



## **Torfaen Replacement Local Development Plan (RLDP) 2022-2037**

# **Landscape and Visual Assessment: Proposed Local Search Areas for Wind and the Blaenavon Industrial Landscape World Heritage Site TACP - February 2022**

## **Executive Summary**

*Mae'r ddogfen hon ar gael yn Gymraeg / This document is available in Welsh*

### **Introduction**

TACP, a landscape consultant, was commissioned by Torfaen (TCBC) and Blaenau Gwent (BGCBC) County Borough Councils to undertake a viewshed analysis and outline landscape visual assessment to assess the potential extent of visibility of wind turbines on the landscape and visual amenity on the Blaenavon Industrial Landscape World Heritage Site (BILWHS) to inform the consideration of proposed 'Wind Energy Local Search Areas' (LSA's) in their respective Replacement Local Development Plans (RLDP's).

This Assessment is an Addendum to the previous **TACP Sensitivity and Capacity Study for Renewable Energy Development** (October 2021) prepared for the Council's, and focuses on the landscape, and visual receptors / viewpoints (VP's) within the World Heritage Site considered most likely to be affected by potential development.

The national planning policy context for the Study Area is outlined in the previous TACP Sensitivity and Capacity Study (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 their RLDP.

### **Methodology**

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). 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 IEAM 2013.

Within the proposed Torfaen Local Search Area (see Figure 1.7 below) the Assessment uses 5 theoretical wind turbine locations along its length, of 120m, 150m and 180m blade tip heights; with 5 similar theoretical turbine locations in the proposed Blaenau Gwent Local Search Area (see Figure 2.7 below). The areas where these turbines are visible from is also shown by the corresponding various green shaded areas on each map, as well as the World Heritage Site and Bannau Brycheiniog National Park (BBNP) Boundaries.

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## **Landscape Designations**

The Study Area encompasses the entire Blaenavon Industrial Landscape World Heritage Site, which is designated as a landscape of international heritage importance. Approximately half of the World Heritage Site lies within the authority area of Torfaen, with the remainder to the north extending into the National Park and Monmouthshire. The Bannau Brycheiniog National Park lies immediately to the north of the Torfaen boundary sharing its southerly boundary for approximately 16km along its western extent.

## **Key Receptors / Viewpoints**

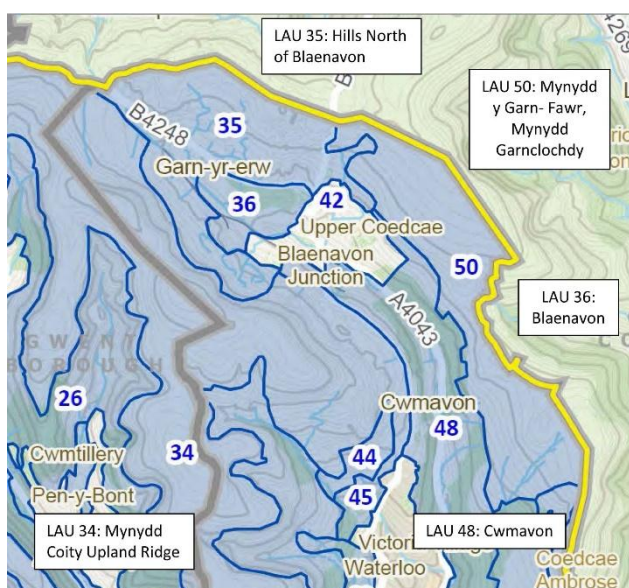
Several key receptors have been defined by the Council's as representative of, or as being important locations within the World Heritage Site. These have been used as a baseline against which to assess the potential visual impact of any potential wind farm development. The six receptors and associated viewpoints selected for assessment in the study area are: -

- Keeper's Pond (GR SO 255107) - Viewpoints P1-3
- Foxhunters Car Park (GR SO 263106) - Viewpoint P4
- Blaenavon Ironworks (GR SO 249092) - Viewpoints P5-P8
- Big Pit National Coal Museum (GR SO 238087) - Viewpoints P9-11
- Blaenavon Industrial Landscape WHS Heritage Centre (GR SO 250088) - Viewpoint P12
- Garn Lakes Local Nature Reserve (GR SO 232099) - Viewpoints P13-15

## **Landscape Assessment Units (LAU)**

Five Landscape Assessment Units (LAU) defined as part of the Sensitivity and Capacity Study for Renewable Energy Development are present within the World Heritage Site, see Figure 1 below. These are summarised as follows: -

Landscape Assessment Unit Reference / Name		Landscape Sensitivity	
		Wind	Solar
LAU 34	Mynydd Coity Upland Ridge	Very High	Very High
LAU 35	Hills North of Blaenavon	High	High
LAU 36	Blaenavon	Low	Low
LAU 48	Cwmavon	Very High	Very High
LAU 50	Mynydd y Garn-Fawr, Mynydd Garnclochdy	Very High	Very High



**Figure 1: Landscape Assessment Units: Blaenavon**

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## **Landscape and Townscape Impact Assessment**

The visual impacts are assessed against the following criteria: -

- Scale of change
- Nature of change
- Duration of change
- Distance
- Screening
- The direction and focus of the view

### **Main findings**

All receptors at each viewpoint are considered **very high** sensitivity to those visiting the Blaenavon Industrial Landscape World Heritage and Bannau Brycheiniog National Park area; and the majority of receptors were considered **high** sensitivity for local / casual users using footpaths as a daily part of their routine i.e. dog walking.

#### **Magnitude of Visual Impacts: Proposed Torfaen Local Search Area**

**Keeper's Pond:** at P1, turbines 1 and 2 will have potential visual impacts within the Zone of Theoretical Visibility (ZTV) at all heights; and Turbines 3-5 will have no impact. At P2, all turbines with a height of 120m will have no impact; turbine 1 will have a potential impact at 150-180m; turbine 2 will have a potential impact at 180m; and turbines 3-5 will have no impact. At P3, only turbine 1 at heights of 150-180m would have potential visual impacts. (See Figure 1.7 below).

**Foxhunters Car Park:** at P4, turbines 1, 2, 3 and 4 at heights of 120-180m would have potential visual impacts; and turbine 5 would have potential visual impact at heights of 150-180m.

For **Blaenavon Ironworks** (P5-P8); **Big Pit** (P9-P11), **BILWHS Heritage Centre** (P12) and **Garn Lakes** (P13-P15) - turbines at all locations and heights would have no potential visual impacts.

#### **Magnitude of Visual Impacts: Proposed Blaenau Gwent Local Search Area**

**Keeper's Pond:** at P1, only turbine 5 at a height of 180m would have potential visual impacts; and at P2 and P3 turbines at all locations and heights would have no potential visual impacts. (See Figure 2.7 below).

**Foxhunters Car Park:** All turbines at all locations and heights would have potential visual impacts.

For **Blaenavon Ironworks** (P5-P8); **Big Pit** (P9-P11), **BILWHS Heritage Centre** (P12) and **Garn Lakes** (P13-P15) - turbines at all locations and heights would have no potential visual impacts.

### **Conclusions**

The majority of the key viewpoints within the Blaenavon Industrial Landscape World Heritage Site are not anticipated to have any visual impacts resulting from the indicative locations of turbines at any height within either Local Search Area.

The most significant visual impacts on the World Heritage Site and the National Park would occur on higher elevation ground above Blaenavon. Principally on the south and southeast facing slopes of Mynydd y Garn-Fawr and the ridge line of the Blorengue.

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.

From Keeper's Pond, photomontage visualisations of the proposed Torfaen Local Search Area for Viewpoint 1 show turbines 1 and 2 would be visible for all heights. At Viewpoint 2, turbine 1 would be visible at 150-180m; turbine 2 would be visible at 180m; and turbines 3-5 would not be visible. At Viewpoint 3, only turbine 1 would be visible from 150-180m.

Similarly, from Keeper's Pond, photomontage visualisations of the proposed Blaenau Gwent Local Search Area provided for Viewpoint 1 show only turbine 5 would be visible at a height of 180m; with no turbines visible from Viewpoints 2 and 3.

For the Foxhunters Car Park, photomontage visualisations from Viewpoint 4, show all turbines at all locations and heights would be visible for both the proposed Torfaen (only turbine 5 would not be at a height of 120m) and Blaenau Gwent proposed Local Search Areas; 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 proposed Local Search Areas. However, it is noted that the presence of the existing transmitter station at this location may go some way towards reducing the perceived visual impacts.

The findings of this Assessment are based on indicative locations of wind turbines and do not include any assessment of associated infrastructure; and its purpose 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.

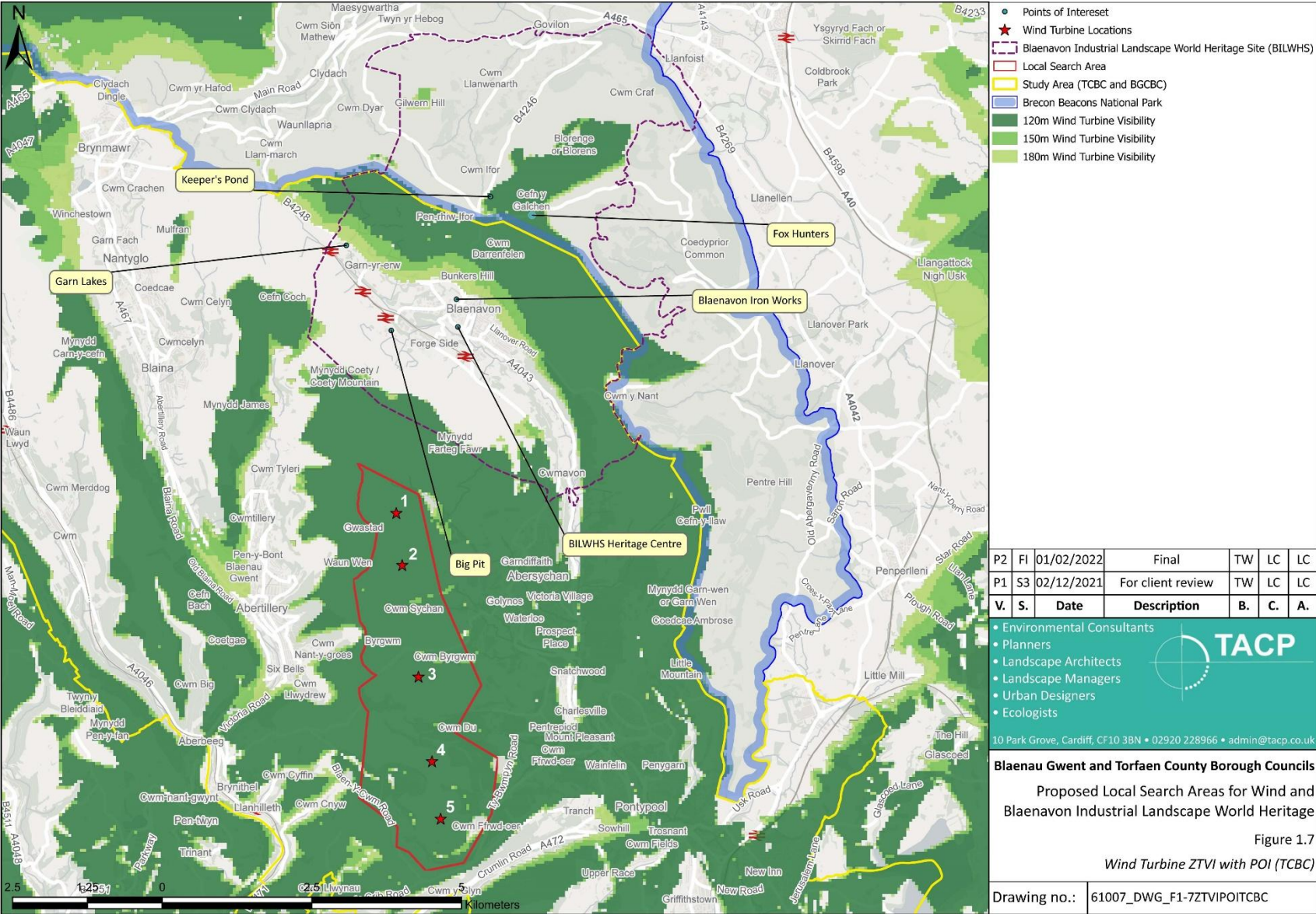
### **Potential Mitigation Measures**

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

- Respect the setting of Blaenavon Industrial Landscape World Heritage Site, Bannau Brycheiniog National Park and associated historic landscape and Scheduled Ancient Monuments;
- Avoid placing turbines on narrow sections of ridge where they will appear on the skyline;
- Consider opportunities to use existing vegetation within each proposed Local Search Area to partially screen wind development; and
- 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.



Figure 1.7 - Zone of Theoretical Visibility from the proposed Torfaen ‘Local Search Area for Wind Energy’

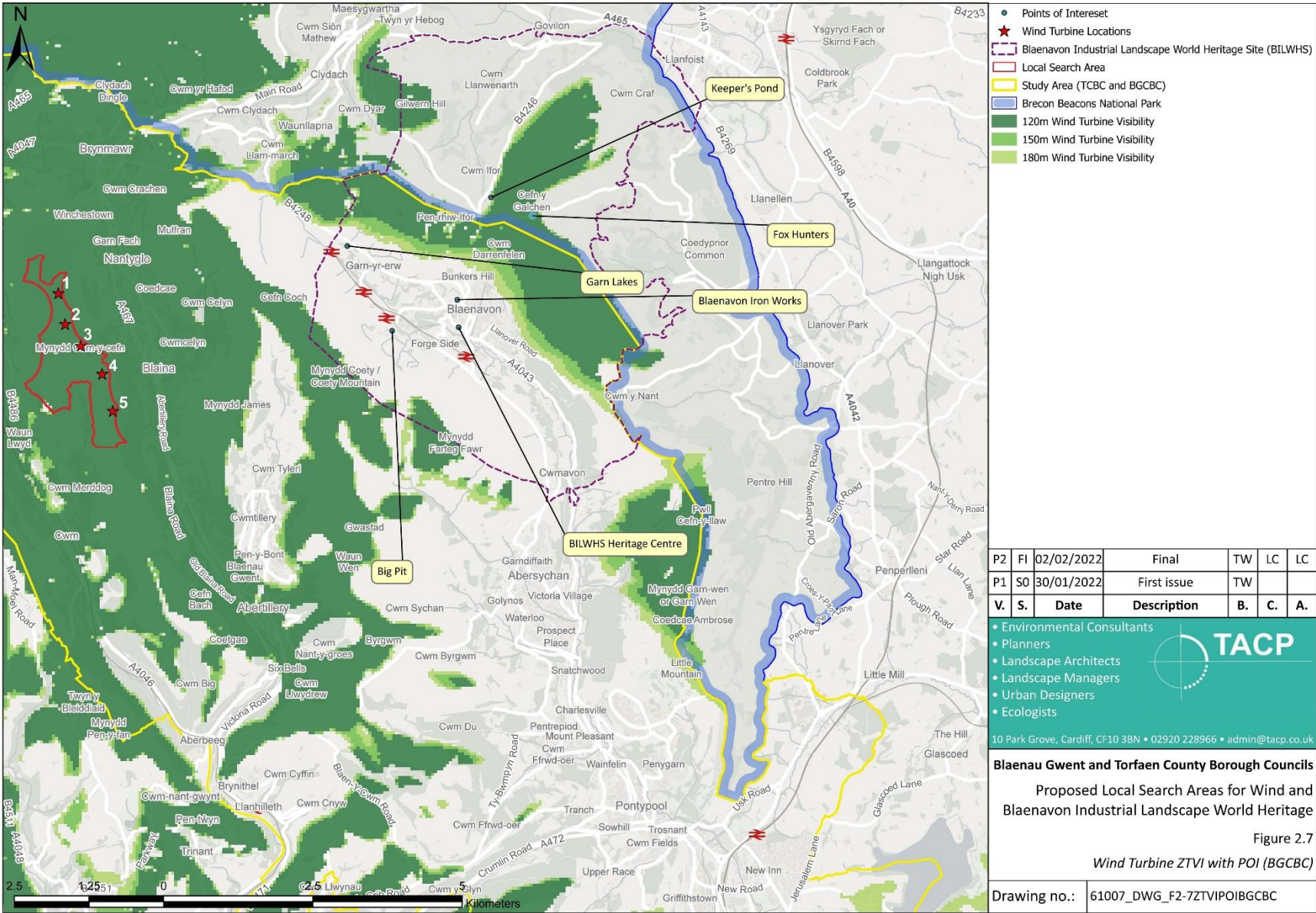


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Figure 2.7 - Zone of Theoretical Visibility from the proposed Blaenau Gwent ‘Local Search Area for Wind Energy’



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