



Cyngor Bwrdeisdref Sirol

**Blaenau Gwent**

County Borough Council

# Blaenau Gwent County Borough Council 2017 Air Quality Progress Report

In fulfillment of Part IV of the Environment Act 1995  
Local Air Quality Management

**Blaenau Gwent County Borough Council**

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## Executive Summary

This progress report is the latest in a series of reports relating to air quality and has been compiled and published by Blaenau Gwent County Borough Council (hereafter referred to as Blaenau Gwent CBC). The report contains the latest air quality data for the calendar year of 2016 applicable to the County Borough, and provides current information relating to any new local developments or issues that may have an impact on air quality.

The UK's National Air Quality Strategy sets air quality objectives for seven key pollutants which Local Authorities are legally required to have regard to. These include Benzene, 1,3 Butadiene, Carbon Monoxide, Lead, Nitrogen Dioxide, Particulate Matter (PM<sub>10</sub>) (gravimetric) and Sulphur Dioxide.

Local authorities are obliged to periodically review the air quality within their area to determine the risk of the air quality objectives set out in the national strategy being exceeded. If a Local Authority identifies a risk of any of the objectives being exceeded within its area then they must proceed to a Detailed Assessment for that pollutant.

The previous reports produced by Blaenau Gwent CBC have concluded that it is unlikely that any of the air quality objectives that the Council are required to have regard to, are being exceeded or will be exceeded within the Borough and therefore no Detailed Assessment for any pollutant has been carried out to-date.

This 2017 air quality progress report **does not** identify the need for Blaenau Gwent CBC to proceed to a Detailed Assessment for any of the seven pollutants identified in the UK's National Air Quality Strategy.

The next Air Quality Progress Report for the County Borough of Blaenau Gwent is scheduled to be published in September 2018.

Further information regarding the UK's National Air Quality Strategy is available at

<http://www.airquality.co.uk>

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# 1 Introduction

## 1.1 Description of Local Authority Area

The County Borough of Blaenau Gwent is located in South East Wales and was formerly part of the County of Gwent. It is approximately 20 miles south to the city of Newport, 30 miles south west to the City of Cardiff and directly north is the Brecon Beacons National Park.

Blaenau Gwent is the smallest of all the Welsh Local Authorities, at about 10,900 hectares. There are three distinctive valleys supporting the five main towns or settlements of Abertillery, Brynmawr, Ebbw Vale, Nantyglo and Blaina, and Tredegar.

Although the towns give the County Borough a busy, urban feel, Blaenau Gwent is actually a largely rural area. Forty five per cent of the land area is undeveloped, and the greater part of this is defined as open countryside.

The Borough has witnessed steady population loss over recent years. The most recent figures from the 2011 census identified that there are 69,814 people living in the area. This compares to 70,064 in 2001 (Censuses).

The main trunk route that runs through the County Borough is the A465, Heads of the Valleys road which provides good communication to the Midlands and the North via the M50/M5 and to London via the M4.

Much of the traditional coal and steel industry that historically populated the Borough has been replaced by a diverse industrial base comprising of businesses such as pharmaceuticals, battery and computer systems, electronic and high tech engineering companies. The closure of much of the heavy industry in the area has had an adverse impact on the local economy but conversely it has meant the removal of significant sources of air pollution.

Blaenau Gwent has experienced enormous regeneration investment in recent years, with much more to come. Major projects like the re-opening of the Ebbw Valley railway and the re-development of the former Corus steelworks site in Ebbw Vale will transform the face of the borough.

The map provided in Appendix 1 to this report outlines the administrative area of Blaenau Gwent.

## 1.2 Purpose of Progress Report

This report fulfils the requirements of the Local Air Quality Management (LAQM) process as set out in Part IV of the Environment Act (1995), the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where

exceedences are considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

For Local Authorities in Wales, Progress Reports are required in the intervening years between the three-yearly Updating and Screening Assessment reports. Their purpose is to maintain continuity in the LAQM process.

They are not intended to be as detailed as Updating and Screening Assessment Reports, or to require as much effort. However, if the Progress Report identifies the risk of exceedence of an Air Quality Objective, the Local Authority (LA) should undertake a Detailed Assessment immediately, and not wait until the next round of Review and Assessment.

### **1.3 Air Quality Objectives**

The air quality objectives applicable to LAQM **in Wales** are set out in the Air Quality (Wales) Regulations 2000, No. 1940 (Wales 138), Air Quality (Amendment) (Wales) Regulations 2002, No 3182 (Wales 298), and are shown in Table 1.1. This table shows the objectives in units of microgrammes per cubic metre  $\mu\text{g}/\text{m}^3$  (milligrammes per cubic metre,  $\text{mg}/\text{m}^3$  for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

**Table 1.1 – Air Quality Objectives included in Regulations for the purpose of LAQM in Wales**

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 µg/m <sup>3</sup>	Running annual mean	31.12.2003
	5.00 µg/m <sup>3</sup>	Annual mean	31.12.2011
1,3-butadiene	2.25 µg/m <sup>3</sup>	Running annual mean	31.12.2003
Carbon monoxide	10 mg/m <sup>3</sup>	Running 8-hour mean	31.12.2003
Lead	0.50 µg/m <sup>3</sup>	Annual mean	31.12.2004
	0.25 µg/m <sup>3</sup>	Annual mean	31.12.2008
Nitrogen dioxide	200 µg/m <sup>3</sup> not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m <sup>3</sup>	Annual mean	31.12.2005
Particulate matter (PM <sub>10</sub> ) (gravimetric)	50 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 µg/m <sup>3</sup>	Annual mean	31.12.2004
Sulphur dioxide	350 µg/m <sup>3</sup> , not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m <sup>3</sup> , not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m <sup>3</sup> , not to be exceeded more than 35 times a year	15-minute mean	31.12.2005



## 1.4 Summary of Previous Review and Assessments

Table 1.2 provides a comprehensive list of the reports produced by Blaenau Gwent CBC as a result of previous rounds of review and assessment of the air quality within the Borough, and summarises the main findings of each report.

**Table 1.2 - Reports Produced By Blaenau Gwent CBC As A Result Of Previous Rounds Of Local Air Quality Review And Assessment**

<b>Report</b>	<b>Review And Assessment Undertaken &amp; Conclusions</b>	<b>Year Published</b>
<b>1999 First Stage Review and Assessment</b>	Initial screening of industrial, transport and other significant sources of air pollution within the Borough. Concluded that it is unlikely that there will be failure to achieve any of the air quality objectives.	1999
<b>2003 Updating and Screening Assessment</b>	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2003
<b>2004 Progress Report</b>	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2004
<b>2005 Progress Report</b>	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2005
<b>2006 Updating and Screening Assessment</b>	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2006
<b>2007 Progress Report</b>	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2007
<b>2008 Progress Report</b>	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2008
<b>2009 Updating and Screening Assessment</b>	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2009

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<b>2010 Progress Report</b>	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2010
<b>2011 Progress Report</b>	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2011
<b>2012 Updating and Screening Assessment Report</b>	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2012
<b>2013 Progress Report</b>	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2013
<b>2014 Progress Report</b>	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2014
<b>2015 Updating and Screening Assessment Report</b>	In-depth review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2015
<b>2016 Progress Report</b>	Review of any matters which may have changed since the last review and assessment which may lead to a risk of an air quality objective being exceeded. Concluded no significant changes and therefore unlikely that there will be failure to achieve any of the air quality objectives.	2016

## 2 New Monitoring Data

### 2.1 Summary of Monitoring Undertaken

#### 2.1.1 Automatic Monitoring Sites

Blaenau Gwent CBC does not currently undertake any automatic monitoring of any of the pollutants relevant to the UK National Air Quality Objectives.

However, there was an automatic monitoring station within the Borough which was undertaking monitoring for ambient levels of Lead, PM<sub>10</sub> and PM<sub>2.5</sub> at a special source orientated site. Monitoring was required at the site for a minimum period of 12 months during 2008/09. Monitoring at this site has now ceased.

The monitoring station was located at Garnlydan Primary School, Ebbw Vale and was run by Environmental Compliance Ltd on behalf of Envirowales Ltd. Envirowales Ltd is a lead acid battery recycling plant sited at the Rassau Industrial Estate, Ebbw Vale which was given planning permission on 21<sup>st</sup> June 2005.

The provision of the monitoring station arose as a result of compliance with the requirements of a formal agreement between Envirowales Ltd and Blaenau Gwent CBC under Section 106 of the Town and Country Planning Act as previously reported in the 2008 Progress Report (Pg 37/38).

The monitoring site location was selected as it was considered to be one of the nearest sites of relevant exposure to emissions from the processes being undertaken at Envirowales Ltd. A map indicating the location of the monitoring site was provided in Appendix 2 of the 2010 Progress Report.

It was agreed that monitoring would commence at a time when the site had become fully operational and as a result monitoring began in September 2008. The monitoring station was routinely calibrated on a monthly basis, audits of the site were carried out in conjunction with the routine calibration exercises. A summary of the information relevant to the automatic monitoring station was provided in the 2010 Progress Report (Table 2.1).

Reports were provided to the Local Authority by Environmental Compliance Ltd every three months from date of commencement of the monitoring exercise. The outline of the methodology used for monitoring and analysis (including quality assurance and controls used) and the results obtained were provided in each report supplied to Blaenau Gwent CBC. A copy of each of the reports were provided in Appendix 3 of the 2010 Progress Report.

The automatic monitoring undertaken at the site **did not** indicate any exceedence or likely exceedence of the Air Quality Objectives for Lead, PM<sub>10</sub> and PM<sub>2.5</sub> at a level for which a Detailed Assessment would be necessary.

### **2.1.2 Non-Automatic Monitoring Sites**

Blaenau Gwent CBC undertook diffusion tube monitoring at 21 sites throughout the Borough during 2016, the details of which are presented in Table 2.1. A map indicating the approximate location of each current monitoring site within the borough is provided in Appendix 2 and individual maps for each monitoring location is provided in Appendix 3 to this report.

The diffusion tubes are exposed for four week periods in accordance with the National NO<sub>2</sub> exposure calendar. Gradko Environmental were used to analyse and provide data from all of the NO<sub>2</sub> diffusion tubes within Blaenau Gwent during 2016.

Gradko Environmental use the 50% TEA in Acetone method to prepare the diffusion tubes for analysis and have indicated that they are following the procedures set out in the Harmonisation Practical Guidance. It has also been confirmed that Gradko Environmental demonstrated satisfactory performance in both the Air- PT/ WASP scheme (run by the Health and Safety Laboratory) and the monthly field inter-comparison exercise run by AEA or own co-location study for the period of 2016.

Blaenau Gwent CBC does not currently undertake a co-location study for its NO<sub>2</sub> diffusion tube monitoring, in previous years the 'National' bias adjustment factor has been used for the results of the monitoring undertaken during each specific year. The bias adjustment factor for Gradko Environmental for 2016 was 1.03.

A full audit of all monitoring sites used by Blaenau Gwent CBC was undertaken during 2009 and as a result minor amendments to the descriptors for some of the sites was carried out and some additional information was provided with regards to all sites.

In addition to the above it was identified as a result of the audit that some of the monitoring locations were no longer required as they were no longer representative of the areas being monitored due to local changes. A number of new sites were also identified as a result of the information obtained during the audit and the Updating and Screening Assessment process carried out in 2009.

So that the ongoing monitoring for 2009 would not be interrupted it was decided that the existing sites would continue until the end of the calendar year for 2009. The new monitoring locations would commence in January 2010 and the redundant sites would cease monitoring at the end of 2009. The sites which were made redundant at the end of the calendar year for 2009 were BGBC-10 and BGBC-15. Four new monitoring locations were identified in total and these commenced operation in January 2010. The new sites are BGBC-23, 24, 25 and 26. Two new sites were added at the start of 2014, BGBC-27 and BGBC-28. These were added as a result of the significant road improvement works that are ongoing in relation to the Heads of the Valley Road (A465) area.

Table 2.1.2 Details of Non-Automatic Monitoring Sites for 2016

Site Name	LA Reference	Site Type	Location	Easting (X) / Northing (Y)	OS Grid Map Reference	Pollutants Monitored	Within AQMA?	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Height between 2 to 4 m? (Y/N)	Distance to kerb of nearest road (N/A if not applicable)	Worst-case Location ?	WAQF Start Date
BGBC-01	S1	Near Road	The Darren, Daren-felen Road, Brynmawr	X 319538 Y 211956	SO1911NE	NO <sub>2</sub>	N	Y (on facade)	Y	8m	Y	Jan 1995
BGBC-03	S3	Urban Background	272 King Street, Brynmawr	X 319292 Y 212030	SO1912SE	NO <sub>2</sub>	N	Y (on façade)	Y	4m	Y	Jan 1995
BGBC-04	S4	Urban Background	22 Parkhill, Beaufort, Ebbw Vale	X 317298 Y 211287	SO1711SW	NO <sub>2</sub>	N	Y (10m)	Y	N/A	N/A	Jan 1995
BGBC-05	A3	Urban Background	Willow Tree Bungalow, Aberbeeg	X 321139 Y 201114	SO2101SW	NO <sub>2</sub>	N	Y (1m)	Y	10m	N/A	Jan 1995
BGBC-07	A1	Urban Background	Aberbeeg Medical Centre, Aberbeeg	X 320942 Y 202011	SO2002SE	NO <sub>2</sub>	N	Y (18m)	Y	25m	N/A	Nov 1995
BGBC-09	S2	Near Road	Ynys Dawel, Daren-felen Road, Brynmawr	X 319556 Y 211980	SO1911NE	NO <sub>2</sub>	N	Y (7m)	Y	33m	Y	Jan 2001
BGBC-11	C2	Urban Background	8 Cwm Graig Bungalows, Marine Street, Cwm, Ebbw Vale	X 318785 Y 204592	SO1804NE	NO <sub>2</sub>	N	Y (on facade)	Y	18m	N/A	Jan 2000
BGBC-13	T2	Roadside	3 Kings Arms Cottages, Trefil, Tredegar	X 312012 Y 212782	SO1212NW	NO <sub>2</sub>	N	Y (on facade)	Y	4m	Y	Oct 2000
BGBC-16	A5	Near road	49 Aberbeeg Road, Aberbeeg	X 321430 Y 202672	SO2102NW	NO <sub>2</sub>	N	Y (on façade)	Y	7m	Y	Oct 2005
BGBC-17	C3	Near road	Cwmyrdderch Court, School Terrace, Cwm, Ebbw Vale	X 318429 Y 205535	SO1805NW	NO <sub>2</sub>	N	Y (5m)	Y	7m	Y	Oct 2005
BGBC-18	BT1	Roadside	Welfare Hall, Beaufort Hill, Ebbw Vale	X 317543 Y 211688	SO1711NE	NO <sub>2</sub>	N	Y (on façade)	Y	5m	Y	Oct 2005
BGBC-19	BT2	Roadside	42 Beaufort Rise, Ebbw Vale	X 316670 Y 211597	SO1611NE	NO <sub>2</sub>	N	Y (on facade)	Y	3m	Y	Oct 2005
BGBC-20	TR1	Roadside	122 Beaufort Road, Tredegar	X 314858 Y 210240	SO1410SE	NO <sub>2</sub>	N	Y (on façade)	Y	5.5m	Y	Oct 2005

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Site Name	LA Reference	Site Type	Location	Easting (X) / Northing (Y)	OS Grid Map Reference	Pollutants Monitored	Within AQMA?	Relevant Exposure? (Y/N with distance (m) to relevant exposure)	Height between 2 to 4 m? (Y/N)	Distance to kerb of nearest road (N/A if not applicable)	Worst-case Location ?	WAQF Start Date
BGBC-21	TR2	Other - Nearest residential premises to busy roundabout on Heads of Valley Road (A465)	14 Bryn Rhosyn, Merthyr Road, Tredegar	X 312846 Y 210586	SO1210NE	NO <sub>2</sub>	N	Y (on façade)	Y	35m	Y	Oct 2005
BGBC-22	BR1	Near road	2 King Street, Brynmawr	X 319562 Y 212128	SO1912SE	NO <sub>2</sub>	N	Y (on façade)	Y	6m	Y	Nov 2005
BGBC-23	C4	Near road	Cwm Conservative Club, Mill Terrace, Cwm	X 318453 Y 205308	SO1805SW	NO <sub>2</sub>	N	Y (on façade)	Y	6m	Y	Jan 2010
BGBC-24	T5	Roadside	4 Glen View, Nantybwh, Tredegar	X 313145 Y 210769	SO1310NW	NO <sub>2</sub>	N	Y (on façade)	Y	5m	Y	Jan 2010
BGBC-25	E1	Near road	Red Rose Care Centre, Park Road, Ebbw Vale	X 316996 Y 207898	SO1607NE	NO <sub>2</sub>	N	Y (on façade)	Y	8m	Y	Jan 2010
BGBC-26	E2	Other – near road where this is an increase in traffic expected due to major works nearby	2 The Dingle, Ebbw Vale	X 316980 Y 209842	SO1609NE	NO <sub>2</sub>	N	Y (on façade)	Y	10m	Y	Jan 2010
BGBC-27	G1	Other – near road where an increase in traffic expected due to major works nearby	Tyn y Rhyn, Llangynidr Road, Ebbw Vale	X 316720 Y 212796	SO1612NE	NO <sub>2</sub>	N	Y (on façade)	Y	40m	Y	Jan 2014
BGBC-28	R1	Other – near road where an increase in traffic expected due to major works nearby	1 Coates Row, Rassau, Ebbw Vale	X 314488 Y 211642	SO1411NW	NO <sub>2</sub>	N	Y (on façade)	Y	20m	Y	Jan 2014

## **2.2 Comparison of Monitoring Results with Air Quality Objectives**

### **2.2.1 Nitrogen Dioxide (NO<sub>2</sub>)**

Blaenau Gwent CBC does not currently undertake any automatic monitoring for Nitrogen Dioxide.

#### **Diffusion Tube Monitoring Data**

A summary of the results obtained from the Nitrogen Dioxide diffusion monitoring undertaken at the 21 sites within the Borough for the period of 2016 is presented in Table 2.2. Full details of the monthly mean values for each site are provided in Appendix 4 to this report.

None of the results from the diffusion tube monitoring are based on triplicate or collocated tubes, the results are based on 12 months' worth of data for the calendar year 2016 so none of the data has been annualised.

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**Table 2.2 Results Of Nitrogen Dioxide Diffusion Tubes For 2016**

Site Name	Location	Within AQMA?	Data Capture 2016 %	Annual Mean Concentrations	Air Quality Objective Annual Mean for Nitrogen Dioxide ( $\mu\text{g}/\text{m}^3$ )
				2016 ( $\mu\text{g}/\text{m}^3$ ) Adjusted for bias (1.03)	
BGBC-01	The Darren, Daren-felen Road, Brynmawr	N	100	16.9	40
BGBC-03	272 King Street, Brynmawr	N	100	12.3	40
BGBC-04	22 Parkhill, Beaufort, Ebbw Vale	N	100	7.7	40
BGBC-05	Willow Tree Bungalow, Aberbeeg	N	100	13.2	40
BGBC-07	Aberbeeg Medical Centre, Aberbeeg	N	100	14.6	40
BGBC-09	Ynys Dawel, Daren-felen Road, Brynmawr	N	100	16.4	40
BGBC-11	8 Cwm Graig Bungalows, Marine Street, Cwm, Ebbw Vale	N	100	11.4	40
BGBC-13	3 Kings Arms Cottages, Trefil, Tredegar	N	100	5	40
BGBC-16	49 Aberbeeg Road, Aberbeeg	N	100	19.5	40
BGBC-17	Cwmyrdderch Court, School Terrace, Cwm, Ebbw Vale	N	83	15.4	40
BGBC-18	Welfare Hall, Beaufort Hill, Ebbw Vale	N	100	20.6	40
BGBC-19	42 Beaufort Rise, Ebbw Vale	N	100	23	40
BGBC-20	122 Beaufort Road, Tredegar	N	100	22.1	40
BGBC-21	14 Bryn Rhosyn, Merthyr Road, Tredegar	N	100	13.8	40
BGBC-22	2 King Street, Brynmawr	N	100	16.5	40
BGBC-23	Cwm Conservative Club, Mill Terrace, Cwm	N	100	14.1	40
BGBC-24	4 Glen View, Nantybwich, Tredegar	N	100	12.9	40
BGBC-25	Red Rose Care Centre, Park Road, Ebbw Vale	N	100	12.7	40
BGBC-26	2 The Dingle, Ebbw Vale	N	100	14.9	40
BGBC-27	Tyn y Rhyn, Llangynidr Road, Ebbw Vale	N	100	8.4	40
BGBC-28	1 Coates Row, Rassau, Ebbw Vale	N	100	8.7	40



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Figure 1 provides a graphical representation of the 2016 measured levels of Nitrogen Dioxide at each monitoring location in comparison with the Air Quality Objective for this pollutant.

In previous reporting years the 'Nitrogen Dioxide with distance from Roads Calculator' had been used to predict the annual mean Nitrogen Dioxide concentration for receptors that are close to roadside monitoring locations but are further from the kerb than the monitor.

As a result of the audit of the monitoring locations carried out in 2009 it was noted that this calculation would no longer be required at any of the monitoring locations, as all roadside monitors are now located on the facade of the nearest receptor. There are no roadside monitoring locations where the receptor is nearer to the kerb than the monitoring site.

The results provided in Table 2.2 indicate that the Nitrogen Dioxide levels at each of the monitoring sites were considerably below the current Annual Mean Air Quality Objective of 40  $\mu\text{g}/\text{m}^3$ .

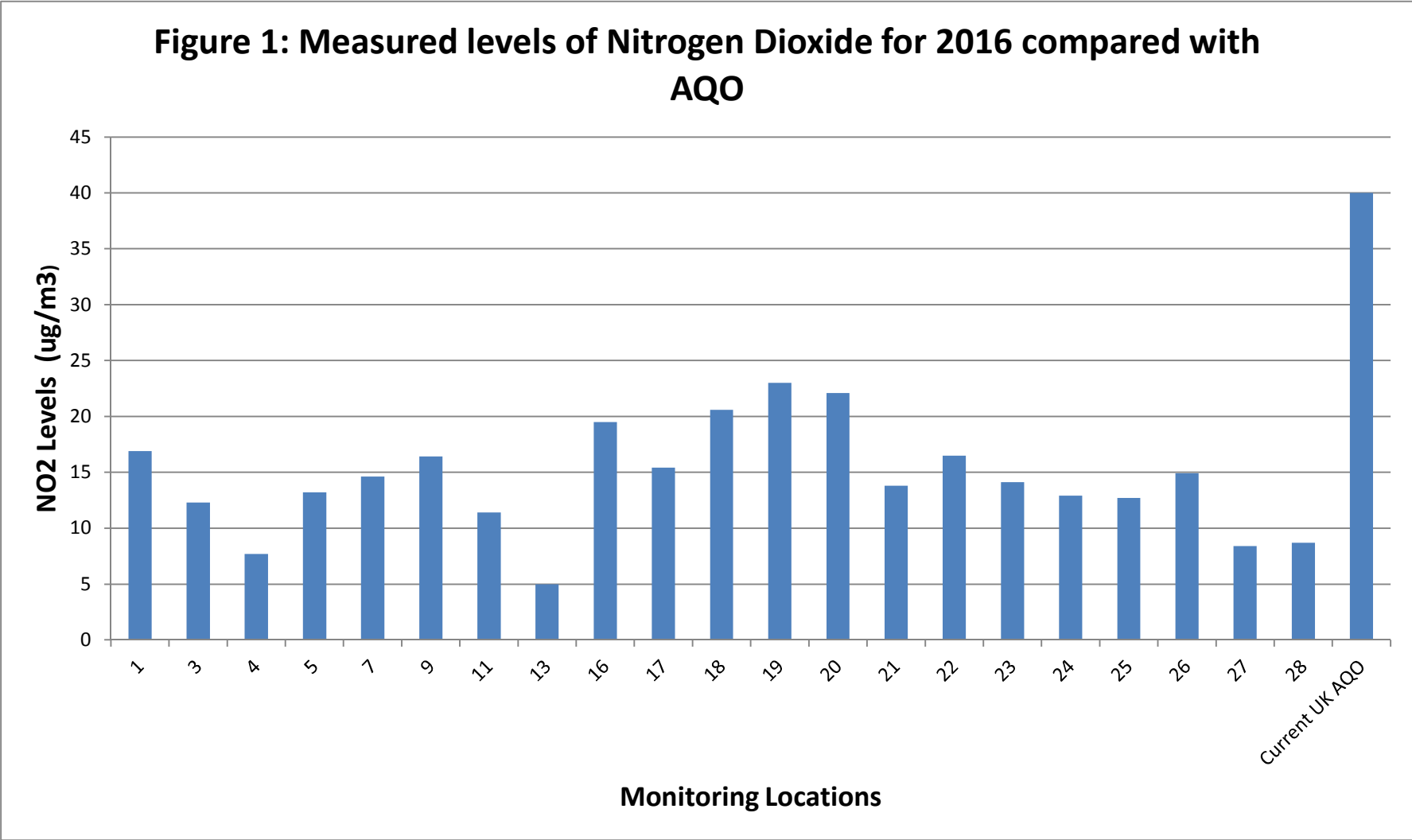
Table 2.3 provides a comparison of the results for the period of 2016 with the results of previous years monitoring (where available) for 2009, 2010, 2011, 2012, 2013, 2014 and 2015. The results identify that there has been an increase in the measured levels of nitrogen dioxide in 2016 when compared with the 2015 results in nineteen out of the twenty one monitoring locations. The results at two monitoring locations showed small decreases in the levels of nitrogen dioxide (BGBC-24 & BGBC-27).

Figure 2 provides a graphical representation of the 2011, 2012, 2013, 2014, 2015 and 2016 measured levels of Nitrogen Dioxide at each monitoring location in comparison with the Air Quality Objective for this pollutant. When compared with the 2014 monitoring results the 2016 monitoring results show there has been a decrease in the nitrogen dioxide levels at ten out of the twenty one monitoring locations. However it also identified ten out of the twenty one sites showed an increase in the levels of nitrogen dioxide with one monitoring location remaining the same (BGBC-11).

The bias adjustment factors used for each year are as per the information provided in each corresponding report for the year produced by Blaenau Gwent CBC and which are available at:

<http://www.blaenau-gwent.gov.uk/environment/2774.asp>

**Figure 1: Measured levels of Nitrogen Dioxide for 2016 compared with AQO**



**Figure 2: Measure Levels of Nitrogen Dioxide for 2011-2016 compared with UK AQO**

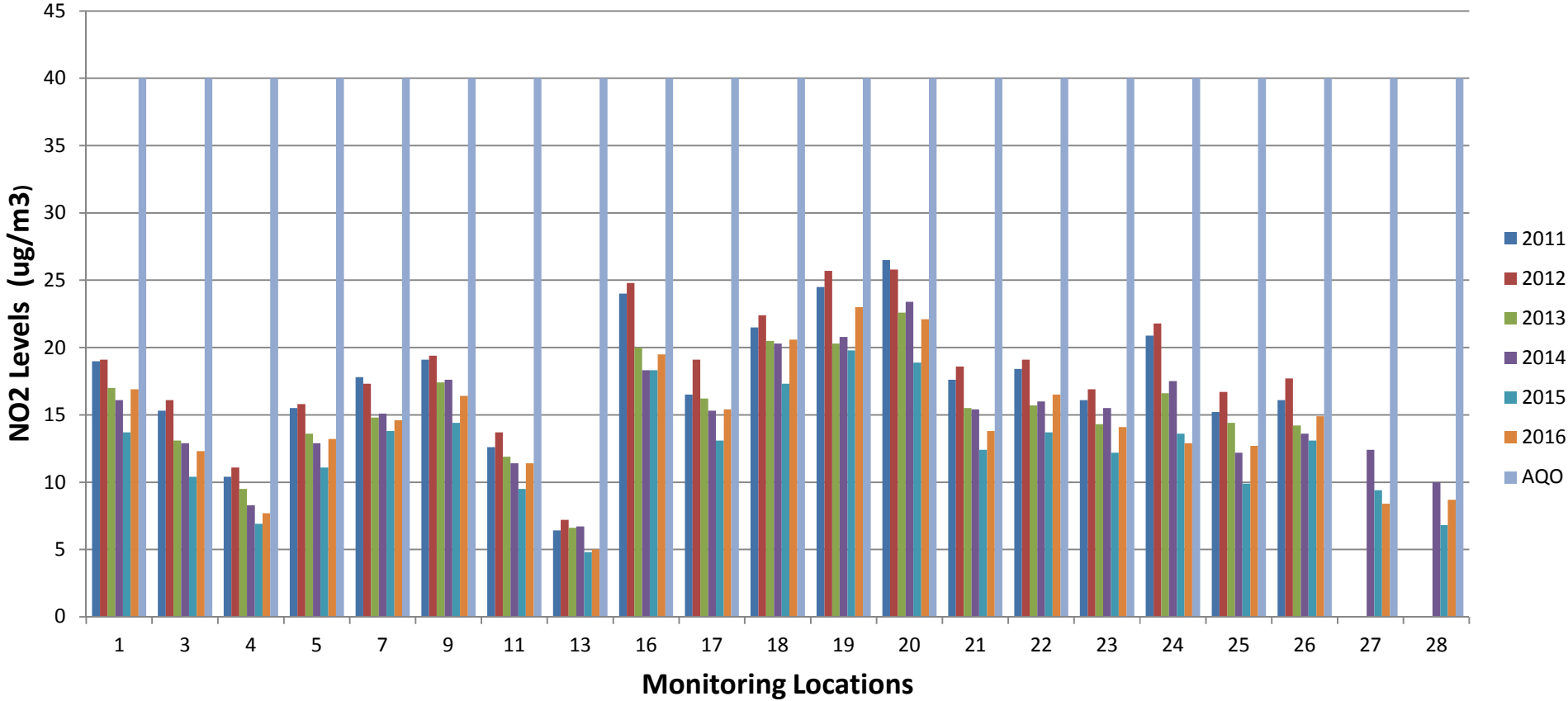


Table 2.3 Results of Nitrogen Dioxide Diffusion Tubes for 2009 through to and including 2016.

Site Name	Annual Mean Concentrations							
	2009 ( $\mu\text{g}/\text{m}^3$ ) Adjusted for bias (0.81 & 0.84)	2010 ( $\mu\text{g}/\text{m}^3$ ) Adjusted for bias (0.85)	2011( $\mu\text{g}/\text{m}^3$ ) Adjusted for bias (0.82)	2012( $\mu\text{g}/\text{m}^3$ ) Not Adjusted for bias	2013( $\mu\text{g}/\text{m}^3$ ) Adjusted for bias (0.87)	2014 ( $\mu\text{g}/\text{m}^3$ ) Adjusted for bias (0.97)	2015 ( $\mu\text{g}/\text{m}^3$ ) Adjusted for bias (0.95)	2016 ( $\mu\text{g}/\text{m}^3$ ) Adjusted for bias (1.03)
BGBC-01	22.9	21.8	19	19.1	17	16.1	13.7	16.9
BGBC-03	15.9	16.7	15.3	16.1	13.1	12.9	10.4	12.3
BGBC-04	10.7	11.5	10.4	11.1	9.5	8.3	6.9	7.7
BGBC-05	15.3	17.0	15.5	15.8	13.6	12.9	11.1	13.2
BGBC-07	18.3	19.5	17.8	17.3	14.8	15.1	13.8	14.6
BGBC-09	23.9	23.0	19.1	19.4	17.4	17.6	14.4	16.4
BGBC-11	14.7	14.5	12.6	13.7	11.9	11.4	9.5	11.4
BGBC-13	7.0	6.5	6.4	7.2	6.6	6.7	4.8	5
BGBC-16	21.7	23.5	24	24.8	20	18.3	18.3	19.5
BGBC-17	19.0	20.9	16.5	19.1	16.2	15.3	13.1	15.4
BGBC-18	21.8	23.5	21.5	22.4	20.5	20.3	17.3	20.6
BGBC-19	25.5	23.6	24.5	25.7	20.3	20.8	19.8	23
BGBC-20	25.4	26.5	26.5	25.8	22.6	23.4	18.9	22.1
BGBC-21	17.4	18.7	17.6	18.6	15.5	15.4	12.4	13.8
BGBC-22	18.7	20.5	18.4	19.1	15.7	16	13.7	16.5
BGBC-23	n/a	19.3	16.1	16.9	14.3	15.5	12.2	14.1
BGBC-24	n/a	18.7	20.9	21.8	16.6	17.5	13.6	12.9
BGBC-25	n/a	16.7	15.2	16.7	14.4	12.2	9.9	12.7
BGBC-26	n/a	17	16.1	17.7	14.2	13.6	13.1	14.9
BGBC-27	n/a	n/a	n/a	n/a	n/a	12.4	9.4	8.4
BGBC-28	n/a	n/a	n/a	n/a	n/a	10	6.8	8.7

### **2.2.2 Particulate Matter (PM<sub>10</sub>)**

No new automatic monitoring was undertaken for PM<sub>10</sub> during 2016.

The results obtained from the Automatic Monitoring Station which was located at Garnlydan Primary School obtained during 2009 and which were reported in the 2010 Progress Report remains the most recent information available.

In summary the results that were reported from the above monitoring exercise undertaken during 2009 indicated that the annual mean of 16.3µg/m<sup>3</sup> for PM<sub>10</sub> was well below the annual mean National Air Quality Objective of 40µg/m<sup>3</sup>.

### **2.2.3 Sulphur Dioxide (SO<sub>2</sub>)**

Blaenau Gwent CBC does not currently undertake any monitoring for Sulphur Dioxide.

### **2.2.4 Benzene**

Blaenau Gwent CBC does not currently undertake monitoring for Benzene.

### **2.2.5 Other Pollutants Monitored**

Blaenau Gwent CBC does not currently undertake any monitoring for 1,3 Butadiene or Carbon Dioxide.

### **2.2.6 Summary of Compliance with AQS Objectives**

Blaenau Gwent CBC has examined the results from monitoring in the borough. Concentrations are all below the objectives, therefore there is no need to proceed to a Detailed Assessment.

## **3 New Local Developments**

### **3.1 Road Traffic Sources**

Blaenau Gwent CBC confirms that there are no new/ newly identified narrow congested streets with residential properties close to the kerb or busy streets where people may spend one hour or more close to traffic. Also there are no new/newly identified roads with high flows of buses and/or HGVs.

Blaenau Gwent CBC confirms that there are no new/newly identified busy junctions or roads with significantly changed traffic flows within the local authority area. Also there are no new bus stations within the local authority area.

Construction works are continuing on the A465 Heads of the Valleys Road, Section 3 Brynmawr to Tredegar, Dualling scheme. The scheme has been reported previously in the 2012 Air Quality Updating & Screening Assessment Report for Blaenau Gwent CBC.

### **3.2 Other Transport Sources**

Blaenau Gwent CBC confirms there are no airports or ports within the local authority area. Also there are no locations where diesel or steam trains are regularly stationary for periods of 15 minutes or more, with potential for relevant exposure within 15m. Blaenau Gwent CBC also confirms that there are no locations with a large number of movements of diesel locomotives, and long term relevant exposure within 30m.

### **3.3 Industrial Sources**

Blaenau Gwent CBC confirms that there are no new or proposed industrial installations for which an air quality assessment has been carried out and there are no existing industrial installations where emissions have increased substantially or new relevant exposure has been introduced. Blaenau Gwent CBC also confirms that there are no new or significantly changed installations with no previous air quality assessment within the local authority area.

It should be noted however that whilst there have been no new industrial installations during 2015 for which an Air Quality Assessment would have been required, there have been a number of new businesses which have required an environmental permit from either Blaenau Gwent CBC or Natural Resources Wales. None of the new installations

## **Blaenau Gwent County Borough Council**

have been assessed as being likely to have a significant impact on the air quality within the Borough either individually or as a result of the cumulative impact of emissions.

A list of the current Part A1, A2 and Part B processes within the Borough previously regulated under the Pollution Prevention (England and Wales) Regulations 2000 (as amended) and the Environmental Permitting (England and Wales) Regulations 2007 (as amended), and which are now regulated under the Environmental Permitting (England and Wales) Regulations 2010 (as amended) was provided in this appendices of the 2011 Progress Report. There have been no significant changes to any of the existing Part A1, A2 and B processes since the 2011 Progress Report that would be likely to have a significant impact on air quality.

Blaenau Gwent CBC confirms that there are no major fuel (petrol) storage depots, no new petrol stations or no poultry farms with the local authority area.

### **3.4 Commercial and Domestic Sources**

Blaenau Gwent CBC confirms that there are no biomass combustion plant and there are no areas of significant domestic solid fuel burning within the local authority area.

### **3.5 New Developments with Fugitive or Uncontrolled Sources**

Blaenau Gwent CBC confirms that there no new potential sources of fugitive or uncontrolled particulate matter, new landfill sites, quarries, unmade haulage roads on industrial sites within the local authority area.

Blaenau Gwent CBC confirms that there are no new or newly identified local developments which may have an impact on air quality within the Local Authority area.

Blaenau Gwent CBC confirms that all the following have been considered:

- **Road traffic sources**
- **Other transport sources**
- **Industrial sources**
- **Commercial and domestic sources**
- **New developments with fugitive or uncontrolled sources.**

## **4 Local / Regional Air Quality Strategy**

### **4.1 Local Air Quality Management Strategy**

Blaenau Gwent CBC has a Departmental Air Pollution Control Policy and Procedure document to facilitate the management of Air Quality with the Borough.

Blaenau Gwent CBC has not developed an air quality strategy and at this time does not propose to do so.

### **4.2 Regional Air Quality Management Strategy**

Blaenau Gwent CBC actively participates in the work of the Welsh Air Quality Forum which assists in co-ordinating the management of Air Quality at an all Wales level amongst the 22 Local Authorities and other partners.

Further information regarding the work of the Welsh Air Quality Forum is available at

<http://www.welshairquality.co.uk/>



## 5 Planning Applications

### 5.1 Planning Consultation Policy

Each week a list of new planning applications that are received by the Planning Division is provided to the Environmental Protection Team within the Environmental Health Department. The Environmental Protection Team then examines the applications that have been received and requests further details in relation to any applications that may have the potential to impact of local air quality.

Consultation with the Planning Applicant and the Planning Division will take place for any developments that are identified as having the potential to have a significant impact on air quality. The applicant may then be required to submit an Environmental Impact Assessment or an air quality assessment as necessary prior to any planning permission being granted.

### 5.2 New Planning Applications

Each planning application is judged on its merits and due regard is given to the Planning Policy Wales document regarding Air Quality published by the Welsh Assembly Government, and other relevant guidance.

A copy of Blaenau Gwent CBC Unitary Development Plan (UDP) and further information regarding the planning process within Blaenau Gwent and the Local Authorities policies regarding land use and development control is available at <http://www.blaenau-gwent.gov.uk/business/7725.asp>

A link to the Local Development Plan (LDP) is also available at the above website.

The Planning Division classify applications that are received into minor and major developments in accordance with the Welsh Office Planning Statistics guidance. Major developments are classified as being the following:

- major dwelling is 10 or more dwellings or if an outline application 0.5 hectares
- For other types of applications major equates to 1000m<sup>2</sup> floor area or 1 hectare if the application is in outline

**Table 3.1: Applications For Major Developments Received And Approved During 2015**

Planning Reference	Type of development	Location	Potential Impact on Local Air Quality
C/2016/0231	Residential development of 14 houses (social housing) (full)	Former Aneurin Bevan Residential Home, Ashvale, Tredegar.	Negligible
C/2016/0158	Erection of two buildings for Class B1/B2/B8 (full)	Units 39 & 40 Rassau Industrial Estate, Rassau, Ebbw Vale.	Negligible
C/2015/0382	Earthworks including importation of material, re-profiling of existing contours (full)	Ben Wards Fields, Brynmawr.	Negligible
C/2016/0226	Outline Planning consent for the proposed construction of a new single form entry primary school.	Land adjacent to Bethany Baptist Chapel, Six Bells Road, Six Bells, Abertillery.	Negligible

### 5.3 Major Planning Applications Approved 2016

None of the above major planning applications that were received and approved in 2016 were considered to have a potential impact on air quality within the Blaenau Gwent area. A major planning application was received in relation to a tyre recovery and recycling process but the application was rejected.

### 5.4 Major Planning Applications 2017

No major planning applications were received by Blaenau Gwent CBC in 2017, at the time of writing this report, that were identified as having the potential to impact on local air quality.

## 6 Air Quality Planning Policies

Blaenau Gwent CBC does not have a specific air quality planning policy however it is outlined as a development management policy within the Local Development Plan that 'the proposal does not result in airborne emissions which have an unacceptable effect on the health, amenity or natural environment of the surrounding area, taking into account cumulative effects of other proposed or existing sources of air pollution in the vicinity.'

The environmental health section of Blaenau Gwent CBC has developed draft supplementary planning guidance for developers on air quality which our planning policy section are looking to go out for consultation on in the near future .

## 7 Local Transport Plans and Strategies

Local Authorities are now required to produce individual transport plans however the South East Wales Valleys Authorities (Blaenau Gwent, Caerphilly, Merthyr Tydfil, Rhondda Cynon Taff and Torfean) got together produced a joint plan that was published in January 2015.

The South East Wales Valleys Local Transport Plan (January 2015) can be viewed at the following website:

<http://www.rctcbc.gov.uk/EN/Resident/ParkingRoadsandTravel/Travel/TransportSchemesandPolicies/TransportPolicyandlocalTransportPlan.aspx>

The local transport plan sets down the vision and objectives for transport in the SE Wales Valleys area and provides a short and long term programme for interventions to work towards achieving these goals. The short term programme sets down those schemes that are priorities for 5 years up to 2020. The longer term programme identifies aspirations up to 2030.

Part of the process of the development of the Local Transport Plan requires the production of a Strategic Environmental Assessment (SEA) which will give consideration to air quality issues.

The Strategic Environmental Assessment Baseline Study Report and Scoping Report are also available at the above website.

## **8 Climate Change Strategies**

As part of its commitment to corporate contribution towards the reduction of greenhouse gases emissions from all its activities and as part of the Climate Change programme Blaenau Gwent CBC has developed an Energy Policy to ensure the effective and efficient use and management of energy.

The Energy Policy compliments the seven core values of the Councils Community plan and contributes to the overall strategic aims of the Local Authority.

The Energy Policy was produced in 2012 and was due to be reviewed and updated however due to staff resource issues this has not happened and there is currently no timescale in place for when this work will be done. A copy of the Energy Policy is found in Appendix 5 of this report.

## **9 Conclusions and Proposed Actions**

### **9.1 Conclusions from New Monitoring Data**

Blaenau Gwent CBC has examined the results from monitoring in the Borough of Blaenau Gwent for the period of 2016. Concentrations are all below the relevant UK National Air Quality Objectives.

### **9.2 Conclusions relating to New Local Developments**

Blaenau Gwent CBC has assessed all new or significantly changed sources in the Borough and relevant new or significantly changes sources in nearby Local Authority areas and has concluded that it is unlikely that the impact of these will result in a potential exceedance of any of the UK National Air Quality Objectives within the Borough.

### **9.3 Other Conclusions**

This report has not identified the need to proceed to a Detailed Assessment for any pollutant relevant to the UK National Air Quality Objectives.

### **9.4 Proposed Actions**

Blaenau Gwent CBC will continue to monitor for Nitrogen Dioxide subject to the continuous review and assessment of the existing monitoring sites. Monitoring for the calendar year of 2017 will be carried out at all monitoring locations identified in Table 2.1.2 of this report.

It is proposed that the results of monitoring carried out during the calendar year of 2017 will be presented in the 2018 Air Quality Progress Report which will be prepared as part of the Updating and Screening Assessment process.

## 10 References

- Blaenau Gwent CBC, (1999), 1999 First Stage Review and Assessment, <http://www.blaenau-gwent.gov.uk/environment/2774.asp>
- Blaenau Gwent CBC, (2003), 2003 Updating and Screening Assessment, <http://www.blaenau-gwent.gov.uk/environment/2774.asp>
- Blaenau Gwent CBC, (2004), 2004 Progress Report, <http://www.blaenau-gwent.gov.uk/environment/2774.asp>
- Blaenau Gwent CBC, (2005), 2005 Progress Report, <http://www.blaenau-gwent.gov.uk/environment/2774.asp>
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- Blaenau Gwent CBC, (2007), 2007 Progress Report, <http://www.blaenau-gwent.gov.uk/environment/2774.asp>
- Blaenau Gwent CBC, (2008), 2008 Progress Report, <http://www.blaenau-gwent.gov.uk/environment/2774.asp>
- Blaenau Gwent CBC, (2009), 2009 Updating and Screening Assessment, <http://www.blaenau-gwent.gov.uk/environment/2774.asp>
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- Blaenau Gwent CBC, (2011) 2011 Progress Report, <http://www.blaenau-gwent.gov.uk/environment/2774.asp>
- Capita Symonds, (2011), Travel In Greater Gwent 2010 – Summary Report, Capita Symonds, Cwmbran.
- DEFRA, (2009), Local Air Quality Management - Technical Guidance LAQM.TG(09), DEFRA.
- Air Quality Review and Assessment Helpdesk Website, <http://laqm.defra.gov.uk/>
- Nitrogen Dioxide Diffusion Tube Precision Results for Laboratories. <http://laqm.defra.gov.uk/diffusion-tubes/precision.html>
- WASP Scheme results for Laboratory- <http://laqm.defra.gov.uk/diffusion-tubes/qa-qc-framework.html>

## Appendices



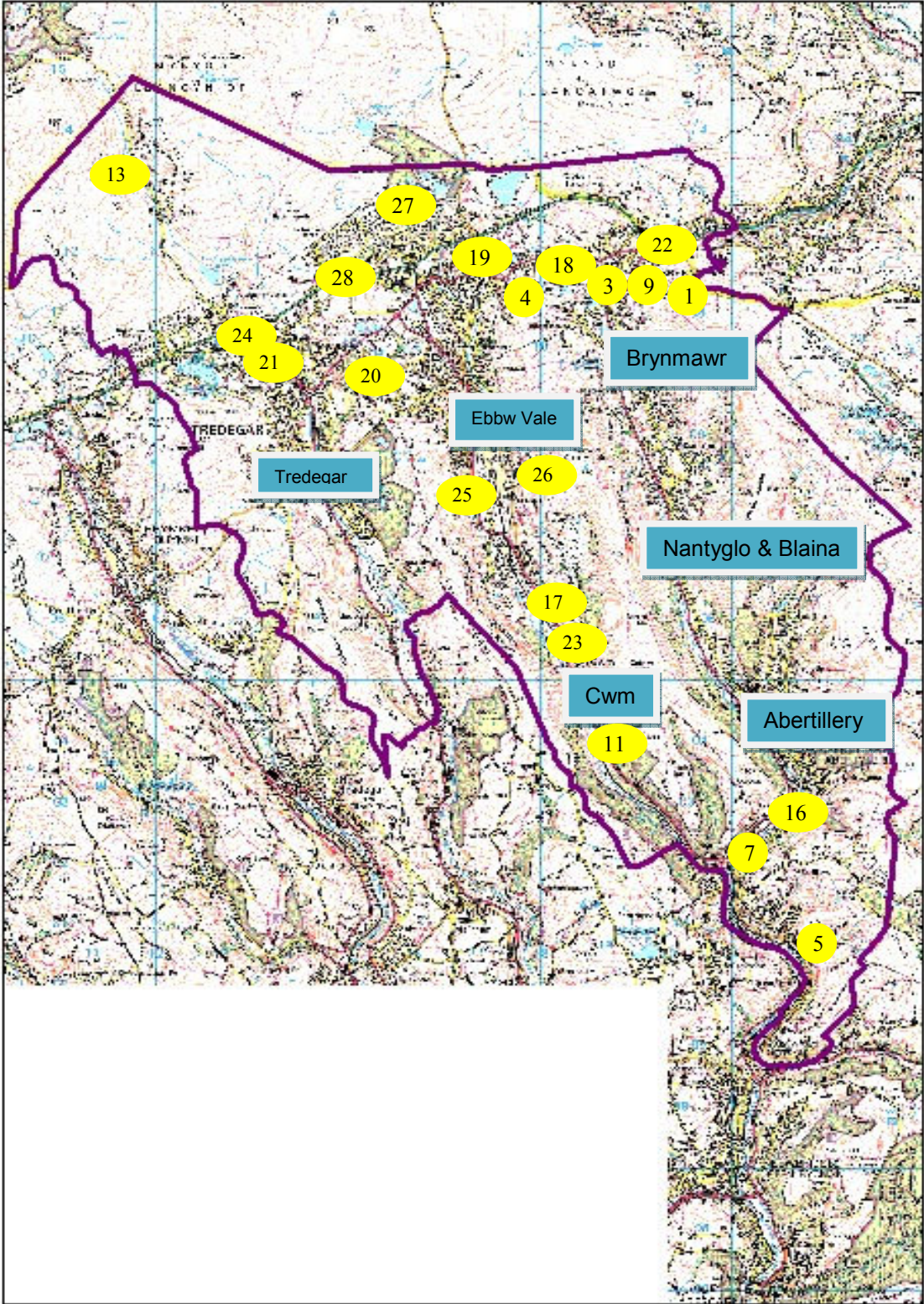
# Appendix 1

Administrative area of Blaenau Gwent CBC



# Appendix 2

Map Indicating Locations of Nitrogen Dioxide Diffusion Tubes.



# Appendix 3

Location plans of all diffusion tubes monitoring within Blaenau Gwent 2016

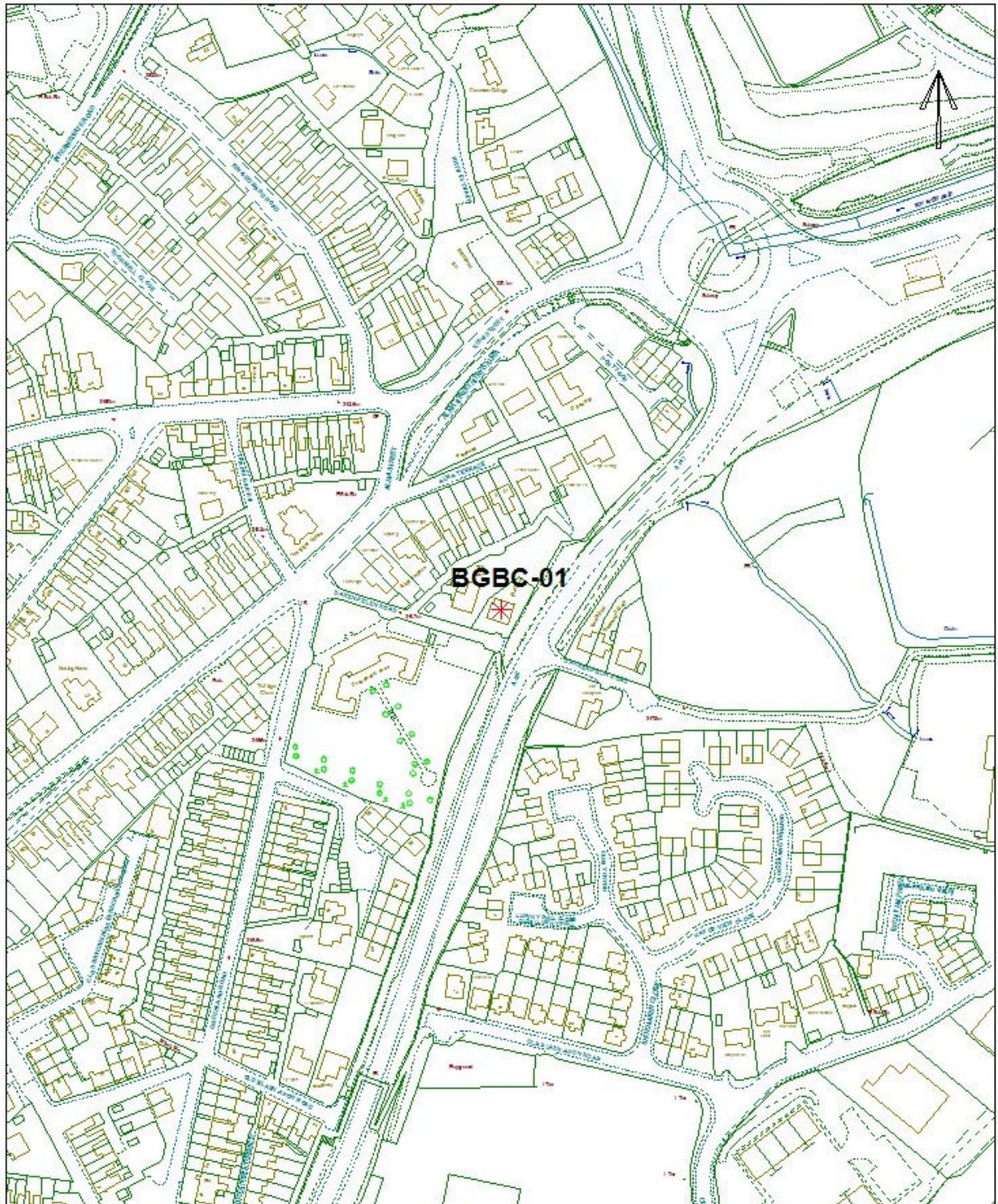


# Blaenau Gwent County Borough Council

**Location:** BGBC-01, The Darren, Daren- Felen Road, Brynmawr

**Easting:** 319532 **Northing:** 211958

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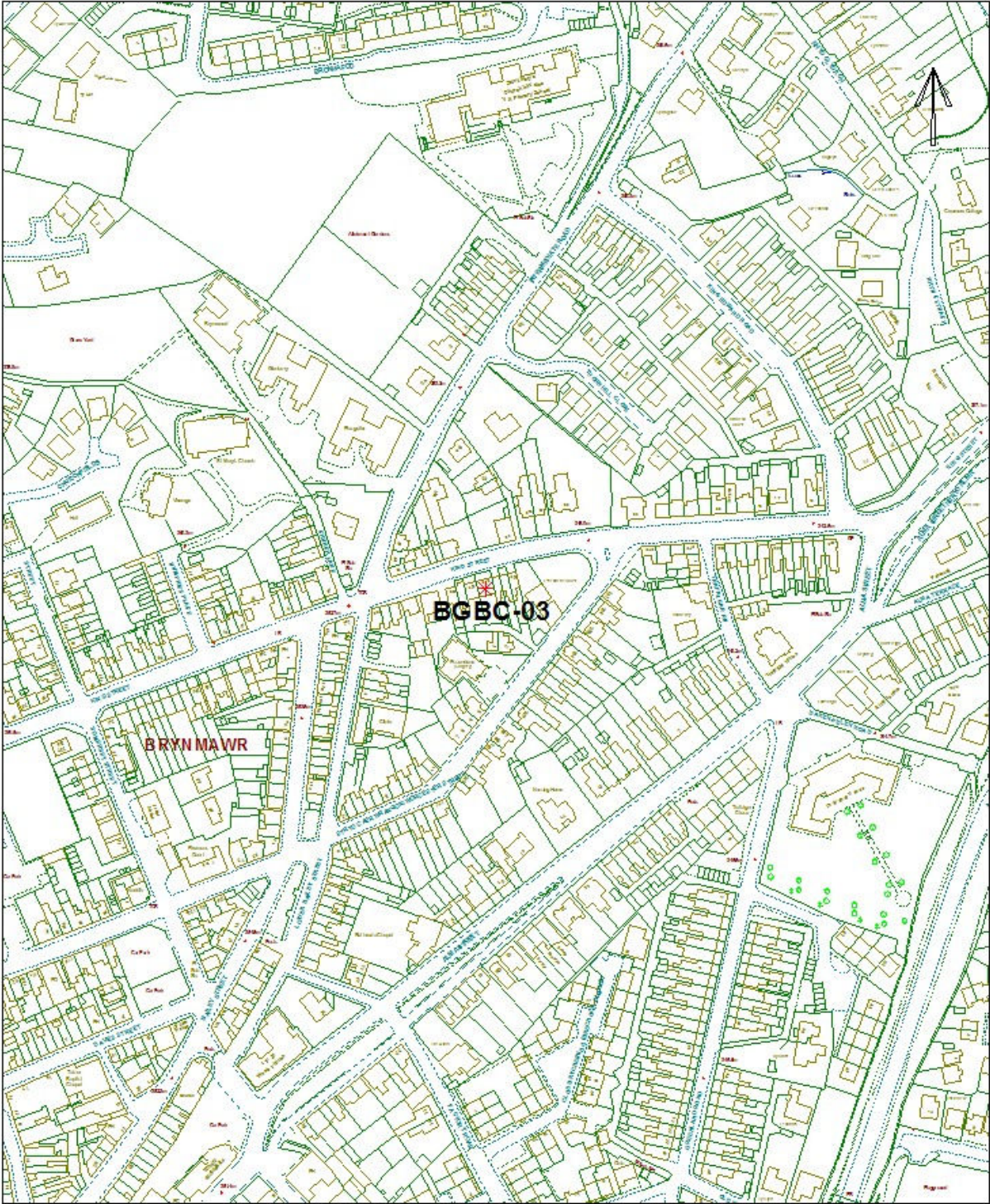


# Blaenau Gwent County Borough Council

**Location:** BGBC-03, 272 King Street, Brynmawr.

**Easting:** 319299 **Northing:** 212018

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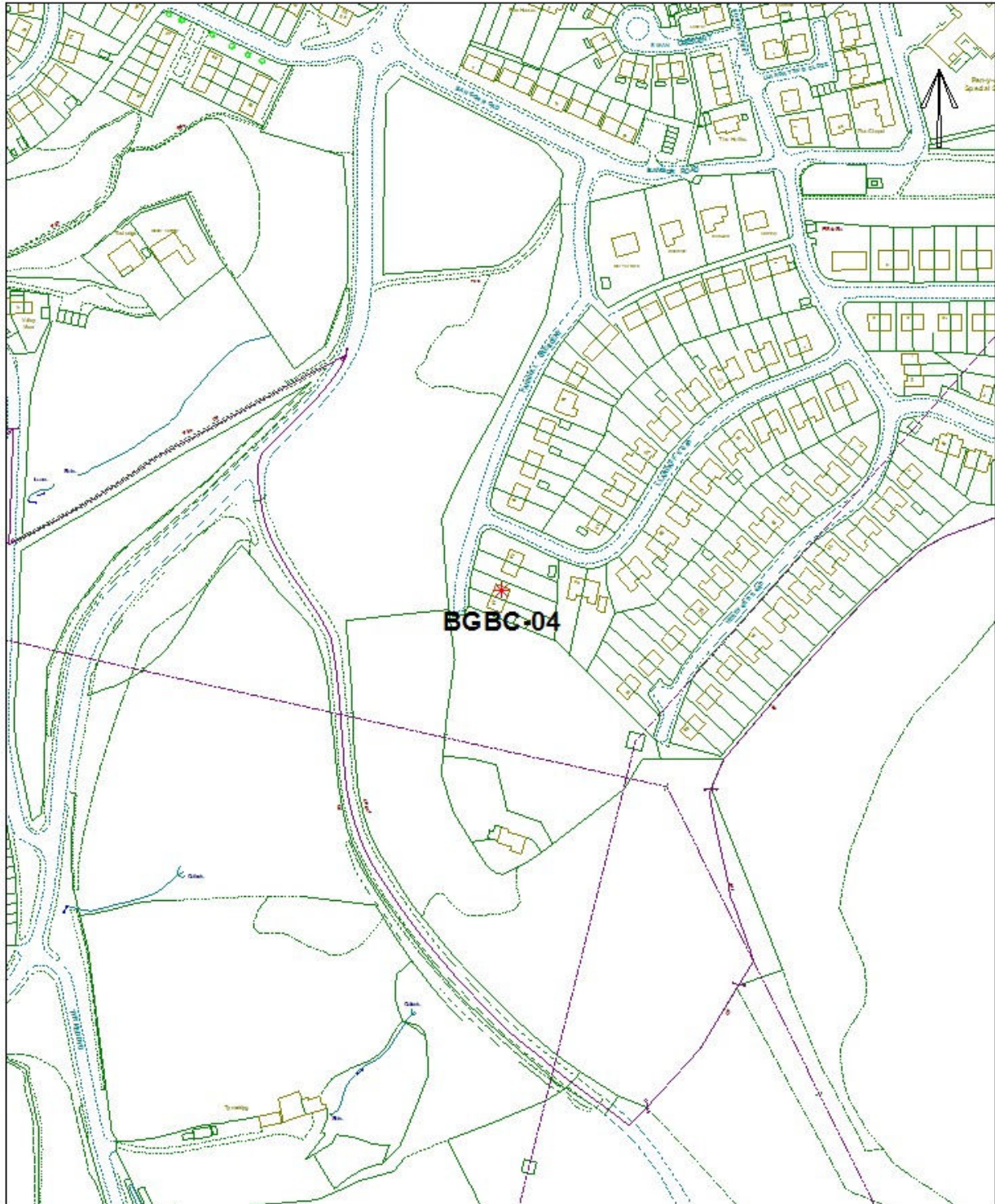


## Blaenau Gwent County Borough Council

Location: BGBC-04, 22 Parkhill, Beaufort, Ebbw Vale.

Easting: 317299 Northing: 211282

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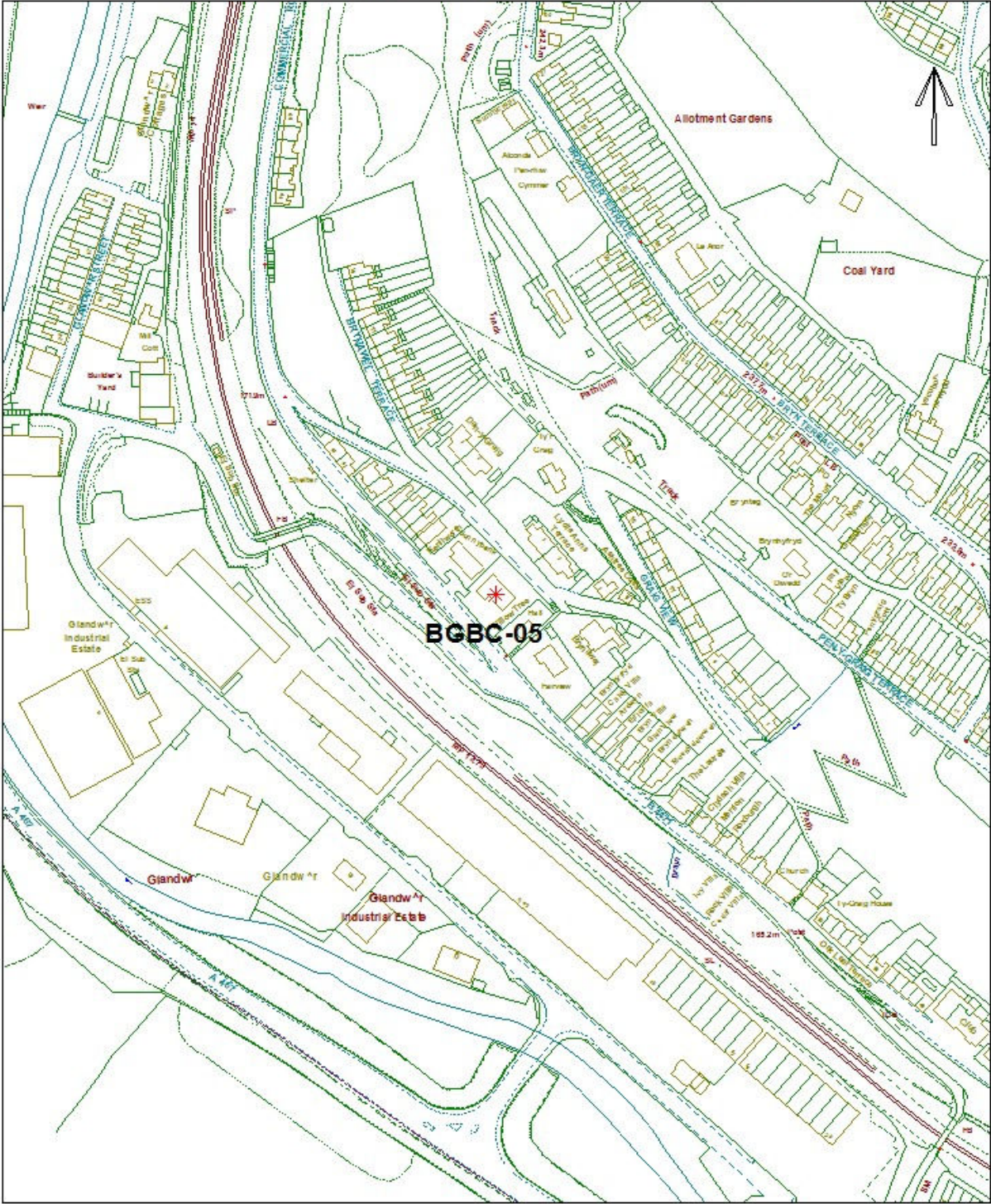


# Blaenau Gwent County Borough Council

**Location:** BGBC-05, Willow Tree Bungalow, Aberbeeg

**Easting:** 321144 **Northing:** 201114

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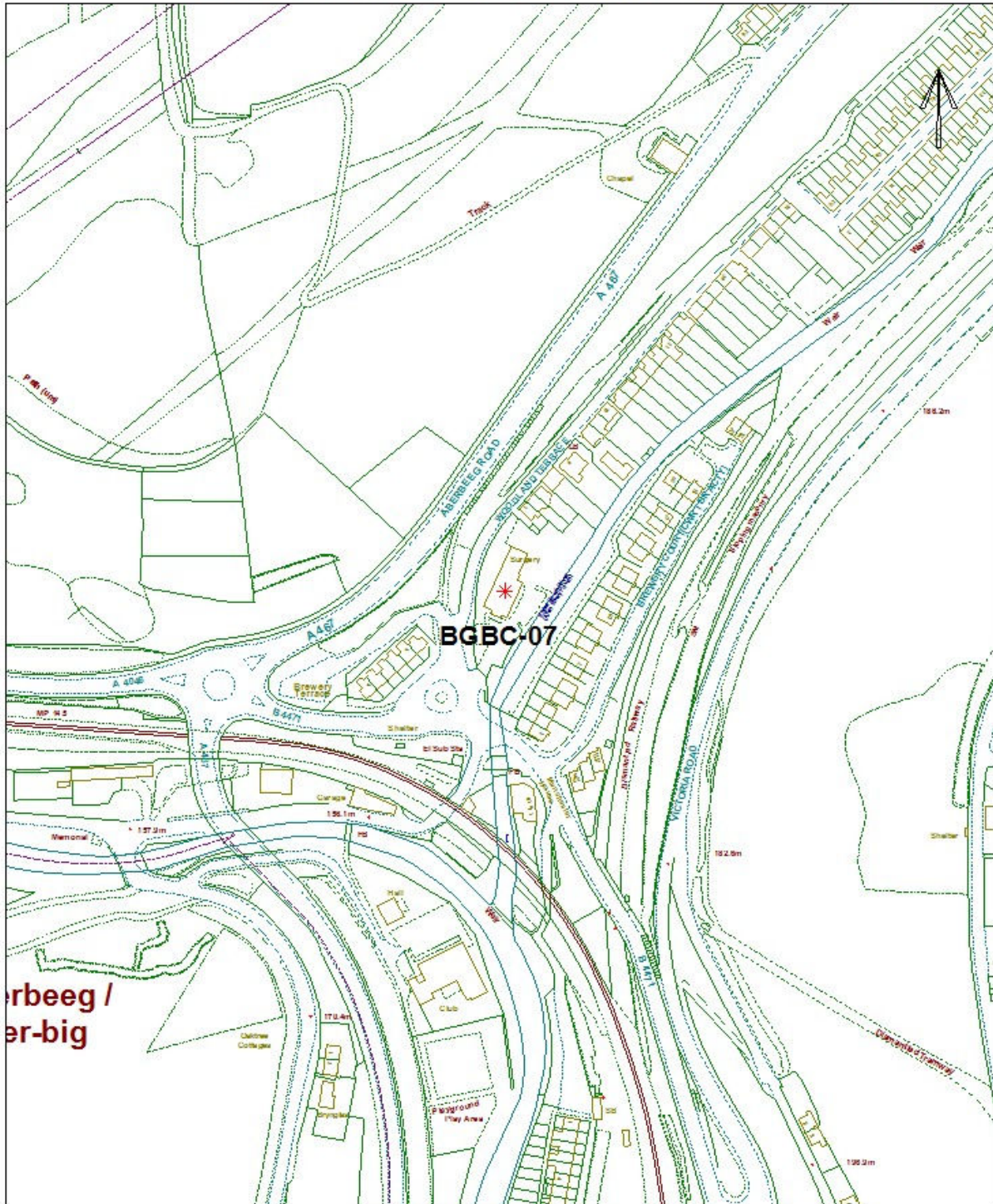


# Blaenau Gwent County Borough Council

Location: BGBC-07, Aberbeeg Medical Centre, Aberbeeg.

Easting: 320955 Northing: 202018

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# Blaenau Gwent County Borough Council

**Location:** BGBC-09, Ynys Dawel, Brynmawr

**Easting:** 319554 **Northing:** 211995

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## Blaenau Gwent County Borough Council

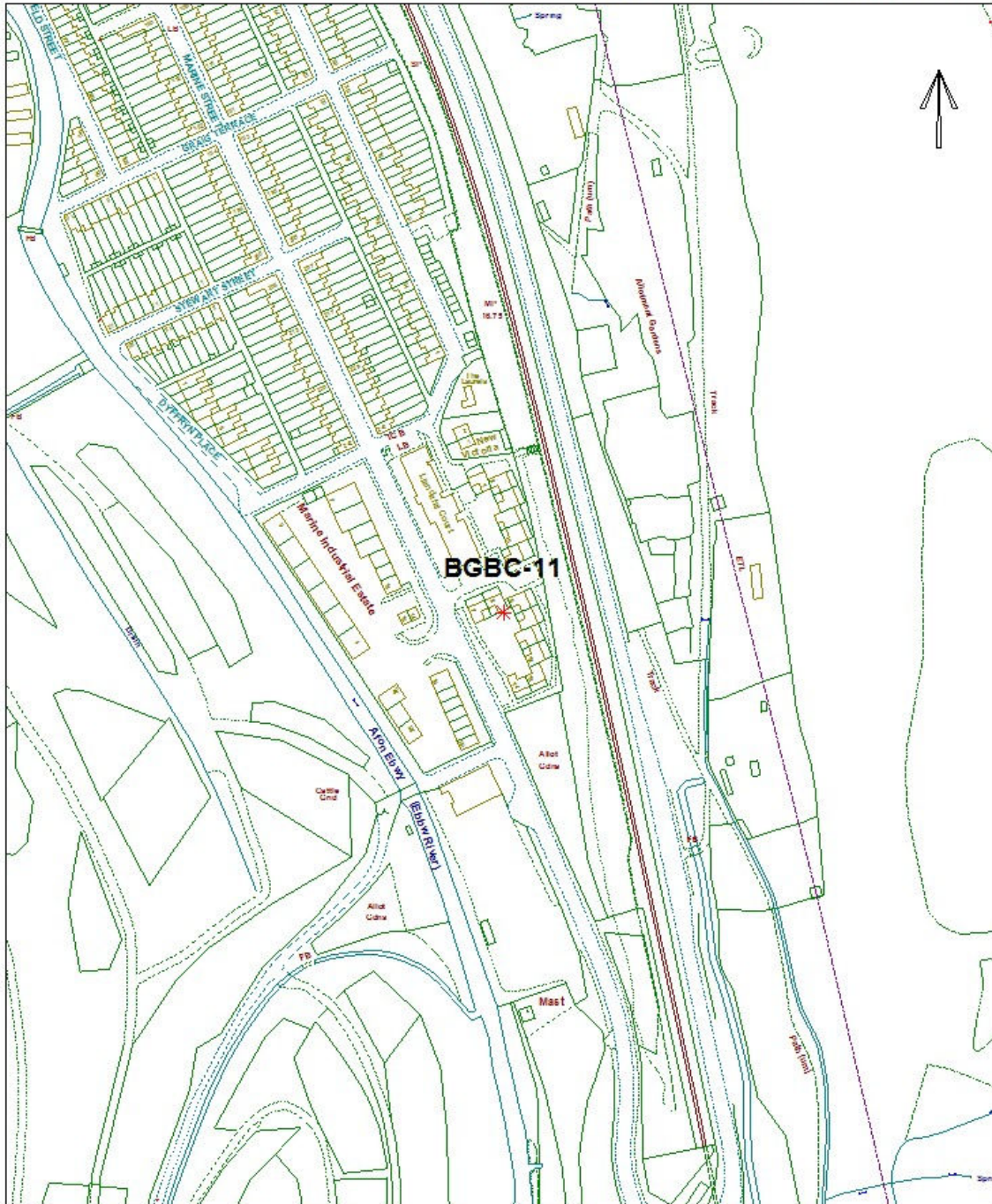
Location: BGBC-11, 8 Cwm Graig Bungalows, Marine Street, Cwm

Easting: 318793 Northing: 204589

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Atgynhychwyd o Fapiau'r Ordnance Survey chaniatod Rheolwr Llyfffa Ei Mawrhydi (c) Hawlfraint y Goron.

Y mae atgynhyrchu heb awdurdod yn torri Hawlfraint y Goron a gall arwain at erlyniad neu achosion sifil. BGBC - LA09002L.



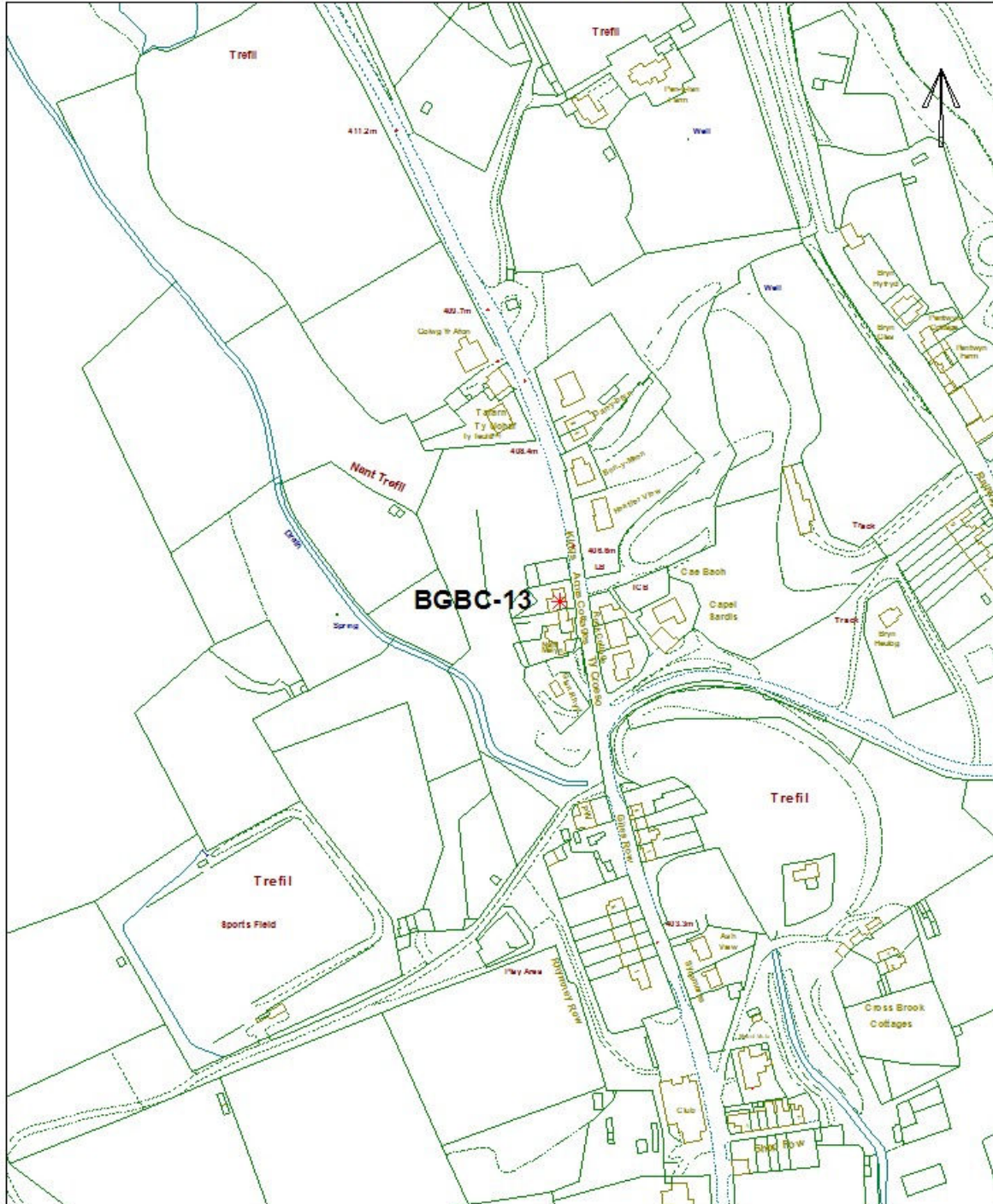


# Blaenau Gwent County Borough Council

Location: BGBC-13, 3 Kings Arms Cottages, Trefil.

Easting: 311983 Northing: 212779

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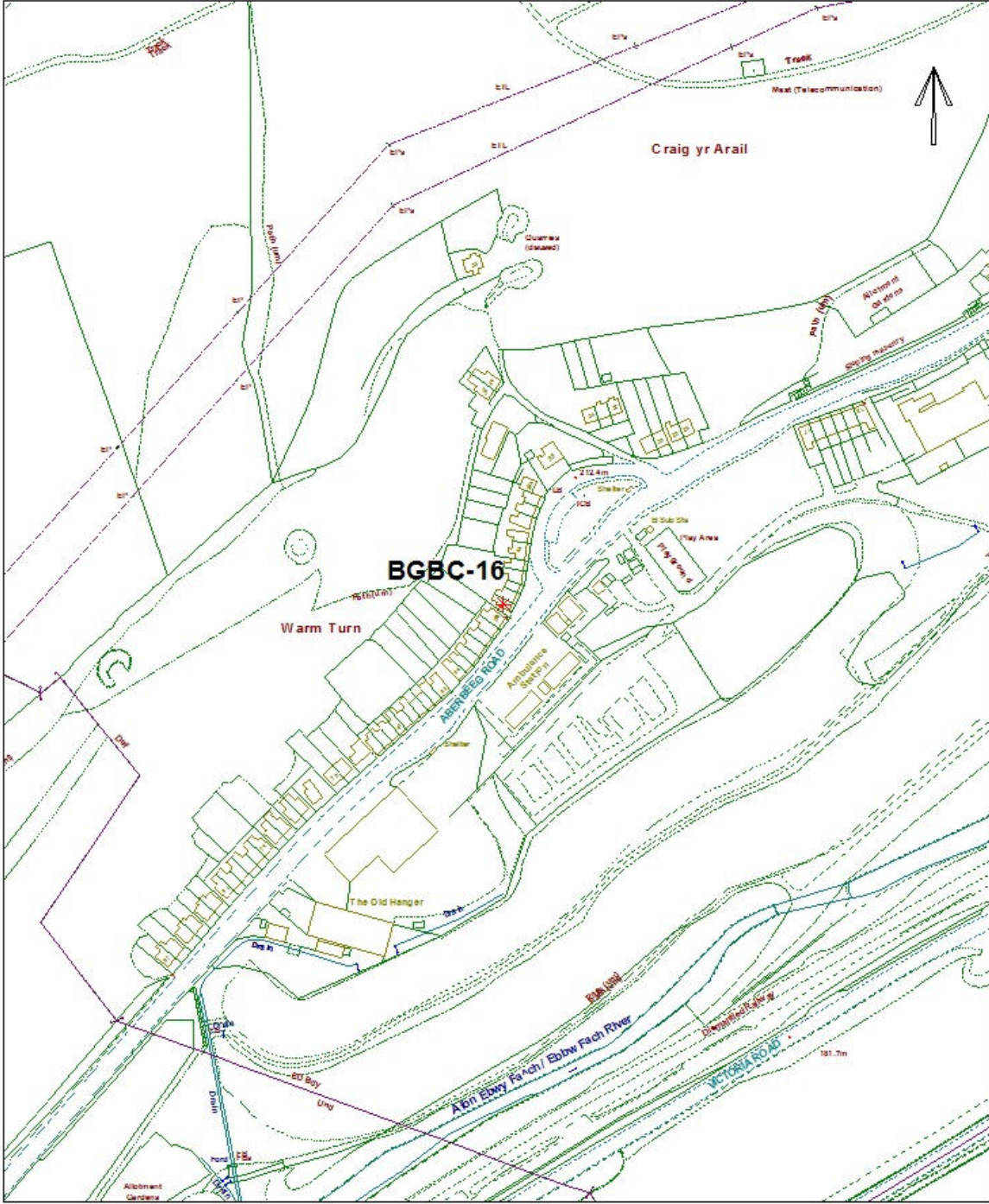


# Blaenau Gwent County Borough Council

Location: BGBC-16, 49 Aberbeeg Road, Aberbeeg.

Easting: 321428 Northing: 202672

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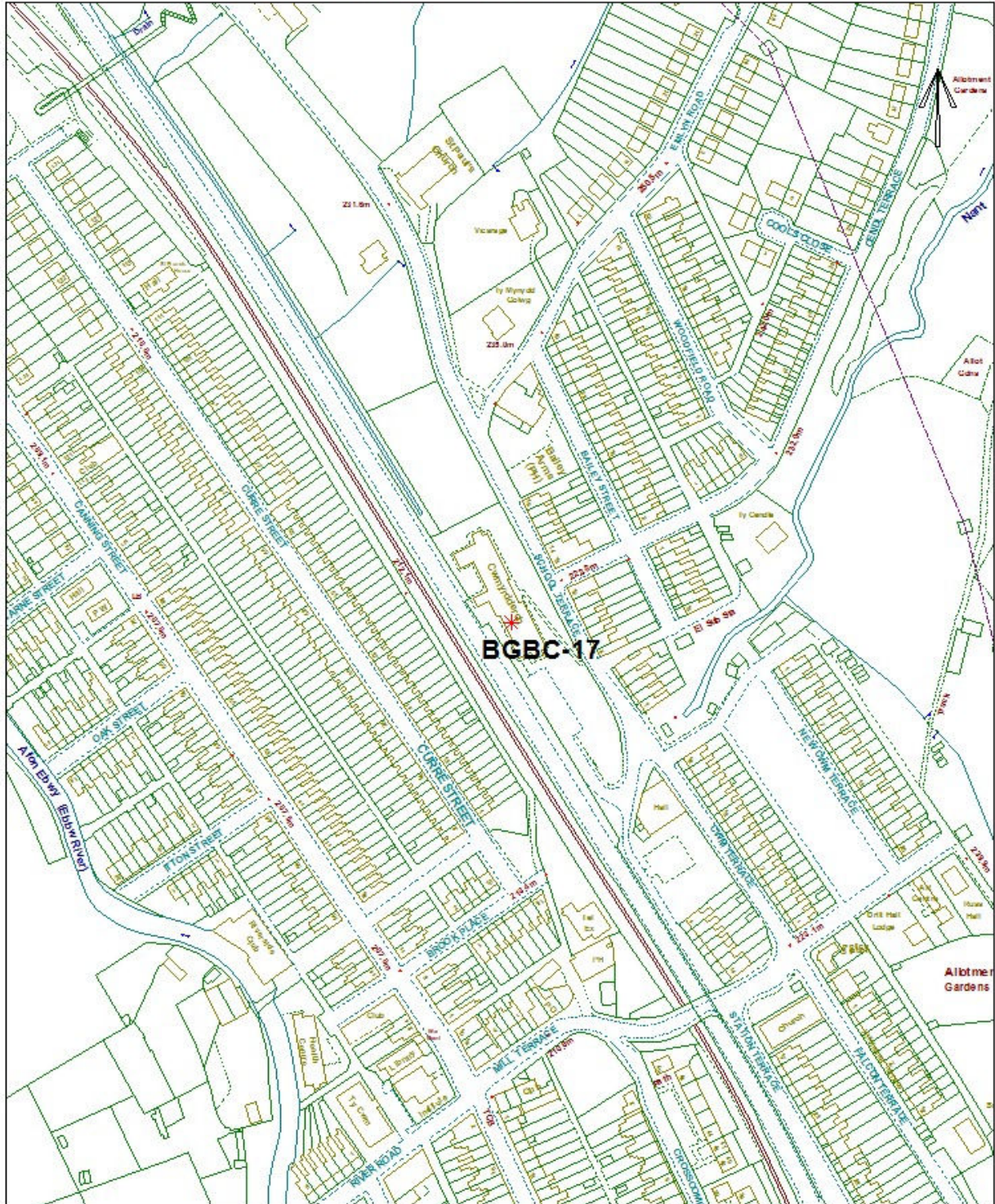


# Blaenau Gwent County Borough Council

Location: BGBC-17, Cwmryrderch Court, School Terrace, Cwm.,

Easting: 318441 Northing: 205540

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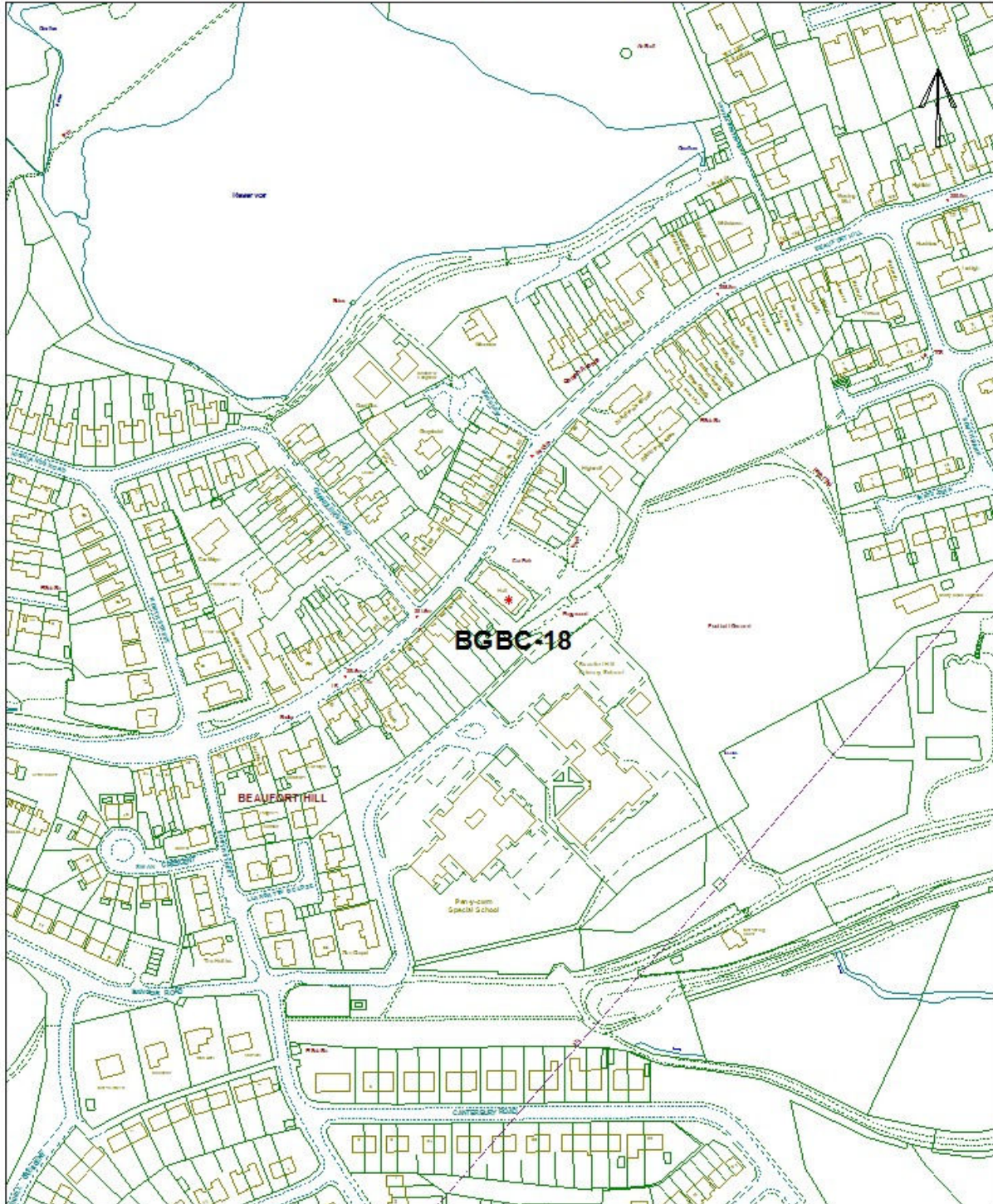


# Blaenau Gwent County Borough Council

**Location:** BGBC-18, Welfare Hall, Beaufort Hill, Ebbw Vale

**Easting:** 317549 **Northing:** 211681

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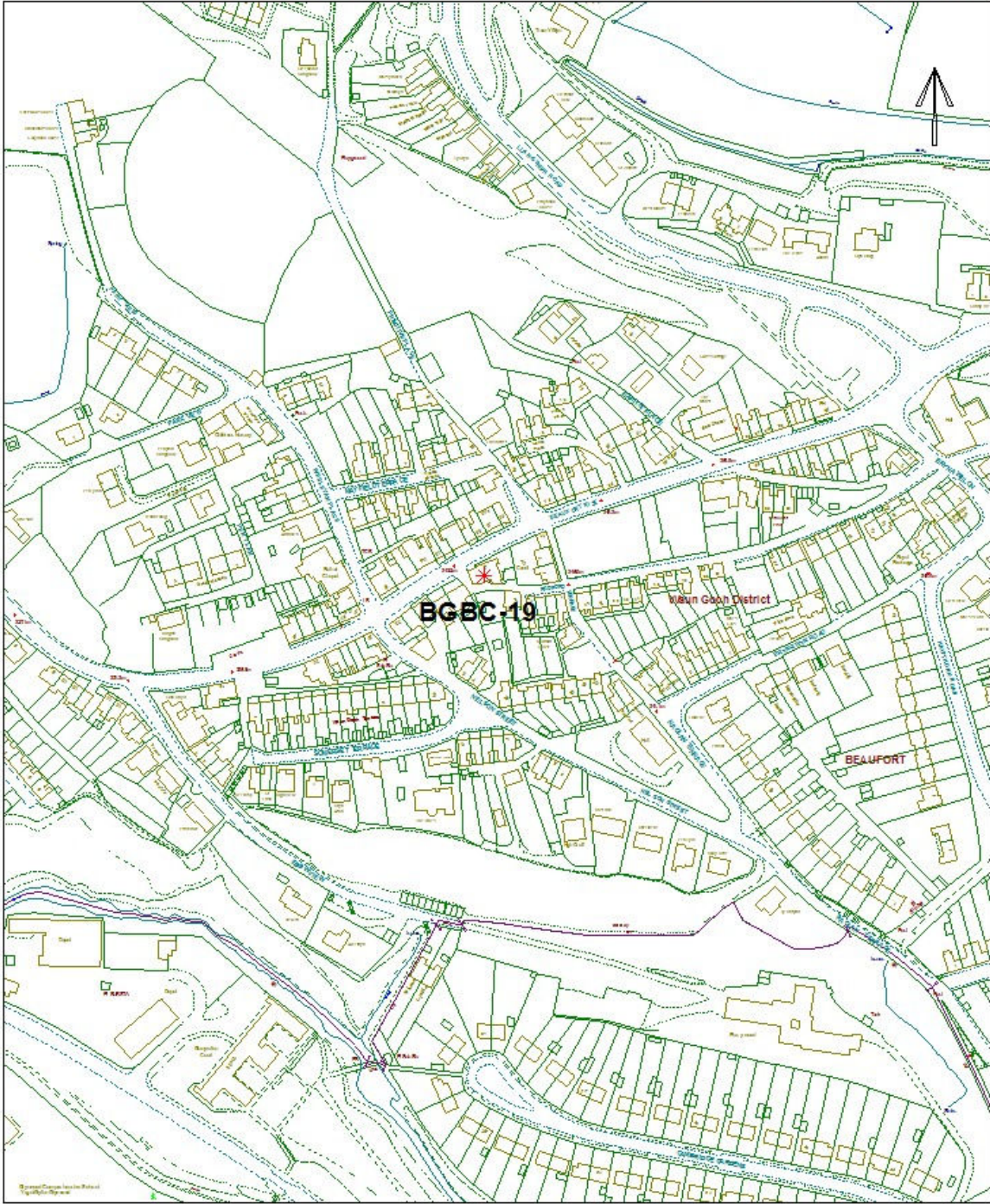


# Blaenau Gwent County Borough Council

Location: BGBC-19, 42 Beaufort Rise, Ebbw Vale

Easting: 316674 Northing: 211582

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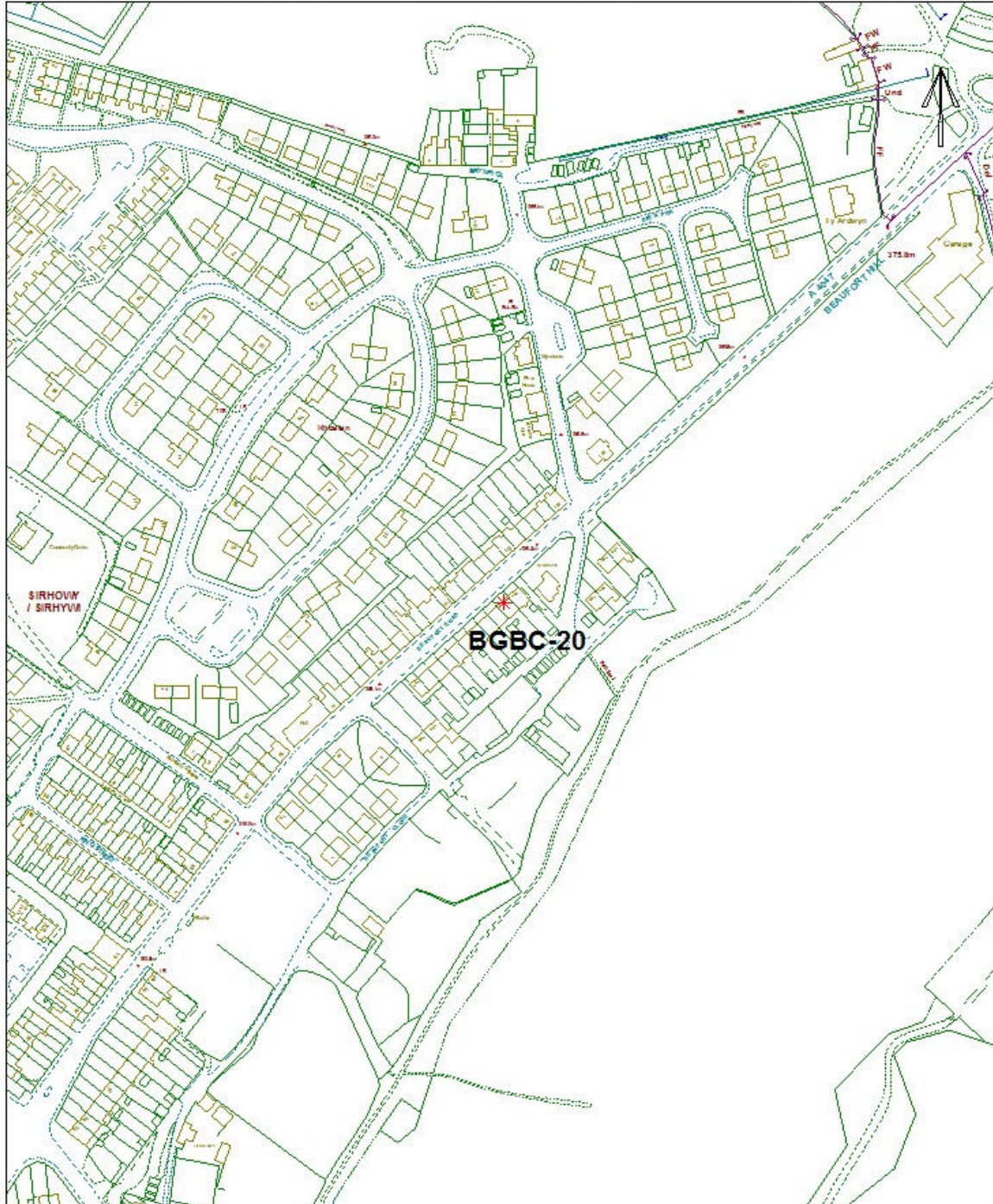


# Blaenau Gwent County Borough Council

Location: BGBC-20, 122 Beaufort Road, Tredegar.

Easting: 314854 Northing: 210243

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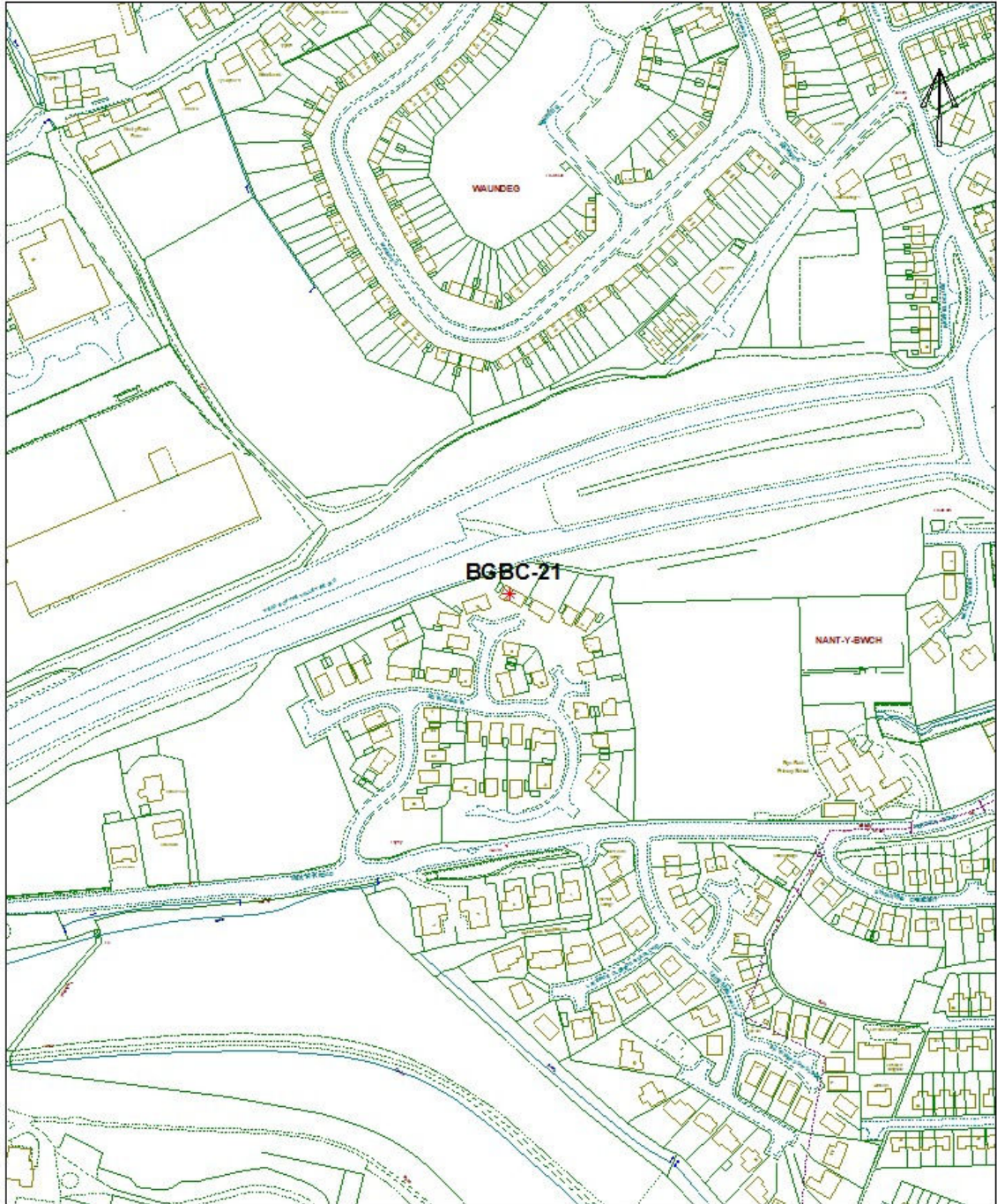


## Blaenau Gwent County Borough Council

Location: BGBC-21, 14 Bryn Rhosyn, Merthyr Road, Tredegar.

Easting: 312846 Northing: 210583

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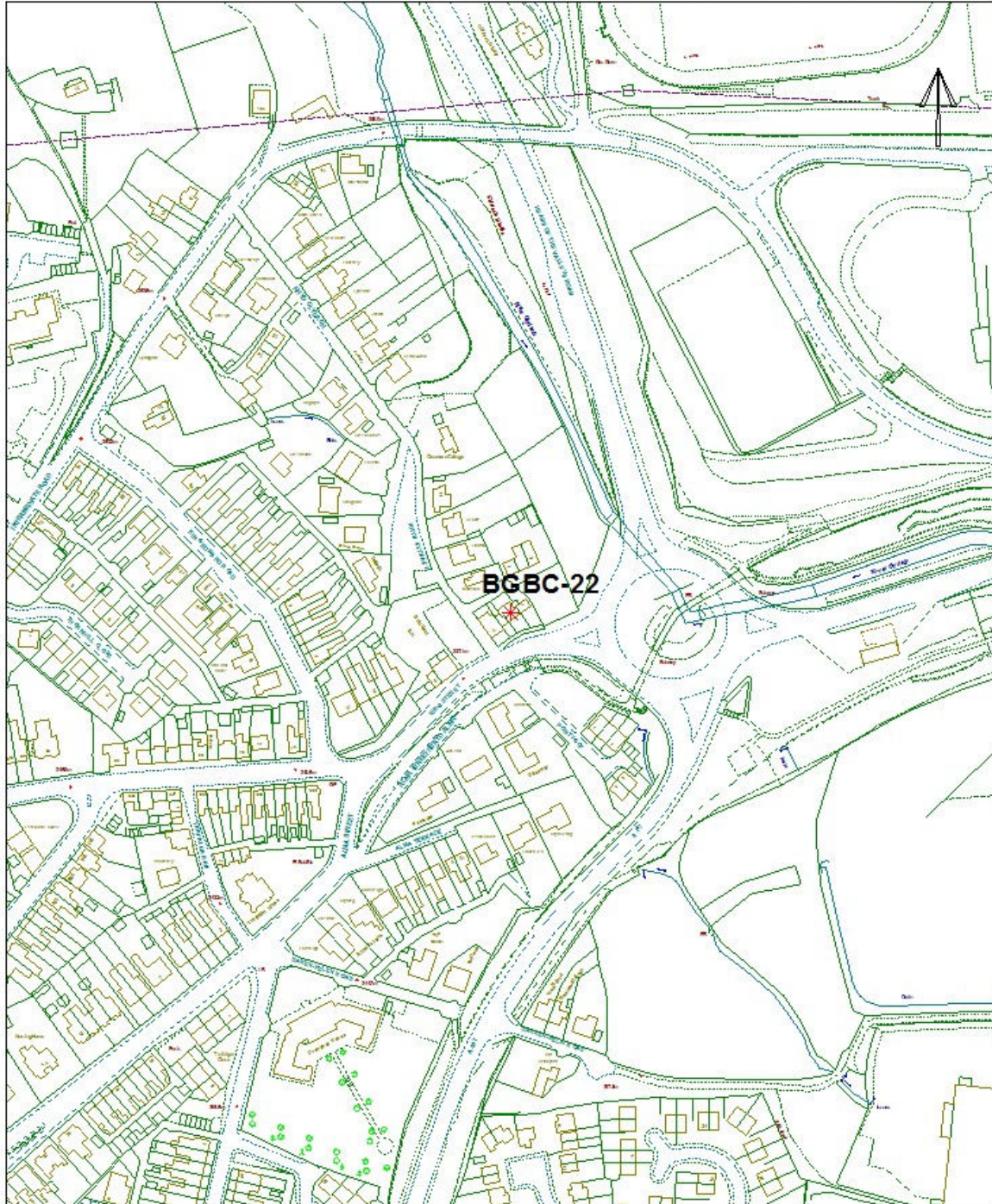


# Blaenau Gwent County Borough Council

Location: BGBC-22, 2 King Street, Brynmawr.

Easting: 319553 Northing: 212137

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Y mae atgynhychu heb awdurdod yn torri Hawlfraint y Goron a gall arwain at erlyniad neu achosion sifil. BGBC - LA09002L*



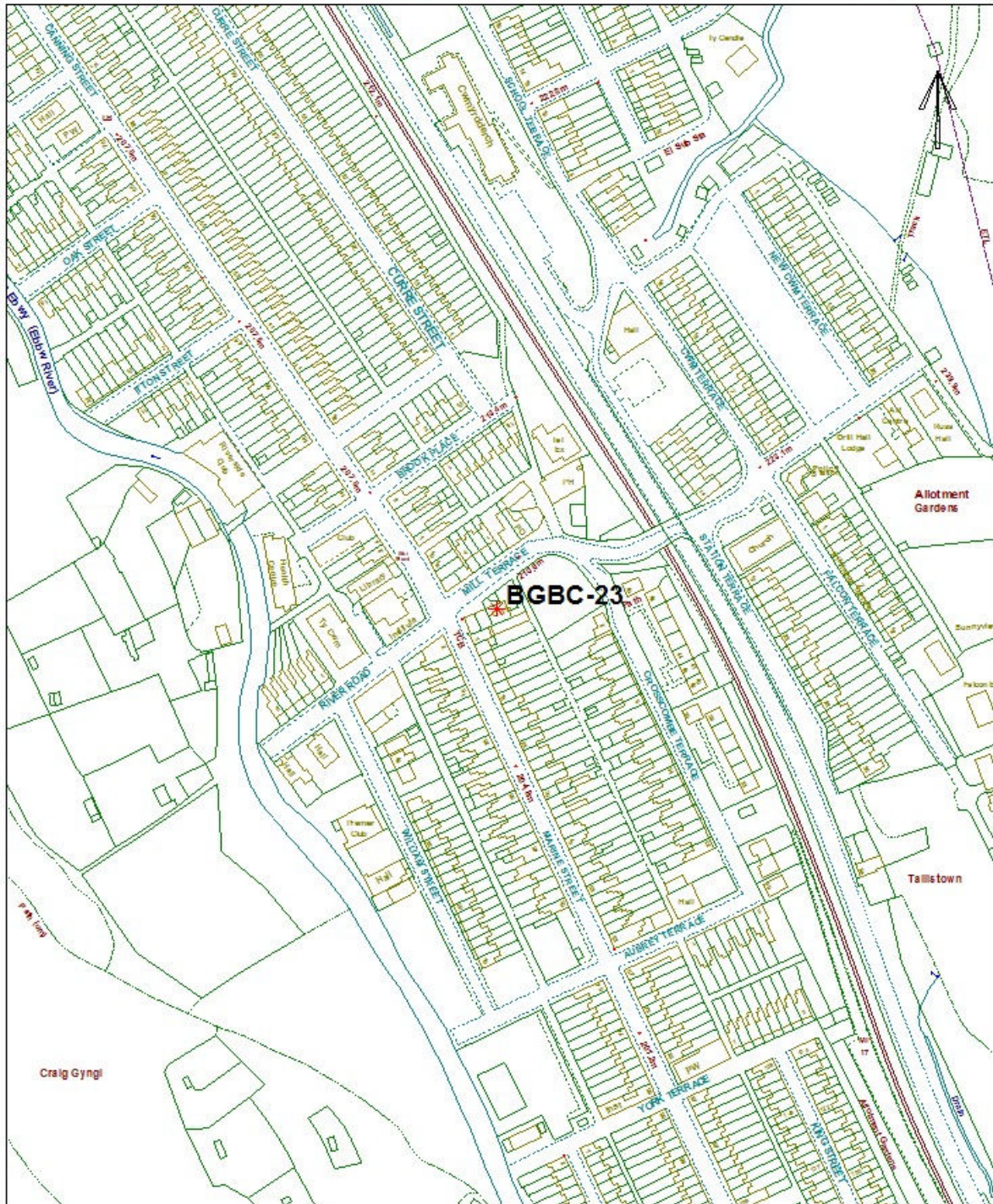


# Blaenau Gwent County Borough Council

**Location:** BGBC-23, Cwm Conservative Club, Mill Terrace, Cwm

**Easting:** 318456 **Northing:** 205308

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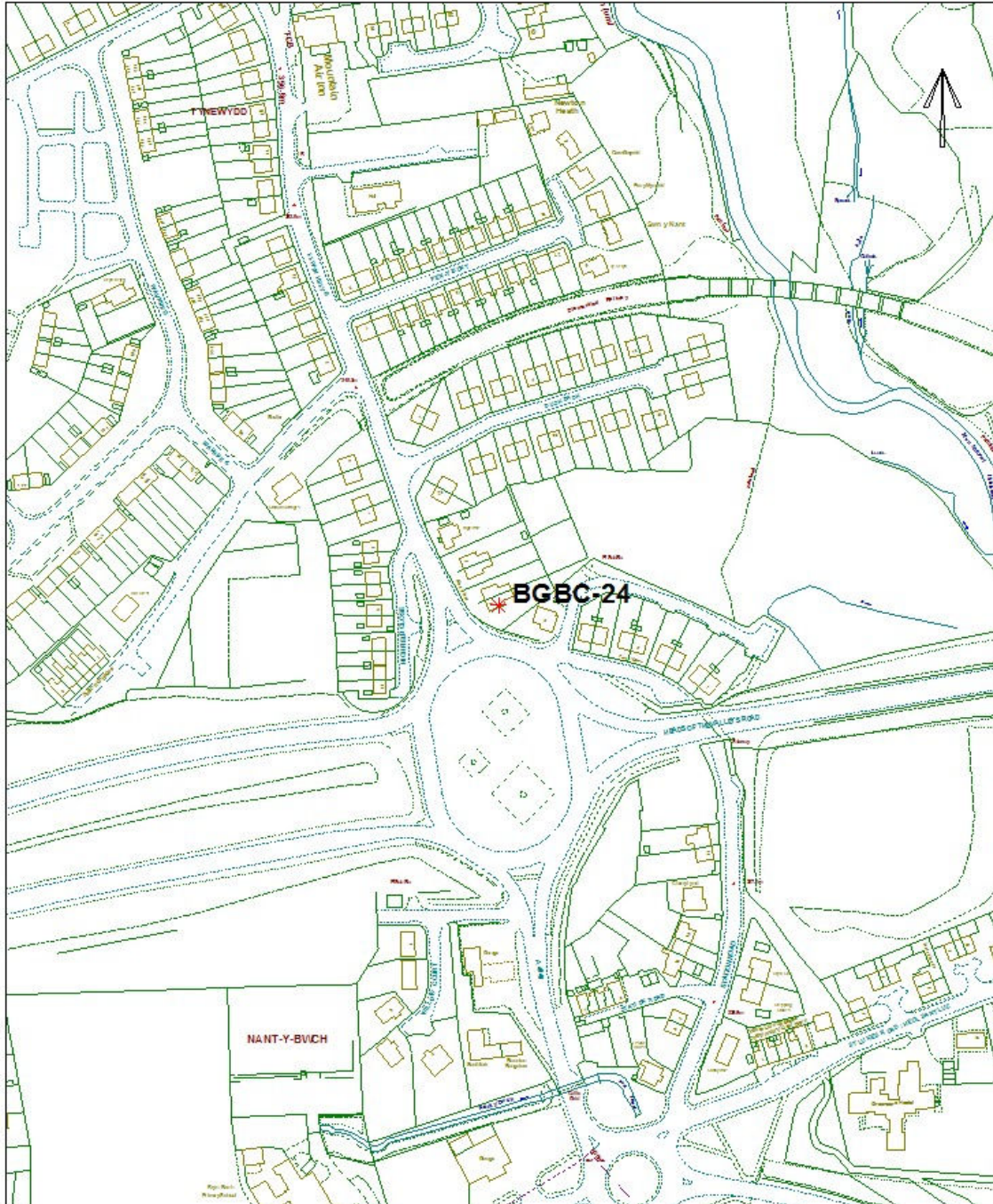


## Blaenau Gwent County Borough Council

Location: BGBC-24, 4 Glen View, Nantybwich, Tredegar.

Easting: 313152 Northing: 210772

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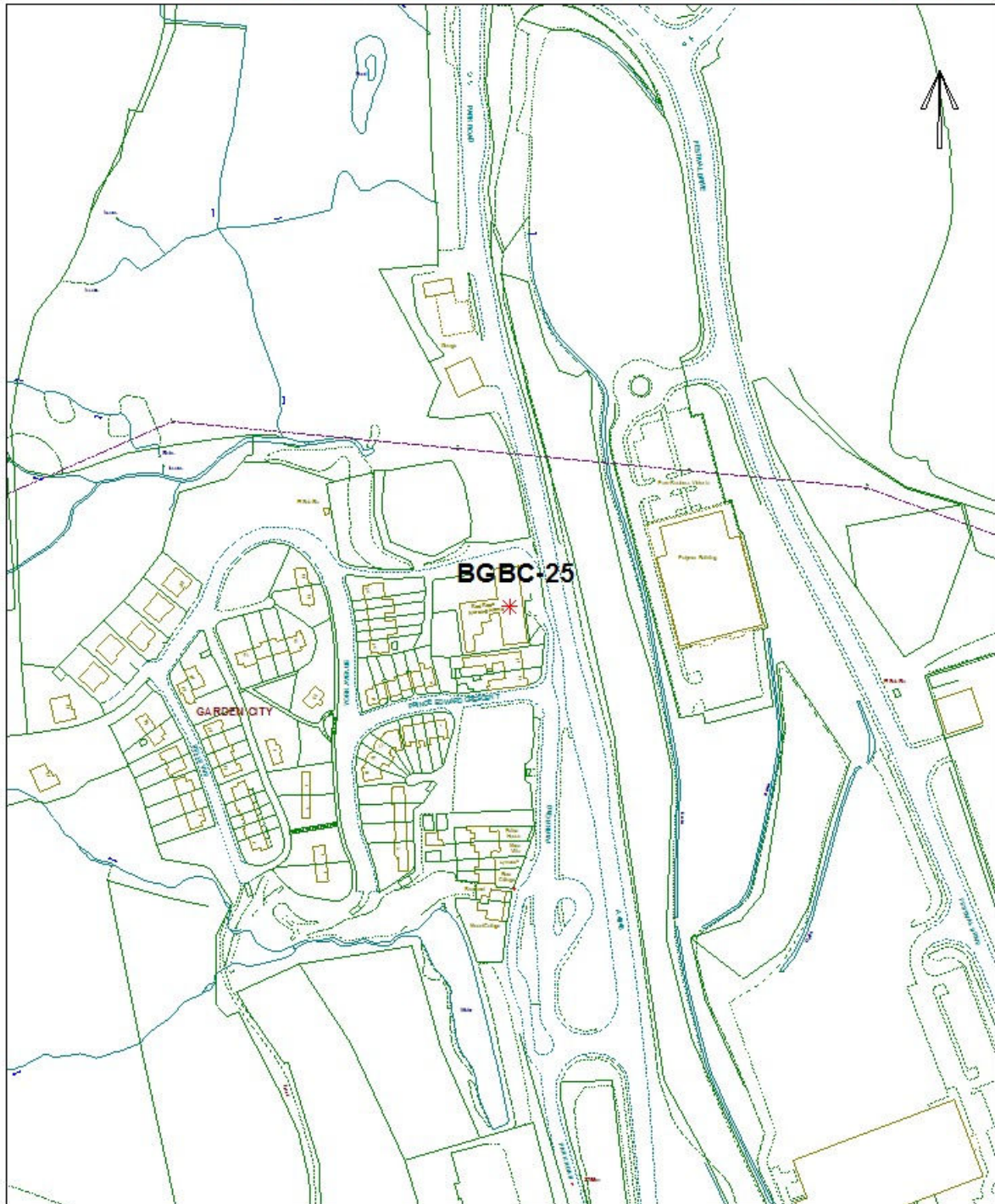


# Blaenau Gwent County Borough Council

**Location:** BGBC-25, Red Rose Care Centre, Park Road,

**Easting:** 316983 **Northing:** 207894

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Y mae atgynhychu heb awdurdod yn tori Hawffraint y Goron a gall arwain at erlyniad neu achosion sifil. BGBC - LA09002L*





# Blaenau Gwent County Borough Council

Location: BGBC-26, 2 The Dingle, Ebbw Vale.

Easting: 316984 Northing: 209840

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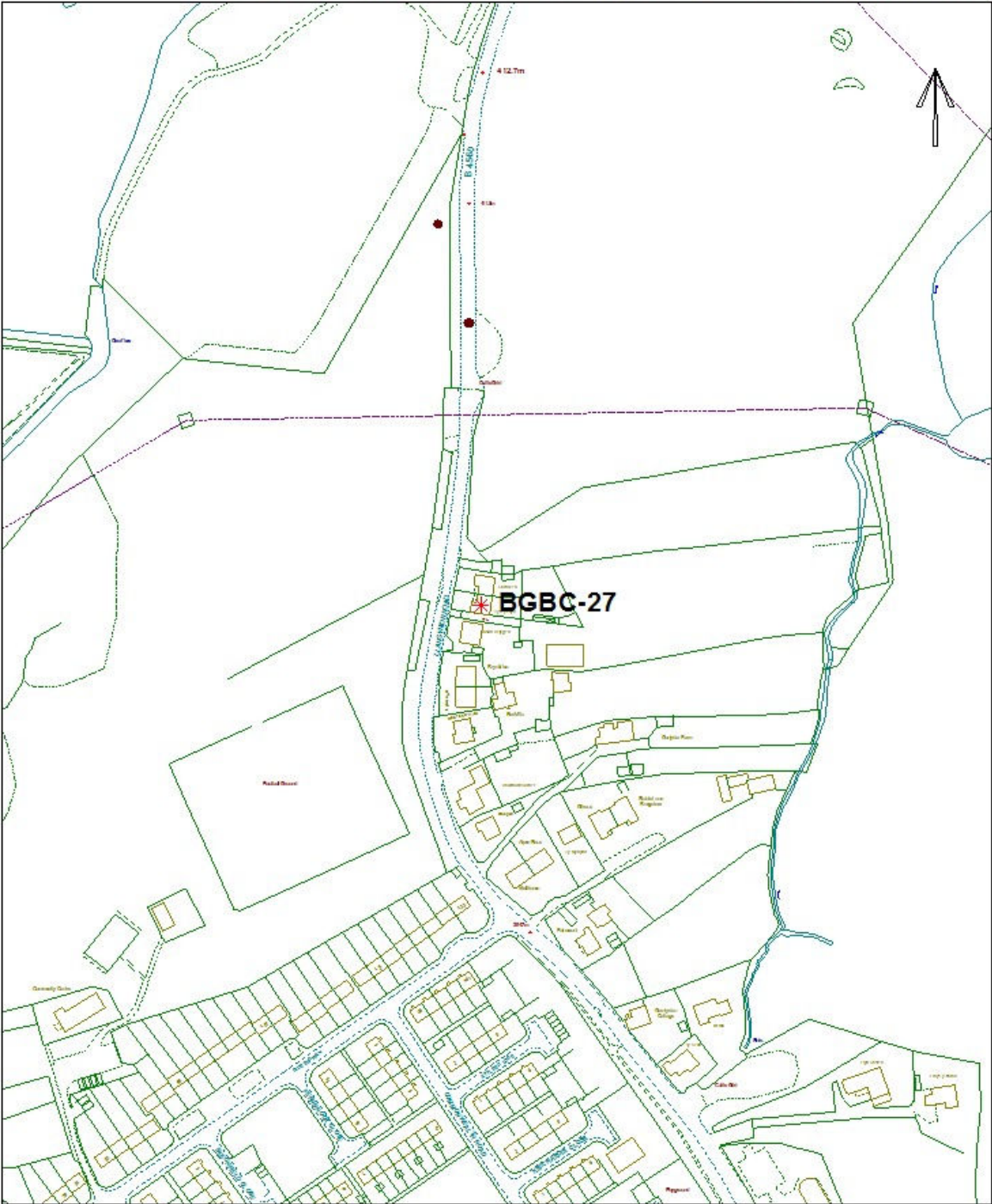


# Blaenau Gwent County Borough Council

Location: BGBC-27, Tyn y Rhyn, Llangynidr Road, Ebbw Vale

Easting: 316731 Northing: 212797

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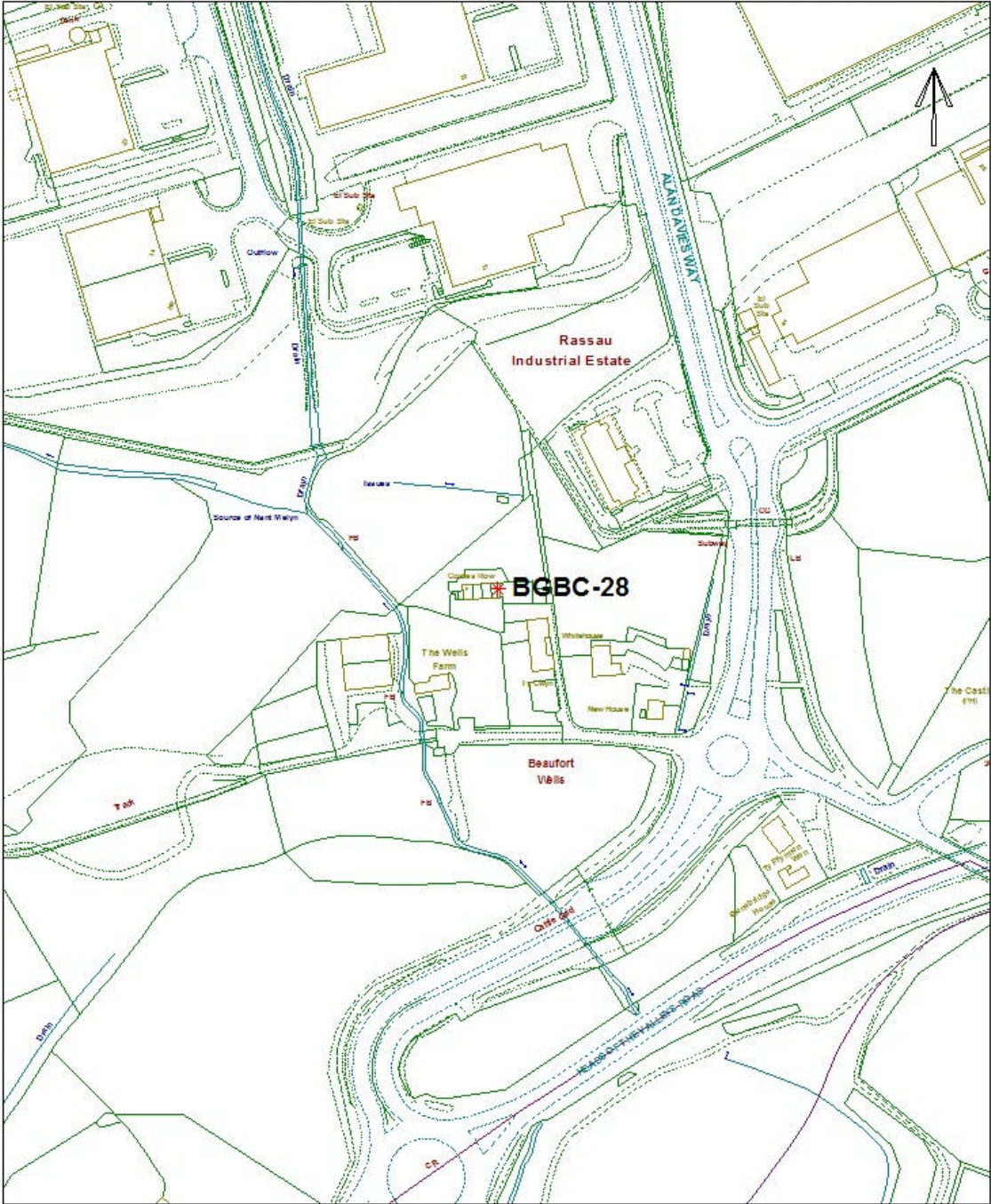


# Blaenau Gwent County Borough Council

Location: BGBC-28, 1 Coates Row, Rassau, Ebbw Vale.

Easting: 314490 Northing: 211637

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# Appendix 4

## NO<sub>2</sub> Diffusion Tube Monitoring Monthly Mean Values 2016

SITE	06/01-03/02	03/02-02/03	02/03-30/03	30/03-26/04	26/04-24/05	24/05-27/06	27/06-28/07	28/07-24/08	24/08-28/09	28/09-26/10	26/10-30/11	30/11-04/01	Annual Mean
BGBC-01	15	16	15	14	19	17	8	13	11	24	19	27	16.5
BGBC-03	11	14	13	9	10	9	7	9	10	15	16	22	12
BGBC-04	10	8	7	6	6	5	5	5	6	11	11	11	7.5
BGBC-05	14	14	13	11	11	10	9	9	11	14	18	21	12.9
BGBC-07	19	18	12	10	11	10	10	10	13	14	19	25	14.2
BGBC-09	15	16	13	14	16	18	9	14	16	23	18	21	16
BGBC-11	14	13	10	8	9	8	8	9	9	12	15	19	11.1
BGBC-13	6	5	4	4	4	3	3	4	5	6	5	10	4.9
BGBC-16	24	22	17	15	15	16	16	15	16	18	23	31	19
BGBC-17	17	16	15	13	13	x	8	9	x	15	17	27	15
BGBC-18	26	27	22	20	14	13	12	11	16	23	25	32	20
BGBC-19	22	23	18	20	23	20	18	17	22	24	26	36	22.4
BGBC-20	22	23	17	18	20	21	16	19	22	26	25	30	21.5
BGBC-21	14	14	13	12	12	10	10	11	12	14	18	21	13.4
BGBC-22	17	17	15	13	14	15	9	12	14	21	22	25	16.1
BGBC-23	14	14	13	11	10	9	7	23	11	13	16	24	13.7
BGBC-24	16	13	12	9	9	9	11	11	12	14	15	21	12.6
BGBC-25	13	11	12	10	11	11	9	10	12	16	15	19	12.4
BGBC-26	17	17	15	13	12	10	10	9	13	16	18	25	14.5
BGBC-27	10	10	8	7	8	7	6	7	8	10	10	8	8.2
BGBC-28	10	10	9	7	8	5	5	7	9	11	7	15	8.5

# Appendix 5

## Blaenau Gwent CBC Energy Policy

**Corporate Energy Policy –  
A Strategy Document for Blaenau Gwent County Borough Council**

**Scope:**

Blaenau Gwent County Borough Council is located in the South Wales valleys and is responsible for providing a wide range of services; ranging from waste management and social care through to education provision and leisure facilities. The Council operates more than 150 premises where energy consumption patterns vary according to operation and building use. This policy aims to reduce energy consumption, costs and carbon emissions from its public buildings and associated operations.

**Declaration of Commitment:**

The adoption of this policy demonstrates the Council's commitment to responsible energy management, with continual improvement as part of the wider environmental and property strategy.

The Council is committed to reducing carbon emissions from its premises and operations and contributing towards UK and Welsh Government targets for carbon emissions reduction. The Council

has an aspiration to reduce carbon emissions from its buildings by 30% by 2020.

Blaenau Gwent County Borough Council will aim to improve its energy efficiency and reduce emissions in line with targets set within this policy. For the purposes of this policy the term "energy

management" also extends to include water consumption. The adoption of a robust energy policy,

backed by effective action and good communication will ensure substantial savings on the Council's

future operational costs.

**Principal Aims:**

- To ensure full and continued compliance with relevant energy related legislation.
- To continue to procure best value gas and electricity contracts to reduce financial risk.
- To actively promote energy and water efficiency in all buildings from where Council services are provided.
- To invest in cost effective energy saving technologies where practicable.
- To raise awareness, educate and motivate employees into more "green housekeeping" and energy saving.
- To evaluate and adopt where practicable, alternative renewable energy technologies for application on Council buildings.

These principle aims will be met through a series of targeted objectives; these are detailed below,

separated into key areas of work and future development.

**Objectives:**

**Legislation & Policy:**

The Carbon Reduction Commitment is a legislative mechanism whereby large non energy intensive organisations must account for their carbon emissions and thus be subject to a financial levy for each tonne of carbon emitted (currently set at £12 per tonne). This represents a significant financial pressure for the Council. Reducing carbon emissions will reduce both energy costs and CRC liability.

o To ensure continued compliance with statutory reporting requirements as stipulated by the Environment Agency

o To undertake initiatives to reduce carbon emissions and CRC financial liability.

- o To set up a CRC Board to oversee and monitor progress of the scheme. This will be chaired by Director of Environment and be attended by representatives across all portfolios. Reporting will be through the existing CAMWG / CMT and Executive processes.

- The Energy Performance of Buildings Regulations 2007 legislate that all premises either purchased, sold or leased require an Energy Performance Certificate (EPC). In addition all public buildings frequently accessed by the public that are over 1000 sq. metres now require a Display Energy Certificate (DEC) that illustrates its operational energy efficiency. Failure to comply with these regulations may leave the Council open to civic penalty.

- o To ensure all eligible buildings have current Display Energy Certificates and Advisory Reports – this will inform future targeting of initiatives to improve energy performance on less efficient buildings.

- o To ensure all requirements for Energy Performance Certificates are carried out when selling, purchasing or leasing premises.

- Under the Welsh Government's National Strategic Indicator for reducing carbon emissions from its non-domestic buildings the Council will continue to make progress towards:

- o A 3% year-on-year reduction in carbon emissions from its operational buildings from 2011 onwards. This reflects the Welsh Government's aspiration for 3% emissions reductions as laid out in the One Wales Policy document.

- Under the Welsh Government Outcome Agreement (2010-2013) the Council has committed to

the following areas to demonstrate improvements in efficiencies:

- o An annual 3% reduction in carbon emissions from operational buildings.

- o An improvement in Display Energy Certificate ratings in for at least 5 premises per year.

- o A staged implementation of Automatic Meter Reading (AMR) from 2010 – 2013.

- o Targeted commitment of funds on the Energy Invest-to-Save budget.

- To ensure energy issues are embedded corporately, energy management and efficiency improvements will be considered appropriately in the wider policy frameworks, such as:

- o Corporate Asset Management Plan

- o Risk Management & Business Planning

- o Corporate Improvement Plan

**Performance Management & Data Management:**

- To continue to provide performance management information in respect of energy and carbon

emissions and to further develop systems and methodologies to report and forecast more accurately.

- Continuation of annual and quarterly updates on internal & external performance indicators.

- To continue to utilise, and further develop TEAM Sigma energy management software to facilitate the central processing and analysis of utility invoice data. The software will be developed over time to allow for greater reporting functionality in the following areas:

- o Carbon Reduction Commitment
- o Production of Display Energy Certificates
- o Analysis of Automatic Meter Reading (AMR) data
- o Energy and water benchmarking
- o Track progress of energy saving projects
- o Monitoring and targeting of inefficient buildings
- To formulate an Action Plan, covering all areas of energy management with prioritised areas for action. This will be reviewed annually to monitor progress against the implementation of this policy.

**Asset Design & Maintenance:**

- To strive to design and refurbish buildings to the highest practicable environmental and energy standards e.g. BREEAM Excellent as minimum standard.
- To ensure planned and reactive maintenance regimes are implemented with energy efficiency embedded and energy efficiency considerations influencing decisions. Where practicable improvements should be made over and above current Building Regulations standards, where funding exists and it is cost effective to do so.
- To continue to develop the regeneration of the former Ebbw Vale Steelworks site. “The Works” will be a showcase for low carbon building design, utilising an ambitious district heating network to help meet site wide carbon reduction targets
- To continually strive to make both energy and cost efficiencies in the operation of the Council’s street-lighting portfolio; making technological and maintenance advancements to improve efficiency.

**Energy Invest-to-Save Fund:**

- To implement cost effective (<5yr payback period) energy saving measures across the portfolio of Council buildings.
- To utilise funding in line with internal commitment targets, such as those within the Outcome Agreements between 2010 – 2013.
- Where resources allow, conduct a programme of energy surveys to identify Invest-to-Save Projects and areas for improvement.
- To develop a post-project monitoring tool to appraise actual energy savings against that predicted.

**Management & Reporting Objectives:**

- The submission of regular progress and information reports to the appropriate Council forum. e.g. Green Team, CMT, Executive and CAMWG
- Development of a reporting methodology to disseminate energy and carbon data to Chief Officers and Departmental Heads. To embed energy efficiency values within all service areas and throughout the corporate structure.
- Compliance with statutory reporting requirements. Timely and accurate energy and carbon emissions data shall be submitted to the relevant external body e.g. Welsh Government and Environment Agency.

**Partnership Working:**

- To further develop relationships with external partners to assist in the implementation of this policy where practicable e.g. Carbon Trust, Energy Saving Trust, and South East Wales Energy Partnership (SEWEP) in order to promote best practice and knowledge sharing.
- To liaise, support and develop new partnerships where appropriate with regards to implementing energy efficiency schemes in the domestic sector. Making best use of appropriate funding such as ARBED, CESP, CERT and Green Deal.
- To continue to collaborate with other Local Authorities to produce best practice and promote knowledge sharing.

**Education & Awareness:**

- To continue to provide energy advice and develop new initiatives to increase awareness and educate employees and members on energy efficiency and climate change issues, through interactive workshops and seminars

**Implementation:**

This policy shall be implemented by way of an Action Plan, this will incorporate prioritised actions, set against timescales. Progress on these actions and the Action Plan itself will be reviewed and amended annually to account for changing legislation, resources, and workloads. Reporting on progress will be through mechanisms described in this policy document.