

Site Plans for the remediation of the Ex-Virginia Park Golf Club

Document Control and Project Details

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Contents

1.0.	Introduction	4
1.1.	Site Address.....	4
1.2.	Principal Contractor Address	4
1.3.	Client Address	4
1.4.	Site Layout.....	4
2.0.	Operating Boundary.....	5
2.1.	1km Buffer Map	6
3.0.	Site Access and Security Arrangements.....	7
3.1.	Site Access.....	7
3.2.	Site Security Arrangements	8
4.0.	Process Areas	9
5.0.	Drainage Systems.....	11
6.0.	Monitoring Points	12
7.0.	Potential Receptors.....	13
7.1.	Human Receptors.....	13
7.2.	Environmental Receptors.....	13
7.3.	Receptor Maps.....	14
7.3.1.	Healthcare Facilities.....	14
7.3.2.	Schools	15
7.3.3.	Commercial/Retail parks, Public Open Space, Allotments, Leisure Centres, Sports Grounds, Cemeteries & Historic Designations.....	17
8.0.	Protected Sites/Other Designations	19
8.1.	National Parks	19
8.2.	AONB.....	19
8.3.	SSSI's	19
8.4.	Special Protection Areas	19
8.5.	Special Areas of Conservation.....	19
8.6.	Source Protection Zones	19
8.7.	Ramsar Sites.....	19
8.8.	Marine conservation zones.....	19
8.9.	Ancient Woodlands.....	20
8.10.	Nitrate Vulnerable Zones	21
8.11.	Historic Landfills.....	22
8.12.	Sites of Importance for Nature Conservation (SINC)	23
8.13.	Watercourses, springs, wells & boreholes.....	25



8.13.1. Water courses 26

1.0. Introduction

This document has been produced as part of the mobile plant permit application.

1.1. Site Address

Virginia Park Golf Club, Heol Bro Wen, Caerphilly, CF83 3SW. Grid Reference: ST 15974 87798

1.2. Principal Contractor Address

Pritchards, Earthmovers House, Unit 16, Llantrisant Business Park, CF72 8LF

1.3. Client Address

Withey Developments Ltd, 221 High St, Blackwood, NP12 1AL

1.4. Site Layout

The project is located at the ex-Virginia golf club & driving range.

2.0. Operating Boundary

The red line found within figure 1, — defines the operating boundary.



Figure 1: Virginia Park Operating Boundary

2.1. 1km Buffer Map

The outermost red line, defines the 1km buffer zone. The innermost red line, is the operating boundary as described in figure 1.



Figure 2: Virginia Park 1km buffer zone and operating boundary

3.0. Site Access and Security Arrangements

3.1. Site Access

Access to site will be gained from Heol Bro Wen, Caerphilly, CF83 3SW via the route depicted by the red arrows in figure 3.



Figure 3: Site access

3.2. Site Security Arrangements

Prichard's will secure their works site using Heras Fencing all within the existing substantial site boundary walls and fencing. The secured boundary is depicted by the red line in figure 1.

Prichards will employ site security contractors to secure the site, and ensure security integrity is upheld during site shutdown hours. Daily site inspections will be undertaken to ensure that the integrity of the fencing remains in place at all times.

4.0. Process Areas

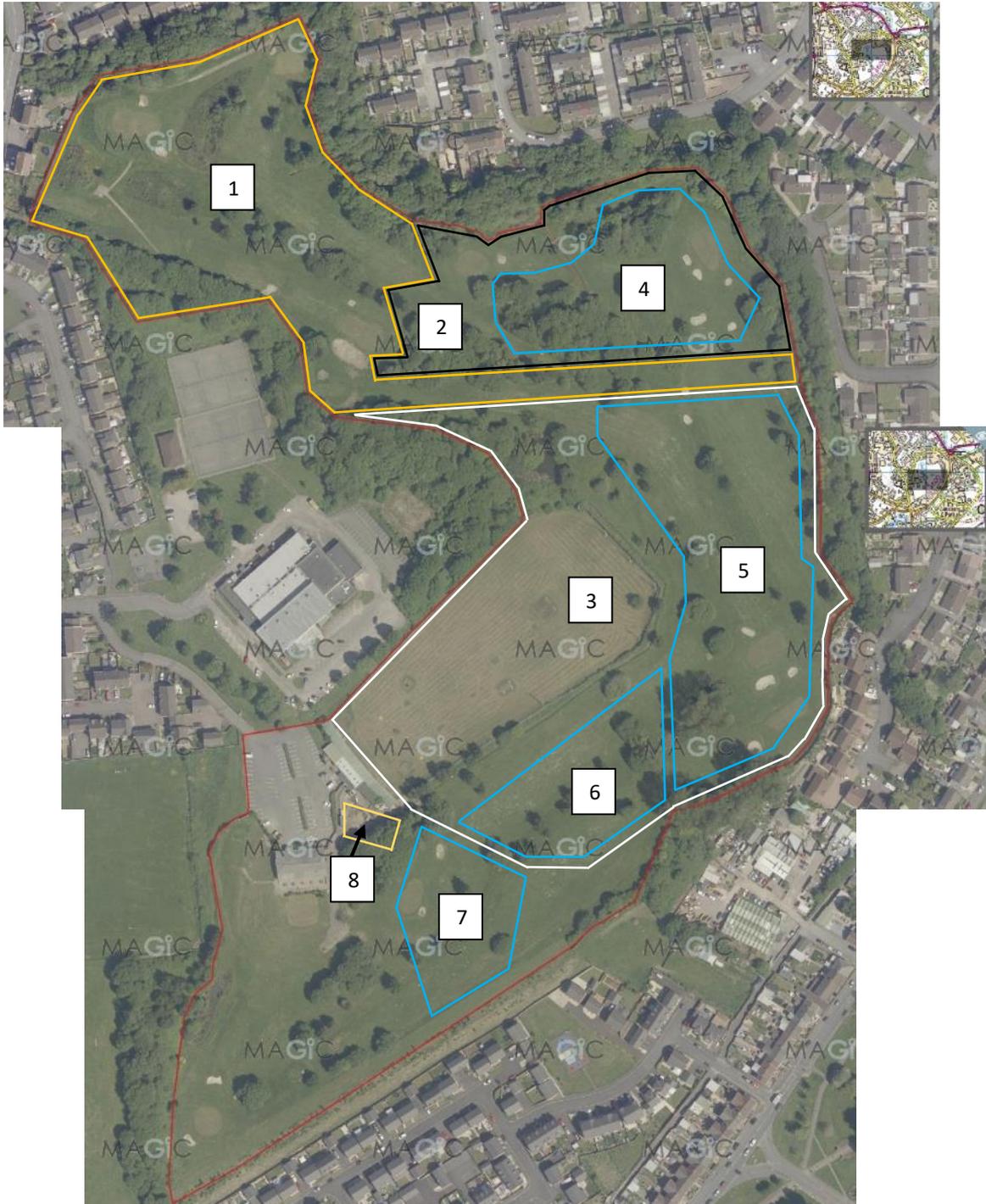


Figure 4: Waste, processing and plant locations.

1. Defined by dark yellow border – Phase 1A
2. Defined by black border – Phase 1B
3. Defined by white border – Phase 2
4. Defined by light blue border – Treatment area and storage stockpile
5. Defined by light blue border – Treatment area and storage stockpile
6. Defined by light blue border – Treatment area and storage stockpile
7. Defined by light blue border – Treatment area and storage stockpile
8. Defined by yellow border – Plant location

7. Defined by light blue border – Treatment area and storage stockpile
8. Defined by dark yellow border – COSHH stores and quarantine zone and skip laydown area for wastes unsuitable to be used in the remediation process.

5.0. Drainage Systems

Figure 5 shows depicts the water storage locations as defined within the areas bounded by the black lines.

Key: A1:- Water is pumped from phase 1B to Lagoon 1. A2:- Water settles from lagoon 1 into lagoon 2. A3:- Water filtrates to ground. Lagoon 3 has no inlet apart from rain water. This water filtrates to ground or is used in dust suppression activities.

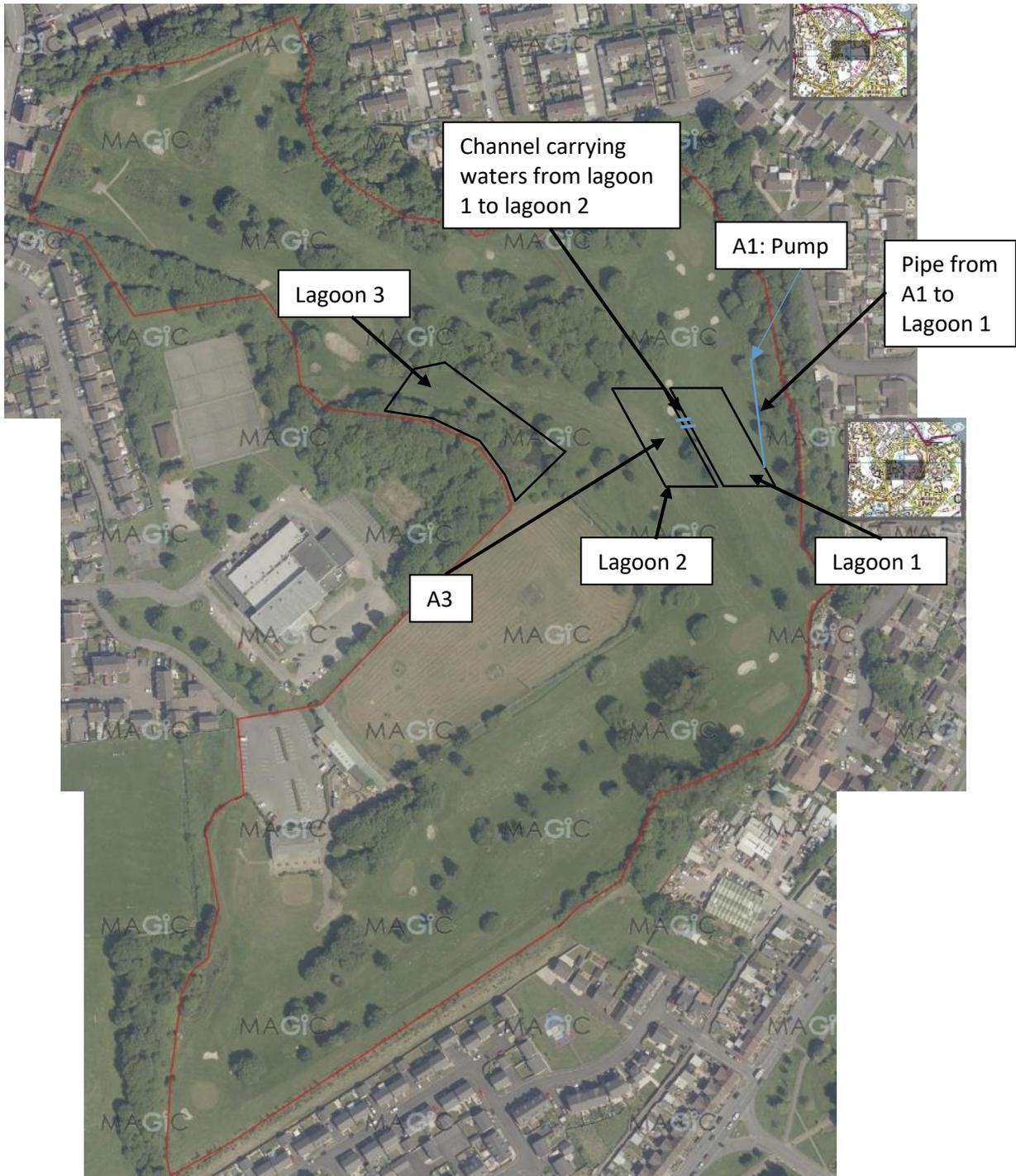


Figure 5: Lagoons.

7.0. Potential Receptors

A number of potential receptors have been identified within the 1km site boundary.

7.1. Human Receptors

- Current and future site workers,
- Residential properties,
- Commercial Properties,
- Schools,
- Healthcare Facilities,
- Sports/leisure facilities.

7.2. Environmental Receptors

- SSSI's,
- Waters and aquatic ecosystems,
 - Ground Waters,
 - Surface Waters,
 - Waterways.
- Soils,
- Protected areas, i.e., SAC's.

7.3. Receptor Maps

Numerous residential properties are found within the 1km area surrounding the project boundary. Unless the building is clearly stated as a receptor, all buildings are assumed to be residential.



7.3.1. Healthcare Facilities.

Includes; Dentists, Dr's Sub Branches, Dr's Surgeries, Hospitals, Opticians, Pharmacies. Key – 

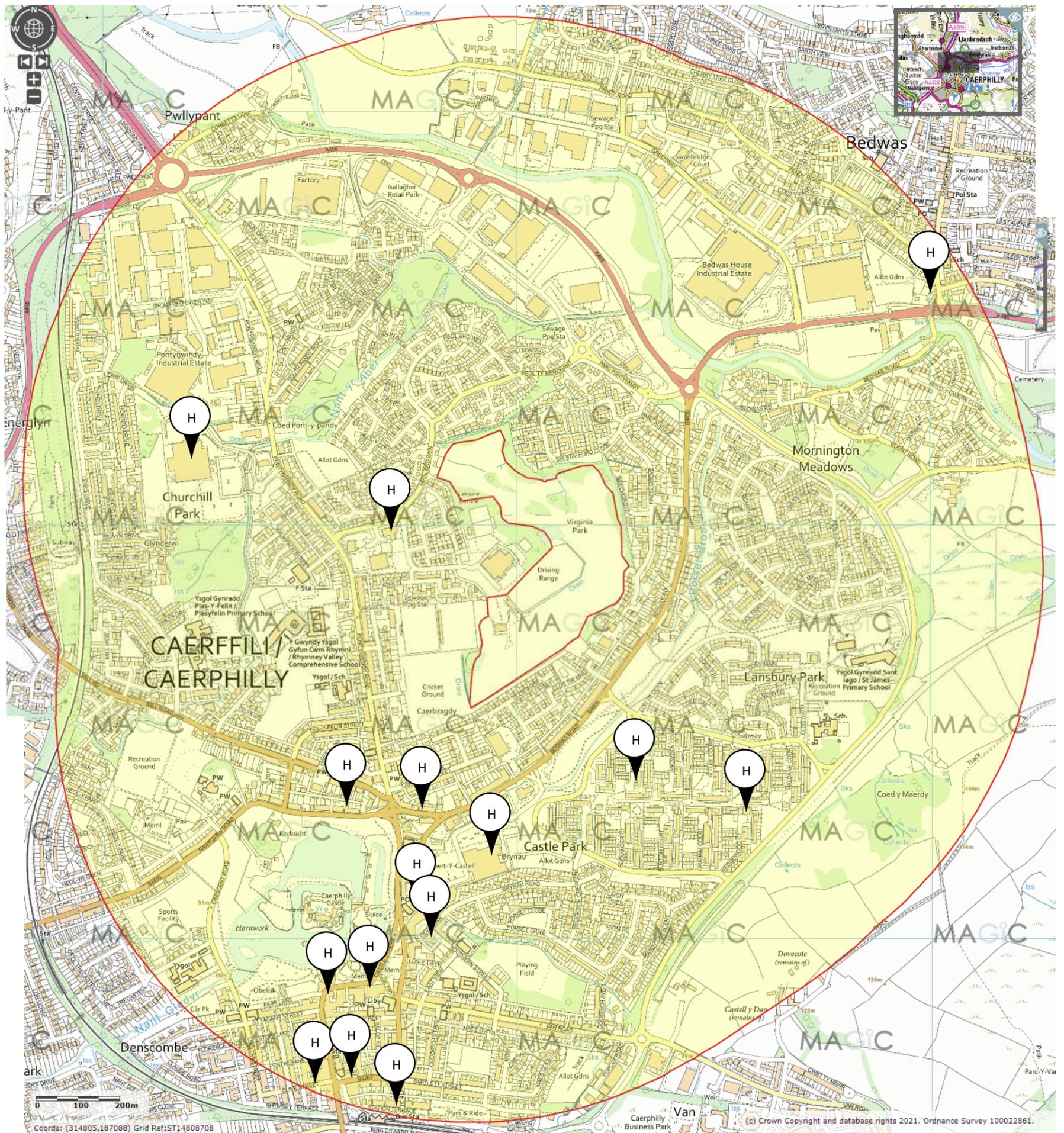


Figure 7: Healthcare receptors within 1km.

Schools	
Letter	Name
A	Bedwas Junior School
B	St James Primary School
C	St Helen's RC Primary School
D	The Twyn School & Nursery
E	Ysgol Gynradd Gymraeg y Castell
F	Ysgol Gymraeg Caerffili
G	Ysgol Gyfun Cwm Rhymni Y Gwyndy Campus
H	Plas-Y-Felin Primary School
I	Bedwas Infant School

7.3.3. Commercial/Retail parks, Public Open Space, Allotments, Leisure Centres, Sports Grounds, Cemeteries & Historic Designations.

Key - 



Figure 9: Identified receptors within 1km.

Key table

Letter	Name
A	Allotments
B	LE5 – LDP protected informal open spaces.
C	Cemeteries
D	LE1 – LDP protected formal open spaces.
L	Leisure Centres
M	Historic Sites
P	Public Open Spaces/Recreational Grounds
S	Sports/Playing Fields.
I	Industrial Units
R	Retail Units

8.0. Protected Sites/Other Designations

The 'Lle.gov' map was consulted for the following protected site types. Those within 1km of the project boundary were recorded;

- National parks
- Areas of outstanding natural beauty (AONB)
- Sites of special scientific interest (SSSI's)
- Special areas of conservation
- Special protection areas
- Ramsar sites (wetlands)
- Marine conservation zones
- Ancient woodland
- Historic Landfills
- Sites of Importance for Nature Conservation

8.1. National Parks

No National Parks are located within 1km of the project boundary. Source: Lle.gov.wales

8.2. AONB

No AONB's are located within 1km of the project boundary. Source: Lle.gov.wales

8.3. SSSI's

No SSSI's are located within 1km of the Project Boundary. Source: Lle.gov.wales

8.4. Special Protection Areas

No SPA sites are located within 1km of the project boundary. Source: Lle.gov.wales

8.5. Special Areas of Conservation

No SACs sites are located within 1km of the project boundary. Source: Lle.gov.wales

8.6. Source Protection Zones

No SPZ sites are located within 1km of the project boundary. Source: NRW Interactive Map

8.7. Ramsar Sites

No Ramsar Sites are located within 1km of the project boundary. Source: Lle.gov.wales

8.8. Marine conservation zones

No MCZ sites are located within 1km of the project boundary. Source: Lle.gov.wales

8.9. Ancient Woodlands

Multiple woodlands have been found within 1km of the project boundary. Source: Lle.gov.wales

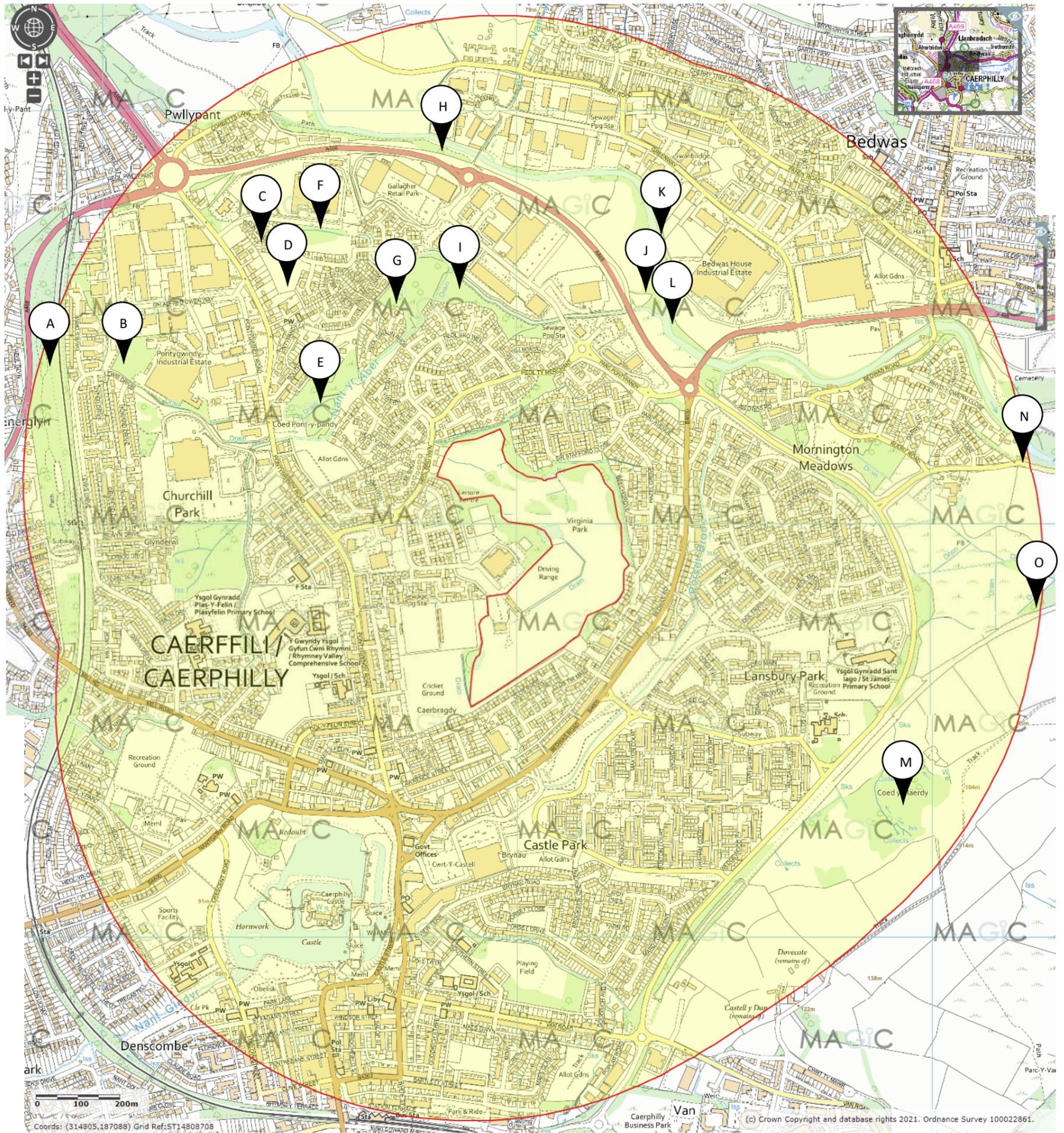


Figure 10: Ancient Woodlands

Ancient Woodlands within 1km of the project boundary

Letter	Lle Unique ID	Category Name
A	17885	Ancient semi natural woodland
B	17886	Ancient semi natural woodland
C	48488	Ancient woodland site of unknown category
D	48487	Ancient woodland site of unknown category
E	15763	Ancient semi natural woodland
F	17888	Ancient semi natural woodland
G	17887	Ancient semi natural woodland
H	17890	Ancient semi natural woodland
I	15764	Ancient semi natural woodland
J	15765	Ancient semi natural woodland
K	11874	Ancient semi natural woodland
L	11873	Ancient semi natural woodland
M	8424	Ancient semi natural woodland
N	15762	Ancient semi natural woodland
O	15761	Ancient semi natural woodland

8.10. Nitrate Vulnerable Zones

No NVZ sites are located within 1km of the project boundary. Source: Lle.gov.wales

8.11. Historic Landfills

Source: Lle.gov.wales



Figure 11: Historic Landfills within 1km.

8.12. Sites of Importance for Nature Conservation (SINC)

A number of SINC's or Local Wildlife Habitats are located within the vicinity of 1km of the site boundary.

Source: <http://caerphilly.opus3.co.uk/ldf/maps/ldp-proposals-map#x=316355.99515694&y=188050.0912992&scale=5000&226>

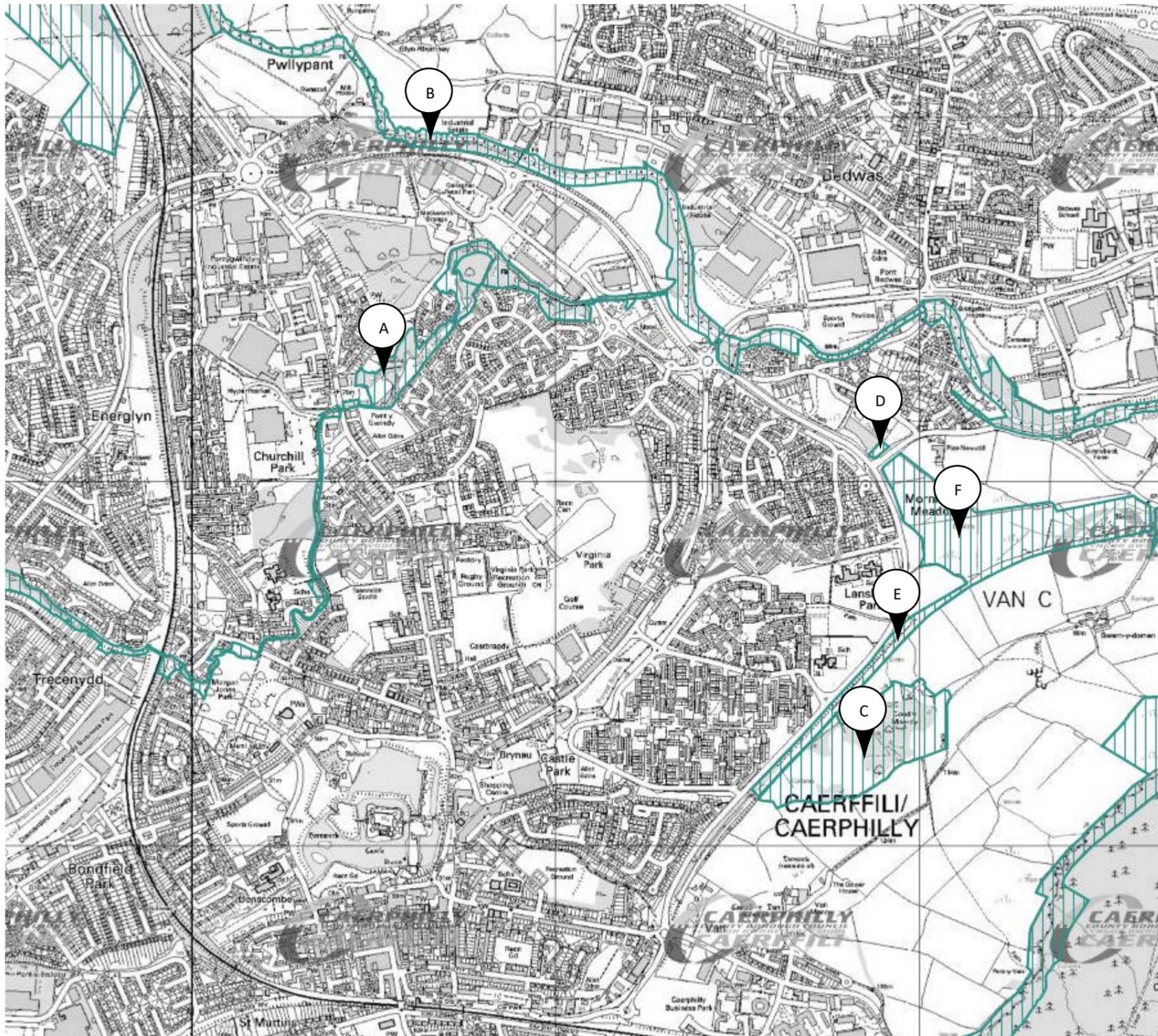


Figure 12: SINC's

Sites of Importance for Nature Conservation

Letter	Designation ID	Name
A	NH 3.156	Nant yr Aber River
B	NH 3.1	River Rhymney
C	NH 3.168	Coed y Maerdy, East of Caerphilly
D	NH 3.170	Caerphilly/ Machen Disused Railway, East of Trethomas
E	NH 3.170	Caerphilly/ Machen Disused Railway, East of Trethomas
F	NH 3.170	Caerphilly/ Machen Disused Railway, East of Trethomas

8.13. Watercourses, springs, wells & boreholes.

The site is bordered by the unnamed water courses along the northern and eastern boundary. As per the bespoke permit for land and groundwater remediation, no permitted activities are to take place;

- Within 10 metres of any watercourse.
- Within 50 metres of any spring or well, or any borehole not used to supply water for domestic or food production purposes; and
- Within 50m of any well spring or borehole used for the supply of water for human consumption. This must include private water supplies.

The yellow lines indicate a 10m buffer zone around watercourses where the buffer zone intersects the site boundary. No permitted activities will occur in these areas.

The red line indicates a 50m buffer zone around a spring identified as 'issues' on OS maps. No permitted activity will occur in this area.

No boreholes are located within 50m of the site boundary. Source: British Geological Survey

No wells are located within 50m of the site boundary. Source: British Geological Survey

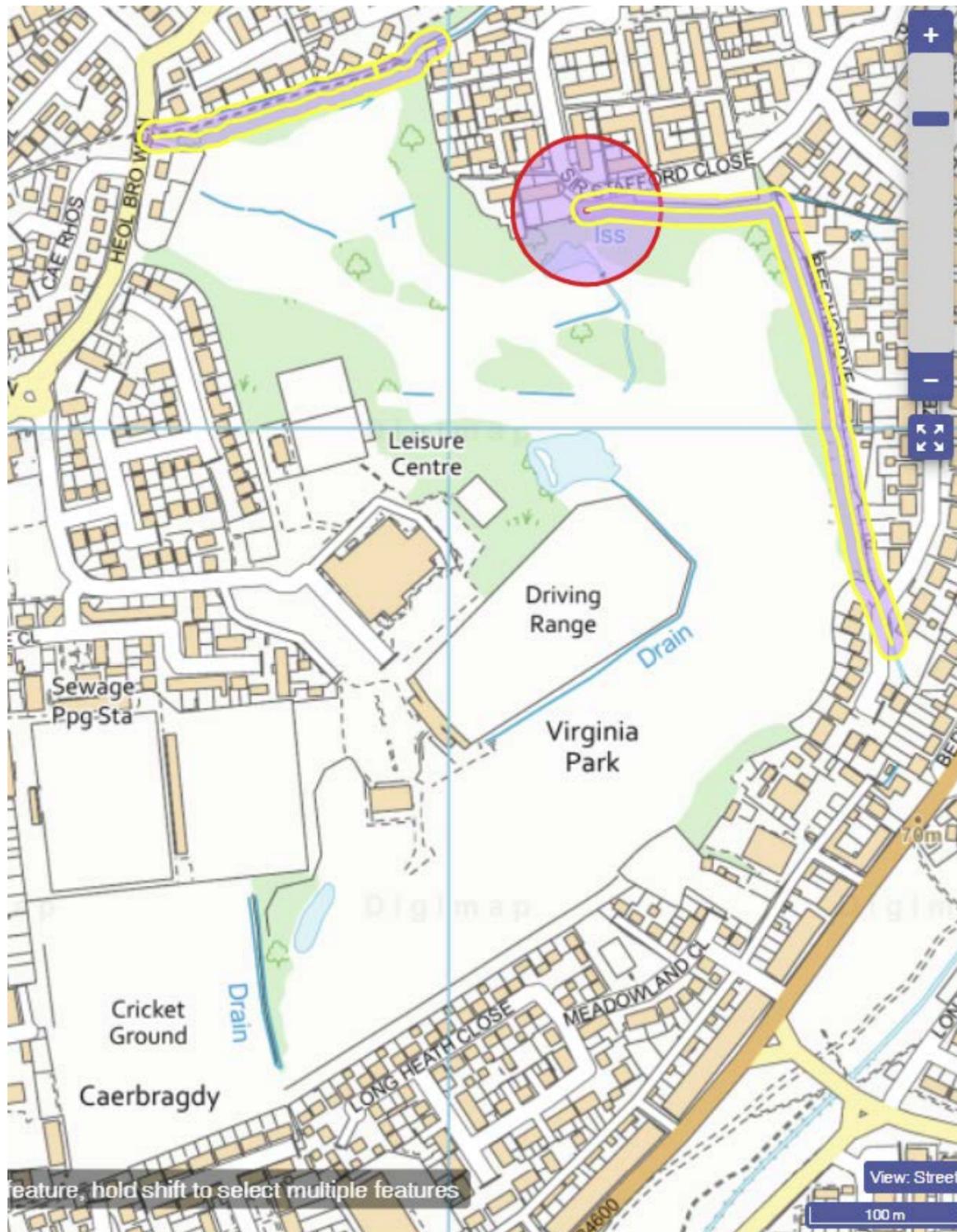


Figure 13: Watercourses and Springs

8.13.1. Water courses

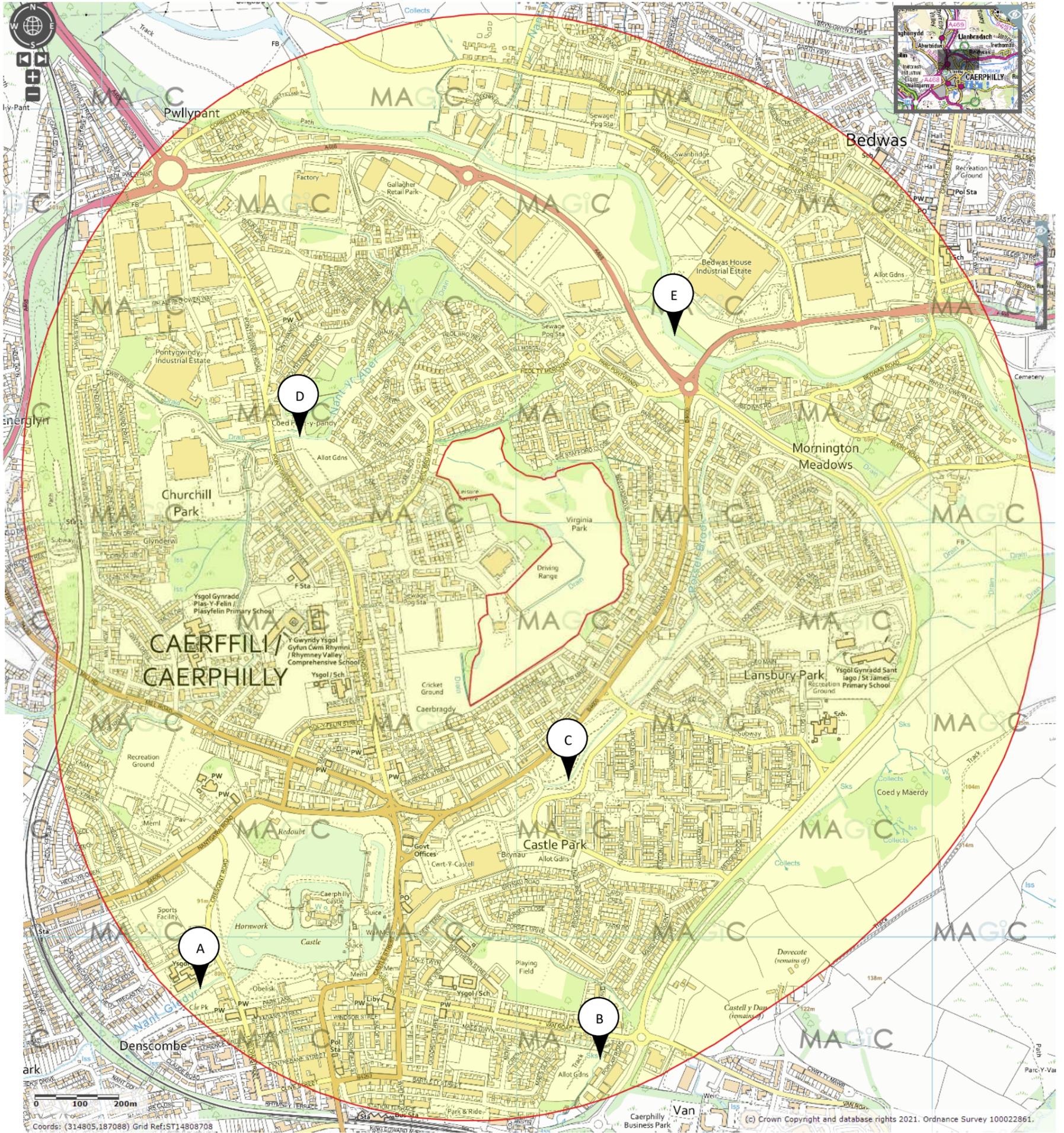


Figure 14: Watercourses within 1km.

Watercourses

Letter	Name:	Tributary of
A	Nant Gledyr	Porset Brook Via Caerphilly Castle Moat
B	Nant y Calch	Porset Brook
C	Porset Brook	Afon Rhymni
D	Nant Yr Aber	Afon Rhymni
E	Afon Rhymni	Severn Estuary