

ESTATESOLUTIONS

Farm



Contaminated Land

PASSED ✓



Flooding

FURTHER ACTION



Argyll's Overview

Contaminated Land :

The property poses an acceptably low contamination risk. No further environmental investigation is recommended.

Flood Risk :

High - The Site is considered to be at an increased risk of flooding from one or more sources. Please refer to the detailed flood risk screening for further information and recommendations.

Environmental Hazards :

The following other Environmental Hazards have been identified in the immediate vicinity of the Site: Radon between 3 and 5%, Radon Protection Measures, Ground Instability Hazard, and Infilled Land



Report on:

Sample Farm, Sample Town, Sample County, United Kingdom

Report prepared for:

Sample

Report Reference:

Sample

Report date:

14th December 2015

Client Reference:

Sample

National Grid Reference:

229560,209040



Site Location

Report prepared on

Sample Farm, Sample Town, Sample County, United Kingdom

Site Area (hectares)

48.6097

Current Use

Agricultural

Proposed Use

Agricultural

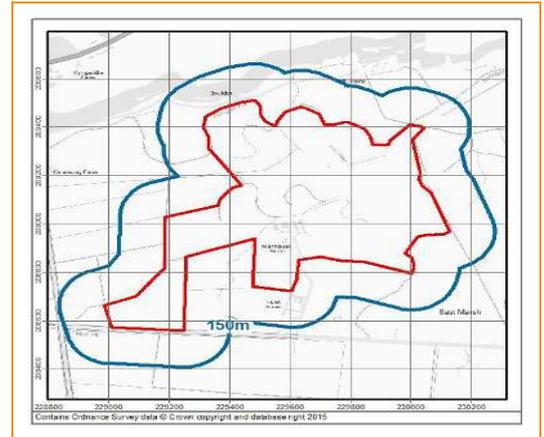
Report Prepared For

Purchaser

Report Author

Ali Stanton BA (Hons) MSc AIEMA

Telephone: 0845 458 5250





Summary of Liabilities and Risk

Issue	Evaluation
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Contaminated Land Liability Assessment



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What is the pollution risk from within the property?	Low to Moderate
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?	Low

Within the scope of this assessment no liabilities have been identified. However, your attention is drawn to the prudent measures suggested overleaf.



FURTHER ACTION


Flood Risk Summary

What is the overall risk of flooding at the farm, assuming defences fail or are absent or over-topped?	High (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		Sensitive Land Uses	
Water Abstractions		Sewage Discharges		Stewardship Schemes	
Unexploded Ordnance		Soil Chemistry		Telecommunication Base Stations / Transmission Lines	
COMAH Sites		Listed Buildings			

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



Conclusions and Recommendations



PASSED



Contaminated Land Conclusion

The mineral railway may have been founded on waste materials, such as clinker and rubble, which could be mildly contaminated. The use of the railway may also have caused some contamination of that area with chemicals such as oils and herbicides.

There is a low to moderate risk that this remains in appreciable quantities and renders the line of the track inappropriate for cultivation, but there is a low risk that this will result in environmental liability for the farm.

The filled ponds may also contain some contaminated waste, such as agrochemicals, but there is a low risk that this is sufficiently severe to result in environmental liability for the farm. There is therefore a low overall risk that contamination at the farm will adversely affect the surrounding area and result in environmental liability.

Recommendations

No further environmental investigation is recommended.



**FURTHER
ACTION**



Flood Risk Recommendations

1. As a significant proportion of the Site has been identified as at an increased risk of flooding, we recommend that you contact us to discuss the next steps that will assist in further clarifying the risk of flooding at the Site. This may involve carrying out a more detailed assessment (a FLOODSOLUTIONS Consult Report). This will review additional site specific data (not available from UK-wide databases) and raise enquiries of statutory bodies (regulatory body, Local Authority etc.). Such an assessment would identify more accurately the risk of flooding and review the standard of existing defences. It could provide a specification and budget cost estimate for a full Flood Risk Assessment to meet the requirement of National Planning Policy Framework (NPPF), should this be required and/or suggestions for flood resistance/resilience measures. Please contact us so we can discuss your requirements and, if necessary, provide a quotation.

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).



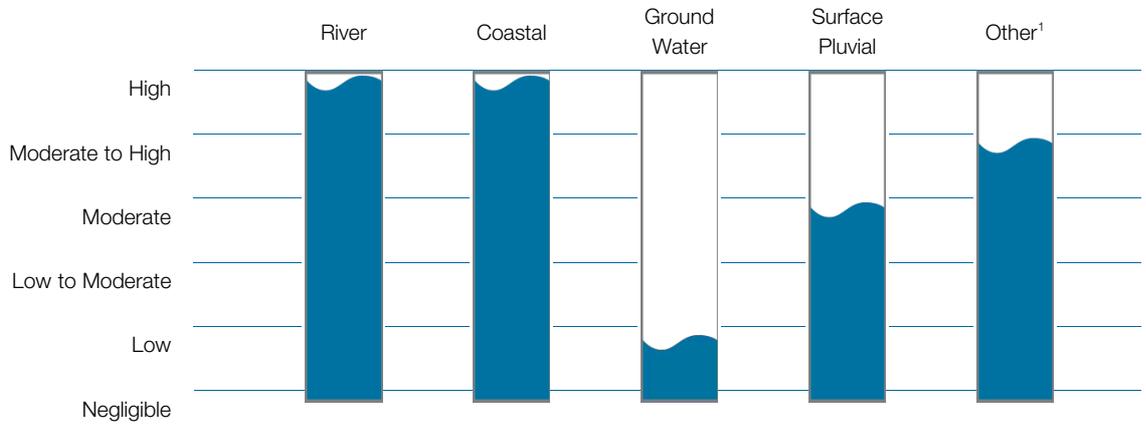
Contaminated Land Risk Analysis

Investigation	Risk Commentary
 <p>Farm description</p> <p>Farm History</p>	<p>The farm is 48.6 hectares and is formed mostly of grazing land for livestock with small areas possibly in arable use. There is a farmyard in the south of the property, where there is a house, several barns, at least one storage clamp and concrete yard areas. There is a pond to the south of the farmyard and several small streams across the farm. No redevelopment is proposed and no industrial activities are undertaken at the farm. The property is being purchased to add to an existing farming estate.</p> <p>There is potentially infilled land on the farm c.1964 (pond, marsh, river, stream, dock etc). A Discharge Consent for sewage and trade discharges to land (via soak-away) has been listed in the south of the farm, but this is probably located at Hurst House to the south.</p> <p>The farm has been in agricultural use since at least the late 1800s, although a mineral railway crossed the north of the land until the early 1900s. Two small ponds immediately east of the farmyard were filled around the 1960s or 1970s and several of the barns appear to have been constructed in the latter 1900s.</p> <p>There have been no other notable activities or alterations noted at the farm since the late 1800s.</p>
<p>Argyll's Comment</p>	<p>There is a low to moderate risk of contaminants being present along the line of the mineral railway or in the filled ponds, although the total quantities involved are not likely to be great.</p>
 <p>Surrounding area description</p> <p>History of Surrounding Area</p> <p>Argyll's Comment</p>	<p>The surrounding area is largely in grassland use, with some woodland and scattered settlements, but there is a large and probably disused quarry 600m to the west. There are many ditches and streams in this area, but no industrial activities have been identified close to the farm.</p> <p>No potentially contaminative historical land uses were identified in proximity to the farm.</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>Argyll's Comment</p>	<p>With reference to Environment Agency data, the superficial hydrogeology underlying the Site is classified as a Secondary (Undifferentiated) Aquifer (deposits with variable/limited permeability) and the bedrock hydrogeology is classified as a Secondary (A) Aquifer (deposits with moderate permeability). In terms of the overlying soils, these are given a H1 (class H1) vulnerability classification. According to information provided by the Environment Agency the Site does not lie within a groundwater Source Protection Zone (SPZ). There are no abstraction licences located within 500m.</p> <p>The nearest water feature is located on Site.</p> <p>The general area appears to be largely in agricultural use, although residential properties are also on-site.</p> <p>The following designated eco-receptors were identified at the Site: Twyni Lacharn - Pentwyn / Laugharne - Pendine Burrows (a Site of Special Scientific Interest).</p> <p>The following designated eco-receptors were identified within 500m: Aber Taf / Taf Estuary (Site of Special Scientific Interest) located 473m north east, and Carmarthen Bay And Estuaries / Bae Caerfyrddin Ac Aberoedd (Special Area of Conservation) located 473m north east.</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>



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?	High
Flood Defences	Are there existing flood defences that might benefit the Site?	Yes
Effect	What is the risk of flooding when these defences are operational?	High



Flood Analysis of Buildings	Are the main farm buildings at significant risk of flooding? Yes
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? Yes 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 Risk Management. 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. As a significant proportion of the Site has been identified as at an increased risk of flooding, we recommend that you contact us to discuss the next steps that will assist in further clarifying the risk of flooding at the Site. This may involve carrying out a more detailed assessment (a FLOODSOLUTIONS Consult Report). This will review additional site specific data (not available from UK-wide databases) and raise enquiries of statutory bodies (regulatory body, Local Authority etc.). Such an assessment would identify more accurately the risk of flooding and review the standard of existing defences. It could provide a specification and budget cost estimate for a full Flood Risk Assessment to meet the requirement of National Planning Policy Framework (NPPF), should this be required and/or suggestions for flood resistance/resilience measures. Please contact us so we can discuss your requirements and, if necessary, provide a quotation.
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).



Additional Considerations

Item	Summary	Suggested Action
Historic Rights of Way	A review of historic mapping indicates there may be former rights of way on the farm. It is possible that these could be re-instated by Natural England under the Discovering Lost Ways project within England. This project aims to identify former rights of way (pre-1949) which have disappeared from local authority maps and statements. Similar projects exist for Scotland and Wales. Argyll recommends contacting the relevant authority for further advice and discussion on the implications for a property owner.	Contact either Natural England, Scottish Natural Heritage, or Natural Resources Wales for further information
Nitrate Vulnerable Zones	The farm is not located within or near a Nitrate Vulnerable Zone. Nitrate Vulnerable Zones are designated areas of land draining into waters assessed to be polluted by nitrates. If the farm had lain within a designated zone the land owner would have 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 mg/kg of arsenic, <1.8 mg/kg of cadmium, 60 - 90 mg/kg of chromium, <150 mg/kg of lead, 15 - 30 mg/kg of nickel.	None required
Agricultural Land Classifications	None Identified	Contact Natural England for further information
Countryside Stewardship Agreements (England and Scotland)	Not Applicable	Contact Natural England for further information
Welsh Stewardship Agreements	None Identified	Contact the Welsh Government for further information
Environmental Stewardship Agreements	None Identified	Contact Natural England for further information
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 Site of Special Scientific Interest, a Site of Special Scientific Interest, and a Special Area of Conservation.	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
Radon between 3 and 5%	Employers are required by the Management of Health and Safety at Work Regulations 1999 to assess risks from radon in workplaces. You may therefore wish to contact the Health Protection Agency for further information regarding radon monitoring.	Contact the Public Health England for further information regarding radon monitoring.

Radon Protection Measures	If redevelopment or building extensions are proposed, radon protection may be required. As the data provided in this report is not site specific, it would be prudent to order a more detailed radon report from the British Geological Survey (www.bgs.ac.uk/georeports) or contact the local Building Controls Officer to clarify the level of radon protection required (if any) in accordance with Building Research Establishment report BR211.	Contact the Public Health England for further information regarding radon monitoring.
Ground Instability Hazard	As a potential ground instability hazard was identified, you may wish to consult a local RICS accredited surveyor and/or review any available geotechnical surveys.	Contact RICS accredited Surveyor for further guidance
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
Tree Preservation Orders / Hedgerows	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. 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.	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

Item	Summary	Suggested Action
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

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.).

If no data is identified then the section will be omitted.

Soil Chemistry

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.

If no data is identified then the section will be omitted.

Flooding Risk Information

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.

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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	1	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)	0	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	0	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	0	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)	2	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)	2	2	N/A

Groundwater Vulnerability

Hydrogeology	On-site	1-250m	251-500m
Superficial Aquifer Designations	2	0	0
Bedrock Aquifer Designations	2	1	0
Groundwater Vulnerability	2	2	N/A
Geology	On-site	1-250m	251-500m
Low Permeability Drift Deposits	2	N/A	N/A
BGS 1:625,000 Solid Geology	2	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	0	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	1	0	1
Special Areas of Conservation	0	0	1
Special Protection Areas	0	0	0
Water Abstractions	0	0	0
Source Protection Zones	0	0	N/A

Natural and Mining Related Hazards

Subsidence	On-site	1-250m	251-500m
Collapsible Ground Stability Hazards	1	1 ³	N/A
Compressible Ground Stability Hazards	1	1	N/A
Ground Dissolution Stability Hazards	0	0	N/A
Landslide Ground Stability Hazards	1	1	N/A
Running Sand Ground Stability Hazards	1	1	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	1	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	0	0
World Heritage Sites	0	0	0
Scheduled Monuments	0	0	0
Historic Battlefields	0	0	0
Historic Landscapes	0	0	0
Country Parks	0	0	0
Ancient Woodlands	0	1	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)	2	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	3	0	0
Groundwater Flood Risk	1	0	1
Surface Water Flooding (1:75 year rainfall event)	3	0	0
Surface Water Flooding (1:200 year rainfall event)	3	0	0
Surface Water Flooding (1:1,000 year rainfall event)	3	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	1	0	0
Other Flood Information	On-site	1-250m	251-500m
Surface Water Feature	8	14	10
Detailed River Network	4	0	0

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

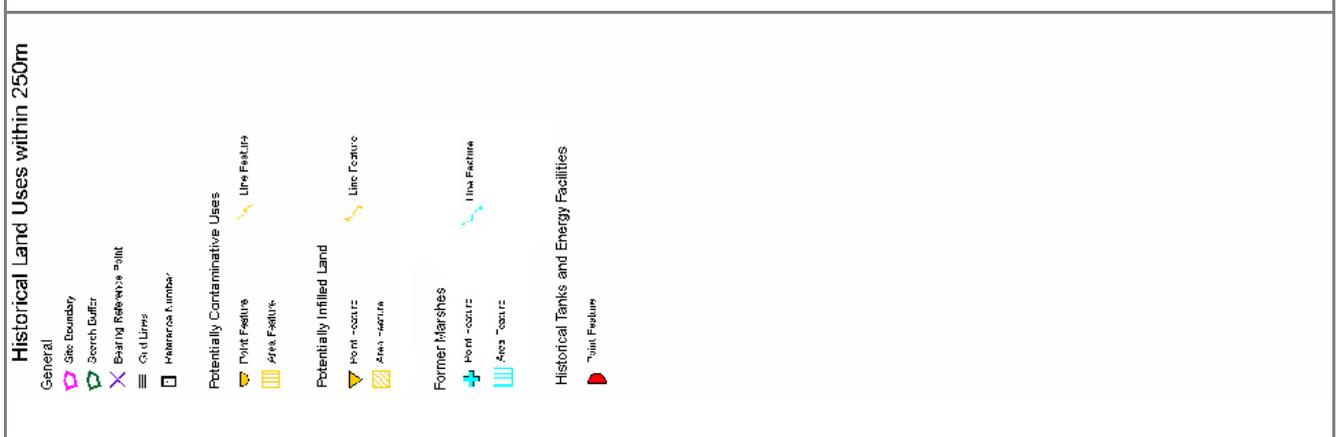
Information on subsidence hazards is provided by the British Geological Survey (BGS). Information present within 250m of the Site is reported under Natural and Mining Related Hazards. Due to the level of detail of this data and the complexities of the real world, the BGS recommends a precautionary approach 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: M Roberts, Property Type: Hotel Trade, Location: Hurst House Farm, Laugharne, Carmarthen, Carmarthenshire, SA33 4rs, Authority: Environment Agency, Welsh Region, Catchment Area: Not Supplied, Permit Ref: Bp0347301, Permit Version: 1, Effective Date: 30th November 2005, Issued Date: 27th October 2005, Revocation Date: Not Supplied, Discharge Type: Sewage And Trade Combined - Unspecified, Discharge Environment: Into Land, Receiving Water: Goundwater Via Soakaway, 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.	On Site	S
2	Operator: Thomas J G, Property Type: Undefined Or Other, Location: Nineacres The Marsh Laugharne, Authority: Environment Agency, Welsh Region, Catchment Area: Not Supplied, Permit Ref: Bn0268401, Permit Version: 1, Effective Date: 15th August 1983, Issued Date: 15th August 1983, Revocation Date: 17th January 1995, Discharge Type: Unspecified, Discharge Environment: Specified Underground, Receiving Water: Underground Strata, Status: Consent expired, Positional Accuracy: Located by supplier to within 10m.	160m	SW
3	Operator: Bradley-Watson P B, Property Type: Undefined Or Other, Location: Hurst House Laugharne Dyfed., Authority: Environment Agency, Welsh Region, Catchment Area: River Taf, Permit Ref: Bp0048301, Permit Version: 1, Effective Date: 26th June 1987, Issued Date: 26th June 1987, Revocation Date: 29th September 1992, Discharge Type: Unspecified, Discharge Environment: Onto Land, Receiving Water: To Land, Status: Consent expired, Positional Accuracy: Located by supplier to within 100m.	232m	S



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Historical Land Use

Historical Potentially Contaminative Uses

Potentially Contaminative Industrial Uses (Past Land Use)

Map ID	Details	Distance	Direction
1	Mineral railway, Date of Mapping: 1891-1907.	On Site	NE
2	Mineral railway, Date of Mapping: 1891-1908.	On Site	N

Potentially Infilled Land

Potentially Infilled Land (Water)

Map ID	Details	Distance	Direction
3	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1964.	On Site	SE
4	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1964.	On Site	E
5	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1964.	58m	S
6	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1964.	79m	S

Aquifer Designation (Superficial)

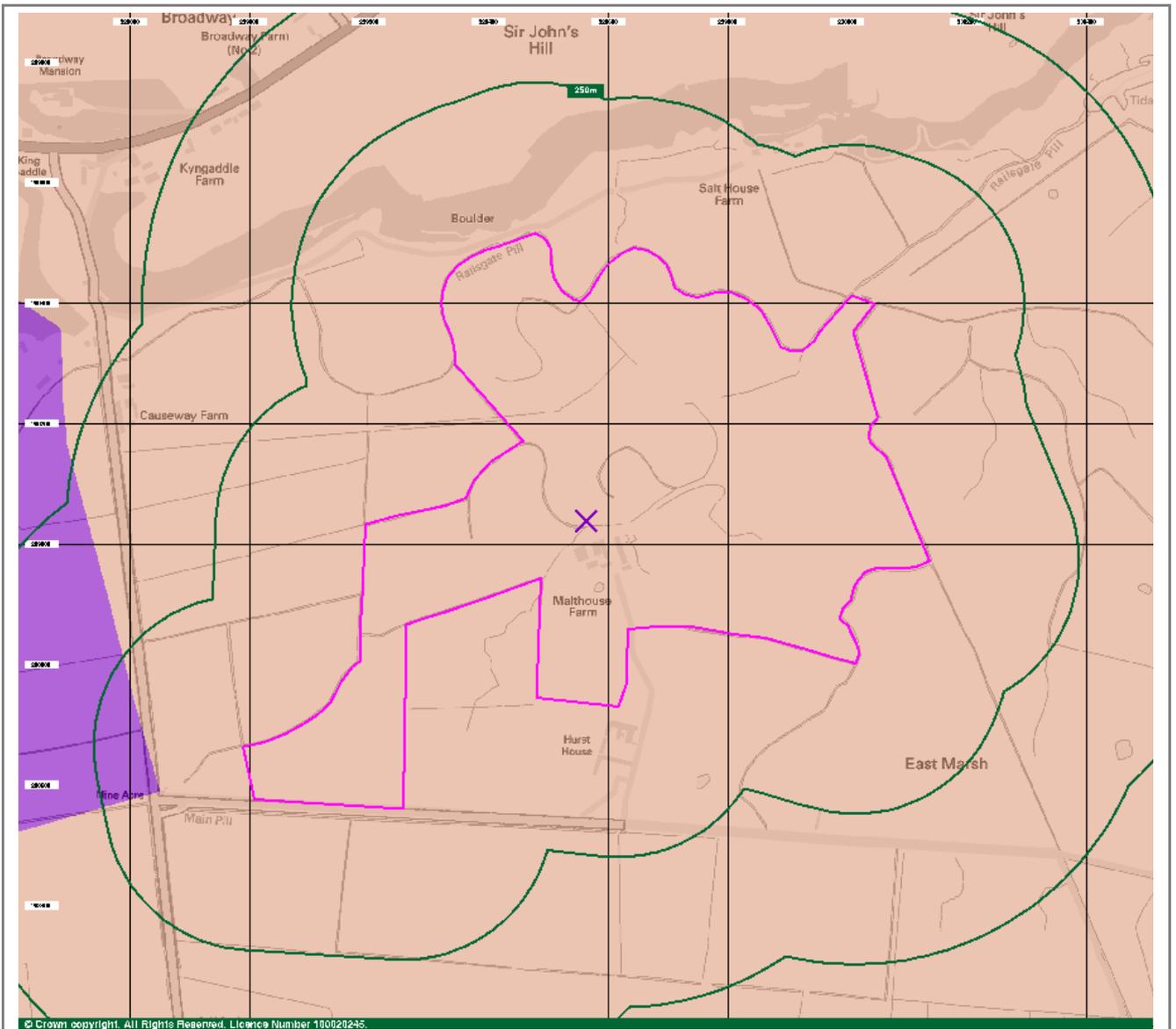


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Aquifer Designations

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

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
	Secondary Aquifer - Undifferentiated These aquifers have a variable permeability, yielding varying amounts of groundwater at different locations but not capable of supporting water supplies at a more than a local scale.	On Site	-
	Secondary Aquifer - Undifferentiated These aquifers have a variable permeability, yielding varying amounts of groundwater at different locations but not capable of supporting water supplies at a more than a local scale.	On Site	E

Bedrock Aquifer Designations

Map ID	Details	Distance	Direction
	Secondary Aquifer - A These aquifers are formed of moderately permeable layers capable of supporting water supplies at a local scale, and in some cases forming an important source of base flow to rivers.	On Site	E
	Secondary Aquifer - A These aquifers are formed of moderately permeable layers capable of supporting water supplies at a local scale, and in some cases forming an important source of base flow to rivers.	On Site	-
	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.	152m	W

Groundwater Vulnerability

Map ID	Details	Distance	Direction
	Soil Classification: Soils of High Leaching Potential (H1) - Soils which readily transmit liquid discharges because they are either shallow, or susceptible to rapid by-pass flow directly to rock, gravel or groundwater, Map Scale: 1:100,000, Map Name: Sheet 35 West Glamorgan.	On Site	E
	Soil Classification: Soils of High Leaching Potential (H1) - Soils which readily transmit liquid discharges because they are either shallow, or susceptible to rapid by-pass flow directly to rock, gravel or groundwater, Map Scale: 1:100,000, Map Name: Sheet 34 Pembroke.	On Site	-
	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 34 Pembroke.	81m	N
	Soil Classification: Soils of High Leaching Potential (H1) - Soils which readily transmit liquid discharges because they are either shallow, or susceptible to rapid by-pass flow directly to rock, gravel or groundwater, Map Scale: 1:100,000, Map Name: Sheet 34 Pembroke.	181m	W

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 34 Pembroke, Scale: 1:100,000.	On Site	-

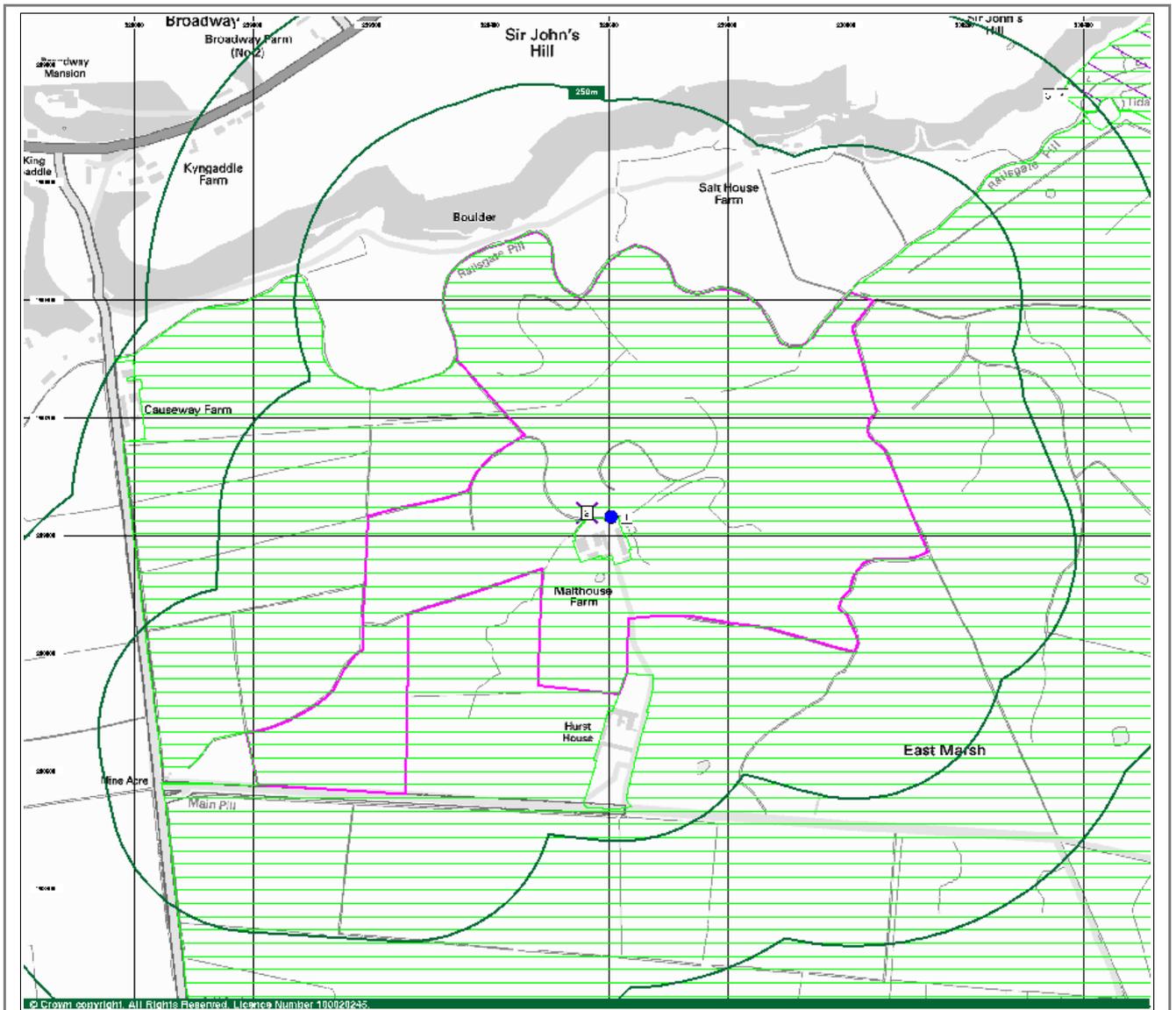
Low Permeability Drift Deposits

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 35 West Glamorgan, Scale: 1:100,000.	On Site	E

BGS 1:625,000 Solid Geology

Map ID	Details	Distance	Direction
	Lower Devonian.	On Site	-
	Tournaisian and Viséan (Carboniferous Limestone Series).	On Site	W

Sensitive Land Uses

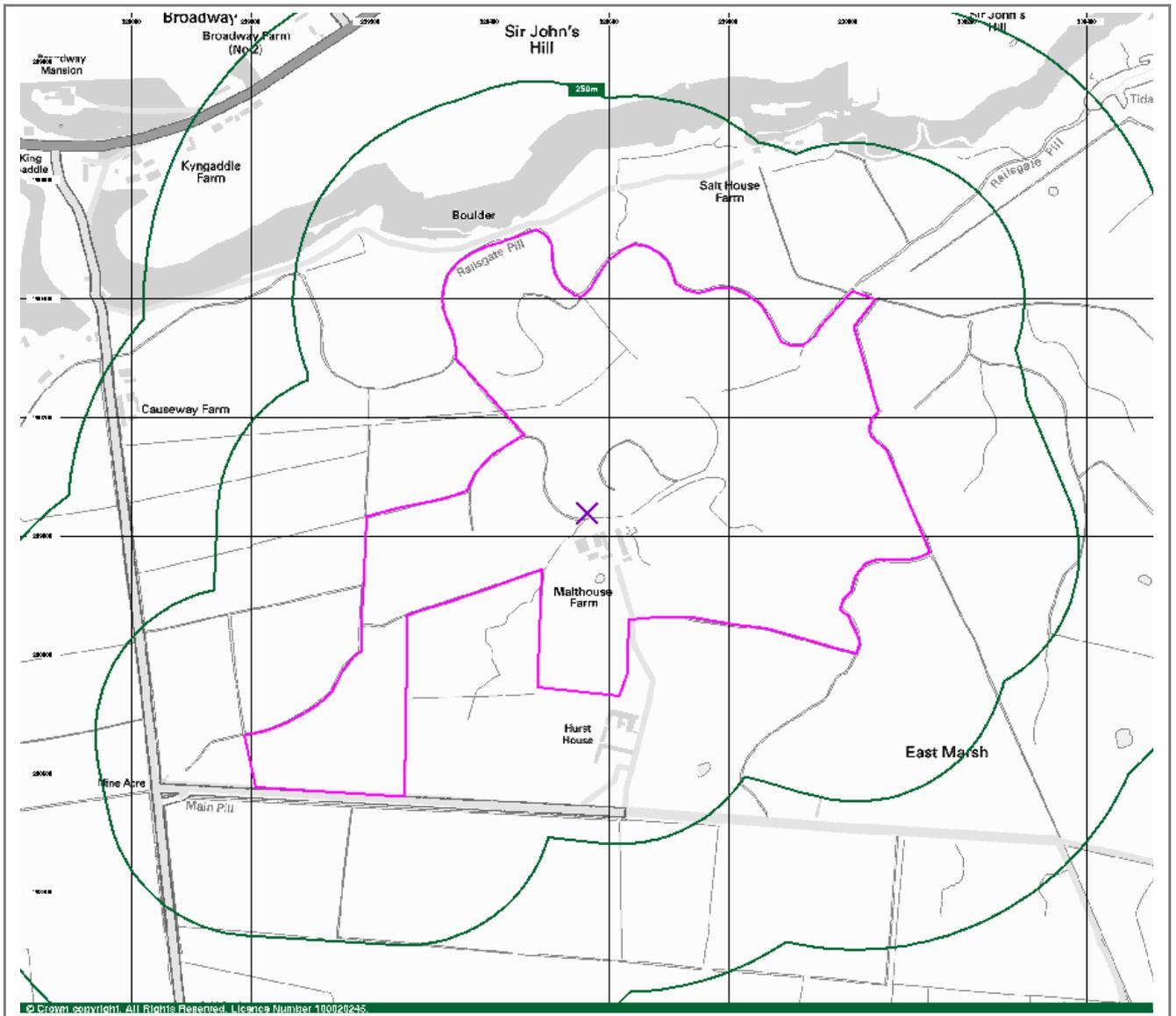


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Sensitive Land Uses

- | | | |
|------------------------------------|-------------------------|-------------------------------------|
| 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
-  Search Buffer
-  Bearing Reference Point
-  N
-  Source Protection Zone I
-  Source Protection Zone II
-  Source Protection Zone III
-  Zone of Special Interest
-  Source Protection Zone Borehole

Environmentally Sensitive Features

Nearest Surface Water Feature

Map ID	Details	Distance	Direction
1	Surface water feature identified in proximity.	On Site	E

Sites of Special Scientific Interest

Map ID	Details	Distance	Direction
2	Name: Twyni Lacharn - Pentywyn / Laugharne - Pendine Burrows, Multiple Area: N, Area (m ²): 23015371.24, Source: Countryside Council for Wales, Reference: 225,32wwk, Designation Date: 1st January 1953, Date Type: Renotified, Designation Details: Biological.	On Site	-
3	Name: Aber Taf / Taf Estuary, Multiple Area: N, Area (m ²): 15002347.53, Source: Countryside Council for Wales, Reference: 2623,33wpv, Designation Date: 6th August 2002, Date Type: Notified, Designation Details: Biological.	473m	NE

Special Areas of Conservation

Map ID	Details	Distance	Direction
4	Name: Carmarthen Bay And Estuaries / Bae Caerfyrddin Ac Aberoedd, Multiple Area: N, Area (m ²): 661083957.79, Source: Countryside Council for Wales, Reference: Uk0020020, Status: Designated.	473m	NE

Natural and Mining Related Hazards

Subsidence

Collapsible Ground Stability Hazards

Details	Distance	Direction
Risk: No Hazard, Source: British Geological Survey, National Geoscience Information Service.	On Site	E
Risk: Very Low, Source: British Geological Survey, National Geoscience Information Service.	37m	N

Compressible Ground Stability Hazards

Details	Distance	Direction
Risk: Moderate, Source: British Geological Survey, National Geoscience Information Service.	On Site	-
Risk: No Hazard, Source: British Geological Survey, National Geoscience Information Service.	37m	N

Landslide Ground Stability Hazards

Details	Distance	Direction
Risk: Very Low, Source: British Geological Survey, National Geoscience Information Service.	On Site	E
Risk: Moderate, Source: British Geological Survey, National Geoscience Information Service.	37m	N

Running Sand Ground Stability Hazards

Details	Distance	Direction
Risk: Moderate, Source: British Geological Survey, National Geoscience Information Service.	On Site	E
Risk: No Hazard, Source: British Geological Survey, National Geoscience Information Service.	37m	N

Shrinking or Swelling Clay Subsidence Hazards

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

Non-Coal Mining Hazards

Details	Distance	Direction
Risk: Highly Unlikely, Source: British Geological Survey, National Geoscience Information Service.	On Site	-
Risk: Highly Unlikely, Source: British Geological Survey, National Geoscience Information Service.	152m	W

Radon

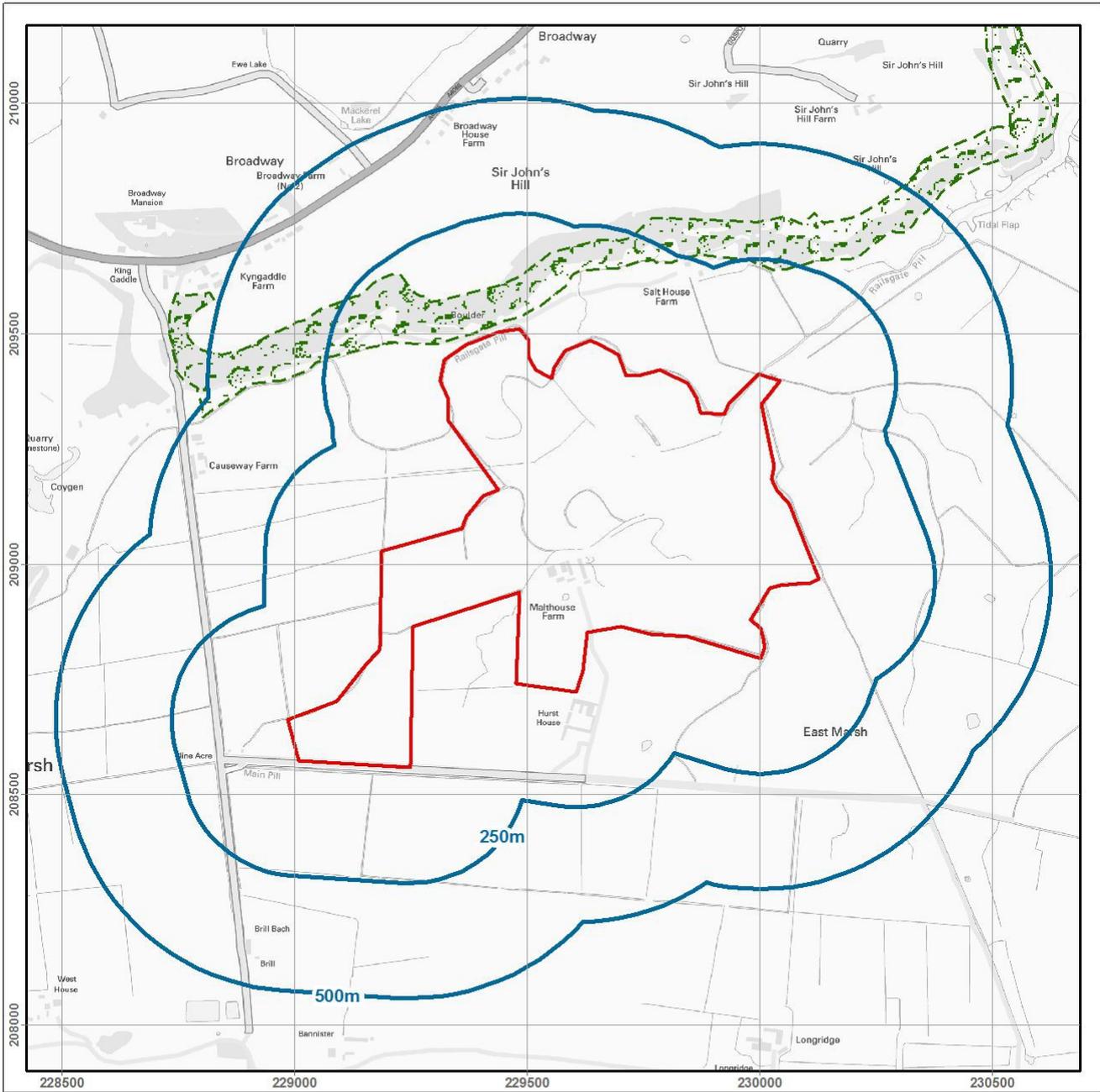
Radon Potential

Details	Distance	Direction
The property is in a radon affected area, as between 3 and 5% of homes are above the action level, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Radon Protective Measures

Details	Distance	Direction
Basic, 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 - 1:13,750

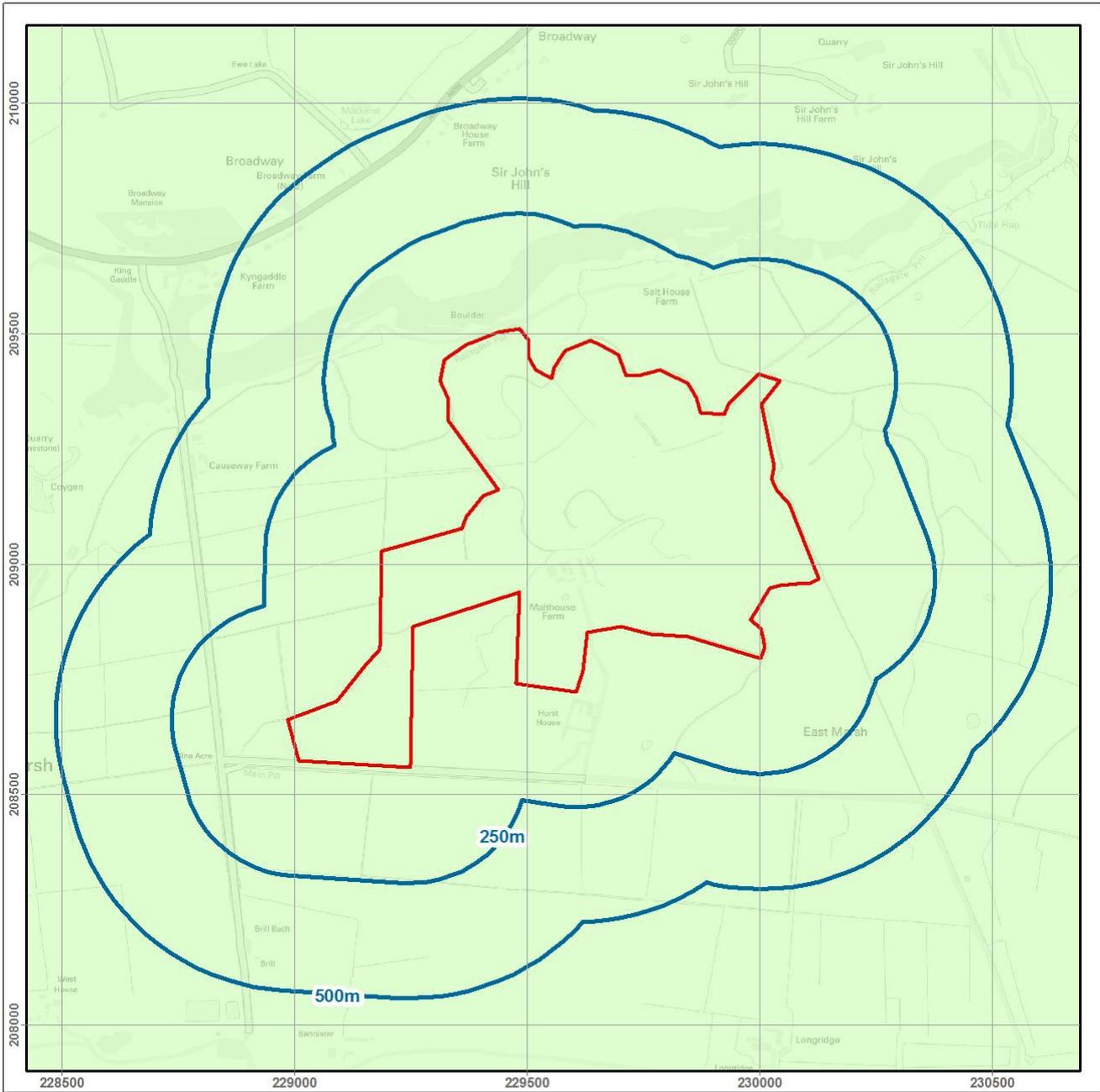
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Farm Specific Issues

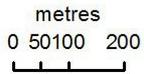
Ancient Woodland

Details	Distance	Direction
Ancient and Semi Natural Woodland, Name: , Area (hectares): 21.46	16.7m	N

BGS Soil Chemistry – Arsenic



Soil Chemistry - Arsenic

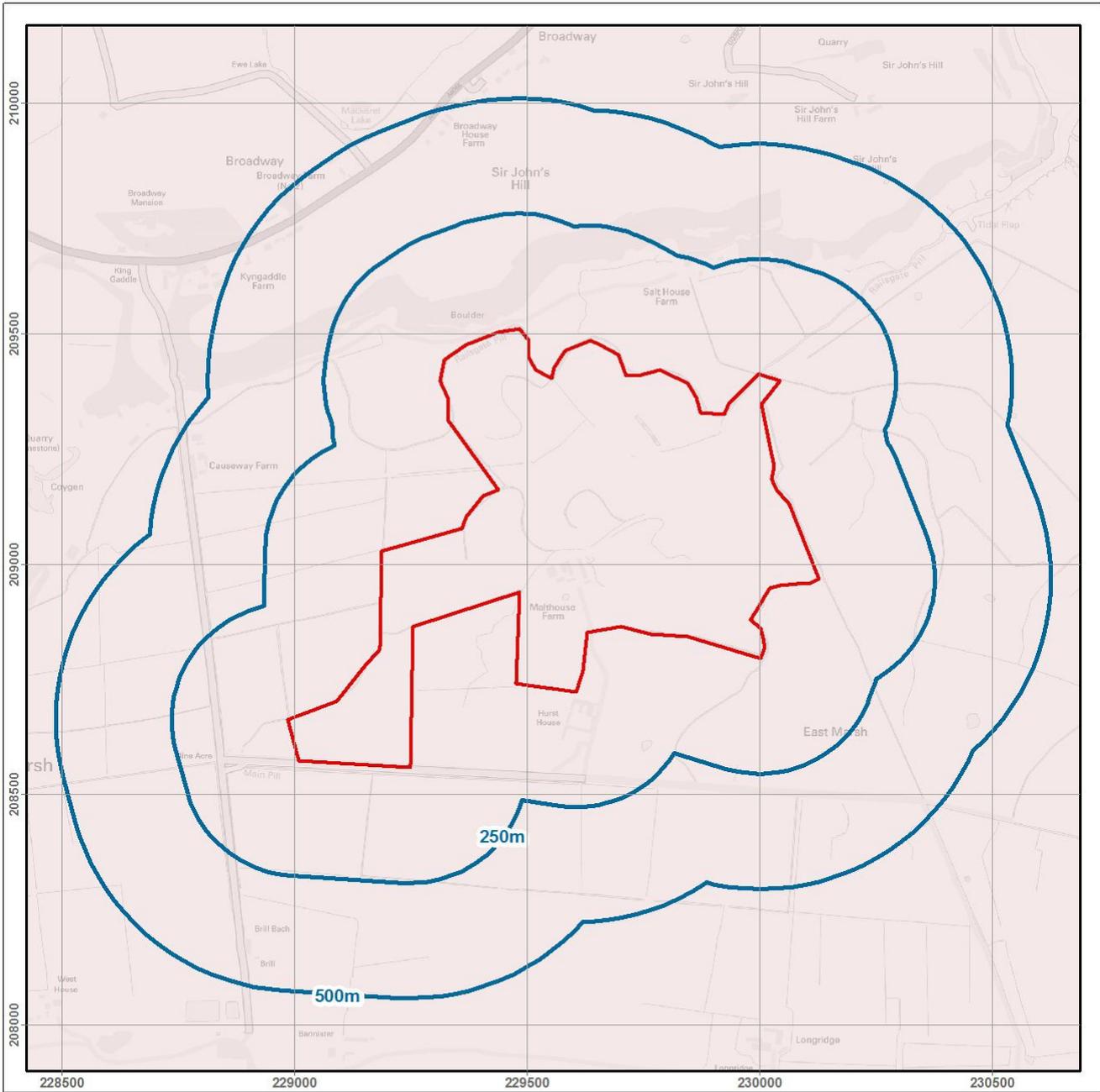


* - Not all features in legend may be present in above map

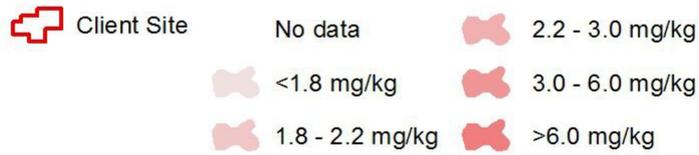
Nominal scale at A4 paper size - 1:13,750

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BGS Soil Chemistry – Cadmium



Soil Chemistry - Cadmium

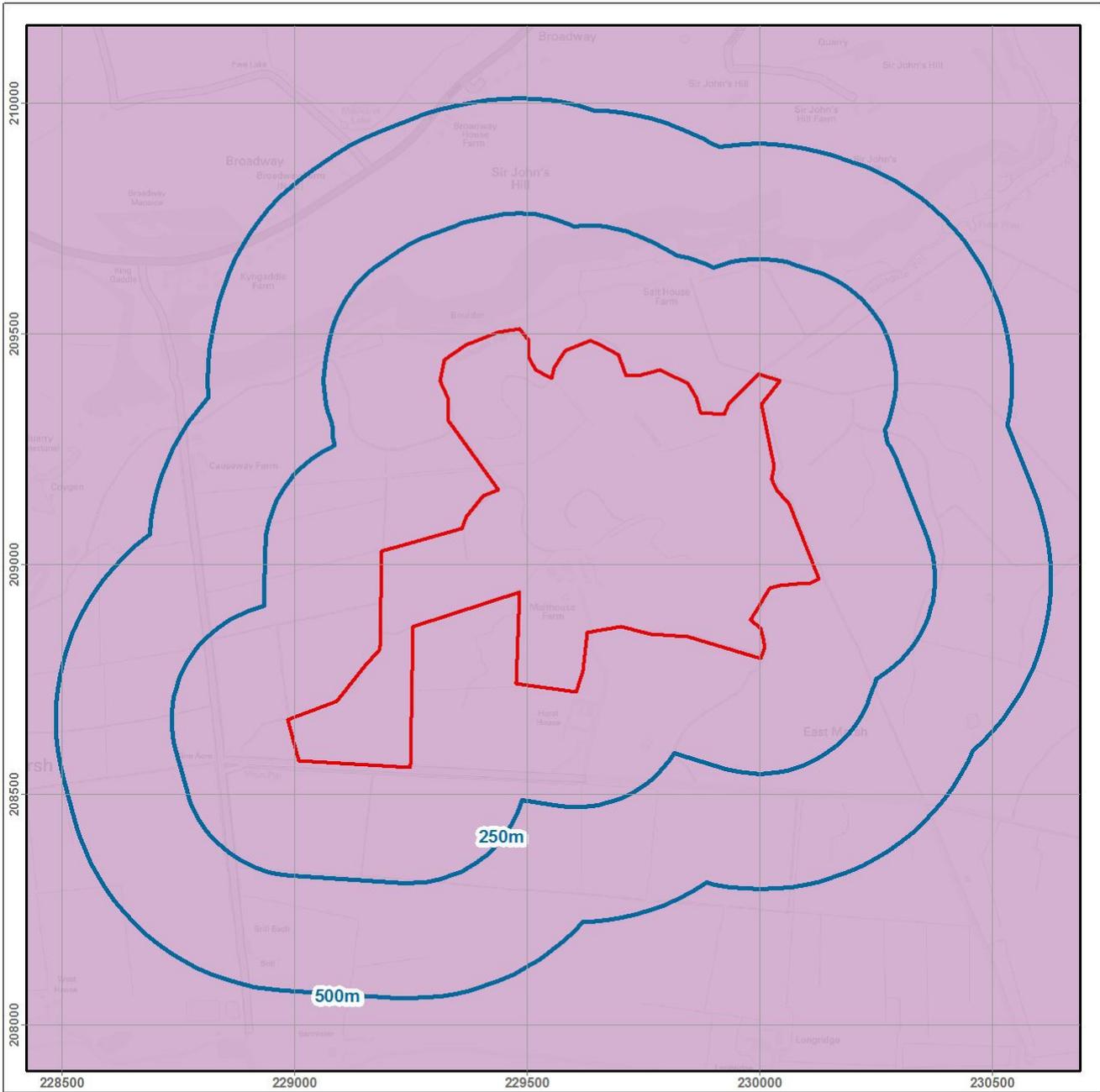


* - Not all features in legend may be present in above map

Nominal scale at A4 paper size - 1:13,750

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BGS Soil Chemistry – Chromium



Soil Chemistry - Chromium

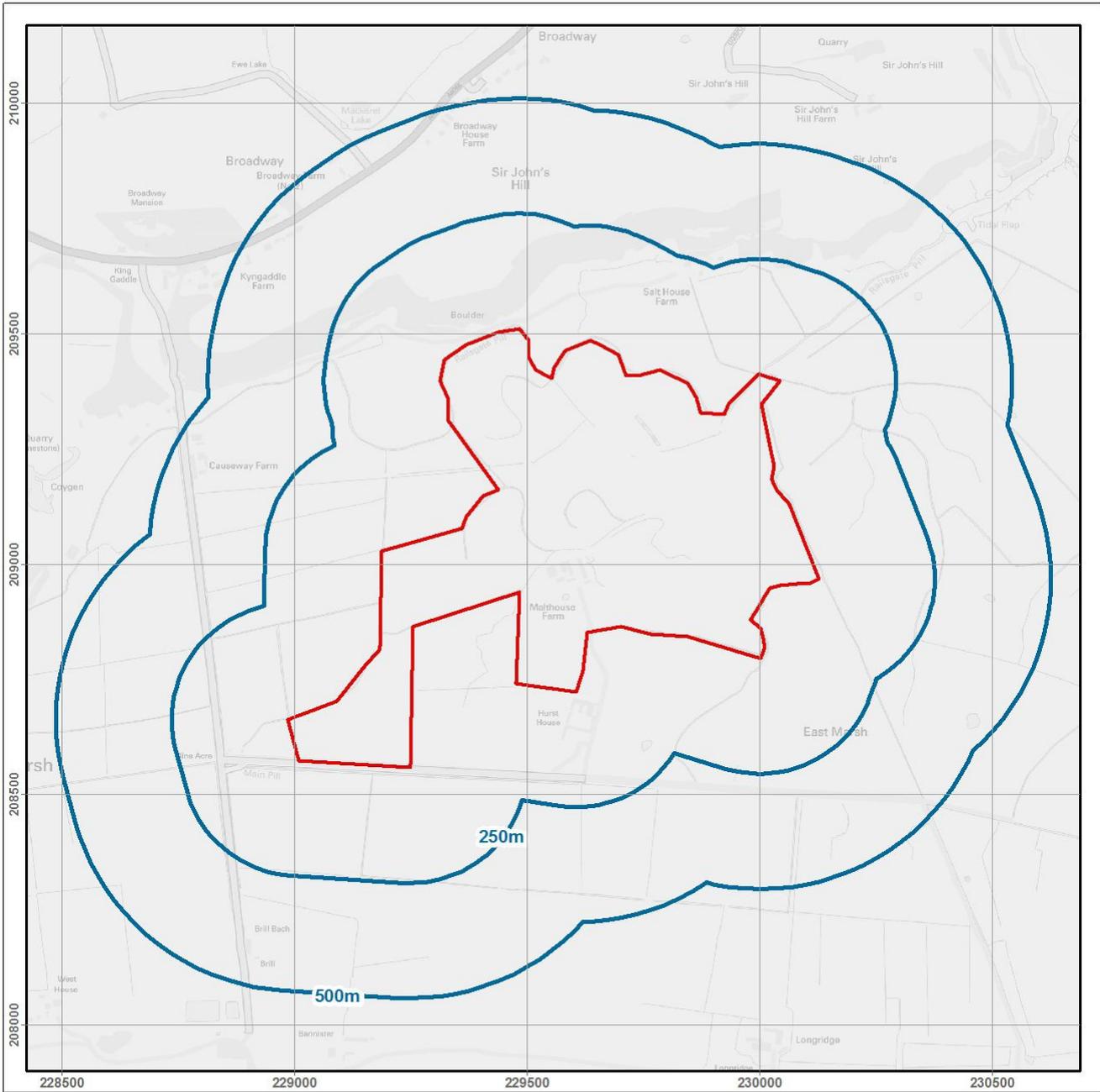


* - Not all features in legend may be present in above map

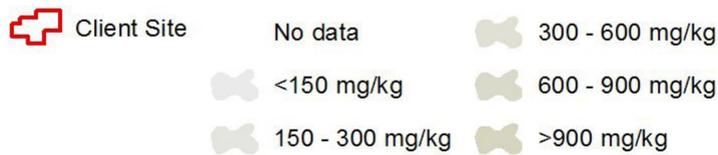
Nominal scale at A4 paper size - 1:13,750

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BGS Soil Chemistry – Lead



Soil Chemistry - Lead

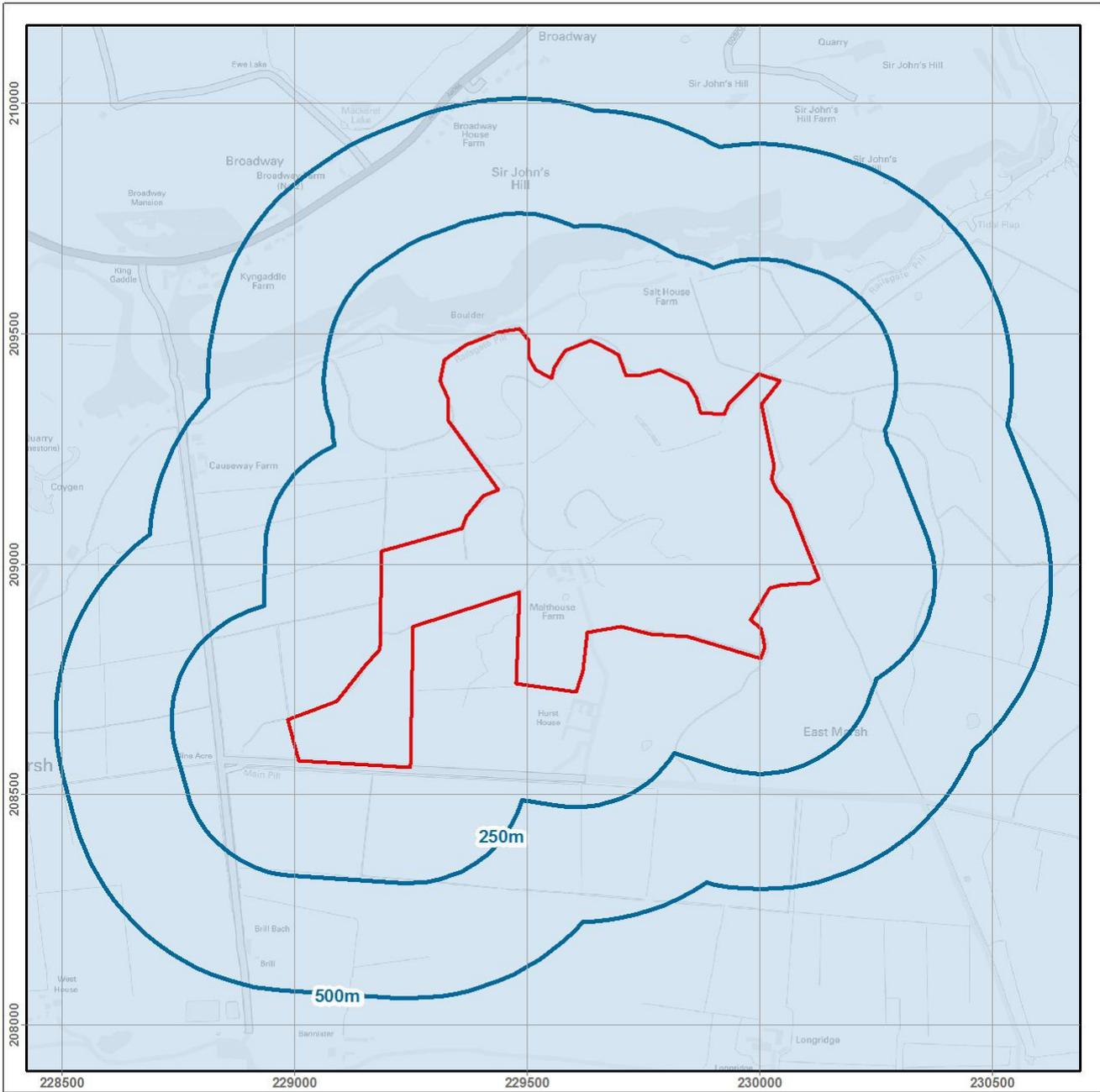


* - Not all features in legend may be present in above map

Nominal scale at A4 paper size - 1:13,750

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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 - 1:13,750

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Soil Chemistry

BGS Soil Chemistry Arsenic

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

BGS Soil Chemistry Cadmium

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

BGS Soil Chemistry Chromium

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

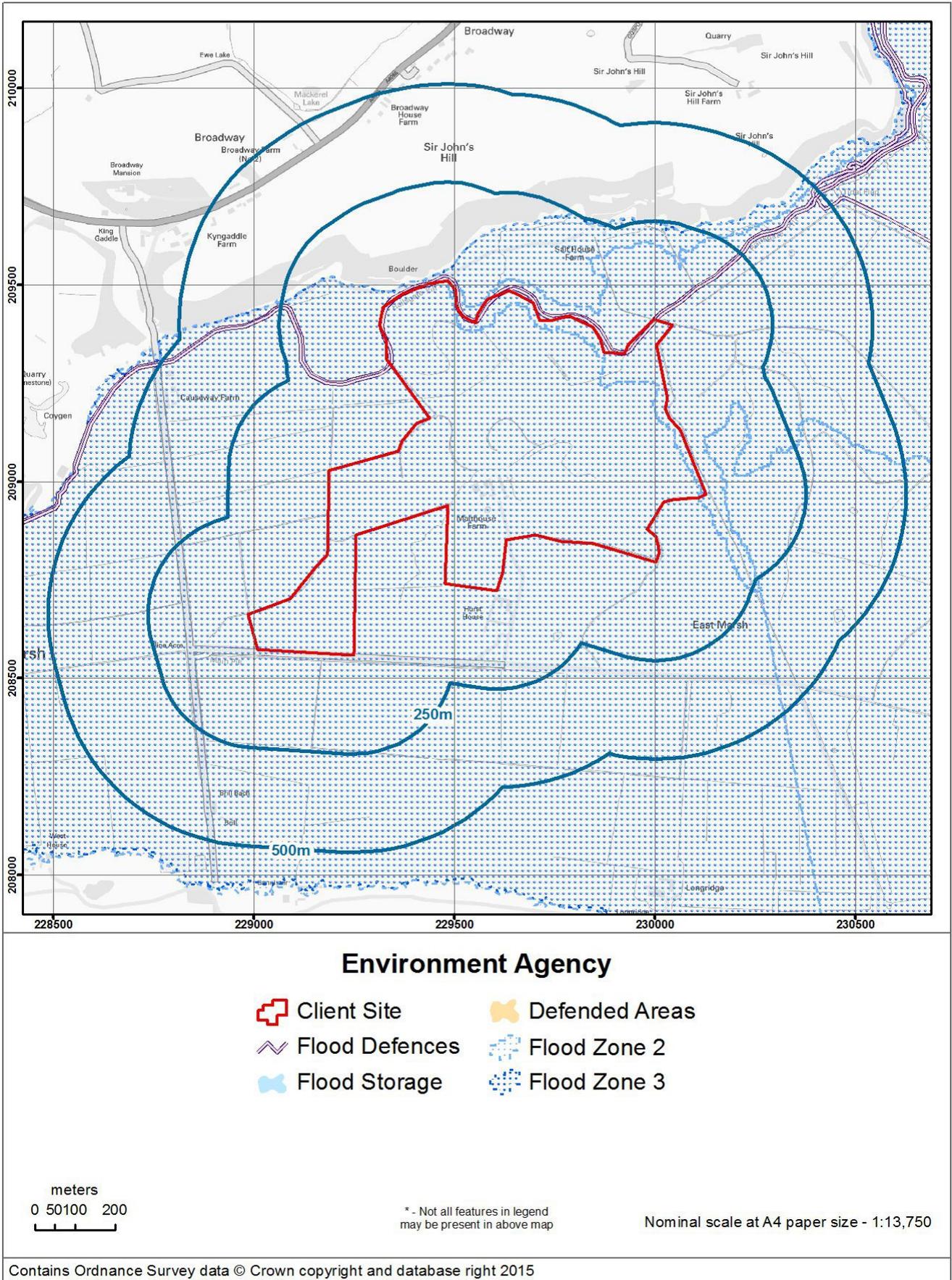
BGS Soil Chemistry Lead

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

BGS Soil Chemistry Nickel

Map ID	Details	Distance	Direction
	Sample Type: Sediment, Proportion: 15 - 30 mg/kg	On Site	-

Flooding from Rivers or Sea



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: Tidal 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: Tidal Models, Source: Environment Agency, Head Office, Boundary Accuracy: As Supplied.	On Site	-
	Type: Fluvial / Tidal Models, Source: Environment Agency, Head Office, Boundary Accuracy: As Supplied.	On Site	-



The Site (or part of it) is at a high risk of flooding from rivers and the sea, as defined by the regulatory body's Flood Map. The risk of annual flooding is greater than 1% (from rivers) or greater than 0.5% (from the sea). Properties in Flood Zone 3 may have difficulty in obtaining flood insurance (most insurers will only cover risks of less than 1.33% annual probability). All development proposals would need to be accompanied by a Flood Risk Assessment, in accordance with NPPF. Developments such as emergency services stations, basement dwellings and caravans, mobile homes and park homes for permanent residential use, etc. are not compatible with this level of risk. Significant planning constraints would apply to such developments as residential, care homes, hotels, short-let caravan parks, camping, etc. Parts of the Site may be within the 'functional floodplain' (>5% annual risk of flooding) within which severe planning constraints apply. It is recommended that a FloodSolutions Consult Report is undertaken to further define the flood risk issues and potential development constraints.

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.

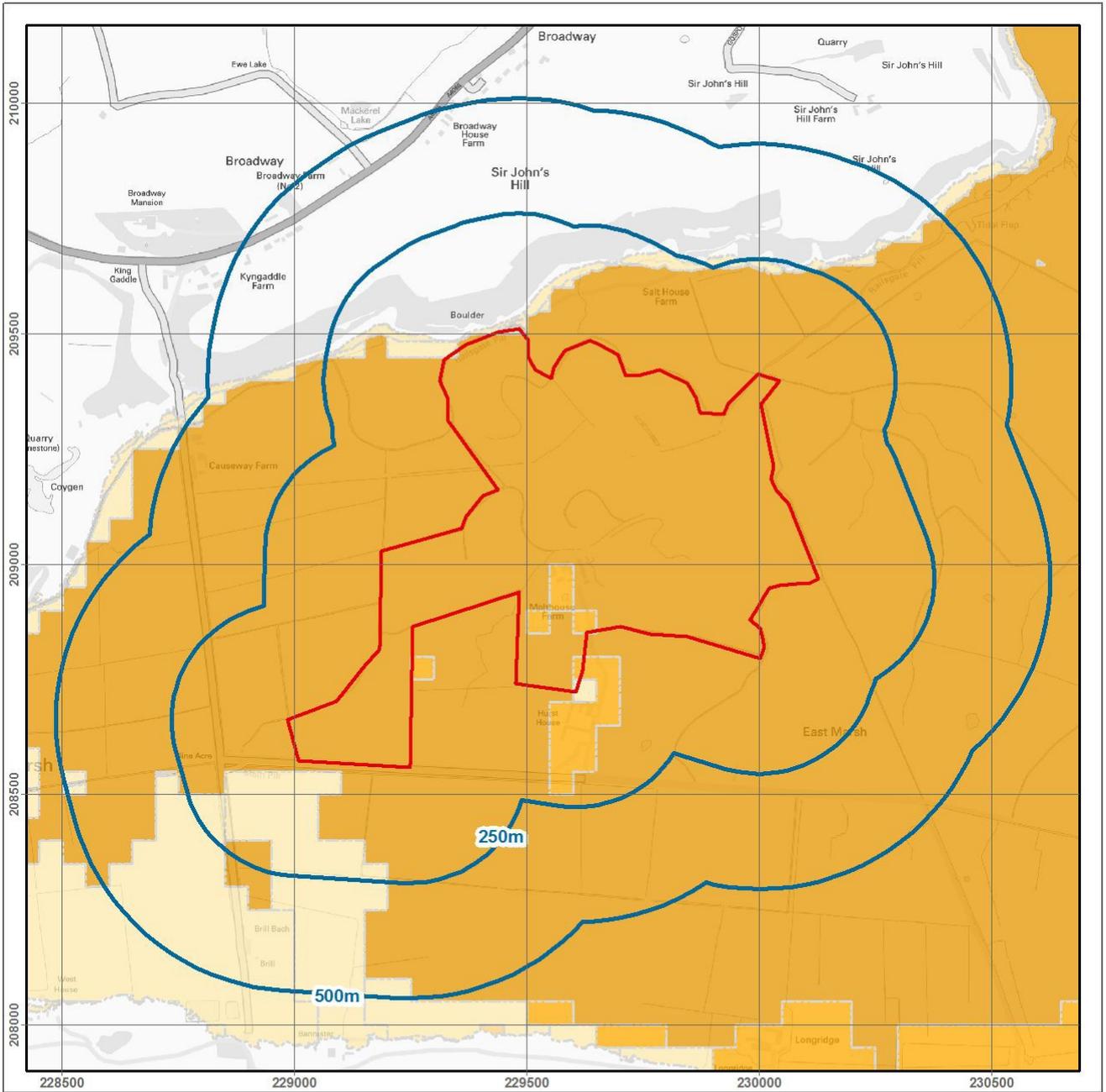
Flood Defences

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.

Natural Resources Wales Risk of Flooding from Rivers and Sea



RoFRS: Flood Probability - Risk of Insurability

-  Client Site
-  High - Yes
-  Medium - Yes
-  Medium - No
-  Low - No
-  Very Low - No



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

Nominal scale at A4 paper size - 1:13,750

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Natural Resources Wales Risk of Flooding from Rivers and Sea

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

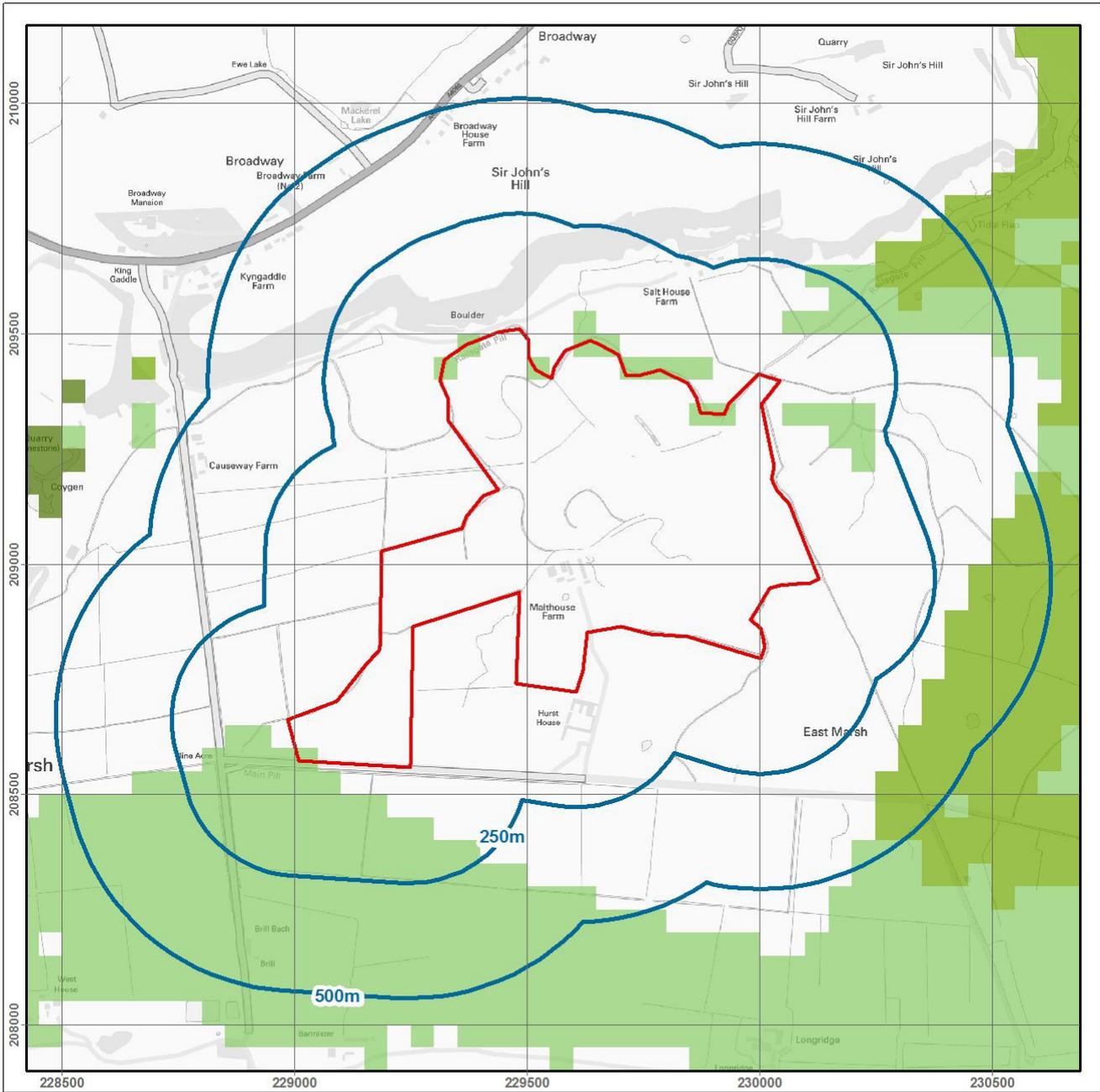


The Site (or part of it) has been defined as being at Significant Flood Risk within the regulatory body's risk assessment. This classification relates to the locality as a whole, rather than the individual site and relates only to the risk of coastal or river flooding. Flood insurance may be difficult 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.

Natural Resources Wales Data

The data in the Risk of Flooding from Rivers and Sea Property Flood Likelihood Database is sourced from Natural Resources Wales'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 - 1:13,750

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Groundwater Flooding Risk

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



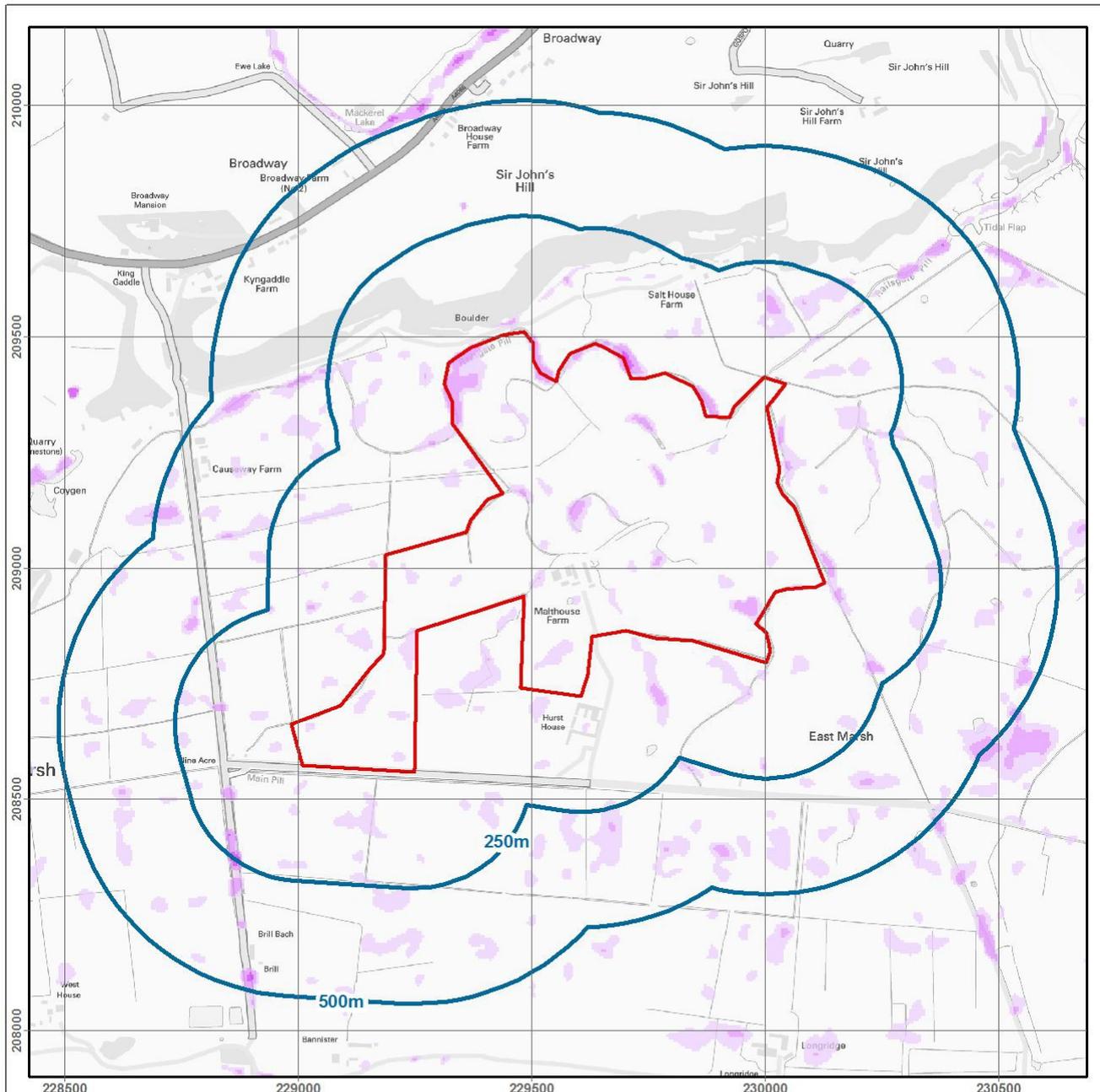
Information from ESI indicates that there is a low risk of groundwater flooding in this area with a return period of 1 in 100 years. There will be a remote possibility that incidence of groundwater flooding could lead to damage to property or harm to other sensitive receptors at, or near, this location. For sensitive land uses further consideration of site topography, drainage, and historical information on flooding in the local area should be undertaken by a suitably qualified professional. Should there be any flooding it is likely to be limited to seepages and waterlogged ground, damage to basements and subsurface infrastructure, and should pose no significant risk to life. Surface water flooding, however, may be exacerbated when groundwater levels are high.

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 100 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 - 1:13,750

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Surface Water Flooding

Surface Water Flooding

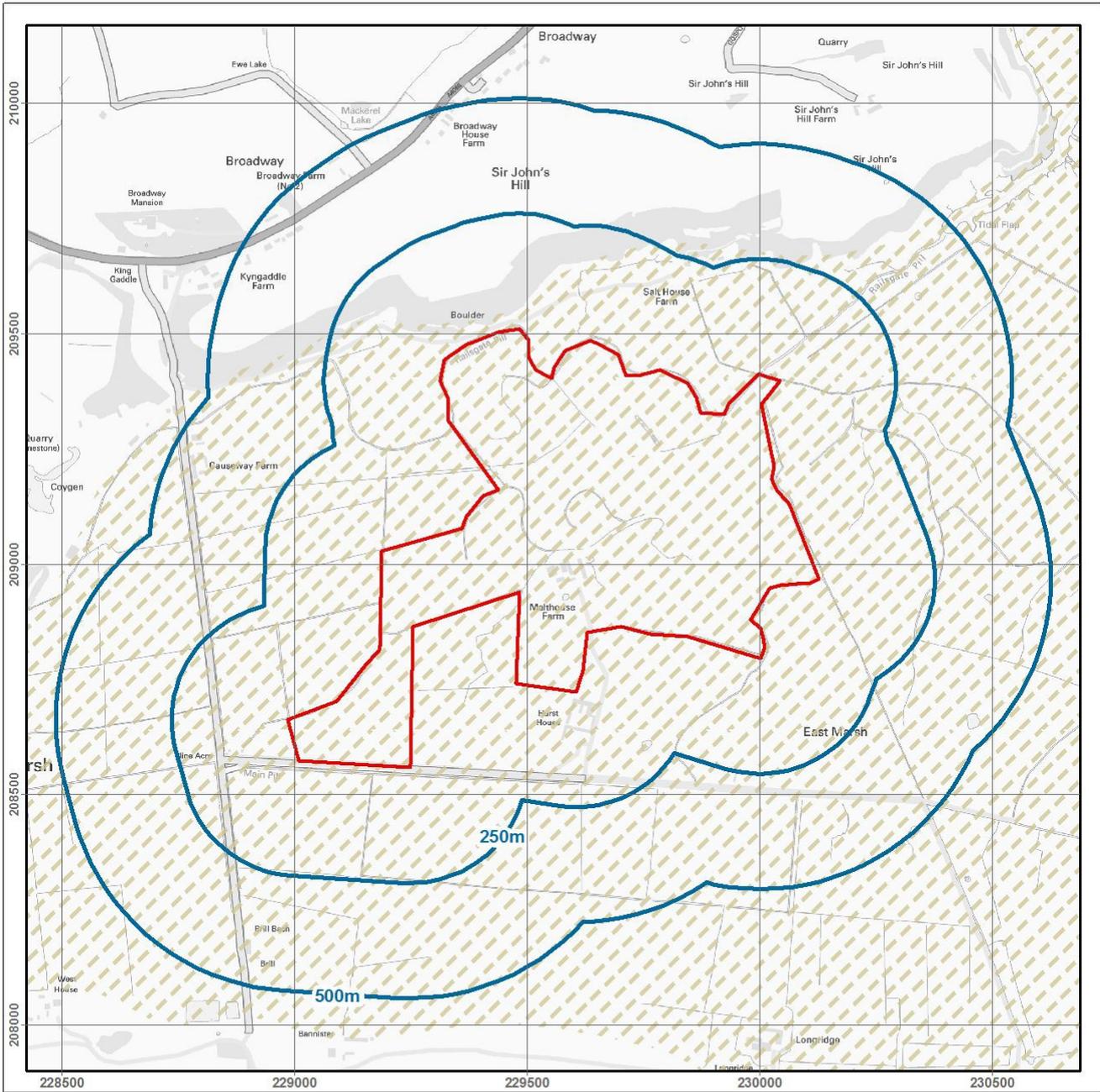
Details	Distance	Reply or Direction
What is the risk of surface water flooding at the Site following a 1 in 75 year rainfall event?	On Site	high
What is the risk of surface water flooding at the Site following a 1 in 200 year rainfall event?	On Site	high
What is the risk of surface water flooding at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



JBA Risk Management 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 Flooding

-  Client Site
-  Historic Floods
-  Geo Indicators



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

Nominal scale at A4 paper size - 1:13,750

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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	YES
Coastal flooding indicators, Higher flood potential from the sea: the first areas to experience the effects of coastal flooding.	On Site	-

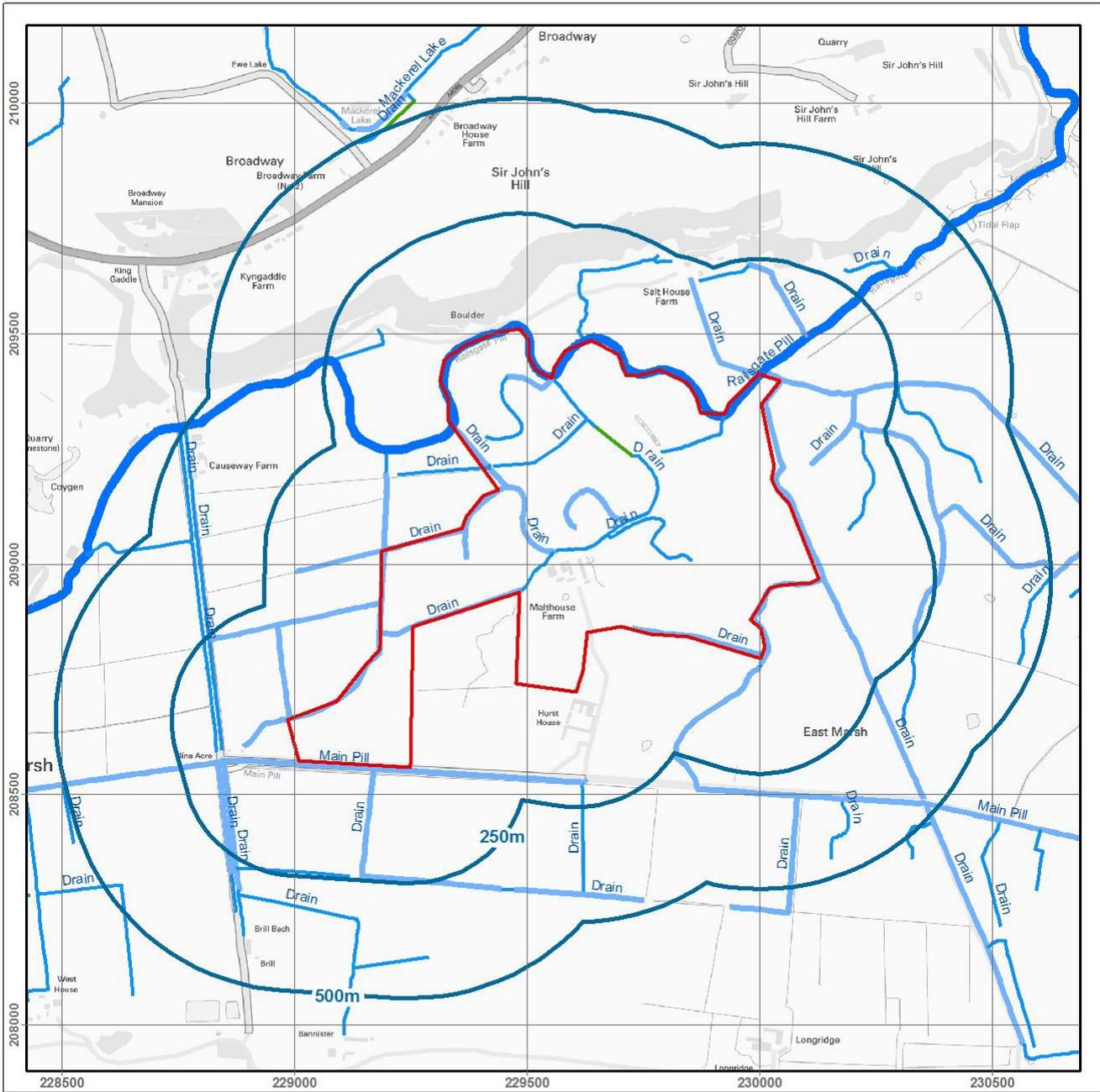


Data from the British Geological Survey (BGS) indicates that the type of deposits in the locality of the Site are of the type normally associated with floodplains. However, this data should only be considered as complementary to the regulatory body's Flood Map. This BGS data does not indicate the likelihood 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

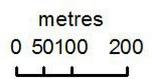
Geological Indicators of Flooding – The BGS Geological Indicators of Flooding (GIF) data set is a digital map based on the BGS Digital Geological Map of Great Britain at the 1:50,000 scale (DiGMapGB-50). It was produced by characterising Superficial (Drift) Deposits on DiGMapGB-50 in terms of their likely 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 - 1:13,750

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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: Railsgate Pill, Watercourse Name: , Is The Feature a Drain?: NO.	On Site	-
	River Name: Drain, Watercourse Name: , Is The Feature a Drain?: YES.	On Site	-
	River Name: , Watercourse Name: , Is The Feature a Drain?: NO.	On Site	-
	River Name: Drain, Watercourse Name: , Is The Feature a Drain?: YES.	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	8.00m
	Minimum height of the Site above sea level	On Site	1.60m
	Average height of the Site above sea level	On Site	3.71m



The Site is at a relatively low height above sea level. However, this is not in itself indicative of the degree 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	On Site	-
Surface water feature	On Site	-
Surface water feature	On Site	-
Surface water feature	On Site	-
Surface water feature	On Site	-
Surface water feature	On Site	-
Surface water feature	On Site	-
Surface water feature	On Site	-
Surface water feature	4.4m	S
Surface water feature	11.3m	N
Surface water feature	14.1m	S
Surface water feature	14.9m	NW
Surface water feature	17.6m	S
Surface water feature	77.1m	E
Surface water feature	77.6m	NE
Surface water feature	121.4m	W
Surface water feature	124.6m	SE
Surface water feature	160.7m	W
Surface water feature	166.1m	W
Surface water feature	167.0m	W
Surface water feature	187.9m	SW
Surface water feature	240.4m	S
Surface water feature	290.1m	S
Surface water feature	342.0m	NE
Surface water feature	346.9m	SE
Surface water feature	424.0m	E
Surface water feature	437.1m	S
Surface water feature	469.1m	SE
Surface water feature	479.7m	NE
Surface water feature	479.7m	NE
Surface water feature	482.7m	S
Surface water feature	498.2m	E



There is a water feature shown on the Ordnance Survey maps within 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 Risk Management 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.

Useful Contacts

Name and Address	Telephone/Fax/Email
Argyll Environmental Limited 1 st Floor 98 – 99 Queens Road Brighton BN1 3XF www.argyllenvironmental.com	Telephone 0845 458 5250 orders@argyllenviro.com
Ensura Limited (for Environmental Insurance) 1 st Floor 98 – 99 Queens Road Brighton BN1 3XF 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
Carmarthenshire County Council County Hall www.carmarthenshire.gov.uk	Telephone 01267 234567 Fax: 01267 238326
British Geological Survey Enquiry Service British Geological Survey www.bgs.ac.uk	Telephone 0115 936 3143 Fax: 0115 936 3276 enquiries@bgs.ac.uk
Countryside Council for Wales Plas Penrhose	Telephone 01248 385500 Fax: 01248 355782
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
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



Important Consumer Protection Information

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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
1st Floor
98 – 99 Queens Road
Brighton
BN1 3XF

Telephone: 0845 458 5250

Email: orders@argyllenviro.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.