

ESTATESOLUTIONS

Farm



Contaminated Land
FURTHER ACTION



Flooding
PASSED ✓



Argyll's Overview

Contaminated Land :

The property poses a sufficiently serious environmental risk to require further investigation. Please refer to the recommendations on page 4.

Flood Risk :

Moderate - The Site is susceptible to flooding from one or more sources. A prudent purchaser should ask the vendor whether there has been any historical flooding and confirm the availability of building and contents insurance. You may also want to carry out further assessment and explore options for managing flood risk (see pages 3 & 4).

Environmental

Hazards :

No other Environmental Hazards have been identified in the immediate vicinity of the Site.



Report on:

**Brookend Farm, Brook End, Cottered, Buntingford,
Hertfordshire, SG9 9QR**

Report prepared for:

Index Property Information
(East Central)

Client Reference:

Not Supplied

Report Reference:

AEL-2043-PSF-516947

National Grid Reference:

532730,228766

Report date:

8th May 2015



Renaissance
environmental

0845 458 5250
www.argyllenvironmental.com

Supplied by



COPSO
ASSOCIATE MEMBER





Site Location

Report prepared on

Brookend Farm, Brook End, Cottered, Buntingford,
Hertfordshire, SG9 9QR

Site Area (hectares)

8.1482

Current Use

Assumed Farm

Proposed Use

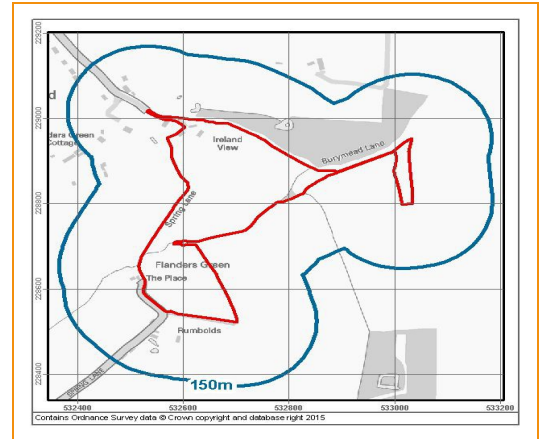
Assumed Farm

Report Prepared For

Purchaser

Report Author

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Telephone: 0845 458 5250





Summary of Liabilities and Risk

Issue	Evaluation
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Contaminated Land Liability Assessment



FURTHER ACTION



What is the pollution risk from within the property?	Moderate to High
What is the pollution risk from the surrounding area?	Low
What is the sensitivity of this area to pollution?	High
What is the overall liability risk of this property?	Moderate to High

Within the scope of this assessment potential liabilities have been identified at the farm. We recommend that you undertake more detailed investigation to better quantify these risks. Please see our recommendations for details.



PASSED



Flood Risk Summary

What is the overall risk of flooding at the farm, assuming defences fail or are absent or over-topped?	Moderate (see recommendations below)
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Additional Considerations Summary

Asbestos		Ground Instability		Mining Hazard	
Radon		Coal Mining		Nitrate Vulnerability	
Brine Compensation		Historic Rights of Way		HS2	
Water Abstractions		Sewage Discharges		Sensitive Land Uses	
Unexploded Ordnance		Soil Chemistry		Stewardship Schemes	
COMAH Sites		Listed Buildings		Telecommunication Base Stations / Transmission Lines	

Please refer to the Additional Considerations section for further details for those considerations that have been flagged by the report.



FURTHER ACTION



Contaminated Land Conclusion

The current and historic waste management facility on the farm may have caused substantial contamination of those areas, which could be polluting the farm and surrounding area. This could adversely affect the future use of those areas and could result in environmental liability.

Recommendations

We recommend undertaking an environmental audit at the Site, including a site inspection, staff interviews and regulatory consultation with appropriate third parties to clarify the risk presented by current and historical operations. The assessment will consider the standard of environmental management and identify potential risks associated with ground contamination in the context of the transaction at hand. An upgrade to a Site Solutions Inspect is available priced from £1255 plus VAT and including all disbursements. A report can normally be prepared in draft format within 10 working days or to your specific requirements. A finalised report can be provided following receipt of regulatory responses, which may take up to 20 working days. We would be happy to provide a detailed proposal on request. Please contact us on 0845 458 5250 if you would like further assistance.

As a minimum we would recommend regulatory consultation with the Local Authority Environmental Health and Planning Departments as outlined above to include a review of planning records for the Site, details of any past Site investigations/remediation work and relevant information concerning the Authorities strategy under Part 2A of the Environmental Protection Act 1990. An upgrade to a Site Solutions Consult is available for this Site for £405 plus VAT (includes all disbursements). This report can usually be prepared within 10-15 working days but may take up to 20 working days depending on response times.



PASSED









Flood Risk Recommendations

1. Although areas of the Site have been identified as at an increased risk of flooding, owing to the limited extent and location of this risk in relation to the main operational areas, further detailed assessment is not deemed necessary. However, it would be prudent to check with the current vendor to confirm whether or not historical flooding has significantly impacted upon farm operations, facilities and general farming practices.
2. If this risk relates to areas where buildings are present, you may wish to consider further assessment to establish anticipated flood depths which will aid a cost appraisal and installation of flood resistance and/or resilience protection measures (Please contact Argyll for more details).
3. You may wish to obtain insurance terms prior to completion of this transaction if the main buildings on Site are at risk.



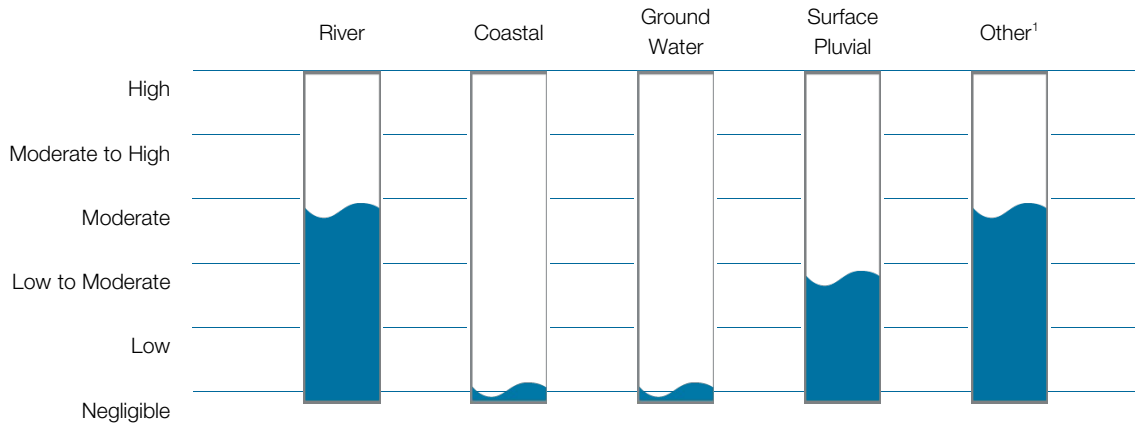
Contaminated Land Risk Analysis

Investigation	Risk Commentary
 <p>Farm description</p> <p>The farm is 8 hectares and is formed predominantly of grassland. Brookend Farm (Ireland View) is located in the north and is made up of a number of small industrial units and an assumed residential property. According to trade directories, current or recent operations at the Site include scrap metal merchants.</p> <p>Furthermore, the following authorisations, licences, consents or enforcements of note have been identified at the Site: a Licensed Waste Management Facility and a Registered Waste Treatment or Disposal Site have been identified, processing waste including scrap metal and end of life vehicles.</p> <p>Farm History</p> <p>The farm was generally similar in 1878, although Brookend Farm (Ireland View) was constructed in the north from the late 1970s. The associated license has revealed that the waste management facility has been operational since c.1993.</p> <p>Argyll's Comment </p> <p>As a result of the historical and current use of the Site, there is a moderate to high risk of contaminants being present.</p>	
 <p>Surrounding area description</p> <p>The farm is almost entirely surrounded by arable land or grassland, with small areas of woodland and disparate farmyards. There are no industrial activities currently identified close to the farm.</p> <p>History of Surrounding Area</p> <p>The area was extremely similar in the late 1800s and there have been no activities or alterations since that time that are likely to significantly affect the farm</p> <p>Argyll's Comment </p> <p>The historical and current use of the surrounding area is therefore considered to present a low risk of affecting the Site.</p>	
 <p>Water resources and sensitive habitats</p> <p>With reference to Environment Agency data, the superficial hydrogeology underlying the Site is classified as an Unproductive Stratum (deposits of negligible permeability) and the bedrock hydrogeology is classified as a Principal Aquifer (highly permeable formations). In terms of the overlying soils, these are given a I1 (class I1) vulnerability classification. According to the Environment Agency the Site lies within a Zone III Source Protection Zone (SPZ). An SPZ is a protection zone placed around a well or borehole that supplies groundwater of potable quality. However, there are no abstraction licences located within 500m. The nearest water feature is located on Site. The general area appears to be largely in agricultural use and no designated eco-receptors were identified within a 500m radius of the Site.</p> <p>Argyll's Comment </p> <p>Overall, the Site is therefore considered to have a high environmental sensitivity.</p>	
<p>Additional Sources of Information</p>	<p>The following additional historical map packs were used to produce this report.</p> <ul style="list-style-type: none"> • Envirocheck Ref: 67280268 centred on 532730, 228766.



Flood Risk Screening

Flood Analysis of Whole Farm	What is the overall risk of flooding at the farm, assuming defences fail or are absent or over-topped?	Moderate
Flood Defences Effect	Are there existing flood defences that might benefit the Site?	Yes
	What is the risk of flooding when these defences are operational?	Moderate



Flood Analysis of Buildings	Are the main farm buildings at significant risk of flooding? No
Riparian Ownership	Is there a Main River located within or adjacent to the Site? Yes Is there a drainage channel located within or adjacent to the Site? No Is there a canal located within or adjacent to the Site? No

Argyll's Comment



A riparian owner describes anyone who owns a property where there is a watercourse within or adjacent to the boundaries of their property.

Under common law, a riparian owner has rights and responsibilities relating to the stretch of watercourse that falls within or beside the boundaries of their land. Their primary responsibility is to keep the watercourse free of any obstructions that could hinder normal water flow. If the riparian owner fails to carry out their responsibilities, this could result in civil action.

A riparian owner should also check before carrying out any works near to the edge of a river, as such works may be subject to byelaws. If infringed, this could lead to enforcement action by the Environment Agency.

There is a presumption that the boundary between properties abutting a watercourse is the centre line of that watercourse. To confirm whether this is the case, a solicitor should check the deeds or the Index Map.

The Environment Agency has published useful guidance "Living on the edge" for owners of land or property alongside a watercourse. Sometimes, the Environment Agency or other organisations managing flood risk, may have statutory rights of access to properties which adjoin a watercourse. This may be for for maintenance, repair or rebuilding of any part of the watercourse or for access to or repair of monitoring equipment.

Development Control

Is there a Main River or canal located within 250m of the Site? **Yes**

Argyll's Comment



Sites which lie close to (but do not adjoin) a watercourse, may be subject to planning controls should redevelopment be considered. The Environment Agency and Internal Drainage Boards are normally consulted regarding any development within 50m of a Main River or drainage channel. Navigation authorities are normally consulted regarding any development within 250m of a canal, although this varies on a site by site basis.

¹Other factors influencing flood risk include historic flood events, geological indicators of flooding, proximate surface water features and elevation above sea level.

Dam and Reservoir Failure

Could the Site be affected by dam or reservoir failure? **No**

Argyll's Comment



The answer is based on detailed models provided by JBA Consulting. These predict the areas liable to flood around approximately 1700 key dams and reservoirs across England and Wales (if that dam or reservoir were to fail).



Recommendations

1. Although areas of the Site have been identified as at an increased risk of flooding, owing to the limited extent and location of this risk in relation to the main operational areas, further detailed assessment is not deemed necessary. However, it would be prudent to check with the current vendor to confirm whether or not historical flooding has significantly impacted upon farm operations, facilities and general farming practices.
2. If this risk relates to areas where buildings are present, you may wish to consider further assessment to establish anticipated flood depths which will aid a cost appraisal and installation of flood resistance and/or resilience protection measures (Please contact Argyll for more details).
3. You may wish to obtain insurance terms prior to completion of this transaction if the main buildings on Site are at risk.



Additional Considerations

Item	Summary	Suggested Action
Nitrate Vulnerable Zones	The farm is located within a Nitrate Vulnerable Zone. Nitrate Vulnerable Zones are designated areas of land draining into waters assessed to be polluted by nitrates. As the farm lies within a designated zone the land owner will need to comply with the requirements of the Nitrates Action Programme regulated by DEFRA and the Environment Agency.	Contact the Environment Agency for further information
Soils	BGS soil chemistry data for the Site indicates 15 - 25 mg/kg of arsenic, <1.8 mg/kg of cadmium, 60 - 90 mg/kg of chromium, <150 mg/kg of lead, 30 - 45 mg/kg of nickel.	None required
Sensitive Land Uses	If areas subject to statutory designations are located either on or in proximity to the Site, there may be land management implications or restrictions to planned developments. You are located inside/within 500m of a Nitrate Vulnerable Zone, and a Nitrate Vulnerable Zone.	Contact the Local Planning Authority or speak with planning consultant
Sewage Discharges	The data indicates that the Site has an operational sewage treatment system and an associated discharge consent. Discharge consents are granted by the Environment Agency (EA) under Section 84(1) of the Water Resources Act 1991. We would advise consultation with the local EA office to determine the conditions placed on any consent or whether an exemption has been granted. If a consent is present, you should check whether there have been any breaches or discharge limits. It would be prudent to check any existing equipment to determine its age and whether replacement/upgrade is likely to be necessary within the short term.	Confirm with current owner whether or not this discharge is located on the farm. If so, confirm that the discharge complies with all current regulations and equipment is in good order
Asbestos (Commercial)	If the buildings at the Site were constructed or renovated during the period between 1950 and 1999, then the fabric of these buildings may contain asbestos in a variety of forms.	Check Asbestos Register and Management Plan

Generic Guidance

Item	Summary	Suggested Action
Energy Performance Certificate	Under the Energy Performance of Buildings (England and Wales) Regulations 2012 and the Energy Performance of Buildings (Scotland) Regulations 2008, there is a requirement for all buildings to have an Energy Performance Certificate (EPC) upon their construction, sale or lease (and in some cases when the building is modified).	Check EPC or conduct energy assessment
Silage, Slurry, Oil, Storage (Farms)	Under the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991, silage, slurry or fuel storage facilities constructed after March 1991 have to be designed and built to minimum standards to prevent the pollution of Controlled Waters.	Compliance Audit
Above and Below Ground Storage	It is common for agricultural premises to store a variety of substances in above ground and underground storage tanks (ASTs and USTs). Most commonly red diesel, heating oil and occasionally petrol on larger estates. There is no reliable database of underground storage tanks nor are all above ground tanks marked on historical maps.	Check all tanks and surrounding land for signs of leaks or spills, such as stained ground or vegetation die-back

Item	Summary	Suggested Action
Tree Preservation Orders / Hedgerows	<p>The objective of a TPO is to protect trees that make a significant impact on their surroundings (important feature within the local landscape or an historical association within the local area). If a tree has an associated TPO then it is an offence to cut down, prune, uproot, wilfully damage or destroy it.</p> <p>Under The Town and Country Planning (Tree Preservation) (England) Regulations 2012, the existing regulations have continued for England and Wales. Farms situated in Wales will follow guidance regulated by the Welsh Assembly Government.</p>	Contact the Local Planning Authority for further information
Hedgerow Regulations 1997	The Hedgerow Regulations came into force in 1997 to protect the most important hedges in the countryside from being removed. The regulations apply to hedges which are more than 20 metres long or which meet another hedgerow at either end. If you remove a hedgerow without permission you are liable to an unlimited fine and may have to replace the hedgerow.	Contact the Local Planning Authority for further information
Drainage	In addition to natural drainage, the management of drains is essential to a farm. It is likely that current land owners will pay a subscription to a drainage board. Drainage maps will be available from the current farm owner. Should you wish these to be reviewed, Argyll would be happy to arrange this to be carried out by an accredited drainage expert.	Request information from the current owner
Operational Compliance	Such liabilities may arise if the Site is in commercial/industrial use and both the Site and the business are being purchased, or the Site is to be purchased as an investment with an operational business as a tenant.	Compliance audit
Electrical Equipment	Prior to 1986 Polychlorinated Biphenyls (PCBs) were used as a fire retardant in cooling oils for electrical equipment. Under the Environmental Protection (Disposal of PCB and other Dangerous Substances) Regulations 2000, PCB containing equipment has been banned.	Confirm removal of PCBs or test equipment
Interceptors	Drainage from car parks or operational areas may discharge to Controlled Waters. This discharge is likely to require treatment prior to release, for example an oil/water interceptor.	Check for valid discharge consent
Air Conditioning/ Refrigeration Equipment	Air conditioning and refrigeration equipment contains heat transfer fluid. This fluid may be an ozone depleting substance (ODS). Any fluid in a halon fire-extinguishing system is also a ODS.	Inspect maintenance records
Change of Use Redevelopment	Proposed changes in land use require permission from the Local Authority and are subject to conditions as part of the statutory planning process.	Contact local planning authority or speak with planning consultant

Whilst this assessment is primarily a desktop assessment of potential soil and groundwater liabilities, the above potential liability considerations that fall outside the scope of the Risk Analysis Methodology have been identified.

Additional sources of information may be available for the Site. These sources could include previous environmental reports (including audits, contaminated land investigation and remediation reports), valuation reports (including property observation checklists), a Land Quality Record, and property deeds. Argyll Environmental would be pleased to review any reports that are available and revise this report accordingly. This may entail additional fees depending upon the volume and complexity of information available. Please contact us for further information.

Contents of the Data Section

Section	Description
Tabular Summary	<p>This section presents a tabular summary of information found for the Site and surrounding area. The data is presented in three buffer zones for ease of reference: data found at the Site, from 1-250m and from 251-500m.</p> <p>If a database has been searched the number of records found will be displayed under the relevant search band. If a database is not available or has not been searched, this will be represented by the abbreviation N/A under the relevant search band.</p>
Current Land Use Mapping	<p>This section provides information on current land uses and is divided into three sections, statutory information, waste and current industrial uses. It is preceded by two maps.</p>
Statutory Information	<p>This section presents detailed statutory information for the Site and surrounding area (up to 500m depending upon dataset). The Map ID of each feature is indicated (where applicable) followed by specific information on each feature and its distance and direction from the Site.</p> <p>If no data is identified then the section will be omitted.</p>
Waste	<p>This section presents detailed information on waste and landfill sites for the Site and surrounding area (up to 500m depending upon dataset). The Map ID of each feature is indicated (where applicable) followed by specific information on each feature and its distance and direction from the Site.</p> <p>If no data is identified then the section will be omitted.</p>
Current Industrial Land Use	<p>This section presents detailed information on current land use for the Site and surrounding area (0-250m). The Map ID of each feature is indicated (where applicable) followed by specific information on each feature and its distance and direction from the Site.</p> <p>If no data is identified then the section will be omitted.</p>
Historical Land Use Mapping	<p>The Historical Land Use Map presents 1:10,000 scale and selected 1:2,500 scale (tanks and energy facilities) historical land use information within 250m of the Site boundary.</p>
Historical Land Use	<p>This section presents selected information on historical land use for the Site and surrounding area (0-250m). The Map ID of each feature is indicated (where applicable) followed by specific information on each feature and its distance and direction from the Site.</p> <p>If no data is identified then the section will be omitted.</p>
Aquifer Designations and Geology	<p>This section is preceded by two maps that present information relating to the aquifer designations beneath the Site. The first of these maps indicates the designation of the Superficial geology. The second map presents the aquifer designation of the solid geology.</p> <p>These maps are followed by detailed information in relation to aquifer designations/groundwater vulnerability and geology at the Site and surrounding area (0-500m).</p> <p>If no data is identified then the section will be omitted.</p>
Environmental Sensitivity	<p>This section presents detailed information on the environmental sensitivity of the Site and surrounding area (up to 500m depending upon dataset) and is preceded by two maps. The first shows areas with statutory designations, the second shows source protection zones. The Map ID of each feature is indicated (where applicable) followed by specific information on each feature and its distance and direction from the Site.</p> <p>If no data is identified then the section will be omitted.</p>
Natural and Mining Related Hazards	<p>This section contains information on natural and mining related hazards which may affect the Site. These include subsidence, radon and mining.</p> <p>If no data is identified then the section will be omitted.</p>

Farm Specific Issues	<p>This section firstly presents data relating to designated features and areas that may be present on or in proximity to a farm and could affect or restrict farming operations (e.g. listed buildings, heritage sites etc.).</p> <p>If no data is identified then the section will be omitted.</p>
Soil Chemistry	<p>This section is preceded by five maps that present information relating to the concentrations of Arsenic, Cadmium, Chromium, Lead and Nickel within soils beneath the farm and surrounding area. The maps are immediately followed by the detailed data.</p> <p>If no data is identified then the section will be omitted.</p>
Flooding Risk Information	<p>This section presents information relating to the four main types of flooding – River flooding, Coastal/tidal flooding, surface water flooding and groundwater flooding. Some of this data will be preceded by an associated map.</p>
High Speed 2	<p>This section presents information relating to the proximity and nature of the High Speed 2 rail link. If the rail link is located within 500m of the Site a map will be shown to show its location.</p> <p>If no data is identified then the section will be omitted.</p>

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Tabular Summary

Statutory Information

Authorisations	On-site	1-250m	251-500m
Local Authority Pollution Prevention and Controls	0	0	N/A
Local Authority Integrated Pollution Prevention and Controls	0	0	N/A
Integrated Pollution Controls	0	0	N/A
Integrated Pollution Prevention And Control	0	0	N/A
Registered Radioactive Substances	0	0	N/A
Discharges	On-site	1-250m	251-500m
Discharge Consents	0	2	N/A
Water Industry Act Referrals	0	0	N/A
Control of Major Accident Hazards Sites	0	0	0
Explosive Sites	0	0	0
Notification of Installations Handling Hazardous Substances	0	0	0
Planning Hazardous Substance Consents	0	0	0
Contraventions	On-site	1-250m	251-500m
Contaminated Land Register Entries and Notices	0	0	N/A
Local Authority Pollution Prevention and Control Enforcements	0	0	N/A
Enforcement and Prohibition Notices	0	0	N/A
Planning Hazardous Substance Enforcements	0	0	0
Substantiated Pollution Incident Register	0	0	0
Prosecutions Relating to Authorised Processes	0	0	N/A
Prosecutions Relating to Controlled Waters	0	0	N/A

Waste

Waste/Landfill Sites	On-site	1-250m	251-500m
BGS Recorded Landfill Sites	0	0	0
Integrated Pollution Control Registered Waste Sites	0	0	N/A
Licensed Waste Management Facilities (Landfill Boundaries)	0	0	N/A
Licensed Waste Management Facilities (Locations)	1	0	0
Local Authority Recorded Landfill Sites	0	0	0
Registered Landfill Sites	0	0	0
Registered Waste Transfer Sites	0	0	N/A
Registered Waste Treatment or Disposal Sites	1	0	N/A
Historical Landfill Sites	0	0	0

Current Land Use

Current Potentially Contaminative Uses	On-site	1-250m	251-500m
Contemporary Trade Directory Entries	1	0	N/A
Fuel Station Entries	0	0	N/A
Other Features	On-site	1-250m	251-500m
Telecommunication Base Stations	0	0 ²	N/A
Overhead Transmission Lines	0	0	N/A

Historical Land Use

Historical Potentially Contaminative Uses	On-site	1-250m	251-500m
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²Telecommunication base stations are only searched to a radius of 100m from the Site boundary.

Historical Land Use

Potentially Contaminative Industrial Uses (Past Land Use)	0	0	N/A
Historical Tanks And Energy Facilities	0	0	N/A
Potentially Infilled Land	On-site	1-250m	251-500m
Former Marshes	0	0	N/A
Potentially Infilled Land (Non-Water)	0	0	N/A
Potentially Infilled Land (Water)	0	0	N/A

Groundwater Vulnerability

Hydrogeology	On-site	1-250m	251-500m
Superficial Aquifer Designations	1	0	0
Bedrock Aquifer Designations	1	0	0
Groundwater Vulnerability	1	0	N/A
Geology	On-site	1-250m	251-500m
Low Permeability Drift Deposits	1	N/A	N/A
BGS 1:625,000 Solid Geology	1	N/A	N/A

Environmental Sensitivity

Environmental Sensitivity	On-site	1-250m	251-500m
Areas of Outstanding Natural Beauty	0	0	N/A
Environmentally Sensitive Areas	0	0	N/A
Forest Parks	0	0	N/A
Local Nature Reserves	0	0	0
Marine Nature Reserves	0	0	0
National Nature Reserves	0	0	0
National Parks	0	0	N/A
National Scenic Areas	0	0	N/A
Nitrate Sensitive Areas	0	N/A	N/A
Nitrate Vulnerable Zones	2	N/A	N/A
Ramsar Sites	0	0	0
River Quality Biology Sampling Points	0	0	N/A
River Quality Chemistry Sampling Points	0	0	N/A
Nearest Surface Water Feature	1	0	N/A
Sites of Special Scientific Interest	0	0	0
Special Areas of Conservation	0	0	0
Special Protection Areas	0	0	0
Water Abstractions	0	0	0
Source Protection Zones	1	0	N/A

Natural and Mining Related Hazards

Subsidence	On-site	1-250m	251-500m
Collapsible Ground Stability Hazards	1	0 ³	N/A
Compressible Ground Stability Hazards	1	0	N/A
Ground Dissolution Stability Hazards	1	0	N/A
Landslide Ground Stability Hazards	1	0	N/A
Running Sand Ground Stability Hazards	1	0	N/A
Shrinking or Swelling Clay Subsidence Hazards	1	0	N/A

³Ground stability hazards are only searched to a radius of 50m from the Site boundary.

Natural and Mining Related Hazards

Non-Coal Mining Hazards	1	0	N/A
Radon	On-site	1-250m	251-500m
Radon Potential	1	N/A	N/A
Radon Protection Measures	1	N/A	N/A
Mining	On-site	1-250m	251-500m
Brine Compensation Areas	0	N/A	N/A
Coal Mining Affected Areas	0	N/A	N/A
Natural and Mining Cavities	0	0	N/A
Mining Instability	0	0	N/A
BGS Recorded Mineral Sites	0	0	N/A

Farm Specific Issues

Farm Specific Issues	On-site	1-250m	251-500m
Listed Buildings	0	5	0
World Heritage Sites	0	0	0
Scheduled Monuments	0	0	1
Historic Battlefields	0	0	0
Historic Landscapes	0	0	0
Country Parks	0	0	0
Ancient Woodlands	0	0	0
Soils	On-site	1-250m	251-500m
BGS Soil Chemistry Arsenic	1	0	0
BGS Soil Chemistry Cadmium	1	0	0
BGS Soil Chemistry Chromium	1	0	0
BGS Soil Chemistry Lead	1	0	0
BGS Soil Chemistry Nickel	1	0	0

Flooding

Current Flood Risk	On-site	1-250m	251-500m
Flooding From Rivers or Sea	1	0	0
Flooding From Rivers or Sea (in an Extreme Event)	1	0	0
Areas Benefiting from Flood Defences	0	0	0
Flood Water Storage Areas	0	0	0
Flood Defences	0	0	0
Risk of Flooding from Rivers and Sea	4	0	0
Groundwater Flood Risk	0	0	0
Surface Water Flooding (1:75 year rainfall event)	1	0	1
Surface Water Flooding (1:200 year rainfall event)	2	0	0
Surface Water Flooding (1:1,000 year rainfall event)	2	0	0
Dam or Reservoir Failure	0	0	0
Historical Flooding	On-site	1-250m	251-500m
Historical Flood Events	0	0	0
Geological Indicators of Flooding	0	0	0
Other Flood Information	On-site	1-250m	251-500m
Surface Water Feature	0	3	2
Detailed River Network	1	0	0

High Speed 2

High Speed 2	On-site	1-1000m	1001-5001m
Proposed Line	0	0	N/A

Tabular Summary Explanation

Argyll has carefully selected a range of datasets which are considered appropriate for the intended use of this report. Each dataset is searched to a set radius from the Site boundary and the tabular summary is divided into different search bands accordingly. If a database is searched and information is found, then the number of records available are detailed in the table above. If the database was searched and no data was found, then a zero will be present. If a database was not searched then the abbreviation N/A will be found, indicating this information was not available at the radius searched.

Landfill Site Information

Registered landfill site boundaries (where available), are shown on the map as a red diagonal hatched polygon and referred to in the map legend as Registered Landfill Sites. At present no complete national dataset exists for landfill site boundaries, therefore a point grid reference provided by the data supplier is used for some landfill sites. The point grid references supplied provide only an approximate position, and can vary from the site entrance to the centre of the site. A point cannot properly define landfill boundaries therefore Landmark constructs a 250 metre or 100 metre "buffer" zone around the point to warn of the possible presence of landfill. The "buffer" zone is shown on the map as an orange crosshatched area and is referred to in the map legend as Potential Landfill Buffer.

Local Authority landfill data is sourced from individual local authorities that were able to provide information on sites operating prior to the introduction of the Control of Pollution Act (COPA) in 1974. Appropriate authorities are listed under Local Authority Landfill Coverage with an indication of whether or not they were able to make landfill data available. Details of any records identified are disclosed. You should be aware that if the local authority had landfill data but passed it to the relevant Environment Agency office, it does not necessarily mean that local authority landfill data is now included in our other Landfill datasets. In addition if no data has been made available for all or part of the search area, you should be aware that a negative response under 'Local Authority Recorded Landfill Sites' does not necessarily confirm that no local authority landfills exist.

Subsidence Hazards

Information on subsidence hazards is provided by the British Geological Survey (BGS). Information present within 250m of the Site is reported under Natural and Mining Related Hazards. Due to the level of detail of this data and the complexities of the real world, the BGS recommends a precautionary approach when using this information and advises taking the worst reading noted for each dataset within the vicinity of a property. Therefore, Argyll reports the presence of a ground stability or non-coal related mining hazard in the Risk Analysis section based on the highest reading found within 50m of the Site boundary.

Statutory Information

Discharges

Discharge Consents

Map ID	Details	Distance	Direction
1	Operator: Mr Michael Hart, Property Type: Domestic Property (Single), Location: Pinewood Baldock Road Cottered Buntingford Hertfordshire Sg9 9lj, Authority: Environment Agency, Thames Region, Catchment Area: Not Supplied, Permit Ref: Npswqd001532, Permit Version: 1, Effective Date: 1st May 2008, Issued Date: 1st May 2008, Revocation Date: Not Supplied, Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company, Discharge Environment: Freshwater Stream/River, Receiving Water: Unnamed Tributary Ofardeley Bk, Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995), Positional Accuracy: Located by supplier to within 10m.	193m	N
2	Operator: Mr M F Roberts, Property Type: Domestic Property (Single), Location: Flanders Green Cottage Brook End Cottered Buntingford Herts Sg9 9qr, Authority: Environment Agency, Thames Region, Catchment Area: Rib, Permit Ref: Canm.0555, Permit Version: 1, Effective Date: 24th February 2003, Issued Date: 24th February 2003, Revocation Date: Not Supplied, Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company, Discharge Environment: Freshwater Stream/River, Receiving Water: Ardeley Brook, Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995), Positional Accuracy: Located by supplier to within 10m.	200m	W

Hazardous Sites

Waste

Waste/Landfill Sites

Local Authority Landfill Coverage

Hertfordshire County Council - Has supplied landfill data

East Hertfordshire District Council - Has supplied landfill data

Licensed Waste Management Facilities (Locations)

Map ID	Details	Distance	Direction
3	Licence Number: 80253, Location: Brookend Farm Bungalow, Cottered, Buntingford, Hertfordshire, SG9 9QR, Operator: Skipp Ernest Thomas James, Operator Location: Not Supplied, Authority: Environment Agency - Thames Region, North East Area, Site Category: Metal Recycling Sites (Mixed), Licence Status: Expired, Issued Date: 8th April 1993, Last Modified: Not Supplied, Expiry Date: 4th May 1994, Suspended Date: Not Supplied, Revoked Date: Not Supplied, Surrendered Date: Not Supplied, IPPC Reference: Not Supplied, Positional Accuracy: Located by supplier to within 10m.	On Site	NW

Registered Waste Treatment or Disposal Sites

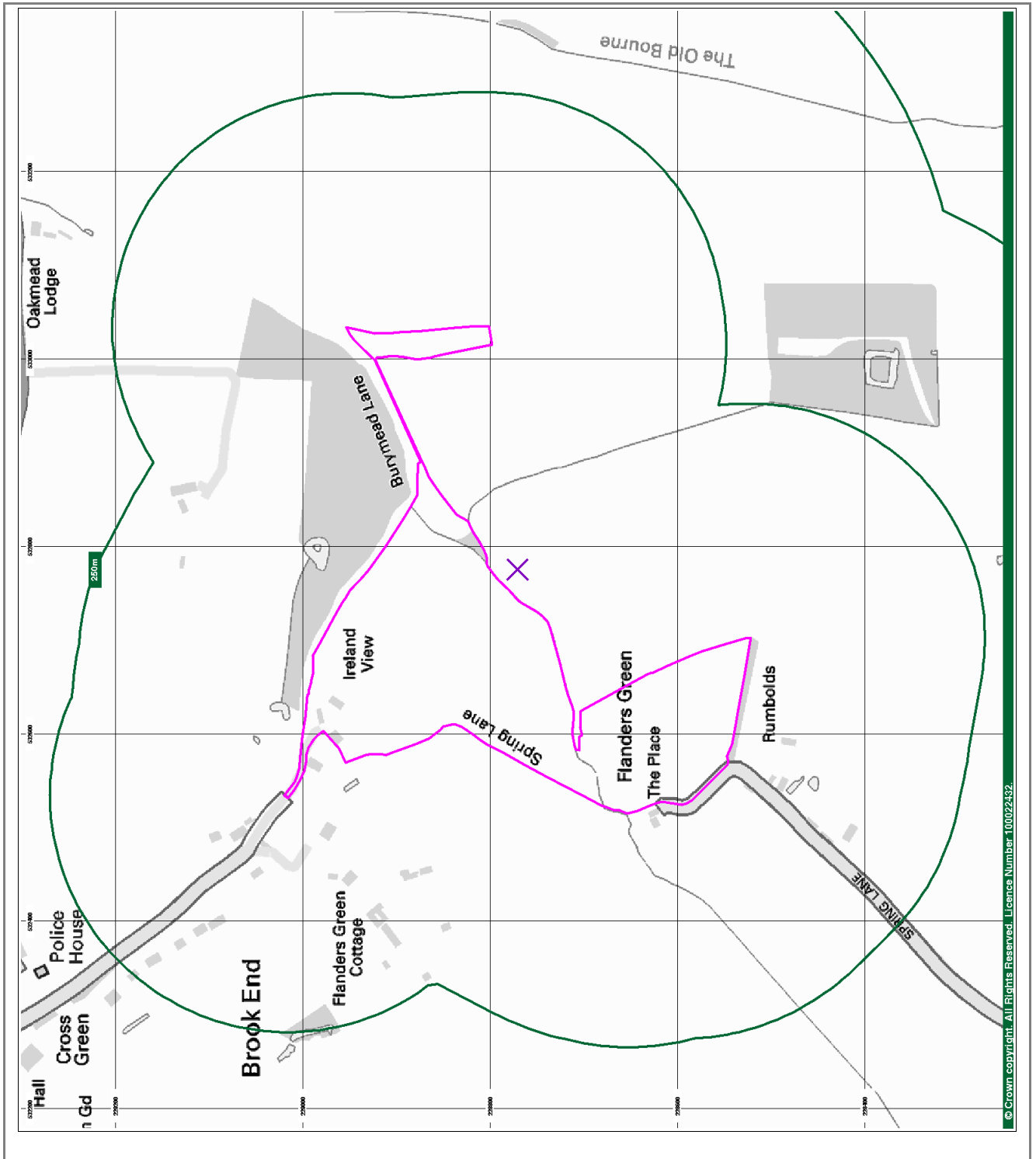
Map ID	Details	Distance	Direction
4	Licence Holder: E T J Skipp, Licence Reference: 93/306, Site Location: Brookend Farm Bungalow, Cottered, BUNTINGFORD, Hertfordshire, SG9 9QR, Operator Location: As Site Address, Authority: Environment Agency - Thames Region, North East Area, Site Category: Scrapyard, Maximum Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year), Waste Source Restrictions: No known restriction on source of waste, Status: Operational as far as is known, Dated: 8th April 1993, Preceded By Licence: Not Given, Superseded By Licence: Not Given, Positional Accuracy: Located by supplier to within 100m, Boundary Quality: Not Supplied, Authorised Waste: 1. scrap metal, 2. vehicles, Prohibited Waste: N/A.	On Site	NW

Current Land Use

Current Potentially Contaminative Uses

Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
5	Scrap Metal Merchants, Name: E T J Skipp & Son, Status: Inactive, Location: Island View, Brook End, Cottered, Buntingford, Hertfordshire, SG9 9QR, Positional Accuracy: Automatically positioned to the address.	On Site	NW

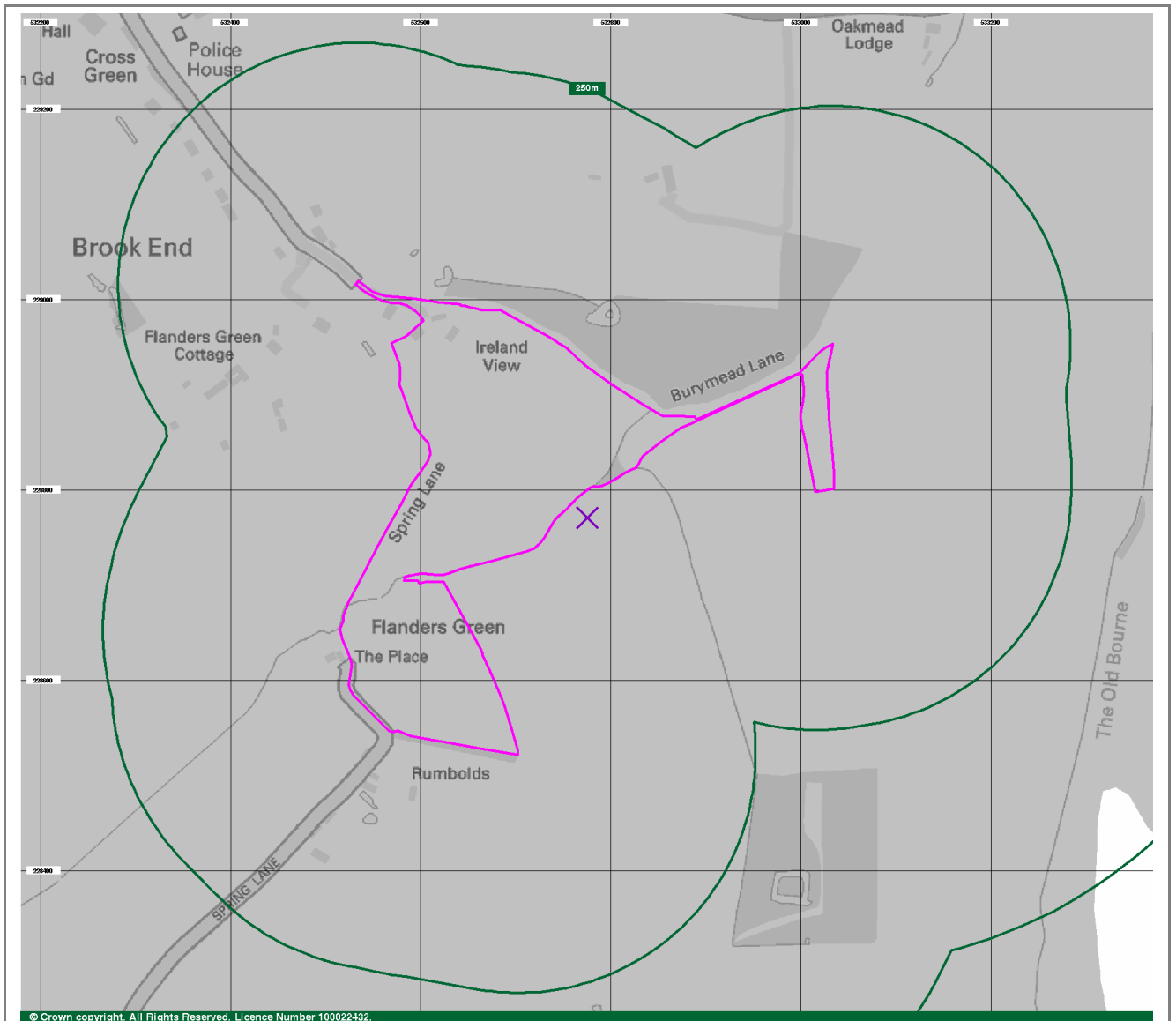


Historical Land Uses within 250m

- General**
 - Site Boundary
 - Search Buffer
 - Bearing Reference Point
 - Grid Lines
 - Reference Number
- Potentially Contaminative Uses**
 - Point Feature
 - Area Feature
 - Line Feature
- Potentially Infilled Land**
 - Point Feature
 - Area Feature
 - Line Feature
- Former Marshes**
 - Point Feature
 - Area Feature
 - Line Feature
- Historical Tanks and Energy Facilities**
 - Point Feature

Historical Land Use

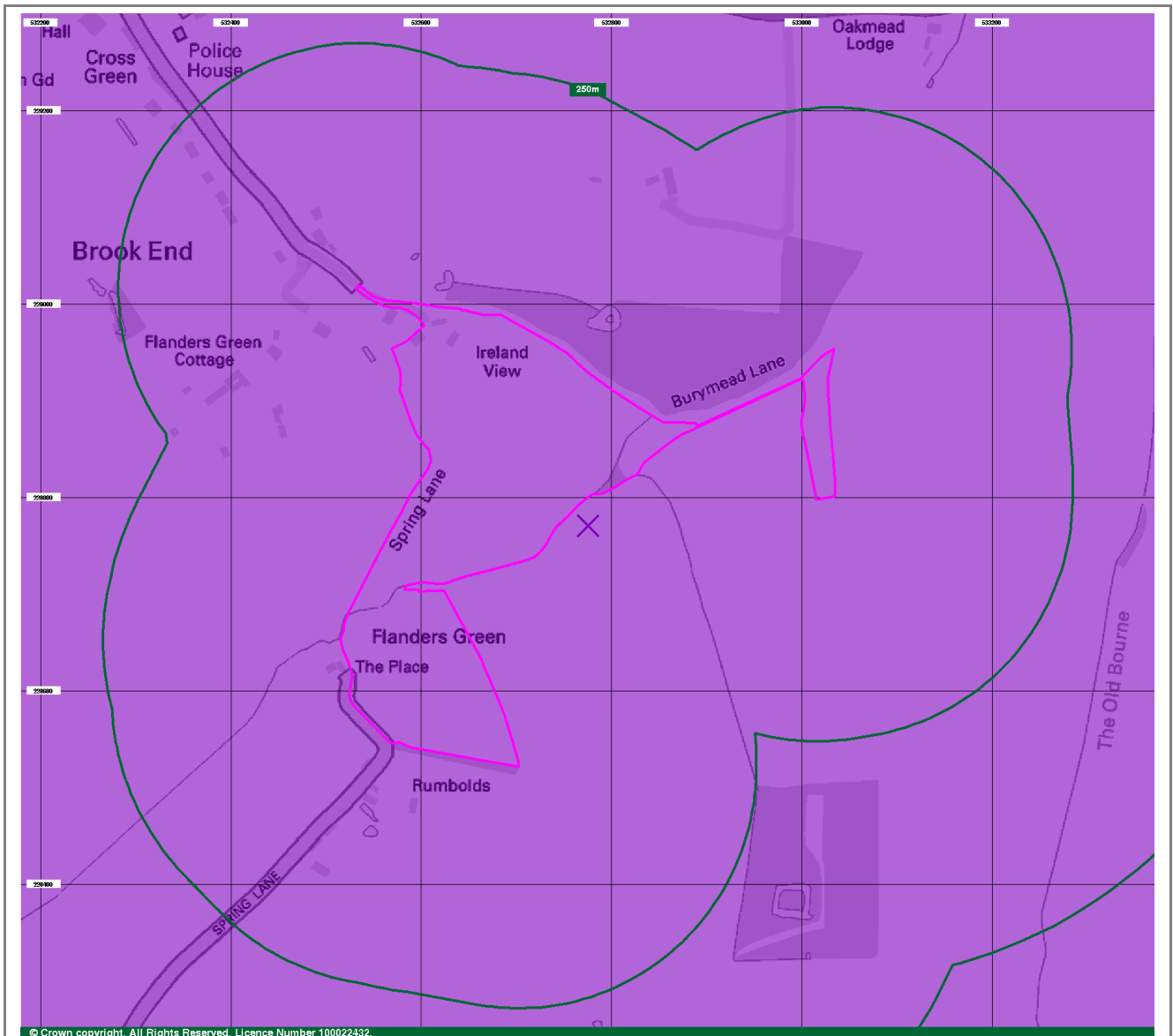
Aquifer Designation (Superficial)



Aquifer Designations

- | | |
|-------------------------|----------------------------|
| Site Boundary | Principal Aquifer |
| Search Buffer | Secondary A Aquifer |
| Bearing Reference Point | Secondary B Aquifer |
| N | Secondary Undifferentiated |
| | Unproductive Strata |
| | Unknown |

Aquifer Designation (Bedrock)



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Aquifer Designations

- | | |
|---|--|
|  Site Boundary |  Principal Aquifer |
|  Search Buffer |  Secondary A Aquifer |
|  Bearing Reference Point |  Secondary B Aquifer |
|  N |  Secondary Undifferentiated |
| |  Unproductive Strata |
| |  Unknown |

Groundwater Vulnerability

Hydrogeology

Superficial Aquifer Designations

Map ID	Details	Distance	Direction
	Unproductive Strata The rock layers or drift deposits have a low permeability that have negligible significance for water supply or river base flow.	On Site	-

Bedrock Aquifer Designations

Map ID	Details	Distance	Direction
	Principal Aquifer These aquifers are typically formed of layers of rock or drift deposits that have a high permeability and provide a high level of water storage. They may support water supply and/or base river flow on a strategic scale.	On Site	-

Groundwater Vulnerability

Map ID	Details	Distance	Direction
	Soil Classification: Soils of Intermediate Leaching Potential (I1) - Soils which can possibly transmit a wide range of pollutants, Map Scale: 1:100,000, Map Name: Sheet 32 North Essex.	On Site	-

Geology

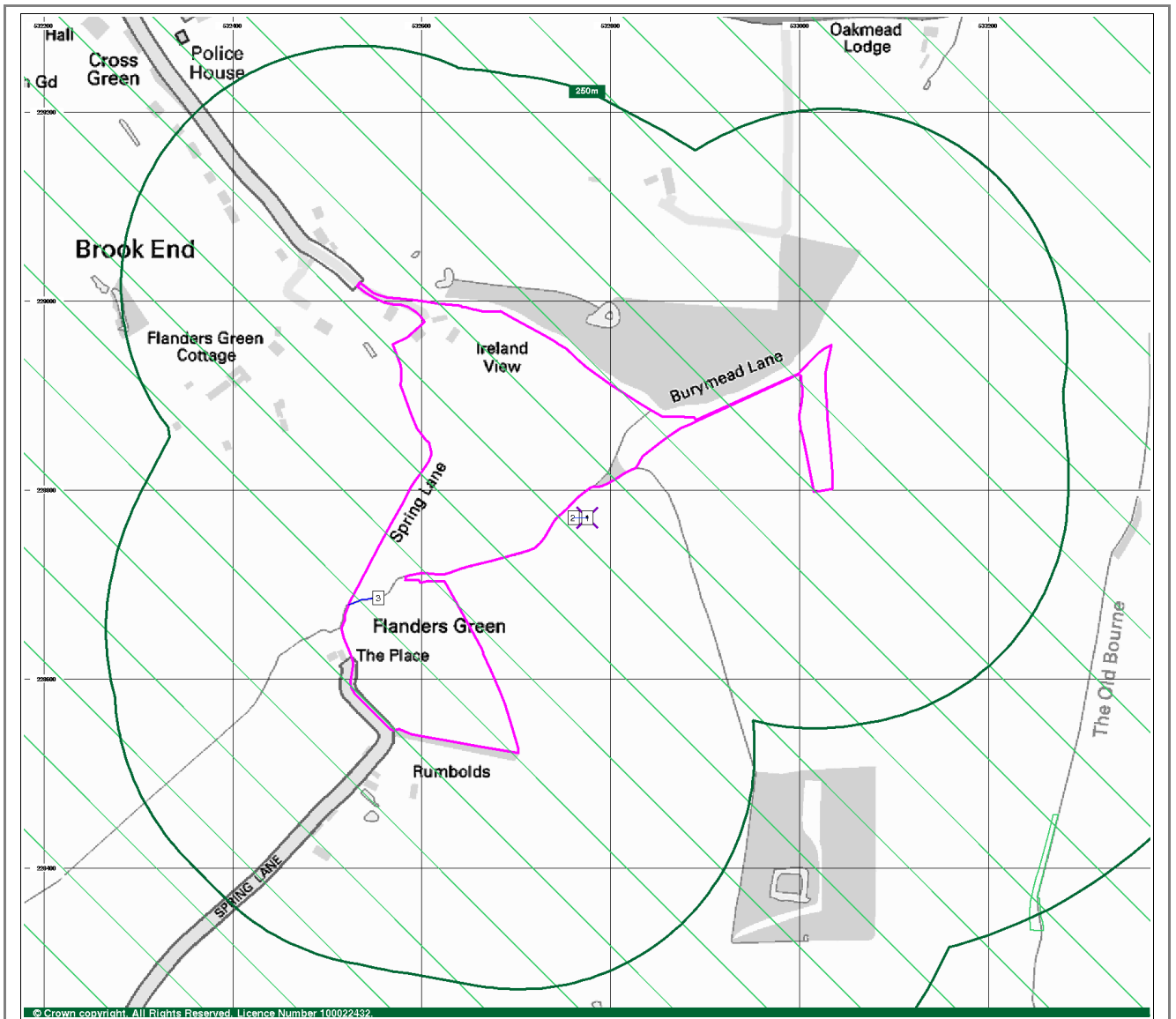
Low Permeability Drift Deposits

Map ID	Details	Distance	Direction
	Low permeability drift deposits occurring at the surface and overlying Major and Minor Aquifers are head, clay-with-flints, brickearth, peat, river terrace deposits and marine and estuarine alluvium, Map Sheet: Sheet 32 North Essex, Scale: 1:100,000.	On Site	-

BGS 1:625,000 Solid Geology

Map ID	Details	Distance	Direction
	White Chalk Subgroup.	On Site	-

Sensitive Land Uses



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Sensitive Land Uses

- | | | |
|------------------------------------|-------------------------|-------------------------------------|
| Site Boundary | Local Nature Reserve | Ramsar Site |
| Search Buffer | Marine Nature Reserve | Nearest Surface Water Feature |
| Bearing Reference Point | National Nature Reserve | Site of Special Scientific Interest |
| N | National Park | Special Area of Conservation |
| Area of Outstanding Natural Beauty | National Scenic Area | Special Protection Area |
| Environmentally Sensitive Area | Nitrate Sensitive Area | Water Abstraction |
| Forest Park | Nitrate Vulnerable Zone | Historical Flood Liability |

Source Protection Zones



Source Protection Zones

- | | | |
|-------------------------|---|--|
| Site Boundary | Inner zone (Zone 1) | Total catchment (Zone 3) |
| Search Buffer | Inner zone - subsurface activity only (Zone 1c) | Total catchment - subsurface activity only (Zone 3c) |
| Bearing Reference Point | Outer zone (Zone 2) | Special interest (Zone 4) |
| N | Outer zone - subsurface activity only (Zone 2c) | Source Protection Zone Borehole |

Environmentally Sensitive Features

Nitrate Vulnerable Zones

Map ID	Details	Distance	Direction
1	Name: , Description: Groundwater, Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA).	On Site	-
2	Name: , Description: Surface Water, Source: Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA).	On Site	-

Nearest Surface Water Feature

Map ID	Details	Distance	Direction
3	Surface water feature identified in proximity.	On Site	W

Source Protection Zones

Map ID	Details	Distance	Direction
	Name: Various, Source: Environment Agency, Head Office, Reference: Not Supplied, Type: Zone III (Total Catchment): The total area needed to support the discharge from the protected groundwater source.	On Site	-

Natural and Mining Related Hazards

Subsidence

Collapsible Ground Stability Hazards

Details	Distance	Direction
Risk: Very Low, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Compressible Ground Stability Hazards

Details	Distance	Direction
Risk: No Hazard, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Ground Dissolution Stability Hazards

Details	Distance	Direction
Risk: Very Low, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Landslide Ground Stability Hazards

Details	Distance	Direction
Risk: Very Low, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Running Sand Ground Stability Hazards

Details	Distance	Direction
Risk: Very Low, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Shrinking or Swelling Clay Subsidence Hazards

Details	Distance	Direction
Risk: Low, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Non-Coal Mining Hazards

Details	Distance	Direction
Risk: Rare, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Radon

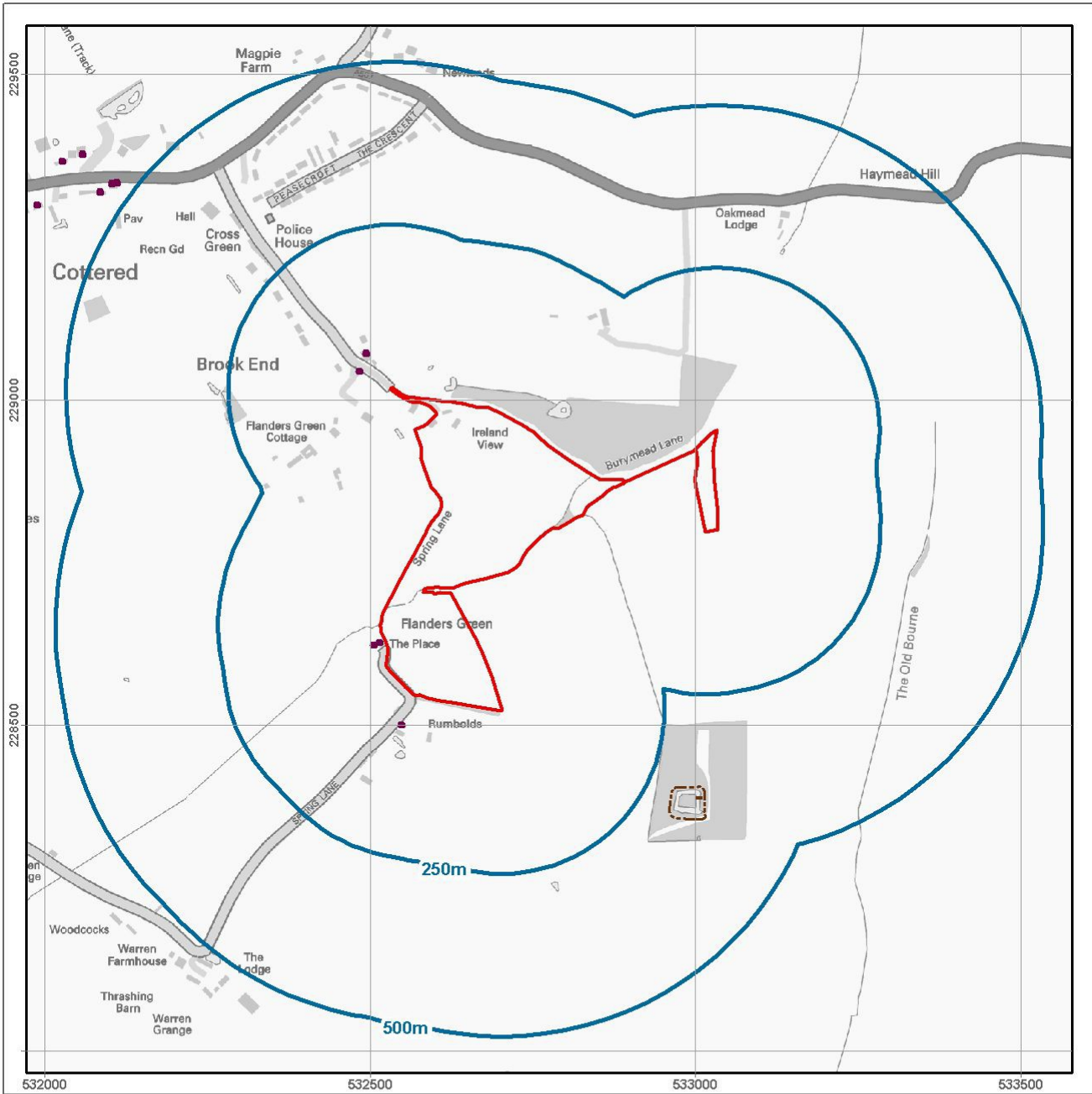
Radon Potential

Details	Distance	Direction
The property is in a lower probability radon area, as less than 1% of homes are above the action level, Source: British Geological Survey, National Geoscience Information Service.	On Site	-



Radon Protective Measures

Details	Distance	Direction
None, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Farm Specific Issues



Archaeological Sites of Interest

-  Client Site
-  Listed Buildings
-  Historic Battlefields
-  World Heritage Sites
-  Historic Landscapes
-  Scheduled Monuments
-  Ancient Woodlands



* - Not all features in legend may be present in above map

Nominal scale at A4 paper size - 1:9,750

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Farm Specific Issues

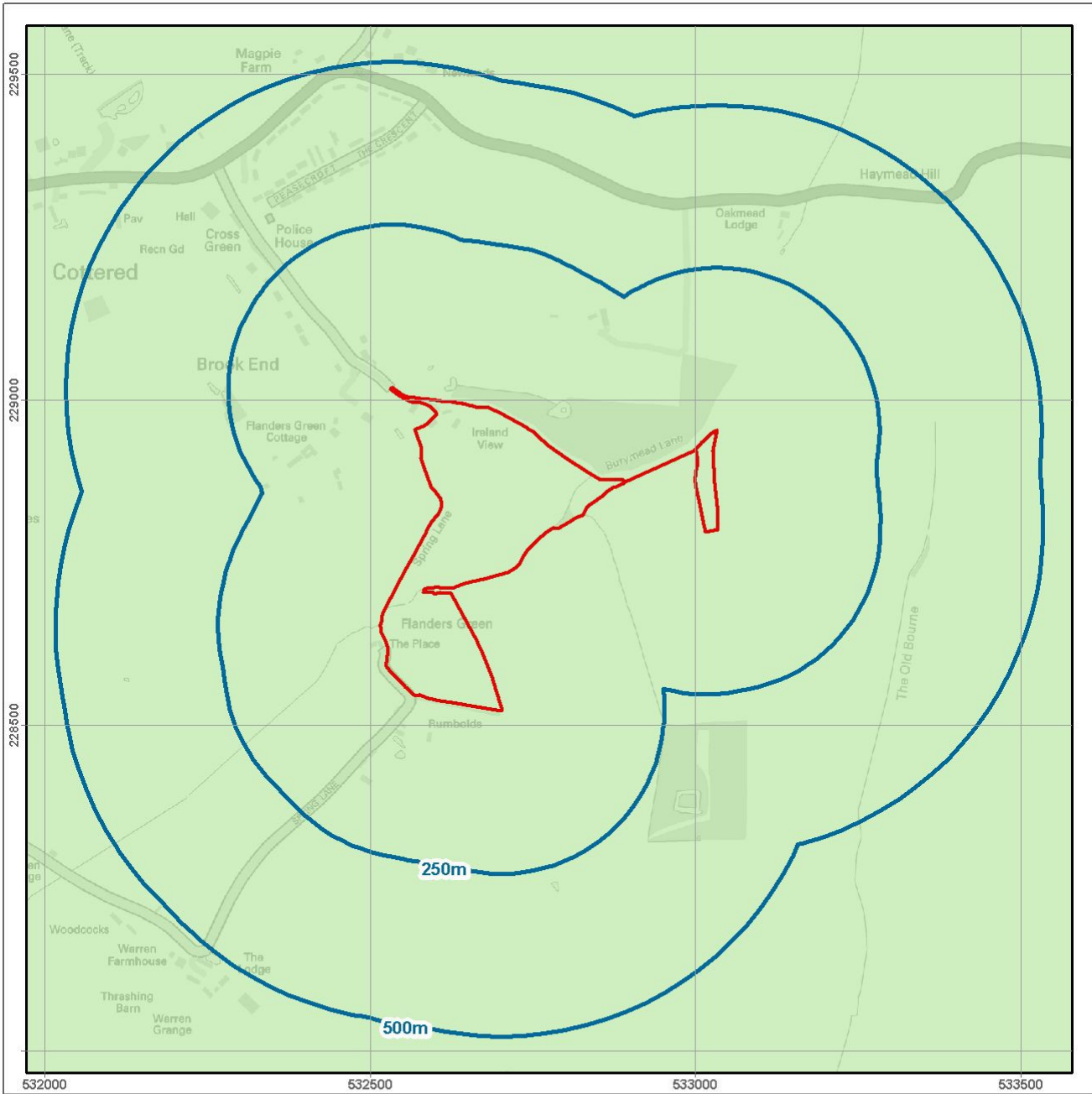
Listed Buildings

Details	Distance	Direction
List Entry: 1175309, Name: STABLE AT THE PLACE 2 METERS TO EAST OF HOUSE, Grade: II, List Date: 06/07/1984, Amend Date: , NGR: TL 32514 28627, Capture Scale: 1:2500, Easting: 532514, Northing: 228627, Area (hectares): 0.000270632938715	8.9m	SW
List Entry: 1101304, Name: THE PLACE, Grade: II, List Date: 06/07/1984, Amend Date: , NGR: TL 32505 28623, Capture Scale: 1:2500, Easting: 532505.35, Northing: 228623.062, Area (hectares): 0.000270632938816	18.4m	SW
List Entry: 1175297, Name: RUMBOLDS, Grade: II*, List Date: 22/02/1967, Amend Date: 06/07/1984, NGR: TL 32548 28501, Capture Scale: 1:2500, Easting: 532547.74, Northing: 228500.773, Area (hectares): 0.000270632938715	48.7m	SW
List Entry: 1175026, Name: SATRAWBERRY COTTAGE, Grade: II, List Date: 11/09/1980, Amend Date: , NGR: TL 32483 29044, Capture Scale: 1:2500, Easting: 532483, Northing: 229044, Area (hectares): 0.000270632938513	54.5m	NW
List Entry: 1101294, Name: GREEN GATES, Grade: II, List Date: 06/07/1984, Amend Date: , NGR: TL 32494 29072, Capture Scale: 1:2500, Easting: 532494, Northing: 229072, Area (hectares): 0.000270632938482	64.7m	NW

Scheduled Monuments

Details	Distance	Direction
List Entry: 1009454, Name: The Island: a moated site 500m south-east of Flanders Green, Schedule Date: 07/09/1992, Amend Date: , NGR: TL 32988 28381, Capture Scale: 1:10000, Easting: 532988.702883, Northing: 228380.550708, Area (hectares): 0.249697515057	289.4m	SE

BGS Soil Chemistry – Arsenic



Soil Chemistry - Arsenic

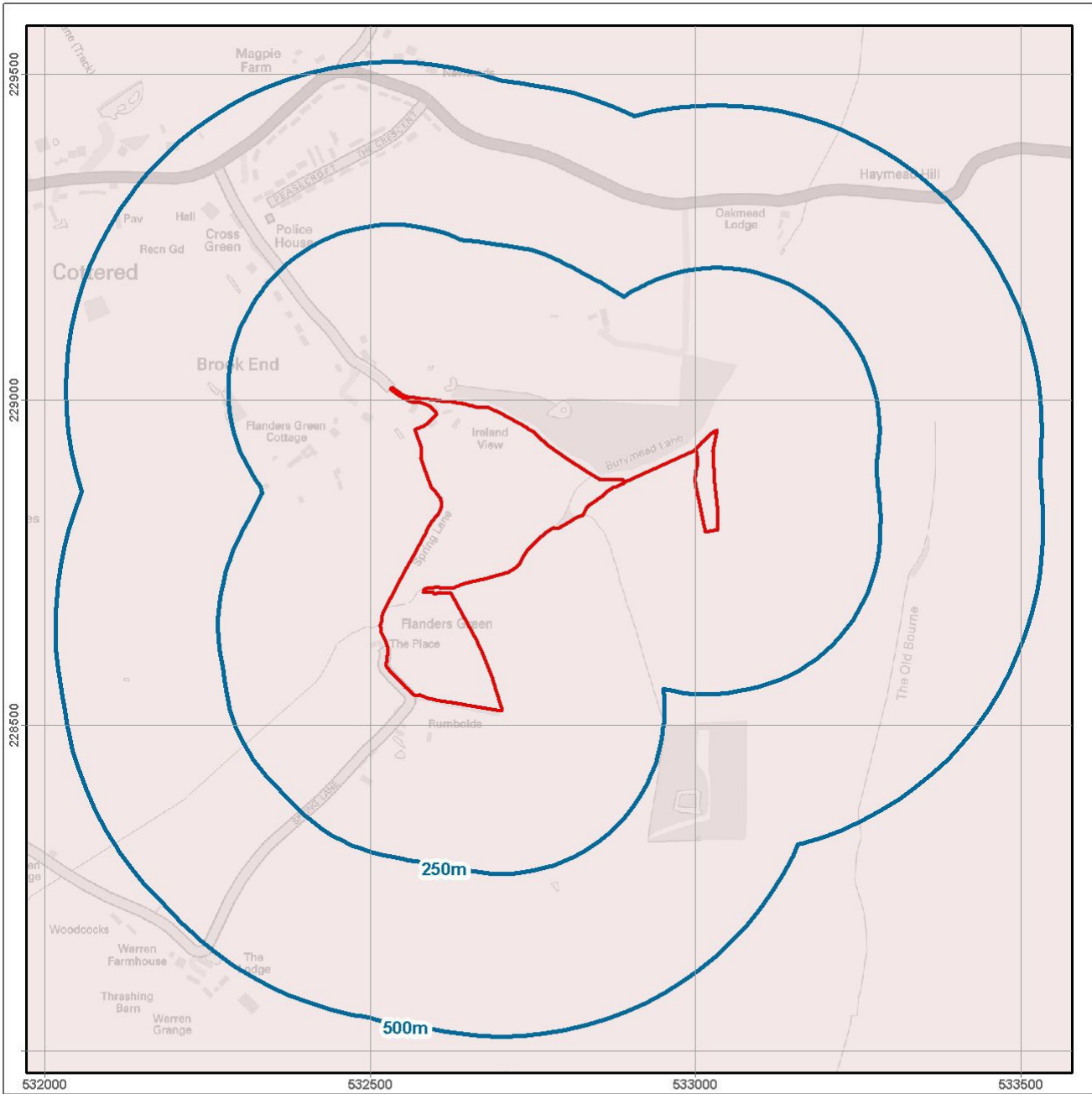


* - Not all features in legend may be present in above map

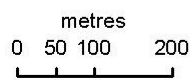
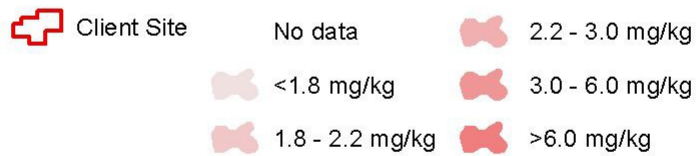
Nominal scale at A4 paper size - 1:9,750

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BGS Soil Chemistry – Cadmium



Soil Chemistry - Cadmium

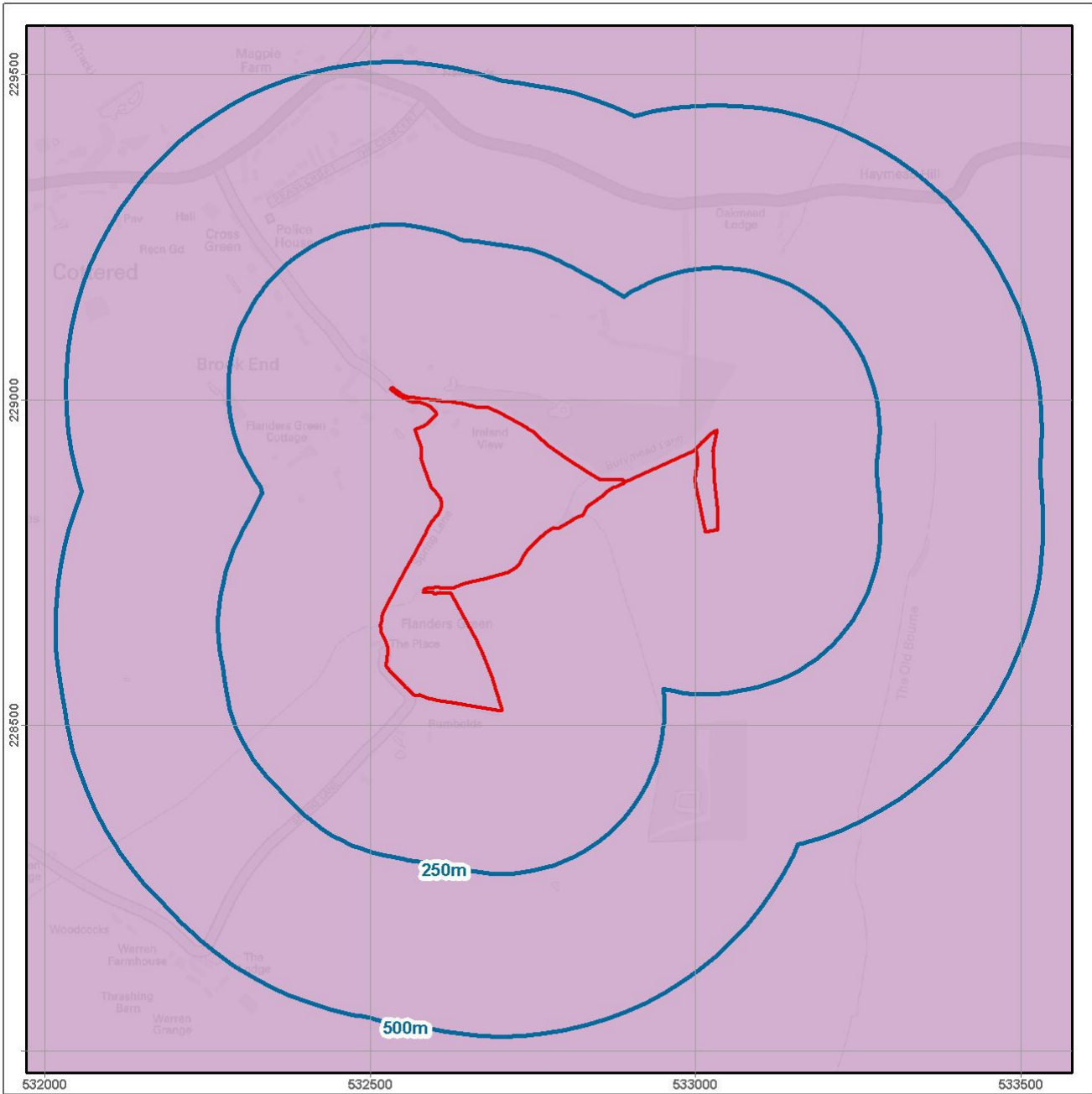


* - Not all features in legend may be present in above map

Nominal scale at A4 paper size - 1:9,750

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BGS Soil Chemistry – Chromium



Soil Chemistry - Chromium

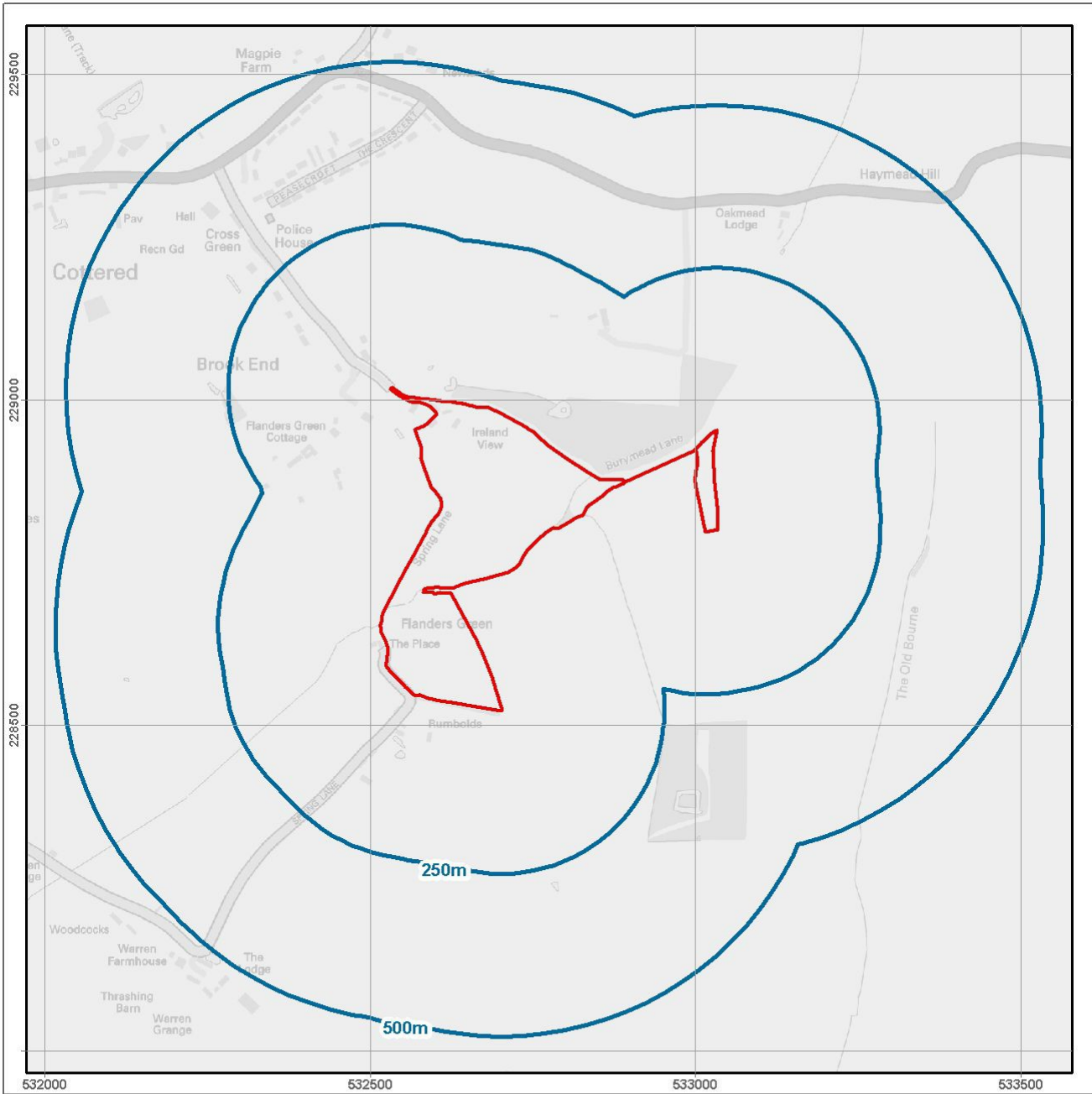


* - Not all features in legend may be present in above map

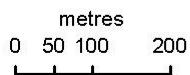
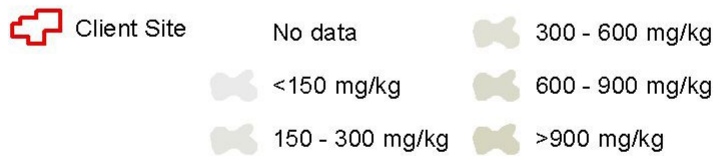
Nominal scale at A4 paper size - 1:9,750

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BGS Soil Chemistry – Lead



Soil Chemistry - Lead

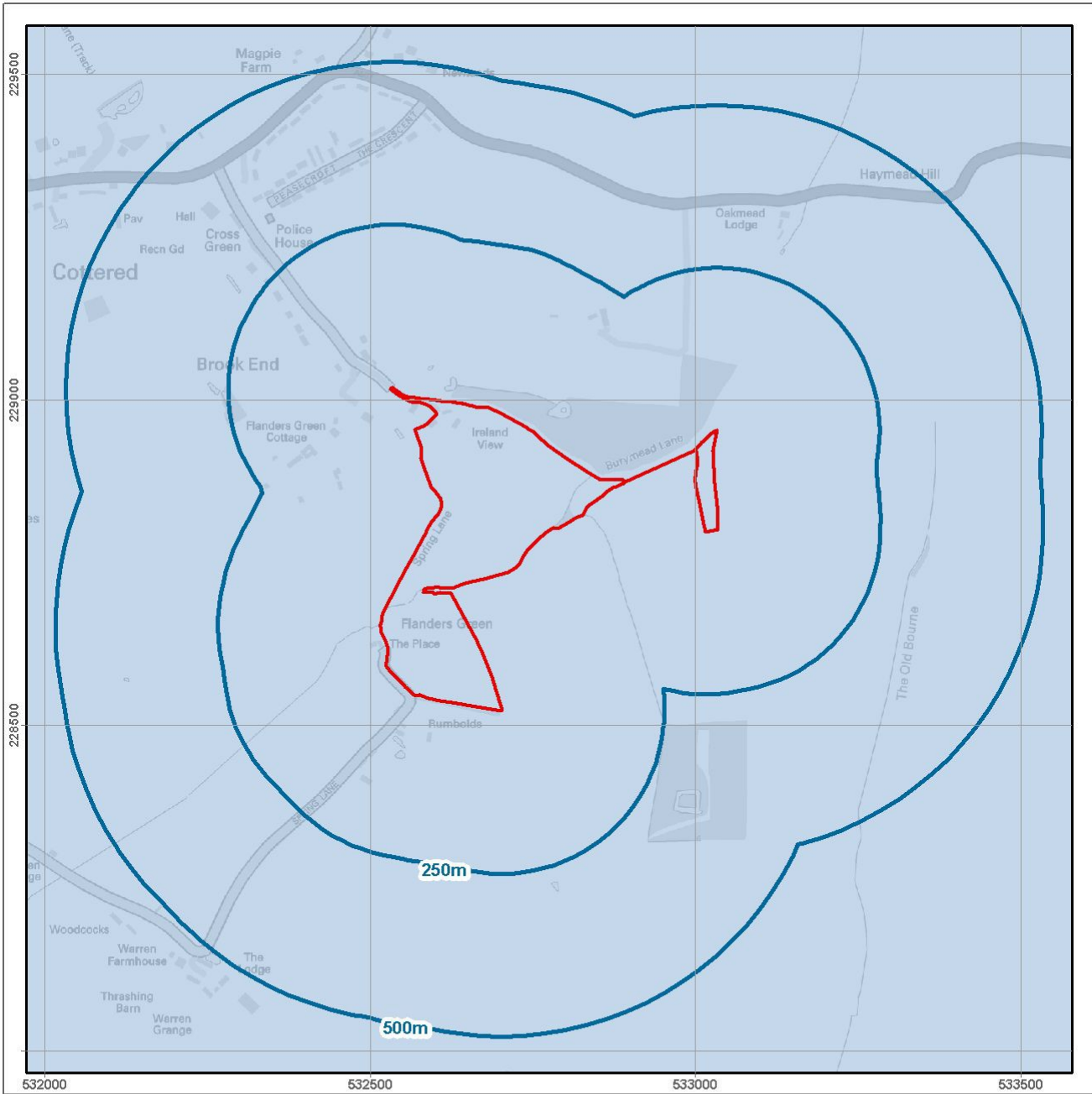


* - Not all features in legend may be present in above map

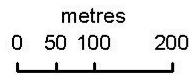
Nominal scale at A4 paper size - 1:9,750

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BGS Soil Chemistry – Nickel



Soil Chemistry - Nickel



* - Not all features in legend may be present in above map

Nominal scale at A4 paper size - 1:9,750

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Soil Chemistry

BGS Soil Chemistry Arsenic

Map ID	Details	Distance	Direction
	Sample Type: RuralSoil, Proportion: 15 - 25 mg/kg	On Site	-

BGS Soil Chemistry Cadmium

Map ID	Details	Distance	Direction
	Sample Type: RuralSoil, Proportion: <1.8 mg/kg	On Site	-

BGS Soil Chemistry Chromium

Map ID	Details	Distance	Direction
	Sample Type: RuralSoil, Proportion: 60 - 90 mg/kg	On Site	-

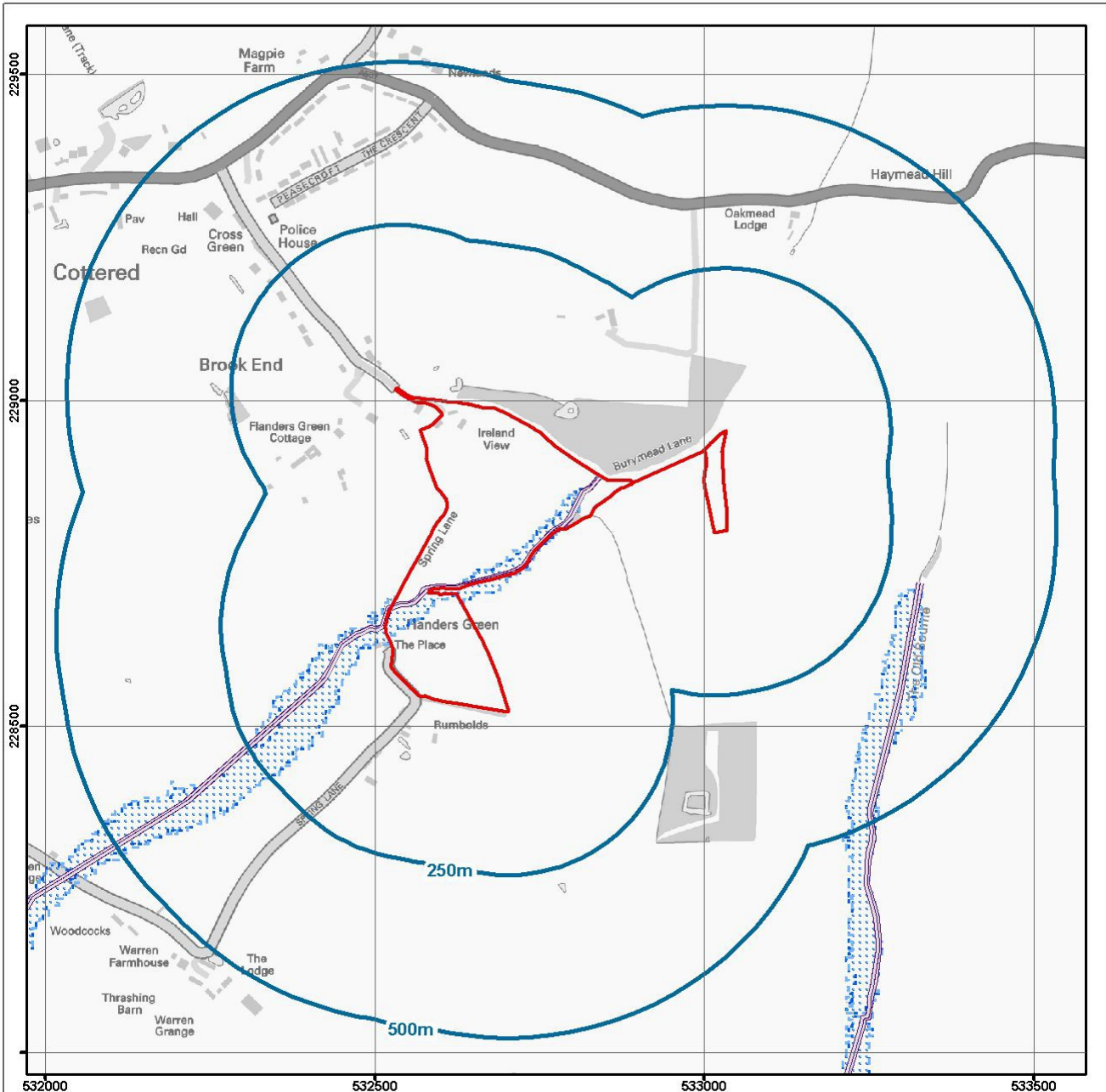
BGS Soil Chemistry Lead

Map ID	Details	Distance	Direction
	Sample Type: RuralSoil, Proportion: <150 mg/kg	On Site	-

BGS Soil Chemistry Nickel

Map ID	Details	Distance	Direction
	Sample Type: RuralSoil, Proportion: 30 - 45 mg/kg	On Site	-

Flooding from Rivers or Sea



Environment Agency

-  Client Site
-  Defended Areas
-  Flood Defences
-  Flood Zone 2
-  Flood Storage
-  Flood Zone 3

meters
0 50 100 200

* - Not all features in legend may be present in above map

Nominal scale at A4 paper size - 1:9,750

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Flooding from Rivers or Sea

Flooding from River or Sea (Flood Zone 3)

Map ID	Details	Distance	Reply or Direction
	Are there any indicative flood plains within 500m?	<501m	YES
	Type: Fluvial Models, Source: Environment Agency, Head Office, Boundary Accuracy: As Supplied.	On Site	-

Flooding from River or Sea in an Extreme Event (Flood Zone 2)

Map ID	Details	Distance	Reply or Direction
	Are there any indicative flood plains (extreme events) within 500m?	<501m	YES
	Type: Fluvial Models, Source: Environment Agency, Head Office, Boundary Accuracy: As Supplied.	On Site	-



The Site is at a low risk of flooding from rivers or the sea, as defined by the regulatory body's Flood Map. If the Site area is greater than one hectare, any planning application for development would need to be accompanied by a Flood Risk Assessment in accordance with NPPF. There should be no difficulty in obtaining flood insurance for properties on the Site. Most insurers will cover risk of less than 1.33% annual probability.

Areas Benefiting from Flood Defences

Map ID	Details	Distance	Reply or Direction
	Does the Site or any areas within 500m benefit from flood defences?	<501m	NO



The Site is over 500m from an Area Benefiting from a Flood Defence, as defined by the regulatory body. The residual risk that the Site may flood if the protection standard of any flood defences is exceeded, or if the defences fail, is insignificant.

Flood Water Storage Areas

Map ID	Details	Distance	Reply or Direction
	Are there any flood water storage areas within 500m?	<501m	NO



The Site is over 500m from a Flood Storage Area (FSA) as defined by the regulatory body. These areas store flood water during significant flood events. It is unlikely that any FSA presents any associated flood risk to the Site.

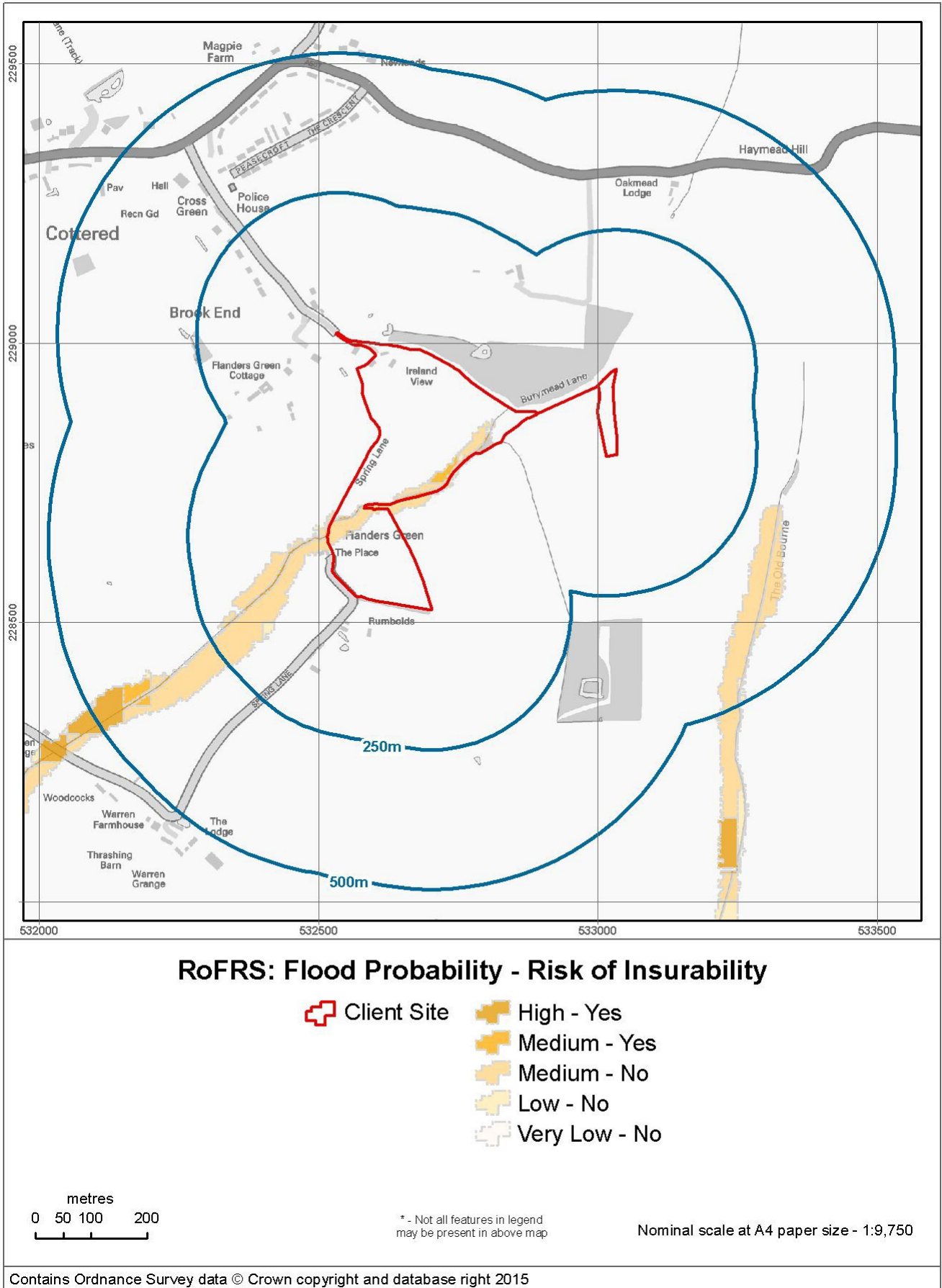
Flood Defences

Map ID	Details	Distance	Reply or Direction
	Are there any flood defences within 500m?	<501m	YES



There are flood defences on the Site. However, there is a residual risk of flooding should the protection standard of those defences be exceeded (and the defences overtopped) or should the defences fail. It is recommended that further investigations are undertaken into the standard of these defences. Please contact us for further information.

The Environment Agency Risk of Flooding from Rivers and Sea



The Environment Agency Risk of Flooding from Rivers and Sea

Details	Distance	Reply or Direction
What is the flood likelihood category for the Site?	On Site	high



The Site (or part of it) has been defined as being at Significant Flood Risk within the regulatory body's risk assessment. This classification relates to the locality as a whole, rather than the individual site and relates only to the risk of coastal or river flooding. Flood insurance may be difficult to obtain for properties on the Site. Nevertheless, it is recommended that a FloodSolutions Consult Report is undertaken to further define the flood risk to the Site.

The Environment Agency Data

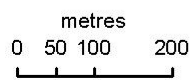
The data in the Risk of Flooding from Rivers and Sea Property Flood Likelihood Database is sourced from the The Environment Agency's National Property Dataset (NPD2). The information provided includes the flood likelihood category low, moderate, or significant according to the flood risk analysis.

Groundwater Flooding Risk



Groundwater Flooding Risk Rating

-  Client Site
-  High Risk
-  Moderate Risk
-  Low Risk



* - Not all features in legend may be present in above map

Nominal scale at A4 paper size - 1:9,750

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Groundwater Flooding Risk

Details	Distance	Reply or Direction
What is the risk of groundwater flooding at the Site?	On Site	-



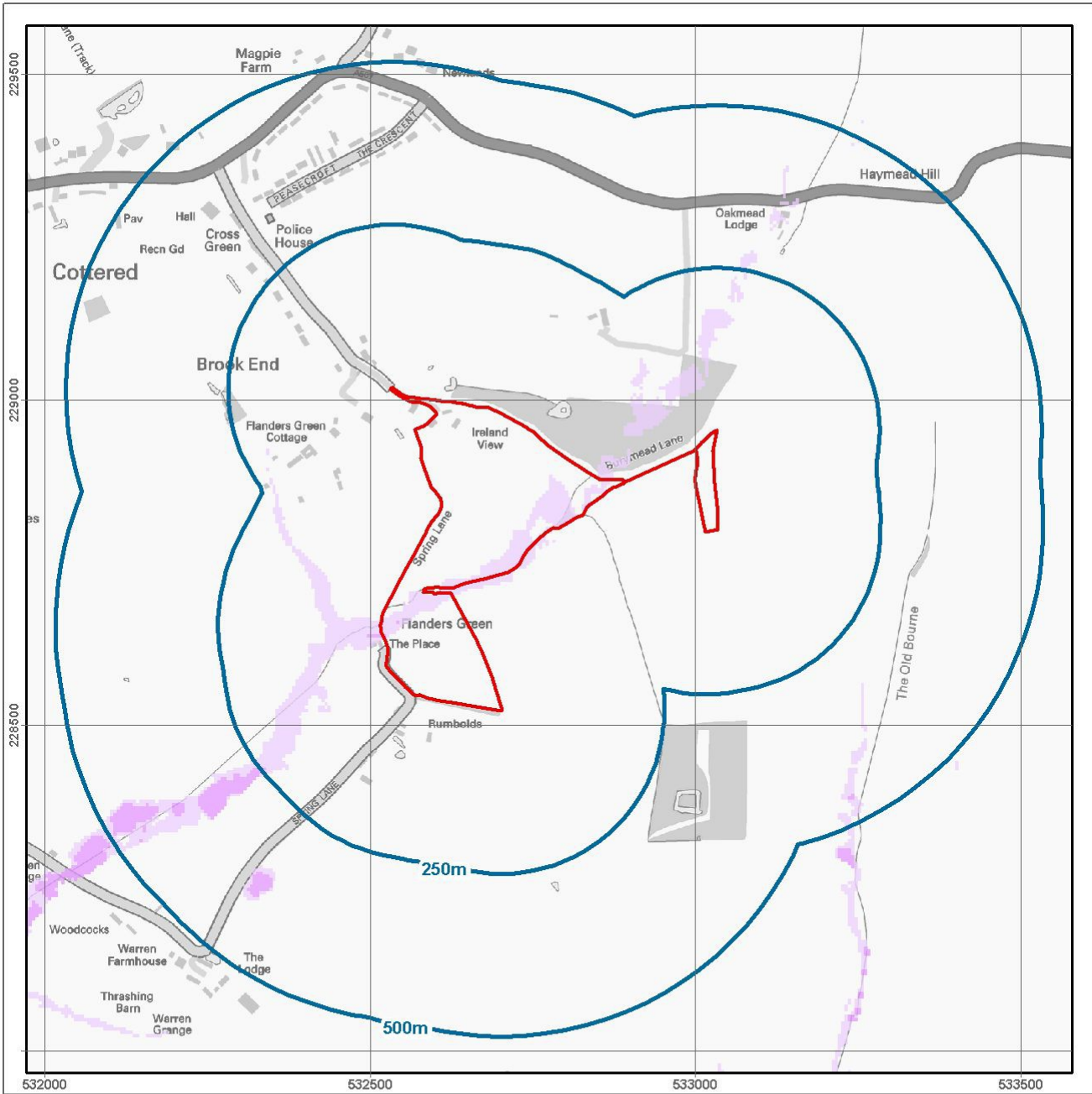
Information from ESI indicates that there is a negligible risk of groundwater flooding in this area and any groundwater flooding incidence will be less frequent than 1 in 200 years return period. No further investigation of risk is deemed necessary unless the proposed site use is unusually sensitive. However, data may be lacking in some areas, so assessment as 'negligible risk' on the basis of the map does not rule out local flooding due to features not currently represented in the national datasets used to generate this version of the map.

ESI Data

ESI provides data to Argyll in relation to groundwater flooding. Through research and development, building on their expertise in addressing groundwater flooding issues for the Environment Agency and other clients in the UK, ESI has developed algorithms and calibrated predictions of the risk of groundwater flooding occurring in England and Wales. This differs from other suppliers of data regarding groundwater flooding which only report on the susceptibility of groundwater flooding. Susceptibility merely has to be identified, whereas risk must be quantified. The resulting map is a 50x50m classification of groundwater flooding risk into four categories (Negligible, Low, Moderate and High). ESI's classifications are based on the level of risk, combining severity and uncertainty that a site will suffer groundwater flooding within a return period of about 200 years.

The map is a general purpose indicative screening tool, and is intended to provide a useful initial view for a wide variety of applications. However, it does not provide an alternative to a site specific assessment, and a detailed risk assessment should be used for any site where the impact of groundwater flooding would have significant adverse consequences.

Surface Water Flooding (1:200 year rainfall event)



Surface Water Risk

-  Client Site
-  10cm - 30cm depth
-  30cm - 1m depth
-  1m + depth



* - Not all features in legend may be present in above map

Nominal scale at A4 paper size - 1:9,750

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Surface Water Flooding

Surface Water Flooding

Details	Distance	Reply or Direction
What is the risk of surface water flooding at the Site following a 1 in 75 year rainfall event?	On Site	low
What is the risk of surface water flooding at the Site following a 1 in 200 year rainfall event?	On Site	medium
What is the risk of surface water flooding at the Site following a 1 in 1,000 year rainfall event?	On Site	medium



JBA Consulting Data

Surface Water Flooding - Information regarding the risk of natural surface water or pluvial flooding. The risk is classified by JBA into four categories, negligible, low (more than 0.1m), medium (more than 0.3m) and high (more than 1m) which reflect varying depths of potential surface water flooding during a range of rainfall events including 1:75 year, 1:200 year and 1:1,000 year events.

Historical Flooding

Historical Flood Events

Details	Distance	Reply or Direction
Have any historic flood events occurred at the Site or within 500m?	<501m	NO



The regulatory body's records have no indication of past flooding within 500m of the Site. As these records are not comprehensive, it may still be prudent to ask the Site owner whether they are aware of any previous flooding at the Site or in the surrounding area.

Environment Agency Data

Historic Flood Outlines - The EA has collated extensive records (including outlines) of flooding from rivers, the sea or groundwater which have occurred in England and Wales since c. 1950. This information comes from various sources including maps, aerial photographs and private records. It is not necessarily comprehensive.

Geological Indicators of Flooding

Details	Distance	Reply or Direction
Are there any geological deposits which indicate the Site may have been flooded in the past?	<26m	NO



Data from the British Geological Survey (BGS) indicates that the type of deposits in the locality of the Site are not of the type normally associated with floodplains. However, this data should only be considered as complementary to the regulatory body's Flood Map. This BGS data does not indicate the likelihood of flooding, since such deposits may be due to flood events which occurred thousands of years ago. Refer to the other assessments in this report for an overall assessment of flood risk.

British Geological Survey Data

Geological Indicators of Flooding – The BGS Geological Indicators of Flooding (GIF) data set is a digital map based on the BGS Digital Geological Map of Great Britain at the 1:50,000 scale (DiGMapGB-50). It was produced by characterising Superficial (Drift) Deposits on DiGMapGB-50 in terms of their likely vulnerability to flooding, either from coastal or inland water flow and reflects areas which may have flooded in the recent geological past. This normally relates to flooding which happened many thousands of years ago.

Detailed River Network



Detailed River Network

- | | |
|-----------------|------------------------|
| Client_Site | Underground River |
| Primary River | Extended Culvert |
| Secondary River | D/S of High Water Mark |
| Tertiary River | D/S Seaward Extension |
| Lake/Reservoir | Canal |



* - Not all features in legend may be present in above map

Nominal scale at A4 paper size - 1:9,750

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Detailed River Network

Detailed River Network

Map ID	Details	Distance	Reply or Direction
	Is there any information from the EA's Detailed River Network within 500m?	<501m	YES
	River Name: , Watercourse Name: , Is The Feature a Drain?: NO.	On Site	-



A river, canal, or drainage channel identified by the regulatory body's detailed river network appears to cross the Site. This does not represent a flood risk in itself, but its presence has been taken into account in the overall risk assessment in this Report.

Environment Agency Data

This data was derived from Ordnance Survey Mastermap (the UK's most detailed digital mapping) and shows the centre-lines of the river network (rivers, drains and streams) in England and Wales. Where relevant, it assigns attributes such as river type and designation (i.e. Main River status). It can be important to know this because certain statutory bodies must be consulted about development proposals near to a Main River, canal or drainage channel.

Other Information

Height Above Sea Level

Map ID	Details	Distance	Reply or Direction
	Maximum height of the Site above sea level	On Site	135.40m
	Minimum height of the Site above sea level	On Site	123.00m
	Average height of the Site above sea level	On Site	128.79m



The Site is at a relatively high elevation above sea level. However, this is not in itself indicative of the absence of flood risk and reference should be made to other assessments within this report.

Distance to Water Features

Details	Distance	Reply or Direction
Are there any water features within 500m?	<501m	YES
Surface water feature	69.0m	SW
Surface water feature	87.5m	S
Surface water feature	245.9m	W
Surface water feature	262.2m	W
Surface water feature	297.3m	SE



There is a water feature shown on the Ordnance Survey within 250m of the Site. This does not represent a flood risk in itself, but its presence has been taken into account in the overall risk assessment in this Report.

Dam or Reservoir Failure

Details	Distance	Reply or Direction
Is there a risk of the Site being affected by the failure of a nearby dam or reservoir?	On Site	NO



Neither the Site nor areas near to it will be likely to flood if a dam or reservoir in the surrounding area failed.

JBA Consulting Data

Dam or Reservoir Failure – JBA has modelled approximately 1700 dams and reservoirs across the UK which are considered to pose the greatest risks to people and property. These models are able to predict the areas likely to flood on all sides of a feature, should an element of it fail e.g. a wall, dam or earth bund.

High Speed 2

Risk	Distance	Direction	Max Speed
Source: High Speed Two (HS2) Ltd, Date: January 2012			
Search radius: 5000m			
The nearest point where the HS2 route is planned to be at ground level is outside the search radius.	N/a	N/a	N/a
The nearest point where the HS2 route is planned to be above ground level (viaduct) is outside the search radius.	N/a	N/a	N/a
The nearest point where the HS2 route is planned to be below ground level (cutting/retaining wall) is outside the search radius.	N/a	N/a	N/a
The nearest point where the HS2 route is planned to be under ground level (tunnel/green tunnel) is outside the search radius.	N/a	N/a	N/a

Background to High Speed 2

The National High Speed Rail Strategy, which started with High Speed 1 (the route between London and the Channel Tunnel), is continuing with the proposed High Speed 2 network between London and Scotland.

Following the Government announcement in January 2012, the first phase of High Speed 2 is an initial London to West Midlands line due to be operational by 2026. A second phase from Birmingham to Leeds and Manchester will see lines built by 2033. This Report comments on the first phase, using current information.

Construction methods will vary and may result in potential disruption to sites near the proposed route.

Useful Contacts

Name and Address	Telephone/Fax/Email
Argyll Environmental Limited Lees House 21-33 Dyke Road Brighton BN1 3FE www.argyllenvironmental.com	Telephone 0845 458 5250 Fax 0845 458 5260 info@argyllenviro.com
Ensura Limited (for Environmental Insurance) Lees House 21-33 Dyke Road Brighton BN1 3FE www.ensura.co.uk	Telephone 0845 652 8585 Fax 0845 652 8686 info@ensura.co.uk
Environment Agency National Customer Contact Centre (NCCC) PO Box 544	Telephone 08708 506 506
Hertfordshire County Council County Development Unit County Hall www.hertsdirect.org	Telephone 01992 556266 Fax: 01992 556202
East Hertfordshire District Council Environmental Health Department Wallfields www.eastherts.gov.uk	Telephone 01992 531491
British Geological Survey Enquiry Service British Geological Survey www.bgs.ac.uk	Telephone 0115 936 3143 Fax: 0115 936 3276 enquiries@bgs.ac.uk
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA) Government Buildings	Telephone 0113 2613333 Fax: 0113 230 0879
Defra Nobel House 17 Smith Square London SW1P 3JR	Telephone 08459 335577 defra.helpline@defra.gsi.gov.uk
ALA (Agricultural Law Association)	Telephone 01206 383521 Enquiries@aka.org.uk
High Speed Two (HS2) Ltd Eland House Bressenden Place London SW1E 5DU http://hs2.org.uk http://highspeedrail.dft.gov.uk	Telephone 020 7944 4908 hs2enquiries@hs2.gsi.gov.uk

Please note that the Environment Agency / SEPA have a charging policy in place for enquiries. When contacting these agencies please mention that this data has been received from the Landmark database, alternatively Argyll Environmental Limited would be pleased to assist with consultation to the above bodies. Please contact us for a quotation.

Contaminated Land Risk Analysis Methodology

The Estate Solutions reports have been designed to assist in making informed decisions during property transactions. The Report is a desktop assessment of direct liabilities (Liabilities) which could affect the owner /occupier of the Site and arise under Part 2A of the Environmental Protection Act 1990 and/or equivalent requirements under the planning regime and/or the Water Resources Act 1991⁴. (Relevant Legislation). If a risk is identified, then a number of options for finding out more about the risk, managing it or transferring it are proposed.

The assessment of environmental liability under the Relevant Legislation is based upon the principle of determining the presence of a plausible contaminant-pathway-receptor relationship (a contaminant linkage). A 'contaminant' is a source of contamination, a 'pathway' is a medium through which the contamination can mobilise and 'a receptor' is a person or entity that could be detrimentally affected by the contamination. If all three are identified, then a 'plausible contaminant-pathway-receptor relationship' may be present. By definition, this is one which Argyll believes could result in significant harm, a significant possibility of significant harm or significant pollution or the possibility of significant pollution to Controlled Waters.

In our assessment we use the following test to decide if there is a potential liability affecting the Site. For the purpose of this assessment a site where a potential Liability has been identified is defined as follows:

A Site which, from the information assessed by Argyll, is considered to have the potential of being affected by contaminative substances present in or under the Site (but excluding potential sources of contamination on or above the land) such that, on the basis of its current or proposed use, there is a reasonable likelihood of a UK regulatory authority, acting in accordance with Relevant Legislation, requiring that remedial measures are taken in order to remedy or mitigate the contaminative substances that are present in or under the land that forms all or part of the Site.

The term Liabilities is defined within the scope of this assessment to mean, remedial works under Part 2A of the Environmental Protection Act 1990 (or where appropriate, equivalent requirements under the planning regime) and/or the Water Resources Act 1991 which may result in direct liability for the site owner/occupier.

The assessment within the Report has been produced and quality checked by a team of qualified environmental professionals. The assessment is based upon a manual review of the data contained within the Data Section of this Report and of 1:2500 and 1:1250 (where available) scale historical mapping.

Ecological Risk Assessment

The evaluation of ecological risk is becoming an increasingly important input when making risk management decisions. In the Site Solutions Commercial report, Argyll assesses two different drivers for risks and liabilities driven by ecological receptors;

- 1.The Contaminated Land Regime; and
- 2.The Environmental Damage Regulations (EDR) 2009.

The Environment Agency has designed a generic framework for conducting ecological risk assessment (see Assessing Risk to Ecosystems from Land Contamination, R&D Technical Report P299, EA 2002). This recommends a tiered approach in line with best practice for human health and controlled water risk assessment and defines Relevant Ecological Receptors as any of the Relevant Types of Receptor as set out in Table 1 of Defra Statutory Guidance on Contaminated Land dated April 2012.

Argyll assesses Relevant Ecological Receptors as part of its assessment process. To do so it uses the Argyll EcoRisk model which was developed and tested in consultation with leading experts and is based on the Environment Agency framework.

The Environmental Damage (Prevention and Remediation) Regulations 2009 were introduced on 1 March 2009 to implement the provisions of the European Commission's Environmental Liability Directive into law in England⁵. The aim of EDR is to prevent and remedy damage to protected species or natural habitats or a site of special scientific interest, surface water, groundwater or to land. 'Environmental damage' has a specific meaning in the Regulations, and covers only the most severe cases. Existing legislation with provisions for environmental liability remains in place. The Regulations apply on land in England and on the seabed around the UK up to the limits set out in the Continental Shelf Act 1964, and to waters in the Renewable Energy Zone, which extends approximately 200 miles out to sea.

Argyll does not consider the standard of current operations, but reports the potential for environmental damage based on the location of EDR Receptors around the Site.

⁴ Water Environment (Controlled Activities)(Scotland) Regulations 2005 where appropriate.




⁵ Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009 or Environmental Damage (Prevention and Remediation) (Scotland) Regulations where appropriate.

When conducting either assessment, Argyll will primarily assess information provided in the Data section of the Report. However, in some cases Argyll may choose to supplement this with freely available public information such as that provided by Natural England and/or information provided by the Argyll Europa System.

Liability Assessment

In this section Argyll will report on any potential soil and groundwater liabilities which it considers are associated with the Site. Our assessment of Liability is based upon the proposed and current use of the Site (as supplied by the client) in line with current Government guidance.

There will be one of the following three responses:

Assessment	Liability Statement & explanation	Defra Category*
PASSED 	<p>Within the scope of this assessment no Liabilities have been identified. No further action is required.</p> <p>This statement indicates that within the scope of this assessment, no issues have been identified that are likely to result in significant cost liabilities under Relevant Legislation.</p>	3 or 4
PASSED 	<p>Within the scope of this assessment no Liabilities have been identified. However, your attention is drawn to the prudent enquiries suggested below.</p> <p>This statement indicates that within the scope of this assessment, no issues have been identified that are likely to result in significant cost liabilities under Relevant Legislation. However, a client may wish to obtain further information about other issues disclosed in the Report, which could be material.</p>	3 or 4
FURTHER ACTION 	<p>Potential Liabilities have been identified under Part 2A of the Environmental Protection Act 1990 (or where appropriate, equivalent requirements under the planning regime) and/or the Water Resources Act 1991⁶. To quantify these you may decide to undertake a more detailed assessment through the recommendation(s) set out below.</p> <p>This statement indicates that within the scope of this assessment, an issue or a number of issues have been identified that are likely to result in significant cost liabilities under Relevant Legislation. In this event, recommendations are made, in order that additional information is collected so that the liabilities may be more accurately assessed.</p>	Potentially 1 or 2

* According to Defra's updated Statutory Guidance on Contaminated Land, Regulators have a four-stage test to decide when land is and is not contaminated. Category 1 and Category 2 sites would encompass land which is capable of being determined as contaminated land, whereas Category 3 and Category 4 sites would encompass land which is not capable of being determined as contaminated land.

Limitations of the Report

The Estate Solutions reports have been designed to satisfy standard environmental due-diligence enquiries, as recommended by the Law Society's contaminated land warning card. It is a 'remote' investigation and reviews only information provided by the client and from the databases of publicly available information that have been chosen to enable a desk based environmental assessment of the Site. The Report does not include a site investigation, nor does Argyll make specific information requests of the regulatory authorities for any relevant information they may hold. Therefore, Argyll cannot guarantee that all land uses or factors of concern will have been identified by the Report.

The information in the Data Section of the Report is derived from a number of statutory and non-statutory sources. While every effort is made to ensure accuracy, Argyll cannot guarantee the accuracy or completeness of such information or data. Argyll will not accept responsibility for inaccurate data provided by external data providers.

Further information regarding our risk assessment methodology is provided in the Products and Services User Manual which is available free of charge from the client area of our website www.argyllenvironmental.com. For further information regarding the datasets reviewed within our assessment, please contact one of our technical team on 0845 458 5250. This report is provided under The Argyll Environmental Terms and Conditions for Data Reports, a copy of which is available on our website. Flood Risk Screening Methodology

⁶Water Environment (Controlled Activities)(Scotland) Regulations 2005 where appropriate.

The EstateSolutions Farm includes a desktop flood risk assessment designed to enable property professionals to assess the risk of flooding at agricultural sites. It examines the overall risk of flooding at a site (not taking into account any flood defences that may be present). The report considers current Government guidance including the National Planning Policy Framework (NPPF) and the agreement between the Association of British Insurers and Defra known as the Statement of Principles. The report has been produced and quality-checked by qualified flood risk specialists using the data contained in this report.

Flood Risk Rating

Argyll provides an overall flood risk rating based on an assessment of the data provided within this report. It does so by asking one question:

1. What is the overall risk of flooding, assuming flood defence fail or are absent or overtopped?

The answer to this question provides a worst case scenario assuming there are either no defences in the area, that any defences in the area could fail, primarily as a result of river or coastal flooding, or are overtopped by excessive flood volumes.

Questions 1 are answered by one of six standard responses:

Response	Meaning
Negligible	The overall flood risk rating for the Site is assessed to be 'Negligible'. Existing datasets do not indicate any risk at the Site itself, or any feature within the locality of the Site, which would be expected to pose a threat of flooding. It is not considered that any further investigations are necessary in regard to flood risk.
Low	The overall flood risk rating for the Site is assessed to be 'Low'. Although large sites (over 1 ha) would require a Drainage Impact Assessment to accompany any planning application, it is not considered necessary to undertake any other further investigations into the flood risk to the Site.
Low to Moderate	The overall flood risk rating for the Site is assessed to be 'Low to Moderate'. The presence of such features as flood defences, flood storage areas and watercourses within the locality of the Site suggests that there may be a risk of flooding to the Site itself. Further investigations could be undertaken to further assess this risk.
Moderate	The overall flood risk rating for the Site is assessed to be 'Moderate'. Information from existing datasets suggests that there are certain features which may present a risk to the Site and its occupants. Further assessment would normally be suggested as a prudent measure to clarify the risk of flooding at the Site.
Moderate to High	The overall flood risk rating for Site is assessed to be 'Moderate to High'. Information from existing datasets suggests that there are certain features which may present a significant risk to the Site and its occupants. Further assessment is usually recommended in order to clarify the risk of flooding at the Site.
High	The overall flood risk rating for Site is assessed to be 'High', with a consequent risk to life and property. This means that existing datasets reveal significant flood risk issues which need to be addressed. Further assessment is usually recommended in order to clarify the risk of flooding at the Site.

Flood Analysis

The flood risk gauges provide a more detailed analysis of the risk from each of the four main types of flooding – river, coastal, groundwater and surface water. In addition, a fifth gauge provides an analysis of other factors (i.e. historic flood events, geological deposits which are indicative of past flooding, proximity to surface water features and elevation above sea level) that may affect the overall flood risk. For surface water flooding, only the risk rating generated from the 1:200 year rainfall event data is included in the overall risk assessment. The data on 1:75 year and 1:1,000 year rainfall events is provided for information only. The flood analysis within the report is automated taking into account the percentage of identified flood risk from the individual datasets to assess their significance in the context of the wider farm. This includes an assessment of whether the assumed main buildings within the Site boundary fall within an area of flood risk. For further information on each of these types of flooding, please refer to the Argyll FloodSolutions User Guide.

This analysis takes into account any existing flood defences that are intended to protect the Site and assumes that these work as designed. The analysis also takes into account the other information contained in those data sections of the report

which are relevant to that particular type of flooding. The assessment of the risk as shown in the flood gauge should therefore take priority over the information in the individual data sections of the report.

Limitations of the Report

The Renaissance Estate Solutions Farm report has been designed to satisfy basic flood-related environmental due-diligence enquiries for farm and large estates. It is a desktop review of information provided by the client and from selected private and public databases. It does not include a site investigation, nor are specific information requests made of the regulatory authorities for any relevant information (other than local water and sewerage providers). Therefore, Argyll cannot guarantee that all issues of concern will be identified by this report, or that the data and information supplied to it by third parties is accurate and complete.

This report includes an assessment of surface water flooding which examines the risk of the general drainage network overflowing during periods of extreme rainfall. This report does not make a detailed site-specific assessment of the suitability of the existing drainage on the Site. If this is required, then a site survey should be considered. The assessment of pluvial flooding does not take into account particular local or temporary factors that may cause surface water flooding such as the blockage or failure of structures on or within watercourses, drains, foul sewers, water mains, canals and other water infrastructure; and any history of drains flooding at the Site or in the locality. Surface water flooding can occur before surface water reaches the general drainage network, for example on hills and inclines.

Environment Agency data does not include flood risk from very small catchments as models of such small scale catchments are not considered to be reliable for UK-wide flood risk assessments. The potential impact of climate change on flood risk to the Site would require further study.

When answering any questions within this report, current applicable legislation is taken into account.

The data used in this report may have inherent limitations and qualifications. Further details are set out in the FloodSolutions User Guide which is available free of charge from our website www.argyllenvironmental.com , or by calling one of our technical team on 0845 458 5250.

This report is provided under The Argyll Environmental Terms and Conditions for Flood Solutions Reports, a copy of which is available on our website, www.argyllenvironmental.com , or by calling one of our technical team on 0845 458 5250

High Speed 2 Risk Analysis Methodology

The High Speed 2 report has been designed to assist in making informed decisions during property transactions. The Report is a desktop analysis of the features of the proposed High Speed 2 route nearest to the Site.

The design of the Report has been produced and quality checked by a team of qualified environmental professionals. The analysis is based upon an automated review of the data contained within the Nearest Features section of this Report.

Limitations of the Report

This section of the report has been designed to satisfy standard due-diligence enquiries for residential and commercial sites. It is a 'remote' investigation and reviews only information provided by the client and from the databases of publicly available information that have been chosen to enable a desk-based analysis of the Site. The Report does not include a site investigation, nor does Argyll make specific information requests of the regulatory authorities for any relevant information they may hold. Therefore, Argyll cannot guarantee that all land uses or factors of concern will have been identified by the Report.

The information in the Nearest Features section of the Report is derived from statutory and non-statutory sources. The data supplied by High Speed Two (HS2) Ltd is the proposed High Speed 2 route at the time of writing this Report. The route is subject to approval by Government and may be subject to change. While every effort is made to ensure accuracy, Argyll cannot guarantee the accuracy or completeness of such information or data. Argyll will not accept responsibility for inaccurate data provided by external data providers.

For further information regarding the datasets reviewed within our analysis, please contact one of our technical team on 0845 458 5250. This report is provided under The Argyll Environmental Terms and Conditions for Data Reports, a copy of which is available on our website.



Important Consumer Protection Information

This search has been produced by Argyll Environmental Ltd, Lees House 21-33 Dyke Road, Brighton, BN1 3FE. Telephone: 0845 458 5250, Fax: 08456 458 5260, e-mail: orders@argyllenviro.com which is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered firms maintain compliance with the Code.

The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom
- sets out minimum standards which firms compiling and selling search reports have to meet
- promotes the best practice and quality standards within the industry for the benefit of consumers and property professionals
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports
- act with integrity and carry out work with due skill, care and diligence
- at all times maintain adequate and appropriate insurance to protect consumers
- conduct business in an honest, fair and professional manner
- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if he finds that you have suffered actual loss as a result of your search provider failing to keep to the Code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

TPOs Contact Details:

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk

PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE



Complaints procedure

If you want to make a complaint, we will:

- Acknowledge it within 5 working days of receipt.
- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.
- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

Complaints should be sent to:

Legal Director
Argyll Environmental Ltd
Lees House
21-33 Dyke Road
Brighton
BN1 3FE

Telephone: 0845 458 5250

Email: orders@argyllenvironmental.com

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk

We will co-operate fully with the Ombudsman during an investigation and comply with his final decision.