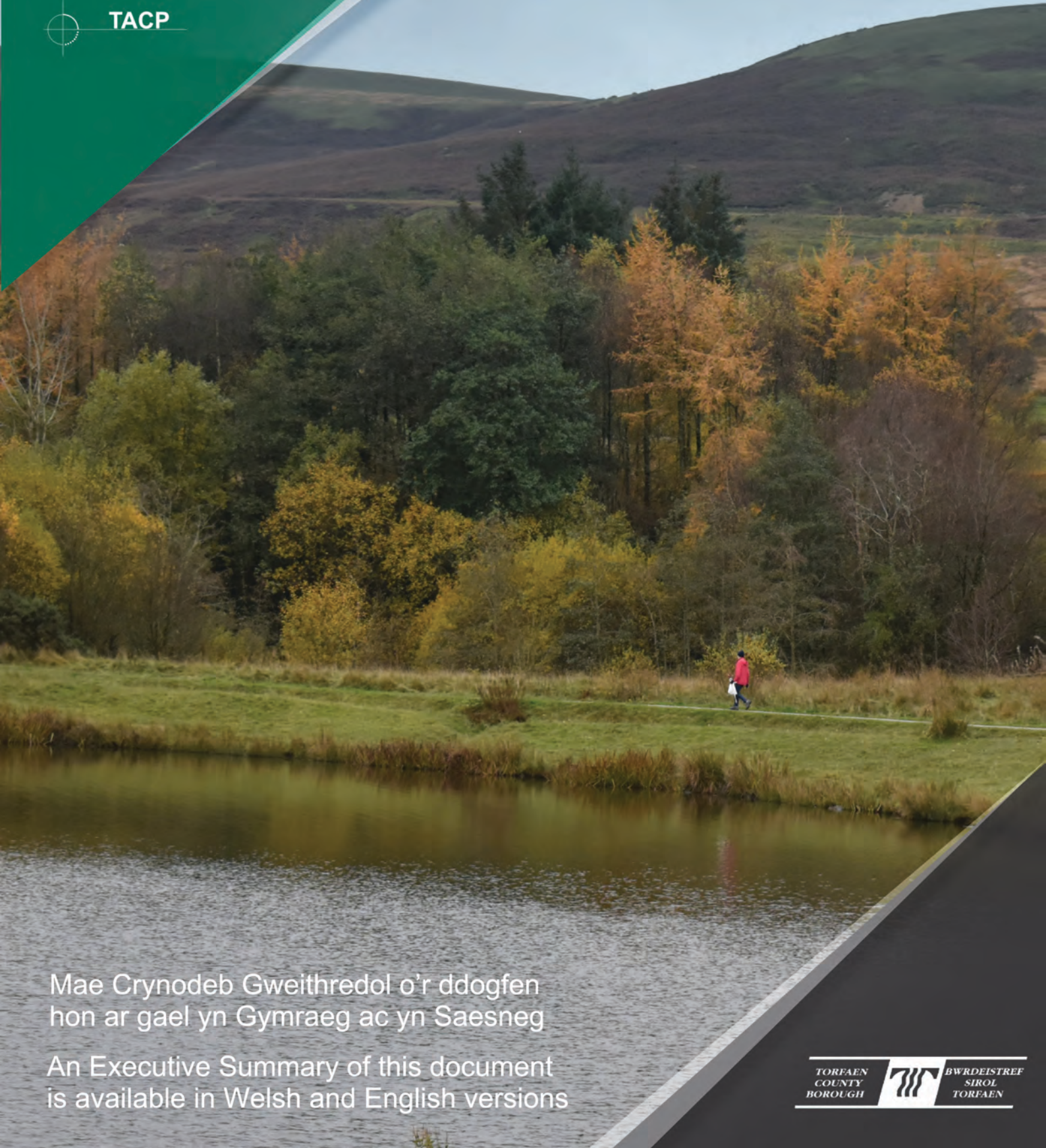


LANDSCAPE AND VISUAL ASSESSMENT: PROPOSED LOCAL SEARCH AREAS FOR WIND AND BLAENAVON INDUSTRIAL LANDSCAPE WORLD HERITAGE SITE

TCBC AND BGCBC

FEBRUARY 2022



Mae Crynodeb Gweithredol o'r ddogfen
hon ar gael yn Gymraeg ac yn Saesneg
An Executive Summary of this document
is available in Welsh and English versions

Blaenau Gwent County Borough Council and
Torfaen County Borough Council

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GLOSSARY

BBNP	Brecon Beacons National Park
BGCBC	Blaenau Gwent County Borough Council
BILWHS	Blaenavon Industrial Landscape World Heritage Site
GIS	Geographical Information System
LAU	Landscape Assessment Unit
LSA	Local Search Area
LVIA	Landscape and Visual Impact Assessment
TCBC	Torfaen County Borough Council
RLDP	Replacement Local Development Plan
WHS	World Heritage Site

1 INTRODUCTION

1.1 General

- 1.1.1 TACP were commissioned by Torfaen County Borough Council (TCBC) and Blaenau Gwent County Borough Council (BGCBC) to undertake a viewshed analysis and outline landscape visual impact assessment to assess the potential extent of visibility of wind turbines should they be deployed within the proposed Local Search Areas for renewable technology within Torfaen and Blaenau Gwent County Boroughs.
- 1.1.2 Stakeholder and member workshops undertaken by each authority have raised concerns regarding potential visual impact upon the Blaenavon Industrial Landscape World Heritage Site (BILWHS).
- 1.1.3 This report will act as an addendum to the Sensitivity and Capacity Study for Renewable Energy Development completed by TACP on behalf of Torfaen and Blaenau Gwent County Borough Councils in Autumn 2021.
- 1.1.4 The purpose of this landscape visual impact assessment is to assess the potential effects of the renewable energy development, in particular that of wind turbines on the landscape and visual amenity of the World Heritage Site surrounding Blaenavon. It describes the methods used to determine the viewshed analysis and therefore the study area of the assessment and then describes the baseline landscape and visual resources found within it. This baseline has been used to assess the potential direct and indirect effects of the development considering the sensitivity of the landscape and visual amenity.
- 1.1.5 As a potential infrastructure improvement, the assessment has been carried out following the principles outlined in the Design Manual for Roads and Bridges (DMRB) LA 107 Landscape and visual effects Revision 2 Landscape Effects (February 2020) and (DMRB) LA 104 Environmental Assessment and Monitoring Revision 1 (August 2020). In addition, the assessment has drawn on the guidance outlined in the 'Guidelines for Landscape and Visual Impact Assessment' (GLVIA), The Landscape Institute (LI) with the Institute of Environmental Management and Assessment (IEMA), 3rd Edition, 2013.
- 1.1.6 The report focuses on the landscape and visual receptors and viewpoints considered most likely to be affected by the potential development. Where adverse effects have been identified, mitigation measures to prevent, reduce or offset these effects have been considered.
- 1.1.7 The report is set out under the following headings.
- **Methodology** - a brief summary of the methodology is included here and sets out how the assessment was undertaken and any limitations, constraints encountered, and assumptions made.
 - **Baseline Conditions: Study Area** - this section describes how the study area has been determined, its description in terms of landscape elements and form and character areas, designations within or close to the potential development. It also provides a baseline description of the viewpoints selected and the results of the scoping of the LVIA.
 - **Predicted Environmental and Visual Effects** – this section sets out the likely landscape and visual impacts and their significance arising from the potential development. It then assesses the cumulative impacts without mitigation.
 - **Conclusions** – this section provides a summary of the above sections.

1.2 Policy Context

- 1.2.1 The national planning policy context for the Study Area is outlined in the previous Sensitivity and Capacity Study for Renewable Energy Development (October 2021) and provides context for the requirements for local energy generation and ownership as set out in the Environment (Wales) Act (2016) and for the Well-Being of Future Generation (Wales) Act (2015). It also sets out the requirement at a regional level where local authorities have been required to identify capacity within their authority area for the provision, ‘...to ensure their area’s full potential for renewable and low carbon energy generation is maximised and renewable energy targets are achieved’, and that this is reported within the Replacement Local Development Plan (RLDP).

1.3 Local Search Area (LSA)

- 1.3.1 As part of the RLDP process both Torfaen County Borough Council and Blaenau Gwent County Borough Council have undertaken preliminary work to identify Local Search Areas (LSAs) within the authority boundaries that are deemed suitable or least damaging to the environment to accommodate renewable energy development. The draft areas will take into account the results of the main sensitivity and capacity assessment published in October 2021 and this addendum, as well as being subject to stakeholder engagement before being included in their respective Deposit RLDPs for formal consultation.

1.4 Scope

- 1.4.1 This document assesses the likely visual impacts and extent of visibility of any potential wind turbine development on the BILWHS for two LSAs one in Torfaen and the other in Blaenau Gwent. The Torfaen LSA lies approximately 1.1km south of the BILWHS at its closest point with the northern extent of the LSA running parallel with the WHS for approximately 2.5km. The Blaenau Gwent LSA lies approximately 3.4km to the west of BILWHS following the Mynydd Carn-y-cefn ridge for approximately 3.5km parallel to the WHS. The scope of this addendum to the Sensitivity and Capacity Study for Renewable Energy Development is to ascertain the extent to which three heights of wind turbine (120m, 150m and 180m) would theoretically be visible from within the BILWHS. In particular the potential visual impacts any turbines would have on five viewpoints at key locations selected for their heritage importance and high visitor footfall.
- 1.4.2 The study area for this additional study covers the zone of theoretical visibility generated by a GIS viewshed analysis with particular relevance to the BILWHS and its immediate boundary with the BBNP. The study area is indicated on Figure 1.1(TCBC) and 2.1(BGCBC).
- 1.4.3 For the purpose of this addendum three heights of wind turbine have been assessed – 120m, 150m and 180m overall height from existing ground level to turbine wing tip. Indicative locations for the wind turbines have been indicated for Torfaen CBC on Figure 1.1 and for Blaenau Gwent CBC on Figure 2.1. These have been placed at approximately 1km intervals along the easterly extent each of the LSAs with locations adjusted to coincide with the highest elevation points along the ridges running parallel to the BILWHS.
- 1.4.4 The main aim of this assessment is;
- To provide a viewshed analysis generated through terrain mapping and GIS analysis to illustrate potential visibility for potential turbine locations on the BILWHS
 - To identify what specific visual impacts are likely at each of the key viewpoint locations.
 - To identify potential mitigation and guidance on siting of renewable energy development with particular focus on wind turbine development.

1.5 Study Area Description

- 1.5.1 The town of Blaenavon sits within the upper reaches of the Afon Llwyd valley in the county authority of Torfaen County Borough Council. It is bounded to the north and east by the southerly extent of the Brecon Beacons National Park (BBNP) and shares county boundaries with Monmouthshire to the east and Blaenau Gwent to the west.
- 1.5.2 The area is dominated by the surrounding upland valley top ridges of Coity Mountain to the east and the rising upland of Mynydd y Garn-fawr between Torfaen and the BBNP to the west. The area is characterised by the remnants of mining heritage with extensive workings, artefacts, buildings and spoil heaps frequent in the locality. Blaenavon itself sits on the valley floor within the 'bowl' formed by the adjacent ridges. The town has had a varied economic and social history intricately linked and dependant of the fortunes of the South Wales coal fields. It contains some fine traditional buildings, alongside more modern built workers housing and industrial development in varying conditions but all sharing a strong visual reminder of mining heritage.
- 1.5.3 The surrounding landscape is typified by strongly defined upland with mixed moorland on slopes and rough grazing/marginal farmland in valley floor. These are interspersed with areas of partially reclaimed former mining and disused tips as seen at the reclamation of the former Kays and Kears site now a thriving and popular nature reserve at Garn Lakes. Long panoramic views are afforded down the valley to the south with extensive across valley views available from the upper slopes and ridges. The bowl like topography creates a strong sense of place reinforced by the relict mining heritage.

2 METHODOLOGY

- 2.1.1 The visual impact assessment methodology used in the preparation of this assessment follows the principles as set out in (DMRB) LA 107 Landscape and visual effects Revision 2 Landscape Effects (February 2020).
- 2.1.2 These have been further developed from the previous 'DMRB Interim Advice Note (IAN) 135/10 Landscape and Visual Effects Assessment (November 2010) and draws from Guidelines for Landscape and Visual Impact Assessment (GLVIA); Third Edition Landscape LI and IEMA 2013.
- 2.1.3 Landscape effects and visual effects are separate but related topics. Assessment of landscape effects relate to the character and individual features that contribute to local and regional distinctiveness and the extent to which the proposals would alter the character and quality of landscape as a resource. For this study however, the emphasis is on the assessment of visual effects related to the potential change in view from specific locations, as perceived by receptors.

2.2 Landscape Character Assessment Methodology

- 2.2.1 Landscape is characterised by dividing the study area into geographical areas which have readily identifiable characteristics in common. These characteristics may include topography; other natural characteristics such as waterways; patterns of land use; urban grain; and building form.
- 2.2.2 Landscape effects can be defined as the changes in the fabric, character and quality of the landscape as a result of a development through:
- Direct effects upon specific landscape elements.

- Subtler effects upon the overall patterns of elements that give rise to landscape character and regional and local distinctiveness.
- Effect upon special interests or values such as designated landscapes, conservation sites and cultural associations; and,
- The capacity of the landscape to accept change of the scheme proposed

2.2.3 For this study these have been based upon the Landscape Assessment Units (LAU) derived from the Sensitivity and Capacity Study for Renewable Energy Development.

2.3 Visual Assessment Methodology

2.3.1 The process of Visual Assessment is undertaken through analysis of the site from strategic viewpoints. This is done by determining the geographical area from which the site is visible, known as the Zone of Visual Influence (ZVI), Visual Envelope or Zone of Theoretical Visibility (ZTV). This has been determined through a GIS viewshed analysis which provides the ZTV for the three differing heights of turbines at the indicative locations illustrated for each LSA on Figures 1.1 (TCBC) and 2.1 (BGCBC). This computer generated ZTV does not take account of built development or intervening vegetation blocks such as woodland, hedgerow and fields boundary elements.

2.3.2 Visual effects relate solely to changes in available views of the landscape and the effect of those changes on people, including.

- The direct effects of the development upon views of the landscape through intrusion or obstruction;
- The overall effect on visual amenity, be it degradation or enhancement; and
- The reaction of viewers who may be affected.

2.3.3 The assessment process aims to be objective and to quantify effects as far as possible. However, LI and IEMA guidance recognise that subjective judgement is appropriate, if it is based upon, '*professional expertise supported by clear evidence, reasoned argument and informed opinion*'. Whilst changes to a view can be factually defined, the evaluation of landscape character and visual effects does require qualitative judgements to be made. The conclusions of this assessment therefore combine objective measurement with subjective professional interpretation.

2.4 Baseline Conditions

2.4.1 Landscape Visual Survey

A landscape visual survey was carried out by Luci Clark (BA Dip LA Hons, CMLI) of TACP on the 11th November 2021 to provide a baseline for assessing the landscape and vegetation framework and assess the likely visual impacts on receptors and properties at the selected viewpoints.

2.4.2 The weather conditions for the visit were dry and predominantly clear becoming overcast and dull towards the end of the day. The site visit included:

- Site specific character analysis, through consideration of landform, vegetation, human influence (built form and culture) and nature of views;
- Assessing likely visual impacts – distance, direction, visual dominance and potential mitigation
- Assessing agreed viewpoint locations; and
- Identifying visual receptors

2.5 Design Limitations and Assumptions

- 2.5.1 The visual impact assessment and viewshed analysis were assessed against indicative wind turbine locations and height. These have been set out as agreed with the client body with the aim of providing an initial representative indication of the likely visual impacts should a wind farm proposal be put forward within the LSA directly south of the BILWHS.
- 2.5.2 The locations of the indicative turbine were positioned at the most visually prominent points along the northerly section of the LSA to generate the ZTV thus providing a 'worst case scenario' for any development. The ZTV itself does not take into account built development or vegetation pattern/form. These aspects are described within the individual viewpoint locations.
- 2.5.3 Representative views have been taken from each of the agreed viewpoint locations. These have considered direction of view, public accessibility, and elevation. It should be noted that The Blaenavon Ironworks (CADW) was not open to the public on the day of the landscape survey and viewpoints at location as close to the most visually sensitive locations of the site have been taken. These have all been taken from publicly accessible PRoW or adjacent open space/playing fields
- 2.5.4 It is assumed that any application for any proposed development would be accompanied by a detailed Landscape and Visual Impact Assessment (LVIA) including full details of layout, height and associated infrastructure.

2.6 Baseline

- 2.6.1 Desk top assessment and field surveys have been undertaken to identify and provide an overview of the study area. These are detailed in the following sections.

2.7 Landscape Designations

2.7.1 Blaenavon Industrial Landscape World Heritage Site (BILWHS)

2.7.2 The Study area encompasses the entire Blaenavon Industrial Landscape World Heritage Site (BILWHS) and as such is designated as a landscape of international heritage importance. Approximately half of the WHS lies within the authority area of Torfaen County Borough Council with the remainder to the north extending into the Brecon Beacons National Park (BBNP) and Monmouthshire.

2.7.3 The BILWHS was designated in 2000 by UNESCO under two key criteria,

- **“Criterion (iii):** *The Blaenavon Landscape constitutes an exceptional illustration in material form of the social and economic structure of 19th century industry.*
- **Criterion (iv):** *The components of the Blaenavon Industrial Landscape together make up an outstanding and remarkably complete example of a 19th century industrial landscape.* “

2.7.4 It encompasses 3,290ha of landscape centred upon the former mining town of Blaenavon. The area was listed for the extent and quality of relict mining heritage still evident including coal and ore mines, quarries, an early example of a railway system, furnaces, worker’s homes and the social infrastructure of the community. Blaenavon’s function as a mining community continued up to the closure of the deep mine at Big Pit in February 1980. The listing of the area as a WHS has enabled Blaenavon to remain a viable valley community with the main employment focus now on tourism and industry based at Gilchrist Thomas Industrial Estate.

2.7.5 The boundary of the World Heritage property includes the major monuments, the mining settlement as well as the surrounding valley landscape and includes all the key attributes of the early industrial period during the formative years of the Industrial Revolution.

2.7.6 The landscape includes new industrial development and settlements surrounding the mining town and is highly visible from higher ground surrounding Blaenavon. Further new development needs to be considered in terms of its visual impact on the WHS and to ensure the integrity of the WHS is not compromised. The WHS does not include a buffer zone and as such its setting could be vulnerable to the re-use of spoil heaps, open-cast mining proposals, renewable energy development and other interventions.

2.7.7 Brecon Beacons National Park (BBNP)

2.7.8 The Brecon Beacons National Park lies immediately to the north of the TCBC boundary sharing its southerly boundary with the borough for approximately 16km along TCBC’s western extent.

2.7.9 At its closest point the BBNP lies approximately 4.4km north and 4.4km east of the TCBC LSA and approximately 2.6km southwest of the BGCBC LSA.

2.7.10 The BBNP also includes the BBNP International Dark Sky Reserve, designated in 2013 and covering 1.347km² and lying approximately 11.5km to the west of the WHS.

2.7.11 Listed Buildings

2.7.12 The WHS includes 24 Scheduled Monuments (SM) and 82 buildings or structures included on the national list of Buildings of Special Architectural interest or Historic interest (Listed Buildings Grade I, II* and Grade II).

2.8 Landscape Character Baseline

2.8.1 The landscape baseline has been determined through consideration of landscape character at regional, local and site-specific scales to define the Landscape Assessment Units detailed as part of the Sensitivity and Capacity Study for Renewable Energy.

2.8.2 LANDMAP

2.8.3 The landscape baseline has initially been assessed from the LANDMAP Information System published by Natural Resources Wales (NRW). The LANDMAP process uses Geographical Information Systems (GIS) to store and manage data collected on five evaluated aspect topic layers; Geological Landscapes, Landscape Habitats, Historic Landscapes, Cultural Landscapes and Visual & Sensory. For each of these topic layers the landscape is evaluated and divided into geographical units known as aspect areas. A data set is developed for each area that describes, classifies and evaluates its quality based upon an all-Wales set of criteria.

2.8.4 LANDMAP Visual and Sensory classification level 2, which identifies landform, was used to divide the study area into landscape units of similar type, termed Landscape Assessment Units (LAU) for the Sensitivity and Capacity Study for renewable energy. These are described below.

2.8.5 Landscape Assessment Units (LAU)

2.8.6 Six Landscape Assessment Units (LAU) defined as part of the Sensitivity and Capacity Study for Renewable Energy Development are present within the BILWHS. These are summarised as follows;

Table 1.1: Landscape Assessment Units summary

LAU ref.	Name	Description	Landscape Sensitivity	
			Wind	Solar
LAU 34	Mynydd Coity Upland Ridge	A strong sense of place with high intervisibility with the BILWHS and BBNP. The assessment identifies that the landscape is of very high sensitivity, the strong landscape character of the area would be adversely affected by development of this type.	Very High	Very High
Guidance on siting		Wind turbines • Respect the setting of Blaenavon WHS and associated historic landscape and SM. • Avoid placing turbines on narrow sections of ridge where they will appear on the skyline. • Consider opportunities to use existing forestry to partially screen wind development. • Respect the setting of St Illytid, Swyffrd-ganol Farm and their historic landscape character.		
		Solar PV • Respect the setting of Blaenavon WHS and associated historic landscape and SM. • Consider opportunities to use the undulating topography to screen solar development from wider views. • Avoid placing solar on north facing slopes where these will be visible from the National Park. • Consider siting solar farms within existing field boundaries which may be enhanced to screen the development in the southern part of the area. • Avoid siting within SINCS unless land management can be consistent with and support conservation objectives.		
LAU 35	Hills North of Blaenavon	Views to BBNP restricted by enclosing landform. Within the valley the majority of views take in the BILWHS and	High	High

Table 1.1: Landscape Assessment Units summary

LAU ref.	Name	Description	Landscape Sensitivity	
			Wind	Solar
		its context. The assessment identifies that the landform and visual qualities of the area taken alone, would have low susceptibility to change of this type. However, when considered alongside the value placed on the landscape as a WHS with all the associated designations, it can be seen that this landscape would be highly sensitive to turbine development of the scales being considered.		
Guidance on siting		Wind turbines • Avoid placing turbines on top of hills where they will appear on the skyline. • Respect the setting of WHS, Scheduled Monuments and historic buildings and landscapes. • Avoid direct impacts on Bloreng SSSI. • Site turbines away from settlements and visitor hotspots. • Potential opportunity to the northwest outside the WHS, but a risk of turbines sited here becoming a focal point as one moves up the valley		
		Solar PV • Consider opportunities to site solar development within existing field boundary patterns on the valley floor. • Consider opportunities to use topography to screen solar development from wider views. • Respect the setting of scheduled monuments and historic buildings.		
LAU 36	Blaenavon	Former mining town with medium scale industrial estates with connecting roads, small number of terraced residential properties. Railway depot. Includes key designated structures related to WHS. Views out across wider WHS. Moderate sense of place, with perceptual qualities including discordant and unattractive.	Low	Low
Guidance on siting		Wind turbines • Respect the setting of Blaenavon WHS and associated historic landscape, SM, listed buildings and Conservation Area. • Consider opportunities to use existing woodland to partially screen wind development. • Consider opportunities to place turbines within the setting of modern industrial areas or road corridors		
		Solar PV • Respect the setting of Blaenavon WHS and associated historic landscape, SM, listed buildings and Conservation Area. • Consider siting solar farms where they will be screened by woodland or local topography. • Avoid siting within SINCS unless land management can be consistent with and support conservation objectives.		
LAU 48	Cwmavon	A small-scale landscape of mosaic open grassland and field parcels and scattered woodland and settlements. Attractive views both in and out with few detractors. Moderate scenic quality and landscape character with a high integrity. The	Very High	Very High

Table 1.1: Landscape Assessment Units summary

LAU ref.	Name	Description	Landscape Sensitivity	
			Wind	Solar
		landscape is assessed as being of very high sensitivity due to its scale and landscape pattern		
Guidance on siting		Wind turbines • Respect the setting of the Blaenavon WHS. • Consider opportunities to partially screen turbines with local topography or existing woodland and forestry. • Respect the setting of the Cwmavon Conservation Area and associated listed buildings. • Site turbines away from individual residences and settlement edges. • Avoid siting turbines where they may interfere with wildlife using the Cwmavon Corridor LNR. • Avoid direct impacts on the Bloreng SSSI.		
		Solar PV • Respect the setting of the Blaenavon WHS. • Consider using existing woodland, forestry and local topography to screen solar development from wider views. • Consider opportunities to site solar development within existing field boundaries. • Only site solar farms within SINC where their management can be consistent with management objectives of SINC. • Respect the setting of the Cwmavon Conservation Area and associated listed buildings.		
LAU 50	Mynydd y Garn- Fawr, Mynydd Garnclochdy	A large-scale landscape of mountain upland this undeveloped ridge forms the boundary with the BBNP with attractive views to adjacent upland areas not available from the valley floor. The area is of high scenic quality, moderate landscape character and high integrity.	Very High	Very High
Guidance on siting		Wind turbines • Respect the Setting of the Blaenavon WHS. • Avoid direct impacts on the Bloreng SSSI. • Respect the setting of the Capel Newydd SM. • Respect the setting of Brecon Beacons National Park. • Avoid siting turbines on narrow sections of ridge where they will be more widely visible.		
		Solar PV • Respect the Setting of the Blaenavon WHS. • Avoid direct impacts on the Bloreng SSSI. • Respect the setting of the Capel Newydd SM. • Respect the setting of Brecon Beacons National Park. • Consider using existing woodland or forestry to screen solar development from views to the west. • Consider siting solar development on less elevated sections of the ridge where the local topography will screen views from BBNP. • Only site solar farms within SINC where their management can be consistent with management objectives of SINC.		

- 2.8.7 The definition of the LAUs also considered the site landscape character and environment and the degree to which the landscape character and sense of place is defined by aspects of landcover/built environment, pattern and texture, scale and appearance, tranquillity, cultural and human interaction.

2.9 Visual Baseline

2.9.1 Value (sensitivity) of resource

- 2.9.2 The GLVIA states that when assessing the significance of effects, the LVIA must first establish the susceptibility of each receptor to the specific change resulting from the proposals and the value attached to the receptor. This will give an indication of the sensitivity of the receptor. Secondly, the magnitude of the change needs to be established by considering the size and scale of the effect, its geographical extent, the duration and reversibility of effect. Knowing the sensitivity of the receptor and magnitude of change will provide a comprehensive assessment of the significance of the effects of the proposals.

- 2.9.3 For the purpose of this addendum study the receptors are primarily limited to the visual receptors and the extent to which their day-to-day activity and human interaction of the scenes will be impacted by a potential wind turbine development.

2.9.4 Sensitivity of Landscape Receptors

- 2.9.5 The following table (Table 2.1) summarises the sensitivities of each of the landscape receptors to the potential development.

Table 2.1: Landscape Receptors

Landscape Element	Scale	Sensitivity to Wind development
Topography	Local	Low
Woodland belts, individual trees, hedgelines	Local	Moderate
Water feature/pond, stream and ditches	Local	Low
Open green space/amenity space	Local	High
PRoW – footpath, cycleways, trails	Local	Moderate/High
Landscape Character and Designations		
Site character area	Local	High/Very High
Blaenavon Industrial Landscape World Heritage Site	International	Very High
Brecon Beacons National Park	National	Very High

2.9.6 Sensitivity of Visual Receptors

- 2.9.7 Visual receptor criteria and their sensitivity are shown in Table 2.2. Those identified at specific viewpoints during the field work are included in Table 2.3. It explains the type of view that each receptor has and its sensitivity to the visibility of the LSA and any theoretical development therein.

Table 2.2: Sensitivity of Visual Receptors

Sensitivity	Typical Criteria
Very High	Static views from and of major tourist attractions; Views from and of very important national/international landscapes, cultural/historical sites (i.e National Parks, UNESCO World Heritage sites). Receptors engaged in specific activities for enjoyment of dark skies.

Table 2.2: Sensitivity of Visual Receptors

Sensitivity	Typical Criteria
High	Residential properties. Views by users of Public Rights of Way or other recreational trails (e.g. National Trails, footpaths, bridleways etc.) Views by users of public open space for the enjoyment of the countryside (e.g. Country Parks, National Trust or other access land etc.) Static views from dense residential areas, longer transient views from designated public open space, recreational areas Views from and of rare, designated areas of national importance
Moderate	Static views from less populated residential areas, schools and other institutional buildings and their outdoors areas. Views by outdoor workers Transient views from local/regional areas such as public open space, scenic roads, railways or waterways. Users of local/regional designated tourist routes of moderate importance Views from and of landscapes of regional importance
Low	Views by users of main roads or passengers in public transport on main arterial routes Views by indoor workers Views by users of recreational/formal sports facilities where the landscape is secondary to enjoyment of the sport (e.g sports facilities) Views by users of local public open spaces of limited importance with limited variety or distinctiveness.
Negligible	Quick transient views such as from fast moving vehicles Views from industrial areas, land awaiting redevelopment Views from landscapes of no importance with no variety or distinctiveness
^a Source: Based on LAN 107, Revision 2, Table 3.41 (Highways England, Feb 2020).	

2.9.8 Key views

2.9.9 A number of key views have been defined by TCBC and BGCBC as representative of, or as being important views within the BILWHS. These have been used as a baseline against which to assess the potential visual impact of any potential wind farm development. They have been chosen to reflect the following: -

- Views from key heritage assets and visitor attractions within the BILWHS that are key to the WHS listing. Consideration of their setting and the integrity of the WHS should be a key consideration.
- Those identified as having a clear view towards the potential development and providing a representative selection across the study area.

2.9.10 The five viewpoints selected for assessment in the study are;

- Keeper's Pond (GR SO 255108);**
Also known as Pen-ffordd-goch Pond or the Forge Pond, it is situated near Pwll Du, on the ridge to the north of Blaenavon and lies within both the BILWHS and the BBNP. It was built in the early 19th century to provide water for the nearby Garnddyrys Forge (1817). The forge was dismantled during the 1860s. It is now a popular local beauty spot and is a key visitor hub for the start of some of the wider heritage trails and walking routes around the WHS.
- Blaenavon Ironworks (GR SO 249092);**

Currently under the care of Cadw, Blaenavon Ironworks is one of the most significant landmarks in the Industrial Landscape of Blaenavon. The ironworks, which started production in 1789 is the best-preserved blast furnace of its time to survive from the beginning of the industrial revolution. The ironworks are historically significant as one of the most important iron producers in the world during the beginning of the nineteenth century.

- **Blaenavon Industrial Landscape WHS Heritage Centre (GR SO 250088);**
Housed in the restored former St. Peter's School (Grade II* listed) the WHS Heritage Centre provides information on the history and heritage of the area and is a key visitor information hub for the WHS. The building itself is one of only a few purpose-built works schools dating between 1800 and 1820. It is the oldest known ironworks school in Wales.
- **Big Pit National Coal Museum (GR SO 238087);**
Is one of the most popular visitor attractions within the BILWHS. The museum is based around the former Big Pit Colliery, which was sunk in about 1860 and closed in 1980. The site reopened as a museum in 1983.
- **Garn Lakes Local Nature Reserve (GR SO 232099);**
This is a very popular visitor attraction and local nature reserve created after extensive land reclamation of the post-industrial tips and extractive/mining industry in the 1990s. It covers 40 hectares, with two lakes and grasslands. It provides a stark contrast in landscape character to the surrounding open exposed upland and marginal grasslands.

2.9.11 An additional viewpoint was also selected at **Foxhunters Car Park (GR SO 263106)** due to its higher elevation and popularity as an alternative starting point for visitors walking over The Blorenge/ Mynydd y Garn-fawr ridge to the east of Blaenavon and representative as an elevated view from within the BBNP.

2.9.12 Viewpoint locations for each LSA are illustrated on Figures 1.8 and 2.8 showing local context and at a scale enabling the individual photographic viewpoints to be read. The photographs are shown on Figures 3.1 to 3.15.

2.9.13 A number of factors may have an effect on a given view of the potential development. These include: -

- *Proximity:* objects within the foreground will potentially have a greater visual impact than those viewed in the background.
- *Aspect and Context:* development viewed against a similar background will often appear less notable within the landscape. Development breaking the skyline, especially if moving will increase the visual impact and can detract from the essential setting and appreciation of the adjacent landscape.
- *Screening:* total or intermittent screening may block or partially screen views of the Schemes. Built form, topography and vegetation may provide screening for each viewpoint.
- *Activity:* movement of wind turbine blades and light reflection changing with movement, draw the eye, increasing impact. Sympathetic siting, form and neutral colouration diminish adverse impact.

Table 2.3: Viewpoint Locations and receptors

Viewpoint ID	Description	Receptors	Sensitivity
VP_1	Keeper's Pond: Keeper's Pond is located within both the WHS and BBNP, it is a popular visitor beauty spot with the main aspect and focus of views tending to be focused to the north and over the rolling moorland within the BBNP and to the Abergavenny/Crickhowell valley below. The southerly facing view is truncated by the unbroken upland moorland ridge of Mynydd y Garn-fawr. A line of electricity/telegraph poles run parallel with the B4246 leading to Blaenavon and forming the only built development or infrastructure visible from this point. No direct views are available into the Afon Llywd valley with Blaenavon also screened by the intervening ridge.		
P_1	View looking south from the interpretation panel at the northerly end of the pond dam Proximity: 5.01km to the closest point within the TCBC LSA Proximity: 6.91km to the closest point within the BGCBC LSA Aspect and Context: The area is open and exposed with a large-scale landscape and northerly facing aspect. Views are far reaching to the north and focused on the valley below to the south views are dominated by the expanse of Keeper's Pond with the intervening ridge of Mynydd y Garn-fawr providing a well-defined and unbroken skyline. Screening: to the south is provided by the intervening topography with no significant vegetation. Activity: Popular with locals and visitors alike the area is regularly used with year-round use by walkers and those following WHS trails and wider public access over the BBNP. The view is tranquil with an attractive 'green' open and wilderness aspect.	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer.	Very High
		Local/casual users using footpaths as a daily part of their routine i.e. dog walking	High
		Vehicle travellers – those using the local road network for travel, business/commuting i.e with only a fleeting or transient view from scenic roads	Moderate/Low
P_2	View looking south from midway along the western perimeter path to Keeper's Pond. Proximity: 4.86km to the closest point within the TCBC LSA Proximity: 6.76km to the closest point within the BGCBC LSA Aspect and Context: Open and exposed with far reaching panoramic views over the adjacent upland moorland and good views to the north and NW into the valley below and over The Tumble. Close proximity to the B4246 with occasional passing traffic. Views of remnant mining heritage, tramway,	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer.	Very High
		Local/casual users using footpaths as a daily part of their routine i.e. dog walking	High

Table 2.3: Viewpoint Locations and receptors

Viewpoint ID	Description	Receptors	Sensitivity
	tips and former workings. Keeper's Pond dominant to the immediate east. Ridge to the south is unbroken other than telegraph lines to the right of the view. Screening: to the south is provided by the intervening topography with no significant vegetation. Activity: Popular with locals and visitors alike the area is regularly used year-round. The view is tranquil with an attractive 'green' open and wilderness aspect.	Vehicle travellers – those using the local road network for travel, business/commuting i.e with only a fleeting or transient view from scenic roads	Moderate/Low
P_3	View looking south from the interpretation panel at the car park entrance. Proximity: 4.7km to the closest point within the TCBC LSA Proximity: 6.6km to the closest point within the BGCBC LSA Aspect and Context: The area is open and exposed with a large-scale landscape and northerly facing aspect. Views are far reaching to the north but sharply truncated to the south by the intervening ridge of Mynydd y Garn-fawr. Screening: to the south is provided by the intervening topography with no significant vegetation. Activity: Popular with locals and visitors alike the area is regularly used year-round. The view is tranquil with an attractive 'green' open and wilderness aspect.	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer.	Very High
		Local/casual users using footpaths as a daily part of their routine i.e. dog walking	High
		Vehicle travellers – those using the local road network for travel, business/commuting i.e with only a fleeting or transient view from scenic roads	Moderate/Low
VP_2	Foxhunter's Car Park: located within both the WHS and BBNP, it is a popular visitor beauty spot with good dual aspect views over the upland moorland to The Blorenge to the north and views over the Blaenavon valley to the south. The masts and associated infrastructure of the transmitter station are visually dominant on the south side of the car park. A local road follows the ridgeline towards Llanover to the east.		
P_4	View looking south and the trailhead of the Iron Mountain trail adjacent to the transmitter station. Proximity: 5.01km to the closest point within the TCBC LSA Proximity: 7.4km to the closest point within the BGCBC LSA Aspect and Context: The area is open and exposed with a large-scale landscape with a dual facing aspect to the northern Blorenge ridge and to the south over the upper reaches of the Blaenavon valley. The moorland	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer.	Very High
		Local/casual users using footpaths as a daily part of their routine i.e. dog walking	High

Table 2.3: Viewpoint Locations and receptors

Viewpoint ID	Description	Receptors	Sensitivity
	upland expanse of Coity Mountain is the dominant feature to the south. Little development is visible with no clear views onto the valley floor. The aspect is one of open exposed and undeveloped. Screening: Any screening is solely dependent on local topography variations. Activity: Popular with locals and visitors alike the area is regularly used year-round. The view is tranquil with an exposed wilderness aspect.	Vehicle travellers – those using the local road network for travel, business/commuting i.e with only a fleeting or transient view from scenic roads	Moderate/Low
VP_3	Blaenavon Ironworks: Located within the heart of Blaenavon town the Ironworks are a key heritage feature and central to the WHS listing. The site is largely enclosed with views facing in on itself. However, views are further reaching from the upper reaches of the site although public access is limited in these areas for health and safety reasons. The site itself was not open to the public at the time of survey.		
P_5	View from the SE side of the site adjacent to the rear of cottages at Stack Square Proximity: 3.13km to the closest point within the TCBC LSA Proximity: 5.92km to the closest point within the BGCBC LSA Aspect and Context: Views are largely focused within the site itself but at this point on the open greenspace adjacent to the ironworks site, the views are largely confined by the surrounding built and residential development of the town. Views are available above roof tops directly to the SW onto the Coity Mountain ridge. These are relatively narrow and funneled directly SW with no wider views to the west and onto the LSA. Screening: Built development and intervening garden vegetation Activity: Very popular heritage destination within the WHS. Constant and relatively high visitor number throughout the open season. Frequent use with passing traffic along the B4246 and into Gilchrist Thomas Industrial Estate low key but constant.	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer.	Very High
		Local/casual users using footpaths and open space as a daily part of their routine i.e. dog walking. Static views from residential properties	High

Table 2.3: Viewpoint Locations and receptors

Viewpoint ID	Description	Receptors	Sensitivity
P_6	View from the upper levels of the Ironworks above the main Blast Furnace. Publicly accessible with viewing platform Proximity: 3.22km to the closest point within the TCBC LSA Proximity: 5.94km to the closest point within the BGCBC LSA Aspect and Context: Views are largely static and although focused into the lower site and key heritage features valley wide views are also available. Coity Mountain lies directly SW and dominates views providing a distinctive upland/moorland undeveloped defined break to the view. Wider views of Blaenavon are available providing context and good orientation for the visitor and key reference points within the WHS, most notably to the SSW and Big Pit. Screening: Some boundary vegetation provides filtered views along the SE boundary of the site, the main built development of Blaenavon lies directly to the south and east and frames and screens lower ground views. Activity: Very popular heritage destination within the WHS. Constant and relatively high visitor number throughout the open season. Movement and activity largely confined to pedestrian movement although low key traffic noise is evident.	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer. Largely static at this point so aware of changes/ variations to the overall view	Very High
P_7	View from NW side of Ironworks site from Playing fields looking SE Proximity: 3.21km to the closest point within the TCBC LSA Proximity: 5.93km to the closest point within the BGCBC LSA Aspect and Context: Views from within the site are from the upper levels above Blast furnace 4 with limited public access due to workings and unprotected drops. Main views are focused within the site but long-distance views are available over the town of Blaenavon down the valley to the SE. Screening: The view from the adjacent playing fields are filtered through mature tree line along the shared boundary. Activity: Constant and relatively high visitor number throughout the open season. Movement and activity largely confined to pedestrian movement although low key traffic noise is evident. Activity on the adjacent playing fields are assumed as irregular recreational use. The continuation of the Iron Mountain Trail runs along the northern edge of the fields and continues to the SE where it meets Stable Row.	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer. Largely static at this point so aware of changes/ variations to the overall view Local/casual users using footpaths and open space as a daily part of their routine i.e. dog walking. Users of recreational/formal sports facilities where the landscape is secondary to enjoyment of the sport	Very High High Low

Table 2.3: Viewpoint Locations and receptors

Viewpoint ID	Description	Receptors	Sensitivity
P_8	View from the vehicular/service entrance to Blaenavon Ironworks adjacent to main pedestrian entrance Proximity: 3.08km to the closest point within the TCBC LSA Proximity: 5.72km to the closest point within the BGCBC LSA Aspect and Context: Views are tightly enclosed and focused on the main road leading to the B4248 Brynmawr and the adjacent Ironworks car park. Highly filtered and occasional glimpsed views through tree canopy of the westerly extent of Coity Mountain. Main focus is tightly contained within the immediate road network and car park with little wider landscape context. Screening: Heavily vegetated providing very good year-round screening Activity: Very popular heritage destination within the WHS. Constant and relatively high visitor number throughout the open season. Constant traffic movement and activity along the main road with frequent HGV and business traffic turning opposite the Ironworks to access the Gilchrist Thomas Industrial estate.	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer. Largely static at this point so aware of changes/variations to the overall view	Very High
		Local/casual users using footpaths and open space as a daily part of their routine i.e. dog walking.	High
		Views by users of main roads or passengers in public transport on main arterial routes	Low
VP_4	Big Pit: National Coal Museum: Located to the SW of Blaenavon town centre Big Pit is a key heritage feature and tourist destination. Together with the Ironworks it is central to the WHS listing. The site is elevated on a slight plateau above the level of the main town lying at approximately 400m AOD around 50m above the ironworks. The site is open and exposed to the elements with clear views along the valley with Coity Mountain a dominant and constant backdrop.		

Table 2.3: Viewpoint Locations and receptors

Viewpoint ID	Description	Receptors	Sensitivity
P_9	View looking SSE along the Afon Llwyd Valley from outside the Timber Workshop Proximity: 2.51km to the closest point within the TCBC LSA Proximity: 4.88km to the closest point within the BGCBC LSA Aspect and Context: Views are channelled along the pathways and spaces in between the pit buildings and at many points are directed in a S Easterly direction down the valley and along the flanks of Coity Mountain. Aspect changes rapidly as the visitor moves through the site and range from open and exposed and open to the elements to sheltered in the lee of buildings. The main visitor focus is directed internally into the site at exhibits, mining heritage and interpretation. Screening: Buildings and mining equipment screen views with the remaining views being partial or sharply directed Activity: Very popular heritage destination within the WHS. Constant and relatively high visitor number throughout the open season.	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer. Largely static at this point so aware of changes/ variations to the overall view	Very High
P_10	View looking SSE from outside the Tram Shed Proximity: 2.45km to the closest point within the TCBC LSA Proximity: 4.80km to the closest point within the BGCBC LSA Aspect and Context: Clear views are available from the edge/extent of the site giving a broadly panoramic view across the Afon Llwyd valley to the SE with little or no built development. Parts of higher lying Blaenavon visible at an oblique angle to the north. The aspect has a clear demarcation between built and rural/upland edge. Abrupt and undeveloped flanks of Coity Mountain are dominant to the south. Relatively quiet and tranquil aspect, clear and unbroken skyline. Screening: Some low level and sporadic tree and scrub vegetation long site boundary but broad expanse is clear and unscreened Activity: Very popular heritage destination within the WHS. Constant and relatively high visitor number throughout the open season. Very little/infrequent vehicular traffic	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer. Largely static at this point so aware of changes/ variations to the overall view	Very High

Table 2.3: Viewpoint Locations and receptors

Viewpoint ID	Description	Receptors	Sensitivity
P_11	View SSE from outside the Pit Head Baths and Canteen Proximity: 2.48km to the closest point within the TCBC LSA Proximity: 4.71km to the closest point within the BGCBC LSA Aspect and Context: Clear and elevated views over the entire site and valley beyond. This viewpoint lies at the highest point of the site and is a key visitor hub where most visitors will circulate stopping and taking in the view. The aspect provides a clear orientation point for both Big Pit and for the wider WHS providing context for many of the WHS principal points of interest as well as the industrial and residential built development of Blaenavon. Gilchrist Thomas Industrial estate is clear to the north of the museum. Setting and context is an important element Screening: Open and clear views with no built or vegetated elements providing screening Activity: Very popular heritage destination within the WHS. Constant and relatively high visitor number throughout the open season.	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer. Largely static at this point so aware of changes/ variations to the overall view	Very High
VP_5	Blaenavon Industrial Landscape World Heritage Centre: Located in the centre of Blaenavon in the former St. Peter's School. The building provides the main visitor information point for the WHS and a key orientation point for visitors. Set in the main conservation area the building sits in an elevated position with land dropping away to the south providing good views across the town and towards Coity Mountain.		
P_12	View SSE along the Afon Llwyd Valley from patio outside the WHS Centre Proximity: 2.79km to the closest point within the TCBC LSA Proximity: 5.89km to the closest point within the BGCBC LSA Aspect and Context: Aspect is largely SE facing. Views are channeled in a SE direction from the external patio with the Coity Mountain ridge a dominant and unbroken skyline. The view is in contrast with other views around Blaenavon in its smaller scale and more intimate, domestic balance. Well vegetated with mature trees and green spaces framing views. Screening: Good level of screening with intervening mature vegetation Activity: Popular heritage destination within the WHS. Constant and	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer. Largely static at this point although those within the visitor centre are largely unaware of the external view Local/casual users using footpaths and open space as a daily part of their routine i.e. dog walking, shopping, commuting.	Very High High

Table 2.3: Viewpoint Locations and receptors

Viewpoint ID	Description	Receptors	Sensitivity
	relatively high visitor number throughout the open season. Local foot traffic and frequent vehicle traffic passing provide a busy environment with a continual level of movement and activity	Views by users of main roads or passengers in public transport on main arterial routes.	Low
VP_6	Garn Lakes: Local Nature Reserve: A popular local nature reserve used by locals and visitors alike. NCN492 cycle route passes through the area. Attractive well wooded setting in contrast with the surrounding rough grazing and upland marginal moorland		
P_13	View looking SE at northern end of the Lower Lake Proximity: 3.75km to the closest point within the TCBC LSA Proximity: 4.42km to the closest point within the BGCBC LSA Aspect and Context: The aspect is widescale and predominantly southerly with long distance views to the SE along the valley and dominated by the Coity Mountain ridge due south. The reserve is created from a reclamation site creating an artificially designed 'naturalised' landscape. The vegetation cover is well wooded with large swathes of open grassland and wet woodland in contrast with the surrounding landscape framework. The main focus is the lakes and the wildlife that frequents them and the associated grassland. Skylines are unbroken and undeveloped. Screening: Well screened by intervening mature tree vegetation. Activity: infrequent, low key although traffic noise along the neighbouring B4248 (Brynmaur) road is a frequent background element	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer. Largely static at this point although those within the visitor centre are largely unaware of the external view	Very High
		Local/casual users using footpaths and open space as a daily part of their routine i.e. dog walking	High
P_14	View looking SE at footpath junction between upper and lower lakes Proximity: 3.87km to the closest point within the TCBC LSA Proximity: 4.55km to the closest point within the BGCBC LSA Aspect and Context: The aspect is widescale and predominantly southerly with long distance views to the SE along the valley and dominated by the Coity Mountain ridge due south. Skylines are unbroken and undeveloped.	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer.	Very High

Table 2.3: Viewpoint Locations and receptors

Viewpoint ID	Description	Receptors	Sensitivity
	Built development with the westerly section of Gilchrist Thomas industrial Estate visible and remnant tip/working evident screening Big Pit from direct view. Screening: Well screened by intervening mature tree vegetation. Although at this point views are more elevated and clearer along the Afon Llwyd valley Activity: infrequent, low key although traffic noise along the neighbouring B4248 (Brynmawr) road is a frequent background element	Local/casual users using footpaths and open space as a daily part of their routine i.e. dog walking	High
P_15	View looking SE from north side of upper lake Proximity: 4.02km to the closest point within the TCBC LSA Proximity: 4.97km to the closest point within the BGCBC LSA Aspect and Context: The aspect is widescale and predominantly southerly with long distance views to the SE along the valley and dominated by the Coity Mountain ridge due south. Skylines are unbroken and undeveloped. Screening: Well screened by intervening mature tree vegetation. Although at this point views are more elevated and clearer along the Afon Llwyd valley Activity: infrequent, low key although traffic noise along the neighbouring B4248 (Brynmawr) road is a frequent background element	BILWHS and BBNP – those visiting the area for the purpose of enjoying the heritage and landscape on offer.	Very High
		Local/casual users using footpaths and open space as a daily part of their routine i.e. dog walking.	High

3 THEORETICAL ENVIRONMENTAL EFFECTS

3.1.1 At its closest point the TCBC LSA lies approximately 1.06 km SE of the BILWHS and the BGCBC LSA lies 3.4km W of the BILWHS. A viewshed analysis has been carried out to ascertain the Zones of Theoretical Visibility (ZTV) of potential wind turbines sited within both LSAs using turbine heights of 120m, 150m and 180m. A combined ZTV for each LSA is illustrated on Figures 1.1 and 2.1 with individual turbine ZTVs illustrated Figures 1.2 to 1.6 (TCBC) and 2.2 to 2.6 (BGCBC).

3.1.2 As this addendum refers to indicative turbine locations within the LSAs the environmental impacts will consider landscape and visual impacts assuming an operational development at opening year without mitigation.

3.2 Landscape and Townscape Impact Assessment

3.2.1 The following table (Table 3.1), brings together the landscape impacts for a potential wind turbine development on the BILWHS and the individual LAU within the WHS.

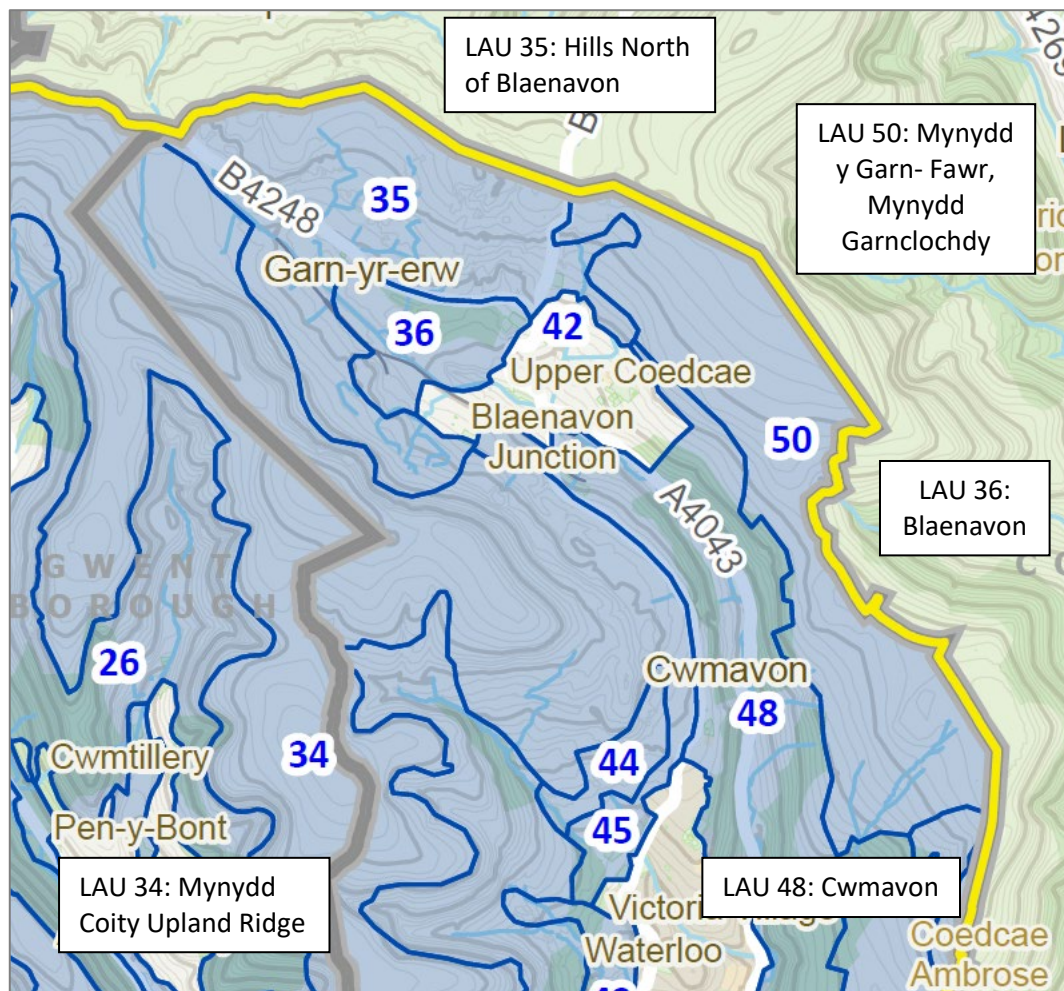


Figure A: Landscape Assessment Units: Blaenavon

Table 3.1: Magnitude of Landscape Impacts

Landscape Character Area	Landscape Sensitivity	Comments	Potential Landscape Impacts	Potential Landscape Impact significance
BILWHS and BBNP	Very high	As landscapes of very high international/ national importance the WHS and BBNP are both considered to have no or very limited ability to accommodate change without substantial loss/gain.	Incongruous, large scale or substantial and out of character development could potentially be an infringement of the criterion for the original listing for the WHS.	<i>Very High sensitivity x Moderate magnitude of impact =</i> Large/Very large adverse
LAU 34: Mynydd Coity Upland Ridge	Very high	This LAU covers the main portion of Coity Mountain as viewed from within the WHS. It is typified by its open exposed and undeveloped nature with very limited development other than occasional scattered farmsteads. It also forms an important backdrop to views from within the BBNP as seen from Foxhunter's and to a lesser extent Keeper's Pond.	The introduction of new vertical elements created by potential wind turbine development into an otherwise undeveloped landscape and along an unbroken skyline would disrupt the existing landscape character of the area.	<i>Very High sensitivity x Moderate magnitude of impact =</i> Large/Very large adverse

Table 3.1: Magnitude of Landscape Impacts

Landscape Character Area	Landscape Sensitivity	Comments	Potential Landscape Impacts	Potential Landscape Impact significance
LAU 35: Hills North of Blaenavon	High	This LAU includes Garn Lakes Local Nature Reserve. The landscape character is generally open and exposed over much of the area with far reaching views along the Afon Llwyd valley with Blaenavon forming a significant proportion of the view in the middle distance. Views become successively more upland and rural focussed as the viewer moves towards the north of the area with the emphasis more on the open, undeveloped nature of the LAU.	The introduction of new vertical elements created by potential wind turbine development into the wider landscape at the lower levels is unlikely to have a significant impact on the landscape character given the already developed nature of settlement and built environment of Blaenavon. However, siting of turbines along a currently unbroken skyline with the added distraction of movement from the turbine blades is likely to disrupt the existing landscape character of the area, especially from the upper/ northern reaches of the character area where existing development is at a greater distance and therefore of less dominance in the field of view.	<i>High sensitivity x Minor magnitude of impact = Slight/Moderate adverse</i>

Table 3.1: Magnitude of Landscape Impacts

Landscape Character Area	Landscape Sensitivity	Comments	Potential Landscape Impacts	Potential Landscape Impact significance
LAU 36: Blaenavon	Low	This LAU includes Big Pit but for the most part comprises the main part of the more modern and industrial expansion of Blaenavon to the north of the historic town centre. The sensitivity assigned as part of the Sensitivity and Capacity Study for Renewable Energy provides a landscape sensitivity based on local small scale renewable generation that would have a better landscape character fit within the industrial development.	The introduction of new vertical elements created by potential wind turbine development into the wider landscape is unlikely to have a significant impact on the landscape character given the already developed nature of settlement and built environment of Blaenavon. However, consideration of siting to maintain an unbroken skyline is recommended to maintain the integrity of the character area boundaries and containment within the valley form.	<i>Low sensitivity x Minor magnitude of impact =</i> Neutral/Slight adverse
LAU 48: Cwmavon	Very High	This LAU includes the valley floor and lower east facing slopes of Mynydd y Garn-fawr and Mynydd Garnclochdy. Much of the area has filtered views of the undeveloped upland ridges along both sides of the valley with the scale becoming more intimate as the valley elevation drops and vegetation cover on the valley sides becomes more wooded.	The introduction of new vertical elements created by potential wind turbine development into an otherwise undeveloped landscape and along an unbroken skyline would disrupt the existing landscape character in areas of the LAU with a clear view onto the adjacent ridgelines.	<i>Very High sensitivity x Moderate magnitude of impact =</i> Large/Very large adverse
LAU 50: Mynydd y Garn- Fawr, Mynydd Garnclochdy	Very High	This LAU covers the area within Torfaen CBC with the closest proximity to both Keeper's Pond and Foxhunters Car Park. Its aspect facing directly onto the LSA at a high elevation provides direct and clear views into the LSA.	The introduction of new vertical elements created by potential wind turbine development into an otherwise undeveloped landscape and along an unbroken skyline would disrupt the existing landscape character of the area.	<i>Very High sensitivity x Moderate magnitude of impact =</i> Large/Very large adverse

3.3 Visual Impact Assessment

- 3.3.1 The assumed visual impact at each of the viewpoint locations resulting from the introduction of new or additional structures in the context of the viewed landscape would remain a constant throughout the operational phase. These impacts would constitute a permanent change. There may be some limited moderation of these impacts through mitigation measures. However, given the scale of the potential development, the breadth and open exposed nature of much of the overall landscape and the general lack of tree cover in the wider landscape this will be limited and would depend more on sympathetic siting rather than off site mitigation.
- 3.3.2 The ZTV impacts for each wind turbine location is shown individually on Figures 1.2 to 1.6 (TCBC) and Figures 2.2 to 2.6 (BGCBC). This shows that whilst the visual impacts still remain in place for much of the eastern Mynydd y Garn-fawr and Bloreng ridge, they can be modified or reduced according to the turbine siting.
- 3.3.3 The visual impacts are assessed against the following criteria;
- *Scale of change*; This change can be in the form of the addition of new features into the view or the removal of existing features (such as trees, woodland or buildings).
 - *Nature of change*; the extent to which a given change is out of character with the existing view can influence the effects which it would produce. For the purpose of this assessment this is an indicative visual impact based on the ZTV/viewshed analysis.
 - *Duration of change*; this is categorised as being short term (i.e. up to 1 year or during construction if the construction period exceeds one year), short/medium term (i.e. 1 to 15 years, during which time planted mitigation would have little significant effect in most cases), or long term (i.e. lasting beyond 15 years). It is assumed in all cases that this will be a long term change i.e permanent.
 - *Distance*; the magnitude of any change would generally decrease with distance from its source, until a point is reached where there is no discernible change.
 - *Screening*; intervening features may block the view completely (in which case there would be no change), or there may be a partial screen, in which case the magnitude of change would decrease. Intervening vegetation where present has been highlighted as this often filters views. The degree to which these filter, or screen a view would change with the seasons, this has been noted where applicable.
 - *The direction and focus of the view*; if the change occurs in the part of the landscape which is the principal area of existing visual interest, the effects are likely to be perceived to be greater than if the proposed change occurs away from the main area of visual interest. This is especially relevant in the context of views from promoted or locally valued viewpoints.
- 3.3.4 The visual impacts at each of the viewpoints is assessed using the cumulative ZTV generated by the five turbine locations. These are described for each LSA separately in the following tables (Table 3.2 TCBC and Table 3.3 BGCBC);

Table 3.2: Magnitude of Visual Impacts: Torfaen CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
Keeper's Pond: P1	Very high	The extent of visible turbine is restricted by the height. However, the turbine blades, but not hub, for 120m, 150m and 180m height of Turbines 1 and 2 will be visible to some extent from this viewpoint resulting in an undeveloped and open skyline potentially being broken by turbine head and/or blades. This would be more evident during periods of operation when the movement of the blades creates a focal point at odds with the adjacent landscape. It should be noted however, that the main focus for all views at Keeper's Pond tends to be focussed to the north and into the BBNP. The views to the south are restricted to the user returning to the car park, there are no direct views of the LSA. Therefore, the overall visual impact is considered to be Moderate Adverse Reference Figure: 1.9 Viewpoint 1 Visualisation (TCBC)	120m turbine – Yes (Turbine 1 and 2)	Large/Very large adverse (Very high sensitivity) ranging to Slight adverse (Low sensitivity)
	High		150m turbine – Yes (Turbine 1 and 2)	
	Moderate/Low		180m turbine – Yes (Turbine 1 and 2)	
Keeper's Pond: P2	Very High	As with P1. However, it is anticipated that only the 180 and 150m heights of Turbine 1 and the 180m height of Turbine 2 would be visible from this point The views to the south are restricted to the user returning to the car park there are no direct views of the LSA. Therefore, the overall visual impact is considered to be Moderate Adverse Reference Figure: 1.10 Viewpoint 2 Visualisation (TCBC)	120m turbine - No	Large/Very large adverse (Very high sensitivity) ranging to Slight adverse (Low sensitivity)
	High		150m turbine – Yes (Turbine 1)	
	Moderate/Low		180m turbine – Yes (Turbine 1 and 2)	
Keeper's Pond: P3	Very High		120m turbine - No	Neutral/ No change

Table 3.2: Magnitude of Visual Impacts: Torfaen CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
	High	As with P1. However, it is anticipated that only the 180 and 150m heights of Turbine 1 would be visible from this point, with the 150m turbine barely breaking the skyline.	150m turbine - Yes (Turbine 1)	Large/Very large adverse (Very high sensitivity) ranging to Slight adverse (Low sensitivity)
	Moderate/Low	The views to the south are restricted to the user returning to the car park there are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Moderate to Minor adverse Reference Figure: 1.11 Viewpoint 3 Visualisation (TCBC)	180m turbine – Yes (Turbine 1)	
Foxhunter's: P4	Very High	The extent of visible turbine is restricted by the height. However, all turbine height will be visible to some extent from this viewpoint resulting in the introduction of an additional vertical element(s) at a large scale in contrast with the surrounding landscape. The LSA lies to the east/left hand side of the view where the foreground is dominated by the existing transmitter station reducing the overall immediate visual impact of development within the more distant LSA (c. 5km). Turbine development would be more evident during periods of operation when the movement of the blades creates a focal point at odds with the adjacent landscape. Therefore, the overall visual impact is considered to be Moderate Adverse Reference Figure: 1.12 Viewpoint 4 Visualisation (TCBC)	120m turbine – Yes (Turbine 1,2,3 and 4)	Large/Very large adverse (Very high sensitivity) ranging to Slight adverse (Low sensitivity)
	High		150m turbine – Yes (Turbine 1,2,3,4 and 5)	
	Moderate/Low		180m turbine – Yes (Turbine 1,2,3,4 and 5)	
Blaenavon Ironworks: P5	Very High	The views to the south and south east are restricted by the adjacent housing development and local variations in	120m, 150m and 180m turbine - No	Neutral/ No change

Table 3.2: Magnitude of Visual Impacts: Torfaen CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
	High	topography there are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible		
Blaenavon Ironworks: P6	Very High	The views at this location are generally directed down and into the Ironworks site and onto the opposite northern facing slopes of Coity Mountain. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
Blaenavon Ironworks: P7	Very High	The views at this location are generally directed down and into the Ironworks site. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			
	Low			
Blaenavon Ironworks: P8	Very High	Views at this location are heavily enclosed by mature vegetation and are screened from wider landscape views. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			
	Low			

Table 3.2: Magnitude of Visual Impacts: Torfaen CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
Big Pit: P9	Very High	The views at this location are generally either confined within the site whilst the visitor engages with the heritage and interpretation or if looking outside the site, are funnelled between buildings and confined in a SE direction along the flanks of Coity Mountain and down the valley. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
Big Pit: P10	Very High	The views at this location are generally either confined within the site whilst the visitor engages with the heritage and interpretation or if looking outside the site, are directed in a SE direction along the flanks of Coity Mountain and down the valley. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
Big Pit_ P11	Very High	The views at this elevated location are generally more expansive over the lower lying valley floor and Blaenavon and the industrial development at Gilchrist Thomas Estate. Views are available to the SE and are guided along the flanks of Coity Mountain and down the valley. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change

Table 3.2: Magnitude of Visual Impacts: Torfaen CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
BILWHS Centre: P12	Very High	Views from this location are contained to the SE and screened by intervening built development and mature tree and hedgerow vegetation. The main focus of the available views are directly south onto the Coity Mountain ridge. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			
	Low			
Garn Lakes: P13	Very High	Views from this location are focussed onto the large lake waterbody and the surrounding woodland and woodland edge vegetation. Longer distance views are available to the SE and are contained by the valley landform and the Coity Mountain ridge. There are no direct views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			
Garn Lakes: P14	Very High	Views from this location are focussed onto the lower lying lake and surrounding woodland and woodland edge vegetation. Longer distance views are available to the SE where the outskirts of Blaenavon and the Gilchrist Thomas Industrial Estate are visible. Longer distance views are contained by the valley landform and the Coity Mountain ridge. There are no direct views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			

Table 3.2: Magnitude of Visual Impacts: Torfaen CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
Garn Lakes: P15	Very High	Views from this location are focussed onto the upper lake and surrounding woodland and woodland edge vegetation. Middle distance views focus on the open and undeveloped ridge of Coity Mountain. There are no direct views of the LSA and no anticipated views of turbines at any of the three assessed heights. However, the adjacent B4248 to Brynmawr (outside the Nature Reserve boundary) may anticipate some visual impacts from the taller turbine heights (180m) Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			

Table 3.3: Magnitude of Visual Impacts: Blaenau Gwent CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
Keeper's Pond: P1	Very high	The extent of visible turbine is restricted by the height. However, the tip of the turbine blades for the 180m height of Turbine 5 will be visible just breaking the skyline at this viewpoint. This would be more evident during periods of operation when the movement of the blades creates a focal point but would be likely to be relatively insignificant within the wider panorama. It should be noted however, that the main focus for all views at Keeper's Pond tends to be focussed to the north and into the BBNP. The views to the south are restricted to the user returning to the car park, there are no direct views of the LSA. Therefore, the overall visual impact is considered to be Minor Adverse Reference Figure: 2.9 Viewpoint 1 Visualisation (BGCBC)	120m turbine - No	Moderate/Large adverse (Very high sensitivity) ranging to Slight adverse (Low sensitivity)
	High		150m turbine - No	
	Moderate/Low		180m turbine - Yes	
Keeper's Pond: P2	Very High	The views to the south are restricted to the user returning to the car park there are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m turbine - No	Neutral/ No change
	High		150m turbine - No	
	Moderate/Low		180m turbine - No	
Keeper's Pond: P3	Very High	The views to the south are restricted to the user returning to the car park there are no views of the LSA and no anticipated views of turbines at any of the three assessed	120m turbine - No	Neutral/ No change
	High		150m turbine - No	

Table 3.3: Magnitude of Visual Impacts: Blaenau Gwent CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
	Moderate/Low	heights. Therefore, the overall visual impact is considered to be Negligible	180m turbine - No	
Foxhunter's: P4	Very High	The extent of visible turbine is restricted by the height. However, all turbine heights for all locations will be visible to some extent from this viewpoint resulting in the introduction of an additional vertical element(s) at a large scale in contrast with the surrounding landscape. The LSA lies to the north/right hand side of the view where the foreground is dominated by the existing transmitter station reducing the overall immediate visual impact of development within the more distant LSA (c. 5km). Turbine development would be more evident during periods of operation when the movement of the blades creates a focal point at odds with the adjacent landscape. Therefore, the overall visual impact is considered to be Moderate Adverse Reference Figure: 2.10 Viewpoint 4 Visualisation (TCBC)	120m turbine - Yes (Turbine 1,2,3,4 and 5)	Large/Very large adverse (Very high sensitivity) ranging to Slight adverse (Low sensitivity)
	High		150m turbine - Yes (Turbine 1,2,3,4 and 5)	
	Moderate/Low		180m turbine - Yes (Turbine 1,2,3,4 and 5)	
Blaenavon Ironworks: P5	Very High	The views to the south and south east are restricted by the adjacent housing development and local variations in topography there are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			

Table 3.3: Magnitude of Visual Impacts: Blaenau Gwent CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
Blaenavon Ironworks: P6	Very High	The views at this location are generally directed down and into the Ironworks site and onto the opposite northern facing slopes of Coity Mountain. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
Blaenavon Ironworks: P7	Very High	The views at this location are generally directed down and into the Ironworks site. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			
	Low			
Blaenavon Ironworks: P8	Very High	Views at this location are heavily enclosed by mature vegetation and are screened from wider landscape views. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			
	Low			
Big Pit: P9	Very High	The views at this location are generally either confined within the site whilst the visitor engages with the heritage and interpretation or if looking outside the site, are funnelled between buildings and confined in a SE direction along the flanks of Coity Mountain and down the valley. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change

Table 3.3: Magnitude of Visual Impacts: Blaenau Gwent CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
Big Pit: P10	Very High	The views at this location are generally either confined within the site whilst the visitor engages with the heritage and interpretation or if looking outside the site, are directed in a SE direction along the flanks of Coity Mountain and down the valley. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
Big Pit_ P11	Very High	The views at this elevated location are generally more expansive over the lower lying valley floor and Blaenavon and the industrial development at Gilchrist Thomas Estate. Views are available to the SE and are guided along the flanks of Coity Mountain and down the valley. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
BILWHS Centre: P12	Very High High Low	Views from this location are contained to the SE and screened by intervening built development and mature tree and hedgerow vegetation. The main focus of the available views are directly south onto the Coity Mountain ridge. There are no views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change

Table 3.3: Magnitude of Visual Impacts: Blaenau Gwent CBC LSA

Viewpoint	Receptor Sensitivity	Comments	Potential Visual Impacts (ZTV)	Potential Visual Impact significance
Garn Lakes: P13	Very High	Views from this location are focussed onto the large lake waterbody and the surrounding woodland and woodland edge vegetation. Longer distance views are available to the SE and are contained by the valley landform and the Coity Mountain ridge. There are no direct views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			
Garn Lakes: P14	Very High	Views from this location are focussed onto the lower lying lake and surrounding woodland and woodland edge vegetation. Longer distance views are available to the SE where the outskirts of Blaenavon and the Gilchrist Thomas Industrial Estate are visible. Longer distance views are contained by the valley landform and the Coity Mountain ridge. There are no direct views of the LSA and no anticipated views of turbines at any of the three assessed heights. Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change
	High			
Garn Lakes: P15	Very High	Views from this location are focussed onto the upper lake and surrounding woodland and woodland edge vegetation. Middle distance views focus on the open and undeveloped ridge of Coity Mountain. There are no direct views of the LSA and no anticipated views of turbines at any of the three assessed heights. However, the adjacent B4248 to Brynmawr (outside the Nature Reserve boundary) may anticipate some visual impacts from the taller turbine heights (180m) Therefore, the overall visual impact is considered to be Negligible	120m, 150m and 180m turbine - No	Neutral/ No change

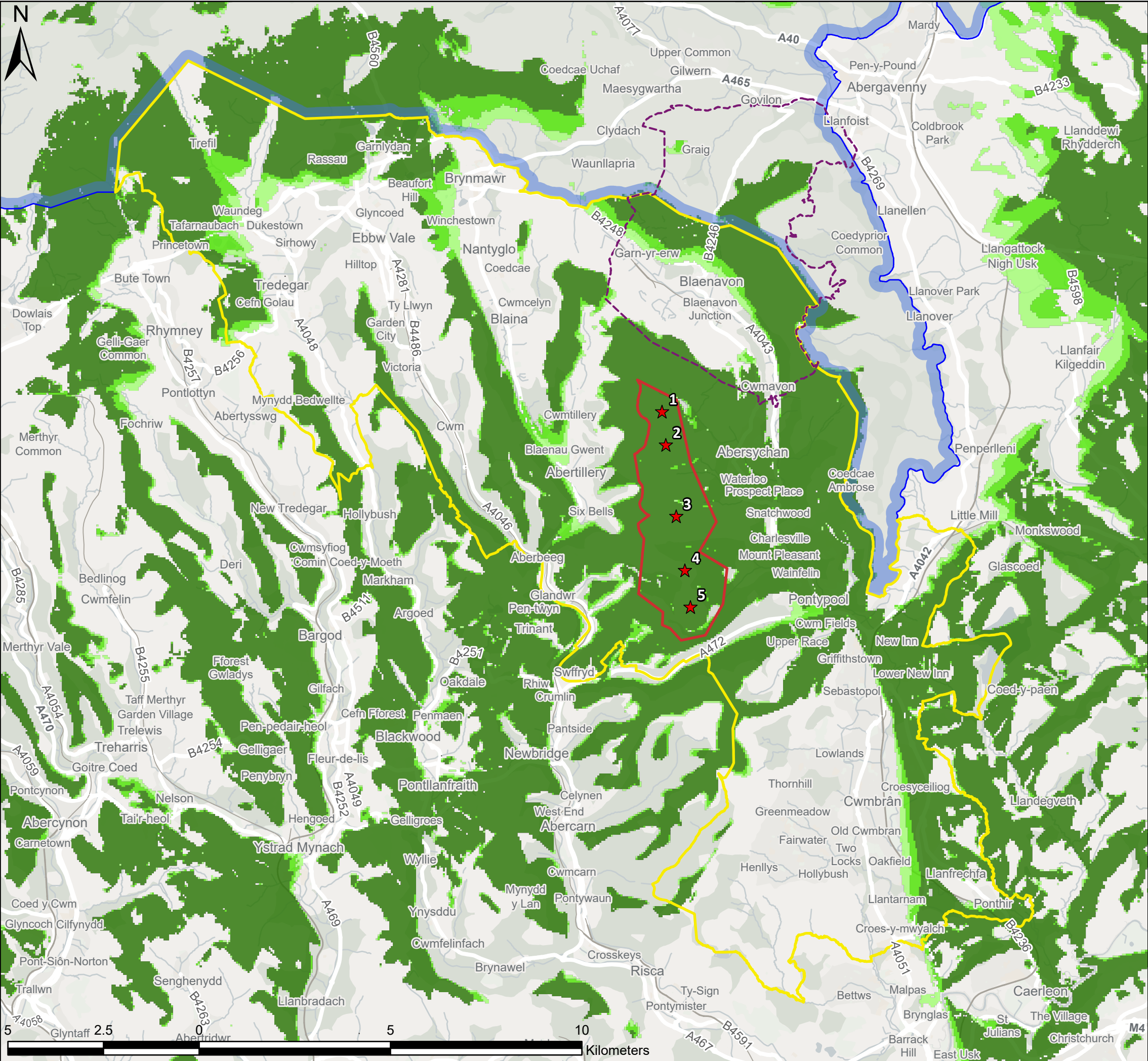
4 POTENTIAL MITIGATION MEASURES

4.1.1 The following potential mitigation measures are recommended for consideration for both landscape and visual impacts for any future development.

- Respect the setting of BILWHS, BBNP and associated historic landscape and Scheduled Monuments.
- Avoid placing turbines on narrow sections of ridge where they will appear on the skyline.
- Consider opportunities to use existing vegetation within each LSA to partially screen wind development.
- Where appropriate (generally as a last measure) consider off-site mitigation planting at receptor viewpoint to screen or filter views of large scale or visually distracting elements created by movement of the turbine blades.

5 CONCLUSIONS

- 5.1.1 The study area for this assessment is taken to be the extent of the Blaenavon Industrial Landscape World Heritage Site (BILWHS) and as an internationally designated area it is considered to be of a Very High landscape sensitivity. However, the local landscape character as assessed in the Sensitivity and Capacity Study for Renewable Energy Development provided more locally refined landscape sensitivities that assessed siting of turbines within, and intervisibility between Landscape Assessment Units (LAUs).
- 5.1.2 The majority of the key viewpoints within the WHS are not anticipated to have any visual impacts resulting from the indicative locations of turbines at any height within either LSA.
- 5.1.3 The most significant visual impacts on the WHS, and the Brecon Beacons National Park (BBNP) would occur on higher elevation ground above Blaenavon. Principally on the south and south east facing slopes of Mynydd y Garn-fawr and the ridge line of the Bloreng.
- 5.1.4 The exposed and open nature of these landscape areas and their far reaching and generally unimpeded views mean planted and built mitigation would be of minimal effectiveness. Mitigation would be more effective in terms of specific turbine siting where utilisation of local changes in topography may minimise visual impacts.
- 5.1.5 The GIS Visualisations provided for viewpoints 1,2,3 and 4 indicate that Turbines 1 and 2 (TCBC) and Turbine 5 (BGCBC) would be visible at Keeper's Pond (VP1,2,3), these would only include the turbine blades themselves and would be more apparent for the 180m and 150m turbine. The greatest visual impact is anticipated during times of operation when the movement of blades periodically breaks the skyline.
- 5.1.6 For Foxhunters Car Park (VP4) all turbine heights would be visible for both the TCBC and BGCBC introducing not only a new infrastructure element into an otherwise undeveloped skyline but also creating a potential cumulative visual impact should turbine development occur in both the TCBC and BGCBC LSAs. It is however noted that the presence of the existing transmitter station at this location may go some way towards reducing the perceived visual impacts at this location.
- 5.1.7 The findings of this assessment addendum are based on indicative locations of wind turbines and do not include any assessment of associated infrastructure. The purpose of this assessment is to provide an overview of potential visual impacts and any final decision should be made with the site/development specific information provided by an Environmental Impact Assessment.



- ★ Wind Turbine Locations
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P4	FI	01/02/2022	Final	TW	LC	LC
P3	S3	06/12/2021	For client review	TW	LC	LC
P2	S3	02/12/2021	For client review	TW	LC	LC
P1	S0	19/11/2021	First issue	TW		
V.	S.	Date	Description	B.	C.	A.

- Environmental Consultants
- Planners
- Landscape Architects
- Landscape Managers
- Urban Designers
- Ecologists



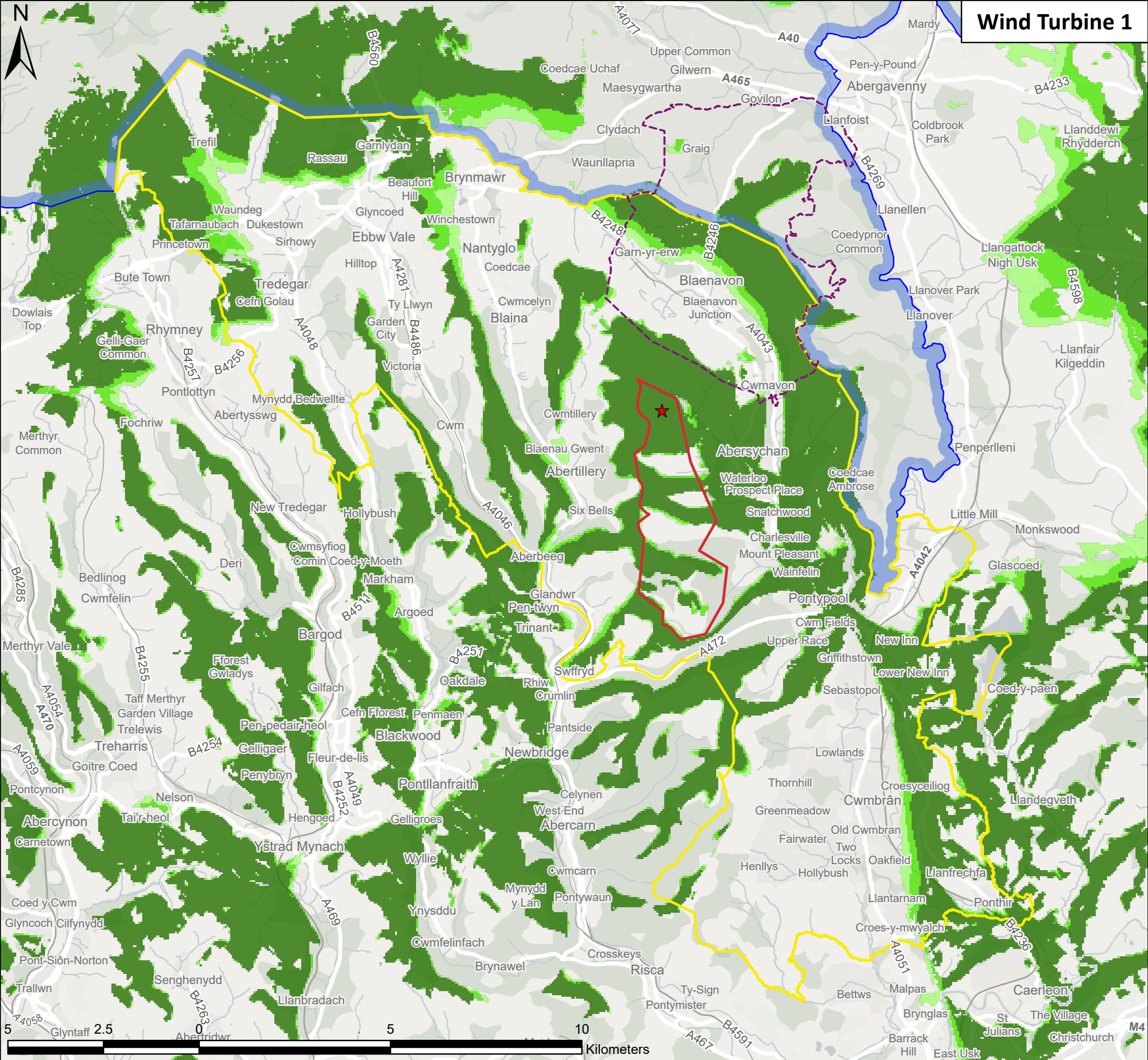
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Proposed Local Search Areas for Wind and
Blaenavon Industrial Landscape World Heritage

Figure 1.1
Wind Turbine ZTVI (TCBC)

Drawing no.:	61007_DWG_F1-1ZTVITCBC
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- ★ Wind Turbine Location
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P3	FI	01/02/2022	Final	TW	LC	LC
P2	S3	02/12/2021	For client review	TW	LC	LC
P1	S3	06/12/2021	First issue	TW	LC	LC
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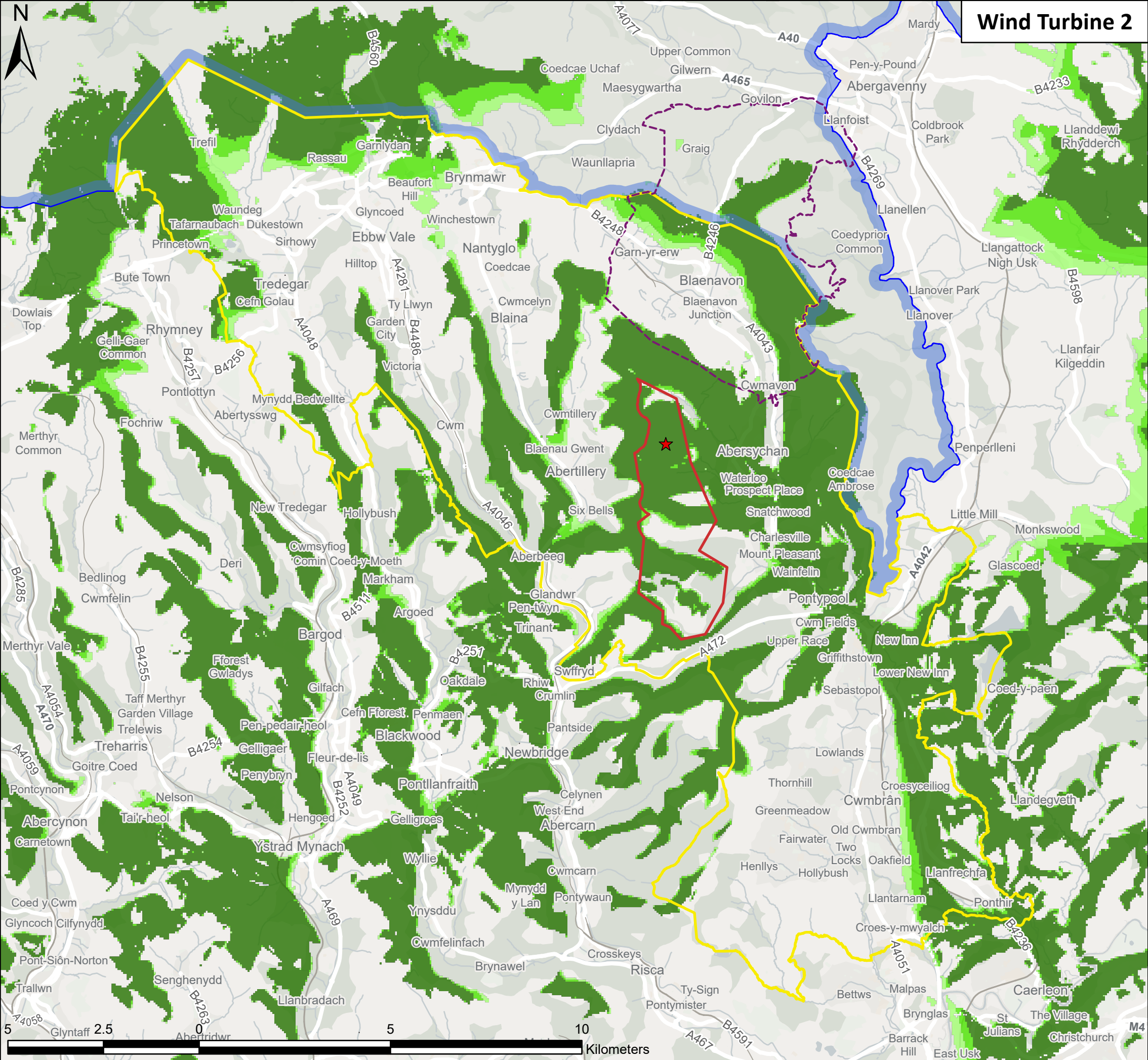
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Figure 1.2
Wind Turbine ZTVI 1 (TCBC)

Drawing no.:	61007_DWG_F1-2ZTVI1TCBC
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- ★ Wind Turbine Location
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P2	FI	01/02/2022	Final	TW	LC	LC
P1	S3	06/12/2021	First issue	TW	LC	LC
V.	S.	Date	Description	B.	C.	A.

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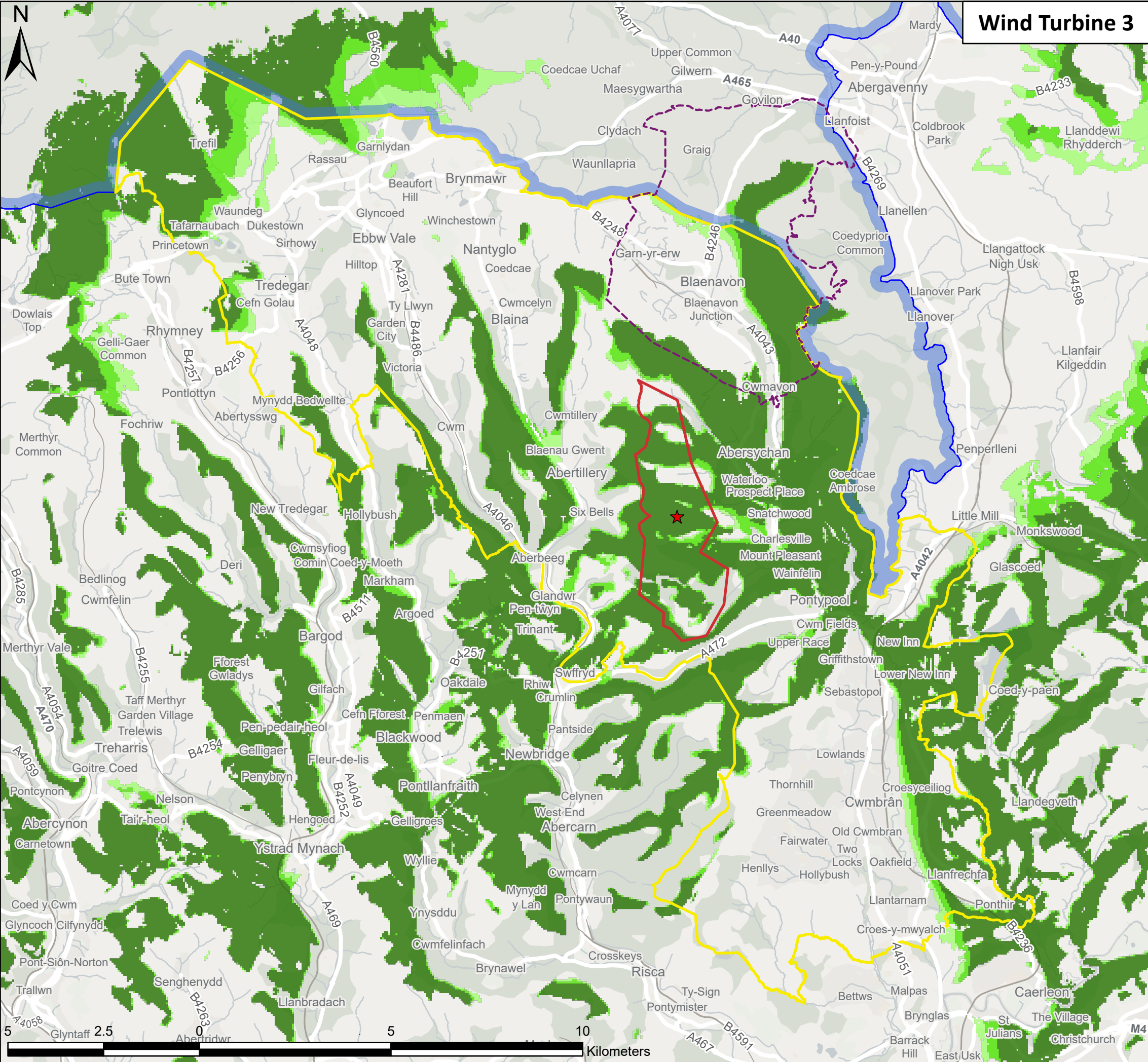
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Figure 1.3
Wind Turbine ZTVI 2 (TCBC)

Drawing no.:	61007_DWG_F1-3ZTVI2TCBC
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Wind Turbine 3

- ★ Wind Turbine Location
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P2	FI	01/02/2022	Final	TW	LC	LC
P1	S3	06/12/2021	First issue	TW	LC	LC
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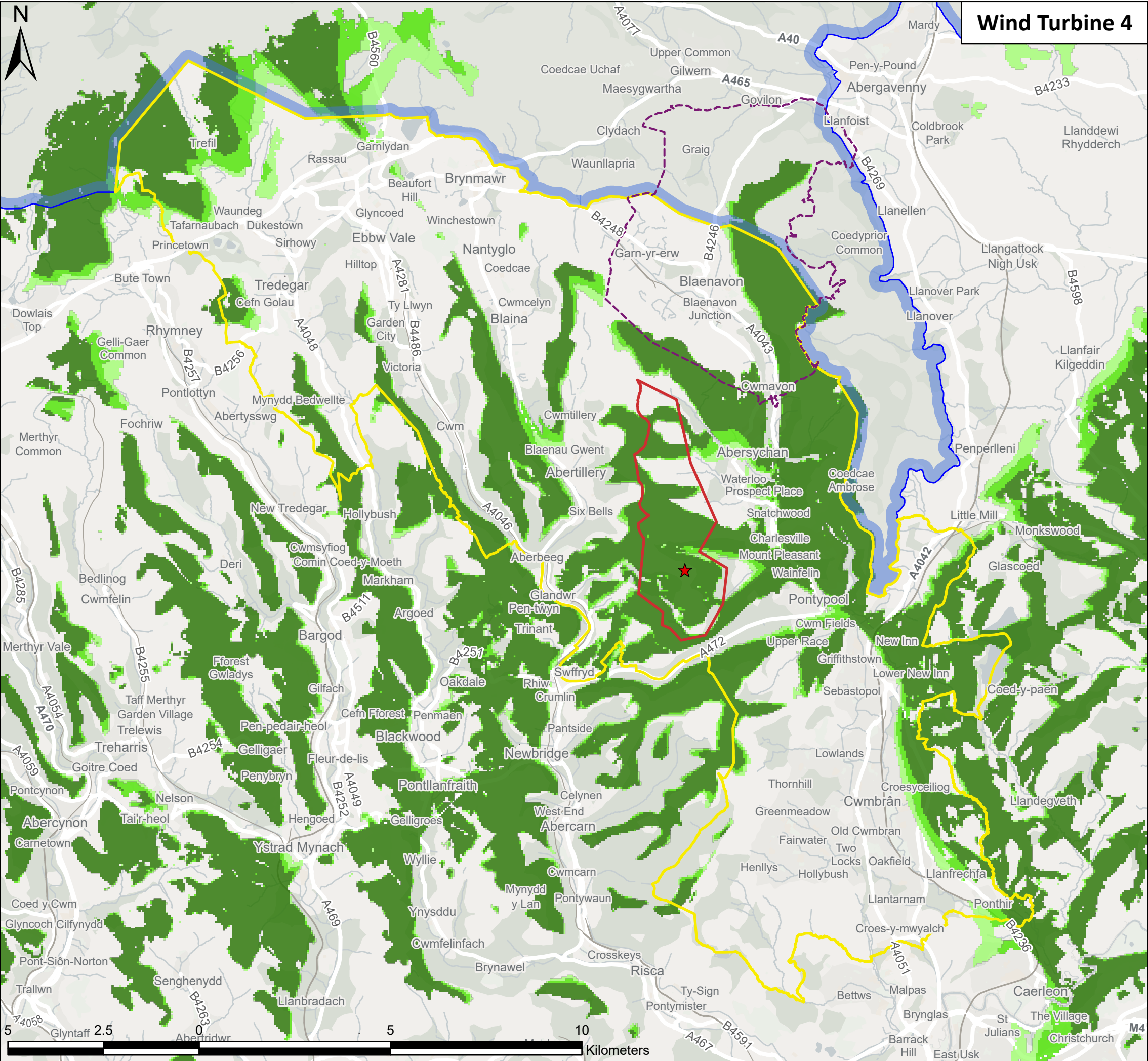
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Figure 1.4

Wind Turbine ZTVI 3 (TCBC)

Drawing no.:	61007_DWG_F1-4ZTVI3TCBC
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- ★ Wind Turbine Location
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P2	FI	01/02/2022	Final	TW	LC	LC
P1	S3	06/12/2021	First issue	TW	LC	LC
V.	S.	Date	Description	B.	C.	A.

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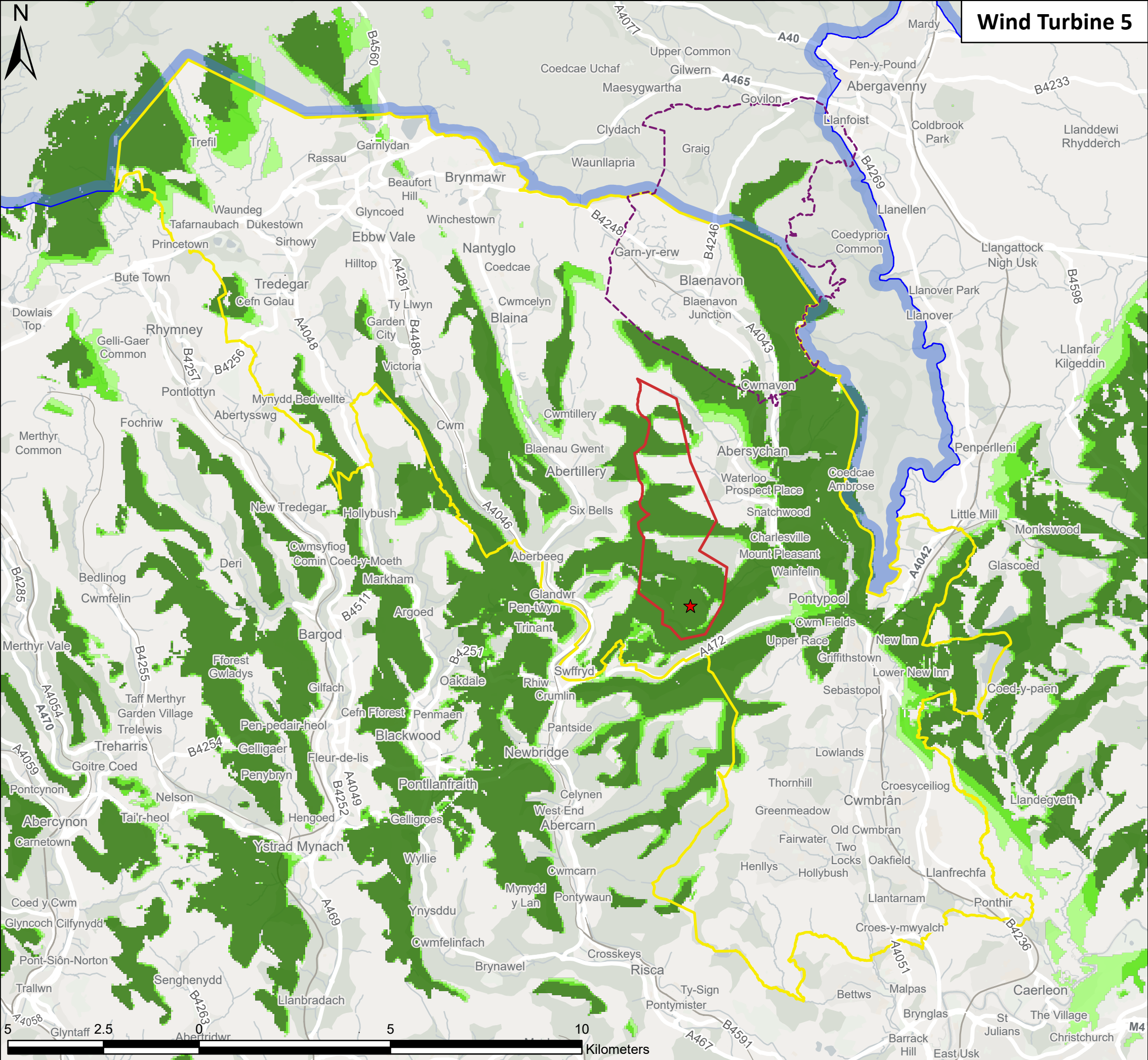
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Figure 1.5
Wind Turbine ZTVI 4 (TCBC)

Drawing no.:	61007_DWG_F1-5ZTVI4TCBC
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Wind Turbine 5

- ★ Wind Turbine Location
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P2	FI	01/02/2022	Final	TW	LC	LC
P1	S3	06/12/2021	First issue	TW	LC	LC
V.	S.	Date	Description	B.	C.	A.

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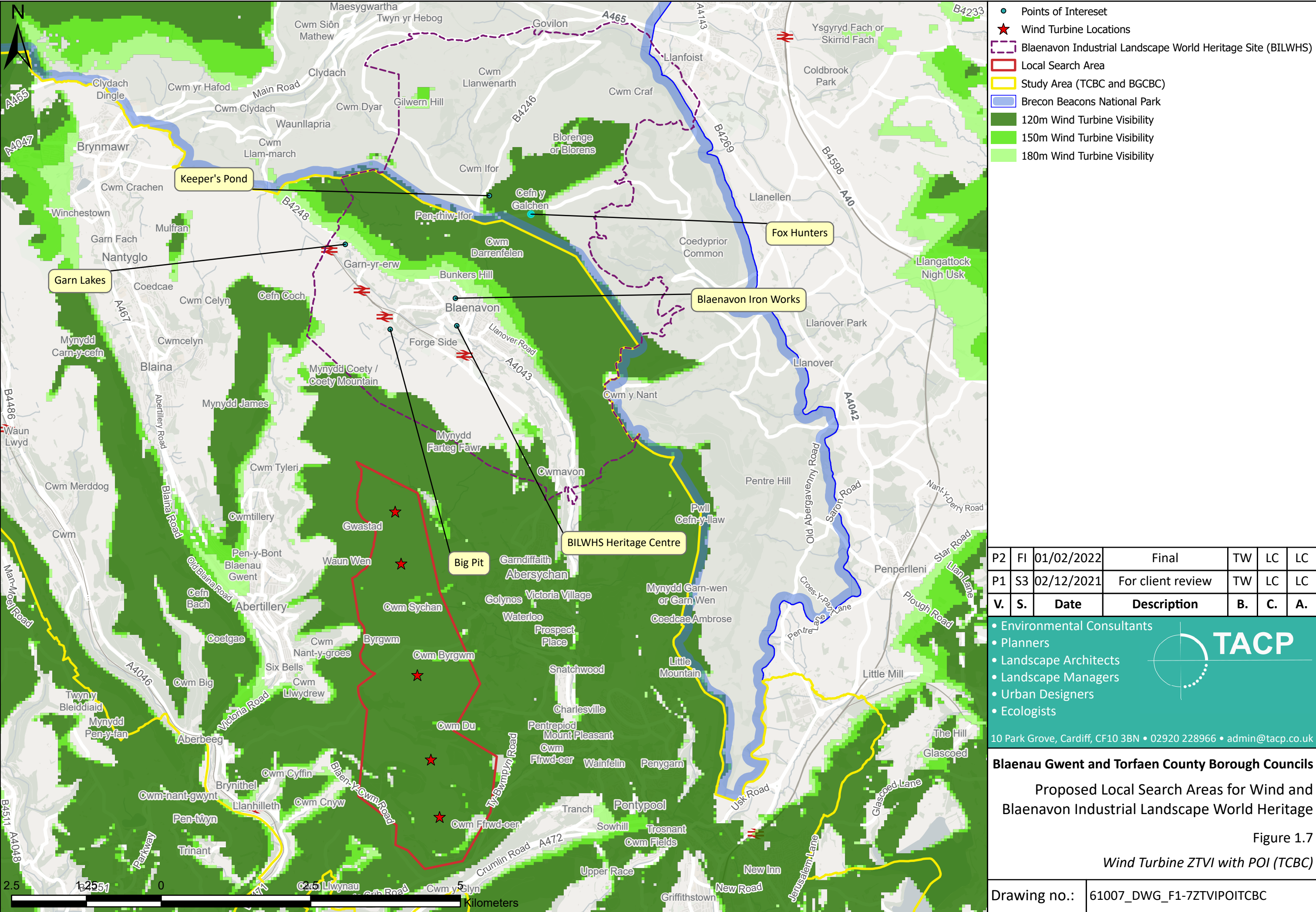
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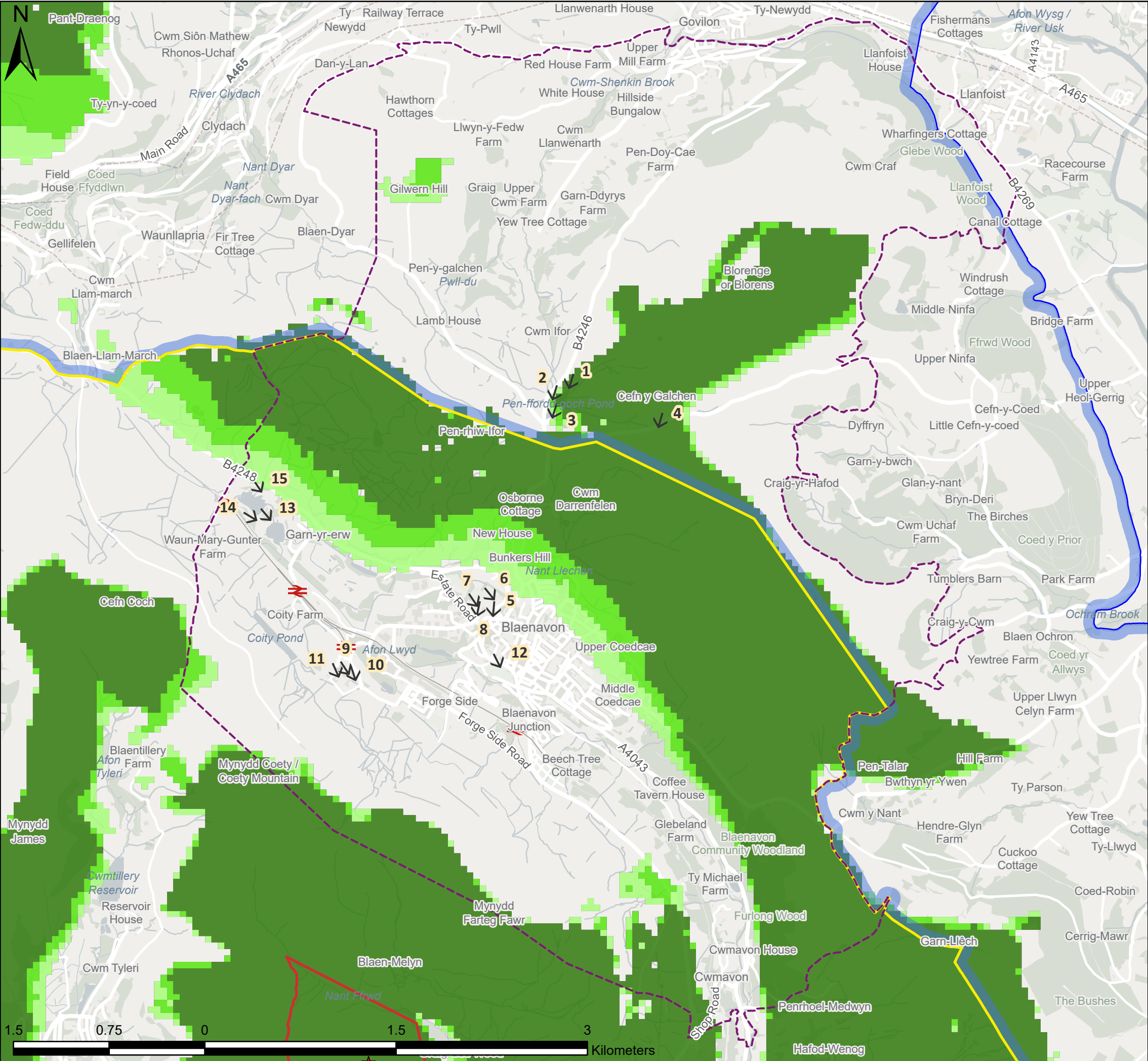
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Proposed Local Search Areas for Wind and
Blaenavon Industrial Landscape World Heritage

Figure 1.6
Wind Turbine ZTVI 5 (TCBC)

Drawing no.:	61007_DWG_F1-6ZTVI5TCBC
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- ↑ LVIA Viewpoint Locations and Directions
- ★ Wind Turbine Locations
- ┌─┐ Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- ▭ Local Search Area
- ▭ Study Area (TCBC and BGBC)
- ▭ Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P2	FI	01/02/2022	Final	TW	LC	LC
P1	S3	02/12/2021	For client review	TW	LC	LC
V.	S.	Date	Description	B.	C.	A.

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Proposed Local Search Areas for Wind and
Blaenavon Industrial Landscape World Heritage

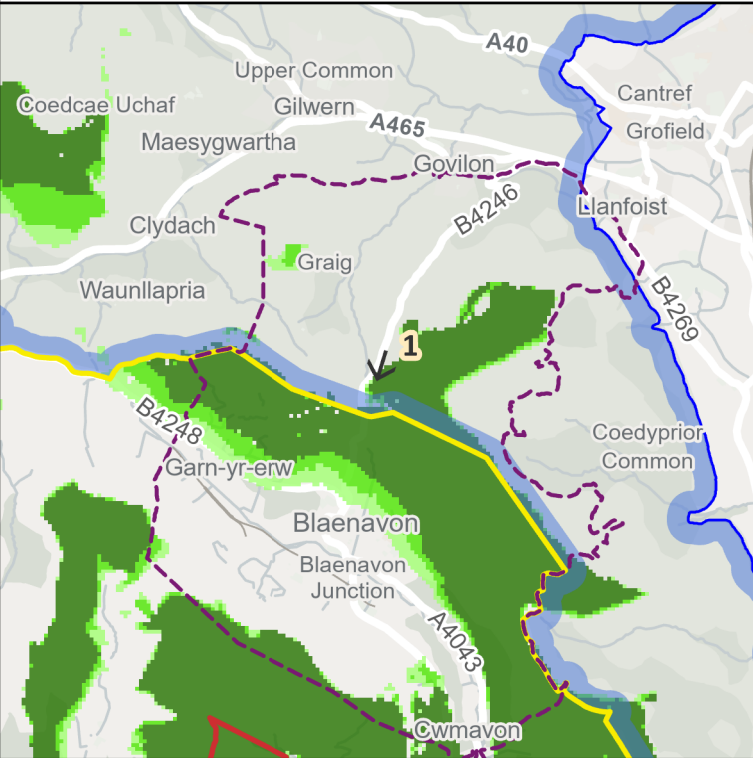
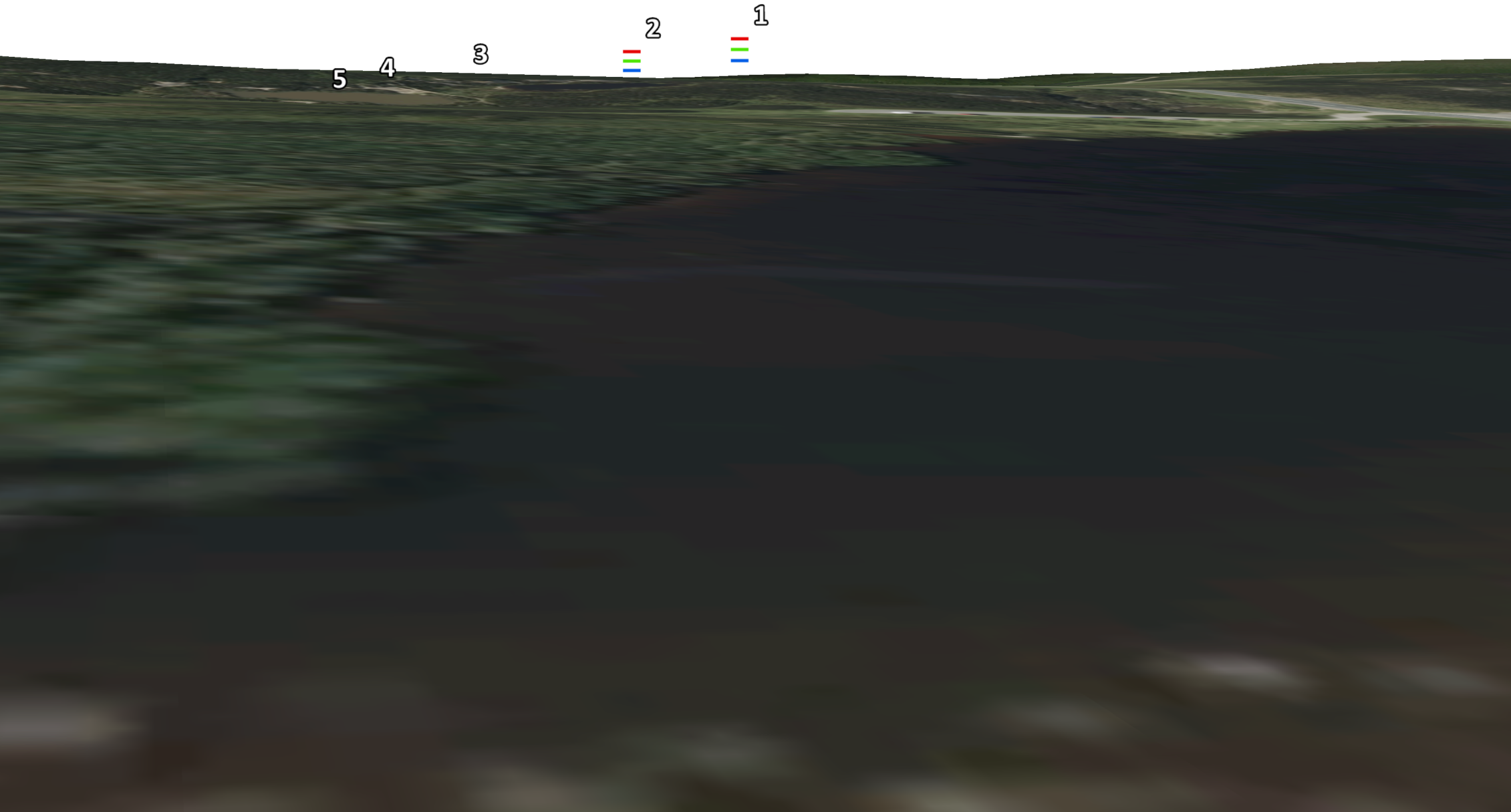
Figure 1.8
Viewpoint Locations (TCBC)

Drawing no.:	61007_DWG_F1-8VPLocationsTCBC
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Viewpoint Location: 325600.09E m, 210986.39N m
Viewpoint Elevation: 476.0m
Viewpoint Bearing: 197°
Viewpoint Pitch: 0°
Viewpoint Roll: 0°

TCBC | Viewpoint 1

- ↑ LVIA Viewpoint Locations and Directions
- Top of 180m Wind Turbine
- Top of 150m Wind Turbine
- Top of 120m Wind Turbine
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility



P1	FI	02/02/2022	Final	TW	LC	LC
V.	S.	Date	Description	B.	C.	A.

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- Landscape Architects
- Landscape Managers
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- Ecologists



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Proposed Local Search Areas for Wind and
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Figure 1.9

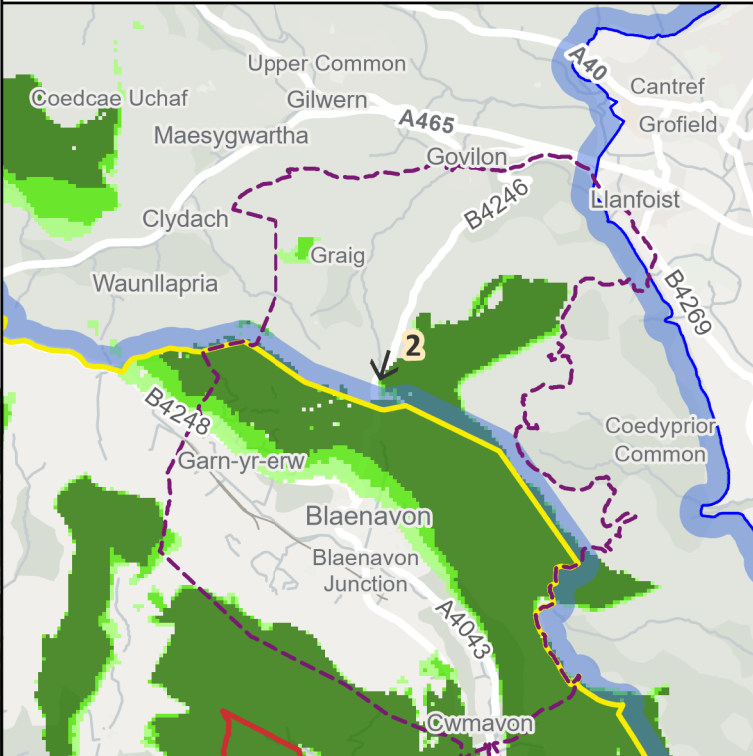
Viewpoint 1 Visualisation (TCBC)

Drawing no.:	61007_DWG_F1-9VP1VisualTCBC
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Viewpoint Location: 325470.79E m, 210896.2N m
Viewpoint Elevation: 472.6m
Viewpoint Bearing: 197°
Viewpoint Pitch: 0°
Viewpoint Roll: 0°

TCBC | Viewpoint 2

- ↑ LVIA Viewpoint Locations and Directions
- Top of 180m Wind Turbine
- Top of 150m Wind Turbine
- Top of 120m Wind Turbine
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility



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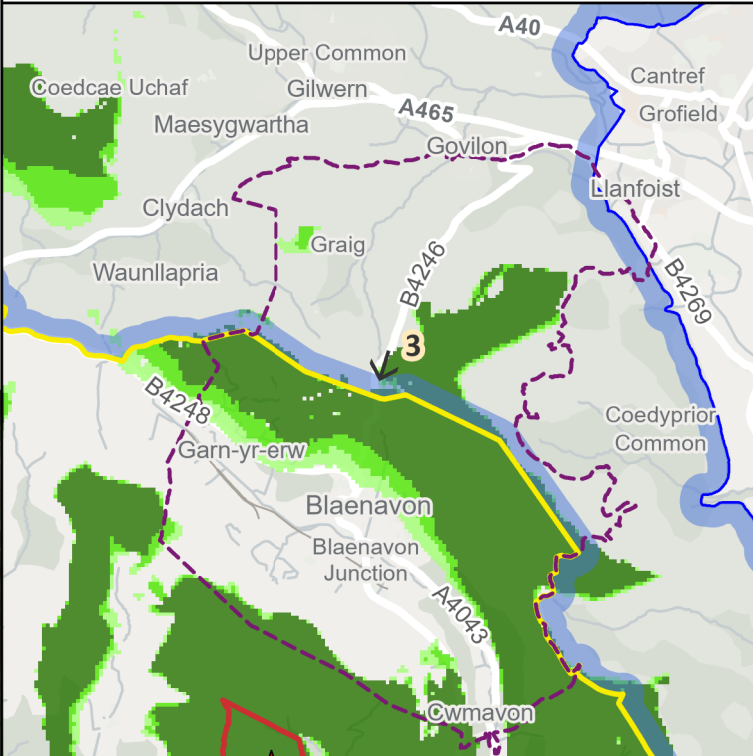
Figure 1.10
Viewpoint 2 Visualisation (TCBC)

Drawing no.:	61007_DWG_F1-10VP2VisualTCBC
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Viewpoint Location: 325468.57E m, 210753.99N m
Viewpoint Elevation: 477.0m
Viewpoint Bearing: 197°
Viewpoint Pitch: 0°
Viewpoint Roll: 0°

TCBC | Viewpoint 3

- ↑ LVIA Viewpoint Locations and Directions
- ★ Wind Turbine Locations
- Top of 180m Wind Turbine
- Top of 150m Wind Turbine
- Top of 120m Wind Turbine
- ▭ Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- ▭ Local Search Area
- ▭ Study Area (TCBC and BGCB)
- ▭ Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility



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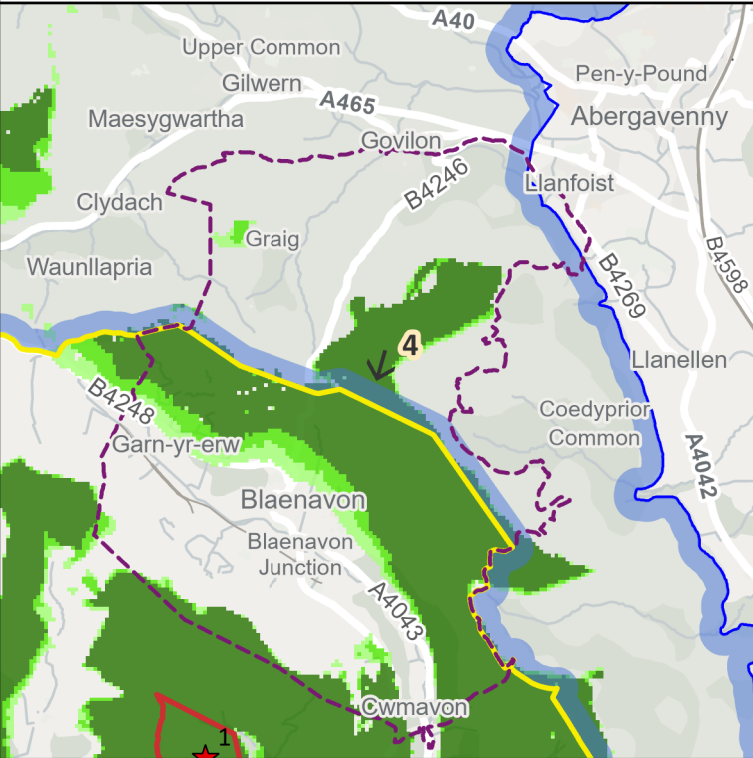
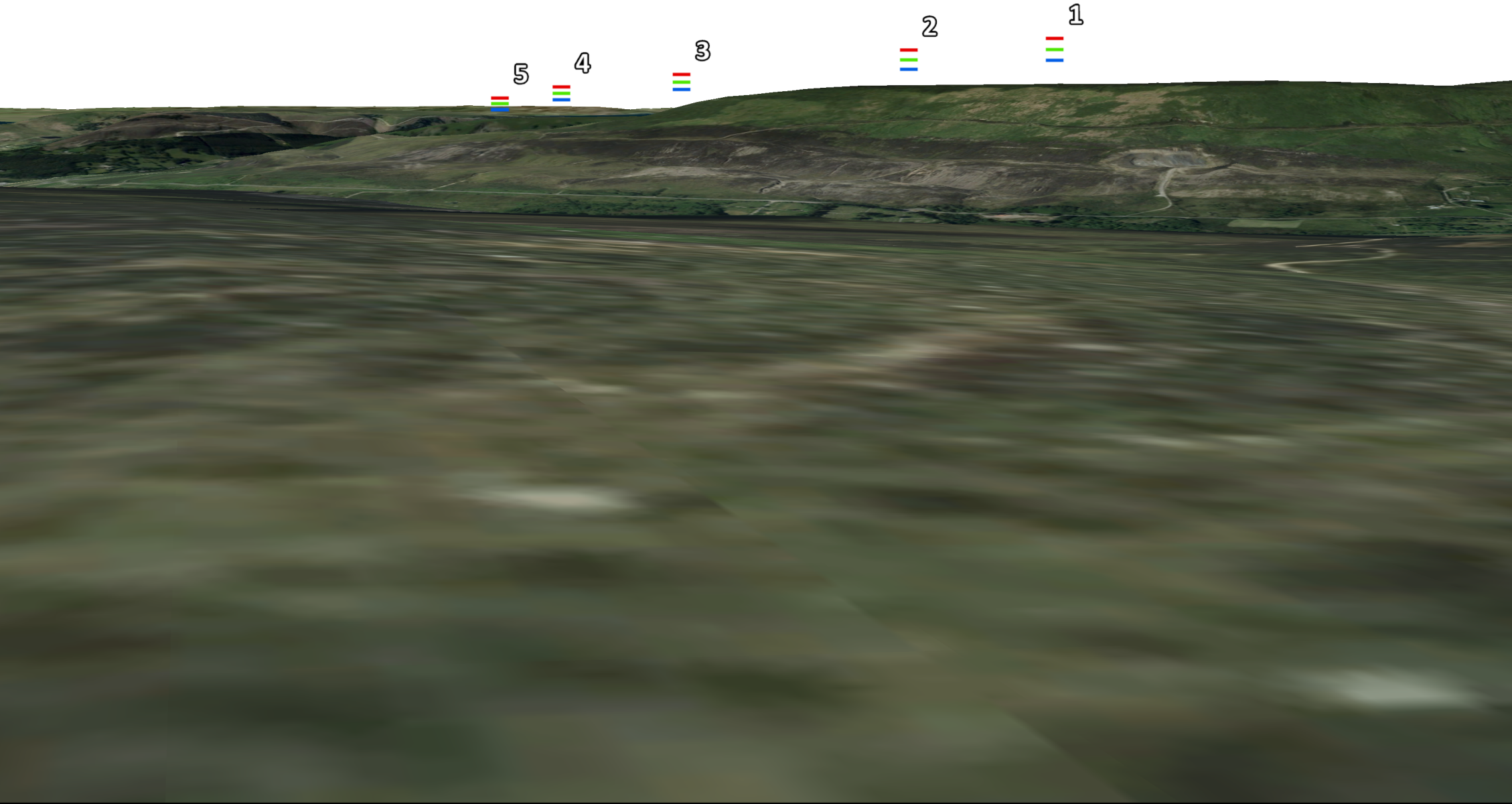
Figure 1.11
Viewpoint 3 Visualisation (TCBC)

Drawing no.:	61007_DWG_F1-11VP3VisualTCBC
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Viewpoint Location: 326299.93E m, 210679.59N m
Viewpoint Elevation: 511.2m
Viewpoint Bearing: 196°
Viewpoint Pitch: 0°
Viewpoint Roll: 0°

TCBC | Viewpoint 4

- ↑ LVIA Viewpoint Locations and Directions
- ★ Wind Turbine Locations
- Top of 180m Wind Turbine
- Top of 150m Wind Turbine
- Top of 120m Wind Turbine
- ▭ Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- ▭ Local Search Area
- ▭ Study Area (TCBC and BG CBC)
- ▭ Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility



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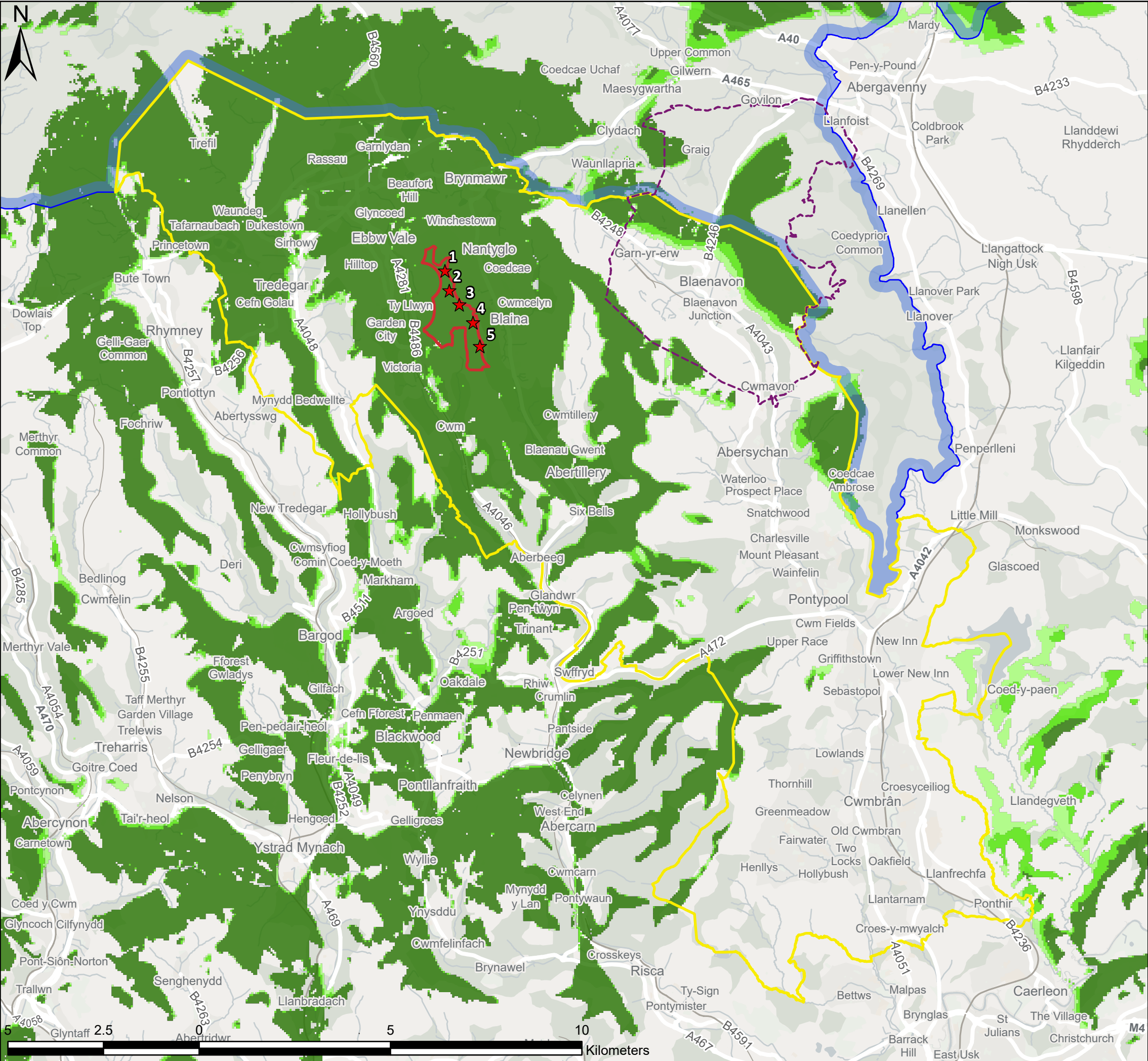
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Proposed Local Search Areas for Wind and
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Figure 1.12

Viewpoint 4 Visualisation (TCBC)

Drawing no.:	61007_DWG_F1-12VP4VisualTCBC
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- ★ Wind Turbine Locations
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P2	FI	02/02/2022	Final	TW	LC	LC
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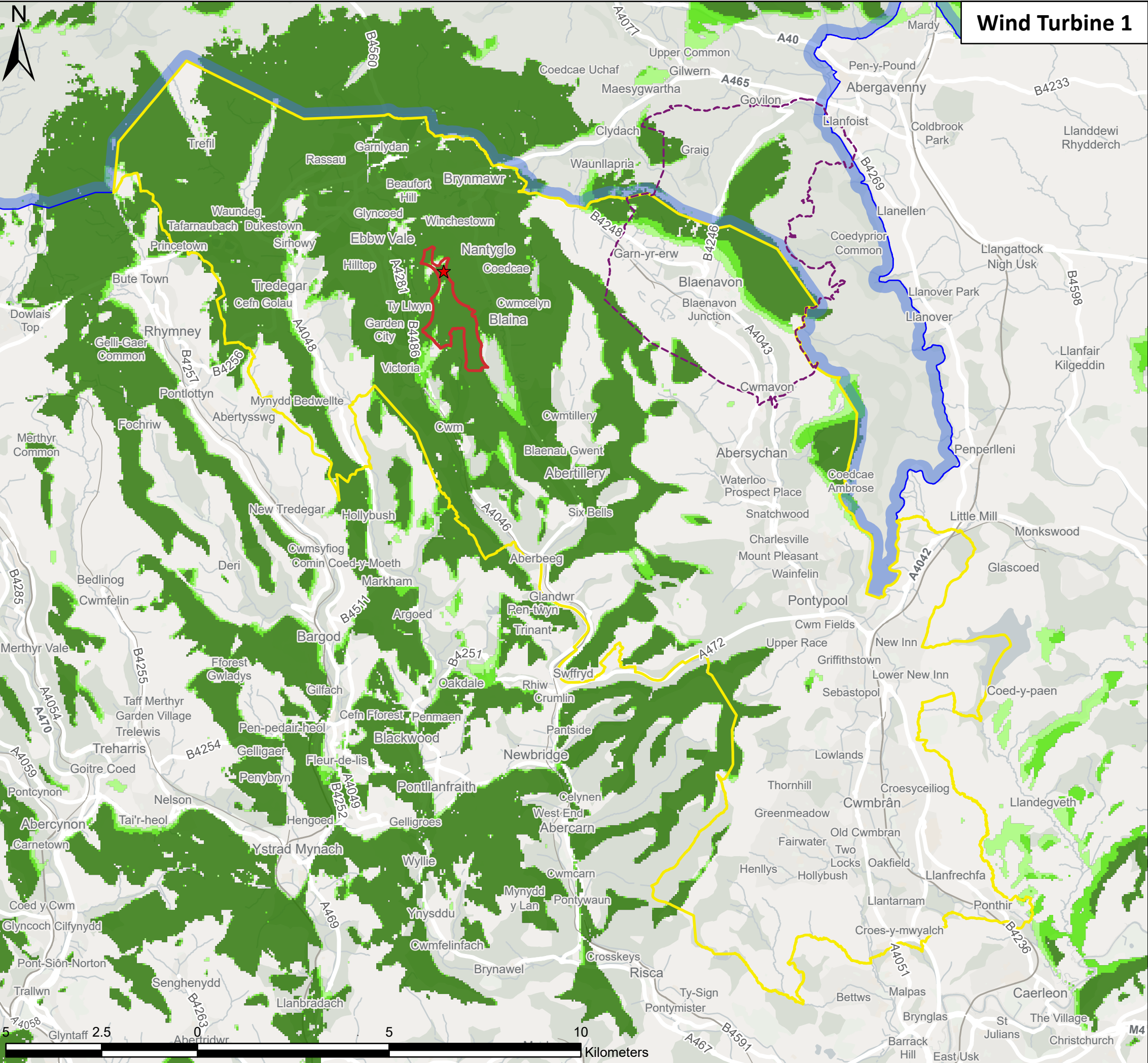
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Proposed Local Search Areas for Wind and
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Figure 2.1
Wind Turbine ZTVI (BGCBC)

Drawing no.:	61007_DWG_F2-1ZTVIBGCBC
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★ Wind Turbine Location

⋯ Blaenavon Industrial Landscape World Heritage Site (BILWHS)

▭ Local Search Area

▭ Study Area (TCBC and BGCBC)

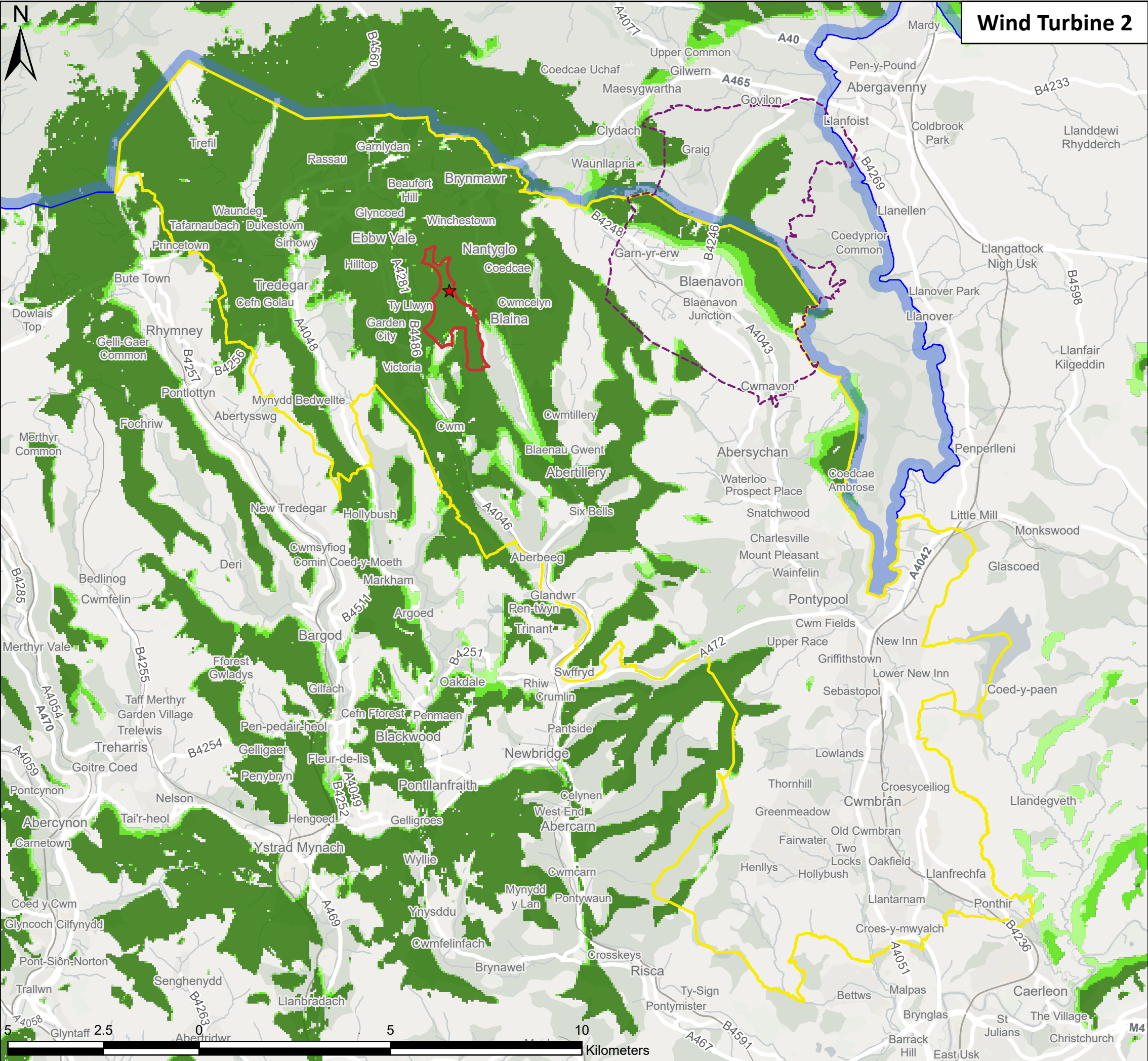
▭ Brecon Beacons National Park

■ 120m Wind Turbine Visibility

■ 150m Wind Turbine Visibility

■ 180m Wind Turbine Visibility

P2	FI	02/02/2022	Final	TW	LC	LC
P1	SO	30/01/2022	First issue	TW		
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Blaenau Gwent and Torfaen County Borough Councils Proposed Local Search Areas for Wind and Blaenavon Industrial Landscape World Heritage Figure 2.2 Wind Turbine ZTVI 1 (BGCBC)						
Drawing no.:		61007_DWG_F2-2ZTVI1BGCBC				



Wind Turbine 2

- ★ Wind Turbine Location
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P2	FI	02/02/2022	Final	TW	LC	LC
P1	SO	30/01/2022	First issue	TW		
V.	S.	Date	Description	B.	C.	A.

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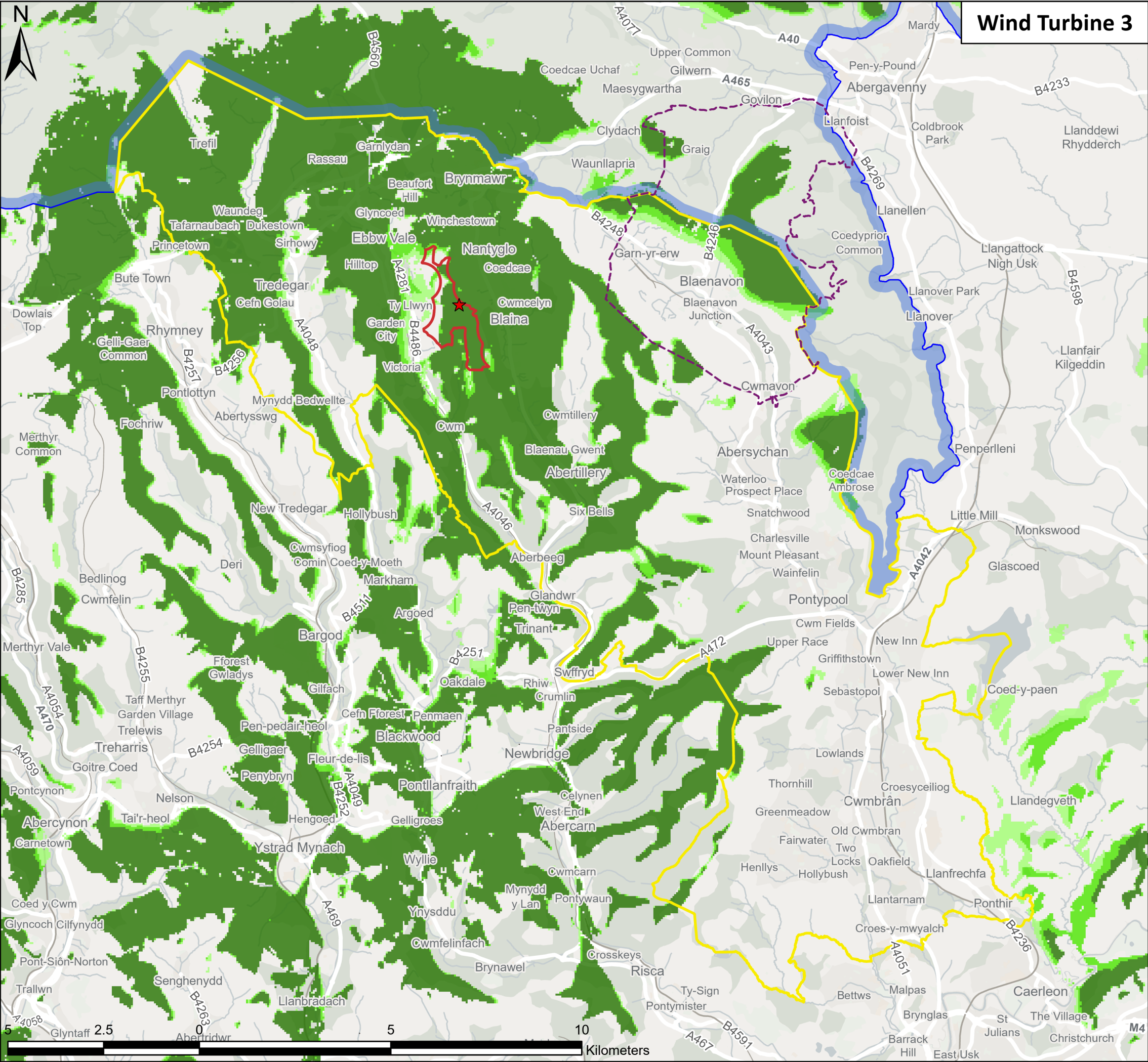
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Figure 2.3
Wind Turbine ZTVI 2 (BGCBC)

Drawing no.:	61007_DWG_F2-3ZTVI2BGCBC
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★ Wind Turbine Location

⋯ Blaenavon Industrial Landscape World Heritage Site (BILWHS)

▭ Local Search Area

▭ Study Area (TCBC and BGBC)

▭ Brecon Beacons National Park

■ 120m Wind Turbine Visibility

■ 150m Wind Turbine Visibility

■ 180m Wind Turbine Visibility

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P1	S0	30/01/2022	First issue	TW		
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Proposed Local Search Areas for Wind and Blaenavon Industrial Landscape World Heritage

Figure 2.4

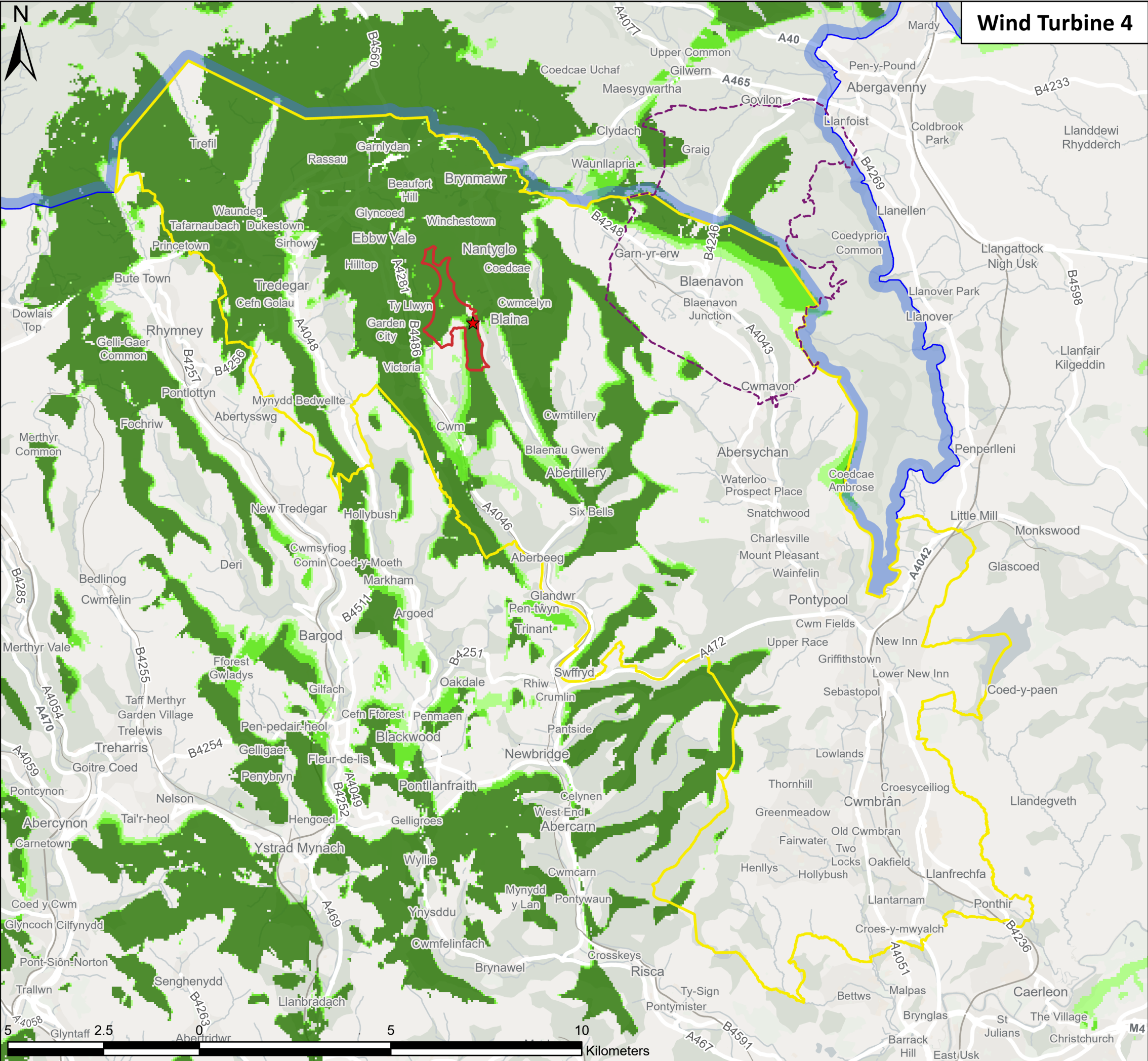
Wind Turbine ZTVI 3 (BGBC)

Drawing no.:

61007_DWG_F2-4ZTVI3BGBC

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Scale: 1:100,000 (Printed at A3)



Wind Turbine 4

- ★ Wind Turbine Location
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

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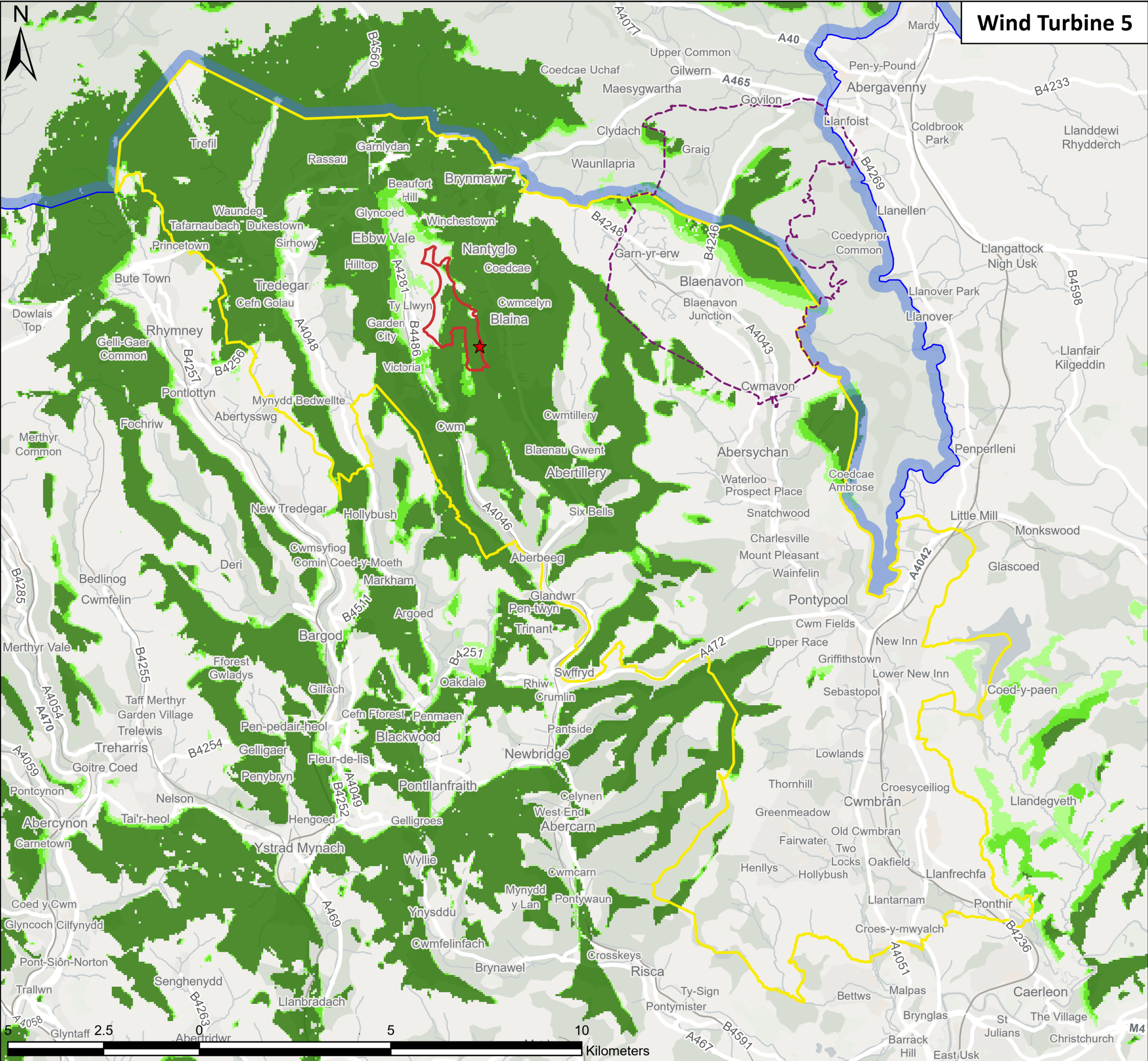
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Proposed Local Search Areas for Wind and
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Figure 2.5
Wind Turbine ZTVI 4 (BGCBC)

Drawing no.:	61007_DWG_F2-5ZTVI4BGCBC
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Wind Turbine 5

- ★ Wind Turbine Location
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

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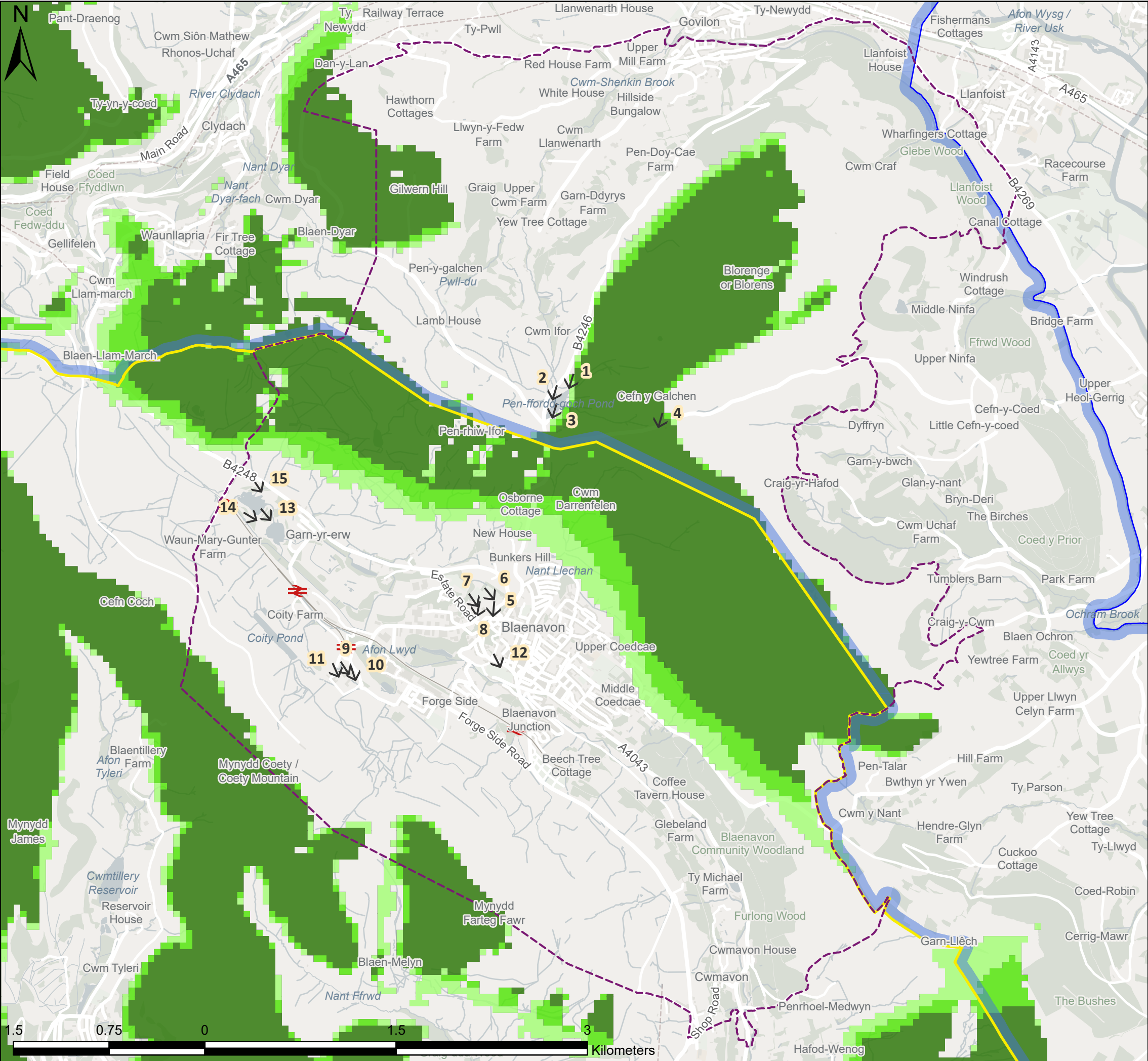
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Proposed Local Search Areas for Wind and
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Figure 2.6
Wind Turbine ZTVI 5 (BGBC)

Drawing no.:	61007_DWG_F2-6ZTVI5BGBC
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- ↑ LVIA Viewpoint Locations and Directions
- ★ Wind Turbine Locations
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Local Search Area
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility

P2	FI	02/02/2022	Final	TW	LC	LC
P1	S0	30/01/2022	First issue	TW		
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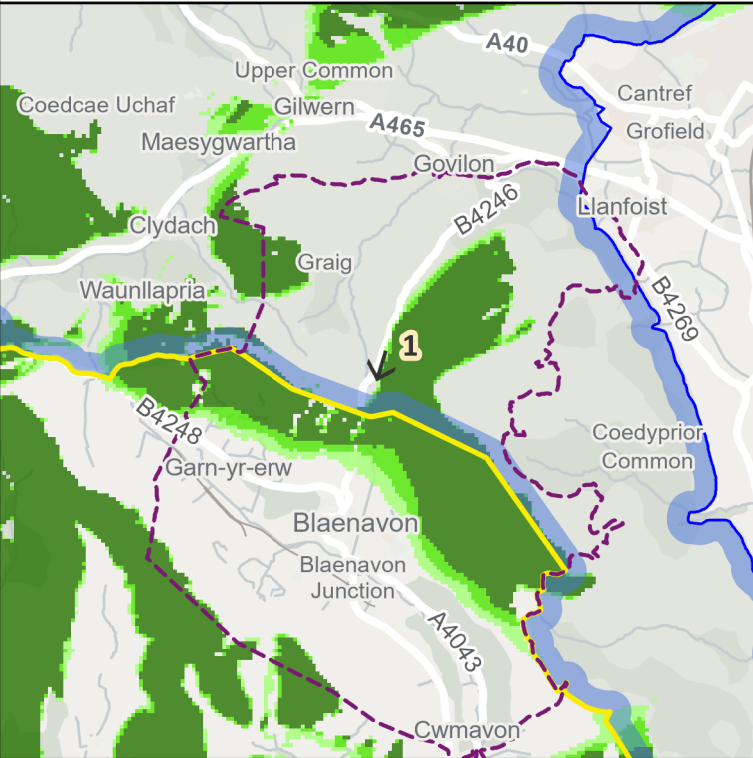
Figure 2.8
Viewpoint Locations (BGCBC)

Drawing no.:	61007_DWG_F2-8VPLocationsBGCBC
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Viewpoint Location: 325600.09E m, 210986.39N m
Viewpoint Elevation: 476.0m
Viewpoint Bearing: 250°
Viewpoint Pitch: 0°
Viewpoint Roll: 0°

BGCBC | Viewpoint 1

- ↑ LVIA Viewpoint Locations and Directions
- Top of 180m Wind Turbine
- Top of 150m Wind Turbine
- Top of 120m Wind Turbine
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Study Area (TCBC and BGCBC)
- Brecon Beacons National Park
- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility



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Proposed Local Search Areas for Wind and
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Figure 2.9

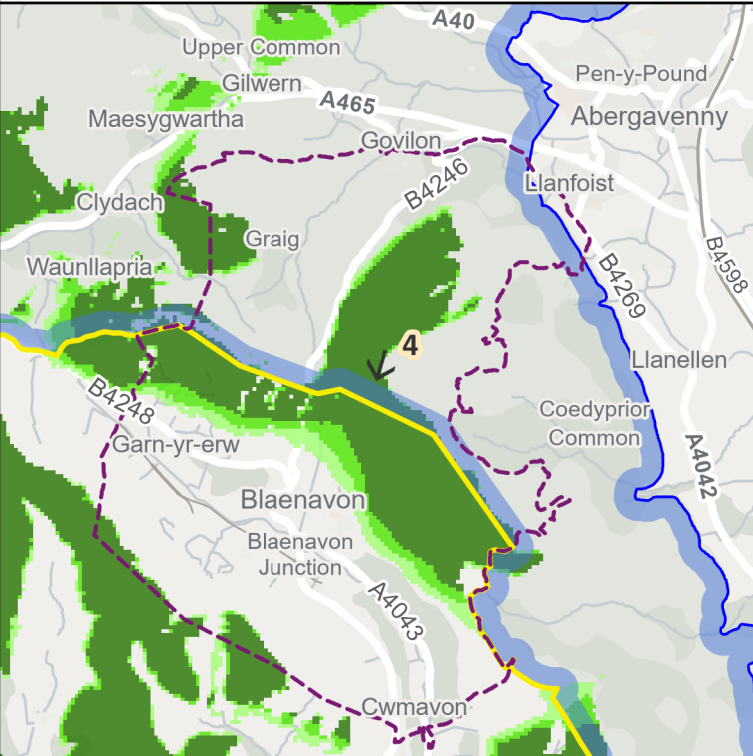
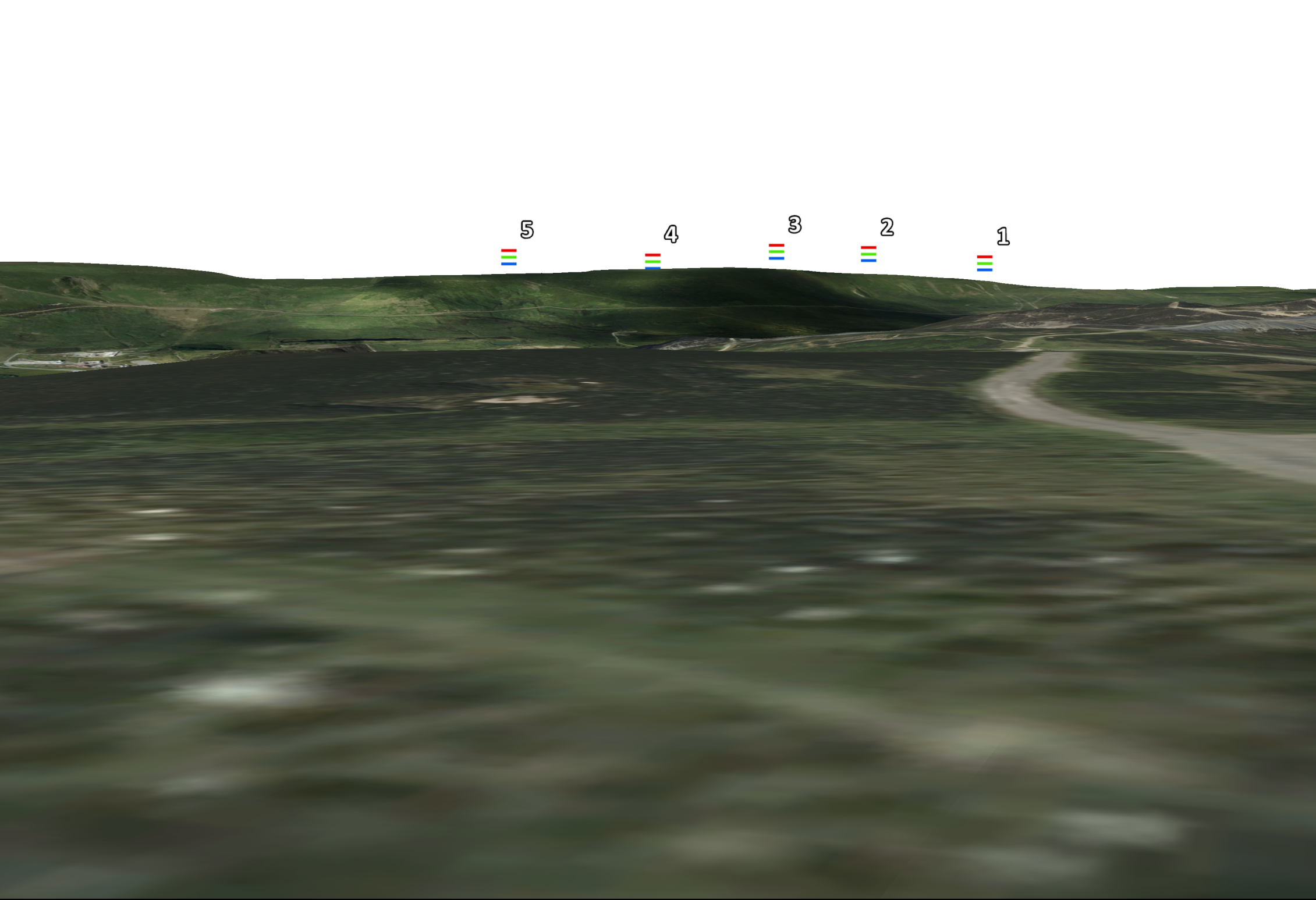
Viewpoint 1 Visualisation (BGCBC)

Drawing no.:	61007_DWG_F2-9VP1VisualBGCBC
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Viewpoint Location: 326299.93E m, 210679.59N m
Viewpoint Elevation: 510.7m
Viewpoint Bearing: 250°
Viewpoint Pitch: 0°
Viewpoint Roll: 0°

BGCBC | Viewpoint 4

- ↑ LVIA Viewpoint Locations and Directions
- Top of 180m Wind Turbine
- Top of 150m Wind Turbine
- Top of 120m Wind Turbine
- Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- Study Area (TCBC and BGCBC)
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- 120m Wind Turbine Visibility
- 150m Wind Turbine Visibility
- 180m Wind Turbine Visibility



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Figure 2.10

Viewpoint 4 Visualisation (BGCBC)

Drawing no.:	61007_DWG_F2-10VP4VisualBGCBC
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VIEWPOINT 1

Camera: Nikon D3500 | Lens: 18-55mm Nikkor AF-P | Focal Length: 50mm | Horizontal Field of View: 60° | Direction of View: 197° | Height Above Ground: 150cm
Date and Time: 11/11/2021 11:51:06 | Weather: Overcast but good middle distance views. Visibility 10km + | Lighting Conditions: Overcast but bright solid cloud cover
Notes: Northern edge of Keepers Pond views South obscured by intervening ridge.

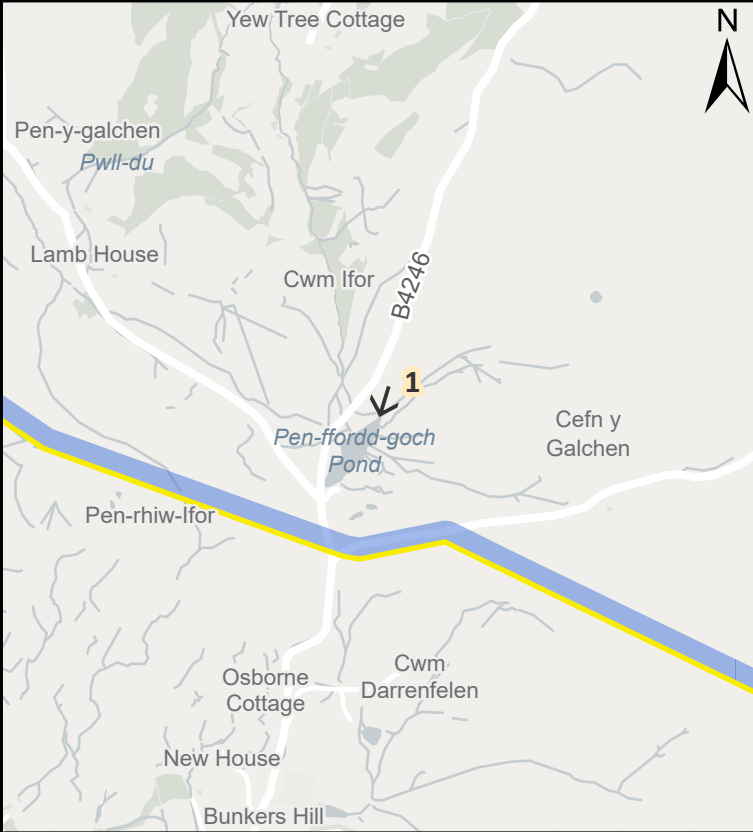


↑ LVIA Viewpoint Locations and Directions

Blaenavon Industrial Landscape World Heritage Site (BILWHS)

Study Area (TCBC and BGCBC)

Brecon Beacons National Park



P2	FI	02/02/2022	Final	TW	LC	LC
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Figure 3.1

Viewpoint 1 Photograph

Drawing no.:	61007_DWG_F3-1VP1
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VIEWPOINT 2

Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AF-P | Focal Length: 50mm | Horizontal Field of View: 60° | Direction of View: 197° | Height Above Ground: 150cm

Date and Time: 11/11/2021 12:02:01 | Weather: Overcast | Lighting Conditions: Bright 100% cloudcover

Notes: As previous VP

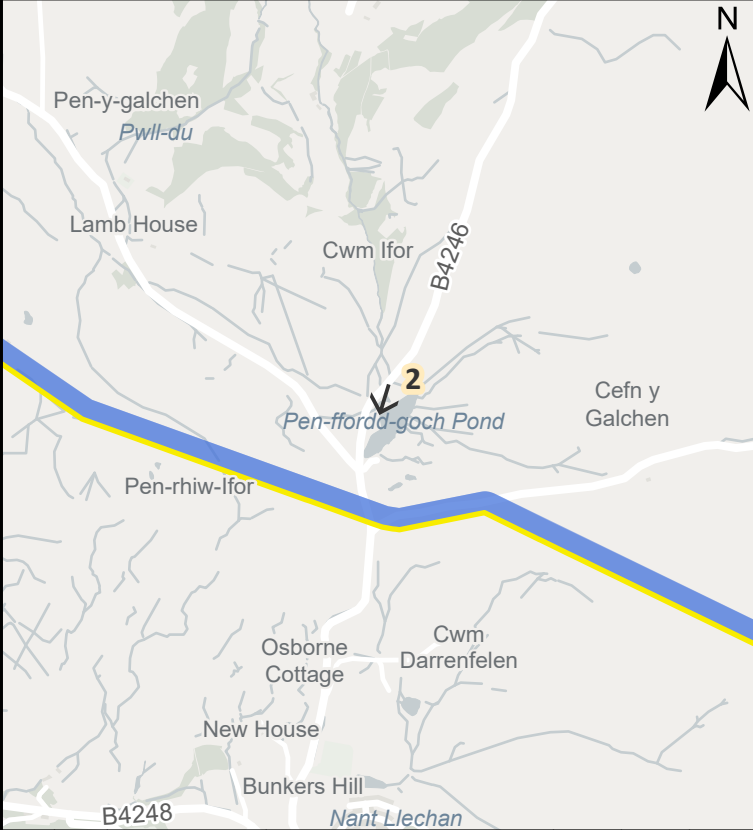


↑ LVIA Viewpoint Locations and Directions

Blaenavon Industrial Landscape World Heritage Site (BILWHS)

Study Area (TCBC and BGCBC)

Brecon Beacons National Park



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Figure 3.2

Viewpoint 2 Photograph

Drawing no.:

61007_DWG_F3-2VP2

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Scale: 1:25,000 (Printed at A3)

VIEWPOINT 3

Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm | Focal Length: 50mm | Horizontal Field of View: 75° | Direction of View: 197° | Height Above Ground: 150cm

Date and Time: 11/11/2021 12:09:18 | Weather: O'cast | Lighting Conditions: Bright 100% cloud over Visibility 10km +

Notes:

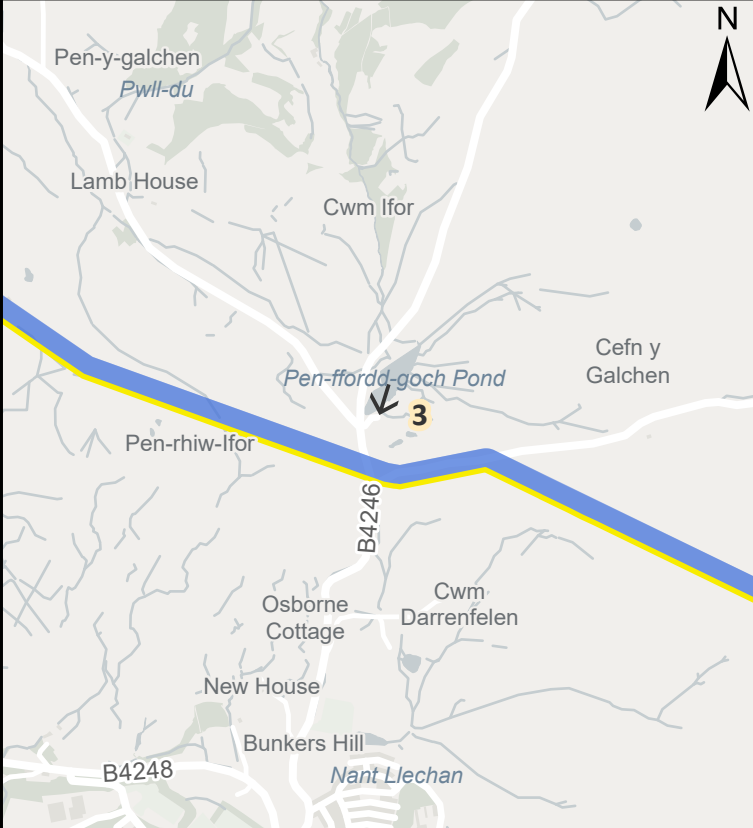


↑ LVIA Viewpoint Locations and Directions

Blaenavon Industrial Landscape World Heritage Site (BILWHS)

Study Area (TCBC and BGCBC)

Brecon Beacons National Park



P2	FI	02/02/2022	Final	TW	LC	LC
P1	S3	02/12/2021	For client review	TW	LC	LC
V.	S.	Date	Description	B.	C.	A.

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Figure 3.3

Viewpoint 3 Photograph

Drawing no.:

61007_DWG_F3-3VP3

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Scale: 1:25,000 (Printed at A3)

VIEWPOINT 4

Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AF-P | Focal Length: 50mm | Horizontal Field of View: 103° | Direction of View: 196° | Height Above Ground: 150cm
Date and Time: 11/11/2021 12:29:44 | Weather: Overcast high cloud | Lighting Conditions: Bright
Notes: Clear views to Mynydd Coity. Broad panorama truncated by transmitter Station on left

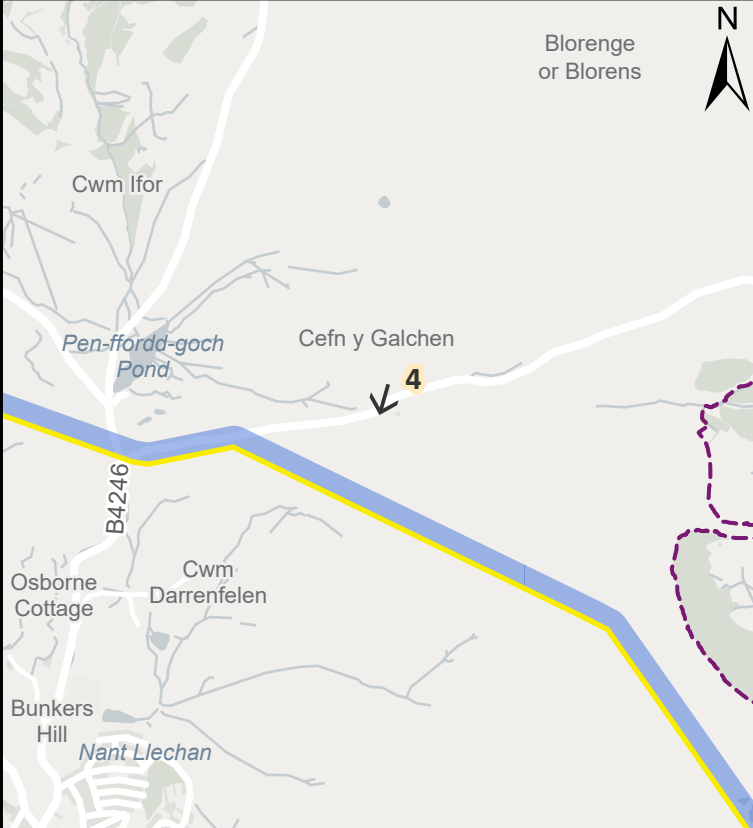


↑ LVIA Viewpoint Locations and Directions

Blaenavon Industrial Landscape World Heritage Site (BILWHS)

Study Area (TCBC and BGCBC)

Brecon Beacons National Park



P2	FI	02/02/2022	Final	TW	LC	LC
P1	S3	02/12/2021	For client review	TW	LC	LC
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Proposed Local Search Areas for Wind and
Blaenavon Industrial Landscape World Heritage

Figure 3.4

Viewpoint 4 Photograph

Drawing no.:	61007_DWG_F3-4VP4
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VIEWPOINT 5

Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AP-F | Focal Length: 50mm | Horizontal Field of View: 90° | Direction of View: 185° | Height Above Ground: 150cm
Date and Time: 11/11/2021 13:26:22 | Weather: Overcast dark cloud but high cover | Lighting Conditions: Dull
Notes: Good visibility. Views of Coity mountain as ridge but only from higher points of the site and funnelled views. Most broadscale views blocked by intervening housing

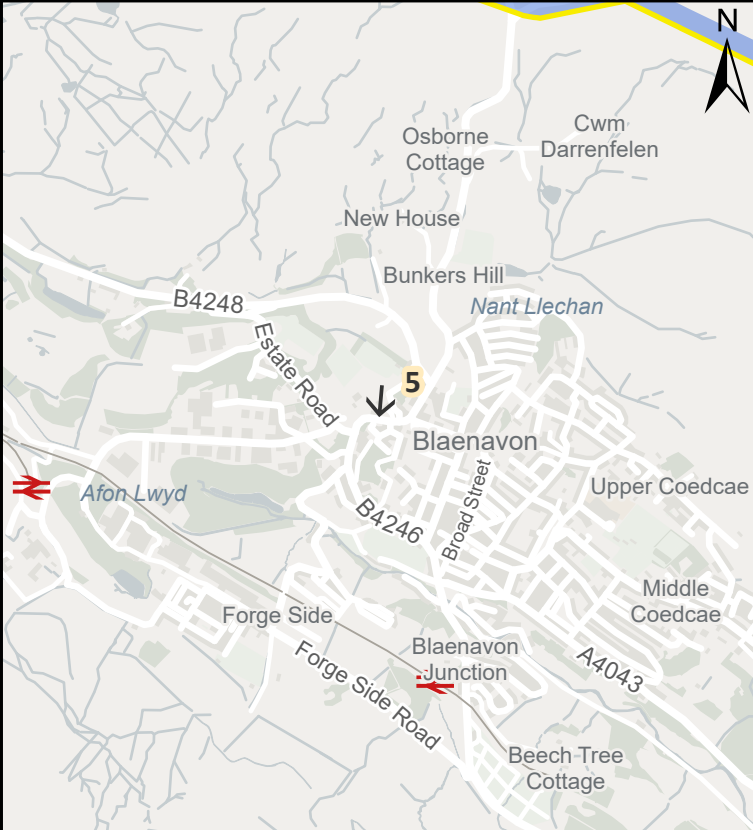


↑ LVIA Viewpoint Locations and Directions

Blaenavon Industrial Landscape World Heritage Site (BILWHS)

Study Area (TCBC and BGCBC)

Brecon Beacons National Park



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P1	S3	02/12/2021	For client review	TW	LC	LC
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Proposed Local Search Areas for Wind and
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Figure 3.5

Viewpoint 5 Photograph

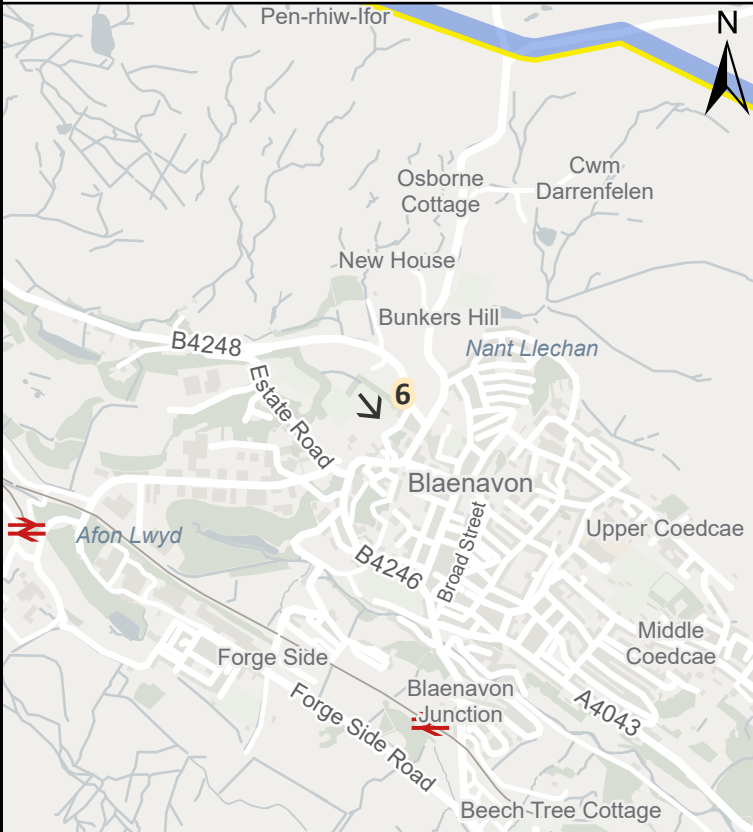
Drawing no.:	61007_DWG_F3-5VP5
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VIEWPOINT 6

Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AP-F | Focal Length: 50mm | Horizontal Field of View: 72° | Direction of View: 141° | Height Above Ground: 150cm
Date and Time: 11/11/2021 13:37:36 | Weather: Overcast dull | Lighting Conditions: Dull road panoramic views down the valley available from upper sections of the site.
Coity Mountain the dominant ridge containing the valley. From upper Ironworks views are focused on this ridge when not looking at the works
Notes:



- ↑ LVIA Viewpoint Locations and Directions
- ▭ Blaenavon Industrial Landscape World Heritage Site (BILWHS)
- ▭ Study Area (TCBC and BGCBC)
- ▭ Brecon Beacons National Park



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Figure 3.6

Viewpoint 6 Photograph

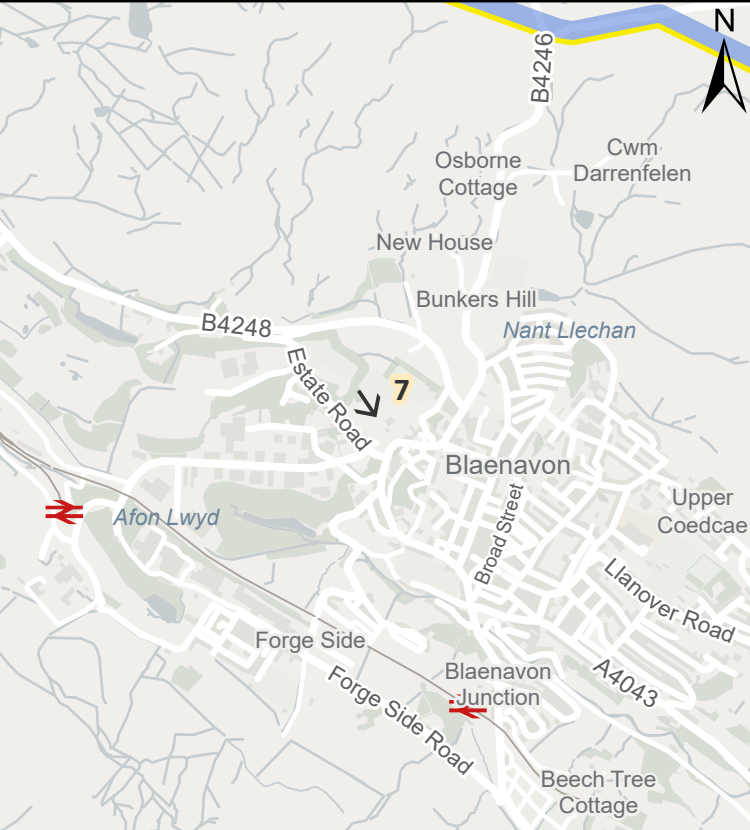
Drawing no.:	61007_DWG_F3-6VP6
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VIEWPOINT 7

Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AP-F | Focal Length: 50mm | Horizontal Field of View: 60° | Direction of View: 146° | Height Above Ground: 150cm
Date and Time: 11/11/2021 13:47:23 | Weather: Overcast | Lighting Conditions: Dull
Notes: View South from adjacent playing fields provides indication of view available from upper south facing levels of Ironworks.
Clear panoramic views over valley to the south. Views over built development and trees but ridge line clearly visible



- ↑ LVIA Viewpoint Locations and Directions
- ▭ Blaenavon Industrial Landscape World Heritage Site (BILWHS)
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Figure 3.7
Viewpoint 7 Photograph

Drawing no.:	61007_DWG_F3-7VP7
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VIEWPOINT 8

Camera: Nikon | Lens: Nikkor 18 to 55mm AP-F | Focal Length: 50mm | Horizontal Field of View: 128° | Direction of View: 192° | Height Above Ground: 150cm

Date and Time: 11/11/2021 14:04:15 | Weather: Overcast | Lighting Conditions: Dull

Notes: Views from lower levels contained within Ironworks site. Well vegetated surroundings screen any views to the south and ridge very little view of Coity ridge

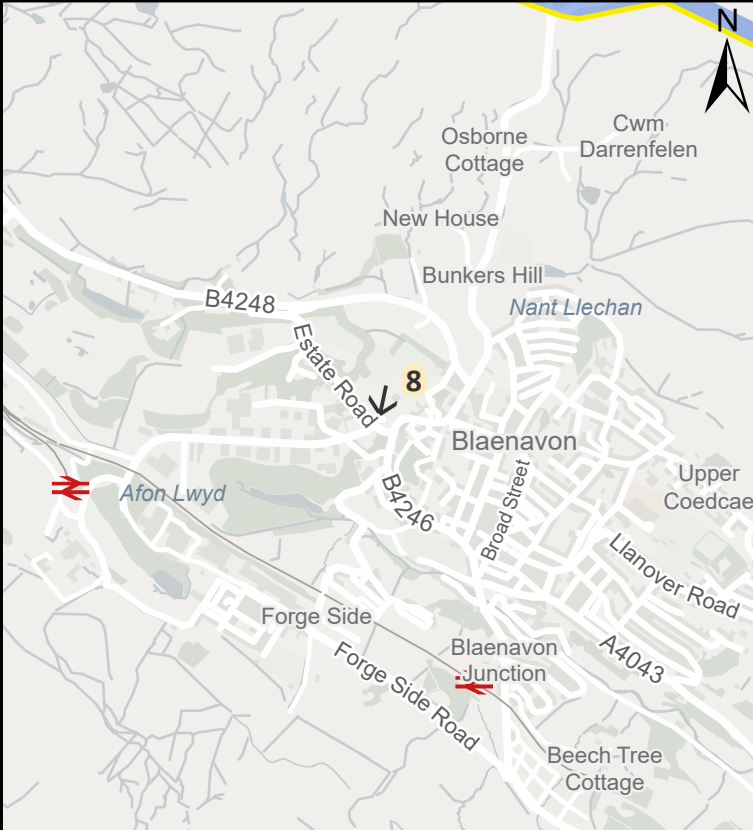


↑ LVIA Viewpoint Locations and Directions

Blaenavon Industrial Landscape World Heritage Site (BILWHS)

Study Area (TCBC and BGCBC)

Brecon Beacons National Park



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Figure 3.8

Viewpoint 8 Photograph

Drawing no.:	61007_DWG_F3-8VP8
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VIEWPOINT 9

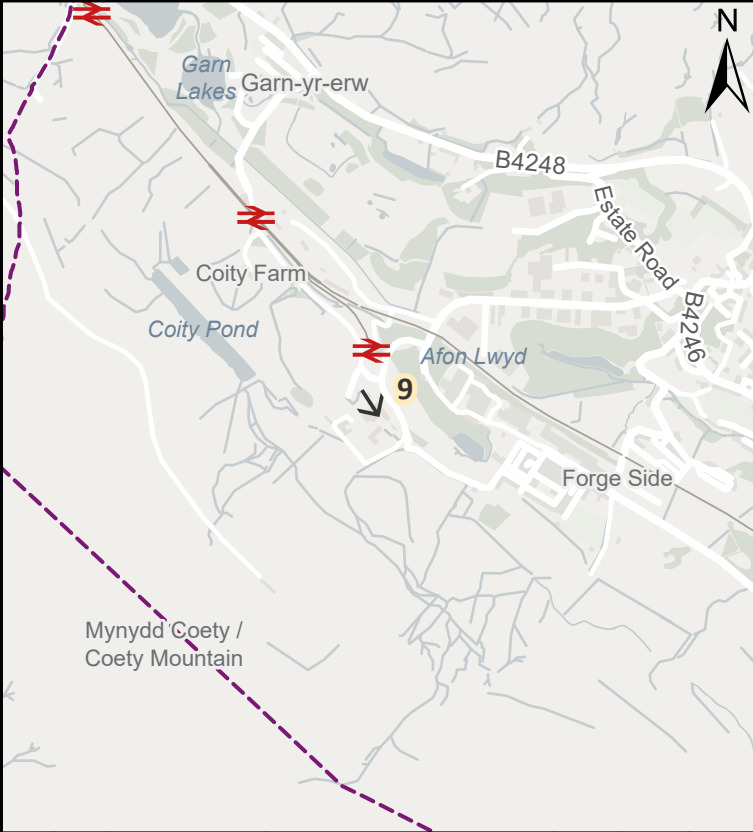
Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AP-F | Focal Length: 50mm | Horizontal Field of View: 80° | Direction of View: 147° | Height Above Ground: 150cm
Date and Time: 11/11/2021 14:19:22 | Weather: Overcast | Lighting Conditions: Dull
Notes: Clear and glimpsed views from between buildings down valley with Coity ridge dominant to the right of the view. Edges of the site clear views within site occasional and focussed



↑ LVIA Viewpoint Locations and Directions

Blaenavon Industrial Landscape World Heritage Site (BILWHS)

Study Area (TCBC and BGCBC)



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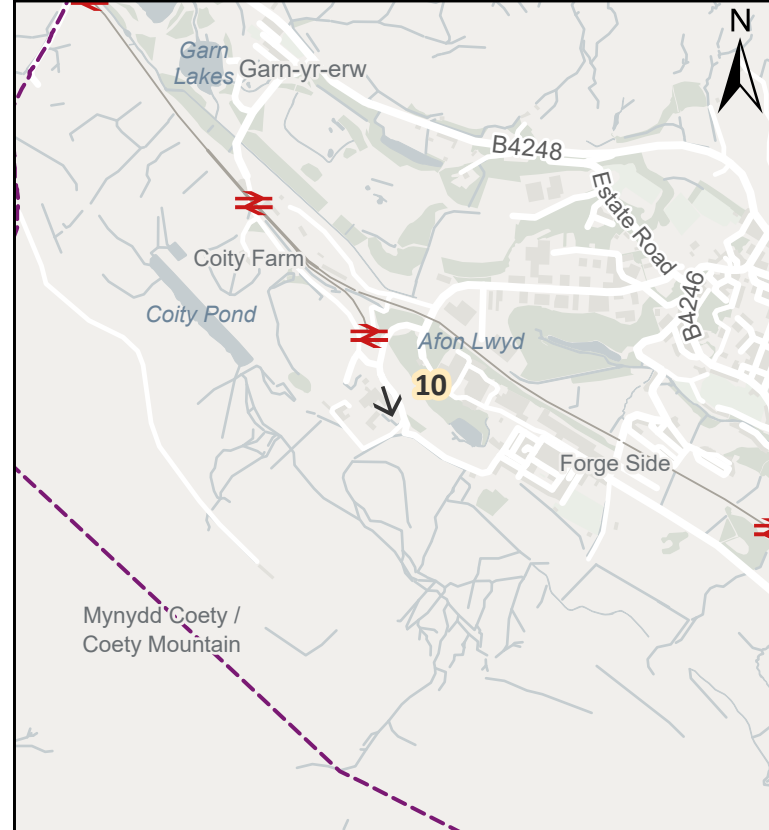
Figure 3.9
Viewpoint 9 Photograph

Drawing no.:	61007_DWG_F3-9VP9
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Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm | Focal Length: 50mm | Horizontal Field of View: 90° | Direction of View: 162° | Height Above Ground: 150cm
Date and Time: 11/11/2021 14:27:06 | Weather: | Lighting Conditions:
Notes: Clear views over open ridge with no development. Quiet tranquil aspect. Clear demarcation between built and rural ridge. Blaenavon clearly visible to the left. Open undeveloped ridge to the right



 Study Area (TCBC and BGCBC)



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Viewpoint 10 Photograph

Drawing no.:	61007_DWG_F3-10VP10
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VIEWPOINT 11

Camera: Nikon D3500 | Lens: 18 to 55mm AF-P | Focal Length: 50mm | Horizontal Field of View: 160° | Direction of View: 156° | Height Above Ground: 150cm

Date and Time: 11/11/2021 14:15:00 | Weather: Overcast, dull | Lighting Conditions: Dull. Visibility closing approx 5-8km

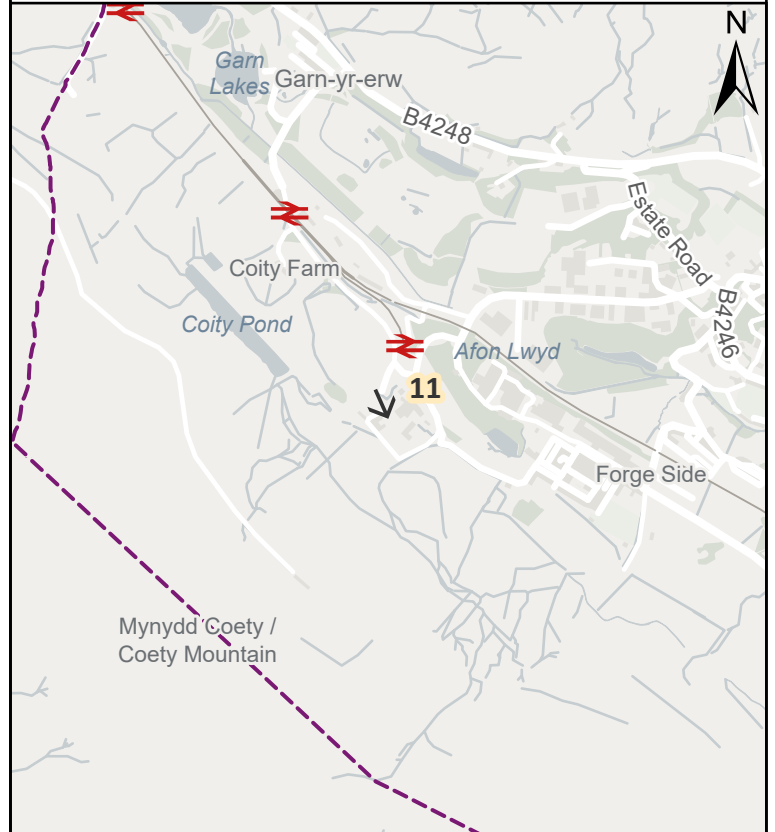
Notes:



LVIA Viewpoint Locations and Directions

 Blaenavon Industrial Landscape World Heritage Site (BILWHS)

 Study Area (TCBC and BGCBC)



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Figure 3.11

Viewpoint 11 Photograph

Drawing no.:	61007 DWG F3-11VP11
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VIEWPOINT 12

Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AP-F | Focal Length: 50mm | Horizontal Field of View: 50° | Direction of View: 153° | Height Above Ground: 150cm

Date and Time: 11/11/2021 14:56:43 | Weather: Overcast light drizzle | Lighting Conditions: Dull

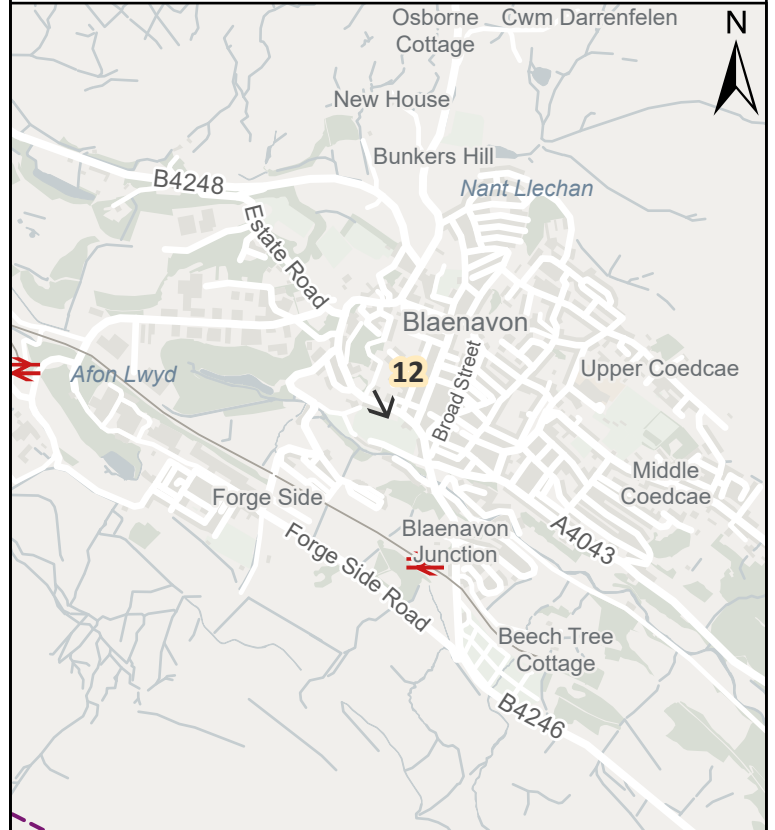
Notes: View down the valley largely screened by mature tree vegetation. Coity ridge visible but only the nearest portion of the ridge to the east. Top of turbines potentially visible over vegetation but not the main focal point. Movement could be a distraction. Views from cafe



↑ LVIA Viewpoint Locations and Directions

 Blaenavon Industrial Landscape World Heritage Site (BILWHS)

 Study Area (TCBC and BGCBC)



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Figure 3.12

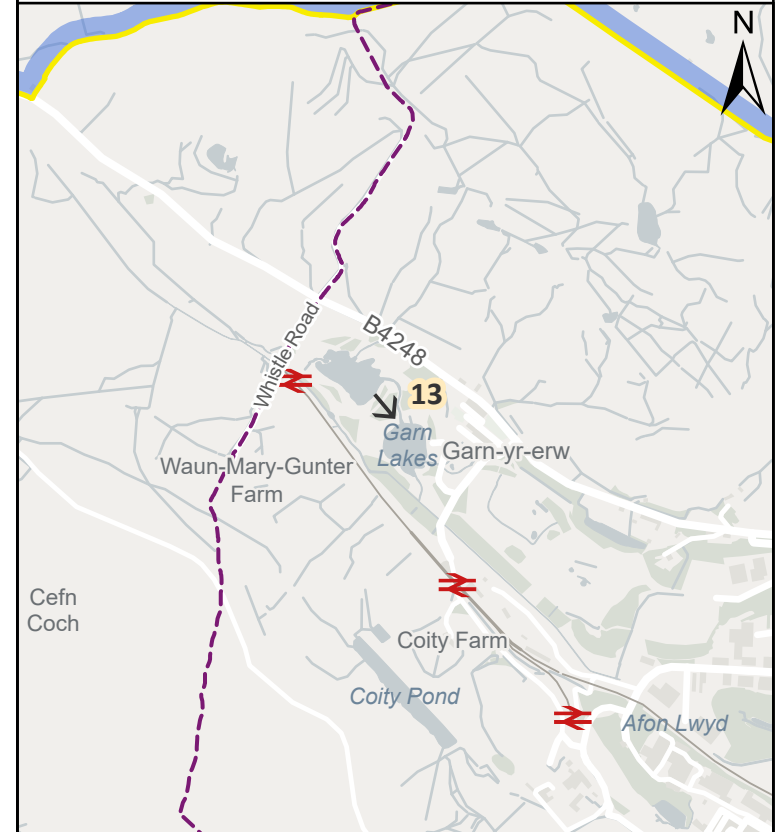
Viewpoint 12 Photograph

Drawing no.:	61007 DWG F3-12VP12
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Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AP-F | Focal Length: 50mm | Horizontal Field of View: 136° | Direction of View: 140° | Height Above Ground: 150cm
Date and Time: 11/11/2021 15:21:13 | Weather: Overcast | Lighting Conditions: Dull
Notes: Long distance panoramic views to SE. Woodland planting on the Eastern extent screens low level views. Coity ridge prominent to the west. Entire ridge line evident currently undeveloped and open. Views from area have no views of development. Slight road noise depending on wind direction otherwise tranquil v popular with local use.



- ↑ LVIA Viewpoint Locations and Directions
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- ▭ Brecon Beacons National Park



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Viewpoint 13 Photograph

Drawing no.:	61007_DWG_F3-13VP13
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VIEWPOINT 14

Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AP-F | Focal Length: 50mm | Horizontal Field of View: 110° | Direction of View: 121° | Height Above Ground: 150cm

Date and Time: 11/11/2021 15:27:53 | Weather: Overcast | Lighting Conditions: Dull

Notes: Very clear long distance views unobstructed

↑ LVIA Viewpoint Locations and Directions

Blaenavon Industrial Landscape World Heritage Site (BILWHS)

Study Area (TCBC and BGCBC)

Brecon Beacons National Park

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Figure 3.14

Viewpoint 14 Photograph

Drawing no.:	61007_DWG_F3-14VP14
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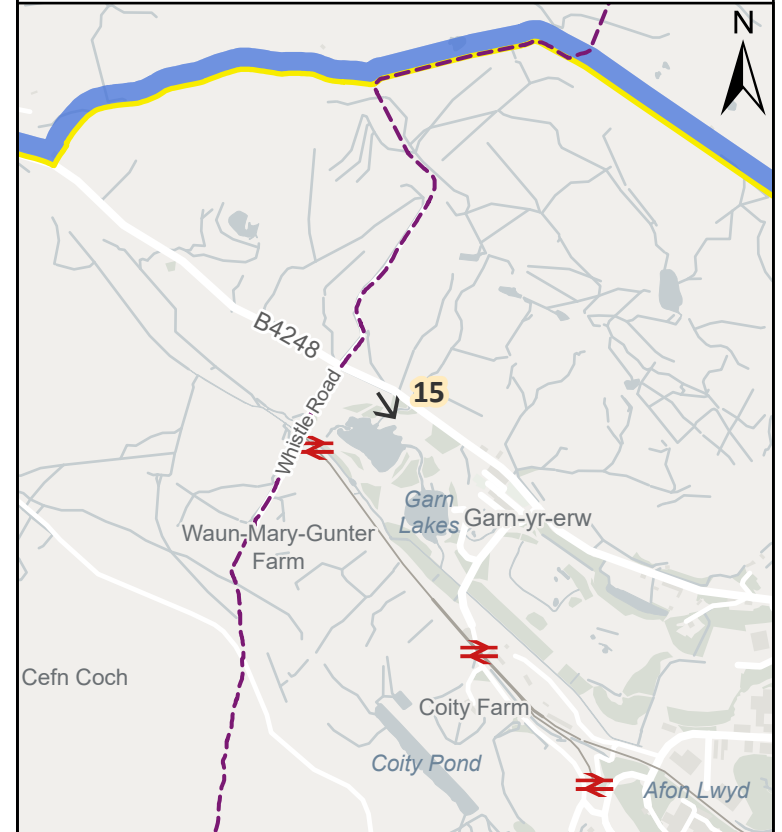
Contains OS data © Crown copyright and database right 2021

Scale: 1:25,000 (Printed at A3)

Camera: Nikon D3500 | Lens: Nikkor 18 to 55mm AP-F | Focal Length: 50mm | Horizontal Field of View: 104° | Direction of View: 146° | Height Above Ground: 150cm
Date and Time: 11/11/2021 15:39:44 | Weather: Overcast | Lighting Conditions: Dull
Notes: Clear views over ridge line. Peripheral paths are well screened by bounding vegetation and road noise on Eastern side of Garn Lakes is far more evident. Cattle grid. However the main clear views are all at key focal point and the busiest hubs therefore have clearest views of turbines over what is currently an open undeveloped ridge



 LVIA Viewpoint Locations and Directions
 Blaenavon Industrial Landscape World Heritage Site (BILWHS)
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 Brecon Beacons National Park



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Proposed Local Search Areas for Wind and
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Figure 3.15

Viewpoint 15 Photograph

Drawing no.:	61007_DWG_F3-15VP15
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