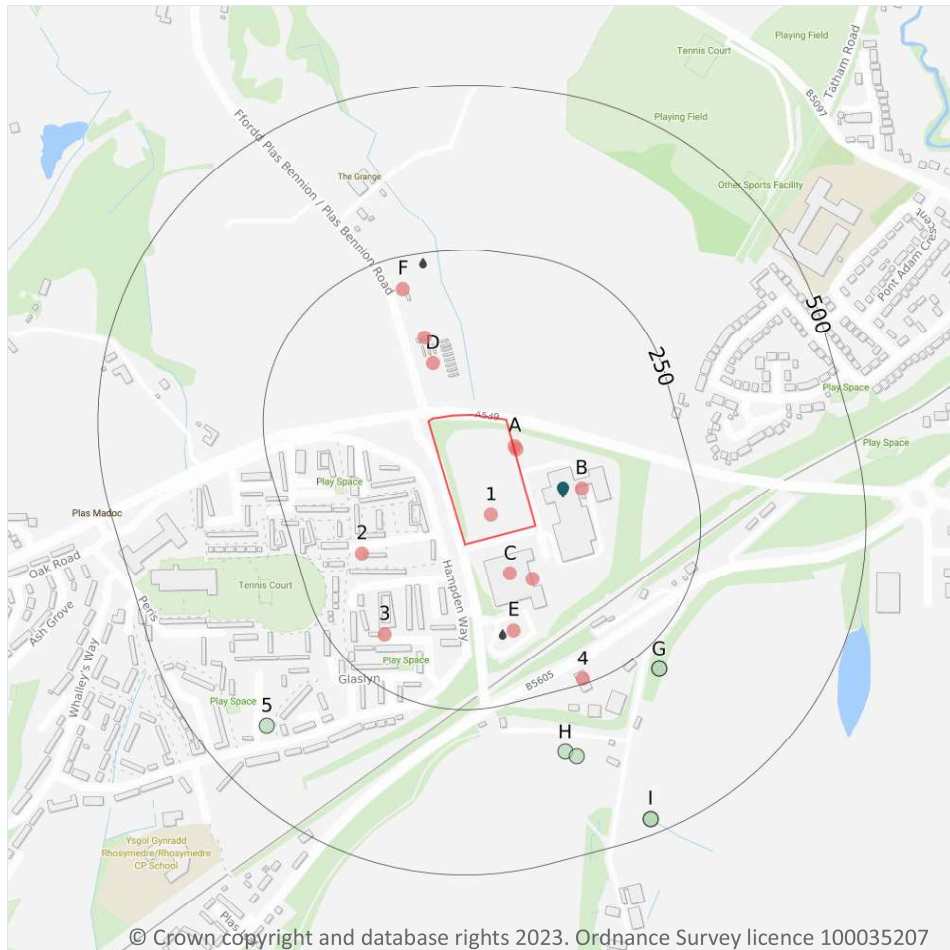


## 4 Current industrial land use



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

### 4.1 Recent industrial land uses

Records within 250m

13

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 40](#) >

| ID | Location | Company         | Address     | Activity                              | Category                      |
|----|----------|-----------------|-------------|---------------------------------------|-------------------------------|
| 1  | On site  | Technology Park | Clwyd, LL14 | Business Parks and Industrial Estates | Industrial Features           |
| A  | 2m NE    | Mast            | Clwyd, LL14 | Telecommunications Features           | Infrastructure and Facilities |
| A  | 3m NE    | Pylon           | Clwyd, LL14 | Electrical Features                   | Infrastructure and Facilities |



| ID | Location | Company                      | Address                                                       | Activity                     | Category                      |
|----|----------|------------------------------|---------------------------------------------------------------|------------------------------|-------------------------------|
| C  | 60m S    | Wrexham Mineral Cables       | -, Wynnstay Technology Park, Ruabon, Wrexham, Clwyd, LL14 6EN | Cable, Wire and Fibre Optics | Industrial Products           |
| C  | 77m SE   | Electricity Sub Station      | Clwyd, LL14                                                   | Electrical Features          | Infrastructure and Facilities |
| B  | 83m E    | Electricity Sub Station      | Clwyd, LL14                                                   | Electrical Features          | Infrastructure and Facilities |
| D  | 84m NW   | Power Station                | Clwyd, LL14                                                   | Energy Production            | Industrial Features           |
| D  | 125m N   | Electricity Sub Station      | Clwyd, LL14                                                   | Electrical Features          | Infrastructure and Facilities |
| E  | 144m S   | Civic Amenity                | Clwyd, LL14                                                   | Refuse Disposal Facilities   | Infrastructure and Facilities |
| 2  | 153m SW  | Electricity Sub Station      | Clwyd, LL14                                                   | Electrical Features          | Infrastructure and Facilities |
| 3  | 182m SW  | Electricity Sub Station      | Clwyd, LL14                                                   | Electrical Features          | Infrastructure and Facilities |
| F  | 202m NW  | Gas Valve Compound           | Clwyd, LL14                                                   | Gas Features                 | Infrastructure and Facilities |
| 4  | 242m SE  | Clwyd Caravans & Leisure Ltd | The Green, Wynnstay Yard, Ruabon, Wrexham, Clwyd, LL14 6DP    | Vehicle Hire and Rental      | Hire Services                 |

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

**Records within 500m**

**0**

Open, closed, under development and obsolete petrol stations.

*This data is sourced from Experian.*

## 4.3 Electricity cables

**Records within 500m**

**0**

High voltage underground electricity transmission cables.

*This data is sourced from National Grid.*



## 4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

*This data is sourced from National Grid.*

## 4.5 Sites determined as Contaminated Land

Records within 500m

0

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

*This data is sourced from Local Authority records.*

## 4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

0

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

*This data is sourced from the Health and Safety Executive.*

## 4.7 Regulated explosive sites

Records within 500m

0

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

*This data is sourced from the Health and Safety Executive.*

## 4.8 Hazardous substance storage/usage

Records within 500m

0

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

*This data is sourced from Local Authority records.*



## 4.9 Historical licensed industrial activities (IPC)

Records within 500m

0

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

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

## 4.10 Licensed industrial activities (Part A(1))

Records within 500m

0

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

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

## 4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m

1

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

Features are displayed on the Current industrial land use map on [page 40](#) >

| ID | Location | Address                                                                                | Details                                                                        |                                                                                                                             |
|----|----------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| B  | 53m E    | Rolinx Performance Coatings,<br>Wynnstay Technology Park,<br>Ruabon, Wrexham, LL14 6EN | Process: Coating Processes<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified.<br>Date of enforcement: No Enforcement Notified.<br>Comment: No Enforcement Notified. |

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

Records within 500m

0

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

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



## 4.13 Licensed Discharges to controlled waters

Records within 500m

2

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

Features are displayed on the Current industrial land use map on [page 40](#) >

| ID | Location | Address                                                                                                                 | Details                                                                                                                        |                                                                                                                             |
|----|----------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| E  | 145m S   | RUABON MANNED CONTAINER SITE WYNNST, RUABON MANNED CONTAINER SITE WYN, MANNED CONTAINER SITE WYNNSTAY B, WYNNSTAY BANKS | Effluent Type: UNSPECIFIED<br>Permit Number: CM0151401<br>Permit Version: 1<br>Receiving Water: RHOSYMEDRE BROOK               | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 06/04/1987<br>Effective Date: 06/04/1987<br>Revocation Date: 18/03/1993 |
| F  | 234m N   | GRANGE PLAS BENNION ROAD, PLAS BENNION ROAD                                                                             | Effluent Type: UNSPECIFIED<br>Permit Number: CM0033001<br>Permit Version: 1<br>Receiving Water: UN-NAMED WATERCOURSE FLOWING T | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 18/03/1966<br>Effective Date: 18/03/1966<br>Revocation Date: 22/12/1992 |

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

## 4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

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

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

## 4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

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

## 4.16 List 1 Dangerous Substances

Records within 500m

0

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

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



## 4.17 List 2 Dangerous Substances

Records within 500m

0

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

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

## 4.18 Pollution Incidents (EA/NRW)

Records within 500m

7

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

Features are displayed on the Current industrial land use map on [page 40 >](#)

| ID | Location | Details                                                                                                                                                 |                                                                                               |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| G  | 286m SE  | Incident Date: 29/10/2016<br>Incident Identification: 1606531<br>Pollutant: -<br>Pollutant Description: -                                               | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details         |
| G  | 286m SE  | Incident Date: 29/10/2016<br>Incident Identification: 1606531<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Pollutant Not Identified | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details         |
| H  | 342m S   | Incident Date: 16/08/2013<br>Incident Identification: 1148387<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage                     | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor)      |
| H  | 353m S   | Incident Date: 31/10/2013<br>Incident Identification: 1172401<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage                     | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor)      |
| 5  | 406m SW  | Incident Date: 29/07/2013<br>Incident Identification: 1141145<br>Pollutant: Oils and Fuel<br>Pollutant Description: Petrol                              | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact)  |
| I  | 476m SE  | Incident Date: 20/10/2016<br>Incident Identification: 1606375<br>Pollutant: -<br>Pollutant Description: -                                               | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |

| ID | Location | Details                                                                                                                                                 |                                                                                               |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| I  | 476m SE  | Incident Date: 20/10/2016<br>Incident Identification: 1606375<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Pollutant Not Identified | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |

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

## 4.19 Pollution inventory substances

Records within 500m

0

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

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

## 4.20 Pollution inventory waste transfers

Records within 500m

0

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

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

## 4.21 Pollution inventory radioactive waste

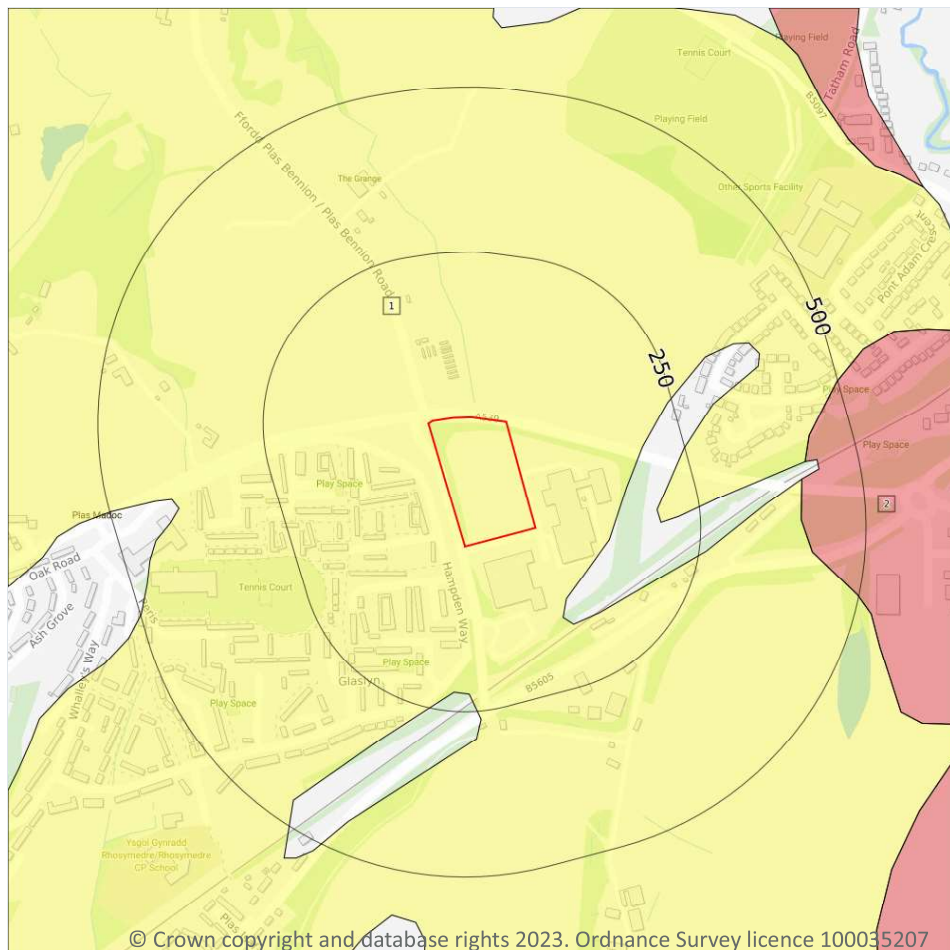
Records within 500m

0

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

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

## 5 Hydrogeology - Superficial aquifer



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

### 5.1 Superficial aquifer

Records within 500m

2

Aquifer status of groundwater held within superficial geology.

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

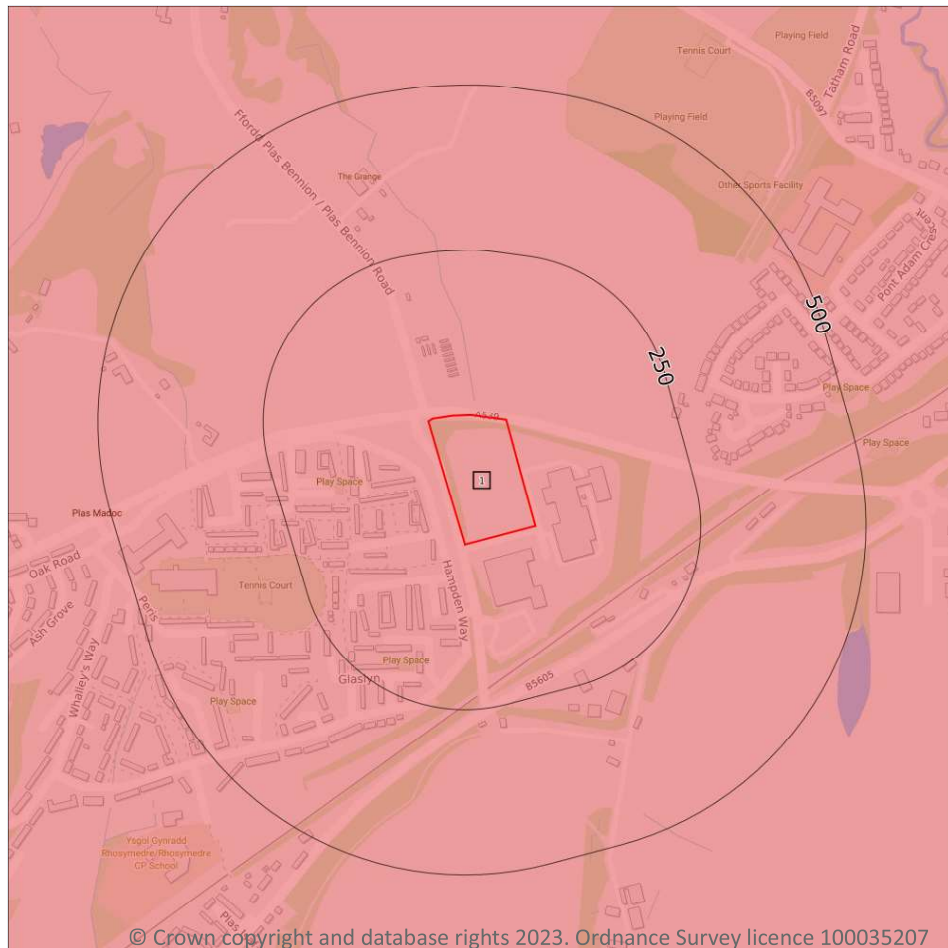
| ID | Location | Designation                | Description                                                                                                                                                                                                                                             |
|----|----------|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | On site  | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 2  | 402m E   | Secondary A                | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers                  |



*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*



## Bedrock aquifer



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

### 5.2 Bedrock aquifer

#### Records within 500m

1

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 49](#) >

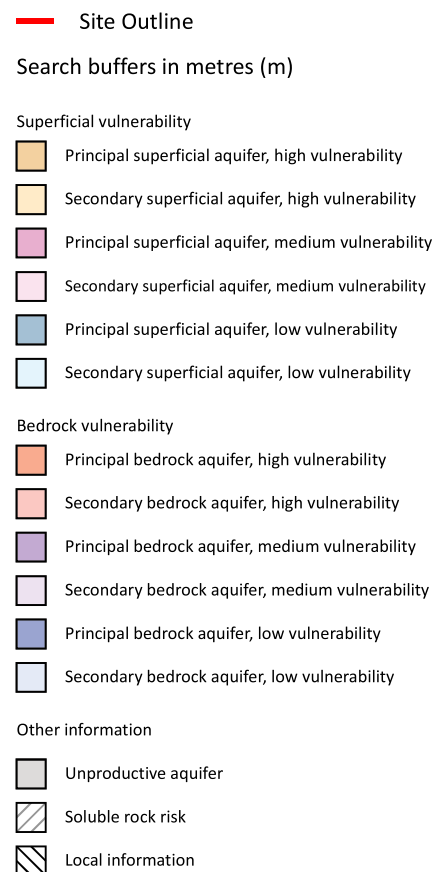
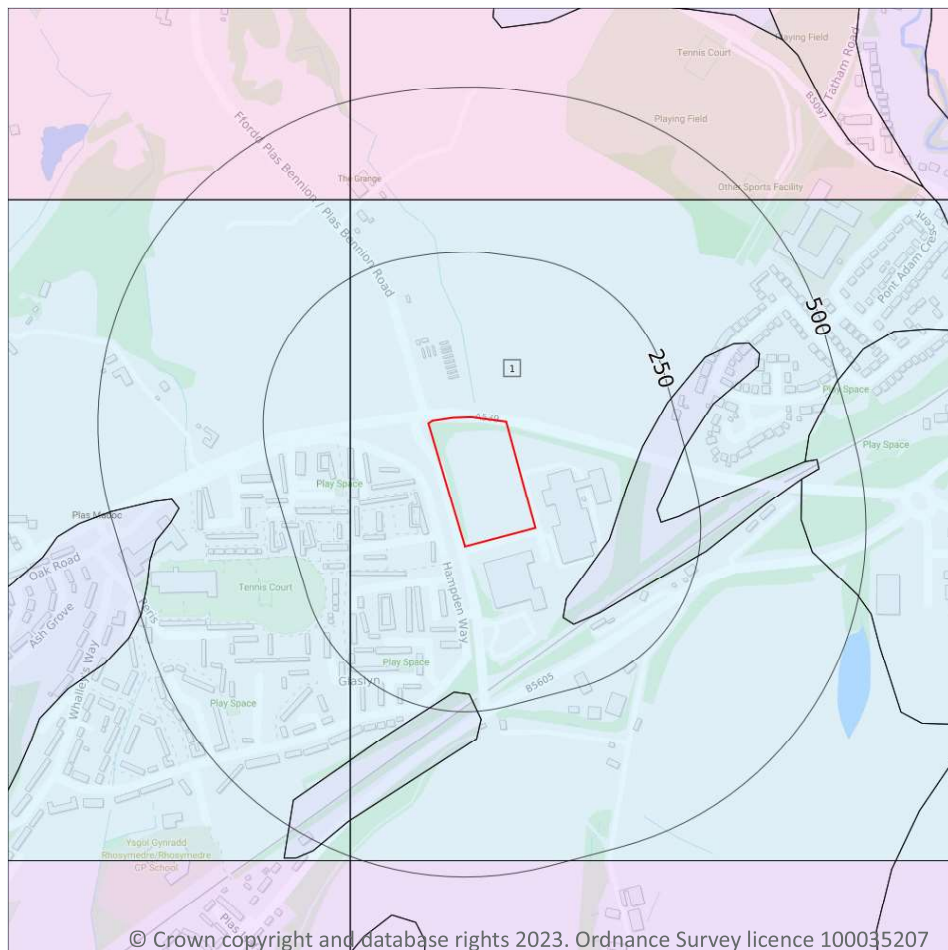
| ID | Location | Designation | Description                                                                                                                                                                                                                            |
|----|----------|-------------|--------------------------------------------------------------------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

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*





## Groundwater vulnerability



### 5.3 Groundwater vulnerability

#### Records within 50m

1

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

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

Features are displayed on the Groundwater vulnerability map on [page 50](#) >





| ID | Location | Summary                                                                                                                                                                                       | Soil / surface                                                                                                | Superficial geology                                                                                                                                      | Bedrock geology                                                                                                      |
|----|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 1  | On site  | <b>Summary Classification:</b><br>Secondary superficial aquifer<br>- Low Vulnerability<br><b>Combined classification:</b><br>Productive Bedrock Aquifer,<br>Productive Superficial<br>Aquifer | <b>Leaching class:</b> Low<br><b>Infiltration value:</b><br><40%<br><b>Dilution value:</b> 300-<br>550mm/year | <b>Vulnerability:</b> Low<br><b>Aquifer type:</b> Secondary<br><b>Thickness:</b> >10m<br><b>Patchiness value:</b> >90%<br><b>Recharge potential:</b> Low | <b>Vulnerability:</b> Low<br><b>Aquifer type:</b><br>Secondary<br><b>Flow mechanism:</b> Well<br>connected fractures |

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*

## 5.4 Groundwater vulnerability- soluble rock risk

|                        |          |
|------------------------|----------|
| <b>Records on site</b> | <b>0</b> |
|------------------------|----------|

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

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

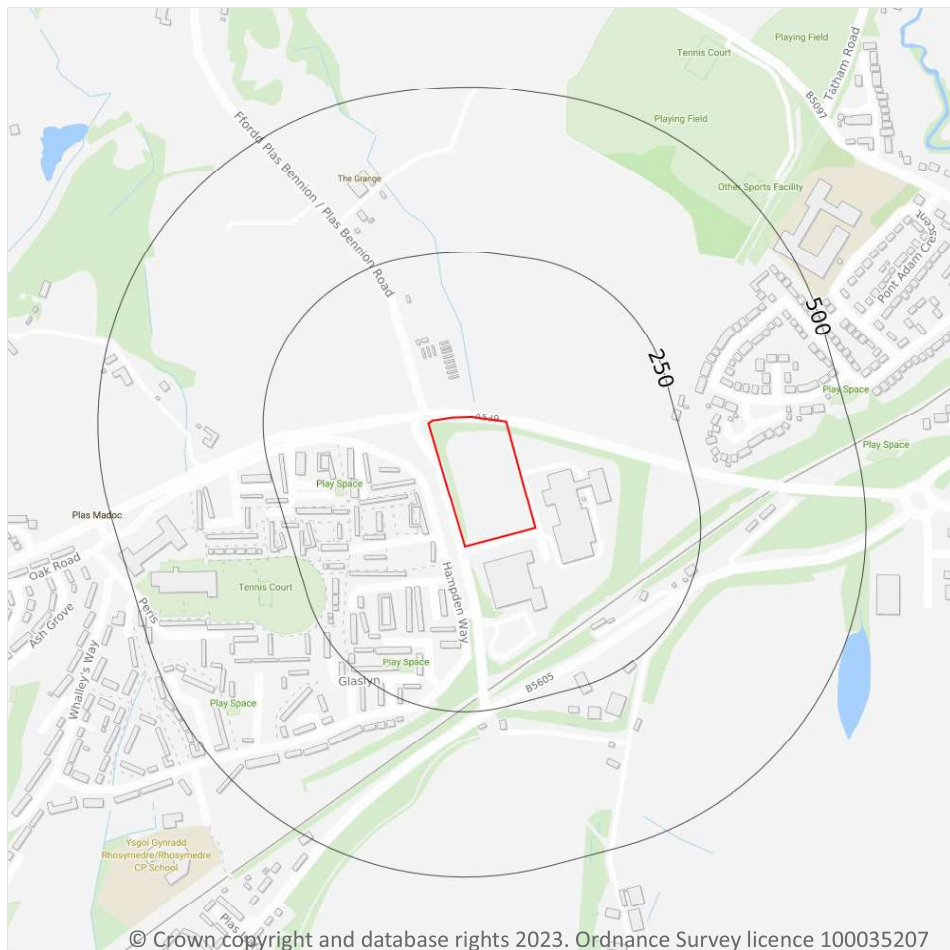
## 5.5 Groundwater vulnerability- local information

|                        |          |
|------------------------|----------|
| <b>Records on site</b> | <b>0</b> |
|------------------------|----------|

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

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

## Abstractions and Source Protection Zones



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

### 5.6 Groundwater abstractions

#### Records within 2000m

1

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

Features are displayed on the Abstractions and Source Protection Zones map on [page 52 >](#)

| ID | Location | Details                                                                                                                                                                                                                               |                                                                                                                                                                                                                                          |
|----|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -  | 1527m NW | Status: Historical<br>Licence No: 24/67/5/0046<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: 35 FT DEEP, 8FT DIA. WELL<br>Data Type: Point<br>Name: Lloyd<br>Easting: 328100<br>Northing: 344800 | Annual Volume (m <sup>3</sup> ): -<br>Max Daily Volume (m <sup>3</sup> ): -<br>Original Application No: -<br>Original Start Date: 12/10/1973<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 12/10/1973<br>Version End Date: - |

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

## 5.7 Surface water abstractions

|                             |          |
|-----------------------------|----------|
| <b>Records within 2000m</b> | <b>0</b> |
|-----------------------------|----------|

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

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

## 5.8 Potable abstractions

|                             |          |
|-----------------------------|----------|
| <b>Records within 2000m</b> | <b>0</b> |
|-----------------------------|----------|

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

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

## 5.9 Source Protection Zones

|                            |          |
|----------------------------|----------|
| <b>Records within 500m</b> | <b>0</b> |
|----------------------------|----------|

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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

## 5.10 Source Protection Zones (confined aquifer)

Records within 500m

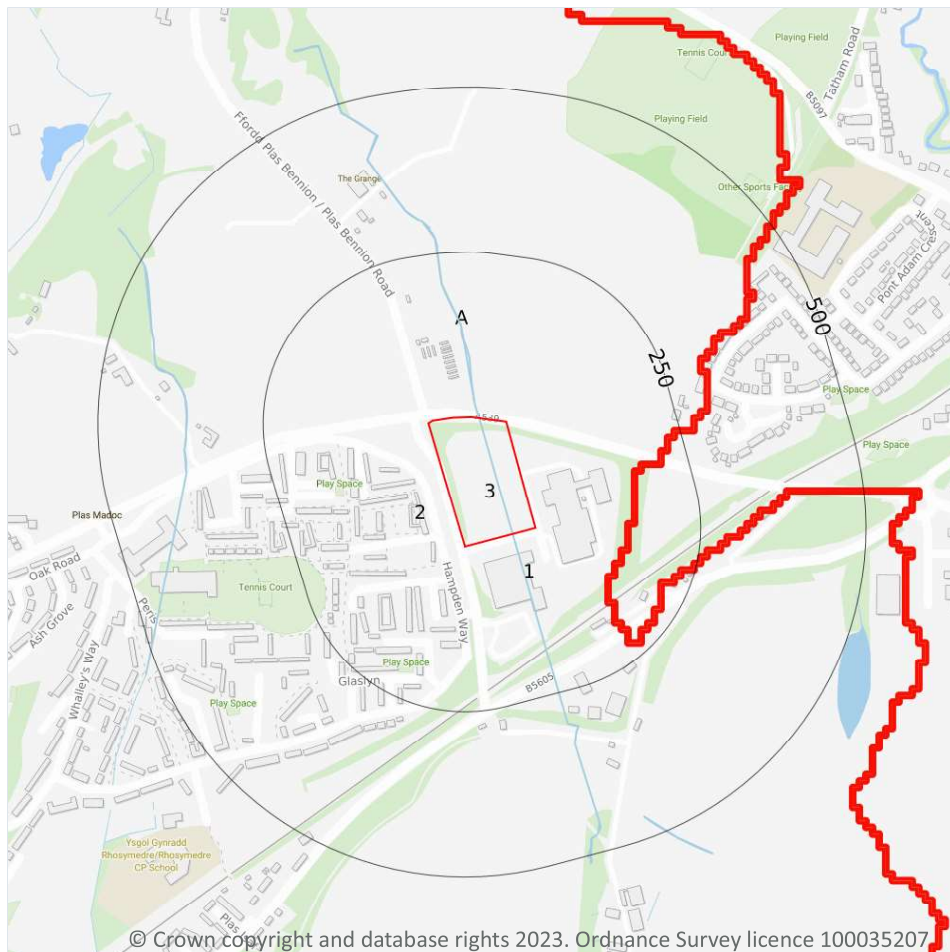
0

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

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



## 6 Hydrology



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

### 6.1 Water Network (OS MasterMap)

Records within 250m

2

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

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

| ID | Location | Type of water feature                               | Ground level | Permanence                                                      | Name |
|----|----------|-----------------------------------------------------|--------------|-----------------------------------------------------------------|------|
| 1  | On site  | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | -    |



| ID | Location | Type of water feature                               | Ground level      | Permanence                                                      | Name |
|----|----------|-----------------------------------------------------|-------------------|-----------------------------------------------------------------|------|
| A  | 23m N    | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | -    |

*This data is sourced from the Ordnance Survey.*

## 6.2 Surface water features

|                            |          |
|----------------------------|----------|
| <b>Records within 250m</b> | <b>1</b> |
|----------------------------|----------|

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

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

*This data is sourced from the Ordnance Survey.*

## 6.3 WFD Surface water body catchments

|                        |          |
|------------------------|----------|
| <b>Records on site</b> | <b>1</b> |
|------------------------|----------|

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

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

| ID | Location | Type               | Water body catchment   | Water body ID  | Operational catchment       | Management catchment |
|----|----------|--------------------|------------------------|----------------|-----------------------------|----------------------|
| 2  | On site  | River WB catchment | Dee - Ceiriog to Alwen | GB111067052060 | Dee Middle Ceiriog to Alwen | Dee                  |

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

## 6.4 WFD Surface water bodies

|                           |          |
|---------------------------|----------|
| <b>Records identified</b> | <b>1</b> |
|---------------------------|----------|

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site.



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

| ID | Location | Type  | Name                   | Water body ID  | Overall rating | Chemical rating | Ecological rating | Year |
|----|----------|-------|------------------------|----------------|----------------|-----------------|-------------------|------|
| -  | 1384m S  | River | Dee - Ceiriog to Alwen | GB111067052060 | Moderate       | Fail            | Good              | 2016 |

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

## 6.5 WFD Groundwater bodies

|                        |          |
|------------------------|----------|
| <b>Records on site</b> | <b>1</b> |
|------------------------|----------|

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

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

| ID | Location | Name                       | Water body ID  | Overall rating | Chemical rating | Quantitative | Year |
|----|----------|----------------------------|----------------|----------------|-----------------|--------------|------|
| 3  | On site  | Dee<br>Silurian/Ordovician | GB41102G200200 | Good           | Good            | Good         | 2017 |

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

## 7 River and coastal flooding

### 7.1 Risk of flooding from rivers and the sea

**Records within 50m****0**

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

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

### 7.2 Historical Flood Events

**Records within 250m****0**

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

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

### 7.3 Flood Defences

**Records within 250m****0**

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

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



## 7.4 Areas Benefiting from Flood Defences

Records within 250m

0

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

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

## 7.5 Flood Storage Areas

Records within 250m

0

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

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



## River and coastal flooding - Flood Zones

### 7.6 Flood Zone 2

|                    |   |
|--------------------|---|
| Records within 50m | 0 |
|--------------------|---|

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

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

### 7.7 Flood Zone 3

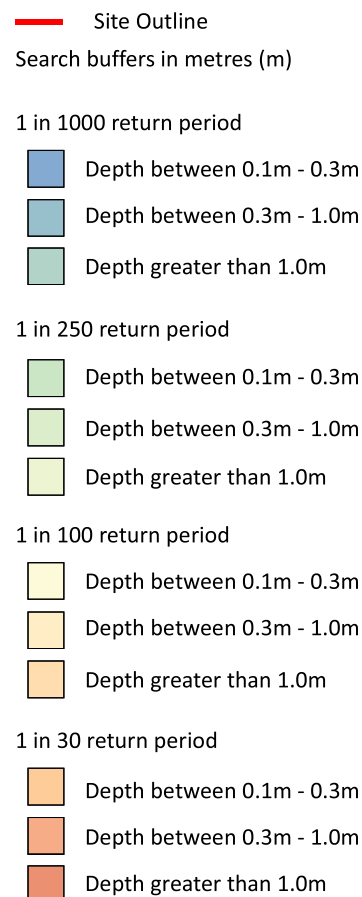
|                    |   |
|--------------------|---|
| Records within 50m | 0 |
|--------------------|---|

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

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



## 8 Surface water flooding



### 8.1 Surface water flooding

**Highest risk on site**

**1 in 30 year, Greater than 1.0m**

**Highest risk within 50m**

**1 in 30 year, Greater than 1.0m**

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

Features are displayed on the Surface water flooding map on [page 61](#) >

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

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

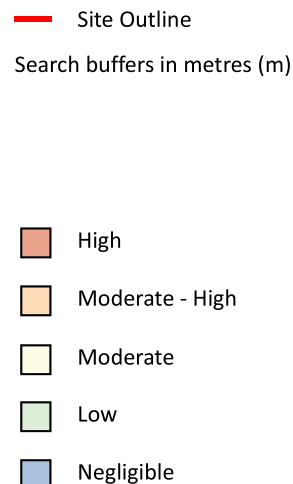
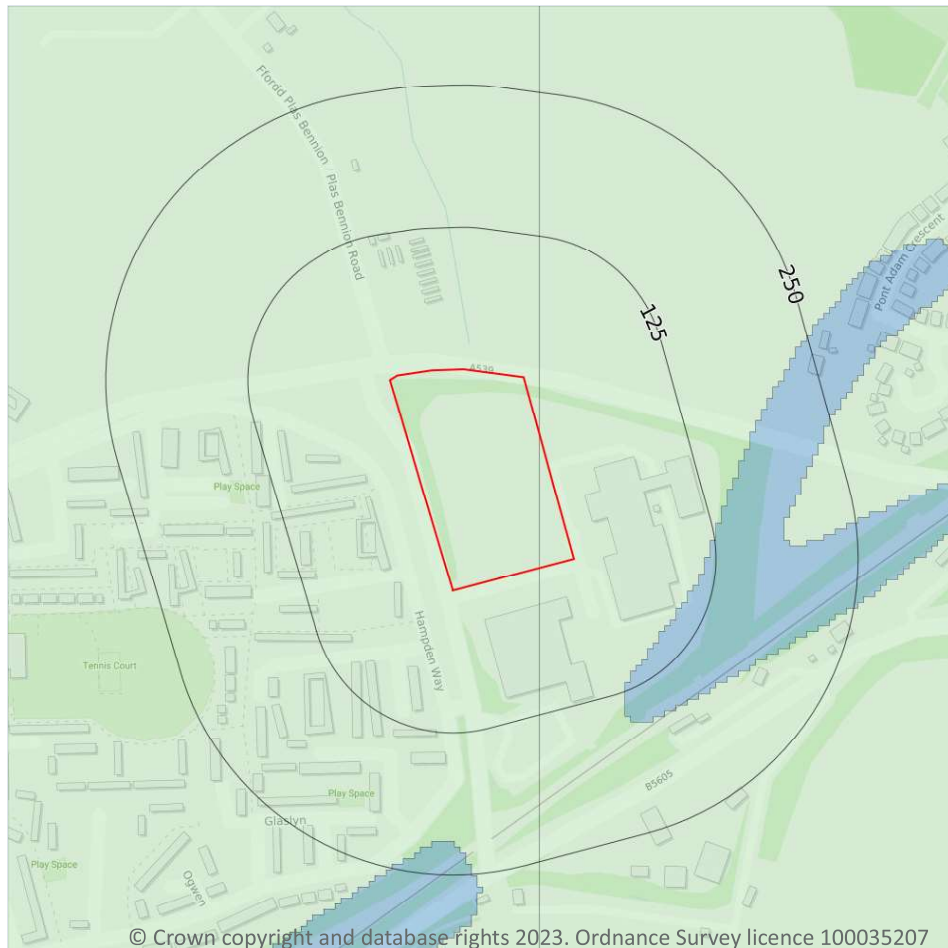
| Return period  | Maximum modelled depth |
|----------------|------------------------|
| 1 in 1000 year | Greater than 1.0m      |
| 1 in 250 year  | Greater than 1.0m      |
| 1 in 100 year  | Greater than 1.0m      |
| 1 in 30 year   | Greater than 1.0m      |

*This data is sourced from Ambiantal Risk Analytics.*





## 9 Groundwater flooding



### 9.1 Groundwater flooding

**Highest risk on site**

**Low**

**Highest risk within 50m**

**Low**

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

Features are displayed on the Groundwater flooding map on [page 63](#) >

*This data is sourced from Ambiental Risk Analytics.*