

## SiteSolutions Combined



Contaminated Land

**PASSED** ✓



Flooding

**PASSED** ✓



Argyll's Overview

**Contaminated Land :** No significant contaminant linkage has been identified. Accordingly soil and groundwater liabilities are unlikely to occur. No further action with respect to contaminated land Liability is required.

**Flood Risk :** The Site is not considered to be at a significant risk of flooding and buildings and contents insurance should be available and affordable.

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

**Operational Permits :** No authorisations, licences, consents or enforcements have been identified at or within 25m of the Site.



Report on:

**Central Herts YMCA 90, Peartree Lane, Welwyn  
Garden City, Hertfordshire, AL7 3UL**

**Report prepared for:**

Bates Wells & Braithwaite

**Report Reference:**

AEL-0446-TSC-959119

**Report date:**

7th December 2018

**Client Reference:**

211511/0035/RRcs

**National Grid Reference:**

524407,212599





## Site Location

### Report prepared on

Central Herts YMCA 90, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UL

### Site Area (m<sup>2</sup>)

6773.22

### Current Use

Residential/Commercial

### Proposed Use

Residential/Commercial

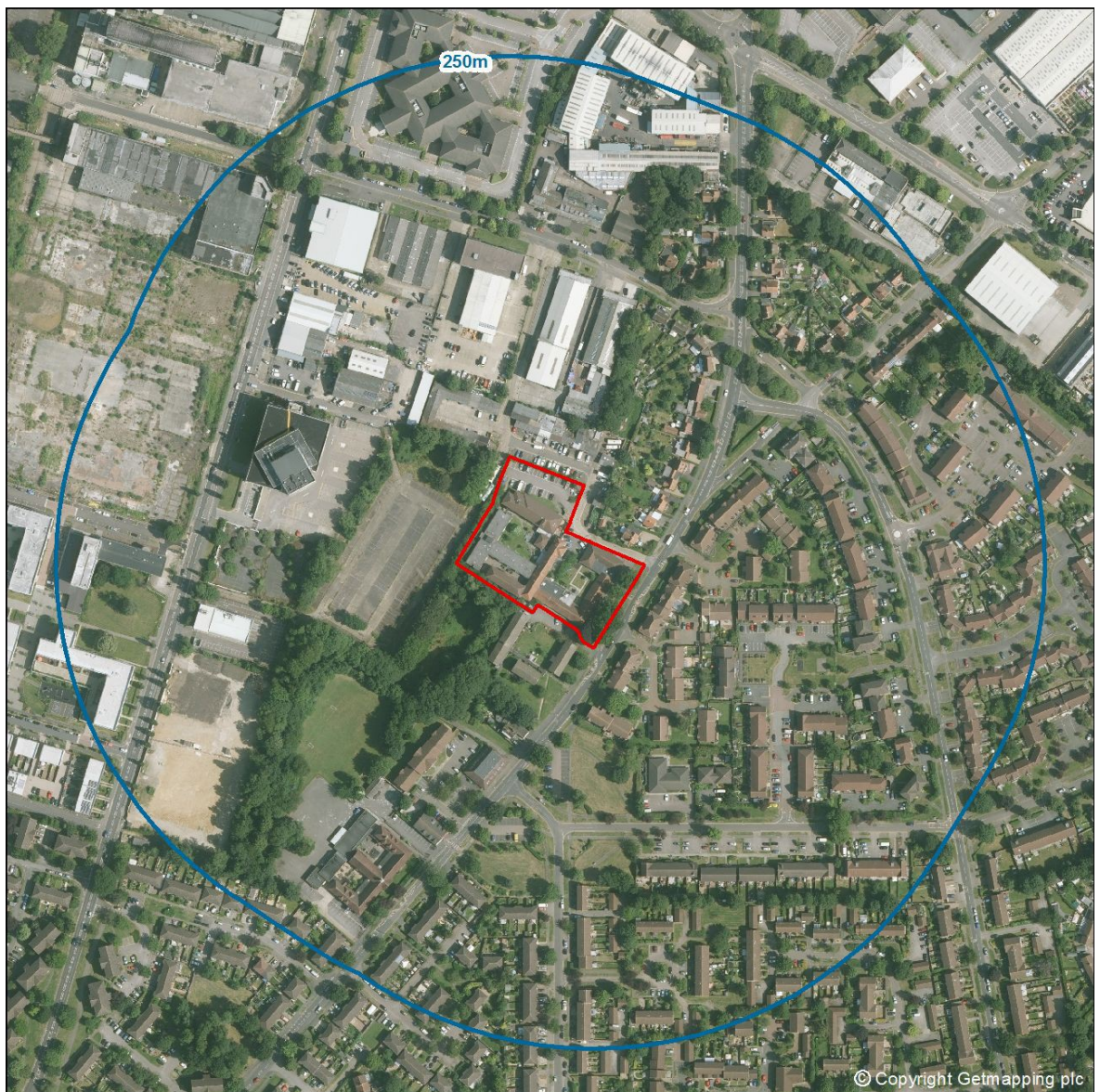
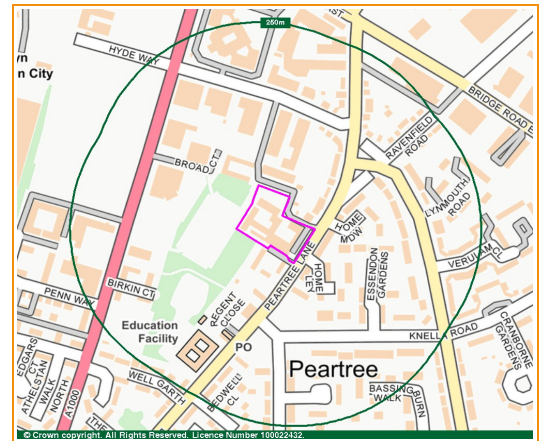
### Report Author

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### Additional Information Provided





## Executive Summary

Risk		Evaluation
	Contaminated Land	 Passed



### Liability Assessment

Within the scope of this assessment no Liabilities have been identified. No further action is required.

What is the overall on-site risk?	Low to Moderate
What is the overall off-site risk?	Moderate
What is the environmental sensitivity rating?	Moderate to High



### Recommendations

None required.

Risk		Evaluation
	Flooding	 Passed



### Consultant's Comment

The site is not considered to be at significant risk of flooding. No further action is considered necessary. However, it would be prudent to consider the measures outlined in the Recommendations section.

- 1 If development is proposed would a detailed Flood Risk Assessment be required? No
- 2 What is the overall risk of flooding, assuming defences fail or are absent or over-topped? Low to Moderate
- 3 Are there existing flood defences that might benefit the Site? No

Insurance		The flood risk identified is unlikely to affect obtaining buildings and contents insurance.
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### Recommendations

1. You should speak to the seller to confirm whether the property or the surrounding area has flooded before. If it has, please contact us for advice.
2. Prior to exchanging contracts, establish the terms of buildings and contents insurance for the property.



## Contaminated Land Risk Analysis

Investigation	Commentary
 <b>On-site sources</b>	<p>A review of historical maps indicates the Site formed part of Peartree Farm in the first map edition, dated 1878, with associated farmyard buildings noted in the north. The Site remained in this use until c.1938, when a Youth Hostel and club had been constructed in the south. Alterations to the layout of the farmyard were noted c.1985, with no significant changes observed until c.1999, when the farmyard buildings were cleared and the entire Site was in use as a youth hostel. No significant further changes were noted.</p> <p>We have been informed by the client that the Site is currently in residential/commercial use and that it will continue in this use without redevelopment.</p>
<b>Argyll's Comment</b> 	<p>As a result of the historical and current use of the Site, there is a <b>low to moderate risk</b> of contaminants being present.</p>
 <b>Off-site sources</b>	<p>A review of historical maps has revealed a number of historical or current potentially contaminative uses within a 100m radius from c.1938. These include: numerous factories and works, most notably a chemical works 30m north, a garage, warehouse, and a corporation yard.</p> <p>According to trade directories, current or recent operations in proximity to the Site include tyre repairs and retreading (23m north), garage services (24m north), car body repairs (24m north), domestic appliances - servicing, repairs and parts (24m north), precision engineers (24m north), garage services (24m north), and precision engineers (47m north west).</p> <p>In addition the following licences, consents and authorisations of note were identified: . a Registered Waste Treatment or Disposal Site (160m west).</p> <p>Furthermore, the following waste sites were identified which may be able to impact upon the Site: a Registered Landfill Site (196m north west) accepting and aqueous effluent waste, industrial effluent treatment sludge operational on 19th June 1979.</p>
<b>Argyll's Comment</b> 	<p>The historical and current use of the surrounding area is therefore considered to present a <b>moderate risk</b> of affecting the Site.</p>
 <b>Pathways and receptors</b>	<p>With reference to Environment Agency data, the superficial hydrogeology underlying the Site is classified as a Secondary (A) Aquifer (deposits with moderate permeability), and 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 U (class U) vulnerability classification.</p> <p>According to the Environment Agency the Site lies within a Zone III Source Protection Zone (SPZ). An SPZ is a protection zone placed around a well or borehole that supplies groundwater of potable quality. There are five abstraction licences located within 1000m. The closest of these are a groundwater abstraction (361m west) for chemicals: process water use. The nearest water feature is located 242m south west. The general area appears to be largely in commercial use.</p> <p>No designated eco-receptors were identified within a 1000m radius of the Site.</p>
<b>Argyll's Comment</b> 	<p>Overall, the Site is therefore considered to have a <b>moderate to high environmental sensitivity</b>.</p>
<b>Additional Sources of Information</b>	<p>No additional materials have been used in this assessment.</p>





## Argyll's Conclusion

Considering the information reviewed during this assessment, no significant contaminant linkages have been identified. Accordingly soil and groundwater liabilities are unlikely to occur.

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



### Environmental Damage Regulations 2009 (EDR)

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

Argyll's  
Comment



The Site is in close proximity to a potentially sensitive receptor as set out in the EDR. It would therefore be prudent to ensure that operations on the site are audited on a regular basis to minimise the risk of causing environmental damage that could result in liability under the EDR. In addition, the presence of such receptors should be considered as part of any future development or activity. Please refer to the risk analysis methodology section for further guidance and definition of terms.

### Additional Considerations

Item	Summary	Suggested Action
Asbestos	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 (England and Wales) Regulations 2012 and the Energy Performance of Buildings (Scotland) Regulations 2008, there is a requirement for all buildings to have an Energy Performance Certificate (EPC) upon their construction, sale or lease (and in some cases when the building is modified).	Check for EPC or conduct energy assessment
Air Conditioning/ Refrigeration Equipment	Air conditioning and refrigeration equipment contains heat transfer fluid. This fluid may be an ozone depleting substance (ODS). Any fluid in a halon fire-extinguishing system is also a ODS.	Inspect maintenance records
Change of Use Redevelopment	Proposed changes in land use require permission from the Local Authority and are subject to conditions as part of the statutory planning process.	Contact local planning authority or speak with planning consultant

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.





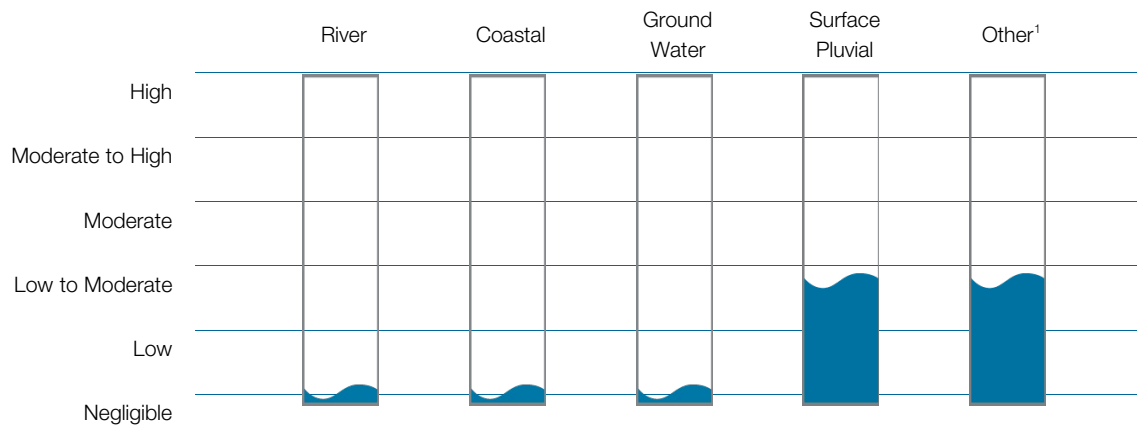
## Flood Risk Screening

	Risk	Issue	Evaluation
1	Development	If development is proposed would a detailed Flood Risk Assessment be required?	No
2	Flooding	What is the overall risk of flooding, assuming defences fail or are absent or over-topped?	Low to Moderate
3	Flood Defences	Are there existing flood defences that might benefit the Site?	No

### Insurance

The flood risk identified is unlikely to affect obtaining buildings and contents insurance.

### Flood Analysis



### Argyll's Comment



No commentary required.

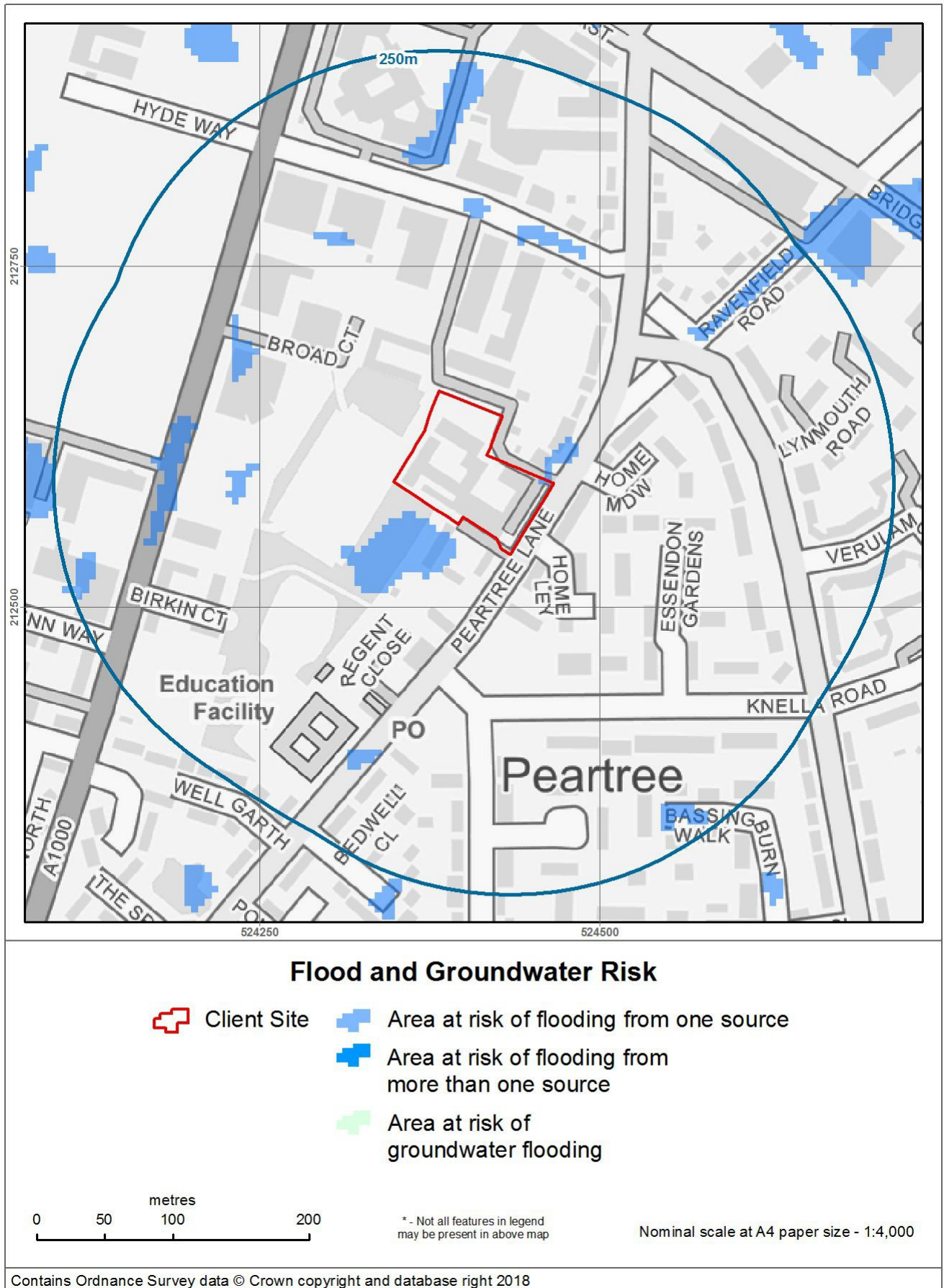


### Recommendations

1. You should speak to the seller to confirm whether the property or the surrounding area has flooded before. If it has, please contact us for advice.
2. Prior to exchanging contracts, establish the terms of buildings and contents insurance for the property.

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

## Current Flood Risk







## Additional Flooding Considerations

### Riparian Ownership

#### Argyll's Comment



Is there a water feature located within or adjacent to the Site? **No**

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 water feature 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 are normally consulted regarding any development within 20m of a Main River and Internal Drainage Boards should be similarly contacted regarding developments close to drainage channels. Navigation authorities are normally consulted regarding any development within 250m of a canal, although this varies on a site by site basis. Please see The Environment Agency website to check if there is a Main River within 20m of your property.

The Environment Agency should also be contacted with regards to development (other than minor development) in Flood Zones 2 and 3.

### 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 Risk Management. These predict the areas liable to flood around approximately 1700 key dams and reservoirs across England and Wales (if that dam or reservoir were to fail).

## 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 Measure

Building Feature	Cost Estimate for Baffles (+ VAT)
Standard (900mm) single door	£750
Standard (1800mm) double entrance door	£950
Large roller shutter door (up to 2,745mm span)	£1,420 (inc channel)
Standard garage door	£1,400 - £1,575
Standard window (up to 1,240mm span)	£750
Large window (1,240mm to 2,150mm span)	£550 - £700
Single air brick	£60 / £90
Double air brick	£80 - £230
Building Feature	Cost Estimate for Tanking (+ VAT)
Tanking (of basement, walls or floors)	£25 - £50 per metre <sup>2</sup>
System Component	Cost Estimate for Plumbing (+ VAT)
Simple non-return valve	£35 / £170
Sophisticated non-return valve	£670 / £900




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. Using the highest detail topographical data available and Environment Agency flood levels, the report will specify the expected flood depths at the property. This can be used to increase your understanding of the risk and the potential significance of a flood event, and to inform a flood survey. This report can usually be prepared within 10-20 working days, although may take up to 25 depending upon regulatory response times. Please contact us on 0845 458 5250 if you would like further assistance.





## Environmental Hazards

	Risk	Recommendation
	<b>Natural or Mining Related Hazards</b>	No natural or mining related hazards have been identified in the immediate vicinity of the Site.
	<b>Telecommunication Base Stations</b>	No telecommunication base stations are located within 100m of the Site.
	<b>COMAH</b>	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
<b>Tabular Summary</b>	<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>
<b>Current Land Use Mapping</b>	<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>
<b>Statutory Information</b>	<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>
<b>Waste</b>	<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>
<b>Current Industrial Land Use</b>	<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>
<b>Historical Land Use Mapping</b>	<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>
<b>Historical Land Use</b>	<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>
<b>Aquifer Designations and Geology</b>	<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>
<b>Environmental Sensitivity</b>	<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>
<b>Natural and Mining Related Hazards</b>	<p>This section contains information on natural and mining related hazards which may affect the Site. These include subsidence, radon and mining.</p>
<b>Flooding</b>	<p>This section contains information on the risks associated with flooding. It includes maps and data associated with river, coastal, groundwater, and surface water flooding, as well as historical flooding and water features.</p>

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# Tabular Summary

## Statutory Information

Authorisations	On-site	1-250m	251-500m
Local Authority Pollution Prevention and Controls	0	0	2
Local Authority Integrated Pollution Prevention and Controls	0	0	0
Integrated Pollution Controls	0	0	11
Integrated Pollution Prevention And Control	0	0	8
Registered Radioactive Substances	0	6	11
Discharges	On-site	1-250m	251-500m
Discharge Consents	0	0	0
Water Industry Act Referrals	0	0	1
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	1
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	0	0
Prosecutions Relating to Authorised Processes	0	0	0
Prosecutions Relating to Controlled Waters	0	0	0

## 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	1	0 (0) *
Registered Waste Transfer Sites	0	0	0
Registered Waste Treatment or Disposal Sites	0	1	4
Historical Landfill Sites	0	0	0

## Current Land Use

Current Potentially Contaminative Uses	On-site	1-250m	251-500m
Contemporary Trade Directory Entries	0	39	59
Fuel Station Entries	0	0	1
Other Features	On-site	1-250m	251-500m
Telecommunication Base Stations	0	0 <sup>2</sup>	N/A
Overhead Transmission Lines	0	0	0
Gas Pipelines	0	0	0
Gas Feeders	0	0	0

## Historical Land Use

Historical Potentially Contaminative Uses	On-site	1-250m	251-500m
Historical Tanks And Energy Facilities	0	5	23
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)	0	5	5

<sup>2</sup>Telecommunication base stations are searched to a radius of 100m from the Site boundary

## Groundwater Vulnerability

Hydrogeology	On-site	1-250m	251-500m
Superficial Aquifer Designations	2	0	0
Bedrock Aquifer Designations	1	0	0
Groundwater Vulnerability	1	0	0
Geology	On-site	1-250m	251-500m
Low Permeability Drift Deposits	1	N/A	N/A
BGS 1:50,000 Bedrock Geology	1	0	0
BGS 1:50,000 Superficial Deposits	2	0	0
BGS 1:50,000 Geological Mapping Coverage	1	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	1	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	4 (1)*
Source Protection Zones	1	0	0

## Natural and Mining Related Hazards

Subsidence	On-site	1-250m	251-500m
Collapsible Ground Stability Hazards	1	0 <sup>3</sup>	N/A
Compressible Ground Stability Hazards	1	0	N/A
Ground Dissolution Stability Hazards	1	1	N/A
Landslide Ground Stability Hazards	1	0	N/A
Running Sand Ground Stability Hazards	1	0	N/A
Shrinking or Swelling Clay Subsidence Hazards	1	0	N/A
Non-Coal Mining Hazards	1	0	N/A
Radon	On-site	1-250m	251-500m
Radon Potential	1	N/A	N/A
Radon Protection Measures	1	N/A	N/A
Mining	On-site	1-250m	251-500m
Brine Compensation Areas	0	N/A	N/A
Coal Mining Affected Areas	0	N/A	N/A
Natural and Mining Cavities	0	5	3
Mining Instability	0	0	N/A
BGS Recorded Mineral Sites	0	0	0

## Flooding

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

Current Flood Risk	On-site	1-250m	251-500m
Flooding From Rivers or Sea	0	0	0
Flooding From Rivers or Sea (in an Extreme Flood)	0	0	0
Areas Benefiting from Flood Defences	0	0	0
Flood Storage Areas	0	0	0
Flood Defences	0	0	0
Risk of Flooding from Rivers and Sea	0	0	0
Groundwater Flood Risk	0	0	0
Surface Water Flooding (1:75 year rainfall event)	1	2	0
Surface Water Flooding (1:200 year rainfall event)	1	2	0
Surface Water Flooding (1:1,000 year rainfall event)	1	2	0
Historical Flooding	On-site	1-250m	251-500m
Historical Flood Events	0	0	0
Geological Indicators of Flooding	0	0	0
Other Flood Information	On-site	1-250m	251-500m
MasterMap Water Network	0	2	6
Surface Water Features	0	0	0
Dam or Reservoir Failure	0	0	0
Site Information	Response		
Height of Site Above Sea Level	84.34m		
Distance of Site Boundary to Nearest Water Feature	Greater than search radius		

#### 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.

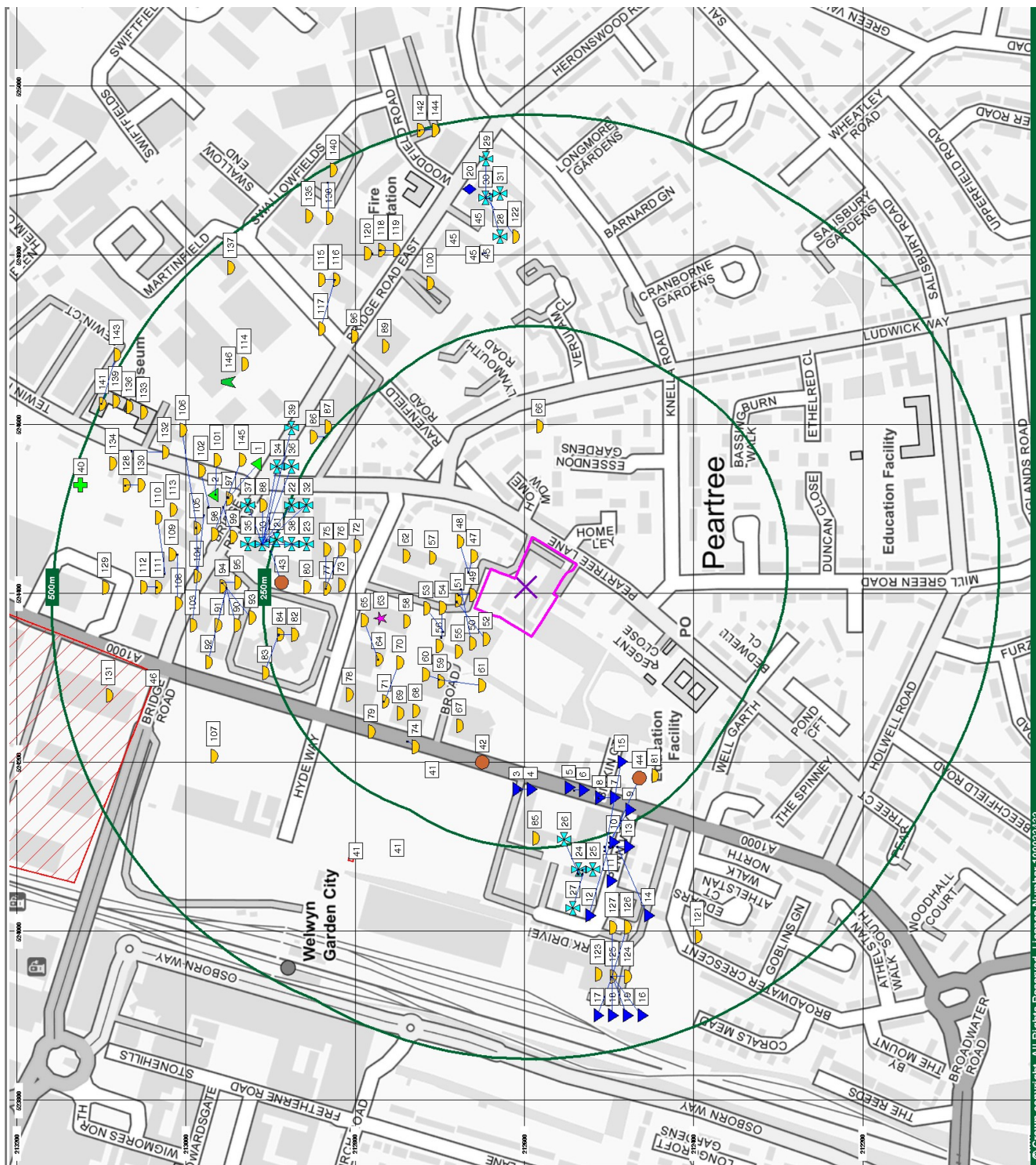
Local Authority landfill data is sourced from individual local authorities that were able to provide information on sites operating prior to the introduction of the Control of Pollution Act (COPA) in 1974. Appropriate authorities are listed under Local Authority Landfill Coverage with an indication of 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

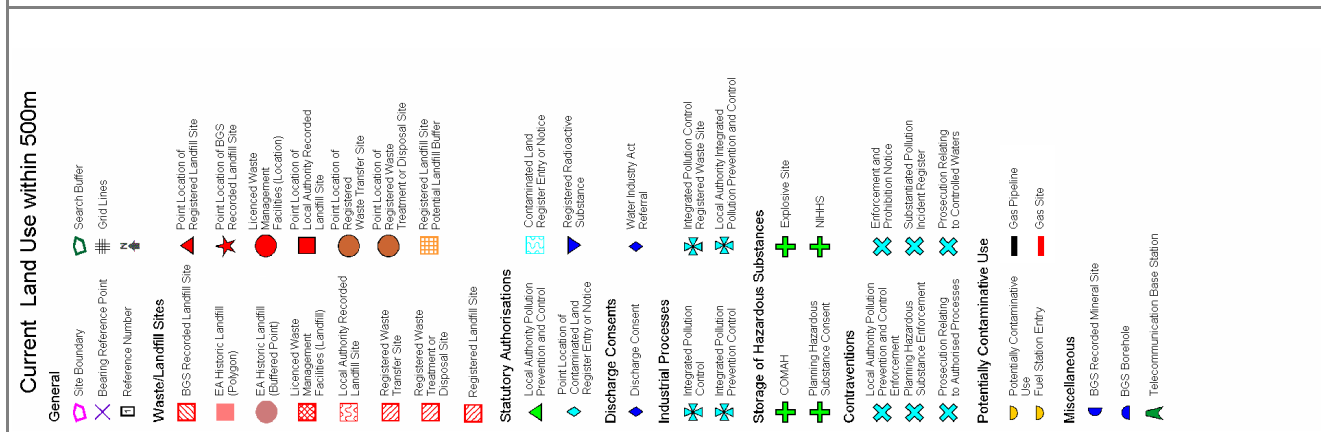
Information on subsidence hazards is provided by the British Geological Survey (BGS). Information present within 250m of the Site is reported under Natural and Mining Related Hazards. Due to the level of detail of this data and the complexities of the real world, the BGS recommends a precautionary approach 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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## Statutory Information

### Authorisations

#### Local Authority Pollution Prevention and Controls

Map ID	Details	Distance	Direction
1	Name: Eastbridge Service Station, Location: Bridge Road East, Welwyn Garden City, Herts, AL7 1LE, Authority: Welwyn Hatfield District Council, Environmental Health Department, Permit Ref: LN000311, Dated: 1st December 1998, Process Type: Local Authority Pollution Prevention and Control, Description: PG1/14 Petrol filling station, Status: Permitted, Positional Accuracy: Manually positioned to the address or location.	320m	N
2	Name: Mark Tempest Autocentre, Location: Unit 1 Garden Court, Welwyn Garden City, AL7 1bh, Authority: Welwyn Hatfield District Council, Environmental Health Department, Permit Ref: NOT SUPPLIED, Dated: 1st January 2012, Process Type: Local Authority Pollution Prevention and Control, Description: PG1/1Waste oil burners, less than 0.4MW net rated thermal input, Status: Permitted, Positional Accuracy: Manually positioned to the address or location.	336m	N

#### Integrated Pollution Controls

Map ID	Details	Distance	Direction
21	Name: British Lead Mills Ltd, Location: Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB, Authority: Environment Agency, Thames Region, Permit Ref: AW7371, Dated: 31st July 2001, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 2.2 A (E) Non-ferrous Metal processes within the Metal Industry, Status: Revoked - Now IPPC, Positional Accuracy: Automatically positioned to the address.	260m	N
22	Name: British Lead Mills Ltd, Location: Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB, Authority: Environment Agency, Thames Region, Permit Ref: AR7009, Dated: 15th September 1995, Process Type: IPC application for process that was regulated by HMIP for air releases under previous legislation, Description: 2.2 A (E) Non-ferrous Metal processes within the Metal Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	263m	N
23	Name: British Lead Mills Ltd, Location: Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB, Authority: Environment Agency, Thames Region, Permit Ref: BD1601, Dated: 24th November 1998, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 2.2 A (E) Non-ferrous Metal processes within the Metal Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	263m	N
24	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX, Authority: Environment Agency, Thames Region, Permit Ref: BG4844, Dated: 29th February 2000, Process Type: IPC major (substantial) variation, Description: 4.2 A (D) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Authorisation revoked, Positional Accuracy: Manually positioned to the road within the address or location.	282m	W
25	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3SP, Authority: Environment Agency, Thames Region, Permit Ref: BC6241, Dated: 24th November 1998, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 4.2 A (D) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Manually positioned to the road within the address or location.	283m	W
26	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX, Authority: Environment Agency, Thames Region, Permit Ref: AJ9776, Dated: 14th February 1994, Process Type: IPC new application, Description: 4.2 A (D) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Manually positioned to the road within the address or location.	287m	W

## Integrated Pollution Controls

Map ID	Details	Distance	Direction
27	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: AX5668, Dated: 17th December 1996, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 4.2 A (D) Manufacture and use of Organic Chemicals within the Chemical Industry, Status: Application has met the requirements for authorisation (but not yet authorised), Positional Accuracy: Manually positioned to the road within the address or location.	288m	W
28	Name: Catomance Technologies Ltd, Location: 96 Bridge Road East, WELWYN GARDEN CITY, Hertfordshire, AL7 1JW, Authority: Environment Agency, Thames Region, Permit Ref: AK8210, Dated: 15th March 1994, Process Type: IPC application for process that was regulated by HMIP for air releases under previous legislation, Description: 4.7 A Pesticide production within the Chemical Industry, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	405m	E
29	Name: Catomance Ltd, Location: 96 Bridge Road East, WELWYN GARDEN CITY, Hertfordshire, AL7 1JW, Authority: Environment Agency, Thames Region, Permit Ref: AM2883, Dated: 16th February 1994, Process Type: Application since found to be exempt from IPC, Description: Not Given, Status: Application since found to be exempt from IPC, Positional Accuracy: Automatically positioned to the address.	406m	E
30	Name: Catomance Technologies Ltd, Location: 96 Bridge Road East, WELWYN GARDEN CITY, Hertfordshire, AL7 1JW, Authority: Environment Agency, Thames Region, Permit Ref: BB2496, Dated: Not Supplied, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 4.7 A Pesticide production within the Chemical Industry, Status: Application has met the requirements for authorisation (but not yet authorised), Positional Accuracy: Automatically positioned to the address.	406m	E
31	Name: Catomance Technologies Ltd, Location: 96 Bridge Road East, WELWYN GARDEN CITY, Hertfordshire, AL7 1LQ, Authority: Environment Agency, Thames Region, Permit Ref: BC7108, Dated: 24th November 1998, Process Type: IPC minor (non-substantial) variation to previous variation, Description: 4.7 A Pesticide production within the Chemical Industry, Status: Authorisation revoked, Positional Accuracy: Automatically positioned to the address.	410m	E

## Integrated Pollution Prevention And Control

Map ID	Details	Distance	Direction
32	Name: British Lead Mills Ltd, Location: Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UB, Authority: Environment Agency, Thames Region, Permit Ref: SP3034UX, Dated: 27th March 2008 to Not Supplied, Activity Descriptions: 1.Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others, Activity Codes: 1.2.2 A(1) (B) (I), Status: Effective, Positional Accuracy: Automatically positioned to the address.	263m	N
33	Name: H J Enthoven Limited, Location: British Lead Mills, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB, Authority: Environment Agency - South East Region, North East Thames Area, Permit Ref: XP3235JX, Dated: 29th January 2018 to Not Supplied, Activity Descriptions: 1.Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others, Activity Codes: 1.2.2 A(1) (B) (I), Status: Effective, Positional Accuracy: Automatically positioned to the address.	263m	N
34	Name: British Lead Mills Ltd, Location: Wgc Lead Recovery Process, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB, Authority: Environment Agency - South East Region, North East Thames Area, Permit Ref: PP3138CR, Dated: 15th October 2012 to Not Supplied, Activity Descriptions: 1.Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others, Activity Codes: 1.2.2 A(1) (B) (I), Status: Superseded By Variation, Positional Accuracy: Automatically positioned to the address.	263m	N
35	Name: British Lead Mills Ltd, Location: Wgc Lead Recovery Process, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB, Authority: Environment Agency - South East Region, North East Thames Area, Permit Ref: SP3034UX, Dated: 27th March 2008 to Not Supplied, Activity Descriptions: 1.Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others, Activity Codes: 1.2.2 A(1) (B) (I), Status: Superseded By Variation, Positional Accuracy: Automatically positioned to the address.	263m	N



## Integrated Pollution Prevention And Control

Map ID	Details	Distance	Direction
36	Name: British Lead Mills Ltd, Location: Wgc Lead Recovery Process, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB, Authority: Environment Agency - South East Region, North East Thames Area, Permit Ref: BL8317IK, Dated: 20th December 2002 to Not Supplied, Activity Descriptions: 1.Non-Ferrous Metals; Producing Etc Lead And Alloys With Release To Air, Activity Codes: 1.2.2 A(1) (D) (I), Status: Superseded By Variation, Positional Accuracy: Automatically positioned to the address.	263m	N
37	Name: British Lead Mills Ltd, Location: Wgc Lead Recovery Process, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UB, Authority: Environment Agency, Thames Region, Permit Ref: BL8317IK, Dated: 20th December 2002 to Not Supplied, Activity Descriptions: 1.Non-Ferrous Metals; Producing Etc Lead And Alloys With Release To Air, Activity Codes: 1.2.2 A(1) (D) (I), Status: Superseded By Variation, Positional Accuracy: Automatically positioned to the address.	263m	N
38	Name: British Lead Mills Ltd, Location: Wgc Lead Recovery Process, Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB, Authority: Environment Agency - South East Region, North East Thames Area, Permit Ref: BX4739IA, Dated: 23rd June 2004 to Not Supplied, Activity Descriptions: 1.Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others, Activity Codes: 1.2.2 A(1) (B) (I), Status: Superseded By Variation, Positional Accuracy: Automatically positioned to the address.	263m	N
39	Name: British Lead Mills Ltd, Location: Wgc Lead Recovery Process, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UB, Authority: Environment Agency, Thames Region, Permit Ref: BX4739IA, Dated: 23rd June 2004 to Not Supplied, Activity Descriptions: 1.Non-Ferrous Metals; Melting With Capacity Greater Than 4T/D Lead/Cadmium Or 20T/D Others, Activity Codes: 1.2.2 A(1) (B) (I), Status: Superseded By Variation, Positional Accuracy: Automatically positioned to the address.	263m	N

## Registered Radioactive Substances

Map ID	Details	Distance	Direction
3	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: BG2558, Dated: 20th April 2000, Description: Substantial variation to authorisation under RSA, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Manually positioned to the address or location.	182m	W
4	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: BG2507, Dated: 20th April 2000, Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Manually positioned to the address or location.	182m	W
5	Name: Roche Products Ltd, Location: 40 Broadwater Road , Welwyn Garden City, Hertfordshire, Al7 3ay, Authority: Environment Agency, Thames Region, Permit Ref: BQ2081, Dated: 14th February 2002, Description: Minor variation to authorisation under RSA, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Manually positioned to the road within the address or location.	184m	W
6	Name: Roche Products Ltd, Location: 40 Broadwater Road , Welwyn Garden City, Hertfordshire, Al7 3ay, Authority: Environment Agency, Thames Region, Permit Ref: BM9149, Dated: 14th February 2002, Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation , Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Manually positioned to the road within the address or location.	189m	W
7	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: BS5924, Dated: 19th September 2002, Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation, Status: Authorisation either revoked or cancelled, Positional Accuracy: Manually positioned to the road within the address or location.	207m	W



## Registered Radioactive Substances

Map ID	Details	Distance	Direction
8	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: BS5908, Dated: 19th September 2002, Description: Initial variation to an authorisation under RSA , Status: Authorisation either revoked or cancelled, Positional Accuracy: Manually positioned to the road within the address or location.	207m	W
9	Name: Roche Products Ltd, Location: P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: AE5209, Dated: 31st March 1991, Description: Authorisation under RSA, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Unknown.	261m	W
10	Name: Roche Products Ltd, Location: P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: AA5762, Dated: 29th June 1992, Description: Substantial variation to authorisation under RSA, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Unknown.	263m	W
11	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: BA4841, Dated: 26th March 1998, Description: Minor variation to authorisation under RSA, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Manually positioned to the address or location.	264m	W
12	Name: Roche Products Ltd, Location: P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: AE5217, Dated: 31st March 1991, Description: Registration under the Act of an open source which is also the subject of an authorisation, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Unknown.	266m	W
13	Name: Roche Products Ltd, Location: P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: AM8628, Dated: 18th July 1994, Description: Substantial variation to authorisation under RSA, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Unknown.	267m	W
14	Name: Roche Products Ltd, Location: P O Box 8, 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AY, Authority: Environment Agency, Thames Region, Permit Ref: BB8729, Dated: 28th October 1998, Description: Substantial variation to authorisation under RSA, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Unknown.	269m	W
15	Name: Roche Products Ltd, Location: 40 Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX, Authority: Environment Agency, Thames Region, Permit Ref: AU2123, Dated: 9th January 1996, Description: Minor variation to authorisation under RSA, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Unknown.	269m	W
16	Name: Heptares Therapeutics Ltd, Location: Biopark Hertfordshire, Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX, Authority: Environment Agency, Thames Region, Permit Ref: CD6683, Dated: 3rd June 2009, Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation, Status: Authorisation either revoked or cancelled, Positional Accuracy: Automatically positioned to the address.	414m	W
17	Name: Heptares Therapeutics Ltd, Location: Biopark Hertfordshire, Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX, Authority: Environment Agency, Thames Region, Permit Ref: CD1550, Dated: 24th November 2008, Description: Authorisation under RSA, Status: Authorisation either revoked or cancelled, Positional Accuracy: Automatically positioned to the address.	414m	W
18	Name: Antisoma Research Ltd, Location: Biopark Hertfordshire, Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX, Authority: Environment Agency, Thames Region, Permit Ref: CE3230, Dated: 10th May 2010, Description: Authorisation under RSA, Status: Authorisation either revoked or cancelled, Positional Accuracy: Automatically positioned to the address.	414m	W

## Registered Radioactive Substances

Map ID	Details	Distance	Direction
19	Name: Heptares Therapeutics Ltd, Location: Biopark Hertfordshire, Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX, Authority: Environment Agency, Thames Region, Permit Ref: CD1568, Dated: 24th November 2008, Description: Registration under the Act of an open source which is also the subject of an authorisation, Status: Authorisation superseded by a substantial or non substantial variation, Positional Accuracy: Automatically positioned to the address.	414m	W

## Discharges

### Water Industry Act Referrals

Map ID	Details	Distance	Direction
20	Name: Catomance Technologies Ltd, Location: CATOMANCE TECHNOLOGIES LTD, 96 BRIDGE ROAD EAST, 96 BRIDGE ROAD EAST, WELWYN GARDEN CITY, HERTFORDSHIRE, AL7 1JW, Authority: Environment Agency, Thames Region, Permit Ref: AB3323, Date: 8th October 1991, 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 cancelled, Positional Accuracy: Automatically positioned to the address.	419m	E

## Hazardous Sites

### Planning Hazardous Substance Consents

Map ID	Details	Distance	Direction
40	Name: Bg Transco Plc, Location: Welwyn Garden Holder Station, Tewin Road, Welwyn Garden City, Herts, AL7, Authority: Welwyn Hatfield District Council, Application Ref: N6/2000/0752/Hs, Hazardous Substance: Liquefied extremely flammable gas (including LPG) and natural gas (whether liquefied or not), Maximum Quantity: 0 Liquefied extremely flammable gas (including LPG) and natural gas (whether liquefied or not), Application Date: 31st May 2000, Decision: New application granted conditionally, Positional Accuracy: Manually positioned to the address or location.	489m	N

## Waste

### Waste/Landfill Sites

#### Local Authority Landfill Coverage

Welwyn Hatfield Council - Has no landfill data to supply

Hertfordshire County Council - Has supplied landfill data

#### Licensed Waste Management Facilities (Locations)

Map ID	Details	Distance	Direction
	Licence Number: 102412, Location: Bridgefields, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1RX, Operator: W G C Metals Ltd, Operator Location: Not Supplied, Authority: Environment Agency - Thames Region, North East Area, Site Category: Vehicle depollution facility, Licence Status: Expired, Issued Date: 21st February 2011, Last Modified: Not Supplied, Expiry Date: 6th July 2018, Suspended Date: Not Supplied, Revoked Date: Not Supplied, Surrendered Date: Not Supplied, IPPC Reference: Not Supplied, Positional Accuracy: Located by supplier to within 10m.	611m	N

## Registered Landfill Sites

Map ID	Details	Distance	Direction
41	Licence Holder: Polycell Products Ltd, Licence Reference: 79/078, Site Location: 30 Broadwater Road, Welwyn Garden City, Hertfordshire, Easting: Not Supplied, Northing: Not Supplied, Operator Location: As Site Address, Authority: Environment Agency - Thames Region, North East Area, Site Category: Landfill - Soak away, Maximum Input Rate: Very Small (Less than 10,000 tonnes per year), Waste Source Restrictions: Waste produced/controlled by licence holder, Dated: 19th June 1979, Preceded By Licence: Not Given, Superseded By Licence: 79/078, Positional Accuracy: Positioned by the supplier, Boundary Accuracy: Good, Authorised Waste: 1. aqueous effluent waste, 2. industrial effluent treatment sludge, Prohibited Waste: N/A.	196m	NW

## Registered Waste Treatment or Disposal Sites

Map ID	Details	Distance	Direction
42	Licence Holder: Polycell Products Ltd, Licence Reference: 79/078, Site Location: 30 Broadwater Road, Welwyn Garden City, Hertfordshire, Operator Location: As Site Address, Authority: Environment Agency - Thames Region, North East Area, Site Category: Storage, Maximum Input Rate: Undefined, Waste Source Restrictions: Waste produced/controlled by licence holder, Status: Site exempt from licence, Dated: 19th June 1979, Preceded By Licence: 79/078, Superseded By Licence: Not Given, Positional Accuracy: Manually positioned to the road within the address or location, Boundary Quality: Not Supplied, Authorised Waste: 1. aqueous effluent waste, Prohibited Waste: N/A.	160m	W
43	Licence Holder: British Lead Mills, Licence Reference: 92/302, Site Location: Peartree Lane, WELWYN GARDEN CITY, Hertfordshire, AL7 3UB, Operator Location: As Site Address, Authority: Environment Agency - Thames Region, North East Area, Site Category: Scrapyard, Maximum Input Rate: Medium (Equal to or greater than 25,000 and less than 75,000 tonnes per year), Waste Source Restrictions: No known restriction on source of waste, Status: Licence lapsed/cancelled/defunct/not applicable/surrendered, Dated: 1st January 1993, Preceded By Licence: Not Given, Superseded By Licence: Not Given, Positional Accuracy: Manually positioned to the address or location, Boundary Quality: Not Supplied, Authorised Waste: 1. scrap lead, Prohibited Waste: 1.Waste N.O.S..	251m	N
44	Licence Holder: Roche Products Ltd, Licence Reference: 86/203, Site Location: 40 Broadwater Road, Welwyn Garden City, Hertfordshire, Operator Location: As Site Address, Authority: Environment Agency - Thames Region, North East Area, Site Category: Storage - Drummed storage, Maximum Input Rate: Very Small (Less than 10,000 tonnes per year), Waste Source Restrictions: Waste produced/controlled by licence holder, Status: Licence lapsed/cancelled/defunct/not applicable/surrendered, Dated: 1st June 1986, Preceded By Licence: Not Given, Superseded By Licence: Not Given, Positional Accuracy: Manually positioned to the address or location, Boundary Quality: Not Supplied, Authorised Waste: 1. solvents - chlorinated & unchlor. a, 2. solvents - chlorinated & unchlor. b, Prohibited Waste: 1.Liable To Cause Environmental Hazards, 2.Poisonous, Noxious And Polluting N.O.S.	266m	W
45	Licence Holder: Catomance Ltd, Licence Reference: 79/076, Site Location: 88/96 Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JW, Operator Location: As Site Address, Authority: Environment Agency - Thames Region, North East Area, Site Category: Storage, Maximum Input Rate: Very Small (Less than 10,000 tonnes per year), Waste Source Restrictions: Waste produced/controlled by licence holder, Status: Licence lapsed/cancelled/defunct/not applicable/surrendered, Dated: 22nd October 1982, Preceded By Licence: Not Given, Superseded By Licence: Not Given, Positional Accuracy: Positioned by the supplier, Boundary Quality: Good, Authorised Waste: 1. aqueous effluent waste, 2. dilute aqueous alum.chloride max.stor, 3. toxic/poisonous wastes, Prohibited Waste: N/A.	341m	E

## Registered Waste Treatment or Disposal Sites

Map ID	Details	Distance	Direction
46	Licence Holder: Rank Xerox Ltd, Licence Reference: 82/134, Site Location: Bessemer Road, WELWYN GARDEN CITY, Hertfordshire, AL7 1HE, Operator Location: PO Box 17 Bessemer Road, WELWYN GARDEN CITY, Hertfordshire, AL7 1HE, Authority: Environment Agency - Thames Region, North East Area, Site Category: Transfer - with treatment, Maximum Input Rate: Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year), Waste Source Restrictions: Waste produced/controlled by licence holder, Status: Site exempt from licence, Dated: 24th May 1984, Preceded By Licence: 78/042, Superseded By Licence: Not Given, Positional Accuracy: Positioned by the supplier, Boundary Quality: Good, Authorised Waste: 1. acids, 2. alkalis, 3. flammable solvents, 4. industrial effluent treatment sludge, 5. metasilicate solution, 6. oil/water mixtures, 7. toxic/poisonous wastes, 8. waste solvents, 9. water (contaminated), Prohibited Waste: 1. Polluting Wastes.	390m	N

## Current Land Use

### Current Potentially Contaminative Uses

#### Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
47	Tyre Repairs & Retreading, Name: Aces Tyres, Status: Active, Location: Unit 6, Peartree Farm, Peartree Lane, Welwyn Garden City, AL7 3UW, Positional Accuracy: Automatically positioned to the address.	23m	N
48	Garage Services, Name: A1 Services, Status: Inactive, Location: Unit 6, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW, Positional Accuracy: Automatically positioned to the address.	24m	N
49	Car Body Repairs, Name: Peartree Welding Centre, Status: Inactive, Location: Unit 2, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW, Positional Accuracy: Automatically positioned to the address.	24m	N
50	Domestic Appliances - Servicing, Repairs & Parts, Name: Jack O'Neill, Status: Inactive, Location: Unit 3, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW, Positional Accuracy: Automatically positioned to the address.	24m	N
51	Precision Engineers, Name: G V A Engineering Co Ltd, Status: Inactive, Location: Unit 1, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW, Positional Accuracy: Automatically positioned to the address.	24m	N
52	Garage Services, Name: Peartree Clutch & Engine Centre, Status: Active, Location: 1 Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW, Positional Accuracy: Automatically positioned to the address.	24m	N
53	Precision Engineers, Name: A C Precision, Status: Inactive, Location: Unit 26, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW, Positional Accuracy: Automatically positioned to the address.	47m	NW
54	Firefighting Equipment, Name: Prompt Fire Protection, Status: Active, Location: Unit 25, Peartree Farm, Peartree Lane, Welwyn Garden City, AL7 3UW, Positional Accuracy: Automatically positioned to the address.	53m	NW
55	Precision Engineers, Name: Jj Engineering (Uk) Ltd, Status: Inactive, Location: Unit 19/20, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW, Positional Accuracy: Manually positioned to the address or location.	55m	NW
56	Printers, Name: Presswork, Status: Inactive, Location: Unit 23-24, Peartree Farm, Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UW, Positional Accuracy: Automatically positioned to the address.	62m	NW
57	Medical Instruments - Manufacturers, Name: Tecmed Ltd, Status: Inactive, Location: 32a Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3AW, Positional Accuracy: Manually positioned to the address or location.	70m	N
58	Radio Communication Equipment, Name: Drake Electronics Ltd, Status: Inactive, Location: 26-28, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ, Positional Accuracy: Automatically positioned to the address.	84m	N



## Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
59	Electrical Engineers, Name: Ridge Engineering Co Ltd, Status: Inactive, Location: 23a Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3AU, Positional Accuracy: Manually positioned to the address or location.	94m	NW
60	Tyre Dealers, Name: Supertyres Motorists Centre, Status: Inactive, Location: Newton House, 23a, Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3BQ, Positional Accuracy: Automatically positioned to the address.	94m	NW
61	Tyre Dealers, Name: Super Tyres Motorists Centre, Status: Active, Location: 23a, Broadwater Road, Welwyn Garden City, AL7 3BQ, Positional Accuracy: Automatically positioned to the address.	95m	NW
62	Meat - Wholesale, Name: British Premium Meats, Status: Active, Location: 32 Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ, Positional Accuracy: Manually positioned to the address or location.	100m	N
63	Recycling Services, Name: F R E S C H, Status: Inactive, Location: 26-28, Hyde Way, Welwyn Garden City, AL7 3UQ, Positional Accuracy: Automatically positioned to the address.	113m	N
64	Machinery - Industrial & Commercial, Name: Cleamax Engineering Ltd, Status: Active, Location: 24, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ, Positional Accuracy: Automatically positioned to the address.	130m	NW
65	Sheet Metal Work, Name: Lemsford Metal Products 1982 Ltd, Status: Active, Location: 24, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ, Positional Accuracy: Automatically positioned to the address.	130m	NW
66	Digital Printing, Name: Moore Digital Solutions, Status: Inactive, Location: 24, Ludwick Way, Welwyn Garden City, Hertfordshire, AL7 3QS, Positional Accuracy: Automatically positioned to the address.	132m	E
67	Distribution Services, Name: Bounty, Status: Active, Location: 29, Broadwater Road, Welwyn Garden City, AL7 3BQ, Positional Accuracy: Automatically positioned to the address.	135m	NW
68	Vending Machine Manufacturers, Name: Pod Drinks Plc, Status: Inactive, Location: 21a, Broadwater Road, Welwyn Garden City, AL7 3BQ, Positional Accuracy: Automatically positioned to the address.	141m	NW
69	Garage Services, Name: Adams Autocare, Status: Active, Location: Unit 10 Broad Court, Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3BQ, Positional Accuracy: Manually positioned within the geographical locality.	153m	NW
70	Tyre Dealers, Name: Super Tyres Motorist Centre, Status: Inactive, Location: 17, Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3BQ, Positional Accuracy: Automatically positioned to the address.	154m	NW
71	Mot Testing Centres, Name: Supertyres Mot Ltd, Status: Inactive, Location: 17, Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3BQ, Positional Accuracy: Automatically positioned to the address.	154m	NW
72	Medical Instruments - Manufacturers, Name: Digitimer Ltd, Status: Inactive, Location: 37, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3BE, Positional Accuracy: Automatically positioned to the address.	158m	N
73	Garage Services, Name: A1m Car Services Ltd, Status: Inactive, Location: 29, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ, Positional Accuracy: Automatically positioned to the address.	162m	N
74	Garage Services, Name: E C Motors, Status: Inactive, Location: Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3BQ, Positional Accuracy: Manually positioned to the road within the address or location.	176m	NW
75	Medical Equipment Manufacturers, Name: Imedco, Status: Active, Location: 27, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ, Positional Accuracy: Automatically positioned to the address.	178m	N
76	Mot Testing Centres, Name: L J Whiteman & Son Welwyn Test Centre, Status: Active, Location: 27b, Hyde Way, Welwyn Garden City, AL7 3UQ, Positional Accuracy: Automatically positioned to the address.	178m	N
77	Medical Equipment Manufacturers, Name: Imedco Ltd, Status: Inactive, Location: 27, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ, Positional Accuracy: Automatically positioned to the address.	178m	N
78	Mot Testing Centres, Name: Supertyres, Status: Inactive, Location: 13-15 Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3BQ, Positional Accuracy: Manually positioned to the address or location.	181m	NW

## Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
79	Car Dealers - Used, Name: Moorlands Motor Company, Status: Inactive, Location: 17 Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3BQ, Positional Accuracy: Manually positioned to the road within the address or location.	189m	NW
80	Garage Services, Name: L J Whiteman & Son, Status: Inactive, Location: 27a, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3UQ, Positional Accuracy: Automatically positioned to the address.	202m	N
81	Pharmaceutical Manufacturers & Distributors, Name: Stafford Miller Ltd, Status: Inactive, Location: Broadwater House, 45, Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3SP, Positional Accuracy: Automatically positioned to the address.	220m	SW
82	Engineers - General, Name: Continental Data Graphics Ltd, Status: Active, Location: Albany Place, Hyde Way, Welwyn Garden City, AL7 3BT, Positional Accuracy: Automatically positioned to the address.	234m	N
83	Pharmaceutical Manufacturers & Distributors, Name: Cephalon, Status: Inactive, Location: Albany Place, Hyde Way, Welwyn Garden City, Hertfordshire, AL7 3BT, Positional Accuracy: Automatically positioned to the address.	234m	N
84	Engineers - General, Name: Continental Data Graphics Ltd, Status: Inactive, Location: Albany Place, Hyde Way, Welwyn Garden City, AL7 3BT, Positional Accuracy: Automatically positioned to the address.	234m	N
85	Pharmaceutical Manufacturers & Distributors, Name: Roche Products Ltd, Status: Inactive, Location: 40 Broadwater Rd, Welwyn Garden City, Hertfordshire, AL7 3AY, Positional Accuracy: Automatically positioned to the address.	239m	W
86	Disability Equipment - Manufacturers & Suppliers, Name: Brig-Ayd Controls Ltd, Status: Active, Location: 56a, Bridge Road East, Welwyn Garden City, AL7 1BS, Positional Accuracy: Automatically positioned to the address.	252m	NE
87	Precision Engineers, Name: Silverstream Engineering Ltd, Status: Active, Location: 58a, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JU, Positional Accuracy: Automatically positioned to the address.	257m	NE
88	Metal Industries - Primary, Name: British Lead Mills, Status: Inactive, Location: Peartree Lane, Welwyn Garden City, Hertfordshire, AL7 3UB, Positional Accuracy: Automatically positioned to the address.	263m	N
89	Commercial Vehicle Bodybuilders & Repairers, Name: Commercial Body Fittings Ltd, Status: Inactive, Location: 80, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JY, Positional Accuracy: Automatically positioned to the address.	286m	NE
90	Car Breakers & Dismantlers, Name: Scrap Cars Vans Caravans Buyer, Status: Inactive, Location: 26, Bridge Road East, Welwyn Garden City, AL7 1HL, Positional Accuracy: Automatically positioned to the address.	295m	N
91	French Polishing, Name: Alan Tracy Ltd, Status: Active, Location: 26, Bridge Road East, Welwyn Garden City, AL7 1HL, Positional Accuracy: Automatically positioned to the address.	295m	N
92	Fumigation Services, Name: Uk Pest Solutions Ltd, Status: Active, Location: Albany Chambers, 26 Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1HL, Positional Accuracy: Automatically positioned to the address.	295m	N
93	Engine Manufacturers & Distributors, Name: Atford, Status: Inactive, Location: 26, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1HL, Positional Accuracy: Automatically positioned to the address.	301m	N
94	French Polishing, Name: Tracy'S French Polishing, Status: Inactive, Location: 26, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1HL, Positional Accuracy: Automatically positioned to the address.	301m	N
95	Printing Engineering Services, Name: Elan Graphic Solutions Ltd, Status: Inactive, Location: 26, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1HL, Positional Accuracy: Automatically positioned to the address.	301m	N
96	Engineers - General, Name: Saint-Gobain Abrasives Ltd, Status: Inactive, Location: Bridge Rd East, Welwyn Garden City, Hertfordshire, AL7 1HZ, Positional Accuracy: Manually positioned to the road within the address or location.	319m	NE
97	Petrol Filling Stations, Name: Esso, Status: Inactive, Location: Bridge Road East, Welwyn Garden City, AL7 1LE, Positional Accuracy: Automatically positioned to the address.	319m	N
98	Petrol Filling Stations, Name: Esso, Status: Inactive, Location: Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1LE, Positional Accuracy: Automatically positioned to the address.	321m	N

## Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
99	Petrol Filling Stations - 24 Hour, Name: Esso, Status: Active, Location: Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1LE, Positional Accuracy: Manually positioned to the address or location.	321m	N
100	Electronic Equipment - Manufacturers & Assemblers, Name: B I Electronics Ltd, Status: Inactive, Location: 82, Bridge Road East, WELWYN GARDEN CITY, Hertfordshire, AL7 1JY, Positional Accuracy: Automatically positioned to the address.	325m	E
101	Garage Services, Name: Mark Tempest Autocentre Ltd, Status: Active, Location: Unit 1-2, Tewin Road Business Centre, Garden Court, Welwyn Garden City, AL7 1BH, Positional Accuracy: Automatically positioned to the address.	335m	N
102	Tyre Repairs & Retreading, Name: Masterfit Auto Services & Repairs, Status: Active, Location: Unit 3, Tewin Road Business Centre, Garden Court, Welwyn Garden City, AL7 1BH, Positional Accuracy: Automatically positioned to the address.	337m	N
103	Car Body Repairs, Name: Auto Wiz, Status: Active, Location: Unit 4, Tewin Road Business Centre, Garden Court, Welwyn Garden City, Hertfordshire, AL7 1BH, Positional Accuracy: Automatically positioned to the address.	339m	N
104	Children & Babywear - Manufacturers & Wholesalers, Name: Babyland, Status: Inactive, Location: Unit 6, Tewin Road Business Centre, Garden Court, Welwyn Garden City, Hertfordshire, AL7 1BH, Positional Accuracy: Automatically positioned to the address.	343m	N
105	Garage Services, Name: Welwyn Merx Ltd, Status: Active, Location: Unit 6, Tewin Road Business Centre, Garden Court, Welwyn Garden City, AL7 1BH, Positional Accuracy: Automatically positioned to the address.	343m	N
106	Electrical Engineers, Name: Village Electrics, Status: Inactive, Location: Unit 6, Tewin Road Business Centre, Garden Court, Welwyn Garden City, Hertfordshire, AL7 1BH, Positional Accuracy: Automatically positioned to the address.	343m	N
107	Food Products - Manufacturers, Name: Cereal Partners, Status: Active, Location: 2 Albany Place, 28, Bridge Road East, Welwyn Garden City, AL7 1RR, Positional Accuracy: Automatically positioned to the address.	356m	NW
108	Tyre Dealers, Name: National Tyres & Autocare, Status: Active, Location: Unit 2c Bridge Park, 27 Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JE, Positional Accuracy: Automatically positioned to the address.	358m	N
109	Tyre Dealers, Name: Just Tyres, Status: Inactive, Location: Unit E-F, Bridge Park, 27, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JE, Positional Accuracy: Automatically positioned in the proximity of the address.	365m	N
110	Garage Services, Name: Halfords Autocentre, Status: Active, Location: Unit B, Bridge Park, 27, Bridge Road East, Welwyn Garden City, AL7 1JE, Positional Accuracy: Automatically positioned to the address.	369m	N
111	Tyre Dealers, Name: Kwik Fit, Status: Active, Location: Unit A, Bridge Park, 27, Bridge Road East, Welwyn Garden City, AL7 1JE, Positional Accuracy: Automatically positioned to the address.	377m	N
112	Tyre Dealers, Name: Kwik-Fit, Status: Inactive, Location: Unit A, Bridge Park, 27, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JE, Positional Accuracy: Automatically positioned to the address.	377m	N
113	Garage Services, Name: Mech-Tech Autos Ltd, Status: Active, Location: Unit 9 Tewin Road Business Centre, Garden Court, Welwyn Garden City, Hertfordshire, AL7 1BH, Positional Accuracy: Manually positioned within the geographical locality.	377m	N
114	Commercial Cleaning Services, Name: Jardak Services, Status: Inactive, Location: Norton Building, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JR, Positional Accuracy: Automatically positioned to the address.	380m	NE
115	Car Dealers, Name: Land Rover Welwyn, Status: Active, Location: 73, Bridge Road East, Welwyn Garden City, AL7 1UT, Positional Accuracy: Automatically positioned to the address.	384m	NE
116	Car Dealers, Name: Lancaster Land Rovers, Status: Inactive, Location: 73, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1UT, Positional Accuracy: Automatically positioned to the address.	384m	NE
117	Car Dealers, Name: Grange Land Rover, Status: Active, Location: 73, Bridge Road East, Welwyn Garden City, AL7 1UT, Positional Accuracy: Automatically positioned to the address.	384m	NE
118	Manufacturers, Name: Mr Bagels Factory, Status: Inactive, Location: Berland House, 83, Bridge Road East, Welwyn Garden City, AL7 1LA, Positional Accuracy: Automatically positioned to the address.	385m	NE

## Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
119	Food Products - Manufacturers, Name: Mr Bagels, Status: Active, Location: Berland House, 83, Bridge Road East, Welwyn Garden City, AL7 1LA, Positional Accuracy: Automatically positioned to the address.	385m	NE
120	Plastic Products - Manufacturers, Name: Quadrant, Status: Inactive, Location: 83 Bridge Rd East, Welwyn Garden City, Hertfordshire, AL7 1LA, Positional Accuracy: Manually positioned to the address or location.	386m	NE
121	Cleaning Services - Domestic, Name: Happy House Cleaners, Status: Inactive, Location: 80, Broadwater Crescent, Welwyn Garden City, Hertfordshire, AL7 3TU, Positional Accuracy: Automatically positioned to the address.	406m	SW
122	Chemicals & Allied Products, Name: Catomance Technology Ltd, Status: Inactive, Location: 96, Bridge Road East, Welwyn Garden City, Hertfordshire, AL7 1JW, Positional Accuracy: Automatically positioned to the address.	406m	E
123	Laboratory Equipment, Instruments & Supplies, Name: Essen Bioscience Ltd, Status: Active, Location: Bio-Park, Broadwater Road, Welwyn Garden City, AL7 3AX, Positional Accuracy: Automatically positioned to the address.	408m	W
124	Laboratories, Name: Biopark Hertfordshire, Status: Inactive, Location: Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3AX, Positional Accuracy: Automatically positioned to the address.	414m	W
125	Pharmaceutical Manufacturers & Distributors, Name: Temag Pharma Ltd, Status: Active, Location: Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3AX, Positional Accuracy: Automatically positioned to the address.	414m	W
126	Laboratories, Name: Biopark, Status: Active, Location: Broadwater Road, Welwyn Garden City, Hertfordshire, AL7 3AX, Positional Accuracy: Automatically positioned to the address.	414m	W
127	Scientific Apparatus & Instruments - Manufacturers, Name: C N Bio Innovations, Status: Inactive, Location: Bio-Park, Broadwater Road, WELWYN GARDEN CITY, Hertfordshire, AL7 3AX, Positional Accuracy: Automatically positioned to the address.	414m	W
128	Tyre Dealers, Name: Ats Euromaster Ltd, Status: Active, Location: 17, Tewin Road, WELWYN GARDEN CITY, Hertfordshire, AL7 1BD, Positional Accuracy: Automatically positioned to the address.	439m	N
129	Waste Disposal Services, Name: Pc Disposals, Status: Inactive, Location: Bessemer House, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HJ, Positional Accuracy: Automatically positioned to the address.	439m	N
130	Non-Ferrous Metals, Name: W.G.C Non Ferrous Metals, Status: Inactive, Location: 17, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BD, Positional Accuracy: Manually positioned to the address or location.	439m	N
131	Builders' Merchants, Name: Wickes, Status: Active, Location: 1, Bessemer Road, Welwyn Garden City, AL7 1GF, Positional Accuracy: Manually positioned to the address or location.	446m	N
132	Car Dealers - Used, Name: Welwyn Car Centre, Status: Inactive, Location: Tewin Rd, Welwyn Garden City, Hertfordshire, AL7 1BD, Positional Accuracy: Manually positioned to the road within the address or location.	446m	N
133	Electronic Component Manufacturers & Distributors, Name: Hamamatsu Photonics (UK) Ltd, Status: Inactive, Location: 10, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW, Positional Accuracy: Automatically positioned to the address.	451m	NE
134	Car Dealers - Used, Name: Duo Cars, Status: Inactive, Location: Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BD, Positional Accuracy: Automatically positioned to the address.	459m	N
135	Sheet Metal Work, Name: L S Fabrications, Status: Active, Location: Swallowfields, Welwyn Garden City, Hertfordshire, AL7 1JD, Positional Accuracy: Automatically positioned to the address.	464m	NE
136	Control Panel Manufacturers, Name: Vosper Thornycroft Controls Ltd, Status: Inactive, Location: 8, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW, Positional Accuracy: Automatically positioned in the proximity of the address.	470m	NE
137	Railway Equipment Manufacturers, Name: Ge Transportation Systems Ltd, Status: Inactive, Location: Inspira House, Martinfield, Welwyn Garden City, Hertfordshire, AL7 1GW, Positional Accuracy: Automatically positioned to the address.	472m	NE
138	Confectionery Manufacturers, Name: Natalie Chocolates, Status: Inactive, Location: 4 Swallow Ct, Swallowfields, Welwyn Garden City, Hertfordshire, AL7 1SB, Positional Accuracy: Manually positioned to the address or location.	485m	NE



## Contemporary Trade Directory Entries

Map ID	Details	Distance	Direction
139	Electronic Component Manufacturers & Distributors, Name: Shindengen (Uk) Ltd, Status: Inactive, Location: 12, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW, Positional Accuracy: Automatically positioned to the address.	488m	NE
140	Frozen Food Processors & Distributors, Name: Wiltshire Farm Foods, Status: Active, Location: Unit 3, Swallow Court, Swallowfields, Welwyn Garden City, AL7 1SB, Positional Accuracy: Automatically positioned to the address.	495m	NE
141	Hospitals, Name: Hertfordshire Community Nhs Trust, Status: Active, Location: Unit 1a Port Road Howard Court, 14 Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW, Positional Accuracy: Automatically positioned to the address.	500m	NE
142	Garage Services, Name: Burrowfield Auto Services Ltd, Status: Active, Location: 2, Woodfield Road, Welwyn Garden City, AL7 1JQ, Positional Accuracy: Automatically positioned to the address.	500m	E
143	Commercial Cleaning Services, Name: Jardak Services, Status: Inactive, Location: 14, Tewin Road, Welwyn Garden City, Hertfordshire, AL7 1BW, Positional Accuracy: Automatically positioned to the address.	500m	NE
144	Garage Services, Name: Burrowfield Auto Services Ltd, Status: Inactive, Location: 2, Woodfield Road, Welwyn Garden City, AL7 1JQ, Positional Accuracy: Automatically positioned to the address.	500m	E

## Fuel Station Entries

Map ID	Details	Distance	Direction
145	Name: Mrh Eastbridge, Location: Bridge Road East , , Welwyn Garden City, Hertfordshire, AL7 1LE, Brand: ESSO, Premises Type: Petrol Station, Status: Open, Positional Accuracy: Manually positioned to the address or location.	321m	N

## Other Features

### Telecommunication Base Stations

Map ID	Details	Distance	Direction
146	Telecommunication Base Station, Location: Not Supplied, Mast Height (m): Not Supplied.	381m	NE

# Historical Land Use

## Historical Potentially Contaminative Uses

### Historical Tanks and Energy Facilities

Map ID	Details	Distance	Direction
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	95m	NW
	Potential Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	105m	NW
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	109m	W
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	169m	NW
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	234m	N
	Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1976.	259m	NE
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	261m	NW
	Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1988.	264m	SW
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	273m	W
	Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1990.	288m	SE
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	304m	NW
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	323m	N
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1968.	330m	N
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1976.	344m	E
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1980.	368m	W
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1980 - 1987.	372m	W
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1980 - 1987.	376m	W
	Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1971 - 1986.	400m	N
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1971.	426m	N
	Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1990.	427m	SE
	Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1988.	440m	S
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1986.	441m	N
	Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1976.	454m	E
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1986.	456m	N
	Potential Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1960 - 1976.	459m	NE
	Tanks, Scale of Mapping: 1:1,250, Date of Mapping: 1986.	463m	N
	Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1988.	466m	SW
	Electrical Sub Station Facilities, Scale of Mapping: 1:1,250, Date of Mapping: 1976.	477m	NE

### Potentially Contaminative Industrial Uses (Past Land Use)

Map ID	Details	Distance	Direction
	Factory or works - use not specified, Date of Mapping: 1960-1989.	19m	NW
	Factory or works - use not specified, Date of Mapping: 1960-1989.	145m	N
	Factory or works - use not specified, Date of Mapping: 1939-1989.	173m	W
	Factory or works - use not specified, Date of Mapping: 1960.	243m	NE
	Factory or works - use not specified, Date of Mapping: 1960-1989.	258m	NE
	Factory or works - use not specified, Date of Mapping: 1960.	323m	N
	Electricity production & distribution [inc large transformers], Date of Mapping: 1925.	328m	N
	Factory or works - use not specified, Date of Mapping: 1989.	329m	N
	Railways, Date of Mapping: 1989.	342m	W
	Metal casting/foundries, Date of Mapping: 1939.	347m	N
	Factory or works - use not specified, Date of Mapping: 1960-1989.	348m	NE
	Factory or works - use not specified, Date of Mapping: 1939-1989.	376m	NE
	Factory or works - use not specified, Date of Mapping: 1939-1960.	399m	N
	Oil, petroleum & gas refining & storage, Date of Mapping: 1989.	427m	N
	Railways, Date of Mapping: 1989.	449m	W

## Potentially Infilled Land

### Potentially Infilled Land (Water)

Map ID	Details	Distance	Direction
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1939.	32m	SW
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1960.	49m	N
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1960.	54m	SW
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1939.	59m	S
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1884.	228m	S
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1960.	273m	W
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1925.	291m	SW
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1925.	312m	SW
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1960.	375m	NE
	Unknown Filled Ground (Pond, marsh, river, stream, dock etc), Date of Mapping: 1939.	443m	W

## Historical Maps

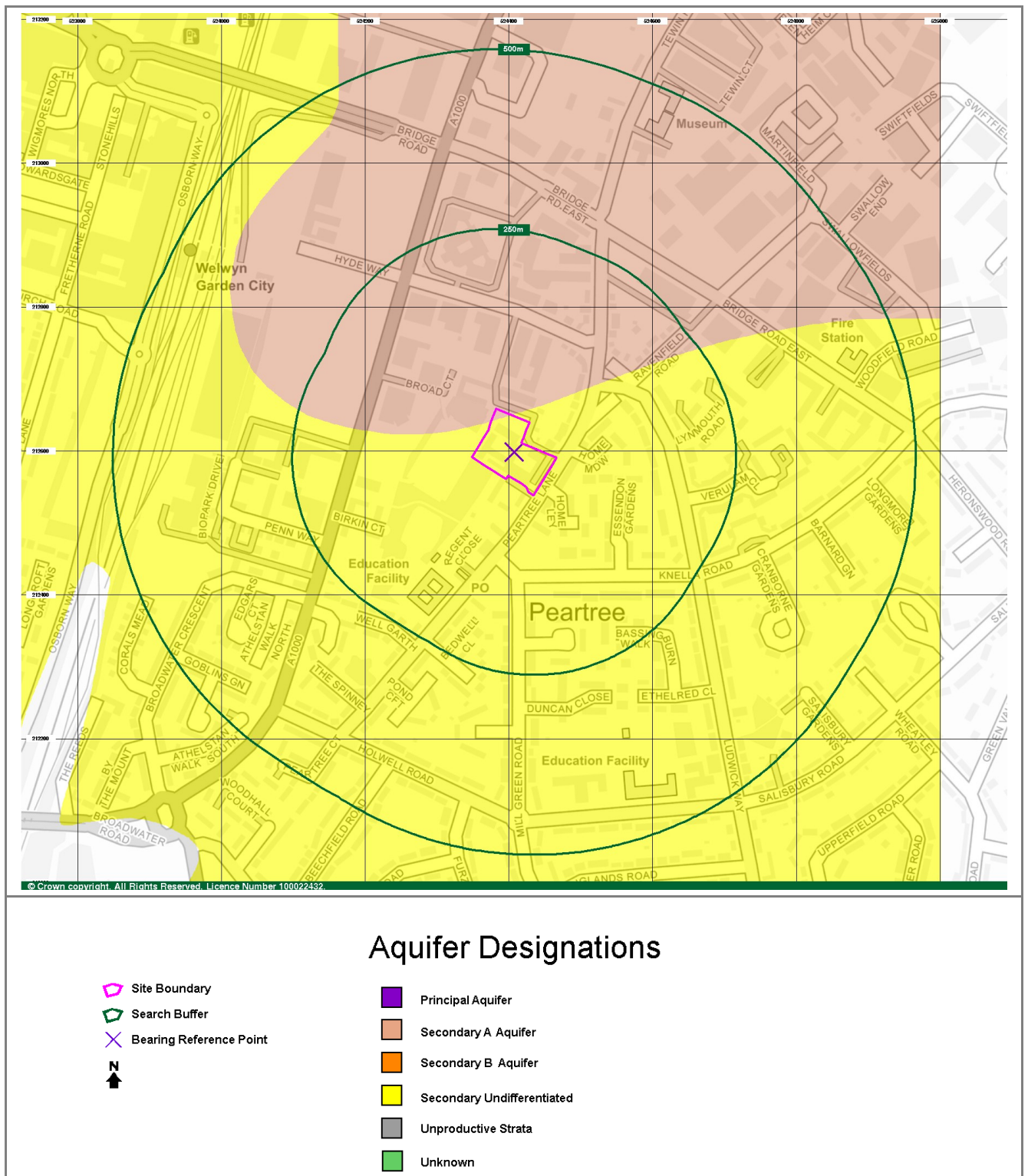
The following maps have been manually reviewed by a consultant and presented in the Risk Analysis section at the front of this report:

Scale	Map Sheet	Published Date
1:2,500	Hertfordshire 028_11	1878
1:2,500	Hertfordshire 028_15	1878
1:2,500	Hertfordshire 028_16	1880
1:2,500	Hertfordshire 028_12	1881
1:2,500	Hertfordshire 028_11	1898
1:2,500	Hertfordshire 028_12	1898
1:2,500	Hertfordshire 028_15	1898
1:2,500	Hertfordshire 028_16	1898
1:2,500	Hertfordshire 028_11	1923
1:2,500	Hertfordshire 028_12	1923
1:2,500	Hertfordshire 028_15	1923
1:2,500	Hertfordshire 028_16	1923
1:2,500	Hertfordshire 028_11	1938
1:2,500	Hertfordshire 028_15	1938
1:2,500	Hertfordshire 028_12	1939
1:2,500	Hertfordshire 028_16	1939
1:10,560	Hertfordshire 028_00	1884
1:10,560	Hertfordshire 028_SE	1899
1:10,560	Hertfordshire 028_SE	1925
1:10,560	Hertfordshire 028_SE	1939
1:10,560	National Grid TL21SE	1960
1:10,560	National Grid TL21SW	1960
1:10,560	National Grid TL21SE	1965
1:10,560	National Grid TL21SW	1966
1:10,000	National Grid TL21SW	1976
1:10,000	National Grid TL21SE	1981
1:10,000	National Grid TL21SW	1989
1:10,000	National Grid TL21SE	1991
1:10,000	National Grid TL21SE	2014
1:10,000	National Grid TL21SW	2014
1:1,250	National Grid TL2412NE	1960
1:1,250	National Grid TL2412NW	1960
1:1,250	National Grid TL2412SE	1960
1:1,250	National Grid TL2412SW	1960
1:1,250	National Grid TL2412NW	1968
1:1,250	National Grid TL2412NE	1976
1:1,250	National Grid TL2412SW	1988
1:1,250	National Grid TL2412SE	1990

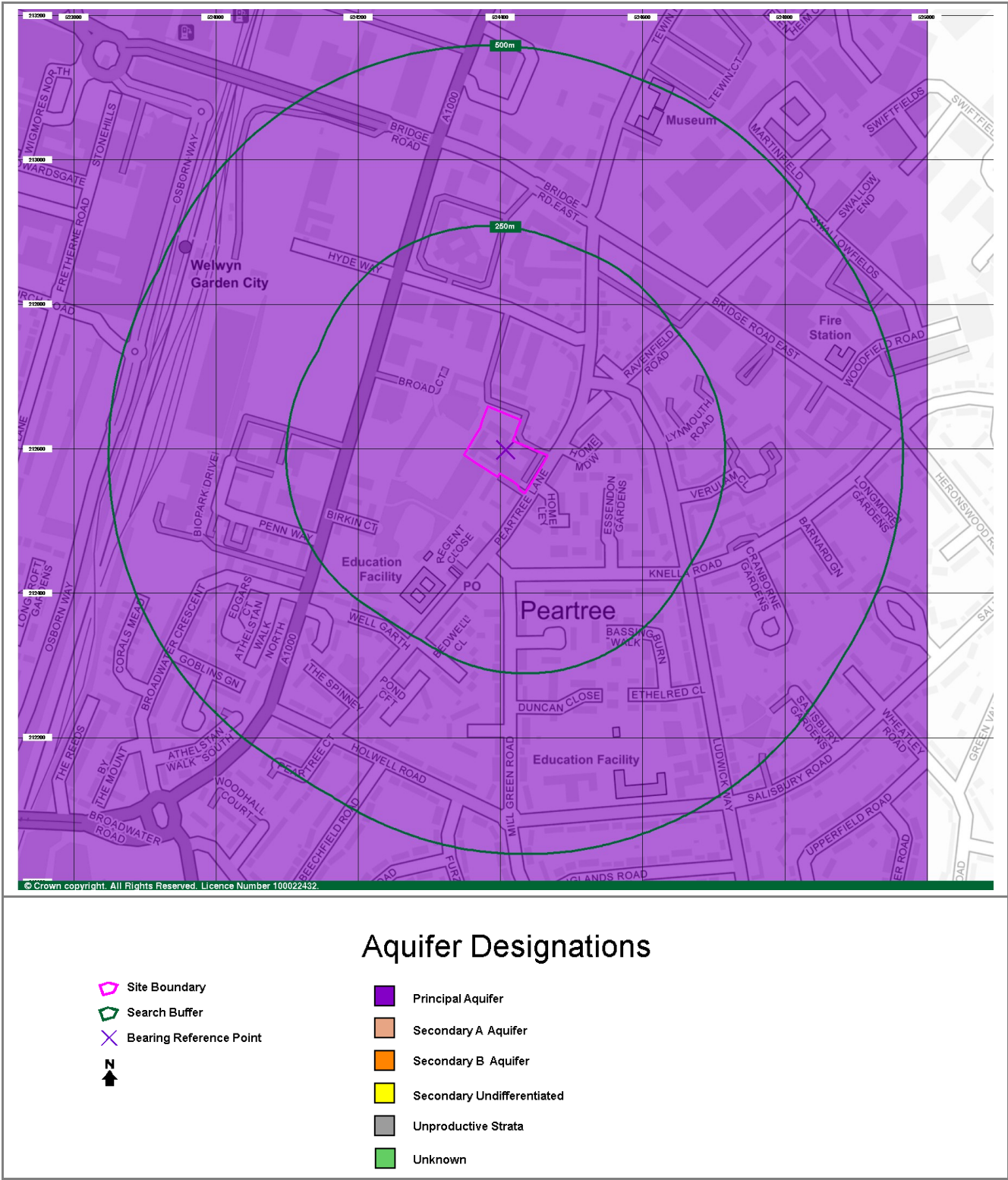
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1:1,250	National Grid TL2412NE	1974
1:1,250	National Grid TL2412SE	1974
1:1,250	National Grid TL2412NE	1993
1:1,250	National Grid TL2412NW	1993
1:1,250	National Grid TL2412SE	1993
1:1,250	National Grid TL2412NW	1993
1:1,250	National Grid TL2412SE	1960
1:1,250	National Grid TL2412SW	1960
1:1,250	National Grid TL2412NW	1986
1:1,250	National Grid TL2412NE	1988
1:1,250	National Grid TL2412SW	1985
1:1,250	National Grid TL2412SE	1986
1:1,250	National Grid TL2412NW	1991
1:1,250	National Grid TL2412NE	1992
1:1,250	National Grid TL2412SW	1986
1:1,250	National Grid TL2412SE	1988



## Aquifer Designation (Superficial)



# Aquifer Designation (Bedrock)



# Groundwater Vulnerability

## Hydrogeology

### Superficial Aquifer Designations

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

### Groundwater Vulnerability

Map ID	Details	Distance	Direction
	Soil Classification: Soils of High Leaching Potential (U) - Soil information for restored mineral workings and urban areas is based on fewer observations than elsewhere. A worst case vulnerability classification (H) assumed, until proved otherwise, Map Scale: 1:100,000, Map Name: Sheet 39 West London.	On Site	-

## Geology

### Low Permeability Drift Deposits

Map ID	Details	Distance	Direction
	Low permeability drift deposits occurring at the surface and overlying Major and Minor Aquifers are head, clay-with-flints, brickearth, peat, river terrace deposits and marine and estuarine alluvium, Map Sheet: Sheet 39 West London, Scale: 1:100,000.	On Site	-

### BGS 1:50,000 Bedrock Geology

Map ID	Details	Distance	Direction
	LEX Code: LESE, Rock Name: Lewes Nodular Chalk Formation and Seaford Chalk Formation (Undifferentiated), Rock Type: Chalk, Min Age: Not Supplied, Max Age: Turonian.	On Site	-

### BGS 1:50,000 Superficial Deposits

Map ID	Details	Distance	Direction
	LEX Code: KGCA, Rock Name: Kesgrave Catchment Subgroup, Rock Type: Sand and Gravel, Min Age: Not Supplied, Max Age: Pleistocene.	On Site	N
	LEX Code: LOFT, Rock Name: Lowestoft Formation, Rock Type: Diamicton, Min Age: Not Supplied, Max Age: Anglian.	On Site	-

### BGS 1:50,000 Geological Mapping Coverage

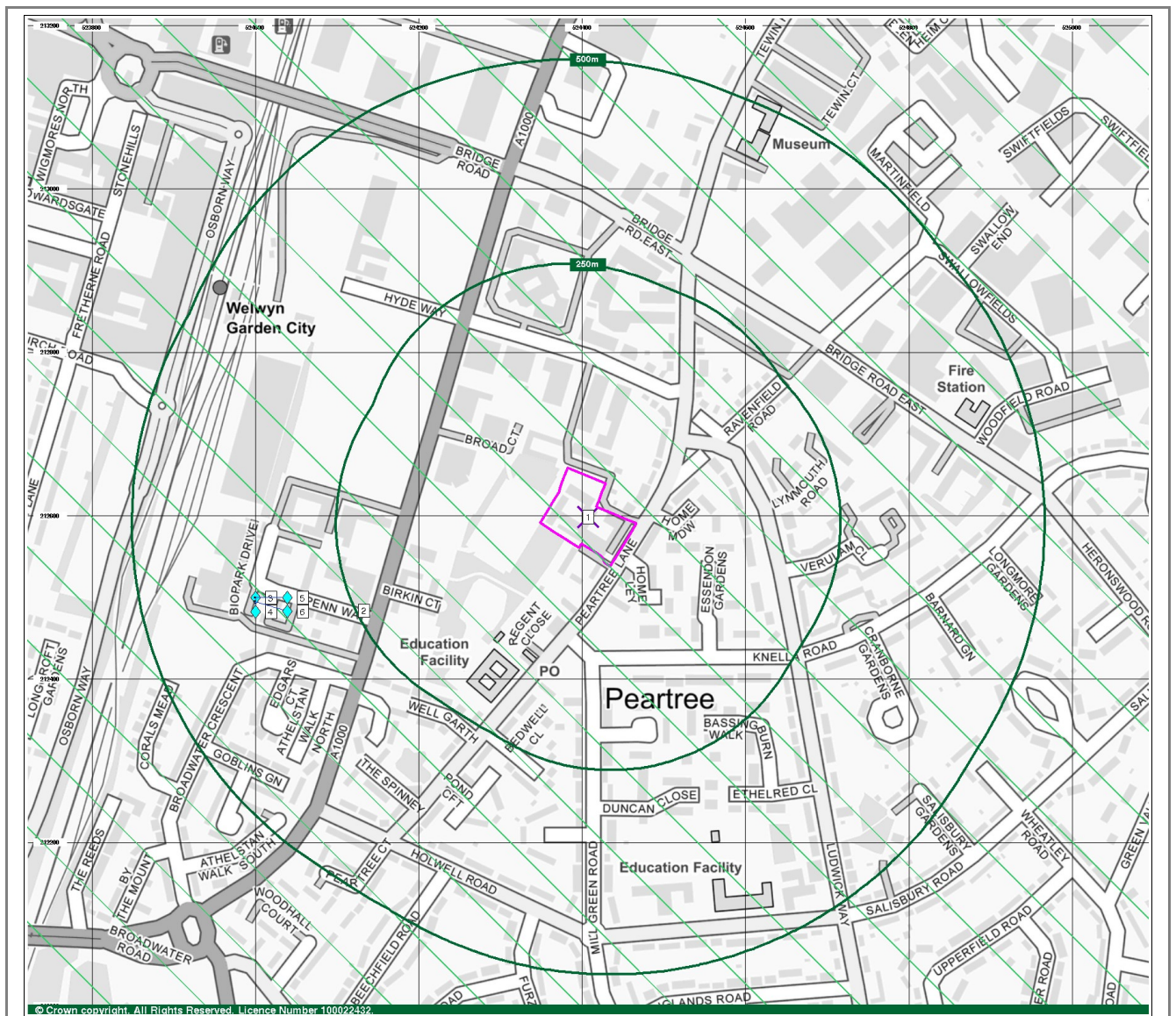
Map ID	Details	Distance	Direction
	Map Sheet No: 239, Map Name: Hertford, Map Date: 1923, Bedrock Geology: Available, Superficial Geology: Available, Artificial Geology: Available, Faults: Not Supplied, Landslip: Not Available, Rock Segments: Not Supplied.	On Site	-

### BGS 1:625,000 Solid Geology

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



# Environmentally Sensitive Features

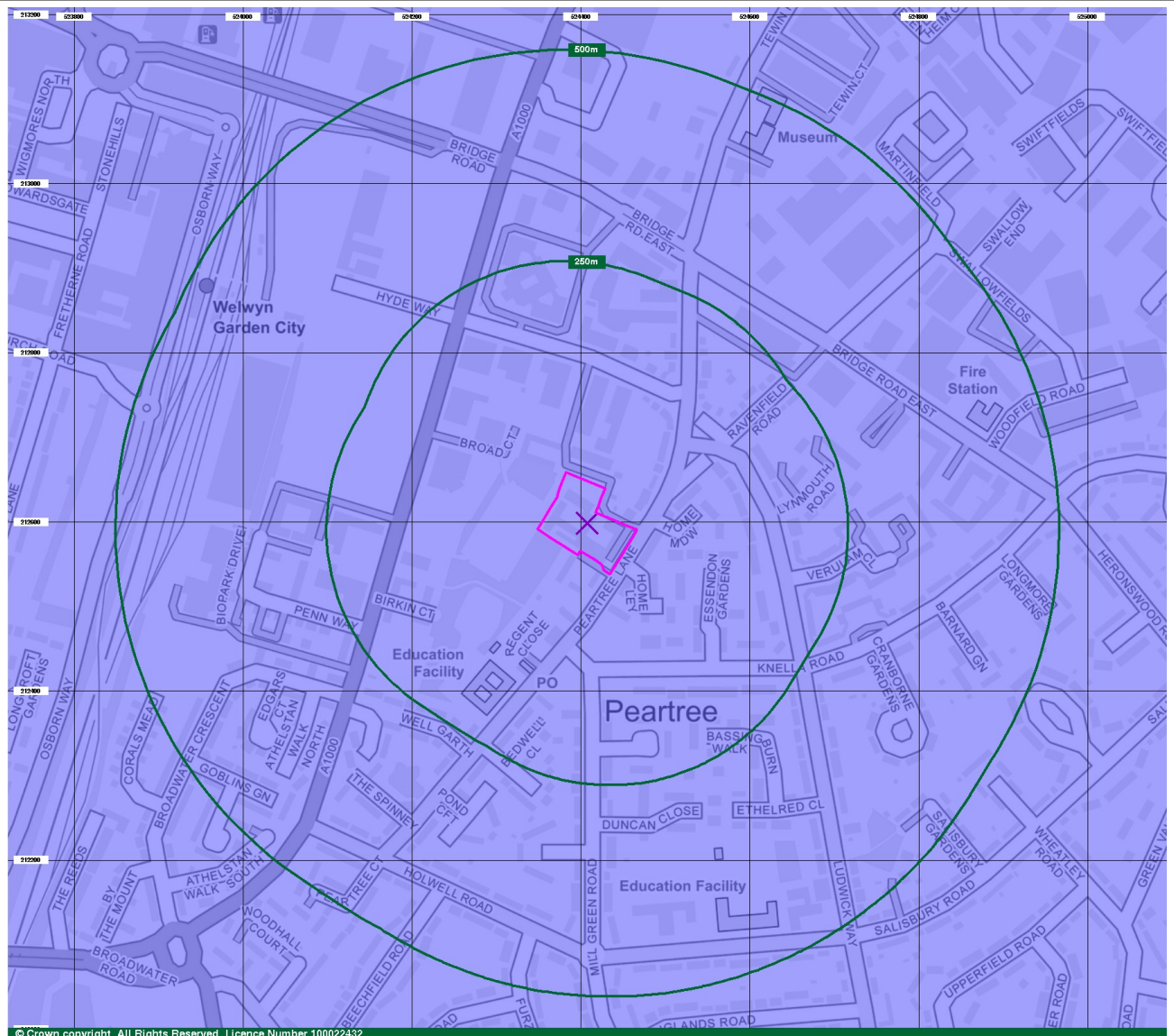


## Sensitive Land Uses

- |                                    |                         |                                     |
|------------------------------------|-------------------------|-------------------------------------|
| 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 |
| Area of Outstanding Natural Beauty | National Park           | Special Area of Conservation        |
| Environmentally Sensitive Area     | National Scenic Area    | Special Protection Area             |
| Forest Park                        | Nitrate Sensitive Area  | Water Abstraction                   |
|                                    | Nitrate Vulnerable Zone | Historical Flood Liability          |



# Source Protection Zones



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## Source Protection Zones

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

# Environmentally Sensitive Features

## Nitrate Vulnerable Zones

Map ID	Details	Distance	Direction
1	Name: Lee Nvz, Description: Surface Water, Source: Environment Agency, Head Office.	On Site	-

## Nearest Surface Water Feature

Map ID	Details	Distance	Direction
2	Surface water feature identified in proximity.	242m	SW

## Water Abstractions

Map ID	Details	Distance	Direction
3	Operator: Roche Products Limited, Licence Number: 29/38/02/0007, Permit Version: 101, Location: Broadwater Road, Welwyn Garden City - 2 Boreholes Grouped, Authority: Environment Agency, Thames Region, Abstraction: Chemicals: Process Water, Abstraction Type: Water may be abstracted from a single point, Source: Groundwater, Daily Rate(m³): Not Supplied, Yearly Rate (m³): Not Supplied, Broadwater Road, Welwyn Garden City, Herts, Authorised Start: 01 January, Authorised End: 31 December, Permit Start Date: 26th August 2005, Permit End Date: Not Supplied, Positional Accuracy: Located by supplier to within 100m.	361m	W
4	Operator: Roche Products Limited, Licence Number: 29/38/02/0007, Permit Version: 100, Location: Broadwater Road, Welwyn Garden City - 2 Boreholes Grouped, Authority: Environment Agency, Thames Region, Abstraction: Chemicals: Process Water, Abstraction Type: Water may be abstracted from a single point, Source: Groundwater, Daily Rate(m³): 1364, Yearly Rate (m³): 318220, Broadwater Road, Welwyn Garden City, Herts, Authorised Start: 01 January, Authorised End: 31 December, Permit Start Date: 9th August 1996, Permit End Date: Not Supplied, Positional Accuracy: Located by supplier to within 100m.	361m	W
5	Operator: George Wimpey Uk Limited, Licence Number: 29/38/02/0007, Permit Version: 102, Location: Broadwater Road, Welwyn Garden City - 2 Boreholes Grouped, Authority: Environment Agency, Thames Region, Abstraction: Chemicals: Process Water, Abstraction Type: Water may be abstracted from a single point, Source: Groundwater, Daily Rate(m³): Not Supplied, Yearly Rate (m³): Not Supplied, Broadwater Road, Welwyn Garden City, Herts, Authorised Start: 01 January, Authorised End: 31 December, Permit Start Date: 7th February 2007, Permit End Date: Not Supplied, Positional Accuracy: Located by supplier to within 100m.	361m	W
6	Operator: Roche Products Ltd, Licence Number: 29/38/02/0001, Permit Version: Not Supplied, Location: Broadwater Road - No 2 Borehole, Authority: Environment Agency, Thames Region, Abstraction: Cooling, Abstraction Type: Not Supplied, Source: Groundwater, Daily Rate(m³): Not Supplied, Yearly Rate (m³): 340950, Chalk (Undifferentiated); Licence Status: Revoked; Lapsed Or Cancelled, Authorised Start: Not Supplied, Authorised End: Not Supplied, Permit Start Date: Not Supplied, Permit End Date: Not Supplied, Positional Accuracy: Located by supplier to within 100m.	362m	W
	Operator: Rank Xerox Ltd, Licence Number: 29/38/02/0074, Permit Version: Not Supplied, Location: Bessemer Road, Authority: Environment Agency, Thames Region, Abstraction: Industrial Processing ( Miscellaneous), Abstraction Type: Not Supplied, Source: Groundwater, Daily Rate(m³): 2991, Yearly Rate (m³): 0, Chalk (Undifferentiated); Status: Revoked; Lapsed Or Cancelled, Authorised Start: Not Supplied, Authorised End: Not Supplied, Permit Start Date: Not Supplied, Permit End Date: Not Supplied, Positional Accuracy: Located by supplier to within 100m.	764m	N

## Source Protection Zones

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

# Natural and Mining Related Hazards

## Subsidence

### Collapsible Ground Stability Hazards

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

### Compressible Ground Stability Hazards

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

### Ground Dissolution Stability Hazards

Map ID	Details	Distance	Direction
	Risk: Very Low, Source: British Geological Survey, National Geoscience Information Service.	On Site	-
	Risk: No Hazard, Source: British Geological Survey, National Geoscience Information Service.	134m	SE

### 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: Very Low, Source: British Geological Survey, National Geoscience Information Service.	On Site	-

### Shrinking or Swelling Clay Subsidence Hazards

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

### Non-Coal Mining Hazards

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

## Radon

### Radon Potential

Map ID	Details	Distance	Direction
	The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or 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	-

## Mining

### Natural and Mining Cavities

Map ID	Details	Distance	Direction
	Cavity Type: Sinkhole x 1, Origin: , Cavity Number: , Commodity: , Positional Accuracy: .	70m	W
	Cavity Type: Sinkhole x 1, Origin: , Cavity Number: , Commodity: , Positional Accuracy: .	129m	W

## Natural and Mining Cavities

Map ID	Details	Distance	Direction
	Cavity Type: Sinkhole x 1, Origin: , Cavity Number: , Commodity: , Positional Accuracy: .	139m	W
	Cavity Type: Sinkhole x 1, Origin: , Cavity Number: , Commodity: , Positional Accuracy: .	153m	NW
	Cavity Type: Sinkhole x 1, Origin: , Cavity Number: , Commodity: , Positional Accuracy: .	209m	NW
	Cavity Type: Sinkhole x 1, Origin: , Cavity Number: , Commodity: , Positional Accuracy: .	308m	N
	Cavity Type: Sinkhole x 1, Origin: , Cavity Number: , Commodity: , Positional Accuracy: .	462m	NE
	Cavity Type: Sinkhole x 1, Origin: , Cavity Number: , Commodity: , Positional Accuracy: .	495m	W



## Flooding from Rivers or Sea



### Environment Agency

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

0 50 100 200  
meters

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

Nominal scale at A4 paper size - 1:7,250

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## Current Flood Risk

### Flooding from River or Sea (Flood Zone 3)

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

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

Details	Distance	Reply or Direction
Are there any flood plains (extreme floods) within 500m?	<501m	NO



The Site is at a low risk of flooding from rivers or the sea, as defined by the regulatory body's Flood Map. If the Site area is greater than one hectare, any planning application for development would need to be accompanied by a Flood Risk Assessment in accordance with NPPF.

### 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.

### Areas Benefiting from Flood Defences

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



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

### Flood Storage Areas

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



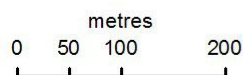
The Site is over 500m from a Flood Storage Area (FSA) as defined by the regulatory body. These areas store flood water during flood events. It is unlikely that any FSA presents any associated flood risk to the Site.



# The Environment Agency Risk of Flooding from Rivers and Sea



## Risk of Flooding from Rivers and Sea (RoFRS)



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

Nominal scale at A4 paper size - 1:7,250

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## Risk of Flooding from Rivers and Sea

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



Some areas may be classified as having no result. This occurs where there is no output data from the regulatory body's risk assessment, but the area falls within the extreme flood outline (with a 0.1% or 1 in 1000 chance of flooding in any year).

### The Environment Agency Data

The data in the Property Flood Likelihood Database is sourced from The Environment Agency's National Receptor Dataset (NRD). The information provided includes the flood likelihood category low, moderate, or significant according to the flood likelihood analysis. Some areas may be classified as having no result. This occurs where there is no output data from the analysis, 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 Risk



## Groundwater Flooding Risk Rating

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

metres  
0 50 100 200

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

Nominal scale at A4 paper size - 1:7,250

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## Groundwater Flooding Risk

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



Information from GeoSmart Information Ltd indicates that there is a negligible risk of groundwater flooding in this area and any groundwater flooding incidence will be less frequent than 1 in 100 years return period. No further investigation of risk is deemed necessary unless the proposed site use is unusually sensitive. However, data may be lacking in some areas, so assessment as 'negligible risk' on the basis of the map does not rule out local flooding due to features not currently represented in the national datasets used to generate this version of the map.

### GeoSmart Information Ltd Data

GeoSmart Information Ltd provides data to Argyll in relation to groundwater flooding. Through research and development, building on their expertise in addressing groundwater flooding issues for The Environment Agency and other clients in the UK, GeoSmart Information Ltd has developed algorithms and calibrated predictions of the risk of groundwater flooding occurring in England and Wales. This differs from other suppliers of data regarding groundwater flooding which only report on the susceptibility of groundwater flooding. Susceptibility merely has to be identified, whereas risk must be quantified. The resulting map is a 5x5m classification of groundwater flooding risk into four categories (Negligible, Low, Moderate and High). GeoSmart Information Ltd's classifications are based on the level of risk, combining severity and uncertainty that a site will suffer groundwater flooding within a return period of about 100 years.

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



**Surface Water Risk**

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

0 50 100 200 metres

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

Nominal scale at A4 paper size - 1:7,250

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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	low
What is the risk of surface water flooding at the Site following a 1 in 200 year rainfall event?	On Site	low
What is the risk of surface water flooding at the Site following a 1 in 1,000 year rainfall event?	On Site	low



### JBA Risk Management Data

Surface Water Flooding - Information regarding the risk of natural surface water or pluvial flooding. The risk is classified by JBA into four categories, low (equal to 10cm), low to medium (more than 10cm), medium (more than 30cm) 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 1:1000 year.



# Historical Flooding



## Historical Flooding

-  Client Site
-  Historic Floods
-  Geo Indicators

metres  
0 50 100 200

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

Nominal scale at A4 paper size - 1:7,250

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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	NO



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

### The Environment Agency Data

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

## Geological Indicators of Flooding

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



### 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.

# OS MasterMap Water Network



## OS MasterMap Water Network

- |   |   |
|---|---|
|  Client Site             |  Lake or Reservoir       |
|  Primary Flow (named)    |  Foreshore and Sea       |
|  Primary Flow (un-named) |  Underground River       |
|  Secondary Flow          |  Marsh                   |
|  Tidal River             |  Canal, Lock or Transfer |

metres  
0 50 100 200

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

Nominal scale at A4 paper size - 1:7,250

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## Other Information

### OS MasterMap Water Network

Details	Distance	Reply or Direction
Is there any information from the OS's MasterMap Water Network within 500m?	<501m	YES
Watercourse Type: Primary Flow (un-named)	241.1m	SW
Watercourse Type: Underground River	246.6m	SW
Watercourse Type: Primary Flow (un-named)	254.0m	SW
Watercourse Type: Primary Flow (un-named)	271.1m	W
Watercourse Type: Underground River	293.6m	W
Watercourse Type: Primary Flow (un-named)	297.0m	W
Watercourse Type: Underground River	310.2m	W
Watercourse Type: Primary Flow (un-named)	312.7m	W



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

#### OS Data

OS MasterMap Water Network is a three-dimensional digital representation of the watercourses in Great Britain. It includes rivers, streams, lakes, lochs and canals as a series of watercourse network lines. The network lines (links) are attributed to provide a range of information about the section of watercourse they depict. The OS MasterMap Water Network will significantly enhance systems used to manage waterways, river and the flood risk they pose.

### Height Above Sea Level

Details	Distance	Reply or Direction
Maximum height of the Site above sea level	On Site	86.00m
Minimum height of the Site above sea level	On Site	83.30m
Average height of the Site above sea level	On Site	84.34m



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

### Distance to Water Features

Details	Distance	Reply or Direction
Are there any water features within 500m?	<501m	NO



There are no water features shown on the Ordnance Survey maps within 500m of the Site.

### Dam or Reservoir Failure

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



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

#### JBA Risk Management Data

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

## Useful Contacts

Name and Address	Telephone/Fax/Email
Argyll Environmental Limited 1 <sup>st</sup> Floor 98 – 99 Queens Road Brighton BN1 3XF <a href="http://www.argyllenvironmental.com">www.argyllenvironmental.com</a>	General enquiries 0845 458 5250 <a href="mailto:orders@argyllenviro.com">orders@argyllenviro.com</a>
Ensura Limited (for Environmental Insurance) 1 <sup>st</sup> Floor 98 – 99 Queens Road Brighton BN1 3XF <a href="http://www.ensura.co.uk">www.ensura.co.uk</a>	Telephone 0845 652 8585 Fax 0845 652 8686 <a href="mailto:info@ensura.co.uk">info@ensura.co.uk</a>
Welwyn Hatfield District Council Environmental Health Department Council Offices <a href="http://www.welhat.gov.uk">www.welhat.gov.uk</a>	Telephone 01707 357000 Fax: 01707 375490
Environment Agency National Customer Contact Centre (NCCC) PO Box 544	Telephone 03708 506 506
Welwyn Hatfield District Council Council Offices <a href="http://www.welhat.gov.uk">www.welhat.gov.uk</a>	Telephone 01707 357000 Fax: 01707 375490
Hertfordshire County Council Spatial Planning and Economy Unit County Hall <a href="http://www.hertsdirect.org">www.hertsdirect.org</a>	Telephone 01992 556266 Fax: 01992 556015 <a href="mailto:spatialplanning@hertfordshire.gov.uk">spatialplanning@hertfordshire.gov.uk</a>
Environment Agency Head Office Rio House	Telephone 01454 624400 Fax: 01454 624409
British Geological Survey Enquiry Service British Geological Survey <a href="http://www.bgs.ac.uk">www.bgs.ac.uk</a>	Telephone 0115 936 3143 Fax: 0115 936 3276 <a href="mailto:enquiries@bgs.ac.uk">enquiries@bgs.ac.uk</a>
Peter Brett Associates Caversham Bridge House <a href="http://www.pba.co.uk">www.pba.co.uk</a>	Telephone 0118 950 0761 Fax: 0118 959 7498 <a href="mailto:reading@pba.co.uk">reading@pba.co.uk</a>
Environment Agency National Customer Contact Centre (NCCC) PO Box 544 Templeborough Rotherham S60 1BY <a href="http://www.environment-agency.gov.uk">www.environment-agency.gov.uk</a>	General enquiries 08708 506 506 Floodline 0845 988 1188 <a href="mailto:enquiries@environment-agency.gov.uk">enquiries@environment-agency.gov.uk</a>
British Geological Survey Enquiry Service British Geological Survey Kingsley Dunham Centre Keyworth Nottingham NG12 5GG <a href="http://www.bgs.ac.uk">www.bgs.ac.uk</a>	General enquiries 0115 936 3143 Fax 0115 936 3276
(For advice on flood insurance) British Insurance Brokers' Association 8th Floor John Stow House 8 Bevis Marks London EC3A 7JB	Consumer helpline 0870 950 1790

Name and Address	Telephone/Fax/Email
JBA Risk Management - Head Office South Barn Broughton Hall Skipton North Yorkshire BD23 3AE	General enquiries 01756 799 919 Fax 01756 799 449 info@jbarisk.com

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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.

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# 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 1991<sup>4</sup>. (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 the Site Solutions Commercial report, Argyll assesses two different drivers for risks and liabilities driven by ecological receptors;

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

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, as amended, were introduced on 1 March 2009 to implement the provisions of the European Union's Environmental Liability Directive into law in England<sup>5</sup>. 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, coastal water or to land. 'Environmental damage' has a specific meaning in the Regulations, and must meet key criteria. Existing legislation with provisions for environmental

<sup>4</sup> Water Environment (Controlled Activities)(Scotland) Regulations 2005 where appropriate.

<sup>5</sup>Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009 or Environmental Liability (Scotland) Regulations 2009 where appropriate.

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 out to the Renewable Energy Zone, which extends approximately 200 miles out to sea.

Argyll will apply due consideration to the nature of any activities likely to be occurring on Site and review EDR Receptors surrounding the Site. However, Argyll are unable to consider the standard of current operations or instances where environmental damage arises either intentionally or as a result of negligence on behalf of the Site operator.




The assessment excludes the identification of potential liabilities arising as a result of genetically modified organisms and the transportation or delivery of polluting goods which may occur at locations off Site. In addition, not all EDR Receptors can be identified in this assessment including protected species/natural habitats such as nesting bats, nesting birds or migratory bird routes which are not officially designated.

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*
<b>PASSED</b> 	<b>Within the scope of this assessment no Liabilities have been identified. No further action is required.</b>  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.	3 or 4
<b>PASSED</b> 	<b>Within the scope of this assessment no Liabilities have been identified. However, your attention is drawn to the prudent enquiries suggested below.</b>  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.	3 or 4
<b>FURTHER ACTION</b> 	<b>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<sup>6</sup>. To quantify these you may decide to undertake a more detailed assessment through the recommendation(s) set out below.</b>  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.	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.

<sup>6</sup>Water Environment (Controlled Activities)(Scotland) Regulations 2005 where appropriate.

## 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.

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](http://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). The report has been produced and quality-checked by a qualified consultant 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
<b>PASSED</b> 	<b>Low and Low to Moderate</b> - The site is not considered to be at significant risk of flooding. No further action is considered necessary.
<b>PASSED</b> 	<b>Moderate</b> - Data suggest that there are features which may present a flood risk to the site and its occupants during an extreme flood event. However, buildings and contents insurance should easily be available in most cases.
<b>FURTHER ACTION</b> 	<b>Moderate to High and High</b> - This report reveals significant flood risk issues which should be addressed. Further assessment is recommended in order to clarify the risk of flooding at the site and to determine appropriate flood protection measures.

## 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 (on page 3) is based on consideration of Risk of Flooding from Rivers and Sea data supplied by The Environment Agency and surface water flooding data supplied by JBA Risk Management. This data is used by a significant proportion of the insurance industry to help 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 1<sup>st</sup> 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 1<sup>st</sup> January 2009. Different guidance applies to these (see Climate Change – Guidance on Insurance Issues for New Developments from [www.abi.org.uk](http://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 1 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:

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

The answer to Question 2 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.

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



The answer to Question 3 is based on the presence of any flood defences in the dataset provided by the Environment Agency within 500m 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:

4. 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 2 and 3 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.

The Risk of Flooding from Rivers and Sea dataset provided by The Environment Agency does take account of failure of flood defences but does not take into account particular local or temporary factors such as blockage. 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](http://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 (July 2013), a copy of which is available on our website, [www.argyllenvironmental.com](http://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, 1<sup>st</sup> Floor, 98 – 99 Queens Road, Brighton, BN1 3XF. Telephone: 0845 458 5250, e-mail: [orders@argyllenviro.com](mailto: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 search 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 up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience 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  
Web site: [www.tpos.co.uk](http://www.tpos.co.uk)  
Email: [admin@tpos.co.uk](mailto:admin@tpos.co.uk)

You can get more information about the PCCB from [www.propertycodes.org.uk](http://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  
1<sup>st</sup> Floor  
98 - 99 Queens Road  
Brighton  
BN1 3XF

Telephone: 0845 458 5250  
Email: [orders@argyllenviro.com](mailto:orders@argyllenviro.com)

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

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