

SITESOLUTIONS Combined



Contaminated Land

FURTHER ACTION



Flooding

FURTHER ACTION



Argyll's Overview

Contaminated Land :

Plausible contaminant linkages have been identified and soil and groundwater liabilities could occur. Accordingly, potential Liabilities have been identified under the relevant contaminated land legislation.

Flood Risk : Moderate-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 have been identified in the immediate vicinity of the Site: Ground Instability Hazard and Infilled Land.

One or more telecommunication base stations are located within 100m of the Site.

Operational Permits :

One or more authorisations, licences, consents or enforcements have been identified at or within 25m of the Site. Please refer to "Current Operations" section for further details.



Report on:

Sample Site, Sample Road, UK

Report prepared for:

Argyll Environmental

Client Reference:

Not Supplied

Report Reference:

Specimen

National Grid Reference:

332383,370836

Report date:

23rd April 2013



Site Location

Report prepared on

Sample Site, Sample Road, UK

Site Area (m²)

27265.54

Current Use

Commercial

Proposed Use

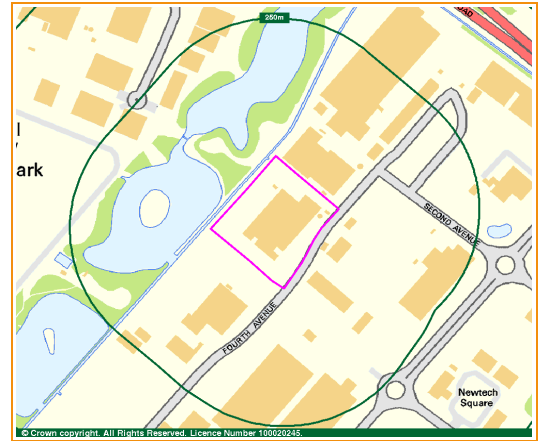
Commercial

Report Author

Steve Watt BSc (Hons) MSc, AIEMA, Environmental Auditor
Telephone: 0845 458 5250

Additional Information Provided

None provided





Executive Summary

Risk

Contaminated Land



Evaluation



Further action



Liability Assessment

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 1991. To quantify these you may decide to undertake a more detailed assessment through the recommendation(s) set out below.

What is the overall on-site risk?	Moderate
What is the overall off-site risk?	Moderate
What is the environmental sensitivity rating?	Moderate to High
Has a plausible contaminant linkage been identified?	Yes



Recommendations

We recommend regulatory consultation with the Local Authority Environmental Health and Planning Departments to include a review of planning records for the Site, details of any past Site investigations/remediation work, relevant information concerning the Authorities strategy under Part 2A of the Environmental Protection Act 1990 and any other information regarding ground conditions or contaminated land. 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 5-10 working days but may take up to 20 working days depending on response times. Please contact us for further information.



Consultant's Comment

The Site is located within an area which is at risk of flooding and as a result insurance may not be available at standard terms. However, this will be dependent on more site specific factors and we recommend contacting your insurance provider before proceeding with any transaction.

Is the Site likely to be insurable at standard terms?	Yes
If development is proposed would a detailed Flood Risk Assessment be required?	Yes (Full)
What is the overall risk of flooding, assuming defences fail or are absent or over-topped?	High
Are there existing flood defences that might benefit the Site?	Yes
What is the risk of flooding when these defences are operational?	Moderate to High



Recommendations

1. As the Site is 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 (Environment Agency, 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. It would be prudent to ask the vendor to confirm whether or not they are aware of any previous flooding at the Site.



Contaminated Land Risk Analysis

	Investigation	Commentary
	On-site sources	The Site appeared to form part of a rifle range prior to c.1870, which was no longer labelled in c.1899. In c.1954 the Site appeared to form part of an airfield and it is noted that this feature could have been omitted from previous map editions due to sensitive military use. By 1986 the Site was developed for assumed light industrial use as part of Deeside Industrial Park with a number of tanks on Site. No further significant changes were identified from subsequent maps. We have not been informed of the current Site use and have therefore assumed that it is in light industrial use and will continue in this use without redevelopment.
	Argyll's Comment	As a result of the historical and current use of the Site, there is a moderate risk of contaminants being present.
	Off-site sources	A number historical or current potentially contaminative uses were identified in proximity to the Site. These include: the rest of the rifle range and airfield identified above, and Deeside Industrial Park and associated premises and tanks. In addition the following licences, consents and authorisations of note were identified: a Water Industry Act Referral 99m south for the discharge of special category effluents.
	Argyll's Comment	The historical and current use of the surrounding area is therefore considered to present a moderate risk of affecting the Site.
	Pathways and receptors	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 Principal Aquifer (highly permeable formations). 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 three abstraction licences located within 1000m. The closest of these are a groundwater abstractions (839m north east) for metal: process water use. The nearest water feature is a drain located 5m north west. The general area appears to be largely in industrial use. No designated eco-receptors were identified within a 1000m radius of the Site.
	Argyll's Comment	Overall, the Site is therefore considered to have a moderate to high environmental sensitivity .
	Additional Sources of Information	No additional materials have been used in this assessment.



Argyll's Conclusion

Considering the information reviewed during this assessment, a number of plausible contaminant linkages have been identified. Soil and groundwater liabilities could arise whether or not redevelopment is considered.

Please refer to risk analysis methodology section for further guidance and definition of terms.



Current Operations

Environmental Damage Regulations 2009 (EDR)

Potential for owner/operation to incur a Liability under the EDR

High

Argyll's
Comment



This assessment does not consider actual or potential operations at the Site. It does assess the presence of relevant EDR Receptors¹ within 5km of the Site which could suffer environmental damage in the event of the release of polluting substances. If the potential for environmental damage is high, then a compliance audit could be considered to clarify the standard of environmental management and the risk of regulatory action under EDR. However, this is only likely to be necessary if the Site is in industrial use.

Regulatory Compliance Within 25m of the Site

Type	Details	Distance
Discharge Consent	Operator: Welsh Development Agency, Location: Sealand Deeside Industrial Park, Authority: Environment Agency, Welsh Region, Permit Ref: Cm0086301, Status: Consent expired.	21m

Additional Considerations

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
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 the Asbestos Register and Management Plan
Energy Performance Certificate	Under the Energy Performance of Buildings (Certificates and Inspections) (England and Wales) Regulations 2007 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 for EPC or conduct energy assessment
Oil Storage	Any above-ground storage facility of greater than 200 litres capacity may fall within the Oil Storage Regulations 2001.	Check tanks for secondary containment
Military Land	Due to its former military use, if redevelopment of the Site were proposed, a desktop threat assessment would be prudent to assess the risk from unexploded ordnance.	Consider desktop threat assessment

Argyll's
Comment



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 Contaminated Land 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.

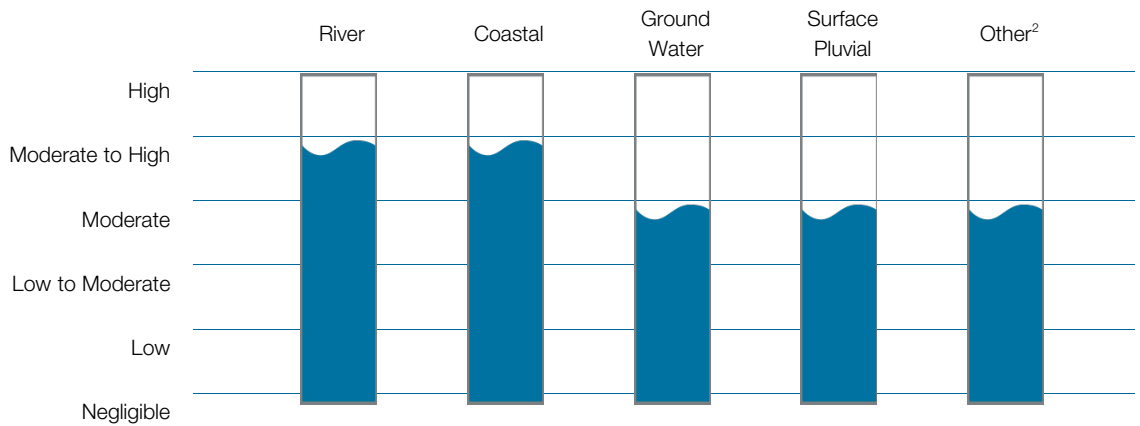
¹Special Protection Areas (Bird Protection Areas), Special Areas of Conservation, Nature Reserves, Landscape Conservation Areas, Natural Parks, National Parks, Biosphere Reserves, Groundwater and Surface Water Features.



Flood Risk Screening

	Risk	Issue	Evaluation
1.	Insurability	Is the Site likely to be insurable at standard terms?	Yes
2.	Development	If development is proposed would a detailed Flood Risk Assessment be required?	Yes (Full)
3.	Flooding	What is the overall risk of flooding, assuming defences fail or are absent or over-topped?	High
4.	Flood Defences	Are there existing flood defences that might benefit the Site?	Yes
5.	Effect	What is the risk of flooding when these defences are operational?	Moderate to High

Flood Analysis



Argyll's Comment



The Site is at a risk of flooding from a number of sources largely owing to its proximity to the River Shotwick Brook West which historically exceeded its channel capacity in the absence of raised flood defences.

Despite this, the Site also lies within an area benefiting from defences and therefore is expected to be offered protection from local or regional flood defences. Furthermore, the majority of the Site has been identified as being at a low risk of flooding according to the National Flood Risk Assessment (NaFRA) dataset. A small portion of the Site is however according to the Environment Agency at a significant risk of flooding despite the presence of these defences.

It would be pertinent therefore to send enquiries to the Environment Agency to establish the level of protection provided to the Site from the identified defences to further clarify the risk of flooding at the Site and whether it Site specific flood defences should be installed to reduce the risk of flooding.

However, buildings and contents insurance may be available at standard terms because the main buildings on Site are not at a significant risk of flooding according to the key data sources frequently used by insurers to determine insurability.

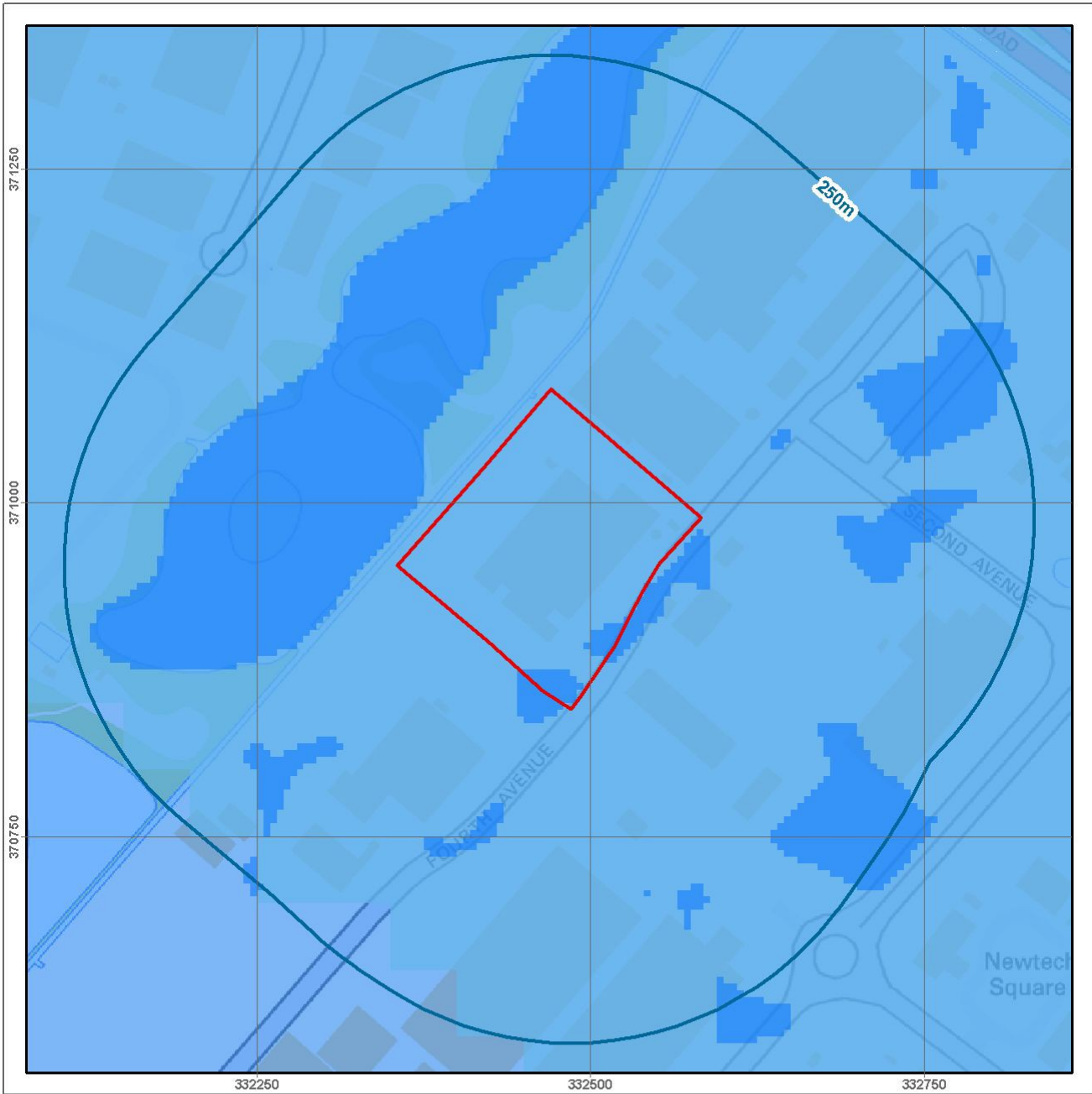
²Other factors influencing flood risk include historic flood events, geological indicators of flooding, proximate surface water features and elevation above sea level.







Recommendations

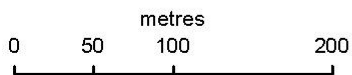
1. As the Site is at an increased risk of flooding, we recommend that you contact us to discuss the next steps that will assist in further clarifying the risk of flooding at the Site. This may involve carrying out a more detailed assessment (a FLOODSOLUTIONS Consult Report). This will review additional site specific data (not available from UK-wide databases) and raise enquiries of statutory bodies (Environment Agency, 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. It would be prudent to ask the vendor to confirm whether or not they are aware of any previous flooding at the Site.

Current Flood Risk



Legend of Flood Risk and Groundwater Susceptibility

-  Client Site
-  Area at risk of flooding from one source
-  Area at risk of flooding from more than one source
-  Area susceptible to groundwater flooding



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

Nominal scale at A4 paper size - 1:4,750

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Additional Flooding Considerations

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 maintenance, repair or rebuilding of any part of the watercourse or for access to or repair of monitoring equipment.

Development Control

Argyll's Comment



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

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.

Sewer Flooding

In times of extreme rainfall events sewers can overflow and cause local flooding. Ofwat's 'DG5 - At Risk Registers' record properties that have flooded from sewers and are at risk of flooding again, with separate registers for internal and external flooding. The At Risk Registers are maintained by each of the ten water and sewerage companies in England and Wales and details of properties subject to sewer flooding are normally kept for between two and five years. These registers are not necessarily complete as not all episodes of past flooding may be recorded.

Dam and Reservoir Failure

Argyll's Comment



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

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).

Flood Risk Management Options

Flooding can usually be managed by the installation of flood protection measures either on/within the building(s) or across the Site. Flood protection measures can be divided into two categories; flood resistance and flood resilience. Both flood resistance and flood resilience solutions can be integrated with design proposals for new build properties or retro-fitted to existing properties. Specific flood protection packages can often include both resistance and resilience measures. What is suitable will depend on a number of factors including flood source, likely flood depths, property design and age.

Research conducted by CLG Sustainable Buildings Division and the Environment Agency revealed that installing flood resistance measures may be inappropriate where likely flooding will be deep. Certain types of building construction are unable to resist the pressure load placed on the exterior skin of the building by retained flood waters. Generally a flood depth between 0.6m and 1.0m above ground level is used as a benchmark to decide whether to consider flood resilience measures rather than rely on flood resistance measures. This is dependent on the age and construction of the property.

Guideline Costs for Resistance Measures

Building Feature	Cost Estimate for Baffles (+ VAT)
Standard (900mm) single door	£725 - £875
Standard (1800mm) double entrance door	£850 - £1,000
Large roller shutter door (up to 2,745mm span)	£1,600 - £1,750
Standard garage door	£1,400 - £1,575
Standard window (up to 1,240mm span)	£350 - £500
Large window (1,240mm to 2,150mm span)	£550 - £700
Single air brick	£70 - £220
Double air brick	£80 - £230
Building Feature	Cost Estimate for Tanking (+ VAT)
Tanking (of basement, walls or floors)	£25 - £50 per metre ²
System Component	Cost Estimate for Plumbing (+ VAT)
Simple non-return valve	£50
Sophisticated non-return valve	£660 - £800

The costs above are for indicative budget purposes only. They are based on installing components of a standard design and colour. If the Site requires bespoke products, these are likely to cost more (for example, if the Site is in a conservation area, different colours may be required).

If you require a property specific assessment of which measures are suitable, and a more accurate cost appraisal, Argyll will need to complete a FLOODSOLUTIONS Consult Report. This report normally costs from £500 to £1,000 (plus VAT) and provides more detailed information on the likelihood and, in particular, the depth of all potential types of flooding. Argyll can also arrange for one of a panel of specialist contractors to provide a tailored estimate for flood protection measures.



Environmental Hazards

	Risk	Recommendation
	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.
	Infilled Land	As the Site lies on or within 25m of potentially infilled land, you may wish to consult a local RICS accredited surveyor and/or review any available geotechnical surveys. Further information may be available from the minerals and waste officer at the County Council and the local Building Regulations Officer. British Geological Survey GeoHazard reports (www.bgs.ac.uk/georeports) may also provide more detailed information.
	Telecommunication Base Stations	One or more telecommunication base stations are located within 100m of the Site (please refer to the Current Land Use map to determine specific locations). Telecommunications equipment emits electromagnetic fields which may have adverse health affects. Further information is available from www.hpa.org.uk and www.sitefinder.ofcom.org.uk .
	COMAH	No Control of Major Accident Hazards (COMAH) sites are located within 500m.

Argyll's Comment



This report is primarily a desktop assessment of potential soil and groundwater liabilities. We also comment whether the above Environmental Hazards are relevant. Contact details are provided at the end of this report.



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>
Flooding	<p>This section contains information on the risks associated with flooding. It includes maps and data associated with Flooding from Rivers or Sea, the Environment Agency National Flood Risk Assessment (NaFRA), Groundwater Flooding Susceptibility, Surface Water Flooding, Historical Flooding and Other Information such as the Detailed River Network.</p>

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Tabular Summary

Statutory Information

Authorisations	On-site	1-250m	251-500m
Local Authority Pollution Prevention and Controls	0	2	4
Local Authority Integrated Pollution Prevention and Controls	0	0	0
Integrated Pollution Controls	0	5	7
Integrated Pollution Prevention And Control	0	0	1
Registered Radioactive Substances	0	0	2
Discharges	On-site	1-250m	251-500m
Discharge Consents	0	2	2
Water Industry Act Referrals	0	1	0
Hazardous Sites	On-site	1-250m	251-500m
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	0
Local Authority Pollution Prevention and Control Enforcements	0	0	0
Enforcement and Prohibition Notices	0	0	0
Planning Hazardous Substance Enforcements	0	0	0
Substantiated Pollution Incident Register	0	1	3
Prosecutions Relating to Authorised Processes	0	0	2
Prosecutions Relating to Controlled Waters	0	0	1

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	0
Licensed Waste Management Facilities (Landfill Boundaries)	0	0	0
Licensed Waste Management Facilities (Locations)	0	0	0
Local Authority Recorded Landfill Sites	0	0	0 (0) *
Registered Landfill Sites	0	0	0 (0) *
Registered Waste Transfer Sites	0	0	0
Registered Waste Treatment or Disposal Sites	0	0	0
Historical Landfill Sites	0	0	0

Current Land Use

Current Potentially Contaminative Uses	On-site	1-250m	251-500m
Contemporary Trade Directory Entries	0	16	27
Fuel Station Entries	0	0	1
Other Features	On-site	1-250m	251-500m
Telecommunication Base Stations	0	1 ³	4

Historical Land Use

Historical Potentially Contaminative Uses	On-site	1-250m	251-500m
Historical Tanks And Energy Facilities	2	9	11
Potentially Infilled Land	On-site	1-250m	251-500m
Former Marshes	0	0	0
Potentially Infilled Land (Non-Water)	0	0	0
Potentially Infilled Land (Water)	3	6	5

³Telecommunication base stations are only searched to a radius of 100m from the Site boundary.

Groundwater Vulnerability

Hydrogeology	On-site	1-250m	251-500m
Superficial Aquifer Designations	1	0	0
Bedrock Aquifer Designations	1	1	0
Groundwater Vulnerability	1	1	0
Geology	On-site	1-250m	251-500m
Low Permeability Drift Deposits	0	N/A	N/A
BGS 1:50,000 Bedrock Geology	1	2	1
BGS 1:50,000 Superficial Deposits	1	0	0
BGS 1:50,000 Geological Mapping Coverage	1	0	0
Detailed River Network Lines	0	3	7
Detailed River Network Offline Drainage	0	0	0
BGS 1:625,000 Solid Geology	1	N/A	N/A
BGS Borehole Logs	0	0	N/A

Environmental Sensitivity

Environmental Sensitivity	On-site	1-250m	251-500m
Areas of Outstanding Natural Beauty	0	0	0
Environmentally Sensitive Areas	0	0	0
Forest Parks	0	0	0
Local Nature Reserves	0	0	0 (0) *
Marine Nature Reserves	0	0	0 (0) *
National Nature Reserves	0	0	0 (0) *
National Parks	0	0	0
National Scenic Areas	0	0	0
Nitrate Sensitive Areas	0	N/A	N/A
Nitrate Vulnerable Zones	0	N/A	N/A
Ramsar Sites	0	0	0 (0) *
River Quality Biology Sampling Points	0	0	0
River Quality Chemistry Sampling Points	0	0	0
Nearest Surface Water Feature	0	1	0
Sites of Special Scientific Interest	0	0	0 (0) *
Special Areas of Conservation	0	0	0 (0) *
Special Protection Areas	0	0	0 (0) *
Water Abstractions	0	0	0 (3)*
Source Protection Zones	0	0	0

Natural and Mining Related Hazards

Subsidence	On-site	1-250m	251-500m
Collapsible Ground Stability Hazards	1	0 ⁴	N/A
Compressible Ground Stability Hazards	1	1	N/A
Ground Dissolution Stability Hazards	0	0	N/A
Landslide Ground Stability Hazards	1	0	N/A
Running Sand Ground Stability Hazards	1	1	N/A
Shrinking or Swelling Clay Subsidence Hazards	1	0	N/A
Non-Coal Mining Hazards	0	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	0
Mining Instability	0	0	N/A
BGS Recorded Mineral Sites	0	0	0

⁴Ground stability hazards are only searched to a radius of 50m from the Site boundary.

Flooding

Current Flood Risk	On-site	1-250m	251-500m
Flooding From Rivers or Sea	1	1	0
Flooding From Rivers or Sea (in an Extreme Event)	1	1	2
Areas Benefiting from Flood Defences	1	0	0
Flood Water Storage Areas	0	0	0
Flood Defences	0	0	0
NAFRA Data	3	0	0
Groundwater Flooding Susceptibility	2	3	0
Surface Water Flooding (1:75 year rainfall event)	2	0	0
Surface Water Flooding (1:200 year rainfall event)	2	0	0
Surface Water Flooding (1:1,000 year rainfall event)	2	0	0
Historical Flooding	On-site	1-250m	251-500m
Historical Flood Events	1	0	0
Geological Indicators of Flooding	1	0	0
Other Flood Information	On-site	1-250m	251-500m
Detailed River Network	0	1	2
Height of Site Above Sea Level	3.03m		
Distance of Site Boundary to Nearest Water Feature	4.2		
Surface Water Features	0	2	2
Dam or Reservoir Failure	0	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.

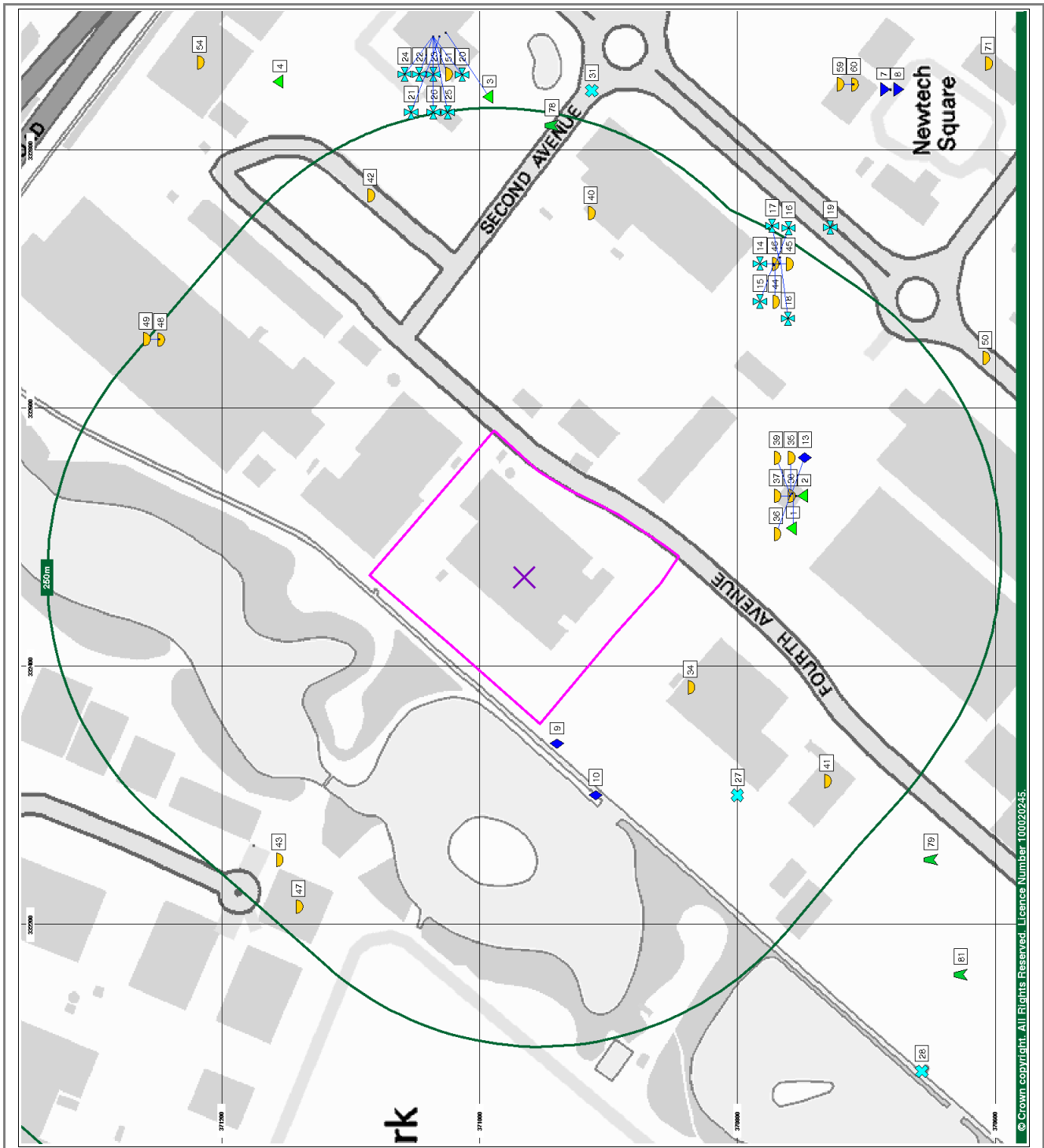
Landfill Site Information

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.

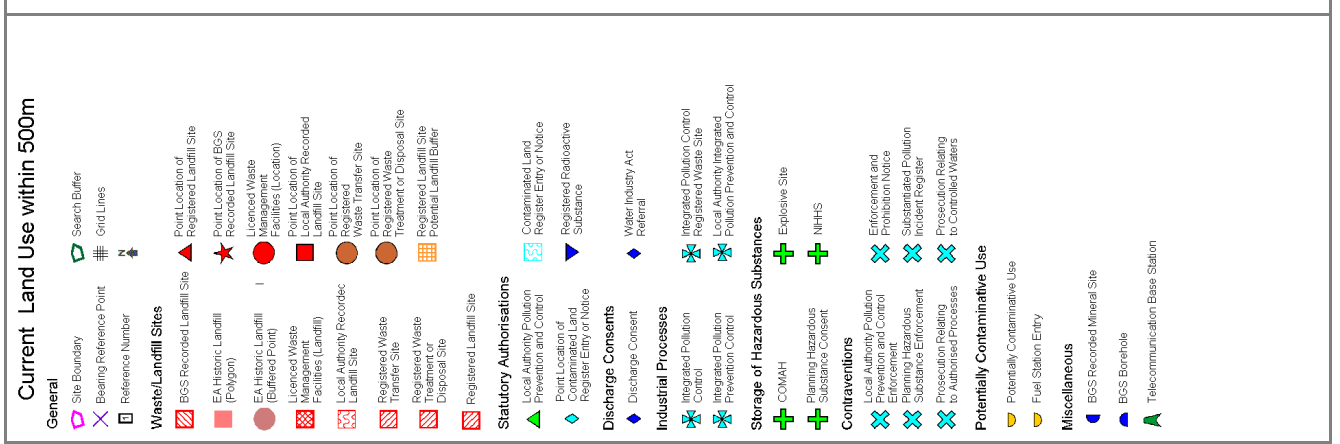
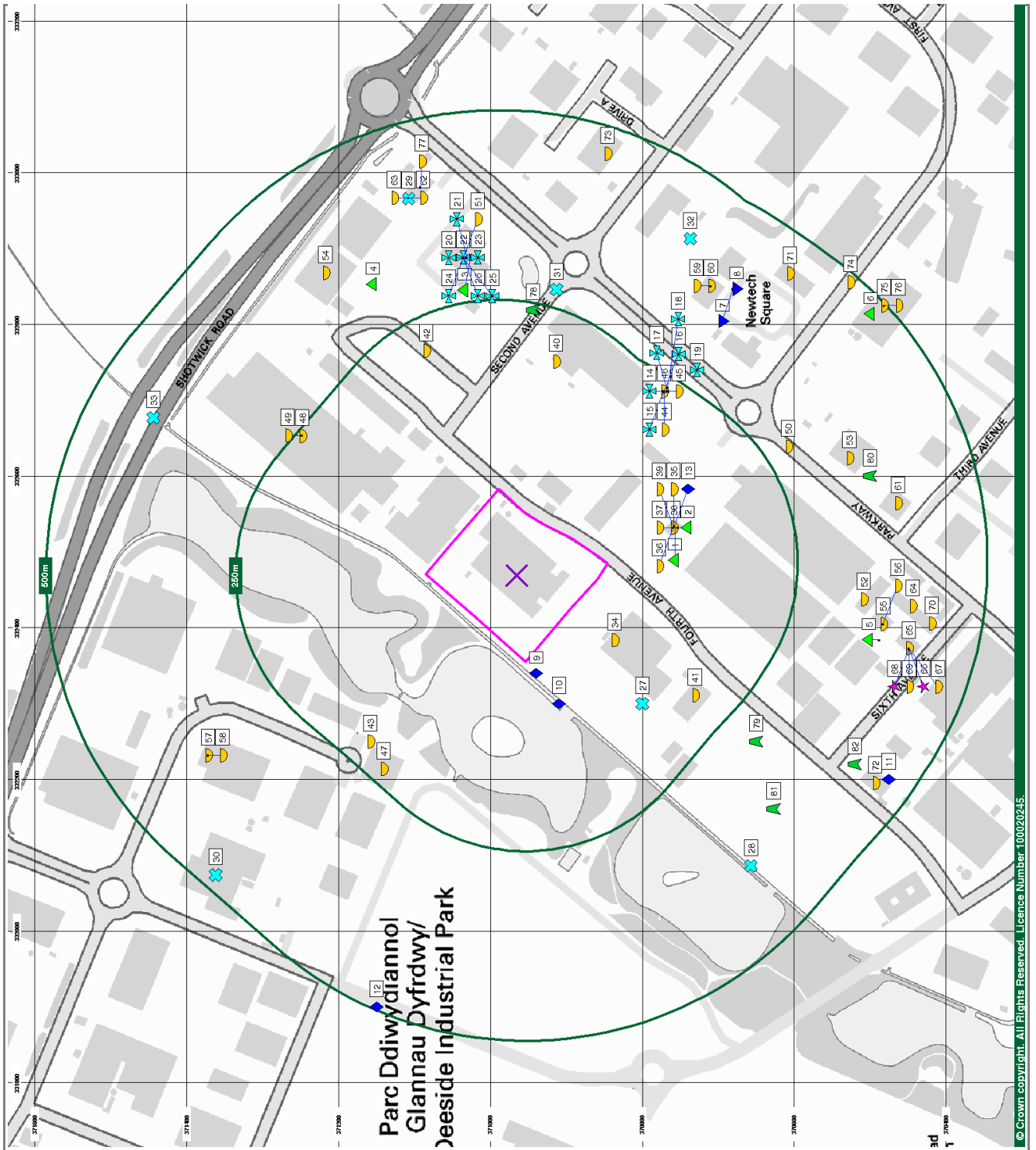
Subsidence Hazards

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.



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Current Land Use within 250m	
General	<ul style="list-style-type: none"> Site Boundary Beaming Reference Point Reference Number
Waste/Landfill Sites	<ul style="list-style-type: none"> BCS Recorded Landfill Site EA Historic Landfill (Polygon) EA Historic Landfill (Buffered Point) Licensed Waste Management Facilities (Landfill) Local Authority Recorded Landfill Site Point Location of Registered Waste Transfer Site Point Location of Registered Waste Treatment or Disposal Site Registered Landfill Site Potential Landfill Buffer
Statutory Authorisations	<ul style="list-style-type: none"> Local Authority Pollution Prevention and Control Contaminated Land Register Entry or Notice Registered Radioactive Substance Water Industry Act Referral
Industrial Processes	<ul style="list-style-type: none"> Integrated Pollution Control Registered Pollution Control Local Authority Integrated Pollution Prevention and Control
Storage of Hazardous Substances	<ul style="list-style-type: none"> Explosive Site NIHHS
Contraventions	<ul style="list-style-type: none"> Local Authority Pollution Prevention and Control Enforcement Planning Hazardous Substance Enforcement Prosecution Relating to Authorised Processes
Potentially Contaminative Use	<ul style="list-style-type: none"> Potentially Contaminative Use Fuel Station Entry
Miscellaneous	<ul style="list-style-type: none"> BCS Recorded Mineral Site BCS Borehole Telecommunication Base Station



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Statutory Information

Authorisations

Local Authority Pollution Prevention and Controls

Map ID	Details	Distance	Direction
1	Name: Mm Packaging (Uk) Deeside Ltd, Location: Fourth Avenue, Deeside Industrial Park, Deeside, Authority: Flintshire Council, Environmental Health Department, Permit Ref: 8320, Dated: 24th May 2005, Process Type: Local Authority Pollution Prevention and Control, Description: PG6/17 Printing of flexible packaging, Status: Authorised, Positional Accuracy: Manually positioned to the address or location.	101m	S
2	Name: Pilkington Micronics Ltd, Location: Fourth Avenue, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NR, Authority: Flintshire Council, Environmental Health Department, Permit Ref: NOT GIVEN, Dated: Not Supplied, Process Type: Local Authority Air Pollution Control, Description: PG3/6 Processes for the polishing or etching of glass or glass products using hydrofluoric acid, Status: Authorisation revoked, Positional Accuracy: Automatically positioned to the address.	103m	S
3	Name: Valspar (Uk) Corporation Ltd, Location: Parkway, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NN, Authority: Flintshire Council, Environmental Health Department, Permit Ref: 6224, Dated: 22nd November 2002, Process Type: Local Authority Pollution Prevention and Control, Description: PG6/10 Coating manufacturing, Status: Authorised, Positional Accuracy: Manually positioned to the address or location.	311m	E
4	Name: Sigma Coatings Ltd, Location: Second Avenue, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2LZ, Authority: Flintshire Council, Environmental Health Department, Permit Ref: NOT GIVEN, Dated: 27th January 1994, Process Type: Local Authority Air Pollution Control, Description: PG6/10 Coating manufacturing, Status: Authorised, Positional Accuracy: Manually positioned to the road within the address or location.	318m	NE
5	Name: Excelsior, Location: Parkway, Dip, Authority: Flintshire Council, Environmental Health Department, Permit Ref: NOT SUPPLIED, Dated: Not Supplied, Process Type: Local Authority Pollution Prevention and Control, Description: PG6/17 Printing of flexible packaging, Status: Application Not Yet Authorised, Positional Accuracy: Manually positioned within the geographical locality.	372m	S
6	Name: Rexam Plastic Packaging Ltd, Location: 48 First Avenue, Deeside Industrial Park, Deeside, Clwyd, Ch5 2nu, Authority: Flintshire Council, Environmental Health Department, Permit Ref: 5903, Dated: 14th July 1999, Process Type: Local Authority Pollution Prevention and Control, Description: PG6/17 Printing of flexible packaging, Status: Authorised, Positional Accuracy: Manually positioned to the address or location.	480m	SE

Integrated Pollution Controls

Map ID	Details	Distance	Direction
14	Name: Corning Optical Fiber Inc, Location: Second Avenue, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NX, Authority: Environment Agency, Welsh Region, Permit Ref: AJ5398, Dated: 31st March 1994, Process Type: IPC application for process that was regulated by HMIP for air releases under previous legislation, Description: 3.3 A Mineral Fibres (non-Asbestos) within the Mineral Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	229m	SE
15	Name: Corning Optical Fiber Inc, Location: Second Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NX, Authority: Environment Agency, Welsh Region, Permit Ref: BK0728, Dated: 15th June 2001, Process Type: IPC major (substantial) variation, Description: 3.3 A Mineral Fibres (non-Asbestos) within the Mineral Industry, Status: Authorisation revoked, Positional Accuracy: Automatically positioned to the address.	229m	SE
16	Name: Corning Optical Fiber Inc, Location: Second Avenue, Deeside Industrial Estate, DEESIDE, CLWYD, CH5 2NX, Authority: Environment Agency, Welsh Region, Permit Ref: BE7176, Dated: 28th October 1999, Process Type: IPC major (substantial) variation, Description: 3.3 A Mineral Fibres (non-Asbestos) within the Mineral Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	229m	SE

Integrated Pollution Controls

Map ID	Details	Distance	Direction
17	Name: Corning Optical Fiber Inc, Location: Second Avenue, Deeside Industrial Estate, DEESIDE, Clwyd, CH5 2NX, Authority: Environment Agency, Welsh Region, Permit Ref: AW4542, Dated: 13th May 1997, Process Type: IPC major (substantial) variation, Description: 3.3 A Mineral Fibres (non-Asbestos) within the Mineral Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	232m	SE
18	Name: Corning Optical Fiber Inc, Location: Second Avenue, Deeside Industrial Estate, DEESIDE, Clwyd, CH5 2NX, Authority: Environment Agency, Welsh Region, Permit Ref: BD6778, Dated: 30th November 1998, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 3.3 A Mineral Fibres (non-Asbestos) within the Mineral Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	236m	SE
19	Name: Txu Europe Power Limited, Location: Deeside Industrial Park, DEESIDE, CLWYD, CH5 2LR, Authority: Environment Agency, Welsh Region, Permit Ref: BG9218, Dated: Not Supplied, Process Type: IPC new application, Description: 1.3 A (B) Combustion processes within the Fuel & Power Industry, Status: Application has met the requirements for authorisation (but not yet authorised), Positional Accuracy: Manually positioned within the geographical locality.	277m	SE
20	Name: Valspar (Uk) Corporation Ltd, Location: Parkway Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NN, Authority: Environment Agency, Welsh Region, Permit Ref: BE7443, Dated: 26th April 1999, Process Type: IPC new application, Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	309m	E
21	Name: Dexter Packaging Products, Location: ParkWay, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NN, Authority: Environment Agency, Welsh Region, Permit Ref: AZ1965, Dated: 9th July 1997, Process Type: IPC major (substantial) variation, Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Application has met the requirements for authorisation (but not yet authorised), Positional Accuracy: Automatically positioned to the address.	309m	E
22	Name: Dexter Speciality Materials Ltd, Location: Parkway, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NN, Authority: Environment Agency, Welsh Region, Permit Ref: BC6314, Dated: 24th November 1998, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	310m	E
23	Name: Dexter Speciality Materials Ltd, Location: Parkway, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NN, Authority: Environment Agency, Welsh Region, Permit Ref: AK2181, Dated: 8th February 1994, Process Type: IPC new application, Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	310m	E
24	Name: Dexter Speciality Materials Ltd, Location: Parkway, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NN, Authority: Environment Agency, Welsh Region, Permit Ref: BV6455, Dated: 12th January 2004, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Revoked - Now IPPC, Positional Accuracy: Automatically positioned to the address.	310m	E
25	Name: Valspar (Uk) Corporation Ltd, Location: Parkway, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NN, Authority: Environment Agency, Welsh Region, Permit Ref: BV6463, Dated: 12th January 2004, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 4.2 A (C) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Revoked - Now IPPC, Positional Accuracy: Automatically positioned to the address.	310m	E

Integrated Pollution Prevention And Control

Map ID	Details	Distance	Direction
26	Name: The Valspar (Uk) Corporation Ltd, Location: Parkway, Deeside Industrial Park, Deeside, Clwyd, CH5 2NN, Authority: Environment Agency, Welsh Region, Permit Ref: BU7545IM, Dated: 24th May 2007 to Not Supplied, Activity Descriptions: 1.The manufacture of dyestuffs, printing ink and coating materials: using > 100 T organic solvent /12 months, 2.Organic Chemicals; Plastic Materials Eg Polymers, Activity Codes: 1.6.5 B (A) (I), 2.4.1 A(1) (A) (VIII), Status: Effective, Positional Accuracy: Automatically positioned to the address.	310m	E

Registered Radioactive Substances

Map ID	Details	Distance	Direction
7	Name: Convatec Ltd, Location: Techbase 2, Newtech Square, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NT, Authority: Environment Agency, Welsh Region, Permit Ref: AF2205, Dated: 31st March 1991, Description: Authorisation under RSA, Status: Authorisation either revoked or cancelled, Positional Accuracy: Unknown.	392m	SE
8	Name: Techbase Ltd, Location: 2B Newtech Square, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NT, Authority: Environment Agency, Welsh Region, Permit Ref: AG0577, Dated: 31st March 1991, Description: Authorisation under RSA, Status: Authorisation either revoked or cancelled, Positional Accuracy: Unknown.	394m	SE

Discharges

Discharge Consents

Map ID	Details	Distance	Direction
9	Operator: Welsh Development Agency, Property Type: Undefined Or Other, Location: Sealand Deeside Industrial Park, Authority: Environment Agency, Welsh Region, Catchment Area: River Dee, Permit Ref: Cm0086301, Permit Version: 1, Effective Date: 4th October 1979, Issued Date: 4th October 1979, Revocation Date: 17th June 1996, Discharge Type: Unspecified, Discharge Environment: Freshwater Stream/River, Receiving Water: Shotwick Brook, Status: Consent expired, Positional Accuracy: Located by supplier to within 100m.	21m	W
10	Operator: Pilkington Micronics Ltd, Property Type: Optical Precision Equipment, Location: 4th Avenue Deeside Industrial Park, Deeside Industrial Park Deeside, Deeside Clwyd, Authority: Environment Agency, Welsh Region, Catchment Area: River Dee, Permit Ref: Cm0179301, Permit Version: 1, Effective Date: 28th February 1989, Issued Date: 28th February 1989, Revocation Date: 22nd December 1992, Discharge Type: Unspecified, Discharge Environment: Freshwater Stream/River, Receiving Water: Shotwick Brook, Status: Consent expired, Positional Accuracy: Located by supplier to within 10m.	71m	W
11	Operator: British Steel Plc, Property Type: Undefined Or Other, Location: Deeside Ind Park Chester Cheshire, Authority: Environment Agency, Welsh Region, Catchment Area: River Dee, Permit Ref: Cm0084601, Permit Version: 1, Effective Date: 8th January 1979, Issued Date: 8th January 1979, Revocation Date: 22nd December 1992, Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company, Discharge Environment: Freshwater Stream/River, Receiving Water: Trib. Of Shotwick Brook, Status: Consent expired, Positional Accuracy: Located by supplier to within 10m.	463m	SW
12	Operator: Welsh Assembly Government, Property Type: Sewerage Network - Pumping Station - Water Company, Location: Ps 1 (Phase 2) Deeside Industrial P, Deeside Industrial Park, Authority: Environment Agency, Welsh Region, Catchment Area: Not Given, Permit Ref: CG0366901, Permit Version: 1, Effective Date: 12th March 1996, Issued Date: 12th March 1996, Revocation Date: Not Supplied, Discharge Type: Storm sewage overflow discharge, Discharge Environment: Freshwater Stream/River, Receiving Water: Shotwick Brook, Status: New Consent, by Application (Water Resources Act 1991, Section 88), Positional Accuracy: Located by supplier to within 100m.	496m	W

Water Industry Act Referrals

Map ID	Details	Distance	Direction
13	Name: Pilkington Micronics Ltd, Location: Unit 15 Fourth Avenue, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NR, Authority: Environment Agency, Welsh Region, Permit Ref: AU5874, Date: 18th January 1996, Process Type: Permissions or amendments to discharge under the Water Industry Act 1991, Description: Processes which result in the discharge of Special Category effluents under The Trade Effluents (Prescribed Processes and Substances) Regulations, Status: Application received by the EA but is not yet authorised, Positional Accuracy: Automatically positioned to the address.	99m	S

Contraventions

Substantiated Pollution Incident Register

Map ID	Details	Distance	Direction
27	Authority: Environment Agency Wales, North Area, Date: 15th May 2001, Incident Ref: 5643, Pollutant: 1.Atmospheric Pollutants And Effects: Other Atmospheric Pollutant Or Effect, 2.Contaminated Water: Firefighting Run-Off, Water Impact: Category 3 - Minor Incident, Air Impact: Category 2 - Significant Incident, Land Impact: Category 2 - Significant Incident, Positional Accuracy: Located by supplier to within 100m.	154m	SW
28	Authority: Environment Agency Wales, North Area, Date: 16th October 2007, Incident Ref: 538709, Pollutant: 1.Specific Waste Materials: Other Specific Waste Material, Water Impact: Category 1 - Major Incident, Air Impact: Category 4 - No Impact, Land Impact: Category 4 - No Impact, Positional Accuracy: Located by supplier to within 10m.	401m	SW
29	Authority: Environment Agency Wales, North Area, Date: 26th March 2005, Incident Ref: 301559, Pollutant: 1.Contaminated Water: Firefighting Run-Off, Water Impact: Category 2 - Significant Incident, Air Impact: Category 3 - Minor Incident, Land Impact: Category 3 - Minor Incident, Positional Accuracy: Located by supplier to within 10m.	402m	E
30	Authority: Environment Agency Wales, North Area, Date: 7th May 2008, Incident Ref: 584829, Pollutant: 1.Atmospheric Pollutants And Effects: Smoke, 2.Contaminated Water: Firefighting Run-Off, Water Impact: Category 3 - Minor Incident, Air Impact: Category 2 - Significant Incident, Land Impact: Category 3 - Minor Incident, Positional Accuracy: Located by supplier to within 10m.	481m	NW

Prosecutions Relating to Authorised Processes

Map ID	Details	Distance	Direction
31	Location: Storage Yard One, Deeside Industrial Park, Garden City, Shotton, Prosecution Text: Failure To Comply With The Provisions Of A Served Notice, Act: Epa90 S59(5), Hearing Date: 31st March 2004, Verdict: Guilty, Fine: £2780, Costs: £100, Positional Accuracy: Manually positioned within the geographical locality.	274m	E
32	Location: Modus Operandi Site, Deeside Industrial Park, DEESIDE, Clywd, CH5 2, Prosecution Text: Ea Ref Sm29/01jr. Fined For Illegally Fly Tipping Waste Between 26-29 August 2000, Act: Epa90 S33(1a), Hearing Date: 25th January 2001, Verdict: Guilty, Fine: £300, Costs: £260, Positional Accuracy: Manually positioned within the geographical locality.	416m	SE

Prosecutions Relating to Controlled Waters

Map ID	Details	Distance	Direction
33	Location: beneath the culvert, Deeside Industrial Park access road, HOLYWELL, Flintshire, CH7, Prosecution Text: EA News Release 16/06//1997, Allowing polluting matter to enter Shotwick Brook, a tributary of the River Dee., Act: WRA91 s85(1), Hearing Date: 13th June 1997, Verdict: Guilty, Fine: £5000, Costs: £, Positional Accuracy: Manually positioned within the geographical locality.	414m	NE

Waste

Waste/Landfill Sites

Local Authority Landfill Coverage

Flintshire Council - Has supplied landfill data

Licensed Waste Management Facilities (Locations)

Map ID	Details	Distance	Direction
	Licence Number: 104542, Location: Unit 1, 1a & 2, Parkway, Zone 2, Deeside Ind Est Zone 2, Deeside, Flintshire, CH5 2NS, Operator: Paperback Collection & Recycling Ltd, Operator Location: Not Supplied, Authority: Environment Agency Wales, North Area, Site Category: HCI Waste TS + treatment, Licence Status: Issued, Issued Date: 17th October 2012, Last Modified: Not Supplied, Expiry Date: Not Supplied, Suspended Date: Not Supplied, Revoked Date: Not Supplied, Surrendered Date: Not Supplied, IPPC Reference: Not Supplied, Positional Accuracy: Located by supplier to within 10m.	737m	SW
	Licence Number: 103589, Location: C T Skip Hire, Drome Road, Deeside Industrial Park, Deeside, Clwyd, CH5 2LR, Operator: Thompson Carl, Operator Location: Not Supplied, Authority: Environment Agency Wales, North Area, Site Category: HCI Waste TS + treatment, Licence Status: Issued, Issued Date: 17th January 2012, Last Modified: Not Supplied, Expiry Date: Not Supplied, Suspended Date: Not Supplied, Revoked Date: Not Supplied, Surrendered Date: Not Supplied, IPPC Reference: Not Supplied, Positional Accuracy: Located by supplier to within 10m.	750m	SE

Current Land Use

Current Potentially Contaminative Uses

Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
34	Glass Fibre Manufacturers, Name: I W T Composites, Status: Inactive, Location: Fourth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NR, Positional Accuracy: Automatically positioned to the address.	71m	SW
35	Food Products - Manufacturers, Name: Dailycer Uk Ltd, Status: Active, Location: Fourth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NR, Positional Accuracy: Automatically positioned to the address.	99m	S
36	Builders' Merchants, Name: Dandys Topsoil, Status: Active, Location: Rear Of, Fourth Av, Deeside Ind Pk, Deeside, Clwyd, CH5 2NR, Positional Accuracy: Manually positioned within the geographical locality.	99m	S
37	Coal & Smokeless Fuel Merchants & Distributors, Name: Dandys Coal Merchants, Status: Active, Location: Fourth Av, Deeside Ind Pk, Deeside, Clwyd, CH5 2NR, Positional Accuracy: Manually positioned within the geographical locality.	99m	S
38	Boxes & Cartons, Name: Mayr-Melnhof Packaging Uk Ltd, Status: Active, Location: Fourth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NR, Positional Accuracy: Automatically positioned to the address.	99m	S
39	Gas Suppliers, Name: Air Products Plc, Status: Inactive, Location: Fourth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NR, Positional Accuracy: Automatically positioned to the address.	99m	S
40	Fasteners & Fixing Devices, Name: Henrob Ltd, Status: Active, Location: Second Avenue, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NX, Positional Accuracy: Automatically positioned to the address.	185m	E
41	Commercial Vehicle Servicing, Repairs, Parts & Accessories, Name: Thomas Hardie Commercials Ltd, Status: Active, Location: Unit 23, Fourth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NR, Positional Accuracy: Automatically positioned to the address.	199m	SW
42	Food Products - Manufacturers, Name: Paramount, Status: Active, Location: Second Av, Deeside Ind Pk, Deeside, Clwyd, CH5 2NW, Positional Accuracy: Manually positioned to the road within the address or location.	206m	E

Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
43	Fireplaces & Mantelpieces, Name: Fireplace Megastore, Status: Active, Location: Unit 5, Deeside Point, Zone 3, Deeside Ind Pk, Flintshire, Deeside, Clwyd, CH5 2UA, Positional Accuracy: Manually positioned within the geographical locality.	214m	NW
44	Electronic Component Manufacturers & Distributors, Name: Rebus Design & Automation, Status: Inactive, Location: B8, Evans Easy Space, Deeside Ind Park, Zone 1/, Deeside, Clwyd, CH5 2Jz, Positional Accuracy: Manually positioned within the geographical locality.	229m	SE
45	Cable & Wire Equipment Manufacturers, Name: Corning Cable Systems, Status: Inactive, Location: Second Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NX, Positional Accuracy: Automatically positioned to the address.	229m	SE
46	Glass Fibre - Materials & Tools, Name: Corning Optical Fibres, Status: Inactive, Location: Second Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NX, Positional Accuracy: Automatically positioned to the address.	229m	SE
47	Plastics - Raw Materials, Name: Thew Arnott, Status: Active, Location: Unit 9, Tenth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2UA, Positional Accuracy: Automatically positioned to the address.	231m	NW
48	Frozen Food Processors & Distributors, Name: Cool Traders, Status: Active, Location: Second Av, Deeside Ind Pk, Deeside, Clwyd, CH5 2NW, Positional Accuracy: Manually positioned to the address or location.	243m	NE
49	Paint Manufacturers, Name: Sigma Coatings Ltd, Status: Inactive, Location: Second Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NW, Positional Accuracy: Automatically positioned to the address.	244m	NE
50	Meat Product Manufacturers & Wholesalers, Name: Walvening Proctor, Status: Inactive, Location: Unit 3, Parkway, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NS, Positional Accuracy: Manually positioned to the road within the address or location.	283m	SE
51	Coating Specialists, Name: The Valspar Uk Corporation Ltd, Status: Active, Location: Parkway, Deeside Industrial Park, Deeside, Clwyd, CH5 2NN, Positional Accuracy: Automatically positioned to the address.	310m	E
52	Cleaning Materials & Equipment, Name: Hygenol Cleaning Supplies, Status: Active, Location: Unit 5, Parkway Business Centre, Sixth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2LD, Positional Accuracy: Automatically positioned to the address.	341m	S
53	Food Products - Manufacturers, Name: Hazlewood Pizza, Status: Inactive, Location: Unit 49, Parkway, Deeside Industrial Park, Deeside, Clwyd, CH5 2NS, Positional Accuracy: Automatically positioned to the address.	347m	S
54	Packaging Materials Manufacturers & Suppliers, Name: Euro Packaging (Uk) Ltd, Status: Active, Location: Second Avenue, Deeside Industrial Park, DEESIDE, Clwyd, CH5 2NX, Positional Accuracy: Automatically positioned to the address.	366m	NE
55	Window Frames - Sales & Service, Name: 7 Day Windows, Status: Active, Location: Unit 3, Parkway Business Centre, Sixth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2LD, Positional Accuracy: Automatically positioned to the address.	372m	S
56	Commercial Vehicle Component Manufacturers, Name: Rhino Products Ltd, Status: Active, Location: Unit 2, Parkway Business Centre, Sixth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2LD, Positional Accuracy: Manually positioned within the geographical locality.	372m	S
57	Leisure & Sportswear Manufacturers & Wholesalers, Name: Ralawise Ltd, Status: Inactive, Location: Unit 112, Tenth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2UA, Positional Accuracy: Automatically positioned to the address.	374m	NW
58	Leisure & Sportswear Manufacturers & Wholesalers, Name: Ralawise Ltd, Status: Active, Location: Unit 112, Tenth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2UA, Positional Accuracy: Automatically positioned to the address.	374m	NW
59	Pharmaceutical Manufacturers & Distributors, Name: Bio-Rad Laboratories (Deeside) Ltd, Status: Active, Location: 1-2, Newtech Square, Deeside Industrial Park, Deeside, Clwyd, CH5 2NT, Positional Accuracy: Automatically positioned to the address.	380m	SE
60	Medical Instruments - Manufacturers, Name: Provalis Plc, Status: Inactive, Location: 1-2, Newtech Square, Deeside Industrial Park, Deeside, Clwyd, CH5 2NT, Positional Accuracy: Automatically positioned to the address.	380m	SE
61	Electrical Goods Sales, Manufacturers & Wholesalers, Name: Comet, Status: Active, Location: Unit 50, Third Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2LA, Positional Accuracy: Automatically positioned to the address.	390m	S

Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
62	Scaffolding & Work Platforms, Name: Nsg U K Ltd, Status: Active, Location: Parkway, Deeside Industrial Park, Deeside, Clwyd, CH5 2NS, Positional Accuracy: Automatically positioned to the address.	403m	E
63	Printers, Name: Graphoprint Ltd, Status: Inactive, Location: Parkway, Deeside Industrial Park, Deeside, Clwyd, CH5 2NS, Positional Accuracy: Automatically positioned to the address.	403m	E
64	Fasteners & Fixing Devices, Name: Plus Fixings Ltd, Status: Inactive, Location: Unit 8, Parkway Business Centre, Sixth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2LD, Positional Accuracy: Automatically positioned to the address.	406m	S
65	Recycling Centres, Name: Paperback Collection & Recycling Ltd, Status: Inactive, Location: Unit 2, Parkway, Deeside Industrial Park, Deeside, Clwyd, CH5 2NS, Positional Accuracy: Manually positioned within the geographical locality.	412m	S
66	Recycling Services, Name: Paperback Collection & Recycling, Status: Inactive, Location: Units 1, 1a & 2, Deeside Ind Pk, Deeside, Clwyd, CH5 2NS, Positional Accuracy: Manually positioned within the geographical locality.	412m	S
67	Packaging & Wrapping Equipment & Supplies, Name: Excelsior Technologies Ltd, Status: Active, Location: Parkway, Deeside Ind Pk, Deeside, Clwyd, CH5 2NS, Positional Accuracy: Manually positioned within the geographical locality.	412m	S
68	Recycling Services, Name: Paperback Collection & Recycling Ltd, Status: Active, Location: Zone 2, Unit 1, 1a, 2, Parkway, Deeside Ind Pk, Deeside, Clwyd, CH5 2NS, Positional Accuracy: Manually positioned within the geographical locality.	412m	S
69	Polythene & Plastic Sheeting Supplies, Name: Deepack Plastics Ltd, Status: Active, Location: Unit 1-2, Parkway, Deeside Industrial Park, Deeside, Clwyd, CH5 2NS, Positional Accuracy: Automatically positioned to the address.	413m	S
70	Packaging & Wrapping Equipment & Supplies, Name: Cheshire Box Ltd, Status: Inactive, Location: Unit 10, Parkway Business Centre, Sixth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2LD, Positional Accuracy: Automatically positioned to the address.	434m	S
71	Food Products - Manufacturers, Name: Paramount Foods Ltd, Status: Active, Location: 3, Newtech Square, Deeside Industrial Park, Deeside, Clwyd, CH5 2NT, Positional Accuracy: Automatically positioned to the address.	451m	SE
72	Frozen Food Processors & Distributors, Name: Woodward Foods Service, Status: Inactive, Location: Beech House, Sixth Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2LB, Positional Accuracy: Automatically positioned to the address.	455m	SW
73	Catering Equipment, Name: Shotton Fabricators Ltd, Status: Inactive, Location: 3, First Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NU, Positional Accuracy: Automatically positioned to the address.	465m	E
74	Road Haulage Services, Name: All Road Transport, Status: Inactive, Location: 103, Zone 1, First Av, Deeside Ind Pk, Deeside, Clwyd, CH5 2NU, Positional Accuracy: Manually positioned to the road within the address or location.	490m	SE
75	Packaging Materials Manufacturers & Suppliers, Name: Rexam Plastic Packaging, Status: Inactive, Location: 48, First Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NU, Positional Accuracy: Automatically positioned to the address.	498m	SE
76	Printers, Name: Grapho Media Ltd, Status: Inactive, Location: 48, First Avenue, Deeside Industrial Park, Deeside, Clwyd, CH5 2NU, Positional Accuracy: Automatically positioned to the address.	498m	SE

Fuel Station Entries

Map ID	Details	Distance	Direction
77	Name: Deeside Service Station, Location: Parkway, Parkway, Deeside Industrial Park, Chester, Cheshire, CH5 2NS, Brand: Bp, Premises Type: Petrol Station, Status: Open, Positional Accuracy: Manually positioned to the address or location.	412m	E

Other Features

Telecommunication Base Stations

Map ID	Details	Distance	Direction
78	Telecommunication Base Station, Location: Deeside Industrial Park, Second Ave, Deeside, Clwyd, Mast Height (m): 15.	241m	E
79	Telecommunication Base Station, Location: Deeside, Clwyd, Mast Height (m): 7.	299m	SW
80	Telecommunication Base Station, Location: Vsat-Ara02191, Nsg (Uk) Ltd, Parkway, Deeside Ind Est, Clwyd, Mast Height (m): 29.	364m	S
81	Telecommunication Base Station, Location: Iceland Foods, Second Ave, Deeside Ind Park, Deeside, Cheshire, Mast Height (m): 23.	375m	SW
82	Telecommunication Base Station, Location: Beech Hse, Sixth Ave, Deeside Ind Pk, Deeside, Clwyd, Mast Height (m): 8.	419m	SW

Historical Land Use

Historical Potentially Contaminative Uses

Historical Tanks and Energy Facilities

Map ID	Details	Distance	Direction
	Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	On Site	E
	Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1991.	On Site	NE
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1991.	8m	NE
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	44m	SE
	Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	91m	SE
	Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	96m	SE
	Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	118m	SE
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	147m	E
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1991.	148m	N
	Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	168m	E
	Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	184m	SE
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1991.	251m	E
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	300m	SE
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1991.	309m	E
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1991.	309m	NE
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1991.	364m	NE
	Gas Monitoring Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	368m	SE
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	409m	S
	Tanks, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	439m	S
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1986.	440m	E
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1991.	464m	NW
	Electrical Sub Station Facilities, Scale of Mapping: 1:2,500, Date of Mapping: 1991.	497m	NW

Potentially Contaminative Industrial Uses (Past Land Use)

Map ID	Details	Distance	Direction
	Factory or works - use not specified, Date of Mapping: 1994.	On Site	-
	Military Land, Date of Mapping: 1954.	On Site	-
	Military Land, Date of Mapping: 1882.	174m	N
	Military Land, Date of Mapping: 1882.	320m	SE
	Factory or works - use not specified, Date of Mapping: 1994.	347m	NW
	Military Land, Date of Mapping: 1882.	435m	SW

Potentially Infilled Land

Potentially Infilled Land (Water)

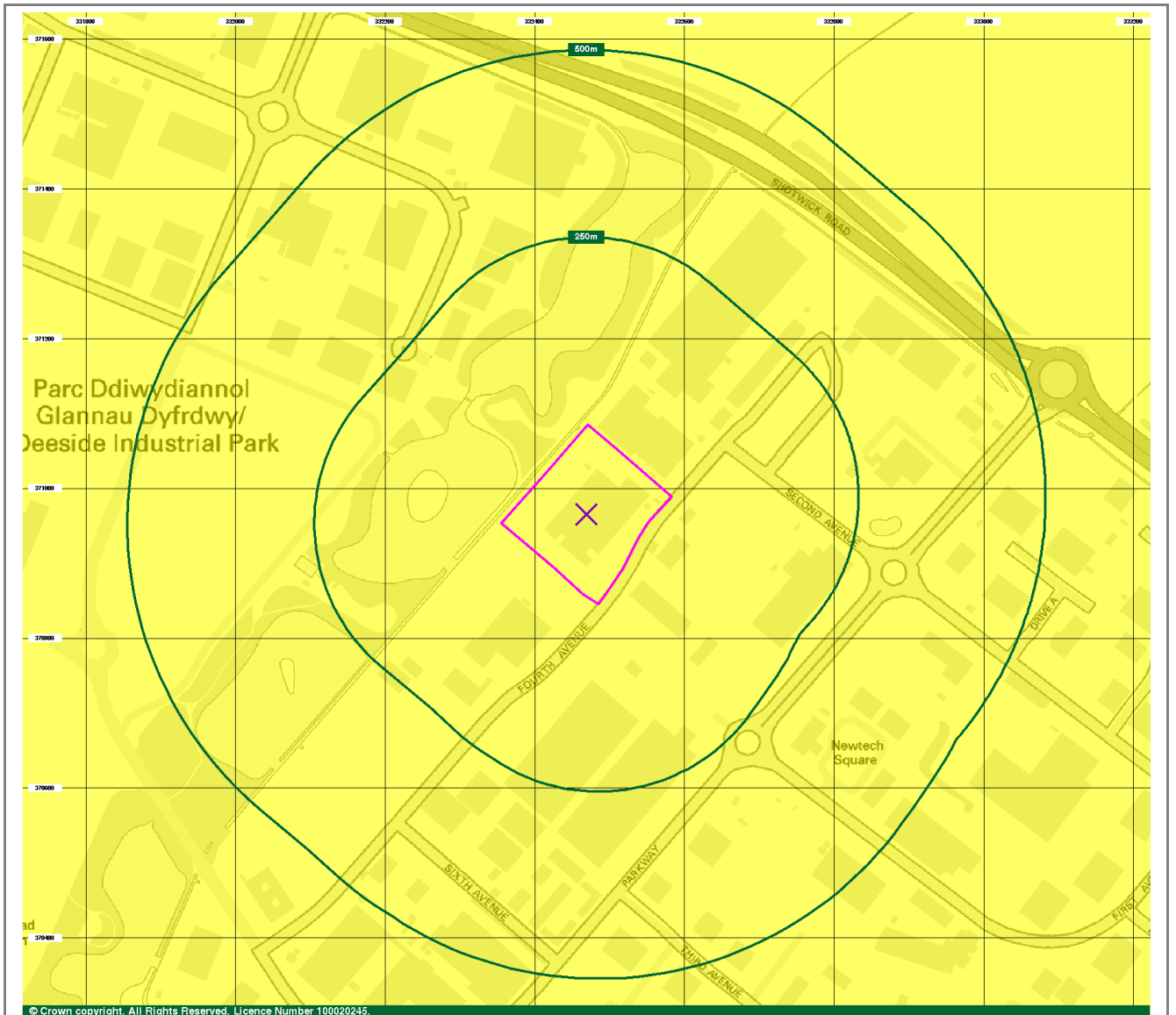
Map ID	Details	Distance	Direction
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1954.	On Site	NW
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1954.	On Site	N
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1954.	On Site	N
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1938.	16m	S
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1882.	31m	E
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1938.	32m	S
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1914.	101m	SE
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1882.	173m	NW
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1882.	192m	SW
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1882.	319m	S
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1882.	321m	S
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1882.	400m	E
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1882.	441m	E
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1882.	463m	E

Historical Maps

The following maps have been manually reviewed by a consultant and presented in the Risk Analysis section at the front of this report:

Scale	Map Sheet	Published Date
1:2,500	Flintshire 010_07	1870
1:2,500	Cheshire 030_15	1872
1:2,500	Cheshire 030_16	1872
1:2,500	Cheshire 038A_04	1874
1:2,500	Cheshire 030_15	1899
1:2,500	Cheshire 030_16	1899
1:2,500	Cheshire 038A_04	1899
1:2,500	Flintshire 010_07	1899
1:2,500	Cheshire 038A_04	1911
1:2,500	Flintshire 010_07	1911
1:2,500	Cheshire 030_15	1912
1:2,500	Cheshire 030_16	1912
1:2,500	National Grid SJ3270	1964
1:2,500	National Grid SJ3271	1964
1:2,500	National Grid SJ3270	1986
1:2,500	National Grid SJ3271	1991
1:2,500	National Grid SJ3270	1992
1:2,500	National Grid SJ3271	1992
1:2,500	National Grid SJ3270	1994
1:2,500	National Grid SJ3270	1995
1:2,500	National Grid SJ3270	1978
1:2,500	National Grid SJ3271	1983
1:2,500	National Grid SJ3270	1983
1:2,500	National Grid SJ3271	1988
1:2,500	National Grid SJ3270	1986
1:2,500	National Grid SJ3270	1988
1:2,500	National Grid SJ3270	1988
1:10,560	Cheshire 030_00	1882
1:10,560	Cheshire 038A_00	1882
1:10,560	Flintshire 010_00	1882
1:10,560	Cheshire 030_SE	1899
1:10,560	Cheshire 038A_NE	1900
1:10,560	Flintshire 010_NE	1900
1:10,560	Flintshire 010_SE	1900
1:10,560	Cheshire 030_SE	1913
1:10,560	Flintshire 010_NE	1913
1:10,560	Flintshire 010_SE	1913
1:10,560	Cheshire 038A_NE	1914
1:10,560	Flintshire 010_NE	1938
1:10,560	Flintshire 010_SE	1938
1:10,560	National Grid SJ37SW	1954
1:10,560	National Grid SJ36NW	1963
1:10,560	National Grid SJ37SW	1966
1:10,560	National Grid SJ36NW	1967
1:10,560	National Grid SJ36NW	1969
1:10,560	National Grid SJ37SW	1970
1:10,000	National Grid SJ36NW	1978
1:10,000	National Grid SJ37SW	1983
1:10,000	National Grid SJ36NW	1992
1:10,000	National Grid SJ37SW	1994
1:10,000	National Grid SJ36NW	2012
1:10,000	National Grid SJ37SW	2012

Aquifer Designation (Superficial)

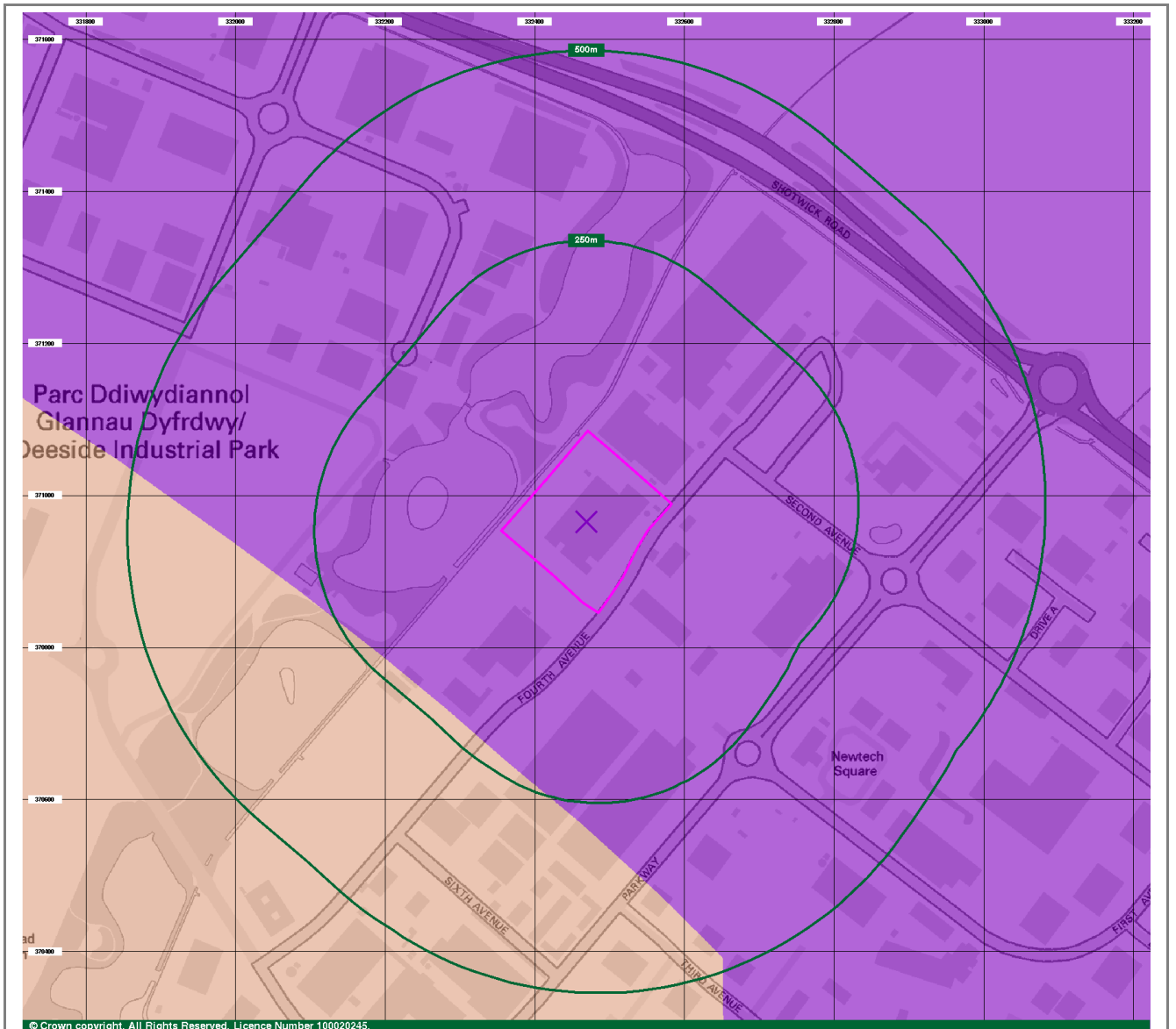


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Aquifer Designations

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

Aquifer Designation (Bedrock)



Aquifer Designations

-  Site Boundary
-  Search Buffer
-  Bearing Reference Point
-  N
-  Principal Aquifer
-  Secondary A Aquifer
-  Secondary B Aquifer
-  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	-

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	-
	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.	227m	SW

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 16 West Cheshire.	On Site	-
	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 16 West Cheshire.	201m	SW

Geology

BGS 1:50,000 Bedrock Geology

Map ID	Details	Distance	Direction
	LEX Code: KNSF, Rock Name: Kinnerton Sandstone Formation, Rock Type: Sandstone, Min Age: Scythian, Max Age: Scythian.	On Site	-
	LEX Code: KNSF, Rock Name: Kinnerton Sandstone Formation, Rock Type: Sandstone, Min Age: Scythian, Max Age: Scythian.	11m	E
	LEX Code: PMCM, Rock Name: Pennine Middle Coal Measures Formation, Rock Type: Mudstone, Siltstone and Sandstone, Min Age: Bolsovian (Westphalian C), Max Age: Duckmantian (Westphalian B).	227m	SW
	LEX Code: PLCM, Rock Name: Pennine Lower Coal Measures Formation, Rock Type: Mudstone, Siltstone and Sandstone, Min Age: Langsettian (Westphalian A), Max Age: Langsettian (Westphalian A).	419m	W

BGS 1:50,000 Superficial Deposits

Map ID	Details	Distance	Direction
	LEX Code: TFD, Rock Name: Tidal Flat Deposits, Rock Type: Clay, Silt and Sand, Min Age: Holocene, Max Age: Holocene.	On Site	-

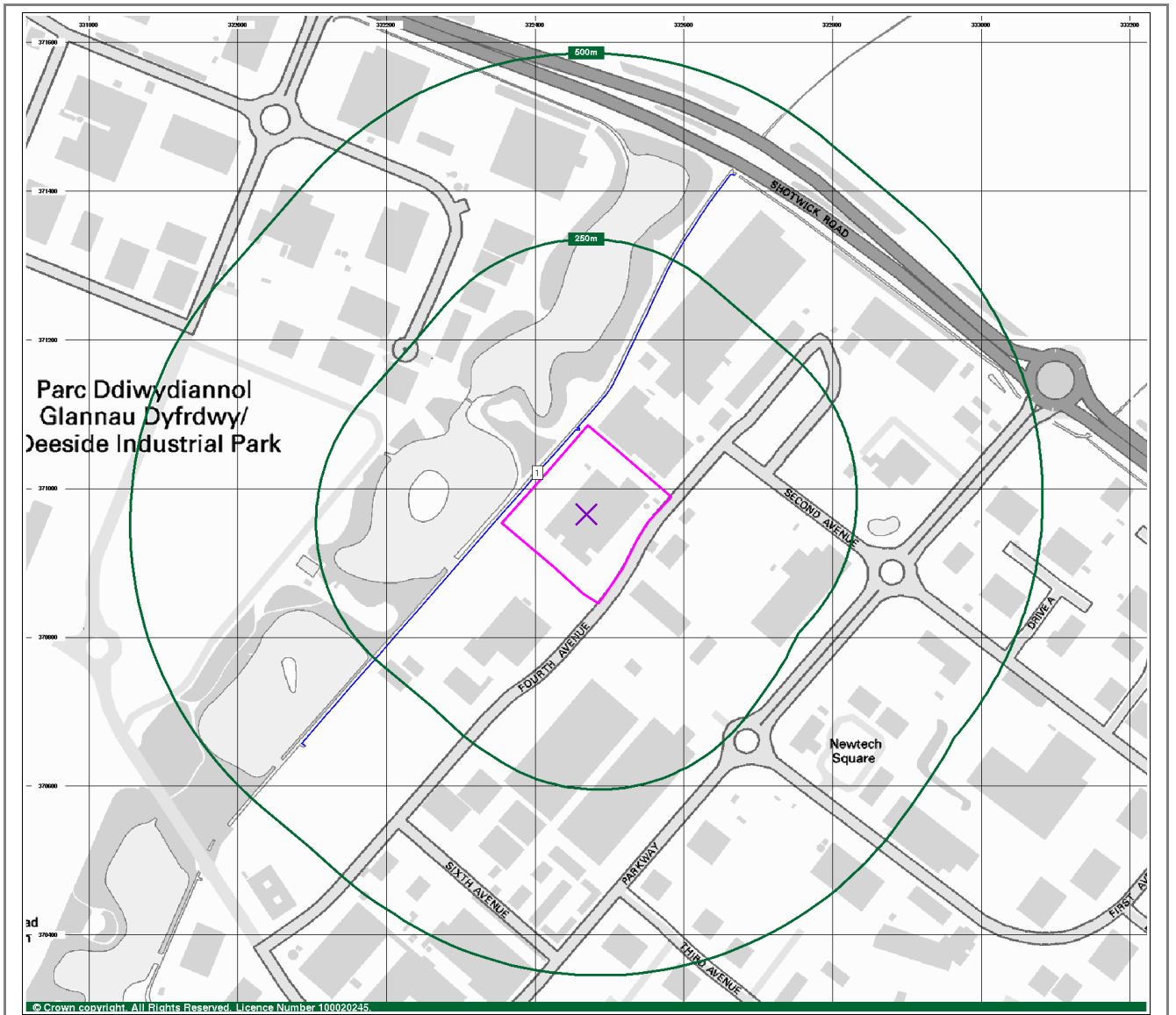
BGS 1:50,000 Geological Mapping Coverage

Map ID	Details	Distance	Direction
	Map Sheet No: 108, Map Name: Flint, Map Date: 1999, Bedrock Geology: Available, Superficial Geology: Available, Artificial Geology: Available, Faults: Available, Landslip: Available, Rock Segments: Available.	On Site	-

BGS 1:625,000 Solid Geology

Map ID	Details	Distance	Direction
	Lower Westphalian (mainly Productive Coal Measures).	On Site	-

Environmentally Sensitive Features

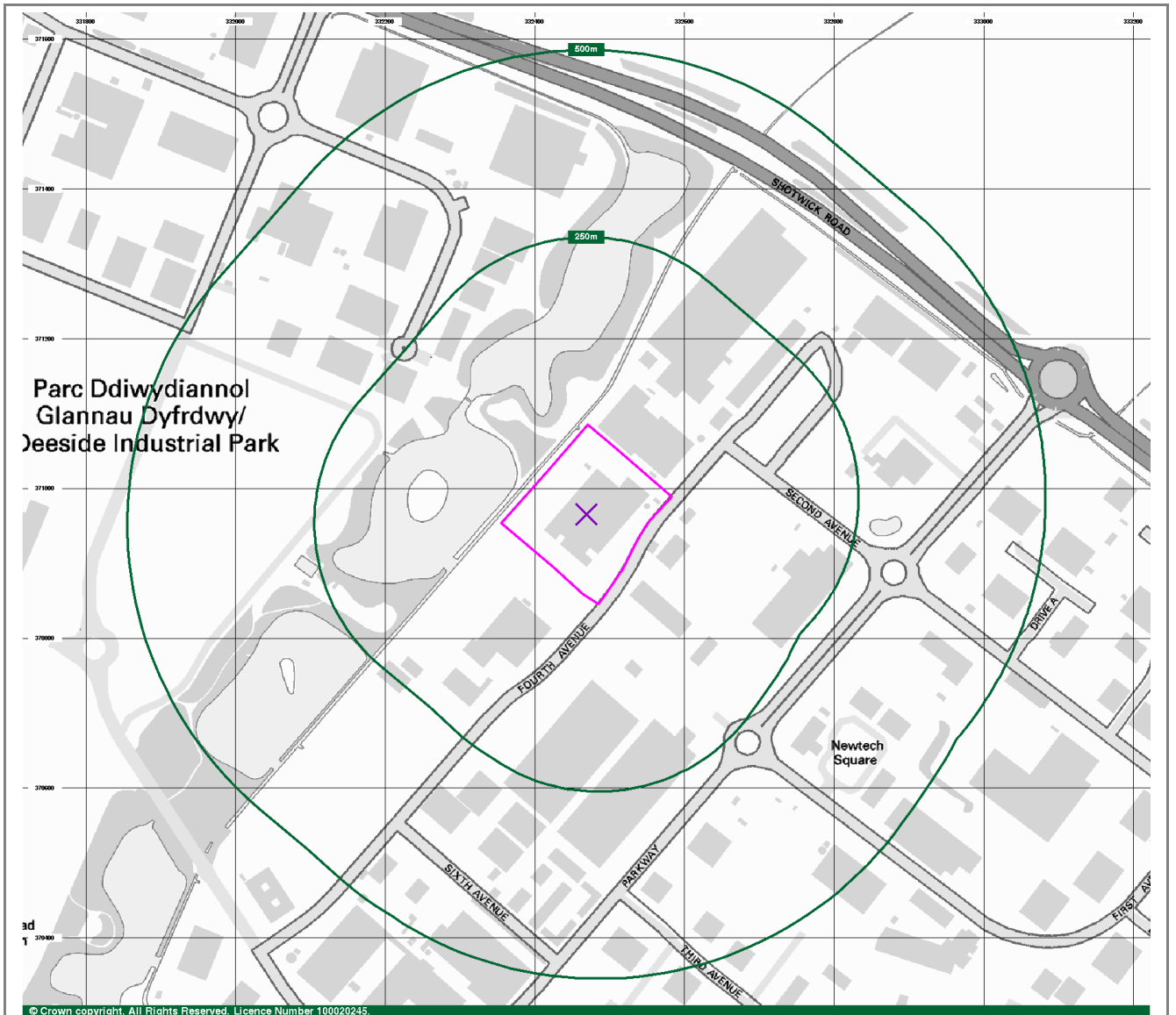


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Sensitive Land Uses

- | | | |
|------------------------------------|-------------------------|-------------------------------------|
| 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



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Source Protection Zones

-  Site Boundary
-  Search Buffer
-  Bearing Reference Point
- 
-  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.	5m	NW

Water Abstractions

Map ID	Details	Distance	Direction
	Operator: Tata Steel Uk Limited, Licence Number: 24/67/10/0090, Permit Version: 103, Location: Borehole 4, Authority: Environment Agency, Welsh Region, Abstraction: Metal: Process Water, Abstraction Type: Water may be abstracted from a single point, Source: Groundwater, Daily Rate(m ³): Not Supplied, Yearly Rate (m ³): Not Supplied, Not Supplied, Authorised Start: 01 January, Authorised End: 31 December, Permit Start Date: 12th November 2010, Permit End Date: Not Supplied, Positional Accuracy: Located by supplier to within 10m.	839m	NE
	Operator: Corus Uk Ltd, Licence Number: 24/67/10/0090, Permit Version: 102, Location: Borehole 4, Authority: Environment Agency, Welsh Region, Abstraction: Metal: Process Water, Abstraction Type: Water may be abstracted from a single point, Source: Groundwater, Daily Rate(m ³): Not Supplied, Yearly Rate (m ³): Not Supplied, Not Supplied, Authorised Start: 01 January, Authorised End: 31 December, Permit Start Date: 3rd July 2009, Permit End Date: Not Supplied, Positional Accuracy: Located by supplier to within 10m.	839m	NE
	Operator: Corus Uk Ltd, Licence Number: 24/67/10/0090, Permit Version: 101, Location: Borehole 4, Authority: Environment Agency, Welsh Region, Abstraction: Metal: Process Water, Abstraction Type: Water may be abstracted from a single point, Source: Groundwater, Daily Rate(m ³): Not Supplied, Yearly Rate (m ³): Not Supplied, Not Supplied, Authorised Start: 01 January, Authorised End: 31 December, Permit Start Date: 1st April 2004, Permit End Date: Not Supplied, Positional Accuracy: Located by supplier to within 100m.	839m	NE

Natural and Mining Related Hazards

Subsidence

Collapsible Ground Stability Hazards

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

Compressible Ground Stability Hazards

Map ID	Details	Distance	Direction
	Risk: Moderate, Source: British Geological Survey, National Geoscience Information Service.	On Site	-
	Risk: Very Low, Source: British Geological Survey, National Geoscience Information Service.	28m	NW

Landslide Ground Stability Hazards

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

Running Sand Ground Stability Hazards

Map ID	Details	Distance	Direction
	Risk: Moderate, Source: British Geological Survey, National Geoscience Information Service.	On Site	-
	Risk: Very Low, Source: British Geological Survey, National Geoscience Information Service.	28m	NW

Shrinking or Swelling Clay Subsidence Hazards

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

Non-Coal Mining Hazards

Map ID	Details	Distance	Direction
	Risk: Highly Unlikely, Source: British Geological Survey, National Geoscience Information Service.	227m	SW

Radon

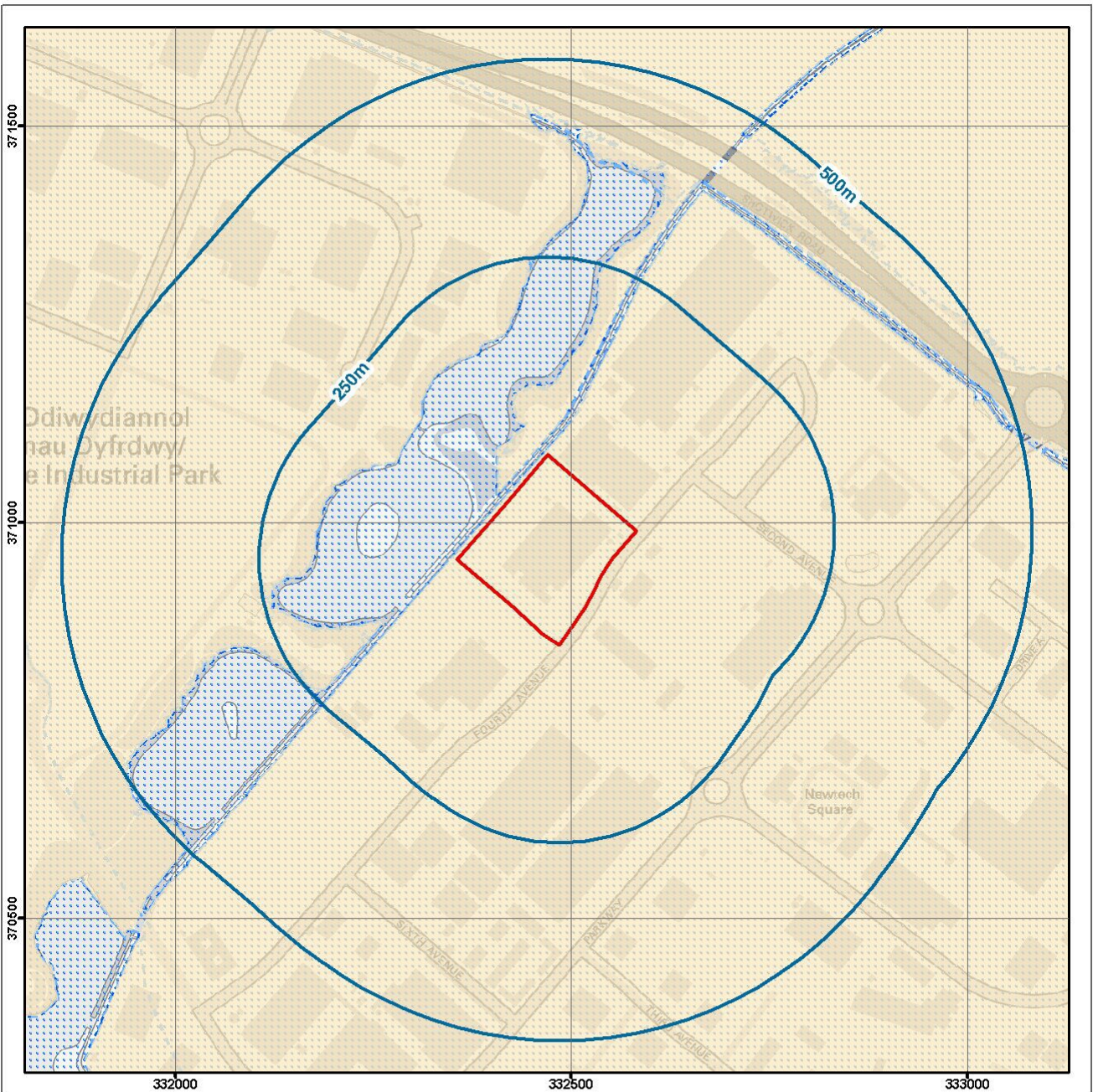
Radon Potential

Map ID	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

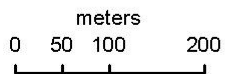
Map ID	Details	Distance	Direction
	None, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

Flooding from Rivers or Sea



Legend of Environment Agency

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



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

Nominal scale at A4 paper size - 1:8,000

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Current Flood Risk

Flooding from River or Sea (Flood Zone 3)

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	-
Type: Fluvial / Tidal Models, Source: Environment Agency, Head Office, Boundary Accuracy: As Supplied.	5.7m	NW

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

Details	Distance	Reply or Direction
Are there any indicative flood plains (extreme events) within 500m?	<501m	YES
Type: Tidal Models and Fluvial Events, Source: Environment Agency, Head Office, Boundary Accuracy: As Supplied.	On Site	-
Type: Fluvial / Tidal Models and Fluvial Events, Source: Environment Agency, Head Office, Boundary Accuracy: As Supplied.	5.7m	NW
Type: Tidal Models, Source: Environment Agency, Head Office, Boundary Accuracy: As Supplied.	355.5m	NE
Type: Fluvial / Tidal Models, Source: Environment Agency, Head Office, Boundary Accuracy: As Supplied.	359.3m	NE



The Site (or part of it) is at a high risk of flooding from rivers and the sea, as defined by the Environment Agency'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 Flood Solutions Consult Report is undertaken to further define the flood risk issues and potential development constraints.

Areas Benefiting from Flood Defences

Details	Distance	Reply or Direction
Does the Site or any areas within 500m benefit from flood defences?	<501m	YES



The Site is within an Area Benefiting from a Flood Defence, as defined by the Environment Agency. There is therefore a residual risk that the Site may flood if the protection standard of the defences is exceeded, or if the defences should fail. It is recommended that further investigations are undertaken into the standard of these defences. Please contact us for further information.

Flood Water Storage Areas

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 Environment Agency. These areas store flood water during significant flood events. It is unlikely that any FSA presents any associated flood risk to the Site.

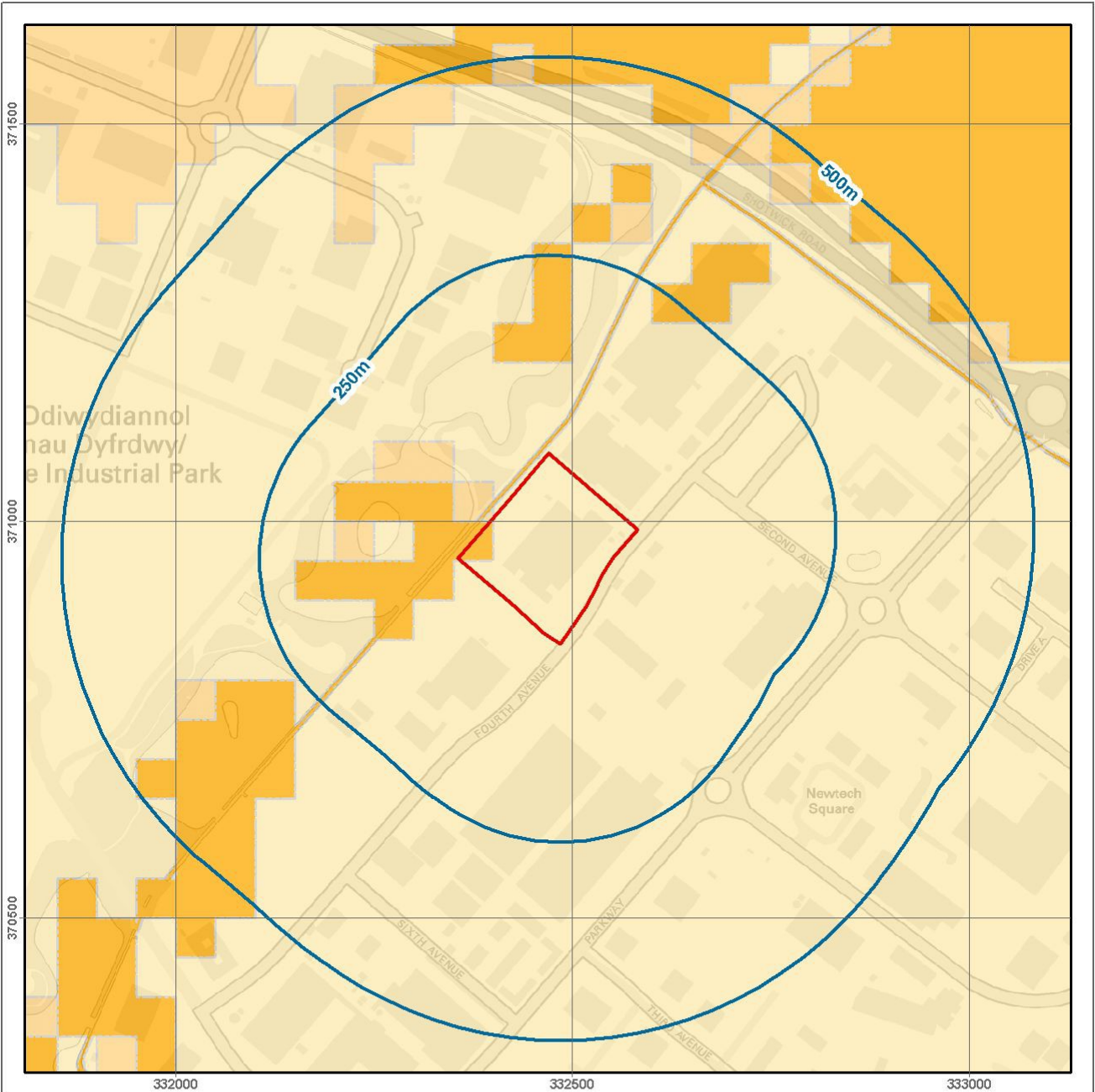
Flood Defences

Details	Distance	Reply or Direction
Are there any flood defences within 500m?	<501m	NO




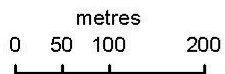
There are no flood defences within 500m of the Site. There may be a small residual risk of flooding from overtopping or failure of defences more distant from the Site. Reference should be made to the assessment of 'Areas Benefiting from Flood Defences' to ascertain whether the Site could potentially be at risk.

Environment Agency National Flood Risk Assessment (NAFRA)



Legend of NAFRA

-  Client Site
-  No Result
-  Low
-  Moderate
-  Significant



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

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

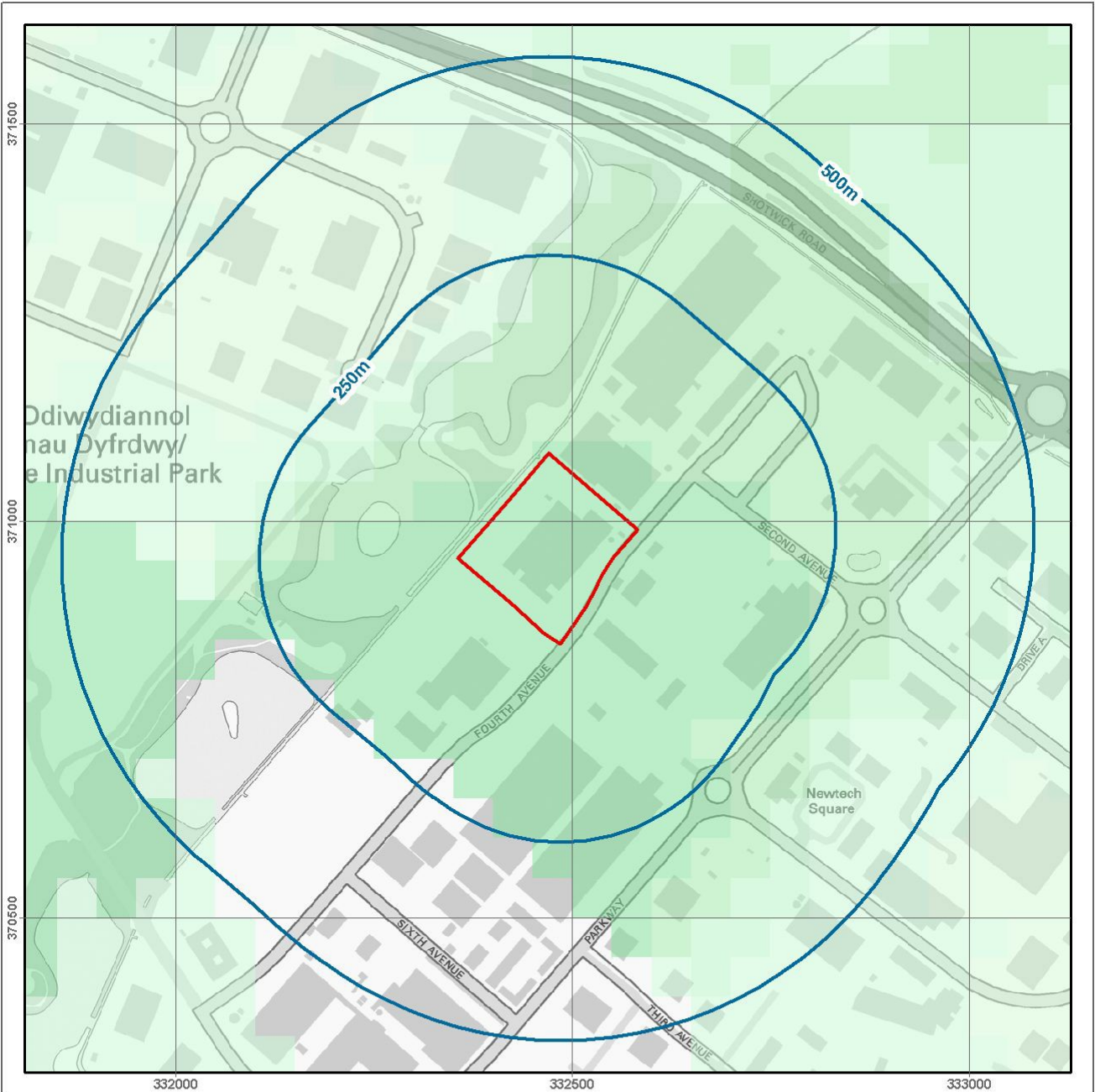


The Site (or part of it) has been defined as being at Significant Flood Risk within the Environment Agency's National Flood Risk Assessment. This classification relates to the locality as a whole, rather than the individual site and relates only to the risk of coastal or river flooding. Flood insurance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

Environment Agency Data

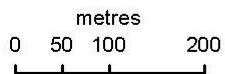
NAFRA - The data in the NaFRA Property Flood Likelihood Database is sourced from the Environment Agency's National Property Dataset (NPD2). The information provided includes the flood likelihood category low, moderate, or significant according to the NaFRA flood risk analysis. Some areas may be classified as having no result. This occurs where there is no output data from the analysis used to produce NaFRA, but the area falls within the extreme flood outline (with a 0.1% or 1 in 1000 chance of flooding in any year).

Groundwater Flooding Susceptibility



Legend of Groundwater Flooding Susceptibility

-  Client Site
-  Very High
-  High
-  Moderate
-  Low
-  Negligible



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

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Groundwater Flooding Susceptibility

Details	Distance	Reply or Direction
What is the susceptibility to groundwater flooding at the Site?	On Site	very high



Information from the British Geological Society (BGS) indicates that the locality has a very high susceptibility to groundwater flooding. However, the BGS advise that this data should not be used to assess the precise risk to any particular site. It is recommended that a further detailed hydrogeological study be undertaken to further quantify this risk, to include a review of any previous records of flooding, rainfall records, property type and land drainage information.




British Geological Survey Data

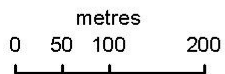
The BGS Susceptibility to Groundwater flooding hazard dataset identifies where geological conditions could enable groundwater to come close to the surface and cause groundwater flooding. The susceptibility data is suitable for use for regional or national planning purposes where the groundwater flooding information will be used along with a range of other relevant information to inform land-use planning decisions. A high susceptibility does not necessarily mean that the Site is at high risk of groundwater flooding. BGS advise that the data should not be used to assess the precise risk at any particular site.

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 - 1:8,000

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Surface Water Flooding

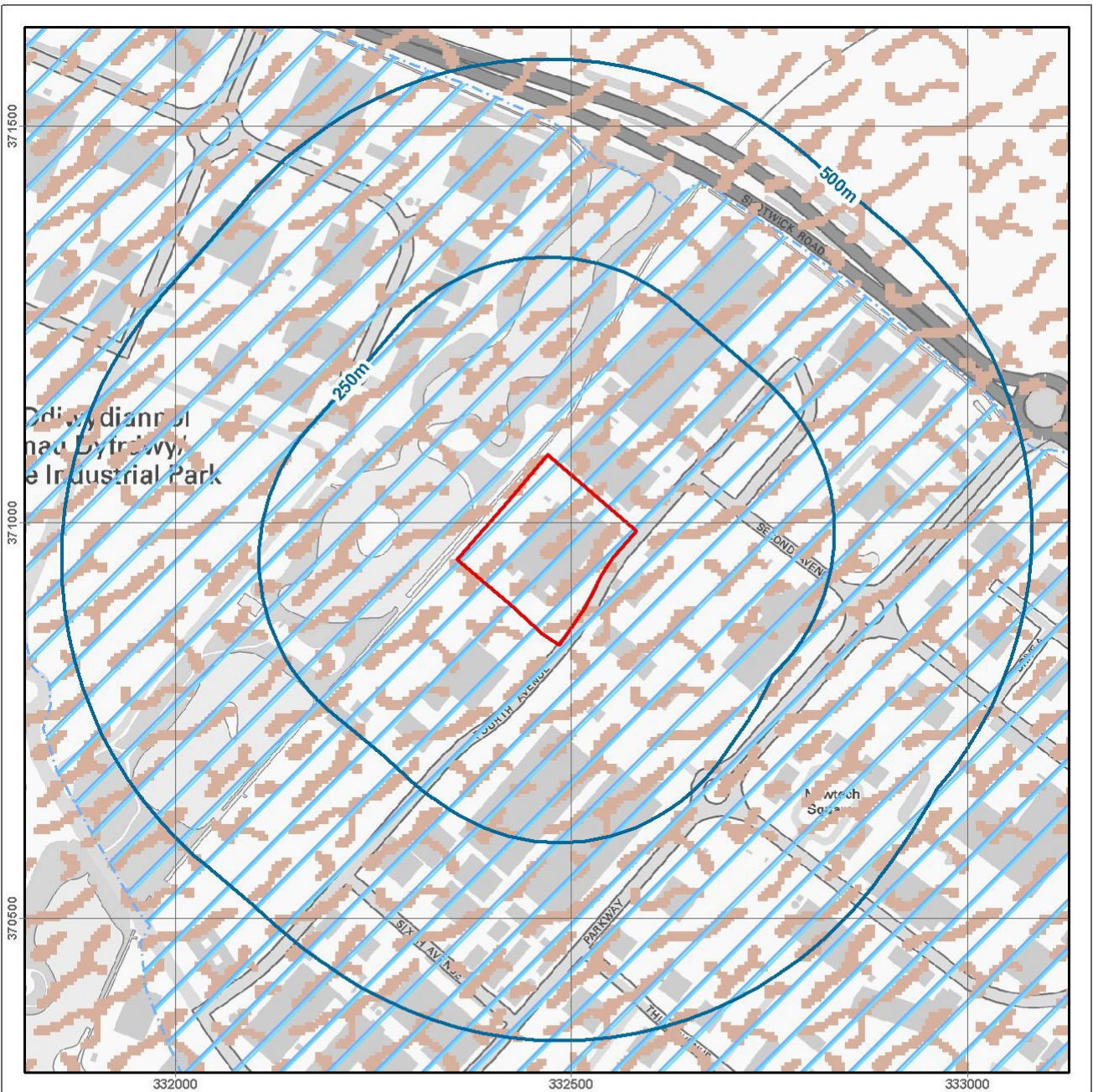
Details	Distance	Reply or Direction
What is the risk of surface water flooding at the Site following a 1 in 75 year rainfall event?	On Site	medium
What is the risk of surface water flooding at the Site following a 1 in 200 year rainfall event?	On Site	medium
What is the risk of surface water flooding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



Legend of 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 - 1:8,000

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Historical Flood Events

Details	Distance	Reply or Direction
Have any historic flood events occurred at the Site or within 500m?	<501m	YES



The Environment Agency's records indicate that the Site has flooded in the past. It would be prudent to ask the Site owner whether they are aware of any previous flooding at the Site or in the surrounding area. It would be possible to ask the Environment Agency for more details of the recorded incident of past flooding. However, their records are not comprehensive. Please contact us for further information.

Environment Agency Data

Historical 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	-

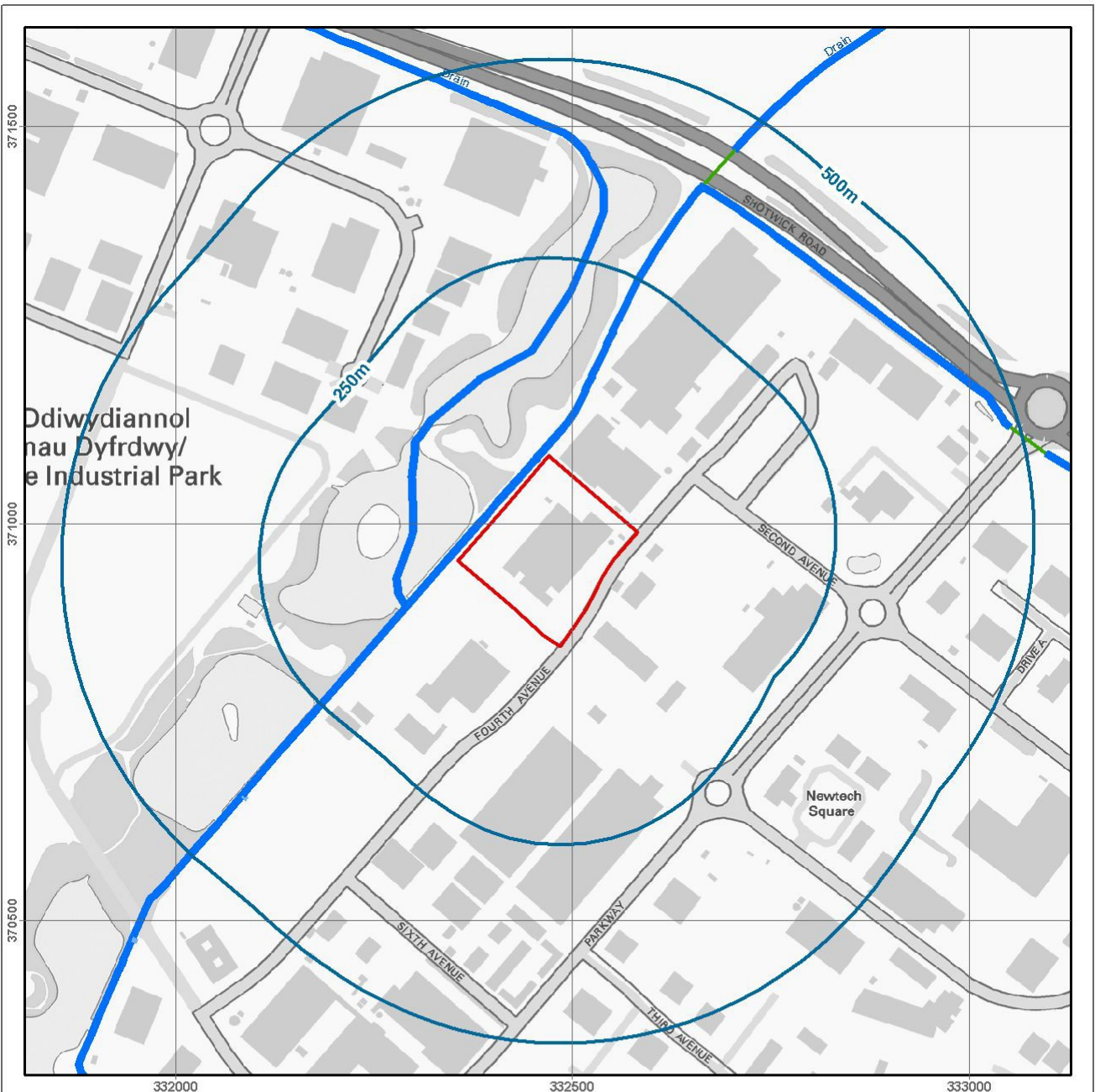


Data from the British Geological Society (BGS) indicates that the type of deposits in the locality of the Site are of the type normally associated with floodplains. However, this data should only be considered as complementary to the Environment Agency's Flood Map. This BGS data does not indicate the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



Legend of 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 - 1:8,000

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Other Information

Detailed River Network

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 Main River?: YES, Is The Feature a Drain?: NO.	9.0m	NW
River Name: , Watercourse Name: , Is The Feature a Main River?: YES, Is The Feature a Drain?: NO.	394.6m	NE
River Name: , Watercourse Name: , Is The Feature a Main River?: NO, Is The Feature a Drain?: NO.	401.2m	SW



The Site is less than 2m above a river, canal or drainage channel identified by the Environment Agency's detailed river network. This does not represent a flood risk in itself, but other assessments of risk within this report should be consulted.

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.

Height Above Sea Level

Details	Distance	Reply or Direction
Maximum height of the Site above sea level	On Site	3.30m
Minimum height of the Site above sea level	On Site	3.00m
Average height of the Site above sea level	On Site	3.03m



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	4.2m	NW
Surface water feature	50.9m	NW
Surface water feature	389.7m	NE
Surface water feature	450.7m	NE



The Site is less than 2m above a water feature (as shown on the Ordnance Survey maps). This does not represent a flood risk in itself, but other assessments of risk within this report should be consulted.

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.

Useful Contacts

Name and Address	Telephone/Fax/Email
<p>Argyll Environmental Limited Lees House 21-33 Dyke Road Brighton BN1 3FE www.argyllenvironmental.co.uk</p>	<p>General enquiries 0845 458 5250 Fax 0845 458 5260 info@argyllenviro.com</p>
<p>Ensura Limited (for Environmental Insurance) Lees House 21-33 Dyke Road Brighton BN1 3FE www.ensura.co.uk</p>	<p>Telephone 0845 652 8585 Fax 0845 652 8686 info@ensura.co.uk</p>
<p>Flintshire Council Environmental Health Department County Hall Mold Flintshire CH7 6NF www.flintshire.gov.uk</p>	<p>Telephone 01352 703413 Fax: 01352 703441</p>
<p>Environment Agency National Customer Contact Centre (NCCC) PO Box 544 Templeborough Rotherham S60 1BY</p>	<p>Telephone 08708 506 506</p>
<p>British Geological Survey Enquiry Service British Geological Survey Kingsley Dunham Centre Keyworth Nottingham Nottinghamshire NG12 5GG www.bgs.ac.uk</p>	<p>Telephone 0115 936 3143 Fax: 0115 936 3276 enquiries@bgs.ac.uk</p>
<p>Environment Agency National Customer Contact Centre (NCCC) PO Box 544 Templeborough Rotherham S60 1BY www.environment-agency.gov.uk</p>	<p>General enquiries 08708 506 506 Floodline 0845 988 1188 enquiries@environment-agency.gov.uk</p>
<p>British Geological Survey Enquiry Service British Geological Survey Kingsley Dunham Centre Keyworth Nottingham NG12 5GG www.bgs.ac.uk</p>	<p>General enquiries 0115 936 3143 Fax 0115 936 3276</p>
<p>(For advice on flood insurance) British Insurance Brokers' Association 8th Floor John Stow House 8 Bevis Marks London EC3A 7JB</p>	<p>Consumer helpline 0870 950 1790</p>
<p>JBA Risk Management - Head Office South Barn Broughton Hall Skipton North Yorkshire BD23 3AE</p>	<p>General enquiries 01756 799 919 Fax 01756 799 449 info@jbarisk.com</p>

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.

Contamination Land Risk Analysis Methodology

The SITESOLUTIONS reports have been designed to assist in making informed decisions during property transactions. This section of 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 1991⁵. (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 this section of 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 this 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 England⁶. 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.

⁵ Water Environment (Controlled Activities)(Scotland) Regulations 2005 where appropriate.

⁶ Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009 or Environmental Damage (Prevention and Remediation) (Scotland) Regulations where appropriate.




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.

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 1991⁷. 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 SITESOLUTIONS 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.

⁷Water Environment (Controlled Activities)(Scotland) Regulations 2005 where appropriate.

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 Limited Conditions of Contract for SITESOLUTIONS and FLOODSOLUTIONS Reports (May 2011), a copy of which is available on our website.




Flood Risk Screening Methodology

This section of the report is a desktop flood risk screening report, designed to enable property professionals to assess the risk of flooding at commercial sites. It examines three areas; how flood risk affects the availability of insurance for a site; how flood risk affects the potential to redevelop a site; and the overall risk of flooding at a site (taking into account any flood defences present). The report considers current Government guidance including the National Planning Policy Framework (NPPF) and the agreement between insurance companies and central Government. The report has been produced and quality-checked by qualified flood risk specialists using the data contained in this report.

Executive Summary and Consultants Comment

In this section Argyll will summarise in a statement whether any significant flood risks have been identified and whether insurance is likely to be available at Standard Terms.

There will be one of the following three responses:

Assessment	Risk Statement
PASSED 	The Site is not considered to be at a significant risk of flooding. Insurance is likely to be available at standard terms.
PASSED 	The Site is located within an area which is at risk of flooding. In most cases insurance should be available at standard terms. However, this will be dependent on site specific factors and we recommend contacting your insurance broker before proceeding with any transaction.
FURTHER ACTION 	The Site is located within an area which is at risk of flooding and as a result insurance may not be available at standard terms. However, this will be dependent on site specific factors and we recommend contacting your insurance broker before proceeding with any transaction.

Insurance Availability

Argyll provides an indication of whether the Site is likely to be insurable for flood risk at standard terms. The answer to Question1 is based on consideration of NaFRA data supplied by the Environment Agency and surface water flooding data supplied by JBA Consulting. This data is used by insurance companies to determine the suitability of a Site for insurance, although they may access additional information which could affect their assessment.

Under the Association of British Insurers' Revised Statement of Principles on the Provision of Flooding Insurance (July 2008), the general policy of member companies is that flood insurance for domestic properties and small businesses should continue to be available for as many customers as possible until 1st July 2013, by which time a longer term solution should be implemented. The premiums charged and other terms will reflect the risk of flooding but insurance will be available:

1. for properties where the flood risk is not significant (generally defined as no worse than 1.33% or 1-in-75 years annual probability of flooding); and
2. to existing domestic property and small business customers at significant risk, providing the Environment Agency has announced plans to reduce that risk within five years, such as improving flood defences. (The commitment to offer cover will extend to the new owner of any applicable property subject to satisfactory information about the new owner).

However, for significant risk areas where no improvements in flood defences are planned, and in all cases other than domestic properties and small businesses, insurers cannot guarantee to provide cover, but will examine the risks on a case-by-case basis. The implementation of the revised Statement of Principles depends on action from the Government and is continually reviewed by insurers. In addition, the revised Statement of Principles does not apply to properties built after 1st January 2009. Different guidance applies to these (see Climate Change – Guidance on Insurance Issues for New Developments from www.abi.org.uk).

The responses to the question 'Is the Site likely to be insurable at standard terms?' assume the Site is an existing domestic property or small business and makes no allowance for previous claims arising from any type of flooding, nor for non-flood related risks such as subsidence.

Response	Meaning
Yes	The Site is likely to be considered acceptable by insurance companies at standard terms and flood insurance should not be difficult to obtain. No further action required.
No	The Site is not likely to be considered acceptable by insurance companies at standard terms, on the basis of current information. Further work may be required in order to obtain acceptable insurance terms for the flood risk. This could include a more detailed risk assessment or the use of accredited products, flood resilient materials and temporary defences to defend the property.

Development Risk

Argyll comments on whether a full or partial Flood Risk Assessment (FRA) would be required in accordance with National Planning Policy Framework (NPPF). The answer to Question 2 is indicative only and is based on the size of the Site (as supplied by the client) and the information in the data section of this report.

NPPF sets out Government policy on development and flood risk. Its aims are to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas of highest risk. Where new development is exceptionally necessary, NPPF aims to make it safe, without increasing flood risk elsewhere, and, where possible, reducing flood risk overall.

A separate Drainage Impact Assessment may be required in addition to an FRA to demonstrate that development of the Site will not adversely affect flood risk elsewhere.

Response	Meaning
Yes (Full)	If the Site was redeveloped, a full Flood Risk Assessment is likely to be required which should include a Drainage Impact Assessment.
Yes (Drainage)	If the Site was redeveloped, a full Flood Risk Assessment may not be required however, given the size of the Site, a Drainage Impact Assessment may be necessary.
No	If the Site was to be redeveloped, no further flood assessment is likely to be required.

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 two questions:

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

The answer to Question 3 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.

4. Are there existing flood defences which might benefit the Site?

The answer to Question 4 is based on the presence of any flood defences registered by the Environment Agency within 250m of the Site. It should be noted that a residual risk of flooding may be present if such defences failed. Flood defences do not generally protect the Site against groundwater and surface water flooding.

If defences are present within 250m, a further question is asked:

5. What is the risk of flooding when these defences are operational?

This assesses the risk from flooding, assuming these defences work as intended and neither fail nor are overtopped.

Questions 3 and 5 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. 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 report has been designed to satisfy basic flood-related environmental due-diligence enquiries for commercial properties. 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 Limited Conditions of Contract for **SITESOLUTIONS** and **FLOODSOLUTIONS** Reports (May 2011), a copy of which is available on our website, www.argyllenvironmental.com or by calling one of our technical team on 0845 458 5250

Flood Glossary

Business Continuity Plan

A business continuity plan is a strategic plan of action for a business to implement in an emergency (i.e. flood event). This plan ensures a business can continue to operate during emergency situations and reduces the risk of suffering avoidable losses. For example, it may cover such items as emergency accommodation and computer back up off site.

Flood Evacuation Plan

A flood evacuation plan sets out clear steps to ensure the safe evacuation of staff during a flood. It will form part of the Business Continuity Plan.

Coastal Flooding

Coastal flooding is the inundation of land areas along the coast caused by sea water rising above normal tidal conditions. Coastal flooding can arise from a combination of high tides, wind induced tidal surge, storm surge created by low pressure and wave action.

Flood Resistance Measures

These measures are designed to prevent flood water from entering the buildings on Site.

Flood Resilience Measures

These measures are intended to make buildings more resilient to flood damage so that they recover more quickly from flooding. They are not designed to prevent flood water entering the property.

Flood Risk Assessment

A full Flood Risk Assessment (FRA) Report is a bespoke report required under NPPF for any development site within Environment Agency Flood Zones 2 or 3 and/or any development site larger than 1 hectare. These reports are generally prepared following liaison with the Local Planning Authority and the application of the sequential test.

Flood Zone 1

An area of low probability of flooding as defined by the Environment Agency – a flood return period of 1 in 1,000 or more.

Flood Zone 2

An area of medium probability of flooding as defined by the Environment Agency – a flood return period between 1 in 100 to 1 in 1,000 for river flooding and 1 in 200 to 1 in 1,000 for coastal flooding.

Flood Zone 3a

An area of high probability of flooding as defined by the Environment Agency – a flood return period between 1 in 20 to 1 in 100 for river flooding and 1 in 200 for coastal flooding.

Flood Zone 3b

This area is a functional floodplain as defined by the Environment Agency. It is an area which is designed to flood – a flood return period of 1 in 20 or less.

Groundwater Flooding

Groundwater flooding occurs when ground water levels increase sufficiently for the water table to intersect the ground surface. Groundwater flooding can occur in a variety of geological settings including valleys and in areas underlain by chalk, and in river valleys with thick deposits of alluvium and river gravels.

NPPF

This relates to the National Planning Policy Framework and the associated Technical Guidance.

Pluvial (Surface Water) Flooding

Pluvial flooding results from rainfall running over ground before entering a watercourse or sewer. It is usually associated with high intensity rainfall events (typically greater than 30mm per hour) but can also occur with lower intensity rainfall or melting snow where the ground is already saturated, frozen, developed (for example in an urban setting) or otherwise has low permeability.

Return Period

Return periods are a measure of how likely flooding is to occur. They are commonly expressed as a ratio (for example 1 in 75 or 1:75). This means that this level of flooding is expected once in every 75 years.

River Flooding

River flooding mainly happens when the river catchment (that is the area of land that feeds water into the river and the streams that flow into the main river) receives greater than usual amounts of water (for example through rainfall or melting of snow). The amount of runoff depends on the soil type, catchment steepness, drainage characteristics, agriculture and urbanisation as well as the saturation of the catchment. The extra water causes the level of the water in the river to rise above its banks or retaining structures.



Important Consumer Protection Information

This search has been produced by Argyll Environmental Ltd, Lees House 21-23 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
21-23 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.