone, no other such environmental sensitivities were identified within 500m of the site.

2.9 Geotechnical Data

According to the Coal Authority, the site was located in an area that may not be affected by coal mining activities.

No non-coal mining records were recorded within a 500m radius of the site.

National databases for a number of different geological hazards have been compiled by the BGS, and a summary of the hazard data pertaining to the site itself is presented in Table 2.7 below.



Hazard	Designation
Non-coal mining	Negligible
Collapsible ground	Very low
Compressible ground	Negligible to very low
Ground dissolution	Negligible
Landslide	Very low
Running sand	Very low
Shrinking and Swelling clay	Negligible to very low

Table 2.7 Summary of BGS Geological Hazards

2.10 Landfill and Waste Management Facilities

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

No historic, recent or active landfills were recorded within a 500m radius of the Site.

A total of 2No. historical waste site was recorded within a 500m radius of the Site. These are summarised in Table 2.8 below.

Location	Address	Further Details	Date
332m NW	Maydencroft Manor, Gosmore, Hitchin.	Environmental Permitting Regulations (Waste)	Not recorded
476m NW	Maydencroft Manor, Gosmore, Hitchin.	Environmental Permitting Regulations (Waste)	Not recorded

Table 2.8 Historical Waste Sites within a 500m Radius of Site.

There were no waste exemption sites recorded within 500m radius of the site.

2.11 Historic Mapping

Historic maps dating back to 1879 were obtained as part of the desk study. A summary of the apparent key features observed on the map extracts both on the site and within the local area is presented within Table 2.9.

Date	On Site	Off Site
1879-1881	The site was shown to essentially comprise two approximately rectangular shaped fields. The field to the west was named Mill Farm and the field on the eastern side was named Pound Farm. The buildings associated with Mill Farm are indicated to be immediately beyond the northern boundary of the field beyond Mill Lane, whilst the buildings of Pound Farm are	The site was generally set in a rural environment, comprising farms and woodland. Mill Lane was indicated on the northern boundary, trending in a south-west to north-east direction. London Road was indicated on the eastern boundary, generally trending north to south.



Date	On Site	Off Site
	noted immediately beyond the eastern boundary off London Road. The fields were linked via a narrow portion of field on the southern boundary. A sandpit was indicated to be within the western field, close to its northern boundary with Mill Lane.	Ippollitts Brook was shown trending north-south, some 250m remote from the eastern boundary. Hopground Cottages were shown adjacent to the western boundary. The village of Gosmore was indicated to the west, whilst the village of Ippollitts was indicated to the south-east.
1887-1898	No significant changes indicated. Though the sand pit labelled “old sand pit” and was therefore assumed to be inactive from this date.	Sloe Hill, a large house, was indicated on the southern side of Mill Lane, immediately beyond the northern site boundary. Brickworks were shown to be present some 600m to the north of the site at Sunnyside. Tumulus was shown in the village of Gosmore some 400m remote from the site to the west.
1922-1924	A pump was indicated to be present within the eastern field. A small rectangular shed like building was indicated in the small linking field central to the site.	No significant changes indicated, though the brickworks to the north were indicated to be a sawmill. Hopground Cottages were indicated to be of a different configuration.
1946-1949	The northernmost portion of the eastern field was indicated to form woodland.	No significant changes, other than further residential development, particularly to the north and south.
1959	No significant changes, though the pump was no longer indicated.	No significant changes indicated.
1976	No Significant changes.	No significant changes.
1980	There appeared to be two rectangular shaped buildings located on the northern boundary of the eastern field in the area previously indicated to form woodland. The sandpit appeared to be infilled.	Further residential development was indicated, particularly to the north and south-west of the site. A sewage works was indicated some c.100m to the east of the site. A foundry and works were shown c.500m to the south-east. Broadmead Nurseries are indicated circa 400m to the north-east.
1981	The map showed single rectangular building intruding into the site from the west on the northern boundary, together with a “track”.	A pumping station, likely to be associated with the sewage works, was indicated c.100m to the east of the site. An electric sub-station was indicated c.150m to the south of the site on London Road.
1991	No significant changes indicated.	No significant changes
2001	No significant changes	The sewage works to the east was no longer indicated.
2010	No significant changes indicated.	No significant changes indicated
2025	No significant changes indicated.	No significant changes indicated.

Table 2.90 Summary of Historic Map extracts



Historic mapping has shown that the site mostly comprised part of a field network up to the present day.

The earliest available map records from c.1879 as detailed in the Groundsure report presented in Appendix A, showed the site to be operating as a farm with a sand pit located in the southwest of the site. The Hopground cottages are shown to border the site at the western extremity. A pump is shown on-site from 1922 to 1959 mapping. The site remained relatively unchanged until c.1980 where it appeared that the sand pit had been infilled and buildings (likely to be associated with the farm operations) were present on the north-eastern boundary. By c.2001 the sewage works was no longer identifiable to the east of the site.

2.12 Asbestos

Some historic buildings were noted on site. It is possible that asbestos containing materials (ACM) could be present on site, associated with damage or the refurbishment of asbestos containing buildings.

2.13 Previous Ground Investigations

Geo-Environmental was made aware of a letter report for a basic desk study and limited intrusive investigation undertaken by RSK at the site in January 2019 ref: 1920378-L01 (00). A copy of this report is presented within Appendix A.

The report concluded the following :-

The main feature of potential contamination on site identified from the findings of the desk study relate to the potential for made ground associated with the fill material used to infill the historical sand pit on site.

It was recommended that an intrusive investigation was conducted to further investigate the nature and magnitude of the fill material.

The ground conditions encountered during the site investigation carried out on 3 December 2018 were generally in line with the initial conceptual site model. The former sand pit, recorded on historic maps appears to have been located in the western corner of the site. Suspected infilled material was identified in 5 trial pits below the topsoil.

The proven depths of the former sand pit varied between 1.5 m bgl (TP6) and 3.9 m bgl (TP12). The fill material was generally described as orangish brown very sandy very gravelly clay and occasional partings of clayey very sandy gravel in places. Gravel was flints with a significant proportion of anthropogenic material including fragments of bricks, concrete, bituminous material, charcoal, ceramic, structured chalk, rare glass, slate and fragmented wood.

Variable cohesive and granular soils of the Glaciofluvial Deposits were encountered below the topsoil at a depth of between 0.3 m to 0.4 m bgl or below the made ground in the area of the suspected former sand pit at a depth of between 1.4 m and 3.9 m bgl.

Groundwater was not encountered to a depth of 4mbgl.



No asbestos containing material was visually identified and no visual or olfactory contamination of concern was noted within the fill. No asbestos has been found in made ground samples tested.

Generally, the results of the GQRA indicate that relevant pollutant linkages are not present.

The marginally elevated arsenic concentration in the sample obtained from the superficial deposits is considered to be naturally occurring within the underlying stratum. No exceedances of arsenic were indicated in made ground samples. Marginal exceedances in chromium indicated in made ground samples were considered not to be of concern.

The initial hazardous waste risk assessment indicates that none of the samples contain hazardous properties therefore waste might be classified as inert or non-hazardous (subject to WAC testing).

In terms of any future development, it is likely that any proposed buildings in the location of the former sand pit may need to give consideration to a piled foundation solution.

Should a redevelopment option be pursued, then further site investigation will be required across the rest of the site, and possibly to greater depths depending on the exact scheme proposed.

2.14 Potential Contamination

The site had been historically used for agricultural purposes. The site was located immediately adjacent to farm buildings and assumed farm buildings were also indicated to be present on parts of the site. The Groundsure dataset identified a sandpit on the western part of the site, which was infilled circa 1980. There is therefore, a potential for Made Ground or contamination to be present within the shallow soils or deeper infilled soils within these areas of the site.

Whilst the current status of the site would suggest that farming has not been undertaken for a number of years, the use of the land for agricultural practices indicated that there is a potential for pesticides and/or herbicide impacted soils within the near surface soils.

Agricultural practices are not covered by the National House Building Council (NHBC), Environment Agency (EA) and Chartered Institute of Environmental Health (CIEH) publication 'Guidance for the Safe Development of Housing on Land Affected by Contamination' (2008), which provides a summary of industrial profiles (1995-1996) published by the former Department of the Environment (DoE) (now part of the Department for Environment, Food and Rural Affairs (DEFRA).

In general, gross contamination is considered unlikely to be present over the vast majority of the site.

2.15 Ground Gas Summary

The desk study identified no present or historic landfill sites within a 500m radius of the Site.

The infilled sandpit may have been subject to backfilling with putrescible materials which have the potential to present a source of ground gases including methane and carbon dioxide.



2.16 Climate Change

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

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

2.17 Unexploded Ordnance

The Zetica risk mapping indicates the site is within a “low” risk area with respect to potential UXO.



3.0 PRELIMINARY ASSESSMENT

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

3.1 Geotechnical Risk Assessment

3.1.1 Potential Geotechnical Issues

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

Hazards identified as being potentially present on site could have implications for foundation design and construction. A summary of commonly occurring geotechnical hazards is given in the following table:

Geotechnical Hazard	Probability	Engineering Implications
Lateral changes in ground conditions	Likely	Variable ground conditions posed by the presence of Glaciofluvial Deposits across the site which may affect foundation design, construction and zoning.
Shrinkable soils	Low-Moderate	The Glaciofluvial Depots could vary from potentially shrinkable gravelly clays to non-shrinkable sandy gravels.
Significant depths of Made Ground	Likely	This would only be in relation to the infilled sandpit on the western part of the site, the extent of which is currently unknown.
Aggressive chemical ground conditions (sulphates)	Likely	The possible presence of aggressive chemical ground conditions may affect foundation design and construction.
Shallow Groundwater	Low-moderate	Shallow groundwater or perched water may be present within the Glaciofluvial Gravel.
Potential for shallow soakaways to be unviable	Low-Moderate	Soakage testing required to confirm infiltration rates.
Potential for dissolution features	Low	Soluble rock deposits were not identified on-site by the Desk Study.
Potential for slope stability issues	Low	No landslips recorded within 500m of the site.

Table 3.1: Possible Geotechnical Hazards

3.2 Preliminary Environmental Conceptual Site Model & Risk Assessment

3.2.1 Methodology

A Preliminary Risk Assessment ('PRA') and Conceptual Site Model ('CSM') have been prepared in accordance with CLR11 based on information obtained as part of the desk study. Possible risks associated with potential sources of contamination and sensitive receptors identified have been qualitatively assessed following a source-pathway-receptor ('Pollutant Linkage') approach in accordance with current UK protocols.



A risk of harm may only exist where a plausible pollutant linkage is present, and where the quantity or concentration of a contaminant is sufficient so as to pose harm. Under the statutory definition, "Contamination" may only strictly exist where contaminants pose a risk of harm to a receptor. The risk classification has been assessed in accordance with CIRIA C552 (Rudland et al., 2001). A summary of how the risks are derived and their definitions are presented in Tables 3.2 and 3.3.

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

Table 3.2: Risk Ratings Matrix

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



Low risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very low risk	There is low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.

Table 3.3: Risk Rating Definitions**3.2.2 Summary of Plausible Sources**

Possible sources of contamination identified from the desk study are summarised in Table 3.4.

Source	Description	Contaminants
Made Ground and shallow soils	The general quality of Made Ground and shallow soils could be impacted by the presence of contamination due to agricultural practises and backfill material utilised within the former sandpit.	Potential for pesticides and herbicides. Possible elevated concentrations of metals, metalloids, TPH and PAH compounds, and asbestos in Made Ground (where present).
Naturally Occurring aggressive ground conditions	Naturally occurring compounds in the ground which could damage buried concrete.	Possible elevated sulphate concentrations.
Ground Gases/Vapours	Possible presence of Made Ground beneath the section of the site associated with the infilled sandpit. This is only considered a viable source of ground gas if significant proportions of organic material are present.	Methane, carbon dioxide, depleted oxygen, trace gases.

Table 3.4: Possible Sources of Contamination**3.2.3 Summary of Plausible Pathways**

The plausible pathways are summarised in Table 3.5. These pathways are based on the proposed end use, including houses and gardens.

Pathway	Description
Direct Contact	Ingestion of soil particles, ingestion and bioaccumulation in vegetables/fruit and inhalation of soil derived dust (including tracked back dust), dermal contact.
Inhalation	Inhalation of soil dust and vapours both inside and outside of buildings.
Vertical & Lateral Migration	Contaminant movement both vertically through leaching/gravity and horizontally along preferential pathways, e.g. services trenches, or with groundwater.
Root Uptake	Uptake of soil and waterborne contaminants by plants.
Chemical Attack	Attack of buried plastics and concrete by aggressive ground conditions.

Table 3.5: Possible Contamination Pathways



3.2.4 Summary of Plausible Receptors

Potential receptors associated with the site and its development are summarised in Table 3.6.

Receptor	Description	Comments
Site Workers	Persons involved in construction and future maintenance of the proposed development.	Ground Workers could become exposed during site clearance, construction and maintenance.
End Users	Residents/occupants of the proposed development.	The proposed development is likely to include areas of private and managed communal soft landscaping.
Soft Landscaping and Ecological Receptors	Possible areas of planting including lawns, shrubs, trees, etc. Mature trees; and well-established old growth hedgerows/trees delineating fields.	Planting is anticipated in private and communal soft landscaping. Well established hedgerows and trees were identified in the site walkover and may also be plausible ecological receptors.
Built Environment	Buried concrete for foundations and plastics for potable water supply pipes may be laid in contact with contaminated soils.	Aggressive ground conditions and significant depths of Made Ground may be present beneath the site, albeit in localised limited areas.
Adjacent Land Users	Sensitive land uses identified within the immediate vicinity.	Adjacent land comprises residential use to the north and west.
Groundwater	Controlled Waters contained within the aquifer(s) beneath the site.	The majority of the site overlies a Secondary A Aquifer. The site is also situated within two SPZ's.
Surface Water	Controlled Waters within lakes, rivers, and ponds, etc., or coastal waters.	The nearest surface water feature was Ippollitts Brook, located some 156m to the north-east of the site.

Table 3.6: Possible Receptors of Contamination

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

Whilst the above sources and receptors have been identified, Table 3.7 overleaf summarises the identified plausible pollution linkages and a qualitative assessment of the risks based on the desk study research.



Potential Source/media	Potential Receptors	Potential Pathways	Likelihood	Severity	Risk and Justification
Limited Areas of Made Ground and Shallow Soils (including the infilled sandpit)	End users	Direct contact	Likely	Mild	Moderate to Low End users are likely to come into contact with soils via direct contact as the development will include private gardens and communal soft landscaping. Sampling and chemical testing required to assess the risk.
	Soft Landscaping and Ecological Receptors	Root Uptake	Likely	Minor	Low Private gardens and communal soft landscaping are proposed. However, no evidence of harm to existing plant life was identified during the site walkover. Sampling and chemical testing required to assess the risk.
	Adjacent land users	Direct contact	Unlikely	Minor	Very Low Adjacent site users are unlikely to come into contact with soils. Sampling and chemical testing required to assess the risk.
	Water supply pipes	Direct contact	Likely	Mild	Moderate to Low Water supply pipes could come into contact with impacted or aggressive soils depending upon depth of installation and extent of soil impact. Sampling and chemical testing required to assess the risk.
	Buildings and infra-structure	Direct contact	Likely	Mild	Moderate to Low Foundations and utilities will be placed within potentially aggressive soils. Sampling and chemical testing required to assess the risk.
	Groundwater	Vertical migration	Low	Minor	Low Shallow groundwater or perched water could be present within the Glaciofluvial Deposits. These strata are classified as Secondary A Aquifers. Significant potentially mobile contamination is not anticipated to be present on site. Sampling and chemical testing required to assess the risk.



Desk Study Report

Potential Source/media	Potential Receptors	Potential Pathways	Likelihood	Severity	Risk and Justification
	Surface Water	Lateral Migration	Low	Minor	Low Significant potentially mobile contamination is not anticipated. Sampling and chemical testing required to assess the risk.
Naturally Occurring Aggressive Ground Conditions	End users	Direct contact and inhalation / ingestion of soil derived dust	Unlikely	Minor	Very Low No naturally occurring potential sources which could harm human health have been identified.
	Adjacent land users	Direct contact	Unlikely	Minor	Very Low No naturally occurring potential sources which could harm human health have been identified.
	Water supply pipes	Direct contact	Unlikely	Minor	Very Low Services will be placed within soils which may be an aggressive environment which may require specific pipework. Sampling and chemical testing required to assess the risk.
	Buildings and Infrastructure	Direct contact	Unlikely	Minor	Very Low Foundations will be placed within soils which may be an aggressive environment for concrete. Sampling and chemical testing required to assess the risk.
Ground Gases and Vapours from any organic rich Made Ground or Off-Site Sources	End Users	Inhalation	Low	Medium	Low to medium Future occupiers may inhale potential ground gases produced by this source. Extensive or deep Made Ground with sufficient organic content for significant ground gas generation is not anticipated on the majority of the site but depending on the infill material of the historic sandpit, ground gas may be present. No significant off-site sources have been identified.
	Buildings and infrastructure	Gas accumulation of flammable gases	Low	Mild	Low Extensive putrescible material sufficient for significant methane production is not anticipated at the site.



Potential Source/media	Potential Receptors	Potential Pathways	Likelihood	Severity	Risk and Justification
	Adjacent land users	Inhalation	Low	Minor	Very Low The potential sources of ground gases beneath the site are unlikely to be in volumes that could give rise to off -site migration. Adjacent land users may be at risk from off-site ground gases. However, this was beyond the remit of this investigation.

Table 3.7: Plausible Pollutant Linkages & Qualitative Risk Assessment



3.3 Preliminary Contamination Risk Assessment Summary

The PRA and CSM developed from the information gathered as part of the desk study process have identified plausible potential pollutant linkages that exist in relation to the proposed redevelopment of the site.

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

It is considered that the overall risk from potential contamination on the site is 'low' albeit with specific potential pollutant linkages being assigned a moderate to low rating and that further assessment would be necessary to satisfy planning conditions or to provide clarification of the risk assessment.

In order to progress this assessment in line with the National Planning Policy Framework, to provide further characterisation of the site and refinement of the PRA and CSM, it is recommended that intrusive investigation and associated testing is undertaken to confirm the findings of the desk study report and to provide a robust risk assessment for the site and proposed redevelopment. As such it is recommended that geochemical and geotechnical investigation be carried out on the site to include analysis of soil and groundwater (if encountered) samples for the range of potential contaminants identified within the Desk Study, together with ground gas monitoring and an assessment of the site's ground gas climate.

3.4 Preliminary Geotechnical Assessment Summary

The proposed development area of the site was shown to be underlain by superficial deposits of the Glaciofluvial Deposits. Made Ground is not expected in any significant quantity, but isolated areas may be present on the site, with note to the area of the historic infilled sandpit on the western portion of the site. The potential variability of the underlying natural strata may include shrinkable soils and desiccation due to mature trees/hedgerows, so a piled foundation solution may be more appropriate for some areas of the site.

It is possible that conventional strip or pad foundations could be suitable for the proposed development over the majority of the site, assuming foundations terminate within the Glaciofluvial Deposits. Whilst the sandier deposits might be non-shrinkable, soils containing a higher proportion of cohesive materials may be subject to a higher volume change potential in accordance with NHBC guidance. The foundation design would also need to account for the presence of numerous trees on-site and on the site boundaries, these could require the localised deepening of foundations.

If the Client has developed any other sites in close proximity to this site it may be prudent to review the foundation solution for that site as an indicator of the possible solution for this site. An intrusive investigation will be required in due course in order to inform the design process.

It is possible that soakaways will function effectively on this site, although this would be subject to testing to inform design. It may also be necessary (subject to testing) to utilise on-site storage and attenuation of peak storm flow, through systems such as porous paving and cellular storage crates.



4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The desk study has shown the site comprised overgrown and partly wooded fields bounded by trees and hedgerows up to the present day. A feature, comprising an infilled sandpit, is located within the development area on the western end of the site.

The surrounding land use predominately comprised open countryside, agricultural fields and stands of woodland. A sewage works was located some 150m to the east of the site.

The proposed end use of the site is understood to comprise a residential development, areas of soft landscaping, access roads and associated infrastructure. As such, sensitive uses such as in private gardens with gardening activities (including dust being tracked back into buildings) and growing vegetables are considered likely to form part of the end use scenario for this site.

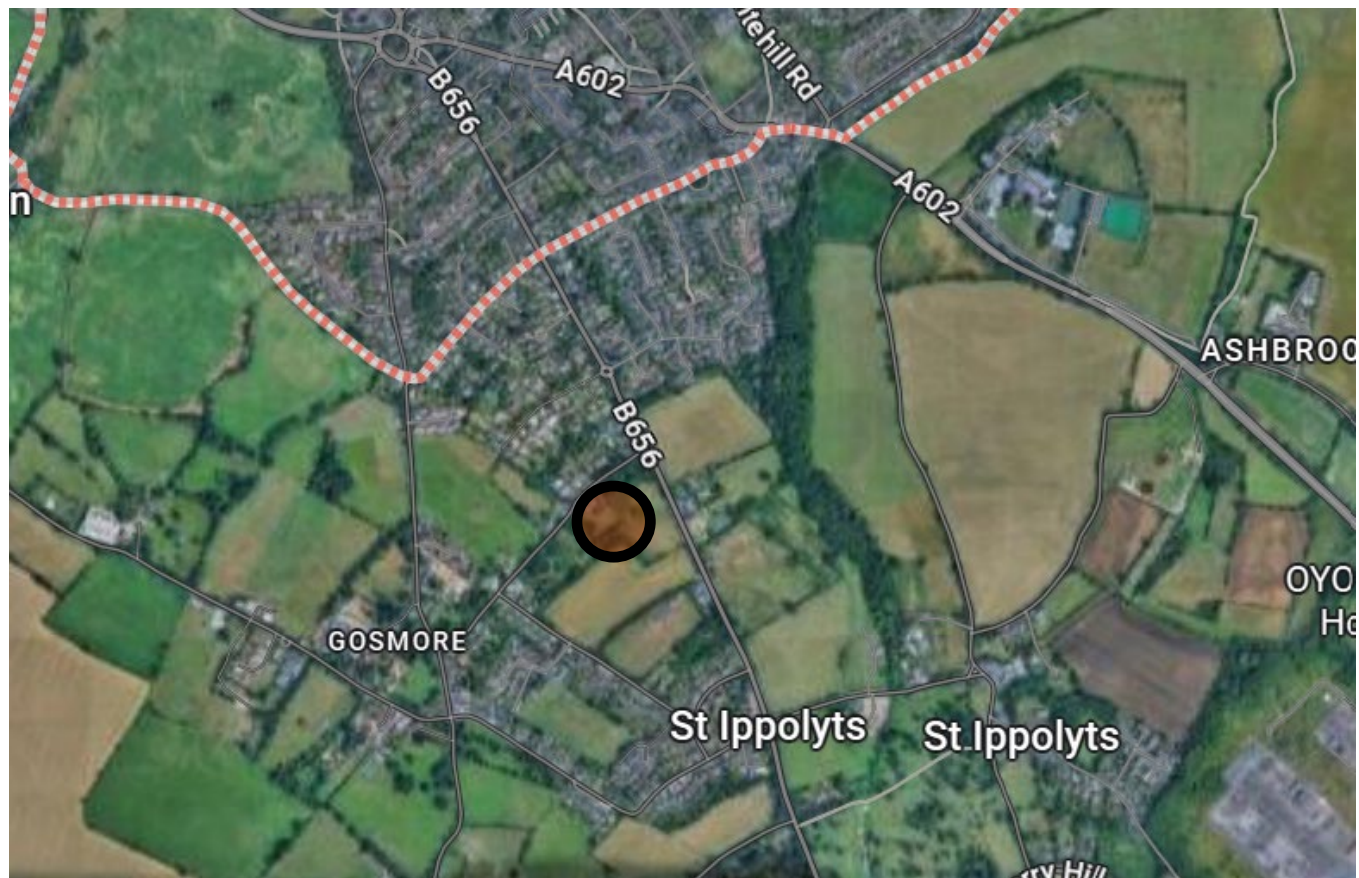
It is concluded that the overall risk of harm to end users is generally low (as defined in Section 3) but that further assessment is likely to be required in order to better characterise potential contamination on-site as result of current and historical land uses and the associated risk to human health and the environment.

It is possible that conventional foundations would be suitable for the proposed development, although any design should account for the potential presence of shrinkable soils and trees in proximity to proposed foundations.

4.2 Recommendations

At this stage and based on the findings of the desk study and preliminary risk assessment, the following scope of works is recommended for the intrusive investigation on the site.

- Intrusive investigation works should be carried out in order to clarify the geotechnical and geo-environmental issues pertaining to redevelopment of the site. This should target the infilled sandpit and define its depth and extent.
- Soakage testing to determine the infiltration rates of representative strata.
- Soil and groundwater (if encountered) sampling and analysis should be undertaken to inform subsequent geotechnical and geo-environmental risk assessment.
- Ground gas monitoring and assessment should be undertaken to characterise the site's ground gas regime.
- Laboratory analysis, on soil samples recovered from the exploratory holes for a range of geotechnical parameters to support foundation design and the like.
- Laboratory analysis, on shallow and deeper soil samples and groundwater samples recovered from the exploratory holes (if encountered), for an analytical suite to include the potential contaminants identified within the desk study and encountered during any intrusive investigation. The suite should include pesticide scans, commonly occurring metals, non-metals, asbestos, TPH, and PAH.
- Waste Acceptance Criteria testing may be required if surplus spoil is to be disposed of from the development.

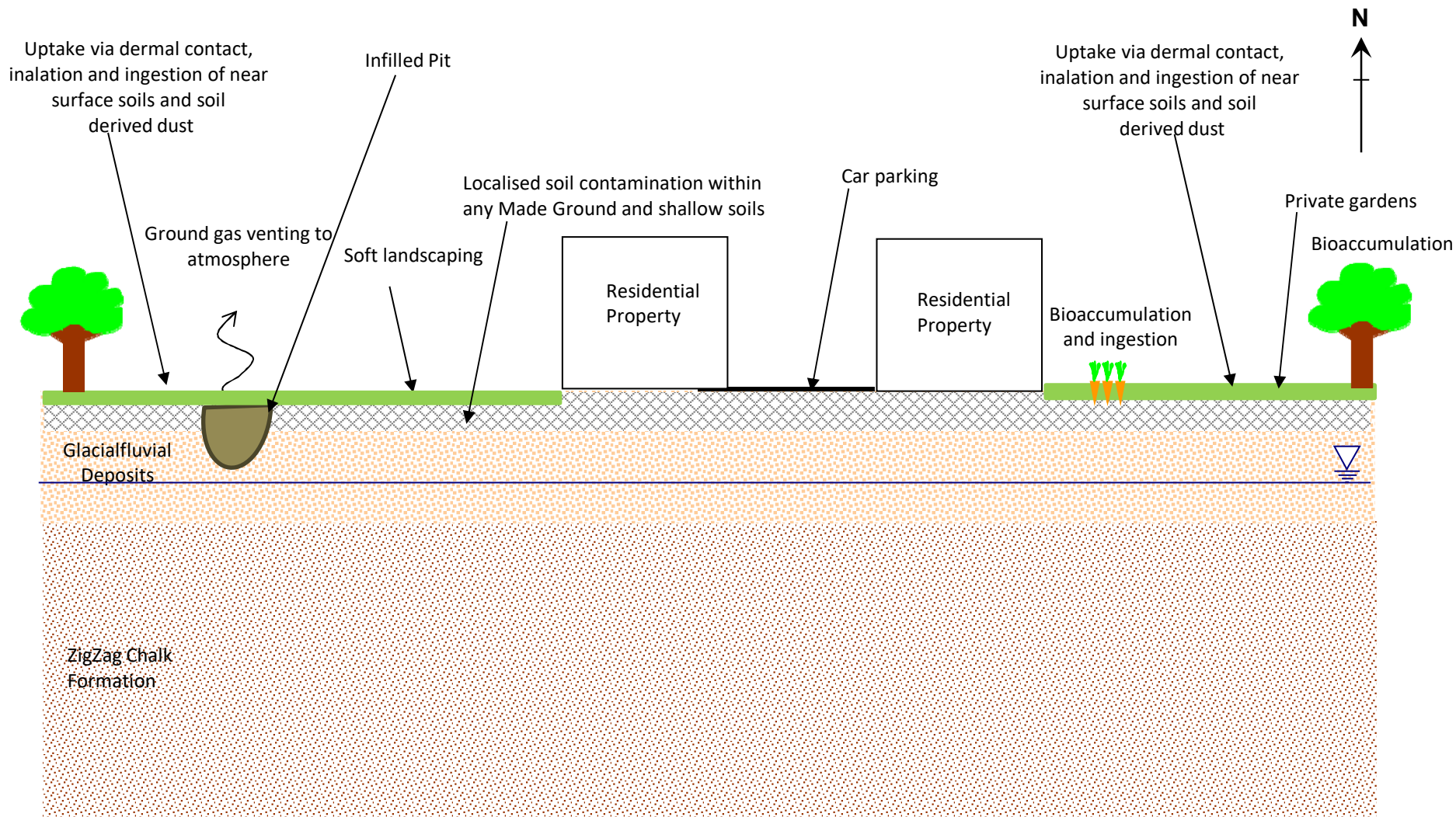


Project:	Land South of Mill Lane, Hitchin			Title	Site Location		
Client:	Martin Grant Homes			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net		 Geo-Environmental	
Ref No:	GE23305	Revision:	V1				
Drawn:	GE	Date:	15/09/2025				
Figure:	1	Scale:	NTS				

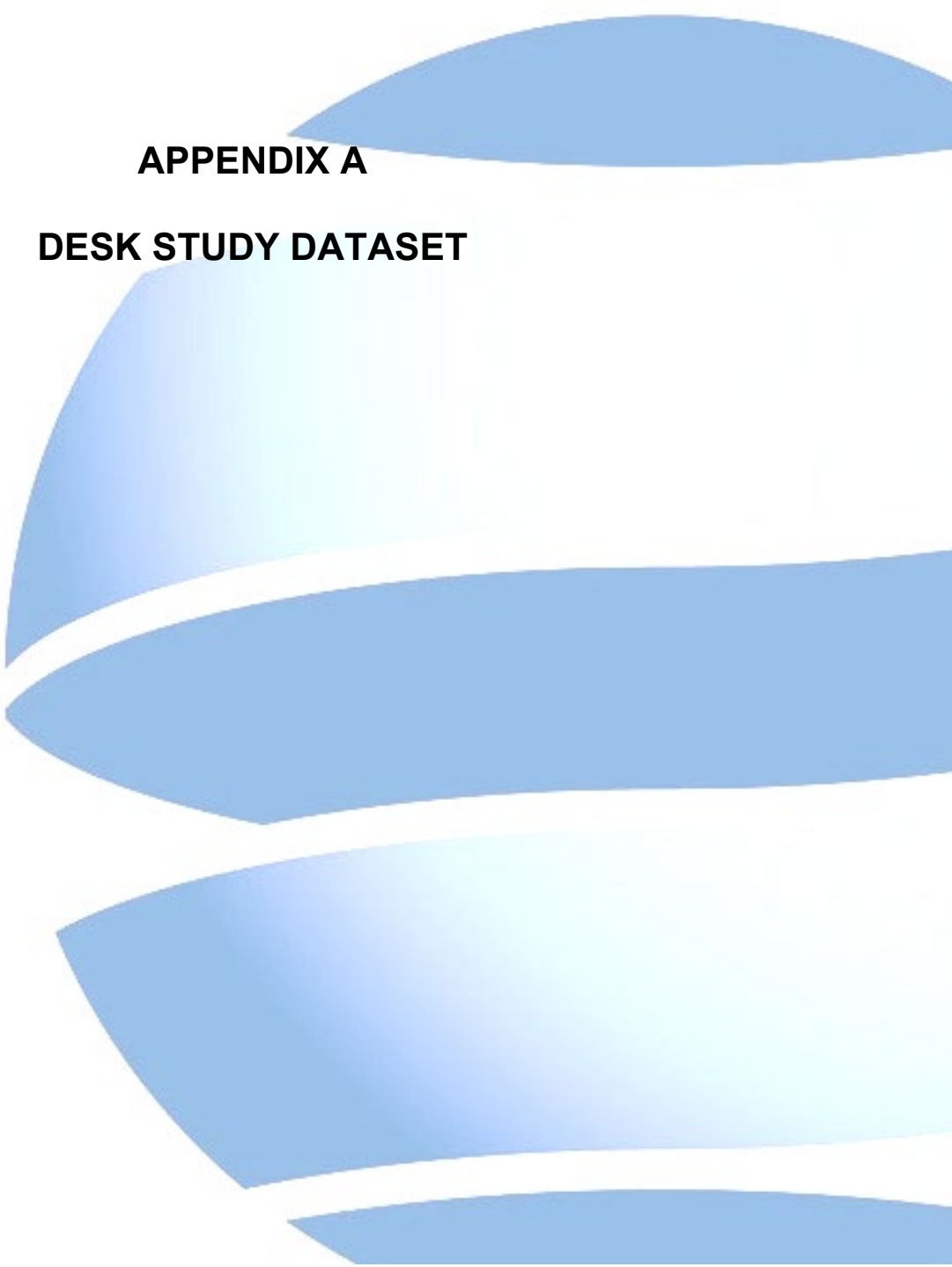




Project:	Land South of Mill Lane, Hitchin			Title	Preliminary Proposed Development Plan		
Client:	MGH			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net  Geo-Environmental			
Ref No:	GE23305	Revision:	1.0				
Drawn:		Date:	15/09/2025				
Figure:	2	Scale:	Not To Scale				



Project:	Mill Lane, Hitchen			Title	Conceptual Site Model (Future Land Use)	
Client:	Martin Grant Homes			Geo-Environmental Services Ltd Unit 7 Danworth Farm, Cuckfield Road Hurstpierpoint, West Sussex BN6 9GL +44(0)1273 832972 www.gesl.net		 Geo-Environmental
Ref No:	GE23305	Revision:	1.0			
Drawn:	AP	Date:	15/09/2025			
Figure:	3	Scale:	Not To Scale			

The background features a series of overlapping, wavy, blue shapes that create a sense of depth and movement. These shapes are positioned on the right side of the page, with some extending towards the center. The colors range from a light, airy blue to a more saturated, medium blue.

APPENDIX A

DESK STUDY DATASET



LAND AT MILL LANE AND LONDON ROAD, ST IPPOLYTS, HITCHIN, HERTFORDSHIRE, SG4 7NN

Order Details

Date: 05/09/2025
Your ref: GE23305/PO9083
Our Ref: GS-2QL-HFF-HO3-VGV

Site Details

Location: 519075 227413
Area: 3.33 ha
Authority: [North Hertfordshire District Council](#) ↗



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[Summary of findings](#)

[p. 2 >](#) [Aerial image](#)

[p. 9 >](#)

[OS MasterMap site plan](#)

[p.14 >](#) [Insight User Guide](#) ↗

Contact us with any questions at:

info@groundsure.com ↗

01273 257 755

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 >	4	1	1	13	-
16 >	1.2 >	Historical tanks >	0	0	0	2	-
17 >	1.3 >	Historical energy features >	0	0	4	2	-
17	1.4	Historical petrol stations	0	0	0	0	-
18	1.5	Historical garages	0	0	0	0	-
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 >	7	1	2	17	-
21 >	2.2 >	Historical tanks >	0	0	0	2	-
21 >	2.3 >	Historical energy features >	0	0	17	4	-
22	2.4	Historical petrol stations	0	0	0	0	-
22	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
23	3.1	Active or recent landfill	0	0	0	0	-
23	3.2	Historical landfill (BGS records)	0	0	0	0	-
24	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
24 >	3.4 >	Historical landfill (EA/NRW records) >	0	0	0	2	-
24	3.5	Historical waste sites	0	0	0	0	-
25	3.6	Licensed waste sites	0	0	0	0	-
25	3.7	Waste exemptions	0	0	0	0	-
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	5	-	-
27	4.2	National Geographic Database (NGD) - Current or recent tanks	0	0	0	-	-
27	4.3	Current or recent petrol stations	0	0	0	0	-
27	4.4	Electricity cables	0	0	0	0	-
27	4.5	Gas pipelines	0	0	0	0	-



28	4.6	Sites determined as Contaminated Land	0	0	0	0	-
28	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
28	4.8	Regulated explosive sites	0	0	0	0	-
28	4.9	Hazardous substance storage/usage	0	0	0	0	-
28	4.10	Historical licensed industrial activities (IPC)	0	0	0	0	-
29	4.11	Licensed industrial activities (Part A(1))	0	0	0	0	-
29 >	4.12 >	<u>Licensed pollutant release (Part A(2)/B) ></u>	0	0	0	1	-
29	4.13	Radioactive Substance Authorisations	0	0	0	0	-
29 >	4.14 >	<u>Licensed Discharges to controlled waters ></u>	0	0	3	5	-
31	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
31	4.16	Pollutant release to public sewer	0	0	0	0	-
31	4.17	List 1 Dangerous Substances	0	0	0	0	-
31	4.18	List 2 Dangerous Substances	0	0	0	0	-
32 >	4.19 >	<u>Pollution Incidents (EA/NRW) ></u>	0	0	2	5	-
33	4.20	Pollution inventory substances	0	0	0	0	-
33	4.21	Pollution inventory waste transfers	0	0	0	0	-
33	4.22	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<u>Hydrogeology ></u>	On site	0-50m	50-250m	250-500m	500-2000m
34 >	5.1 >	<u>Superficial aquifer ></u>	Identified (within 500m)				
36 >	5.2 >	<u>Bedrock aquifer ></u>	Identified (within 500m)				
37 >	5.3 >	<u>Groundwater vulnerability ></u>	Identified (within 50m)				
39 >	5.4 >	<u>Groundwater vulnerability- soluble rock risk ></u>	Identified (within 0m)				
39	5.5	Groundwater vulnerability- local information	None (within 0m)				
40 >	5.6 >	<u>Groundwater abstractions ></u>	0	0	0	0	14
44 >	5.7 >	<u>Surface water abstractions ></u>	0	0	0	0	2
45 >	5.8 >	<u>Potable abstractions ></u>	0	0	0	0	4
46 >	5.9 >	<u>Source Protection Zones ></u>	2	0	0	0	-
46	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<u>Hydrology ></u>	On site	0-50m	50-250m	250-500m	500-2000m

47 >	6.1 >	Water Network (OS MasterMap) >	0	0	4	-	-
48 >	6.2 >	Surface water features >	0	0	5	-	-
48 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
49 >	6.4 >	WFD Surface water bodies >	0	0	0	-	-
49 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
50	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
50	7.2	Historical Flood Events	0	0	0	-	-
50	7.3	Flood Defences	0	0	0	-	-
51	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
51	7.5	Flood Storage Areas	0	0	0	-	-
52	7.6	Flood Zone 2	None (within 50m)				
52	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding >					
53 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
55 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
56 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	0	0	0	2
57	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
57	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
57	10.4	Special Protection Areas (SPA)	0	0	0	0	0
57	10.5	National Nature Reserves (NNR)	0	0	0	0	0
58	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
58 >	10.7 >	Designated Ancient Woodland >	0	0	0	0	4
58	10.8	Biosphere Reserves	0	0	0	0	0
59	10.9	Forest Parks	0	0	0	0	0
59	10.10	Marine Conservation Zones	0	0	0	0	0
59 >	10.11 >	Green Belt >	1	0	0	0	0



59	10.12	Proposed Ramsar sites	0	0	0	0	0
60	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
60	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
60	10.15	Nitrate Sensitive Areas	0	0	0	0	0
60 >	10.16 >	Nitrate Vulnerable Zones >	2	0	0	0	2
62 >	10.17 >	SSSI Impact Risk Zones >	2	-	-	-	-
63 >	10.18 >	SSSI Units >	0	0	0	0	2
Page	Section	Visual and cultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
64	11.1	World Heritage Sites	0	0	0	-	-
65	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
65	11.3	National Parks	0	0	0	-	-
65 >	11.4 >	Listed Buildings >	0	2	4	-	-
66 >	11.5 >	Conservation Areas >	0	0	1	-	-
66	11.6	Scheduled Ancient Monuments	0	0	0	-	-
66	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations >	On site	0-50m	50-250m	250-500m	500-2000m
67 >	12.1 >	Agricultural Land Classification >	Urban (within 250m)				
68	12.2	Open Access Land	0	0	0	-	-
68	12.3	Tree Felling Licences	0	0	0	-	-
68	12.4	Environmental Stewardship Schemes	0	0	0	-	-
68 >	12.5 >	Countryside Stewardship Schemes >	0	1	0	-	-
Page	Section	Habitat designations >	On site	0-50m	50-250m	250-500m	500-2000m
69 >	13.1 >	Priority Habitat Inventory >	0	0	5	-	-
70	13.2	Habitat Networks	0	0	0	-	-
70	13.3	Open Mosaic Habitat	0	0	0	-	-
70	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
71 >	14.1 >	10k Availability >	Identified (within 500m)				
72 >	14.2 >	Artificial and made ground (10k) >	2	2	2	8	-

74 >	14.3 >	Superficial geology (10k) >	3	4	2	9	-
75	14.4	Landslip (10k)	0	0	0	0	-
76 >	14.5 >	Bedrock geology (10k) >	3	0	0	1	-
77 >	14.6 >	Bedrock faults and other linear features (10k) >	0	0	0	4	-
Page	Section	Geology 1:50,000 scale >	On site	0-50m	50-250m	250-500m	500-2000m
78 >	15.1 >	50k Availability >	Identified (within 500m)				
79 >	15.2 >	Artificial and made ground (50k) >	1	0	0	4	-
80 >	15.3 >	Artificial ground permeability (50k) >	1	0	-	-	-
81 >	15.4 >	Superficial geology (50k) >	2	0	4	5	-
82 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
82	15.6	Landslip (50k)	0	0	0	0	-
83	15.7	Landslip permeability (50k)	None (within 50m)				
84 >	15.8 >	Bedrock geology (50k) >	3	0	0	2	-
85 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
85 >	15.10 >	Bedrock faults and other linear features (50k) >	0	0	0	1	-
Page	Section	Boreholes >	On site	0-50m	50-250m	250-500m	500-2000m
86 >	16.1 >	BGS Boreholes >	0	1	24	-	-
Page	Section	Natural ground subsidence >					
88 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
89 >	17.2 >	Running sands >	Very low (within 50m)				
90 >	17.3 >	Compressible deposits >	Very low (within 50m)				
92 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
93 >	17.5 >	Landslides >	Very low (within 50m)				
94 >	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
96 >	18.1 >	BritPits >	1	0	0	1	-
97 >	18.2 >	Surface ground workings >	7	2	0	-	-
98	18.3	Underground workings	0	0	0	0	0
98	18.4	Underground mining extents	0	0	0	0	-



98 >	18.5 >	Historical Mineral Planning Areas >	0	0	0	4	-
99 >	18.6 >	Non-coal mining >	1	0	0	0	2
99	18.7	JPB mining areas	None (within 0m)				
99	18.8	The Coal Authority non-coal mining	0	0	0	0	-
100 >	18.9 >	Researched mining >	0	0	0	2	-
100	18.10	Mining record office plans	0	0	0	0	-
100	18.11	BGS mine plans	0	0	0	0	-
101	18.12	Coal mining	None (within 0m)				
101	18.13	Brine areas	None (within 0m)				
101	18.14	Gypsum areas	None (within 0m)				
101	18.15	Tin mining	None (within 0m)				
101	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes >	On site	0-50m	50-250m	250-500m	500-2000m
102	19.1	Natural cavities	0	0	0	0	-
103 >	19.2 >	Mining cavities >	0	0	0	0	3
103	19.3	Reported recent incidents	0	0	0	0	-
103	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
104 >	20.1 >	Radon >	Between 1% and 3% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
106 >	21.1 >	BGS Estimated Background Soil Chemistry >	7	3	-	-	-
107	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
107	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
108	22.1	Underground railways (London)	0	0	0	-	-
108	22.2	Underground railways (Non-London)	0	0	0	-	-
108	22.3	Railway tunnels	0	0	0	-	-
108	22.4	Historical railway and tunnel features	0	0	0	-	-
108	22.5	Royal Mail tunnels	0	0	0	-	-

109	22.6	Historical railways	0	0	0	-	-
109	22.7	Railways	0	0	0	-	-
109	22.8	Crossrail 2	0	0	0	0	-
109	22.9	HS2	0	0	0	0	-

Recent aerial photograph



Capture Date: 15/06/2022

Site Area: 3.33ha



Recent site history - 2019 aerial photograph



Capture Date: 14/09/2019

Site Area: 3.33ha



Recent site history - 2010 aerial photograph



Capture Date: 27/04/2010

Site Area: 3.33ha



Recent site history - 2006 aerial photograph



Capture Date: 12/07/2006

Site Area: 3.33ha



Recent site history - 1999 aerial photograph



Capture Date: 27/05/1999

Site Area: 3.33ha



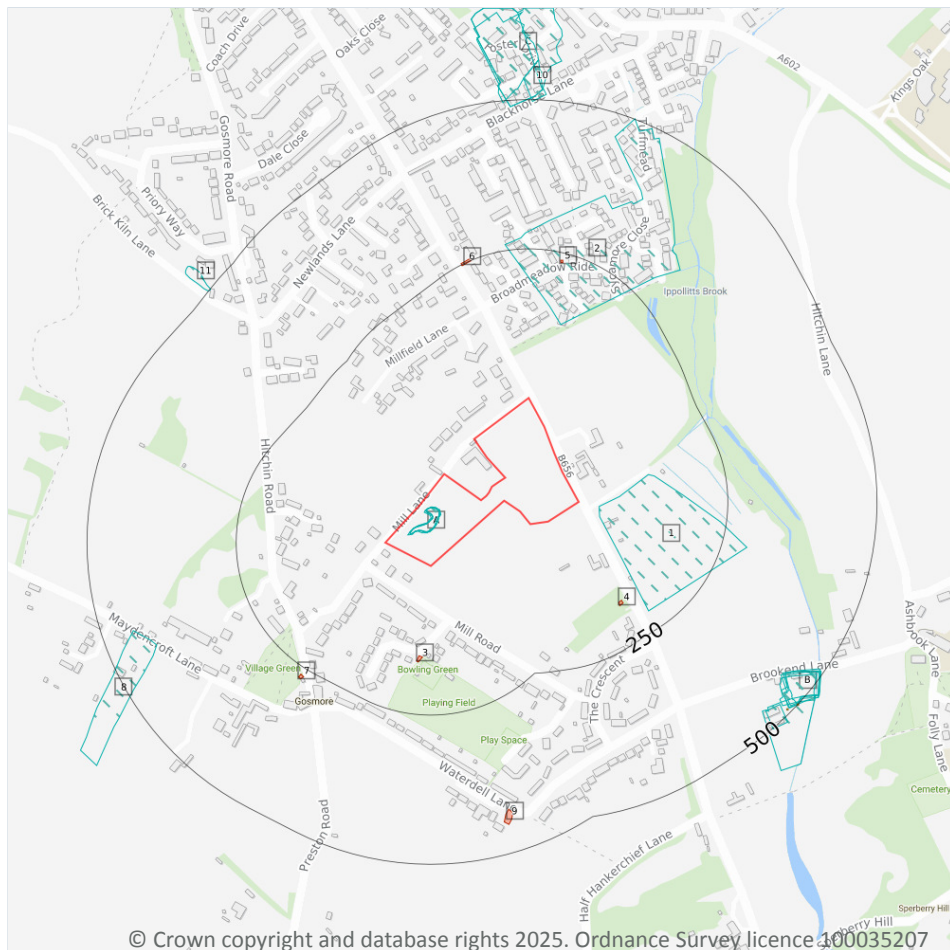
OS MasterMap site plan



Site Area: 3.33ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

1.1 Historical industrial land uses

Records within 500m

19

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
A	On site	Unspecified Pit	1897 - 1946	2097534



ID	Location	Land use	Dates present	Group ID
A	On site	Unspecified Pit	1884	2114260
A	On site	Unspecified Ground Workings	1946	2122932
A	On site	Unspecified Pit	1959	2148393
1	35m E	Sewage Works	1991	2073735
2	134m NE	Nurseries	1980 - 1991	2144128
8	420m SW	Nursery	1980 - 1991	2146966
B	446m SE	Unspecified Works	1959	2153206
B	446m SE	Iron Foundry	1922 - 1946	2148065
B	450m SE	Iron Foundry	1946	2135977
B	450m SE	Unspecified Works	1980 - 1991	2140111
B	450m SE	Iron Foundry	1884	2130577
B	467m SE	Iron Foundry	1897	2104137
B	470m SE	Unspecified Foundry	1980 - 1991	2156285
C	489m N	Brick Works	1897	2084535
C	489m N	Unspecified Pit	1897	2156356
C	497m N	Unspecified Pits	1884	2090101
10	497m N	Unspecified Pit	1884	2096109
11	499m NW	Unspecified Ground Workings	1946	2090916

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

2

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

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



ID	Location	Land use	Dates present	Group ID
B	492m SE	Unspecified Tank	1981	365173
B	499m SE	Unspecified Tank	1981	365172

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m

6

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

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

ID	Location	Land use	Dates present	Group ID
3	152m S	Electricity Substation	1981 - 1995	265071
4	177m SE	Electricity Substation	1981	249573
5	233m N	Electricity Substation	1993 - 1997	259584
6	248m NW	Electricity Substation	1982 - 1997	257048
7	262m SW	Electricity Substation	1981 - 1995	261116
9	428m S	Electricity Substation	1981 - 1992	258138

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.



1.5 Historical garages

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

0

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

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

2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

2.1 Historical industrial land uses

Records within 500m

27

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
A	On site	Unspecified Pit	1946	2097534
A	On site	Unspecified Pit	1922	2097534
A	On site	Unspecified Pit	1897	2097534



ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Ground Workings	1946	2122932
A	On site	Unspecified Pit	1884	2114260
A	On site	Unspecified Pit	1959	2148393
A	On site	Unspecified Ground Workings	1946	2122932
1	35m E	Sewage Works	1991	2073735
B	134m NE	Nurseries	1991	2144128
B	134m NE	Nurseries	1980	2144128
G	420m SW	Nursery	1991	2146966
G	420m SW	Nursery	1980	2146966
I	446m SE	Unspecified Works	1959	2153206
I	446m SE	Iron Foundry	1946	2148065
I	446m SE	Iron Foundry	1922	2148065
I	450m SE	Iron Foundry	1946	2135977
I	450m SE	Unspecified Works	1991	2140111
I	450m SE	Unspecified Works	1980	2140111
I	450m SE	Iron Foundry	1884	2130577
I	467m SE	Iron Foundry	1897	2104137
I	470m SE	Unspecified Foundry	1991	2156285
I	470m SE	Unspecified Foundry	1980	2156285
J	489m N	Unspecified Pit	1897	2156356
J	489m N	Brick Works	1897	2084535
J	497m N	Unspecified Pits	1884	2090101
3	497m N	Unspecified Pit	1884	2096109
4	499m NW	Unspecified Ground Workings	1946	2090916

This data is sourced from Ordnance Survey / Groundsure.



2.2 Historical tanks

Records within 500m

2

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

Features are displayed on the Past land use - un-grouped map on [page 19 >](#)

ID	Location	Land Use	Date	Group ID
I	492m SE	Unspecified Tank	1981	365173
I	499m SE	Unspecified Tank	1981	365172

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

21

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
C	152m S	Electricity Substation	1981	265071
C	153m S	Electricity Substation	1995	265071
2	177m SE	Electricity Substation	1981	249573
D	233m N	Electricity Substation	1993	259584
D	233m N	Electricity Substation	1995	259584
D	233m N	Electricity Substation	1993	259584
D	233m N	Electricity Substation	1995	259584
D	233m N	Electricity Substation	1997	259584
D	233m N	Electricity Substation	1993	259584
E	248m NW	Electricity Substation	1995	257048
E	248m NW	Electricity Substation	1993	257048
E	248m NW	Electricity Substation	1995	257048



ID	Location	Land Use	Date	Group ID
E	248m NW	Electricity Substation	1997	257048
E	248m NW	Electricity Substation	1993	257048
E	248m NW	Electricity Substation	1993	257048
E	249m NW	Electricity Substation	1982	257048
E	249m NW	Electricity Substation	1992	257048
F	262m SW	Electricity Substation	1981	261116
F	262m SW	Electricity Substation	1995	261116
H	428m S	Electricity Substation	1992	258138
H	430m S	Electricity Substation	1981	258138

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

0

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

This data is sourced from Ordnance Survey / Groundsure.



3.3 Historical landfill (LA/mapping records)

Records within 500m

0

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

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

3.4 Historical landfill (EA/NRW records)

Records within 500m

2

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

Features are displayed on the Waste and landfill map on [page 23 >](#)

ID	Location	Details		
1	332m NW	Site Address: Maydencroft Manor, Gosmore, Hitchin Licence Holder Address: -	Waste Licence: - Site Reference: 179/PRE-76, HCC/179, 1900/5106 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded: - Last Recorded: -
2	476m NW	Site Address: Maydencroft Manor, Gosmore, Hitchin Licence Holder Address: -	Waste Licence: - Site Reference: HCC/179, 179/PRE-76, 1900/5104 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: - First Recorded: - Last Recorded: -

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

3.5 Historical waste sites

Records within 500m

0

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

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

3.6 Licensed waste sites

Records within 500m

0

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

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

3.7 Waste exemptions

Records within 500m

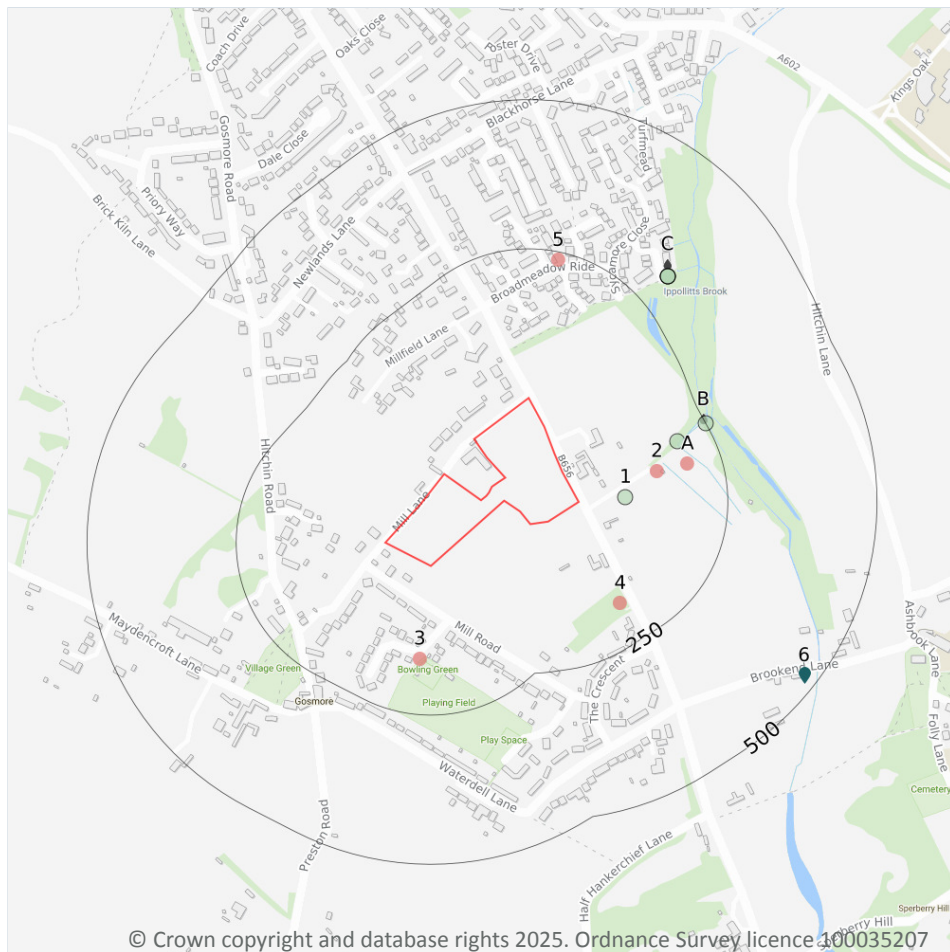
0

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.

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



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

5

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 26](#) >

ID	Location	Company	Address	Activity	Category
2	141m E	Pumping Station	Hertfordshire, SG4	Water Pumping Stations	Industrial Features
3	157m S	Electricity Sub Station	Hertfordshire, SG4	Electrical Features	Infrastructure and Facilities
4	180m SE	Electricity Sub Station	Hertfordshire, SG4	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
A	193m E	Mast (Telecommu nication)	Hertfordshire, SG4	Telecommunications Features	Infrastructure and Facilities
5	236m N	Electricity Sub Station	Hertfordshire, SG4	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

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

Records within 250m **0**

Current or recent tanks identified from the Ordnance Survey NGD.

This data is sourced from Ordnance Survey.

4.3 Current or recent petrol stations

Records within 500m **0**

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m **0**

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m **0**

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 Sites determined as Contaminated Land

Records within 500m

0

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

This data is sourced from Local Authority records.

4.7 Control of Major Accident Hazards (COMAH)

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.8 Regulated explosive sites

Records within 500m

0

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

This data is sourced from the Health and Safety Executive.

4.9 Hazardous substance storage/usage

Records within 500m

0

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

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m

0

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

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

4.11 Licensed industrial activities (Part A(1))

Records within 500m**0**

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

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

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

Records within 500m**1**

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

Features are displayed on the Current industrial land use map on [page 26 >](#)

ID	Location	Address	Details	
6	477m SE	Henry Isaacs, The Foundry, St Ippolitts, Hichin, SG4 7NX	Process: Non-ferrous Metal Foundry Processes Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcements Notified Comment: No Enforcements Notified

This data is sourced from Local Authority records.

4.13 Radioactive Substance Authorisations

Records within 500m**0**

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

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

4.14 Licensed Discharges to controlled waters

Records within 500m**8**

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

Features are displayed on the Current industrial land use map on [page 26 >](#)



ID	Location	Address	Details	
B	249m NE	POUND FARM PUMPING STATION, ST IPPOLLITTS, HERTFORDSHIRE, ENGLAND	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: AWCNF353611497 Permit Version: 1 Receiving Water: IPPOLLITTS BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 01/12/1999 Effective Date: 26/11/1999 Revocation Date: 01/12/1999
B	249m NE	POUND FARM PUMPING STATION, ST IPPOLLITTS, HERTFORDSHIRE, ENGLAND	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: AW1NF631 Permit Version: 1 Receiving Water: -	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 11/02/1966 Effective Date: 11/02/1966 Revocation Date: -
B	249m NE	POUND FARM PUMPING STATION, ST IPPOLLITTS, HERTFORDSHIRE, ENGLAND	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: AWCNF11497 Permit Version: 1 Receiving Water: IPPOLLITTS BROOK	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 13/10/2000 Effective Date: 26/11/1999 Revocation Date: -
C	323m NE	LAND OFF LONDON ROAD PS, HITCHIN, HERTFORDSHIRE, SG4 7SW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - NOT WATER COMPANY Permit Number: PRCNF02265 Permit Version: 3 Receiving Water: Ippollitt's Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 14/01/2000 Revocation Date: 19/01/2000
C	323m NE	LAND OFF LONDON ROAD PS, HITCHIN, HERTFORDSHIRE, SG4 7SW	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: PRCNF02264 Permit Version: 1 Receiving Water: land	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 26/04/1990 Revocation Date: 10/02/1992
C	323m NE	LAND OFF LONDON ROAD PS, HITCHIN, HERTFORDSHIRE, SG4 7SW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - NOT WATER COMPANY Permit Number: PRCNF02265 Permit Version: 1 Receiving Water: Ippollitt's Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 26/04/1990 Revocation Date: 24/09/1999
C	323m NE	LAND OFF LONDON ROAD PS, HITCHIN, HERTFORDSHIRE, SG4 7SW	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - NOT WATER COMPANY Permit Number: PRCNF02265 Permit Version: 2 Receiving Water: Ippollitt's Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 25/09/1999 Revocation Date: 13/01/2000



ID	Location	Address	Details	
C	323m NE	LAND OFF LONDON ROAD PS, HITCHIN, HERTFORDSHIRE, SG4 7SW	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: PRCNF02265 Permit Version: 5 Receiving Water: Ippollitt's Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/04/1990 Effective Date: 20/01/2000 Revocation Date: -

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

4.15 Pollutant release to surface waters (Red List)

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

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

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

4.16 Pollutant release to public sewer

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

Discharges of Special Category Effluents to the public sewer.

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

4.17 List 1 Dangerous Substances

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

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

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

4.18 List 2 Dangerous Substances

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

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

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



4.19 Pollution Incidents (EA/NRW)

Records within 500m

7

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

Features are displayed on the Current industrial land use map on [page 26](#) >

ID	Location	Details	
1	79m E	Incident Date: 09/07/2002 Incident Identification: 90170 Pollutant: Sewage Materials Pollutant Description: Storm Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
A	194m NE	Incident Date: 09/12/2001 Incident Identification: 47360 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
B	251m NE	Incident Date: 02/01/2003 Incident Identification: 128802 Pollutant: Sewage Materials Pollutant Description: Storm Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
C	309m NE	Incident Date: 29/12/2002 Incident Identification: 127912 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
C	309m NE	Incident Date: 24/12/2002 Incident Identification: 127547 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
C	309m NE	Incident Date: 02/09/2002 Incident Identification: 104550 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
C	309m NE	Incident Date: 07/11/2002 Incident Identification: 119376 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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



4.20 Pollution inventory substances

Records within 500m**0**

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

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

4.21 Pollution inventory waste transfers

Records within 500m**0**

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

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

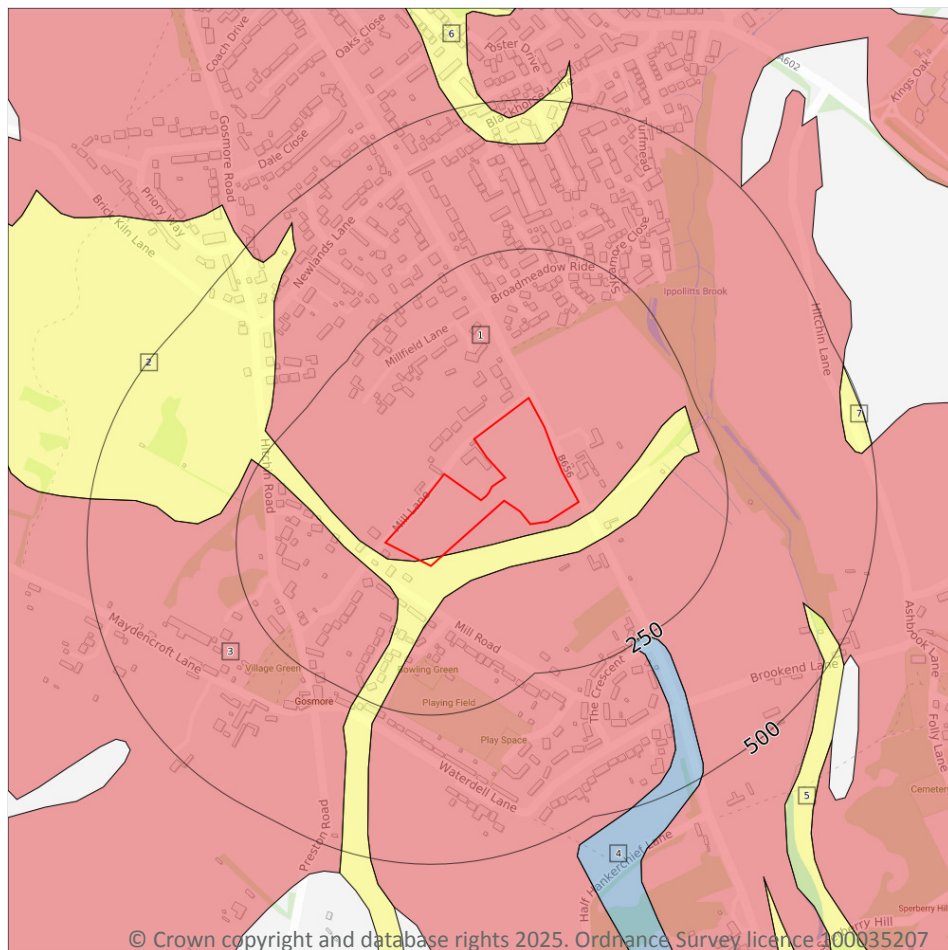
4.22 Pollution inventory radioactive waste

Records within 500m**0**

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

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

5 Hydrogeology - Superficial aquifer



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

5.1 Superficial aquifer

Records within 500m

7

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 34](#) >

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

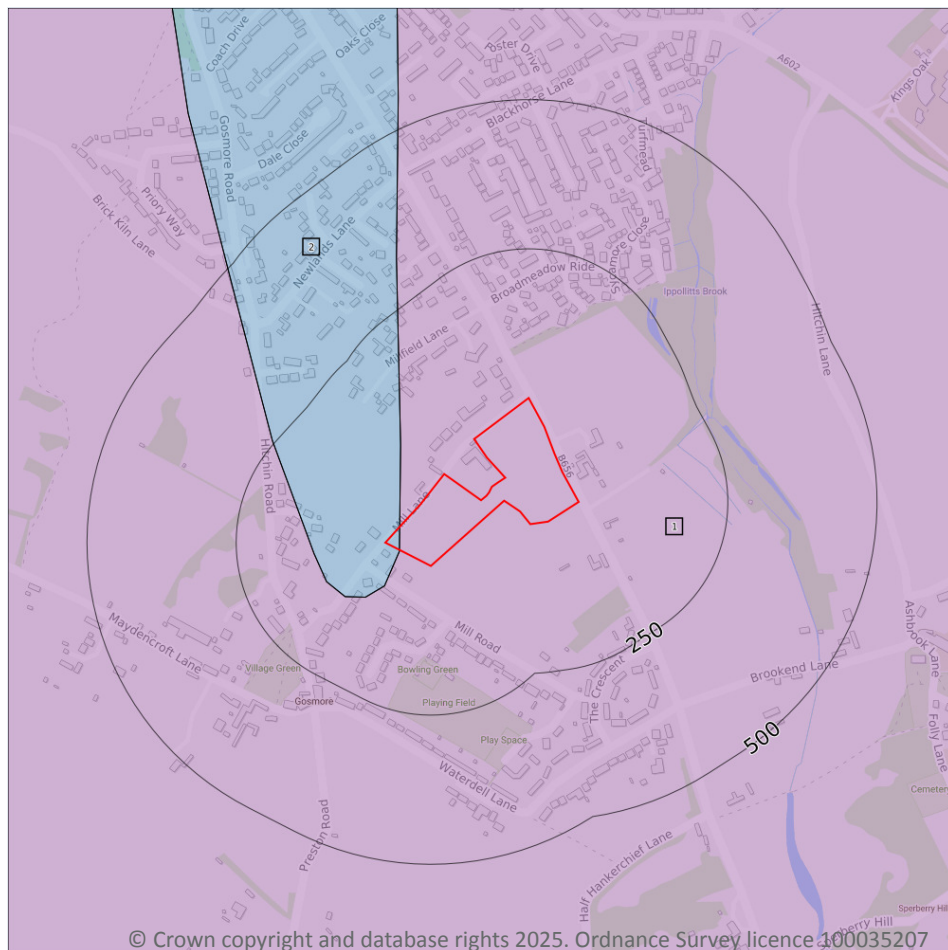


ID	Location	Designation	Description
3	50m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	247m SE	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
5	413m SE	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
6	426m N	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
7	459m E	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

2

Aquifer status of groundwater held within bedrock geology.

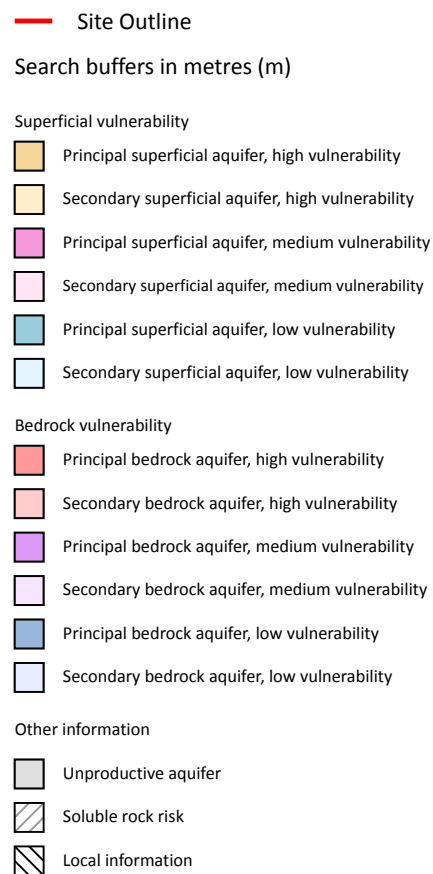
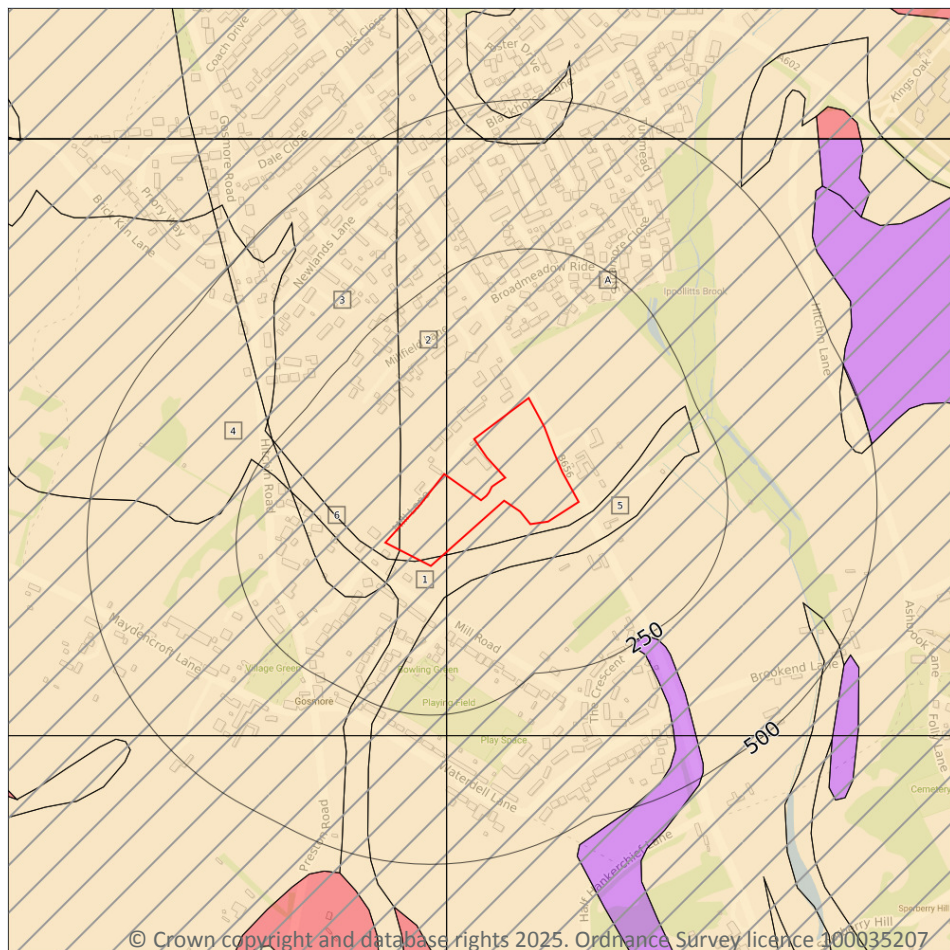
Features are displayed on the Bedrock aquifer map on [page 36](#) >

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

6

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

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

Features are displayed on the Groundwater vulnerability map on [page 37 >](#)



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Principal Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: High	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
A	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Medium Aquifer type: Principal Flow mechanism: Well connected fractures
5	4m SE	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Medium Aquifer type: Principal Flow mechanism: Well connected fractures
6	18m SW	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: High	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

2

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

ID	Maximum soluble risk category	Percentage of grid square covered by maximum risk
4	Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.	6.0%
A	Significant soluble rocks are likely to be present. Problems unlikely except with considerable surface or subsurface water flow.	38.0%

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

5.5 Groundwater vulnerability- local information

Records on site

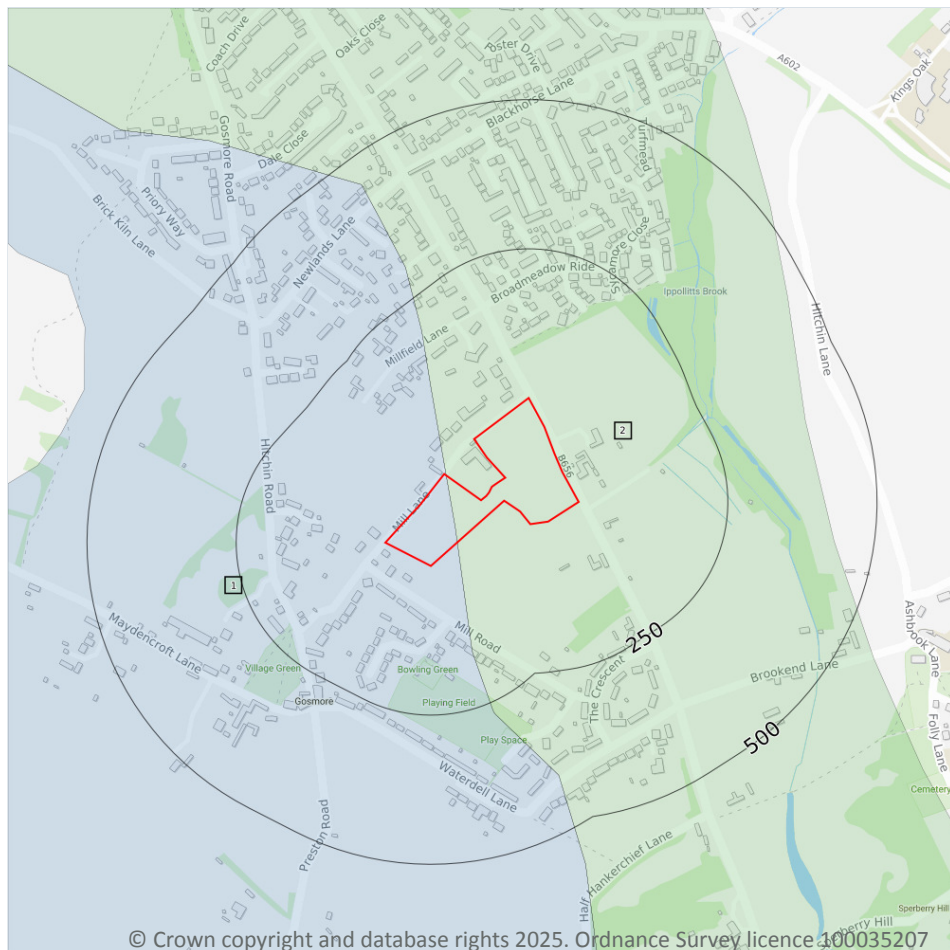
0

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

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



Abstractions and Source Protection Zones



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

5.6 Groundwater abstractions

Records within 2000m

14

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 40](#) >

ID	Location	Details	
-	1197m NW	Status: Historical Licence No: 6/33/13/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL HEAD CHARLTON Data Type: Point Name: Affinity Water Limited Easting: 517800 Northing: 227800	Annual Volume (m ³): 829663 Max Daily Volume (m ³): 2273 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 14/11/2012 Version End Date: -
-	1227m NW	Status: Historical Licence No: 6/33/13/*G/0096 Details: Transfer Between Sources (Pre Water Act 2003) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BATH SPRING WELL Data Type: Point Name: ENVIRONMENT AGENCY Easting: 517940 Northing: 228090	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 1640 Original Application No: - Original Start Date: 11/07/1996 Expiry Date: 10/07/2016 Issue No: 1 Version Start Date: 11/07/1996 Version End Date: -
-	1227m NW	Status: Historical Licence No: 6/33/13/*G/0096/R01 Details: Transfer Between Sources (Pre Water Act 2003) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BATH SPRING WELL Data Type: Point Name: ENVIRONMENT AGENCY Easting: 517940 Northing: 228090	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 864 Original Application No: - Original Start Date: 11/07/2016 Expiry Date: 31/03/2018 Issue No: 1 Version Start Date: 11/07/2016 Version End Date: -
-	1227m NW	Status: Active Licence No: 6/33/13/*G/0096/R03 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BATH SPRING WELL Data Type: Point Name: ENVIRONMENT AGENCY Easting: 517941 Northing: 228092	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 864 Original Application No: NPS/WR/039254 Original Start Date: 27/06/2024 Expiry Date: 31/03/2030 Issue No: 1 Version Start Date: 27/06/2024 Version End Date: -



ID	Location	Details	
-	1227m NW	Status: Historical Licence No: 6/33/13/*G/0096/R02 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BATH SPRING WELL Data Type: Point Name: ENVIRONMENT AGENCY Easting: 517941 Northing: 228092	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 864 Original Application No: NPS/WR/025466 Original Start Date: 01/04/2018 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2018 Version End Date: -
-	1227m NW	Status: Historical Licence No: 6/33/13/*G/0096/R02 Details: Transfer Between Sources (Pre Water Act 2003) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BATH SPRING WELL Data Type: Point Name: ENVIRONMENT AGENCY Easting: 517941 Northing: 228092	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 864 Original Application No: - Original Start Date: 01/04/2018 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 01/04/2018 Version End Date: -
-	1227m NW	Status: Historical Licence No: 6/33/13/*G/0096/R02 Details: Transfer Between Sources (Post Water Act 2003) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BATH SPRING WELL Data Type: Point Name: ENVIRONMENT AGENCY Easting: 517941 Northing: 228092	Annual Volume (m ³): 200000 Max Daily Volume (m ³): 864 Original Application No: NPS/WR/025466 Original Start Date: 01/04/2018 Expiry Date: - Issue No: 1 Version Start Date: 01/04/2024 Version End Date: -
-	1245m NW	Status: Active Licence No: 6/33/13/*G/0010 Details: General Use Relating To Secondary Category (Very Low Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL HEAD CHARLTON Data Type: Point Name: Affinity Water Limited Easting: 517760 Northing: 227829	Annual Volume (m ³): 829661 Max Daily Volume (m ³): 2273 Original Application No: NPS/WR/033627 Original Start Date: 01/11/1966 Expiry Date: - Issue No: 103 Version Start Date: 02/11/2020 Version End Date: -



ID	Location	Details	
-	1245m NW	Status: Active Licence No: 6/33/13/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL HEAD CHARLTON Data Type: Point Name: Affinity Water Limited Easting: 517760 Northing: 227829	Annual Volume (m ³): 829661 Max Daily Volume (m ³): 2273 Original Application No: NPS/WR/033627 Original Start Date: 01/11/1966 Expiry Date: - Issue No: 103 Version Start Date: 02/11/2020 Version End Date: -
-	1460m E	Status: Historical Licence No: 6/33/13/*G/0086 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE W OF LITTLE WYMONDLEY Data Type: Point Name: HERTFORDSHIRE & BEDFORDSHIRE PETROLEUM Easting: 520680 Northing: 227320	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1988 Version End Date: -
-	1460m E	Status: Historical Licence No: 6/33/13/*G/0086 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE W OF LITTLE WYMONDLEY Data Type: Point Name: HERTFORDSHIRE & BEDFORDSHIRE PETROLEUM Easting: 520680 Northing: 227320	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1988 Version End Date: -
-	1545m SW	Status: Historical Licence No: 6/33/13/*G/0046 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT TATMORE PLACE Data Type: Point Name: DERMAL LABORATORIES LTD Easting: 518100 Northing: 226000	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/12/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1972 Version End Date: -
-	1720m W	Status: Active Licence No: 6/33/13/*G/0008 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT TEMPLE END,HITCHIN Data Type: Point Name: Affinity Water Limited Easting: 517200 Northing: 227600	Annual Volume (m ³): 1659327 Max Daily Volume (m ³): 5682.5 Original Application No: NPS/WR/011805 Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 14/11/2012 Version End Date: -



ID	Location	Details	
-	1907m NE	Status: Historical Licence No: 6/33/13/*G/0043 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: FOUR BOREHOLES AT NINE SPRINGS Data Type: Point Name: BURDETT-COUTTS Easting: 520500 Northing: 228900	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/02/1969 Expiry Date: - Issue No: 100 Version Start Date: 01/09/1990 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 40 >](#)

ID	Location	Details	
-	1438m NW	Status: Historical Licence No: 6/33/13/*S/0055 Details: Non-Evaporative Cooling Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER HIZ AT HITCHIN CENTRE Data Type: Point Name: WILLIAM RANSOM & SON PLC Easting: 518400 Northing: 228800	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/02/1968 Expiry Date: - Issue No: 100 Version Start Date: 01/07/1991 Version End Date: -
-	1969m NE	Status: Historical Licence No: 6/33/13/*S/0034 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: WATERCOURSE N OF GT WYMONDLEY Data Type: Line Name: LETCHWORTH GARDEN CITY HERITAGE FOUNDATION Easting: 520630 Northing: 228850	Annual Volume (m ³): 22300 Max Daily Volume (m ³): 727 Original Application No: - Original Start Date: 01/11/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1999 Version End Date: -

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



5.8 Potable abstractions

Records within 2000m

4

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 40 >](#)

ID	Location	Details	
-	1197m NW	Status: Historical Licence No: 6/33/13/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL HEAD CHARLTON Data Type: Point Name: Affinity Water Limited Easting: 517800 Northing: 227800	Annual Volume (m ³): 829663 Max Daily Volume (m ³): 2273 Original Application No: - Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 14/11/2012 Version End Date: -
-	1245m NW	Status: Active Licence No: 6/33/13/*G/0010 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL HEAD CHARLTON Data Type: Point Name: Affinity Water Limited Easting: 517760 Northing: 227829	Annual Volume (m ³): 829661 Max Daily Volume (m ³): 2273 Original Application No: NPS/WR/033627 Original Start Date: 01/11/1966 Expiry Date: - Issue No: 103 Version Start Date: 02/11/2020 Version End Date: -
-	1460m E	Status: Historical Licence No: 6/33/13/*G/0086 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE W OF LITTLE WYMONDLEY Data Type: Point Name: HERTFORDSHIRE & BEDFORDSHIRE PETROLEUM Easting: 520680 Northing: 227320	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 01/04/1985 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1988 Version End Date: -
-	1720m W	Status: Active Licence No: 6/33/13/*G/0008 Details: Potable Water Supply - Direct Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BORE AT TEMPLE END,HITCHIN Data Type: Point Name: Affinity Water Limited Easting: 517200 Northing: 227600	Annual Volume (m ³): 1659327 Max Daily Volume (m ³): 5682.5 Original Application No: NPS/WR/011805 Original Start Date: 01/11/1966 Expiry Date: - Issue No: 102 Version Start Date: 14/11/2012 Version End Date: -



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

5.9 Source Protection Zones

Records within 500m

2

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on [page 40 >](#)

ID	Location	Type	Description
1	On site	2	Outer catchment
2	On site	3	Total catchment

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

5.10 Source Protection Zones (confined aquifer)

Records within 500m

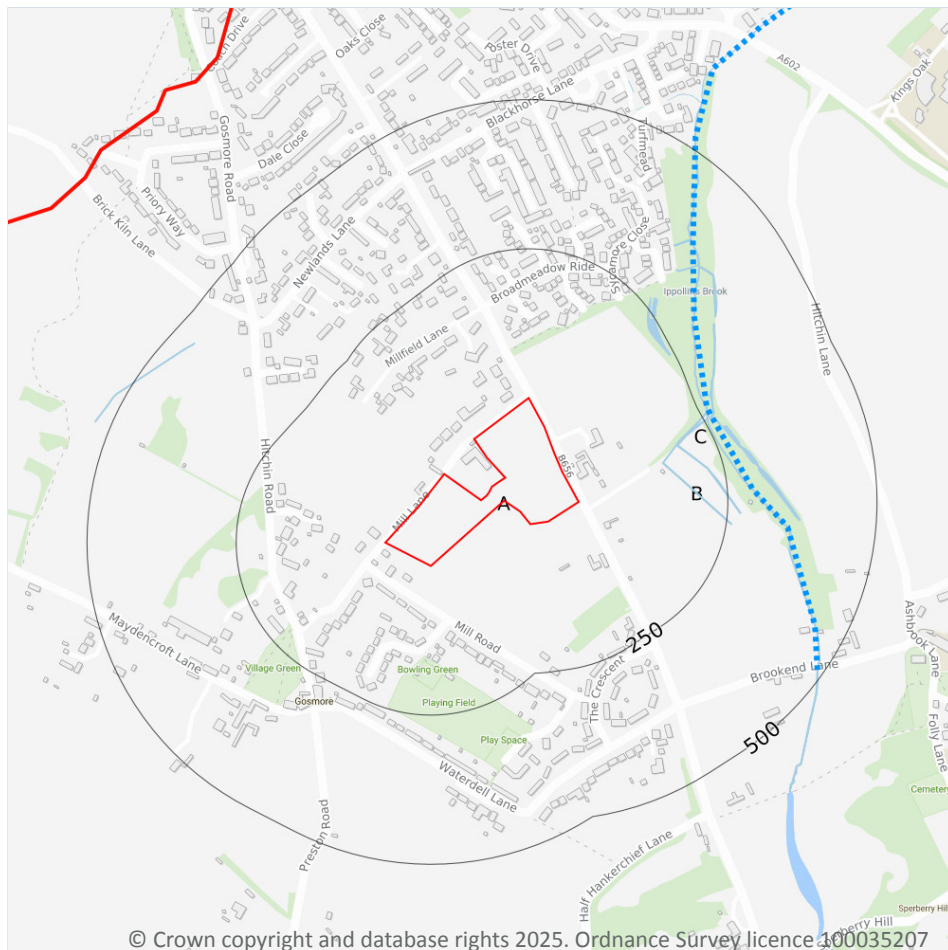
0

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

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



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

4

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 47 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
B	156m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
B	191m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	192m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	213m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.

6.2 Surface water features

Records within 250m

5

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 47 >](#)

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 47 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	On site	River	Purwell	GB105033037690	Ivel	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 47 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
3	264m NE	River	Purwell	GB105033037690 ↗	Moderate	Fail	Moderate	2019

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

6.5 WFD Groundwater bodies

Records on site

1

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

Features are displayed on the Hydrology map on [page 47 >](#)

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

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



7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

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

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

7.2 Historical Flood Events

Records within 250m

0

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

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

7.3 Flood Defences

Records within 250m

0

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

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

7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

7.5 Flood Storage Areas

Records within 250m

0

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

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



River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

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

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

7.7 Flood Zone 3

Records within 50m

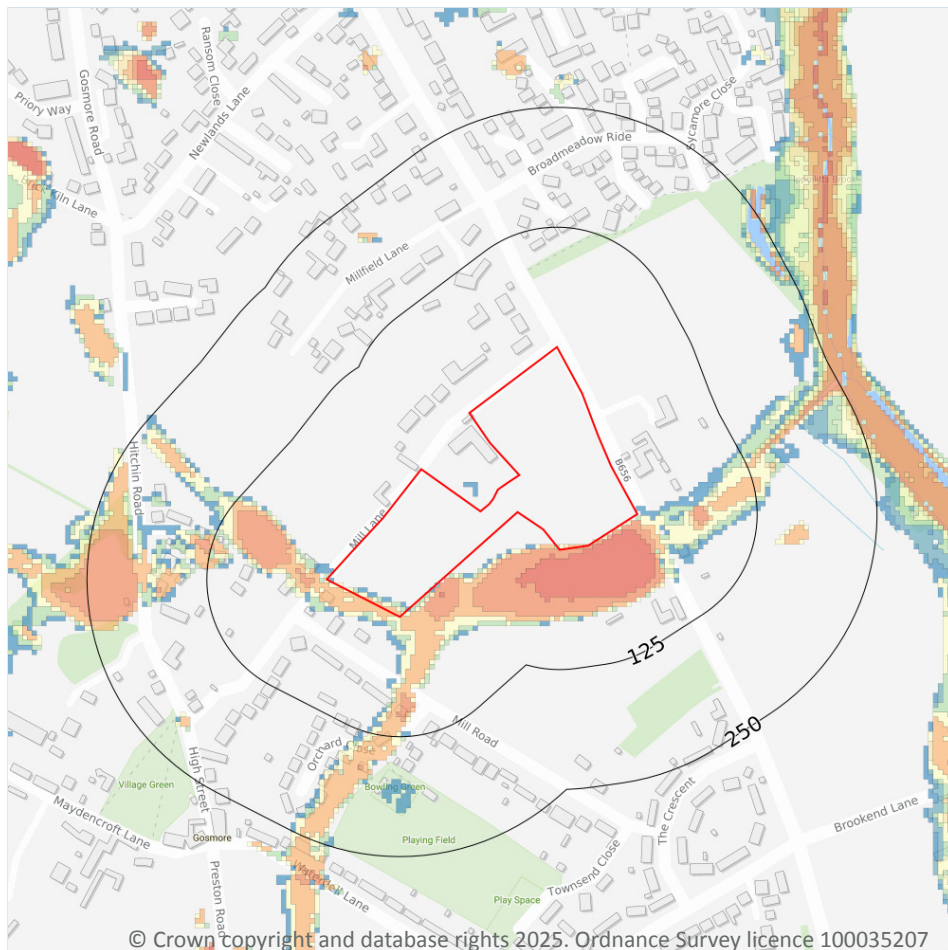
0

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

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



8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

8.1 Surface water flooding

Highest risk on site

1 in 30 year, 0.3m - 1.0m

Highest risk within 50m

1 in 30 year, Greater than 1.0m

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

Features are displayed on the Surface water flooding map on [page 53](#) >

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

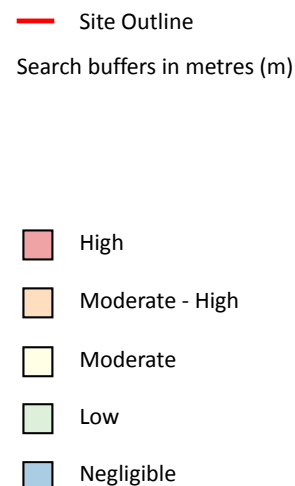
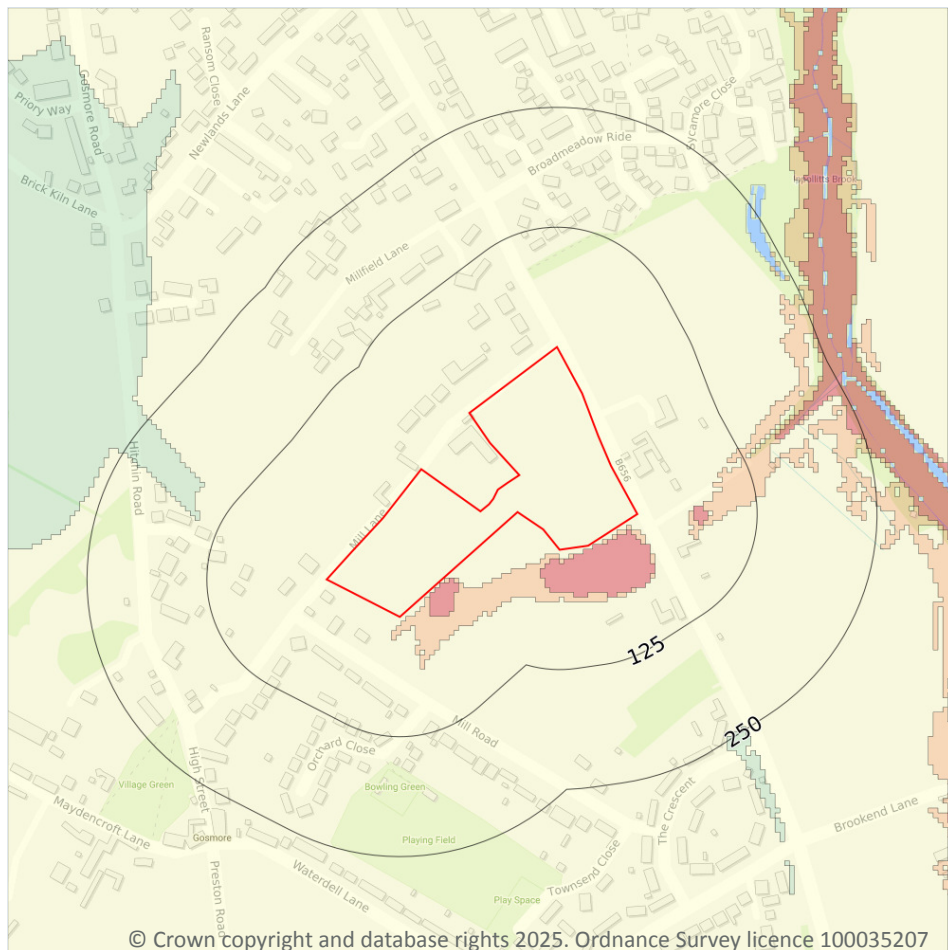
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

This data is sourced from Ambiental Risk Analytics.



9 Groundwater flooding



9.1 Groundwater flooding

Highest risk on site

Moderate

Highest risk within 50m

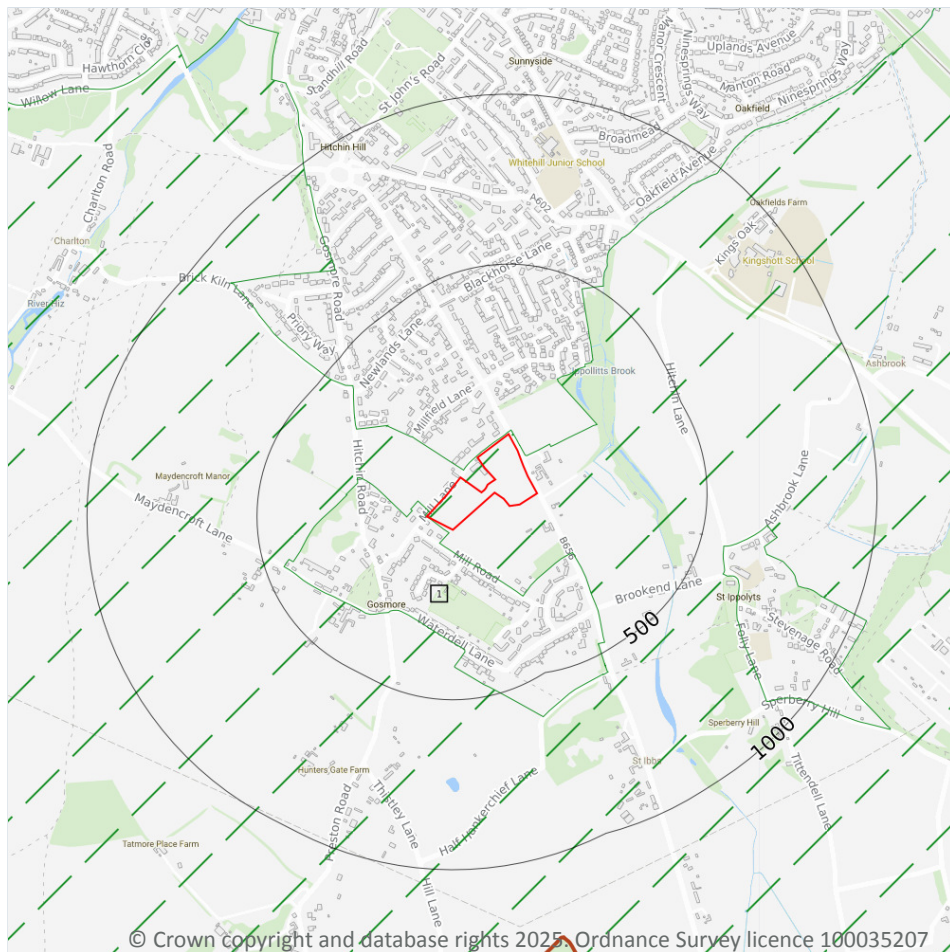
High

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

Features are displayed on the Groundwater flooding map on [page 55 >](#)

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- Designated Ancient Woodland
- Green Belt

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

2

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.

Features are displayed on the Environmental designations map on [page 56 >](#)

ID	Location	Name	Data source
-	1744m SW	Wain Wood SSSI	Natural England



ID	Location	Name	Data source
-	1855m S	Wain Wood SSSI	Natural England

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**4**

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 56 >](#)

ID	Location	Name	Woodland Type
2	1242m S	Vicars Grove	Ancient & Semi-Natural Woodland
-	1744m SW	Unknown	Ancient & Semi-Natural Woodland
-	1894m SW	Unknown	Ancient Replanted Woodland
-	1945m SW	Unknown	Ancient Replanted Woodland

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

10.8 Biosphere Reserves

Records within 2000m**0**

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

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



10.9 Forest Parks

Records within 2000m**0**

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

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m**0**

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

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

10.11 Green Belt

Records within 2000m**1**

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

Features are displayed on the Environmental designations map on [page 56 >](#)

ID	Location	Name	Local Authority name
1	On site	London Green Belt	North Hertfordshire

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

10.12 Proposed Ramsar sites

Records within 2000m**0**

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

This data is sourced from Natural England.



10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

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

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

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

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

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m

0

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

This data is sourced from Natural England.

10.16 Nitrate Vulnerable Zones

Records within 2000m

4

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

Location	Name	Type	NVZ ID	Status
On site	Great Ouse NVZ	Surface Water	391	Existing

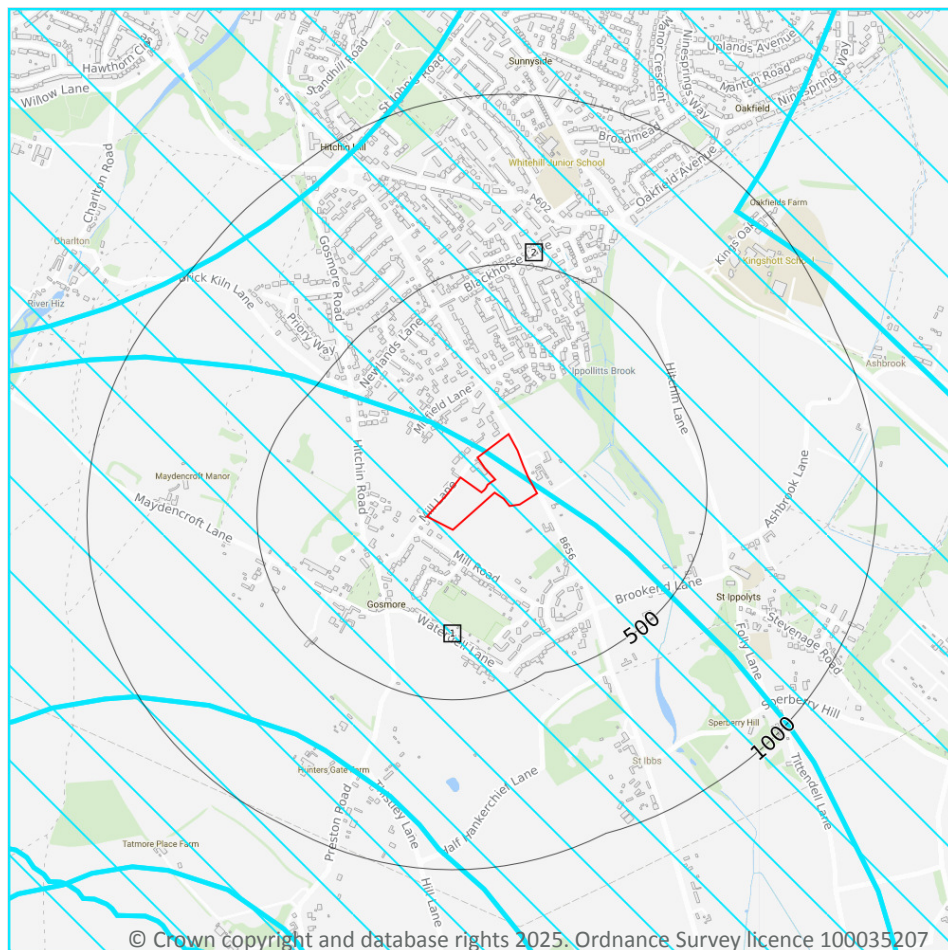


Location	Name	Type	NVZ ID	Status
On site	Anglian Chalk	Groundwater	71	Existing
1302m S	Great Ouse NVZ	Surface Water	391	Existing
1302m S	Anglian Chalk	Groundwater	71	Existing

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

2

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 62](#) >

ID	Location	Type of developments requiring consultation
1	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0101000322302&notes=&location=517998,223625%20(IRZ%20polygon%20centre)
2	On site	https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0301000500000&notes=&location=520390,225914%20(IRZ%20polygon%20centre)



This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m

2

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.

Features are displayed on the SSSI Impact Zones and Units map on [page 62 >](#)

ID: -
Location: 1744m SW
SSSI name: Wain Wood
Unit name: Wains Wood
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Unfavourable - Recovering	20/05/2009

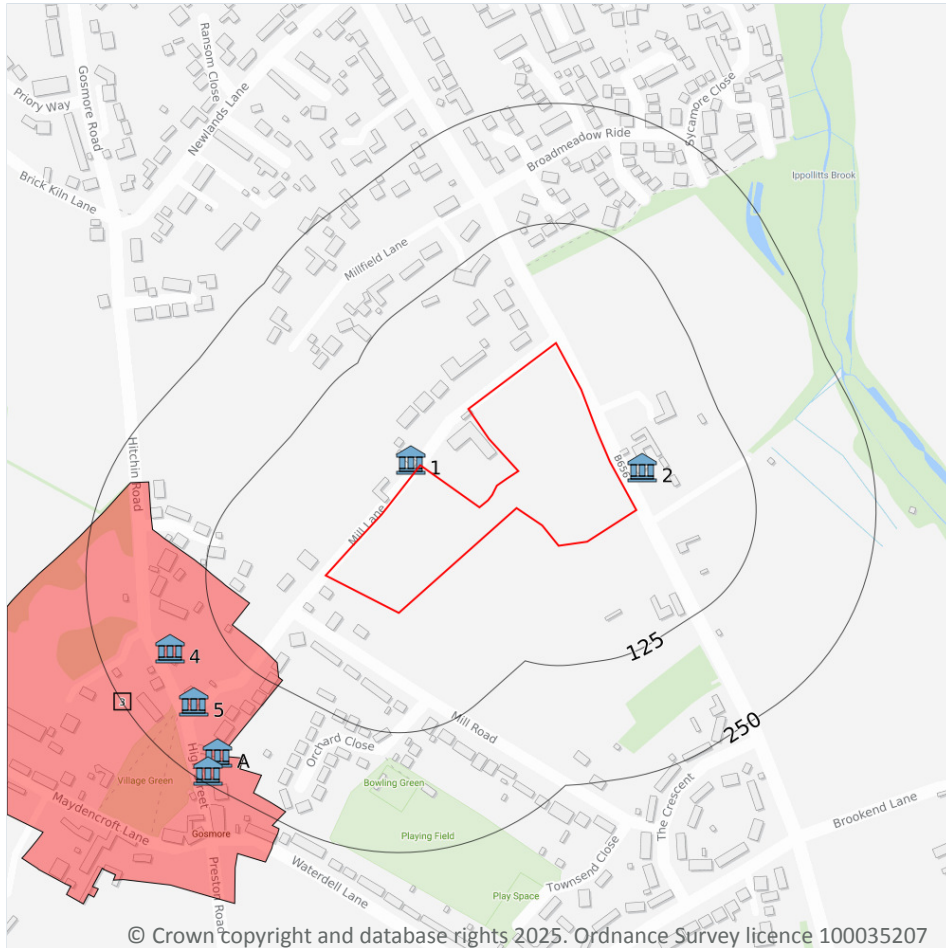
ID: -
Location: 1855m S
SSSI name: Wain Wood
Unit name: Wains Wood
Broad habitat: Broadleaved, Mixed And Yew Woodland - Lowland
Condition: Unfavourable - Recovering
Reportable features:

Feature name	Feature condition	Date of assessment
Lowland mixed deciduous woodland	Unfavourable - Recovering	20/05/2009

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

6

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

Features are displayed on the Visual and cultural designations map on [page 64 >](#)

ID	Location	Name	Grade	Reference Number	Listed date
1	11m NW	The Mill Farm	II	1102506	28/05/1987
2	27m NE	Pound Farmhouse	II	1102539	28/05/1987
4	180m SW	Gosmore House	II	1295446	28/05/1987
5	190m SW	Rose Cottages	II	1175085	28/05/1987
A	217m SW	Outbuildings To Victoria House Adjoining Number 9 (The Old Cottage)	II	1102536	28/05/1987

ID	Location	Name	Grade	Reference Number	Listed date
A	237m SW	Victoria House	II	1175099	27/05/1968

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

11.5 Conservation Areas

Records within 250m

1

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

Features are displayed on the Visual and cultural designations map on [page 64 >](#)

ID	Location	Name	District	Date of designation
3	85m W	Gosmore	North Hertfordshire	08/06/1970

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

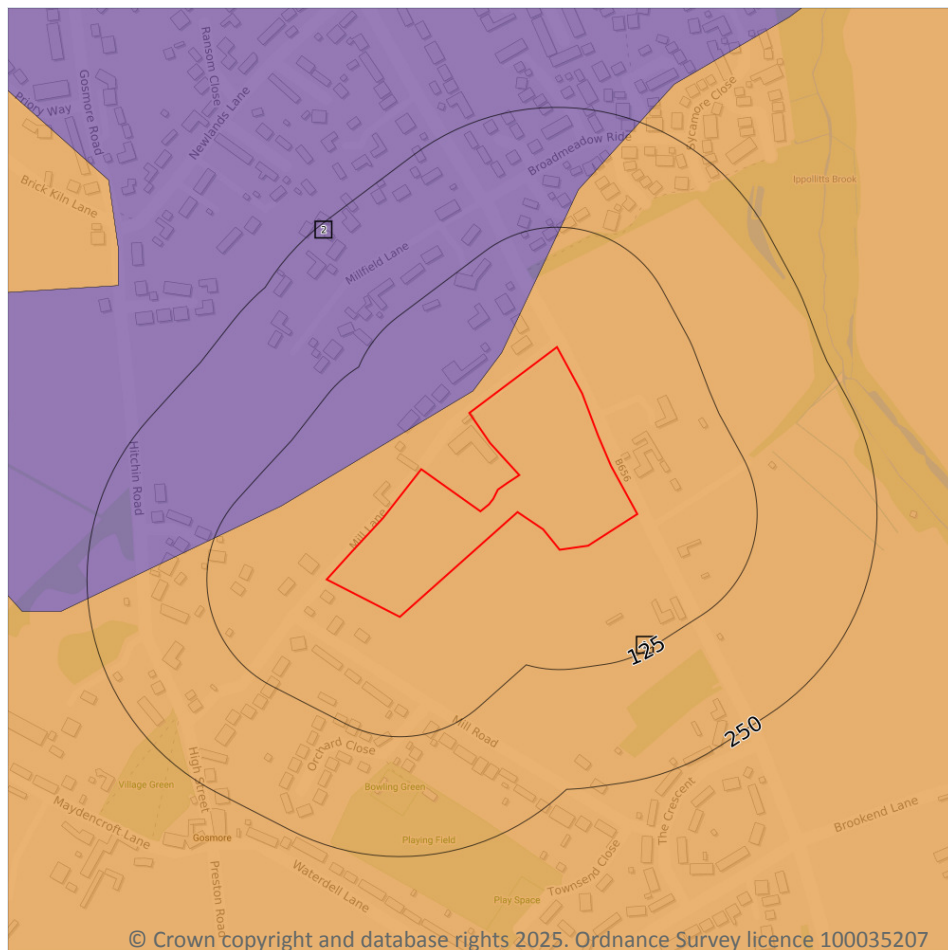
0

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 67](#) >

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
2	16m NW	Urban	Non-agricultural/no quality assigned



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

1

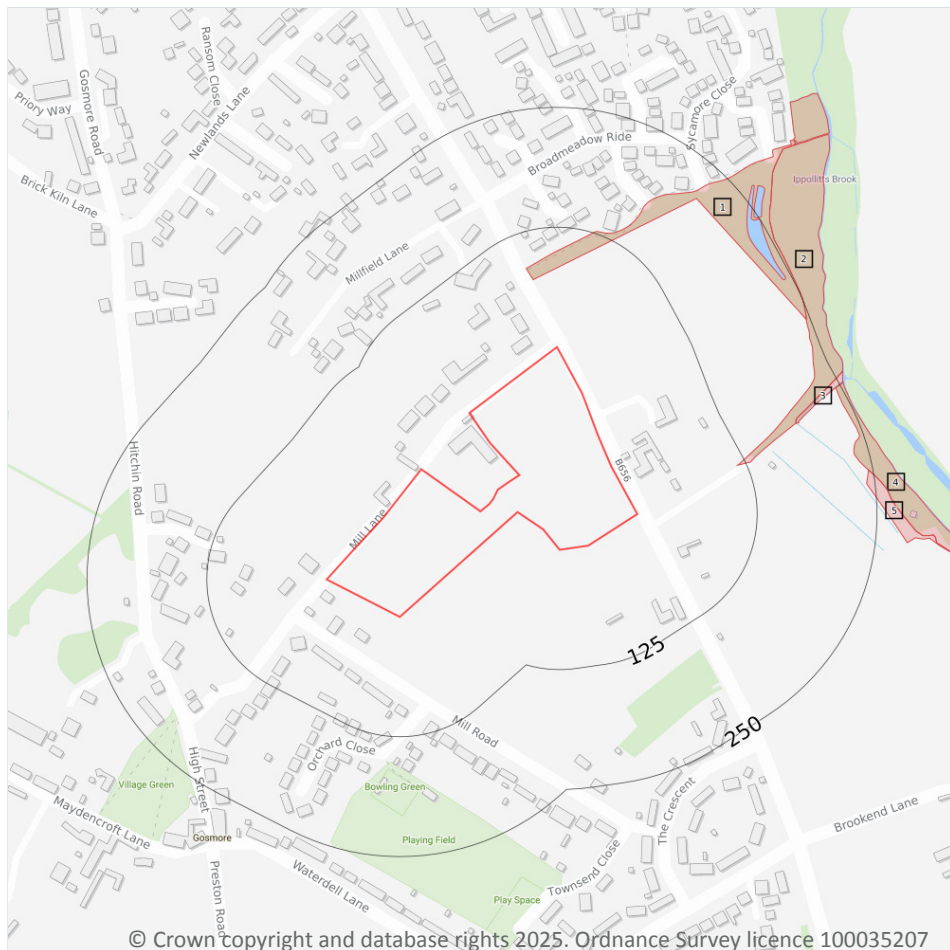
Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

Location	Reference	Scheme	Start Date	End Date
5m NW	1270257	Countryside Stewardship (Middle Tier)	01/01/2022	31/12/2026

This data is sourced from Natural England.



13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

13.1 Priority Habitat Inventory

Records within 250m

5

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

Features are displayed on the Habitat designations map on [page 69 >](#)

ID	Location	Main Habitat	Other habitats
1	75m N	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
2	117m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	191m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	235m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
5	241m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m	0
----------------------------	----------

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

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m	0
----------------------------	----------

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

This data is sourced from Natural England.

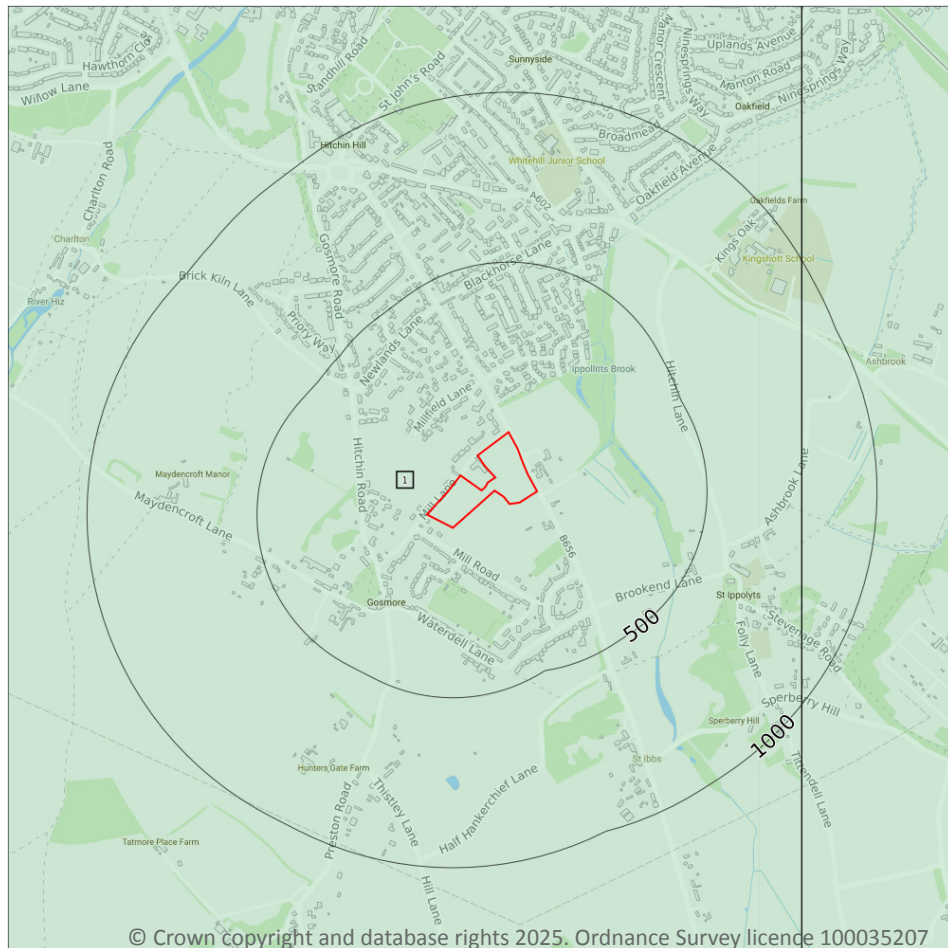
13.4 Limestone Pavement Orders

Records within 250m	0
----------------------------	----------

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

This data is sourced from Natural England.

14 Geology 1:10,000 scale - Availability



- Site Outline**
- Search buffers in metres (m)**
- Full coverage
 - Partial coverage
 - No coverage

14.1 10k Availability

Records within 500m

1

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

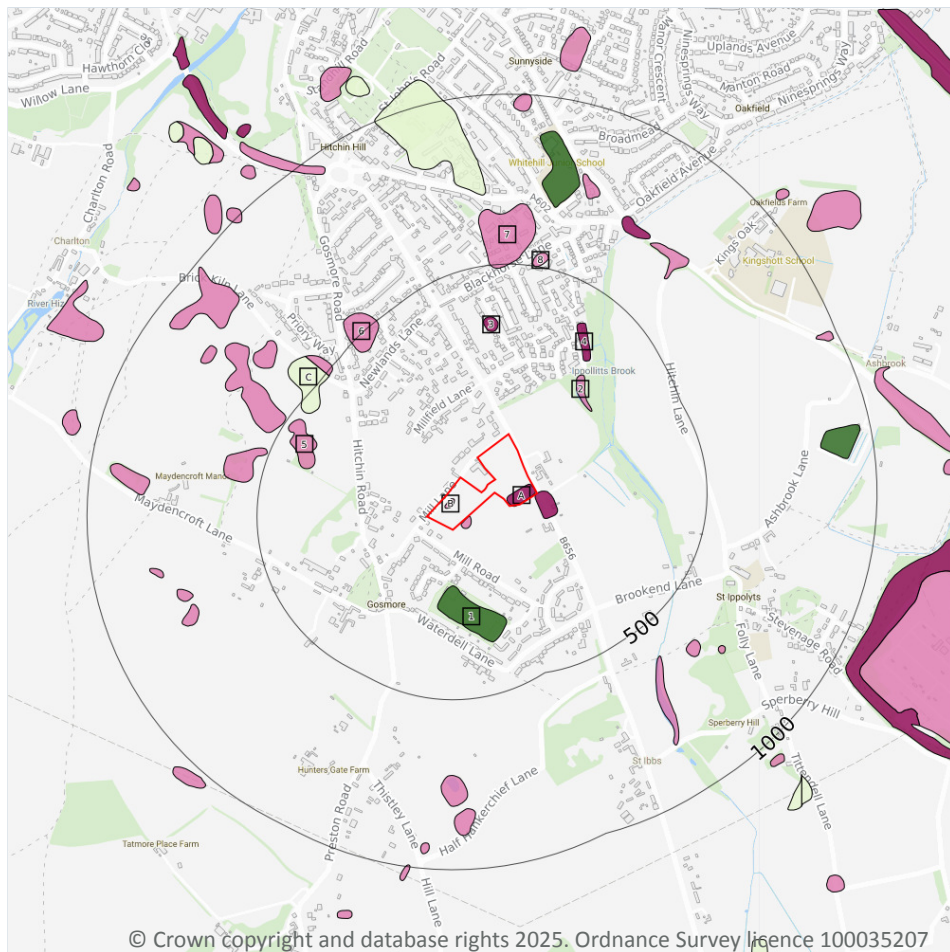
Features are displayed on the Geology 1:10,000 scale - Availability map on [page 71](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	TL12NE

This data is sourced from the British Geological Survey.



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



- Site Outline**
- Search buffers in metres (m)**
- Reclaimed ground
 - Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

14

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.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on [page 72](#) >

ID	Location	LEX Code	Description	Rock description
A	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
B	On site	WGR-VOID	Worked Ground (Undivided)	Void
A	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
B	2m SE	WGR-VOID	Worked Ground (Undivided)	Void

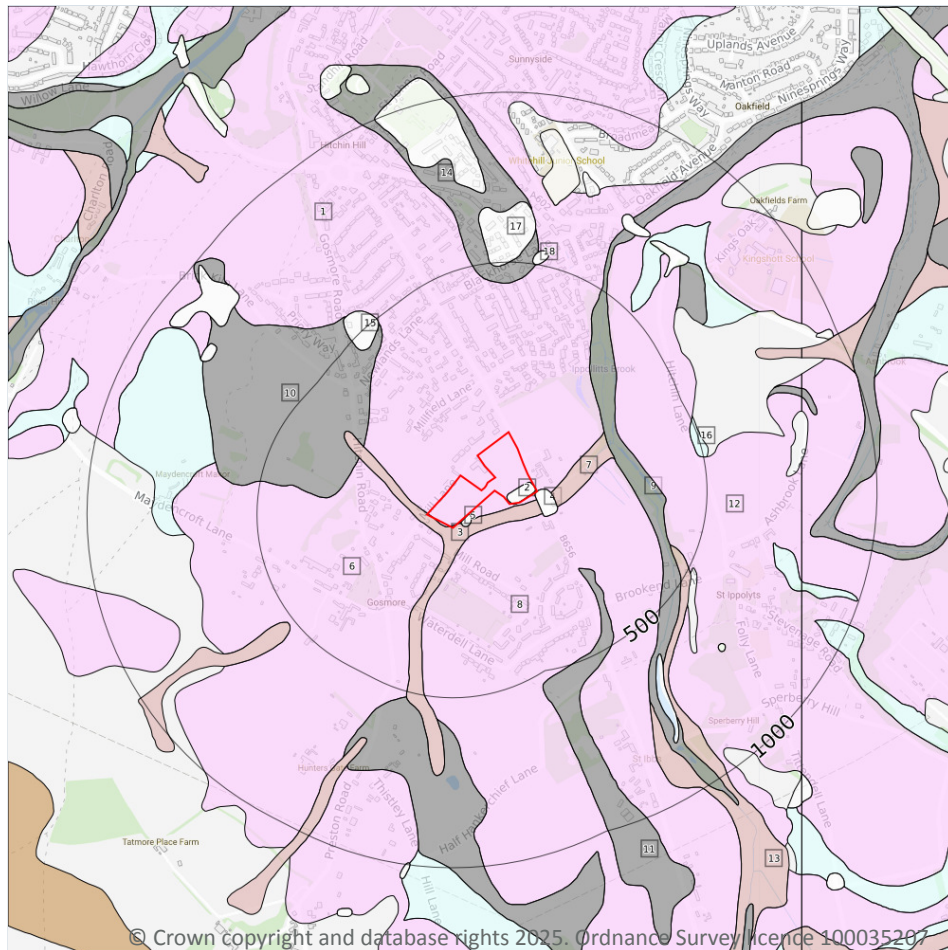


ID	Location	LEX Code	Description	Rock description
1	165m S	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
2	235m NE	WGR-VOID	Worked Ground (Undivided)	Void
3	305m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	310m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
5	365m NW	WGR-VOID	Worked Ground (Undivided)	Void
6	450m NW	WGR-VOID	Worked Ground (Undivided)	Void
C	450m NW	WMGR-ARTDP	Infilled Ground	Artificial Deposit
C	488m NW	WGR-VOID	Worked Ground (Undivided)	Void
7	489m N	WGR-VOID	Worked Ground (Undivided)	Void
8	499m N	WGR-VOID	Worked Ground (Undivided)	Void

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



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

14.3 Superficial geology (10k)

Records within 500m

18

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

Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 74 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel
2	On site	SUPNM-UNKNOWN	Superficial Theme Not Mapped [for Digital Map Use Only] - Unknown/unclassified Entry	Unknown/unclassified Entry
3	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel



ID	Location	LEX Code	Description	Rock description
4	On site	SUPNM-UNKNOWN	Superficial Theme Not Mapped [for Digital Map Use Only] - Unknown/unclassified Entry	Unknown/unclassified Entry
5	2m SE	SUPNM-UNKNOWN	Superficial Theme Not Mapped [for Digital Map Use Only] - Unknown/unclassified Entry	Unknown/unclassified Entry
6	27m SW	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel
7	41m E	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
8	51m S	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel
9	247m E	ALV-CZ	Alluvium - Silty Clay	Clay, Silty
10	255m NW	HEAD-CZ	Head - Silty Clay	Clay, Silty
11	257m SE	GLLMP-CZ	Glaciolacustrine Deposits, Mid Pleistocene - Clay, Silty (unlithified Deposits Coding Scheme)	Clay, Silty
12	289m NE	GFDMP-XSV	Glaciofluvial Deposits, Mid Pleistocene - Sand And Gravel	Sand And Gravel
13	422m E	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
14	438m N	HEAD-CZ	Head - Silty Clay	Clay, Silty
15	450m NW	SUPNM-UNKNOWN	Superficial Theme Not Mapped [for Digital Map Use Only] - Unknown/unclassified Entry	Unknown/unclassified Entry
16	478m E	LOFT-DMTN	Lowestoft Formation - Diamicton	Diamicton
17	489m N	SUPNM-UNKNOWN	Superficial Theme Not Mapped [for Digital Map Use Only] - Unknown/unclassified Entry	Unknown/unclassified Entry
18	499m N	SUPNM-UNKNOWN	Superficial Theme Not Mapped [for Digital Map Use Only] - Unknown/unclassified Entry	Unknown/unclassified Entry

This data is sourced from the British Geological Survey.

14.4 Landslip (10k)

Records within 500m

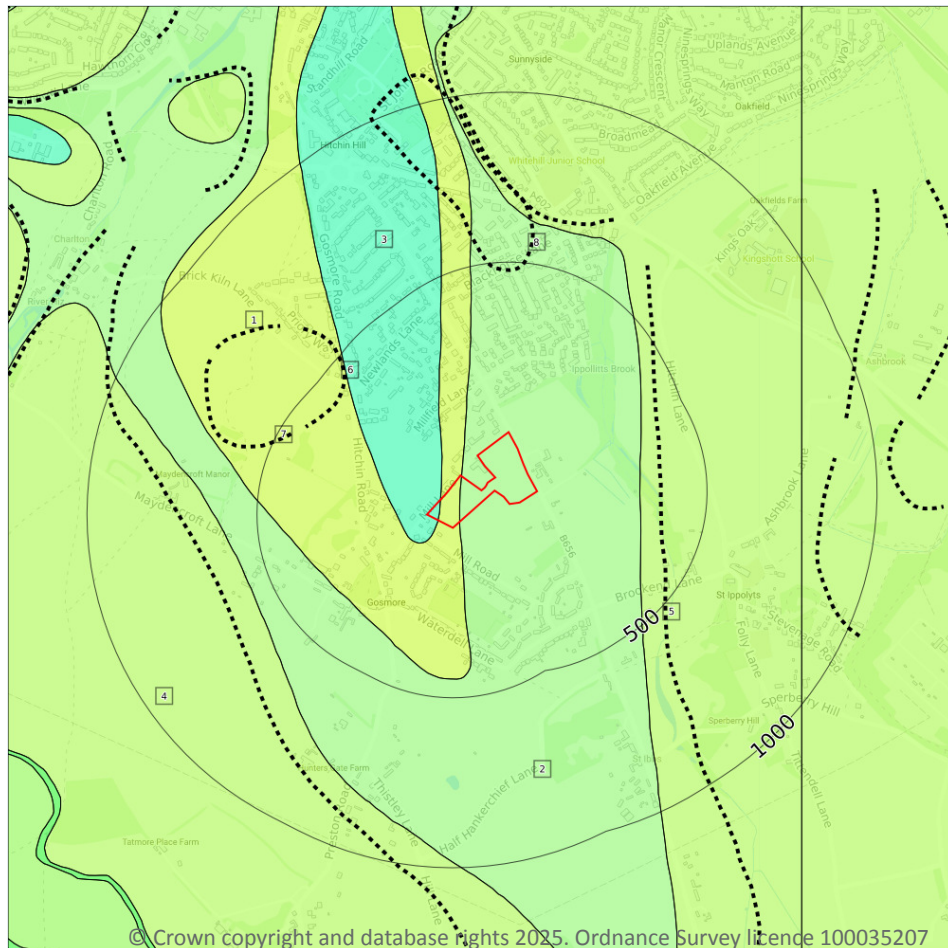
0

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

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

..... Bedrock faults and other linear features (10k)

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

14.5 Bedrock geology (10k)

Records within 500m

4

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

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 76 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	WMCH-CHLK	West Melbury Marly Chalk Formation - Chalk	Cenomanian Age
2	On site	ZZCH-CHLK	Zig Zag Chalk Formation - Chalk	Cenomanian Age
3	On site	GLT-MDST	Gault Formation - Mudstone	Albian Age



ID	Location	LEX Code	Description	Rock age
4	302m E	HNCK-CHLK	Holywell Nodular Chalk Formation And New Pit Chalk Formation (undifferentiated) - Chalk	Turonian Age - Cenomanian Age

This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

4

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.

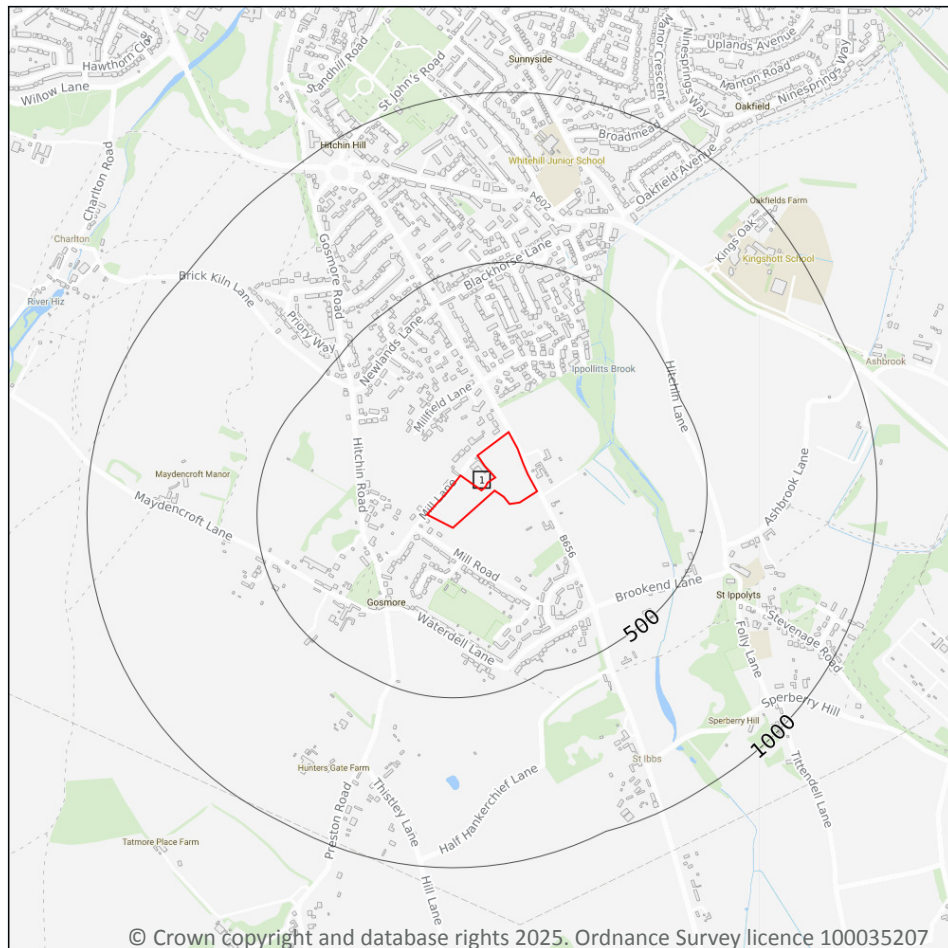
Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 76 >](#)

ID	Location	Category	Description
5	364m E	LANDFORM	Buried channel or valley margin
6	418m NW	LANDFORM	Form line
7	459m NW	LANDFORM	Form line
8	477m N	LANDFORM	Form line

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 78](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW221_hitchin_v4

This data is sourced from the British Geological Survey.

