



Parc Ynni Calon y Gwynt

ENVIRONMENTAL STATEMENT

Chapter 7 Landscape and Visual





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TYPE OF DOCUMENT (VERSION) PUBLIC

PROJECT NO. 62282400

OUR REF. NO. 62282400_CH07_002

DATE: JULY 2026

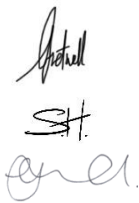
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QUALITY CONTROL

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks				
Date	29/05/2026	03/06/2026		
Prepared by	Laura Fretwell Steve Holford KMW	Laura Fretwell Steve Holford KMW		
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Project number	62282400	62282400		
Report number	001	002		
File reference				

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7 LANDSCAPE AND VISUAL

7.1 INTRODUCTION

- 7.1.1. This chapter presents the assessment of the likely significant effects of the Proposed Development with respect to landscape and visual amenity receptors. The assessment is based on information obtained to date. This chapter should be read in conjunction with the development description provided in **Chapter 4: Description of the Proposed Development** and with respect to relevant parts of the following chapters:
- **Chapter 5: Ecology**, which assesses the effects of the Proposed Development on habitats and species, including trees within the Site;
 - **Chapter 8: Cultural Heritage** which assesses the effects of the Proposed Development on the setting of heritage assets; and
 - **Chapter 12: Traffic and Transport** which assesses the effects of the Proposed Development on the use of public rights of way (PRoW) within the Site.
- 7.1.2. This chapter describes:
- The legislation, policy and technical guidance that has informed the assessment (**Section 7.2**);
 - Consultation and engagement that has been undertaken and how comments from consultees relating to the Landscape and Visual Impact Assessment (LVIA) have been addressed (**Section 7.3**);
 - The methods used for baseline data gathering (**Section 7.4**);
 - Overall baseline (**Section 7.5**);
 - Embedded measures relevant to landscape and visual amenity (**Section 7.6**);
 - The scope of the assessment for landscape and visual amenity (**Section 7.7**);
 - The methods used for the assessment (**Section 7.8**);
 - The assessment of landscape effects including LANDMAP Aspect Areas, the Eryri National Park and proposed Glyndŵr National Park (**Section 7.9**);
 - The assessment of visual effects (**Section 7.10**);
 - The assessment of cumulative (inter-project) effects (**Section 0**);
 - A summary of the significance conclusions (**Section 7.12**);
 - Any further assessment/works to be adopted (**Section Error! Reference source not found.**).
- 7.1.3. A number of appendices accompany this LVIA as follows:
- **Appendix 7A** LVIA Methodology and Glossary;
 - **Appendix 7B** LANDMAP Filtering Process;
 - **Appendix 7C** LANDMAP Aspect Areas: baseline descriptions and sensitivity assessments;
 - **Appendix 7D** LANDMAP GLAAs: Assessment of effects;

- **Appendix 7E** LANDMAP LHAAs: Assessment of effects;
- **Appendix 7F** LANDMAP VSAAAs: Assessment of effects;
- **Appendix 7G** LANDMAP HLAAs: Assessment of effects;
- **Appendix 7H** LANDMAP CLSAAAs: Assessment of effects;
- **Appendix 7I** Assessment of landscape effects: Eryri National Park;
- **Appendix 7J** Assessment of landscape effects: Proposed Glyndŵr National Park;
- **Appendix 7K** Viewpoint Assessment;
- **Appendix 7L** Residential Visual Amenity Assessment (RVAA); and
- **Appendix 7M** Night-time Assessment¹.

7.1.4. These appendices are contained within **Volume 4** and contain the extensive volume of baseline information and detailed assessments with summaries included in **Sections 7.9 to 7.12** in order to present a clear and succinct Draft ES chapter.

7.1.5. Figures accompanying this chapter are contained within **Volume 3** and include plans and visualisations of the Proposed Development, the latter of which are presented to accord with the NatureScot (NS) guidance².

VARIATIONS AND MICRO-SITING

7.1.6. Post consent, the location of the proposed 11 turbines would be subject to micro-siting of up to 50 m. Viewpoint analysis confirms that a horizontal micro-siting allowance of up to 50 m is unlikely to significantly alter the Zone of Theoretical Visibility (ZTV) pattern or change the overall results of the LVIA. Any horizontal micro-siting allowance of up to 50 m remains subject to the existing site constraints which, in practice, would notably limit this movement within the site area.

LIMITATIONS AND ASSUMPTIONS

7.1.7. Whilst turbine (T) 7 has a reduced blade tip height of 180 m, the hub height ZTV and visualisations have assumed a hub height of 118.5 m (the same hub height as the remaining 10 turbines) and a smaller rotor diameter. This represents a worst-case scenario with regard to hub height visibility.

7.1.8. Although several field surveys have been carried out, not every landscape and visual receptor has been visited in the field and professional experience has been applied to the judgements made in the LVIA and accompanying appendices. This has been aided by the use of ZTVs, visualisations, up to date aerial photography and the use of specialist wind farm modelling software (ReSoft WindFarm).

7.1.9. In terms of visual effects, it is considered that screening provided by vegetation cover would not remain constant throughout the year. The assessment of effects is based on an estimate of worst-case scenario winter views, where deciduous wooded species have lost their leaves, with a filtering branch structure remaining.

¹ The Night-time Assessment in **Appendix 7M** has been informed by the *Parc Ynni Calon y Gwynt Windfarm Reduced Lighting Scheme Proposal* which is contained in **Appendix 14A**.

² Scottish Natural Heritage (now NatureScot) (2017). Visual Representation of Wind Farms: Good Practice Guidance, Version 2.2. (Online). Available at <https://www.nature.scot/doc/visual-representation-wind-farms-guidance>

7.1.10. Field surveys have been carried out from publicly accessible locations only.

7.2 RELEVANT LEGISLATION, PLANNING POLICY AND TECHNICAL GUIDANCE

7.2.1. This section identifies the legislation, planning policy and technical guidance that has informed the assessment of effects with respect to landscape and visual amenity.

LEGISLATION

7.2.2. A summary of the relevant legislation is provided in **Table 7-1**.

Table 7-1 - Legislation Relevant to the LVIA

Legislation	Legislative context
Wellbeing of Future Generations (Wales) Act 2015 ³	The Act puts in place seven well-being goals to help ensure that public bodies are all working towards the same vision of a sustainable Wales. In relation to landscape matters, the most relevant well-being goal is the achievement of 'a resilient Wales', which seeks to maintain and enhance a biodiverse natural environment. Planning Policy Wales - Edition 12 ⁴ recognises that this goal can be supported by protecting sufficient scales, extent and connectivity of, and between, landscapes and habitats to enable them to withstand the pressures of change and protect and enhance biodiversity and to promote opportunities for social and economic activity based on valuing and enabling access to the natural, historic and built environment.
National Parks and Access to the Countryside Act 1949 ⁵	This Act provided the framework for the creation of National Parks and Areas of Outstanding Natural Beauty (AONB) (now National Landscapes), including the Eryri National Park and Shropshire Hills National Landscape which lie within the Study Area of the LVIA (see Section 7.4). One of a National Park's statutory duties is the promotion of public understanding and enjoyment of each Park's special qualities steered by a National Park Authority as guided by each Park's statutory Management Plan.
Countryside and Rights of Way Act 2000 ⁶	Section 85 requires public bodies to consider whether any activities outside of a National Landscape may affect land in the National Landscape. Planning Policy Wales ⁴ emphasises that this duty is relevant in considering development proposals that are situated outside of the National Landscape boundary, but which might have an impact on the setting of the National Landscape.

³ National Assembly for Wales (2015) *Well-being of Future Generations (Wales) Act 2015*. (Online). Available at: <https://www.legislation.gov.uk/anaw/2015/2> (Accessed March 2026)

⁴ Welsh Government (2024) *Planning Policy Wales Edition 12*. (Online). Available at: <https://www.gov.wales/sites/default/files/publications/2024-07/planning-policy-wales-edition-12.pdf> (Accessed March 2026)

⁵ Parliament of the United Kingdom (1949) *National Parks and Access to the Countryside Act 1949*. (Online). Available at: <https://www.legislation.gov.uk/ukpga/Geo6/12-13-14/97/contents> (Accessed March 2026)

⁶ Parliament of the United Kingdom (2000) *Countryside and Rights of Way Act 2000*. (Online). Available at: <https://www.legislation.gov.uk/ukpga/2000/37/contents> (Accessed March 2026)

PLANNING POLICY

- 7.2.3. A summary of the relevant national and local planning policy is provided in **Table 7-2** below. The Site is located in the administrative boundary of Powys County Council (PCC). Beyond 15 km lie the administrative boundaries of Gwynedd to the north-west and Ceredigion to the south-west.

Table 7-2 - Planning Policy Relevant to the LVIA

Policy	Policy Context
National Planning Policy	
Future Wales - The National Plan 2040 ⁷	Policy 17 - Renewable and Low Carbon Energy and Associated Infrastructure. This policy advises that there is a presumption in favour of large-scale wind energy development in Pre-Assessed Areas for wind developments (where the Welsh Government has already modelled the likely impact on the landscape and has found them to be capable of accommodating development in an acceptable way), subject to the criteria in Policy 18. The Site lies within Pre-Assessed Area 3 (further detail is set out in Chapter 3: Scheme Need, Alternatives and Iterative Design Process). The policy continues by stating that all proposals should demonstrate that they will not have an unacceptable adverse impact on the environment. Policy 18 - Renewable and Low Carbon Energy Developments of National Significance. Proposals qualifying as Developments of National Significance will be permitted subject to Policy 17 and the criteria listed under Policy 18. Of relevance to the LVIA for the Project, item 2 requires that there are no unacceptable adverse visual impacts on nearby communities and individual dwellings. The cumulative impacts of existing and consented renewable energy schemes should also be considered.
Planning Policy Wales, Edition 12 ⁴	With specific reference to large scale wind developments and the landscape, paragraph 5.9.17 recognises that Future Wales identifies Pre-Assessed Areas where the Welsh Government has already modelled the likely impact on the landscape and has found them to be capable of accommodating development in an acceptable way. There is a presumption in favour of large-scale wind energy development in these areas, subject to other criteria contained within the policy. General LVIA issues are included in Chapter 6 - Distinctive and Natural Places and more specifically within Section 6.3 Landscape. Amongst the statements of particular relevance to the Project are those concerning statutory landscape designations i.e., National Parks and National Landscapes, including paragraph 6.3.5 that states that the duty to have regard to their purposes applies to activities affecting these areas whether those activities are located within or outside a National Park or a National Landscape. Paragraph 6.3.12 and 6.3.13 relate to non-statutory designations such as Special Landscape Areas (SLAs) that define local areas of high landscape importance, which may be unique, exceptional or distinctive to the area. Planning authorities should apply these designations where there is good reason to believe that normal planning policies cannot provide the necessary protection.

⁷ Welsh Government (2021). Future Wales - The National Plan 2040. (Online). Available at: <https://www.gov.wales/future-wales-national-plan-2040-0>

Policy	Policy Context
	Paragraphs 6.3.20 and 6.3.21 concerns the use of LANDMAP and its role in informing landscape assessments needed to inform local authorities in making local policy, guidance and decision making.
Local Planning Policy	
Powys Adopted Local Development Plan 2011 - 2026 ⁸	Strategic Policy SP7 - Safeguarding of Strategic Resources and Assets states that to safeguard strategic resources and assets in the County, development proposals must not have an unacceptable adverse impact on the resource or asset and its operation. Of relevance to the LVIA, this includes land designated at international, European and/or national level for environmental protection, recreational assets (National Trails, Public Rights of Way Network, Recreational Trails and National Cycle Network) and the valued characteristics and qualities of the landscape throughout Powys. Policy DM4 - Landscape states that proposals for new development outside the Towns, Large Villages, Small Villages and Rural Settlements defined in the Settlement Hierarchy must not, individually or cumulatively, “<i>have an unacceptable adverse effect, on the valued characteristics and qualities of the Powys landscape</i>”. All proposals will need to be appropriate and sensitive in terms of integration, siting, scale and design to the characteristics and qualities of the landscape including its: topography; development pattern and features; historical and ecological qualities; open views; and tranquillity; and have regard to LANDMAP. The policy also requires that proposals have regard to adjacent protected landscapes and the visual amenity enjoyed by users of both Powys landscapes and adjoining areas. Proposals which are likely to have a significant impact on the landscape and/or visual amenity will require a Landscape and Visual Impact Assessment to be undertaken. Policy DM7 - Dark Skies and External Lighting requires that development proposals involving external lighting will only be permitted when a lighting scheme has been provided that demonstrates that the lighting will not individually or cumulatively cause (of relevance to the LVIA) unacceptable levels of light pollution especially in the countryside or an unacceptable adverse effect on the visibility of the night sky. Policy DM13 - Design and Resources. This policy requires that development proposals demonstrate a good quality design and have regard to the qualities and amenity of the surrounding area, local infrastructure and resources. Proposals will only be permitted where all stated criteria, where relevant, are satisfied, including that “<i>Development has been designed to complement and/or enhance the character of the surrounding area in terms of siting, appearance, integration, scale, height, massing, and design detailing</i>” and that “<i>The development contributes towards the preservation of local distinctiveness and sense of place</i>”. Policy RE1 - Renewable Energy states that proposals for renewable and low carbon energy development will be permitted subject to a number of criteria. Within or close to the Strategic Search Areas (SSAs), proposals for wind energy greater than 25MW will be permitted subject to criteria 3 to 5; all other proposals for renewable and low carbon energy will only be permitted

⁸ Powys County Council (2018). Powys Local Development Plan 2011 - 2026. (Online). Available at: <https://www.conwy.gov.uk/en/Resident/Planning-Building-Control-and-Conservation/Strategic-Planning-Policy/Adopted-Local-Development-Plan-LDP/Adopted-Local-Development-Plan-LDP.aspx> (Accessed March 2026).

Policy	Policy Context
	where they can demonstrate they would not prejudice the purpose of the SSA. The policy requires proposals for all types of renewable and low carbon energy development and associated infrastructure either on their own, cumulatively or in combination with existing, approved or proposed development, to comply with all other relevant policies in the LDP and states that <i>“Satisfactory mitigation shall be in place to reduce the impact of the proposal and its associated infrastructure. Proposals shall make provision for the restoration and after-care of the land for its beneficial re-use”</i>.
Eryri Local Development Plan 2016-2031 ⁹	Strategic Policy D: Natural Environment (D) states that the natural resources, biodiversity, geodiversity and ‘Special Qualities’ of the Snowdonia National Park will be protected from inappropriate development. Development Policy 2: Development and the Landscape (2) requires the scale and design of new development, including its setting, landscaping and integration to respect and conserve the character, qualities and views of the landscape. Unacceptable impacts on the landscape will be resisted and <i>“particular regard will be had to the protection of:</i> <i>i. The Snowdonia Dark Skies Reserve, in particular Core Areas.</i> <i>ii. The Dyfi Biosphere Reserve.</i> <i>iii. Section 3 areas of natural beauty</i> <i>iv. Undeveloped coast.</i> <i>v. Panoramas visible from significant viewpoints.</i> <i>vi. Sensitive Landscape Character Areas as defined in the Supplementary Planning Guidance documents the Landscapes of Eryri and the Landscape Sensitivity and Capacity Assessment”</i>.
Supplementary Planning Guidance (SPG)	
Powys Local Development Plan (2011-2026) Supplementary Planning Guidance Renewable Energy ¹⁰	Section 9 of this SPG sets out the criteria for determining renewable energy schemes within Powys what states that the information requested by the Council is likely to include <i>“impacts on communities and individual dwellings, including zones of theoretical visibility (ZTV), visual impact and residential amenity”, “landscape and visual impacts, including effects on nationally protected landscapes, upland areas and commons” and “cumulative impacts - developers should be clear about likely cumulative impacts arising from all of the considerations below, recognising that in some areas the cumulative impact of existing and consented energy development may limit the capacity for further development”</i>. Section 9.2 of the SPG deals with landscape sensitivity and capacity, whilst Section 9.3 details LVIA, stating <i>“For all types of renewable / low carbon energy, the assessment of landscape and visual effects (including impacts on landscape, seascape, townscape and communities) will be of primary importance. Impacts on skylines, views and panoramas into and out of the proposed development will be important considerations”</i>.

⁹ Snowdonia National Park Authority (2016). Eryri Local Development Plan 2016-2031. (Online). Available at: <https://snowdonia.gov.wales/wp-content/uploads/2022/01/Cynllun-Datblygu-Lleol-Saesneg.pdf>

¹⁰ Powys County Council (2019). Powys Local Development Plan (2011-2026) Supplementary Planning Guidance Renewable Energy. (Online). Available at: <https://en.powys.gov.uk/article/4907/LDP-Supplementary-Planning-Guidance-SPG-and-Supporting-Policy>

Policy	Policy Context
Powys Local Development Plan (2011-2026) Supplementary Planning Guidance Landscape ¹¹	This SPG supplements the landscape related policies of the Powys Local Development Plan (LDP) (2011-2026) and provides guidance on what landscape is and the Powys landscape, relevant LDP policies relating to landscape, how policies in the LDP relating to landscape should be implemented, what is required to be submitted as part of a planning application for different scales / types of development and the monitoring and review processes associated with the LDP and SPG relating to landscape.
Eryri National Park Supplementary Planning Guidance 07 Landscape and Seascapes of Eryri ¹²	This SPG identifies the key characteristics of individual Landscape Character Areas (LCAs) and Seascape Character Areas (SCAs) within the National Park and sets out information on how to manage change within them.
Eryri National Park Supplementary Planning Guidance 13 Landscape Sensitivity and Capacity ¹³	This SPG provides the sensitivity and capacity of each of the 25 Landscape Character Areas to the types of development which, due to their size, design and locational requirements, may have a harmful effect on the landscape character of the National Park. The study considers three development types including Wind Energy (focussing on smaller scale developments) and has been reviewed for background information.
Cynllun Eryri - The Eryri National Park Partnership Plan 2020 ¹⁴	The National Park Partnership Plan (NPPP) is the statutory Management Plan for the Eryri National Park. The NPPP seeks to both safeguard and enrich the landscape and tranquillity of the area through a series of proactive measures. Of relevance to the LVIA is Outcome A7 “<i>Our Special Qualities are well-protected</i>”, with further relevant details provided in item A7.2 which states: “<i>Through the Local Development Plan, ensure that major new developments safeguard views into and out of the National Park</i>” by ensuring that any major development proposals are subject to rigorous examination and include an assessment of the impact on National Park purposes and that consideration of the landscape and visual impact of proposals close to the National Park boundary and how these may impact on National Park purposes, including views into, and out of, the National Park.

TECHNICAL GUIDANCE

7.2.4. A summary of the technical guidance for the LVIA is provided in **Table 7-3** below.

Table 7-3 - Technical guidance relevant to the LVIA

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- ¹¹ Powys County Council (2019). Powys Local Development Plan (2011-2026) Supplementary Planning Guidance Landscape. (Online). Available at: <https://en.powys.gov.uk/article/4907/LDP-Supplementary-Planning-Guidance-SPG-and-Supporting-Policy>
- ¹² Eryri National Park Authority (2014). Supplementary Planning Guidance 07 Landscapes and Seascapes of Eryri. (Online). Available at: <https://snowdonia.gov.wales/wp-content/uploads/2022/03/Supplementary-Planning-Guidance-7-%E2%80%93-Landscape-and-Seascapes-of-Eryri.pdf> (Accessed March 2026)
- ¹³ Eryri National Park Authority (2016). Supplementary Planning Guidance 13 Landscape Sensitivity and Capacity Assessment (Online). Available at: <https://snowdonia.gov.wales/wp-content/uploads/2022/03/Supplementary-Planning-Guidance-13-Landscape-Sensitivity-and-Capacity-Assessment.pdf> (Accessed March 2026)
- ¹⁴ Eryri National Park Authority (2020). Cynllun Eryri The Eryri National Park Partnership Plan. (Online). Available at: <https://snowdonia.gov.wales/wp-content/uploads/2020/09/Cynllun-Eryri-English-ER.pdf> (Accessed March 2026)

Technical Guidance Document	Context
Guidelines for Landscape and Visual Impact Assessment (Third Edition) ¹⁵	The third edition of this guidance (known as 'GLVIA3') which is produced by the Landscape Institute and Institute of Environmental Assessment is widely regarded by landscape and planning professions as the 'industry standard' together with best practice and professional experience. GLVIA3 provides the framework within which the remaining sections of the Draft ES have been undertaken with a summary of the methodology by which the LVIA has been undertaken being set out in Section 6.8 with a detailed methodology included in Appendix 7A .
Technical Guidance Note LITGN-2024-01 - Notes and Clarifications on aspects of the 3rd Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3) ¹⁶	This document provides a compilation of clarifications on the GLVIA3 and has been produced to help interpret aspects of the guidance provided in GLVIA3 and should be read alongside GLVIA3.
Using LANDMAP in Landscape and Visual Impact Assessments (GN46) ¹⁷	This guidance outlines Natural Resources Wales (NRW) advice on how LANDMAP information should be used in LVIAs. It sets out typical search and study area extents for a range of heights of tall structures and describes the filtering process that should be applied to existing LANDMAP evidence to help focus the detailed assessment of potentially sensitive landscape and visual receptors on the aspect areas most likely to be affected.
Visual Representation of Windfarms (Version 2.2) ¹⁸	This NatureScot guidance is focussed on the production of visualisation-related materials to be included within an ES LVIA, made available to the public and to inform decision making. All wind farm applications requiring a LVIA as part of an EIA should conform with the requirements set out within this document.
Technical Guidance Note 06/19 - Visual Representation of Development Proposals ¹⁹	This Technical Guidance Note applies to visual representation of all forms of development. Paragraph 1.5.3 notes that the Landscape Institute (LI) supports the Scottish Natural Heritage (now NatureScot) Guidance: Visual Representation of Wind Farms v2.2 and that the Visual Representation of Development Proposals is broadly consistent with the guidance, particularly in respect of Type 4 Visualisation.

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- ¹⁵ Landscape Institute and the Institute of Environmental Management and Assessment (2013) *Guidelines for Landscape and Visual Impact Assessment. 3rd edition*. London. Routledge
- ¹⁶ Landscape Institute (2024) *Technical Guidance Note LITGN-2024-01 Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3)*. (Online). Available at: https://www.landscapeinstitute.org/wp-content/uploads/2024/08/LITGN-2024-01-GLVIA3-NC_Aug-2024.pdf (Accessed March 2026)
- ¹⁷ Natural Resources Wales (2025) *Using LANDMAP in Landscape and Visual Impact Assessments GN46*. (Online). Available at: <https://naturalresourceswales.gov.uk/guidance-and-advice/business-sectors/planning-and-development/evidence-to-inform-development-planning/using-landmap-in-landscape-and-visual-impact-assessments-gn46/?lang=en> (Accessed March 2026)
- ¹⁸ Scottish Natural Heritage (now NatureScot) (2017) *Visual representation of wind farms: Guidance. Version 2.2*. (Online). Available at: <https://www.nature.scot/doc/visual-representation-wind-farms-guidance> (Accessed March 2026)
- ¹⁹ Landscape Institute (2019) *Technical Guidance Note 06/19 Visual Representation of Development Proposals*. (Online). Available at: <https://www.landscapeinstitute.org/visualisation/> (Accessed March 2026)

Technical Guidance Document	Context
Guidance: Assessing the Cumulative Impact of Onshore Wind Energy Developments ²⁰	This NatureScot guidance sets out advice on assessing cumulative landscape and visual impacts and is referenced in Chapter 7 of GLVIA3.
Technical Information Note 2/2019 - Residential Visual Amenity Assessment ²¹	This technical information note summarises the requirement and stages of undertaking a Residential Visual Amenity Assessment (RVAA) that focuses upon private views and visual amenity in a manner that is beyond the type of visual assessment specified in GLVIA3. The approach set out facilitates the provision of an RVAA that can be used by a decision maker when weighing potential effects upon overall residential amenity in the planning balance
Technical Information Note 04/2020 - Infrastructure ²²	This Technical Guidance Note provides information on the planning, design and management of infrastructure to support the delivery of major infrastructure projects in the UK. Part 1 of the document explains what infrastructure is, the role of the Landscape Professional and the planning and design process in a major infrastructure project. Part 2 provides technical guidance and resources, introducing documents of relevance to different infrastructure types.
Technical Guidance Note 02/21 - Assessing landscape value outside national designations ²³	This technical guidance note provides information and guidance to landscape professionals and others who need to make judgments about the value of a landscape (outside national landscape designations) in the context of the UK Town and Country Planning system.
Special Landscape Qualities - Guidance on assessing effects ²⁴	This NatureScot guidance applies to the Special Qualities (SQs) identified for National Parks and describes the sequence of steps to follow in a SQ assessment, demonstrates how the SQs can be used to influence the siting and design of a proposal and explains why and how this information is required to inform judgements on effects in relation to planning and land use policies.
Guidance on Aviation Lighting Impact Assessment ²⁵	This NatureScot Guidance explains why night-time Aviation Lighting Impact Assessments are needed and it sets down a three-stage process for evaluating and illustrating the landscape and visual effects arising from aviation warning lights

- ²⁰ NatureScot (2021). *Guidance: Assessing the Cumulative Impact of Onshore Wind Energy Developments*. (Online). Available at: <https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments#Introduction+and+scope+of+this+guidance> (Accessed March 2026)
- ²¹ Landscape Institute (2019) *Technical Guidance Note 2/19 - Residential Visual Amenity Assessment*. (Online). Available at: <https://www.landscapeinstitute.org/technical-resource/rvaa/> (Accessed March 2026)
- ²² Landscape Institute (2020) *Technical Information Note 04/2020 - Infrastructure*. (Online). Available at: <https://www.landscapeinstitute.org/news/infrastructure-guidance-updated/> (Accessed September 2025)
- ²³ Landscape Institute (2021) *Technical Guidance Note 02/21 - Assessing landscape value outside national designations*. (Online). Available at: <https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations/> (Accessed March 2026)
- ²⁴ NatureScot (2025) *Special Landscape Qualities - Guidance on assessing effects*. (Online). Available at: <https://www.nature.scot/doc/special-landscape-qualities-guidance-assessing-effects> (Accessed March 2026)
- ²⁵ NatureScot (2024) *Guidance on Aviation Lighting Impact Assessment*. (Online). Available at: <https://www.nature.scot/doc/guidance-aviation-lighting-impact-assessment> (Accessed March 2026)

Technical Guidance Document	Context
Designing for Renewable Energy in Wales ²⁶	This guide “ <i>promotes a holistic consideration of power generation infrastructure (i.e. wind turbines and solar panels) and associated infrastructure to ensure schemes are considered in their entirety</i> ”. It should be noted that this publication is not a policy document and instead provides guidance relating to policy, as set out in the Welsh Government’s Planning Policy Wales ⁴ and Policies 17 and 18 of Future Wales: The National Plan 2040 ^{Error! Bookmark not defined.} .

7.3 CONSULTATION AND ENGAGEMENT

OVERVIEW

- 7.3.1. The assessment has been informed by consultation response and ongoing stakeholder engagement. An overview of the approach to consultation is provided in **Section 2.4 of Chapter 2: Approach to EIA**.

SCOPING DIRECTION

- 7.3.2. A Scoping Direction (**Appendix 1B**) was issued by PEDW on behalf of the Welsh Ministers, on 14 May 2025 (reference DNS CAS-02905-P2F6M6). A summary of the relevant responses received in the Scoping Direction in relation to the LVIA and confirmation of how these have been addressed within the assessment to date is presented in **Table 7-4**.

Table 7-4 - Summary of EIA Scoping Direction responses for the LVIA

Consultee	Consideration	How addressed in this Draft ES
PEDW ID.39	Guidance: The assessment should include consideration of the following guidance: ■ Guidance on Aviation Lighting Impact Assessment, NatureScot, November 2024 ■ Special Landscape Qualities - Guidance on assessing effects, NatureScot, January 2025 ■ Designing for Renewable Energy in Wales, Design Commission for Wales, November 2023	The guidance documents set out in the Scoping Direction have been used to inform the LVIA’s methodology as set out in Table 7-3 and Appendix 7A LVIA Methodology . Designing for Renewable Energy in Wales has also informed the wind farm design as set out in Section 7.6 .
PEDW ID.40	Data sources: NRW advise that the following data sources should be used to inform the assessment: ■ Evidence reports relating to the North East Wales National Park Designation Project ■ Evidence on Tranquillity & Place - Dark Skies	The data sources set out in the Scoping Direction have been used to inform the baseline and assessment of effects as set out in Table 7-5 and these include the three requested for consideration.

²⁶ Design Commission for Wales (2023) Designing for Renewable Energy in Wales. (Online). Available at: <https://www.gov.wales/sites/default/files/publications/2023-12/designing-for-renewable-energy-in-wales.pdf> (Accessed March 2026)

Consultee	Consideration	How addressed in this Draft ES
	Evidence on Tranquillity and Place - Visually Tranquil Areas	
PEDW ID.41	Cumulative Study Area: NRW concur with the proposed search area and study area. The SR proposed the same 27 km study area for the cumulative LVIA. NRW note it is unclear how the cumulative study area has been defined, NRW advise this should be informed by a cumulative Zone of Theoretical Visibility. PEDW advise that the methodology to inform the cumulative study area must be set out in the ES. Agreement should be reached with NRW on the proposed study area.	The cumulative Study Area also extends to 27 km in line with the advice provided in the <i>NatureScot Guidance - Assessing the cumulative landscape and visual impact of onshore wind energy developments</i>²⁰ which states that “<i>The key principle for all impact assessments is to focus on the likely significant impacts and those which are likely to influence the outcome of the consenting process</i>”. This has been informed by the ZTVs for the Proposed Development, cumulative ZTVs and distribution of wind energy schemes.
PEDW ID.42	Eryri National Park: The development is proposed 16 km from the border of Eryri National Park (NP). NRW note the justification for scoping out impacts on Eryri NP states that the location of intervening operational and consented cumulative wind energy developments between the proposed development and the NP boundary, alongside the distance and limited visibility means that significant effects are unlikely. NRW query this approach, stating that ENP should be scoped into the LVIA, particularly for cumulative impact assessment as this will cover both the ‘additional’ and ‘combined’ cumulative effects of existing, consented, and the proposed developments. Eryri NPA also raise concerns with the potential cumulative effects due to the number of wind farm developments surrounding the National Park boundary. PEDW direct that landscape impacts, including cumulative impacts, on Eryri NP are scoped into the assessment.	An assessment, including cumulative impact assessment of the effects on the Eryri National Park’s Special Qualities, as defined in Cynllun Eryri - The Snowdonia National Park Partnership Plan 2020¹⁴, is included in Appendix 7I and its conclusions summarised in Section 7.9.
PEDW ID.43	Cumulative Assessment: PEDW note that Table 7-1 appears to indicate that cumulative assessment on landscape would be scoped out. NRW advise that cumulative landscape impacts must be considered. PEDW direct that cumulative landscape impacts are scoped into the ES. The ES should include a description of the likely significant effects resulting from the cumulation of effects with other existing and / or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources, as set out in schedule 4, paragraph 5(e) of the 2017	A cumulative landscape assessment has been undertaken in line with NatureScot Guidance²⁰ for all landscape receptors considered in the LVIA and is included in Appendix 7D, 7E, 7F, 7G, 7H, 7I and 7J. The conclusions of the detailed landscape assessments are set out in Section 7.9. The approach to the cumulative assessment for all other topic chapters has followed the Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment as detailed in Section 2.8 of Chapter 2: Approach to EIA.

Consultee	Consideration	How addressed in this Draft ES
	Regulations. The applicant should also refer to best practice guidance on the assessment of existing and approved development Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment, available at: https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment	
PEDW ID.44	North East Wales National Park: NRW note that the proposed development is located approx. 11km to the south of the candidate area of the new North East Wales National Park. Whilst the National Park is yet to be designated, the applicant is advised to keep the assessment up to date and consider the future designation. The ES should either include an assessment assuming the Candidate Area has been designated as a new National Park or assess impacts on any new National Park designation that might have been made. PEDW direct that the potential impacts on the candidate area of the new North East Wales National Park are scoped in the ES, and the level of assessment should be tailored to the status of the designation at the time of the application.	An assessment of the effects on the draft Special Qualities which have been identified to date for the proposed Glyndŵr National Park in North East Wales, is included in Appendix 7J . This has been informed by the draft special quality headlines, with their constituent characteristics grouped where appropriate. This is considered to be proportionate to the status of the proposed Glyndŵr National Park.
PEDW ID.45	Viewpoints: NRW are provisionally satisfied with the proposed viewpoint within Eryri NP and within the candidate area for the new National Park. The applicant is advised to liaise with NRW to provide draft photography and the results of the cumulative ZTV analysis, this will allow NRW to provide detailed comments on viewpoint selection.	The photography and visualisations are provided for all viewpoints in Figures 7.16 to 7.35 , with Viewpoint 13 (Figure 7.28) located on the eastern boundary of the proposed Glyndŵr National Park and Viewpoint 20 (Figure 7.35) located within the Eryri National Park. The cumulative ZTVs are included in Figures 7.13.1 to 7.13.6 .
PEDW ID.46	Visualisations: The SR proposed to only include a photograph and wireline for VP 20. NRW recommend that a photomontage may be required from VP 20, and that wirelines from all viewpoints should include the consented cumulative schemes. The applicant is advised to provide viewpoints and visualisations in accordance with NRW's advice. Further consultation with NRW is required should the ES defer from this advice.	A photomontage has been prepared for Viewpoint 20 and is presented in Figure 7.35 . All viewpoints provide wirelines that contain consented cumulative schemes.
PEDW ID.47	Mitigation: NRW recommend mitigation in the form of the reduction of the intensity of aviation warning lighting during good visibility.	A lighting strategy which details the mitigation measures associated with the aviation warning lights is included in Appendix 14A . This has informed the Night-time Assessment presented in Appendix 7M .

Consultee	Consideration	How addressed in this Draft ES
PEDW ID.48	Reasonable Alternatives: The applicant is advised that the principles outlined in Designing for Renewable Energy in Wales should be considered as part of the evolution of the scheme design. Determining the appropriate turbine layout should be based on rigorous analysis, testing and response to the landscape setting. The ES should explain how the findings of the LVIA have informed the design process, including the location, scale, number, siting, and layout of the turbines. These design matters should also be considered in relation to existing and consented wind farms nearby. This should be set out in the reasonable alternatives section of the ES.	The design has evolved through consideration of a range of environmental and technical constraints in line with Section 4.1 of Designing for Renewable Energy in Wales ²⁶ which states “ <i>The construction of large-scale wind and solar energy installations should result from a thorough, multidisciplinary site selection and design process</i> ”. The iterative design of the Proposed Development is detailed within Chapter 3: Need, Alternatives and Iterative Design with a full project description including the associated infrastructure detailed in Chapter 4: Description of the Proposed Development . LVIA specific design considerations and mitigation is reported in Section 7.6 .
Powys County Council (PCC) ID.103	The EIA will need to take account of the Powys Landscape Character Assessment.	The host Powys Landscape Character Areas (LCA) for the Proposed Development are described in Section 7.5 . Whilst this LVIA utilises LANDMAP Aspect Areas as the landscape character receptors, in accordance with paragraphs 6.3.20 and 6.3.21 of Planning Policy Wales, Edition 12 ⁴ and Policy DM4 - Landscape in the Powys Adopted Local Development Plan 2011 - 2026 ⁸ , the relevant Powys LCAs are recorded under the VSAA baseline descriptions in Appendix 7C .

7.4 DATA GATHERING METHODOLOGY

STUDY AREA

LVIA Study Area

- 7.4.1. *Using LANDMAP in Landscape and Visual Impact Assessments (GN46)*^{Error! Bookmark not defined.} advises that the LVIA Study Area for structures of a height of 176 m to 225 m should extend to 26 km to 28 km distance. For this LVIA, a 27 km study area has been set from each of the proposed turbine locations in line with *GN46*^{Error! Bookmark not defined.} and as agreed with NRW (ID.41 of **Table 7-4**). This LVIA Study Area is illustrated in **Figure 7.1 Landscape and Visual Study Area**.
- 7.4.2. It is important to note that the boundary of the LVIA Study Area is not the limit of potential visibility. Rather, it is an area defined by the NRW guidance GN46, on the basis of development management cases and evidence reports in relation to vertical structures, to determine a suitable LVIA Study Area for the assessment of wind farms which will contain all likely significant landscape and visual effects.

Cumulative LVIA Study Area

- 7.4.3. The cumulative Study Area also extends to 27 km in line with the advice provided in the NatureScot *Guidance - Assessing the cumulative landscape and visual impact of onshore wind energy developments*²⁰ which states that “*The key principle for all impact assessments is to focus on the likely significant impacts and those which are likely to influence the outcome of the consenting process*”.
- 7.4.4. The cumulative context is illustrated in **Figure 7.12 Cumulative Context** and the cumulative ZTVs are presented in:
- **Figure 7.13.1 Cumulative ZTV - Calon y Gwynt with Tirgwynt and Esgair Cwmowen;**
 - **Figure 7.13.2 Cumulative ZTV - Calon y Gwynt with Mynydd Clogau;**
 - **Figure 7.13.3 Cumulative ZTV - Calon y Gwynt with Carno I & II and Carno III;**
 - **Figure 7.13.4 Cumulative ZTV - Calon y Gwynt with Llanbrynmair and Cemmaes;**
 - **Figure 7.13.5 Cumulative ZTV - Calon y Gwynt with Llandinam, Llandinam Repowering and Garn Fach; and**
 - **Figure 7.13.6 Cumulative ZTV - Calon y Gwynt with Llyn Lort.**

DESK STUDY

- 7.4.5. A summary of the organisations that have supplied data, together with the nature of that data is outlined in **Table 7-5**.

Table 7-5 - Data sources used to inform the LVIA

Organisation	Data Source	Data Provided
Ordnance Survey (OS)	Scale 1:50,000 and 1:25,000 mapping as appropriate	Baseline information on the landscape context including topography, drainage, settlement pattern, land use, tree cover, promoted recreational routes, transport network and infrastructure.
Google Earth Pro	Aerial photography and Street View.	Baseline information and Street View images on the landscape context including drainage, settlement pattern, land use, tree cover, transport network and infrastructure.
NRW	National Landscape Character Areas ²⁷	High-level baseline information on landscape character which sets the context for local LANDMAP data.
	LANDMAP Geological Landscape (GLAA), Landscape Habitats (LHAA), Visual and Sensory (VSAA), Historic Landscape (HLAA) and Cultural Landscape	Baseline information on landscape character in Wales, recorded and evaluated in a nationally consistent data set.

²⁷ Natural Resources Wales. (2013). National Landscape Character Areas (NLCA) map and descriptions. (online). Available at: <https://naturalresources.wales/evidence-and-data/maps/nlca/?lang=en>

Organisation	Data Source	Data Provided
	Services (CLSAA) GIS dataset and evaluations.	
	Special Landscape Areas (SLAs) GIS dataset.	Baseline information on the spatial distribution of SLAs.
	Tranquillity and Place - Visually Tranquil Areas GIS dataset ²⁸ and accompanying report ²⁹ .	Baseline information on tranquillity provided by a nationally consistent terrestrial Tranquillity and Place resource which identifies visually tranquil areas for use as an evidence base.
	Tranquillity & Place - Dark Skies GIS dataset³⁰ and accompanying report³¹.	Baseline information on dark skies provided by a nationally consistent resource.
Powys County Council	Local Landscape Character Assessment for the Powys Local Development Plan Area Landscape Character Assessment Report (and accompanying Profiles)³²	Baseline information on landscape character within Powys.
Eryri National Park Authority	Cynllun Eryri - The Snowdonia National Park Partnership Plan 2020¹⁴	Baseline information on the Special Qualities of the National Park.
	Supplementary Planning Guidance 07: Landscape and Seascapes of Eryri¹²	Baseline information on landscape character within the National Park
	Supplementary Planning Guidance 13: Landscape Sensitivity and Capacity Assessment³³	Baseline information on sensitivity of Landscape character areas within the National Park.

²⁸ Natural Resources Wales (2025) *Tranquillity and Place: Visually Tranquil Areas* (online). Available at: <https://storymaps.arcgis.com/stories/865c1876d9f64280a3dfc6e2769a46a5> (Accessed March 2026)

²⁹ Green C, Manson D, Chamberlain K (2022) *Tranquillity and Place. NRW Report No: 569 (version 2)*. (online). Available at: https://www.lucmaps.co.uk/NRW_TranquillityPlace/Tranquillity%20and%20Place%20-%20Theme%205%20Report.pdf (Accessed March 2025)

³⁰ Natural Resources Wales (2025) *Tranquillity and Place: Dark Skies* (online). Available at: <https://storymaps.arcgis.com/stories/865c1876d9f64280a3dfc6e2769a46a5> (Accessed March 2026)

³¹ Green C, Manson D, Chamberlain K (2021) *Tranquillity and Place - Dark Skies. NRW Report No: 514* (online). Available at: <https://lucmaps.co.uk/NRWDarkSkies/> (Accessed March 2026)

³² LUC on behalf of Powys County Council (2022). *Local Landscape Character Assessment for the Powys Local Development Plan Area Landscape Character Assessment Report*. (online). Available at: <https://en.powys.gov.uk/article/13408/Replacement-Local-Development-Plan-Latest-Evidence>

³³ Eryri National Park Authority (2016). *Supplementary Planning Guidance 13 Landscape Sensitivity and Capacity Assessment*. (online). Available at: <https://eryri.gov.wales/wp-content/uploads/2022/03/Supplementary-Planning-Guidance---Landscape-Sensitivity-and-Capacity-Assessment.pdf>

Zone of Theoretical Visibility (ZTV)

- 7.4.6. Analysis of ZTV maps is used to further define the scope of the assessment. The ZTVs have been calculated using ArcGIS computer software to produce an area of potential visibility of any part of the proposed turbines, calculated to turbine blade-tip and hub-height at heights 200 m (180 m for Turbine (T7)) and 118.5 m Above Ground Level (AGL) respectively, on the basis of the candidate turbine specification.
- 7.4.7. The ZTV does not however take account of built development and vegetation, which can significantly reduce the area and extent of actual visibility in the field and as such provides the limits of the visual assessment Study Area. As a result, there may be roads, tracks and footpaths in the wider setting which, although shown as falling within the ZTV, have restricted viewing opportunities since they are heavily screened or filtered by built form, forestry, banks, walls or hedgerow vegetation. The ZTVs therefore provide a starting point in the assessment process and accordingly tend to over-estimate the potential visibility of the proposed turbines.
- 7.4.8. Four ZTV maps for the Proposed Development have been provided as follows:
- **Figure 7.2 Zone of Theoretical Visibility (ZTV) to Blade Tip with Viewpoint Locations:** illustrates the ZTV calculated to blade tip height (180-200 m) at 1:220,000 scale (at A3 paper size) and includes the locations of the 20 viewpoints included in the LVIA;
 - **Figure 7.3 Zone of Theoretical Visibility (ZTV) to Hub Height with Viewpoint Locations:** illustrates the ZTV calculated to hub height (118.5 m) at 1:220,000 scale (at A3 paper size) and includes the locations of the 20 viewpoints included in the LVIA;
 - **Figure 7.4 Detailed Zone of Theoretical Visibility (ZTV) to Blade Tip with Viewpoint Locations:** illustrates a detailed ZTV calculated to blade tip height (200 m) at 1:100,000 scale (at A3 paper size) on 1:50,000 OS base mapping. This extends to an area to 10km from each of the proposed turbine locations, representing the conclusions of the viewpoint analysis (**Appendix 7K**) which indicates that 7-9km is the outer distance from the Proposed Development, within which significant effects may occur; and
 - **Figure 7.5 Detailed Zone of Theoretical Visibility (ZTV) to Hub Height with Viewpoint Locations:** illustrates a detailed ZTV calculated to hub height (118.5 m) at 1:100,000 scale (at A3 paper size) on 1:50,000 OS base mapping. This also extends to an area to 10km from each of the proposed turbine locations.

Wind Farms relevant to the cumulative assessment

- 7.4.9. Other operational and consented (or under construction) wind farms, and wind farm applications within the cumulative LVIA Study Area that have been scoped into the CLVIA (as set out in **Section 7.7**) are shown on **Figure 7.12** and included in Table 7-6. This is based on data gathered in March 2026 and reflects the situation as of 13 March 2026. The list of wind farms will be reviewed and if necessary updated as part of the Final ES and any changes will be reflected in the final CLVIA.

Table 7-6 - Wind Energy Development within 27km included in the CLVIA

Ref.	Name of wind farm	Number of wind turbines	Approximate distance from Proposed Development (km)	Height to blade tip (m)
Operational (OP)				

Ref.	Name of wind farm	Number of wind turbines	Approximate distance from Proposed Development (km)	Height to blade tip (m)
OP1	Mynydd Clogau	17	1.2	66
OP2	Tirgwynt	12	1.5	116
OP3	Carno I & II	68	7.2	50.6/ 79
OP4	Llandinam	102	12.5	45
OP5	Cemmaes	18	14.2	66
OP6	Bryn Blaen	6	17.1	100
OP7	Garreg Lwyd	17	20.9	130
OP8	Bryn Titli	22	22.4	48.5
OP9	Cefn Croes	39	25	90/100
Consented (CO)				
CO1	Llanbrynmair	30	7.2	126.5
CO2	Carno III	13	7.6	149.9
CO3	Llandinam Repowering	34	12.3	121.2 (31 turbines) 111.2 (T3, T43 & T29)
CO4	Garn Fach	17	14.8	149.9
Application (AP)				
AP1	Esgair Cwmowen	11	0.56	125
AP2	Banc Du Energy Park	7	17.1	200
AP3	Rhiwlas Energy Park	15	19.8	200
Scoping (SC) (within 10km of the Site)				
SC1	Llyn Lort	25	3	220
SC2	Mynydd Llest y Graig	16	4.6	200
SC3	Llanbrynmair (Redesign)	15	7.9	230
SC4	Carnedd Wen	28	8.6	200

7.4.10. It should be noted that whilst those wind farms at Scoping Stage are shown on **Figure 7.12** and the cumulative wirelines in viewpoint **Figures 7.16 to 7.35** (where appropriate), they are not considered

further in the cumulative assessment in line with NatureScot guidance²⁰, which states that projects at scoping or pre-planning stage are not to be included due to their indicative layouts and uncertainty of being submitted as applications. The exception relates to the Llyn Lort Wind Energy Park. Whilst the application for this scheme has not yet been validated³⁴ and published on the Planning & Environment Decision Wales (PEDW) Planning Casework website, the proximity of Llyn Lort Wind Energy Park to the Proposed Development and the estimated date of submission for the application being May 2026 (latest Notification under DNS CAS-02362-P3S4H4³⁵), this scheme has been included in the Cumulative 2 Scenario.

7.4.11. As set out in the Scoping Report, the following are also excluded from the cumulative assessment as turbines of this scale are unlikely to make a significant contribution to cumulative effects:

- all single turbines below 50 m to blade tip height.
- all single turbines beyond 10 km from the Proposed Development.
- micro-generation turbines (25-50 m) within 5 km of the Proposed Development would only be included in the CLVIA if they consist of three or more turbines.

7.4.12. Six cumulative ZTVs have been prepared to provide an indication of the inter-visibility between those schemes that are considered to have the greatest potential to generate significant cumulative landscape or visual effects. The cumulative developments have been grouped according to their planning status and/or geographical location. All of the cumulative ZTVs assume bare ground and are calculated to blade tip height, indicating the maximum theoretical visibility of other wind farms. The six ZTVs and the schemes included in each are shown on **Figures 7.13.1 to 7.13.6**.

SURVEY WORK

7.4.13. The Study Area was traversed extensively during the field survey to allow a more detailed understanding of the likely actual visibility of the Proposed Development than the ZTVs can provide. The field survey allows the assessors to judge the likely scale, distance, extent and prominence of the Proposed Development.

7.4.14. Desktop findings were verified and augmented by targeted field reconnaissance during which key sensitive receptors, including selected viewpoint locations were visited.

7.4.15. A number of field surveys have been undertaken as follows:

- Field surveys during November and December 2025 to obtain viewpoint photography under winter conditions to illustrate the maximum visibility scenario.
- Further field surveys in April 2026 to obtain viewpoint photography from viewpoints that could not be captured during the winter photography campaign due to inclement weather and ground conditions.
- Field surveys in May 2026 to survey the nearest residential properties from publicly accessible locations as part of the RVAA.

³⁴ The Llyn Lort Wind Energy Park ES was submitted to PEDW on 11 July 2025, with revisions to Volume III submitted on 17 February 2026. The Assessment of Environmental Statement, dated 23/03/2026, requested further information under Regulation 24 of the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (as amended) (Online). Available at: <https://planningcasework.service.gov.wales/case/CAS-02362-P3S4H4>

³⁵ DNS Notification of Proposed Development Llyn Lort Energy Park (05 December 2025). (Online). Available at: <https://planningcasework.service.gov.wales/case/CAS-02362-P3S4H4>

- 7.4.16. All photography has been undertaken in accordance with the Landscape Institute's Visual Representation of Development Proposals¹⁹ and has been undertaken during the winter months (where possible), when vegetative screening was reduced, thereby reflecting the maximum visibility scenario. All photographs presented in the figures accompanying the LVIA have been taken using:
- A high resolution digital SLR camera with a 'full frame' sensor (i.e. 36 x 24 mm) with the camera set at 1.5 m Above Ground Level (AGL);
 - A 50 mm fixed focal length (prime) lens; and
 - A professional quality tripod fitted with a panoramic head.
- 7.4.17. Accurate locations are established using a hand-held Global Positioning System (GPS) unit.

Viewpoint analysis

- 7.4.18. Viewpoint analysis is used to assist the design and further define the scope of the assessment. In particular, the maximum distance from the Proposed Development at which significant effects are likely to be sustained has been identified. This has been used to focus the baseline information and detailed reporting of this assessment.
- 7.4.19. The viewpoints selected for the assessment have been agreed with consultees including the relevant local authorities and NRW. The final viewpoint schedule is set out in **Table 7-7** which includes the reason for their selection.
- 7.4.20. Visualisations have been prepared for each viewpoint to accord with NatureScot¹⁸ guidance and include 90° baseline photographs and wirelines (including cumulative wirelines where relevant), 53.5° wirelines and 53.5° and 90° photomontages in **Figures 7.16 to 7.35**. The viewpoint assessment for each of the 20 selected viewpoints is reported in **Appendix 7K**.
- 7.4.21. Cumulative wind farm developments that would be visible within the CLVIA Study Area have been illustrated as wirelines and follow the baseline photographs and wirelines in **Figures 7.16 to 7.35**.

Table 7-7 - LVIA Viewpoint Locations

VP No.	Viewpoint Location	Minimum Separation Distance (km)	Principal Receptor(s)	Viewpoint Type
1*	A470, Clatter	2.9 km (T5)	Residents and road users.	Representative viewpoint from the A470 demonstrating the view experienced by a range of receptors.
2	A470, Carno	3.3 km (T5)	Residents and road users.	Representative viewpoint from the A470 demonstrating the view experienced by a range of receptors.
3	Cefn Coch	5.6 km (T11)	Residents, road users and tourists/ visitors.	Representative viewpoint from the minor road between Cefn Coch and Llanllugan demonstrating the view experienced by a range of receptors, including visitors to the Cefn Coch Inn.

VP No.	Viewpoint Location	Minimum Separation Distance (km)	Principal Receptor(s)	Viewpoint Type
4*	A470, east of Talerddig	6.3 km (T7)	Residents and road users.	Representative viewpoint from the A470 demonstrating the view experienced by a range of receptors.
5	Severn Way, south of Bwlch-y-Ffridd	6.2 km (T1)	Recreational users (walkers) and road users.	Specific viewpoint representative of views from the Severn Way. The viewpoint is also representative of views experienced by users of the minor road.
6	B4569, west Caersws	6.1 km (T1)	Recreational users (cyclists and walkers), residents and road users.	Representative viewpoint from the B4569 demonstrating the view experienced by a range of receptors including recreational users of Sustrans NCR 81 and the Severn Way, as well as residents on the edge of Caersws. The viewpoint is also representative of views from the Bro Caersws Registered Landscape of Special Historic Interest.
7	Glyndŵr's Way, north of Moelddolwn	9.2 km (T10)	Recreational users (walkers).	Specific viewpoint representative of views from the Glyndŵr's Way National Trail.
8*	Minor road, east of New Mills	9.9 km (T1)	Residents and road users.	Representative viewpoint from the minor road network in the eastern LVIA Study Area demonstrating the view experienced by a range of receptors, including user of local PRoWs.
9	Llanidloes Road, Newtown	10.3 km (T1)	Residents and road users.	Representative viewpoint from Llanidloes Road on the northern edge of Newtown, demonstrating the view experienced by a range of receptors.
10	Sustrans NCR 81 and Severn Way, northeast of Llanidloes	11.3 km (T5)	Recreational users (cyclists and walkers) and road users.	Representative viewpoint from the minor road between Llanidloes and Oakley Park demonstrating the view experienced by a range of receptors including recreational users of Sustrans NCR 81 and the Severn Way, as well as road users.
11	Glyndŵr's Way, north of Llanbrynmair	12.4 km (T7)	Recreational users (walkers).	Specific viewpoint representative of views from the Glyndŵr's Way National Trail.
12	Cambrian Way, west of Bont Dolgadfan	13.9 km (T7)	Recreational users (walkers).	Specific viewpoint representative of views from the Cambrian Way.
13	B4395, north of Llangadfan	13.7 km (T10)	Recreational users (walkers),	Representative viewpoint from the B4395 demonstrating the view experienced by a range

VP No.	Viewpoint Location	Minimum Separation Distance (km)	Principal Receptor(s)	Viewpoint Type
			residents and road users.	of receptors, including users of the Glyndŵr's Way National Trail.
14	Sustrans NCR 8, west of Dylife	15.3 km (T6)	Recreational users (cyclists) and road users.	Specific viewpoint representative of views from the Sustrans NCR 8. The viewpoint is also representative of views experienced by users of the minor road west of Dylife and from the Dyffryn Clywedog Registered Landscape of Special Historic Interest.
15	Y Golfa, west of Welshpool	19.1 km (T11)	Recreational users (walkers and golfers).	Specific viewpoint representative of views from the Glyndŵr's Way National Trail. The viewpoint is also representative of views experienced by users of Welshpool Golf Club.
16	Glyndŵr's Way, Meifod	20.3 km (T11)	Recreational users (walkers), residents and road users.	Specific viewpoint representative of views from the Glyndŵr's Way National Trail. The viewpoint is also representative of views experienced by residents at Meifod and users of the minor road.
17	Offa's Dyke National Trail, northeast of Montgomery	22.1 km (T1)	Recreational users (walkers) and road users.	Specific viewpoint representative of views from the Offa's Dyke Path National Trail. The viewpoint is also representative of views experienced by users of the B4386 and from the Bro Trefaldwyn Registered Landscape of Outstanding Historic Interest.
18	Black Mountain, Shropshire Hills National Landscape	22.5 km (T1)	Tourists/ visitors and road users.	Specific viewpoint representative of views from the Shropshire Hills National Landscape. The viewpoint is also representative of views experienced by users of the minor road.
19	Cambrian Way, Pumlumon Fawr	23.1 km (T5)	Recreational users (walkers).	Specific viewpoint representative of views from the Cambrian Way. The viewpoint is also representative of views from the Ucheldir Ceredigion Registered Landscape of Outstanding Historic Interest.
20	Maen Du, Eryri (Snowdonia) National Park	23.8 km (T7)	Recreational users (walkers).	Specific viewpoint representative of views from an elevated location within the Eryri National Park. The viewpoint is also representative of views experienced from the South Ceredigion Uplands SLA.

Night-time Illustrated Viewpoint which accompanies the Night-time assessment in **Appendix 7M*

7.5 OVERALL BASELINE

- 7.5.1. This section summaries the baseline landscape and visual amenity conditions determined through the course of desk-based and field survey investigations. This section identifies those landscape and visual receptors that lie within the LVIA Study Area and which are pertinent in the context of the Proposed Development.

CURRENT BASELINE

The Site and immediate surrounding area

- 7.5.2. The southern part of the Site of the Proposed Development is located across the upper hill slopes of Garreg-hir, 466 m above ordnance datum (AOD), extending in an easterly direction to include the summit of Craig y Llyn-mawr (485 m AOD) and north of Llyn Mawr to the northern slopes of Waun Y Llyn, to the south of Mynydd Cerrigllwydion. The northern part of the Proposed Development Site extends to the north-easterly facing slopes of Y Glonc (461 m AOD) in the east, to the south of Esgair Cwmowen. To the west, the Proposed Development Site includes the westerly slopes of Blaen-y-Cwm and Garreg-Hir to the north of Pantygesail.
- 7.5.3. The land across the Proposed Development Site comprises predominantly improved upland pasture for sheep grazing, although some intervening areas of marshy grassland or upland heathland are distributed across western and northern areas, providing a contrasting land cover colour and texture. Some small areas of coniferous shelterbelt are in evidence across the southern Site, at Lluestuchaf and north of Llyn Mawr, which in turn is bound to the north by areas of naturally regenerating deciduous woodland. Further margins of scrub vegetation mark the course of the Nant y Llyn Mawr which crosses the eastern part of the Site.
- 7.5.4. The pastoral land within the Proposed Development Site has been sub-divided by fences and intermittent hedgerows into a pattern of regular, large fields. Field boundaries within the western Site are less clearly defined and irregular. The Site is crossed by a number of existing surfaced access tracks and a large agricultural building is located within the northern part of the Site. The farm buildings and residential property at Llyn Mawr are located on the southern boundary of the Site.
- 7.5.5. The operational Mynydd Clogau and Tirgwynt wind farms adjoin the Proposed Development Site, 930 m to the east and 1.3 km to the north, respectively.

National Landscape Character

- 7.5.6. At the national scale of NRW's 48 National Landscape Character Areas²⁷ (NLCAs), the Site is located within the north-eastern fringes of NLCA 21: Cambrian Mountains. This covers an “*extensive upland plateau, being an inland spine that divides western and eastern river catchments and forms one of the most extensive and tranquil areas of Southern Britain*”³⁶. The key characteristics of this NLCA are as follows:

- “*Upland plateau - A band of resistant Silurian grits forming a vast upland, rolling, windswept plateau of moorland hills and incised valleys at the heart of Wales.*”

³⁶ Natural Resources Wales (2014). National Landscape Character, NCLA 21 Cambrian Mountains. (Online). Available at: <https://cdn.cyfoethnaturiol.cymru/682591/nlca21-cambrian-mountains-description.pdf?rmode=pad&v=1d35c8fab5fb010> (Accessed March 2026).

- Deep valleys and glacial features - Glaciation gouged deeply dissected U-shaped valleys into the plateau, as well as corries (cymoedd), lakes and moraines.
- Open moorland and forestry - Thin soils support extensive tracts of sheep grazed grassy moorland - the smooth slopes are interspersed with bracken scrub, wind blown oaks and angular blocks of coniferous forestry.
- Peat bogs, pools - Upland peat deposits give rise to large areas of blanket bog and pools of open water.
- Hedgerow enclosed pastures - Deep valleys on the edges of the moorland, with their distinctive pattern of hedgerow enclosures, lush pastures for stock grazing, and woodland.
- Major reservoirs - notably Nant-y-Moch, Llyn Clywedog, Craig Goch, Penygarreg, Garreg-ddu, Claerwen and Llyn Brianne are features of the valleys, contributing to the landscape's man-made features.
- Mineral exploitation - Metal ores have been exploited from the prehistoric period with evidence for Bronze Age copper working at Copa Hill, however, most activity relates to extensive lead and silver mining which occurred principally during the 19th and 20th centuries.
- Lack of settlement - Settlement is largely absent, being confined to the lower hillsides and valleys, however, a large number of deserted settlements indicate that settlement was once more widespread than today.
- Natural features - Screes and cliffs, gritstone outcrops, stony summits, bracken scrub and wind blown oaks provide texture in the landscape.
- Panoramic views - from high summits over the moorlands and adjacent lowlands are a feature of the hills.
- Tranquil - The mountains engender a sense of remoteness because of their dark night-time skies, low population density, relative inaccessibility, the impression of naturalness they impart and the relative lack of visible, built influences.
- Archaeology - The mountains contain a significant scattering of prehistoric monuments, including round barrows, cairns, stone circles and standing stones, Iron Age hillforts and settlements. The fort at Cae Gaer indicates a Roman presence, while the Cistercian abbey of Strata Florida was established on the west side of the mountains in the late 12th century. Its granges covered much of this area as well as part of lowland Ceredigion³⁶.

7.5.7. The distribution of the host and other NLCAs within the LVIA Study Area is shown in **Figure 7.6 National Landscape Character Areas with Zone of Theoretical Visibility (ZTV) to Blade Tip**.

Powys Landscape Character Assessment

7.5.8. The Local Landscape Character Assessment for the Powys Local Development Plan Area³² identifies 61 landscape character areas (LCAs), representing discrete geographic areas with a recognisable local identity. This indicates that the Proposed Development is located within two LCAs; LCA 19: Carno Valley within which the southern part of the access track is located and LCA 17: Esgair Cwmowen, which would host the remainder of the access tracks, proposed turbines and other ancillary infrastructure.

7.5.9. The key characteristics of LCA 17: Esgair Cwmowen are defined as follows:

- *“Topography, geology and drainage*

- *Elevated area of upland hills and ridges rising to 425 m AOD in the north at Mynydd Waun Fawr and a notable escarpment in the south rising to 485 m AOD in the south at Garreg-hir.*
- *Underlain by a large upland block of mainly Middle Silurian Wenlock sandstones, with a distinctive rounded knoll in the south-west dominated by Pentrowed Grit.*
- *Tan-y-Foel Quarry Regionally Important Geological Site (RIGS) is notable as it provides the thickest continuously exposed section through the Wenlock sandstone-dominated mid Silurian sedimentary deposits in Wales and there are unusual periglacial features north-east of Y Foel.*
- **Vegetation cover**
 - *Mosaic of improved and semi-improved grassland, rough and poorly drained acidic and marshy grassland, bracken and heath, and smaller areas of fen and flushes/springs.*
 - *Coniferous forestry scattered throughout as well as semi-natural broadleaved ribbon woodland in stream valleys.*
- **Agricultural land use and field patterns**
 - *Typically rough grazing, with improved pasture found in the central and southern areas, with fields of varying scales enclosed by species rich hedgerows and ribbon woodland.*
- **Semi-natural habitats**
 - *Important habitats present are blanket bog, oligotrophic pools and lakes, ancient and/or species rich hedgerows and semi-natural broadleaved woodland, including Sites of Importance for Nature Conservation (SINCs) in the north at Llyn Gogor (blanket bog) and Llyn Hir (nutrient poor lake) and in the south at Llyn Du (oligotrophic lake) and Gwgia (reservoir) as well as the SSSI at Llyn Mawr.*
- **Archaeology and cultural heritage**
 - *Early settlement and land use is represented by complexes of dispersed, Neolithic to Bronze Age hilltop burial and ritual monuments and by dispersed abandoned prehistoric, medieval and post-medieval hilltop house sites.*
 - *Scheduled Monuments include numerous cairns, Mynydd Waun Fawr Roman Road in the north and Llyn y Tarw ritual complex in the south.*
- **Settlement and road pattern**
 - *Relatively unsettled, with farmsteads on the fringes of the LCA along minor roads.*
 - *A well-developed network of PRowS with scattered areas of open access land.*
- **Views and perceptual qualities**
 - *Sense of remoteness and exposure at plateau tops, locally reduced where wind farms and quarrying occur.*
 - *Expansive views across the surrounding lowlands, and conversely forming the backdrop to the Carno Valley to the south-west and Nant yr Eira to the north-west³².*

7.5.10. The key characteristics of LCA 19: Carno Valleys are cited as follows:

- **“Topography, geology and drainage**
 - *Upland valley landform with a flat valley floor and slopes which rise to meet the enclosing plateau at over 400 m AOD.*

- *Underlain by Silurian sedimentary sandstones, mudstones and slates, with glacial and fluvioglacial deposits including boulder clay and till on the valley floors.*
- *Regionally Important Geological Site (RIGS) at Pontbell Quarry, notable as a well-exposed section of Silurian Dolgau Mudstone Group and Talerddig Cutting, an example of early Silurian Talerddig Grit and Shale Group and Dolgau Mudstone Group.*
- **Vegetation cover**
 - *Improved grassland with some rough grazing on upper slopes.*
 - *High proportion of broadleaved woodland, including ancient semi-natural woodland along the river valley and its tributary streams.*
- **Agricultural land use and field patterns.**
 - *Traditional livestock grazing with small to medium scale fields which are well defined by managed hedgerows, with some areas of well wooded and overgrown hedgerow boundaries and intermittent broadleaf trees.*
- **Semi-natural habitats**
 - *Important habitats present are hedgerows and broadleaved woodland, including ancient semi-natural woodland, present in small parcels and ribbon woodland following the river valley and the gullies of its tributary streams.*
- **Archaeology and cultural heritage**
 - *Prehistoric land use and settlement is indicated by the remains of an Iron Age hillfort at Castell Carno.*
 - *Dispersed farmsteads, houses and cottages of later medieval to 18th century origin, many of which are listed buildings including the Grade II* listed dwellings at Plasnewydd and Plasau duon.*
- **Settlement and road pattern**
 - *Clusters of dwellings at Talerddig, Carno, Clatter and Pontdolgoch located along the A470 and railway line which follow the valley floor.*
 - *A well-developed network of PRowS cross the farmed landscape.*
- **Views and perceptual qualities**
 - *Traditionally farmed valley landscape with a settled, domestic character.*
 - *Views are channelled along and across the valley, contained by the rising slopes of the enclosing uplands.”³²*

7.5.11. Whilst the Local Landscape Character Assessment for the Powys Local Development Plan Area³² further refines the extensive NLCAs into smaller scale landscape character units, the LVIA utilises LANDMAP Aspect Areas as the landscape character receptors, as set out in the Scoping Report^{Error! Bookmark not defined.} and agreed through the Scoping Direction. This approach aligns with paragraphs 6.3.20 and 6.3.21 of Planning Policy Wales, Edition 12⁴ and also accords with Policy DM4 - Landscape in the Powys Adopted Local Development Plan 2011-2026⁸. As noted in paragraph 1.34 of the Local Landscape Character Assessment for the Powys Local Development Plan Area³², the “baseline information within LANDMAP has informed the assessment” and considers all five aspect layers in one LCA, grouping similar Aspect Areas into a larger landscape character unit. Consequently, LANDMAP represents a finer level of detail and has been used in accordance with

both national and local planning policy (which advocates the use of LANDMAP assessments to inform development management decisions) and to avoid the double counting of effects on single area of landscape.

LANDMAP

Introduction

- 7.5.12. LANDMAP provides an all-Wales resource of landscape characteristics, qualities, and influences, arranged within five aspect layers: Geological Landscape, Landscape Habitats, Visual and Sensory, Historic Landscape and Cultural Landscape.
- 7.5.13. The selection of LANDMAP Aspect Areas to be included in the LVIA has been carried out in accordance with the methodology provided in Using LANDMAP in Landscape and Visual Impact Assessments GN46¹⁷. The filtering process described within GN46¹⁷ is set out in **Appendix 7B**. A landscape sensitivity assessment which considers both value and susceptibility in accordance with GLVIA3¹⁵ is reported for each Aspect Areas included in the LVIA in **Appendix 7C**.

Geological Landscapes Aspect Areas (GLAAs)

- 7.5.14. The outcome of the filtering process recorded in **Appendix 7B** (as outlined in GN46¹⁷) identified four GLAAs to be considered further in the assessment as follows:
- MNTGMGL392 Lanwnog;
 - MNTGMGL528 Caersws;
 - MNTGMGL760 Llyn Mawr; and
 - MNTGMGL918 Mynydd Waun Fawr-Cefn Gwyn.
- 7.5.15. The location of the GLAAs in relation to the proposed turbine locations and the blade tip ZTV is shown on **Figure 7.8a LANDMAP Geological Landscape Aspect Areas with Zone of Theoretical Visibility (ZTV) to Blade Tip**. A baseline description is provided in **Appendix 7C**.

Landscape Habitats Aspect Areas (LHAAs)

- 7.5.16. The outcome of the filtering process recorded in **Appendix 7B** identified two LHAAs to be considered further in the assessment as follows:
- MNTGMLH028 (unnamed);
 - MNTGMLH052 (unnamed); and
 - MNTGMLH094 (unnamed).
- 7.5.17. The location of the LHAAs in relation to the proposed turbine locations and the blade tip ZTV is shown on **Figure 7.8b LANDMAP Landscape Habitats Aspect Areas with Zone of Theoretical Visibility (ZTV) to Blade Tip**. A baseline description is provided in **Appendix 7C**.

Visual and Sensory Aspect Areas (VSAAs)

- 7.5.18. The filtering process outlined in GN46¹⁷ is recorded in **Appendix 7B**. The Viewpoint Analysis presented in **Appendix 7K** identified no significant visual effects beyond a distance of 7km. As a consequence, and using a precautionary approach, the landscape assessment has been re-scoped to include only those VSAAs which lie within or partially within a 10km buffer of the proposed turbines. The landscape assessment therefore considers the following 15 VSAAs:

- MNTGMVS179 Trannon Moors;
- MNTGMVS204 Llanidloes Farmland;
- MNTGMVS211 Llandinam;
- MNTGMVS212 Llandinam Hill and Scarp Mosaic;
- MNTGMVS227 Cefn Carnedd Wooded Hillside;
- MNTGMVS235 Carno Mosaic;
- MNTGMVS254 Kerry Ridgeway;
- MNTGMVS363 Newydd Fynyddog;
- MNTGMVS457 Clywedog Upland Grazing;
- MNTGMVS694 Carno Uplands;
- MNTGMVS695 Trannon Uplands Bryn Crugog;
- MNTGMVS733 Esgair Cwmowen Uplands;
- MNTGMVS819 Castle Caereinion Farmlands;
- MNTGMVS865 Caersws River Bowl; and
- MNTGMVS899 Tregynon Rolling Hills.

7.5.19. The location of these VSAAAs in relation to the proposed turbine locations and the blade tip ZTV is shown on **Figures 7.8c LANDMAP Visual and Sensory Aspect Areas with Zone of Theoretical Visibility (ZTV) to Blade Tip** and **7.8d Detailed LANDMAP Visual and Sensory Aspect Areas with Zone of Theoretical Visibility (ZTV) to Blade Tip**. A baseline description is provided in **Appendix 7C**.

Historic Landscape Aspect Areas (HLAAs)

7.5.20. The outcome of the filtering process outlined in GN46¹⁷ and recorded in **Appendix 7B** identified 13 HLAAs which lie within or partially within 10km of the proposed turbines and are therefore considered further in the landscape assessment as follows:

- MNTGMHL352 Upper Banwy;
- MNTGMHL433 Middle Banwy / Upper Rhiw;
- MNTGMHL559 Allt Fawr;
- MNTGMHL649 Gregynog;
- MNTGMHL704 Trannon Moor;
- MNTGMHL719 Brooks;
- MNTGMHL789 Mochdre;
- MNTGMHL827 Caersws;
- MNTGMHL820 Penbedw;
- MNTGMHL859 Ffridd Rhyd Ddu;

- MNTGMHL902 Caersws basin;
- MNTGMHL952 Lower Clywedog / Upper Severn; and
- MNTGMHL970 Gelli Hill.

7.5.21. **Figures 7.8e LANDMAP Historic Landscape Aspect Areas with Zone of Theoretical Visibility (ZTV) to Blade Tip and 7.8f Detailed LANDMAP Historic Landscape Aspect Areas with Zone of Theoretical Visibility (ZTV) to Blade Tip** illustrate the location of these HLAAs in relation to the proposed turbine locations and the blade tip ZTV. A baseline description is provided in **Appendix 7C**.

Cultural Landscape Services Aspect Areas (CLSAAAs)

7.5.22. The filtering process outlined in GN46¹⁷ and recorded in **Appendix 7B** identified four CLSAAAs to be considered further in the assessment as follows:

- MNTGMCLS021 Carno Mosaic;
- MNTGMCLS099 Carno Uplands;
- MNTGMCLS108 Esgair Cwmowen Uplands; and
- MNTGMCLS130 Caersws River Bowl.

7.5.23. The location of these CLSAAAs in relation to the proposed turbine locations and the blade tip ZTV is shown on **Figure 7.8g LANDMAP Cultural Landscape Services Aspect Areas with Zone of Theoretical Visibility (ZTV) to Blade Tip**.

Landscape Designations

Nationally Designated Landscapes

7.5.24. The following nationally designated landscapes and proposed nationally designated landscapes fall wholly or partly within the LVIA Study Area as shown on **Figure 7.7 National and local landscape designations with Zone of Theoretical Visibility (ZTV) to Blade Tip** (Sheets 1 to 4):

- Eryri National Park;
- Proposed Glyndŵr National Park; and
- Shropshire Hills National Landscape.

Eryri National Park (ENP)

7.5.25. Legislation⁵ defines National Parks as tracts of country that should be conserved and enhanced for their natural beauty, wildlife and cultural heritage. Opportunities for open-air recreation and enjoyment of these landscapes and their character should be promoted. The Eryri (Snowdonia) National Park (ENP) was the first of three National Parks in Wales to be designated in 1951, and contains the highest mountain in Wales, Yr Wyddfa (Snowdon).

7.5.26. The National Park covers a wide area with a variety of landscapes many of which are highly valued for their natural beauty and tranquillity and is renowned for its vast mountainous backdrops, but also offers beautiful and unspoilt valley and coastal settings.

7.5.27. The ENP also has the status of International Dark Sky Reserve, which reflects the outstanding quality of the night sky and demonstrable effort being made to reduce obtrusive light pollution.

- 7.5.28. The ENP boundary is illustrated in **Figure 7.7** (Sheets 1 to 4) which is overlapped by the blade tip ZTV, indicating the maximum extent of theoretical visibility across the National Park. The ENP is located at a minimum distance of approximately 16 km from the Proposed Development.
- 7.5.29. The baseline description of the Special Qualities (SQs) of the ENP, as defined in Cynllun Eryri - The Eryri National Park Partnership Plan 2020¹⁴ is set out in **Appendix 7I**, alongside an assessment of effects undertaken in accordance with NatureScot's Special Landscape Qualities - Guidance on assessing effects²⁴.
- 7.5.30. A review of the SQs concludes that the following should be included in the assessment as they relate to visual and perceptual aspects of the ENP:
- SQ No.1 Diverse Landscapes - Diverse, high-quality landscapes and seascapes within a small geographic area, ranging from coast to rolling uplands to rugged mountains for which Snowdonia is famed; and
 - SQ No. 5 Tranquillity and Solitude - The opportunity for people to understand and enjoy Snowdonia National Park actively, whilst maintaining areas of silence, tranquillity and solitude, thus promoting vital aspects of health, well-being and personal reflection.
- 7.5.31. There would be no effect on the SQs related to the physical characteristics of the ENP or on those relating to culture and the community.

Proposed Glyndŵr National Park

- 7.5.32. In its Programme for Government (2021-2026)³⁷, the Welsh Government set out its intention to designate a new National Park in Wales based on the existing Clwydian Range and Dee Valley Area of Outstanding Natural Beauty (AONB)³⁸. NRW began evaluating the case for a new National Park in Wales in 2023, undertaking data and evidence gathering, consultation and engagement with local communities and other stakeholders, in line with NRW's Procedural guidance GN 010³⁹.
- 7.5.33. In January 2026, following a review of the evidence and the findings from statutory consultation, the NRW Board agreed that sufficient evidence demonstrating that the statutory criteria relating to Natural Beauty and opportunities for open air recreation had been met, and that the area is of such national significance that National Park purposes should apply. The Glyndŵr National Park Designation Order was therefore submitted to the Welsh Government. It was subsequently announced⁴⁰ in March 2026 that the Welsh Government, in line with the National Parks and Access to the Countryside Act 1949, plans to hold a public local inquiry to consider the representations and objections made in connection with the creation of the new Glyndŵr National Park. The timescales associated with a public inquiry are not yet known.

³⁷ Welsh Government (2016). Programme for government 2021 to 2026. (Online). Available at: <https://www.gov.wales/programme-government>.

It should be noted that this was published under the published under the 2021 to 2026 administration of the Welsh Government which changed in May 2026.

³⁸ Since 2024, AONBs have been branded as 'National Landscapes' but retain the AONB title under legislation.

³⁹ Natural Resources Wales (2022). Statutory landscape designation: procedural guidance. Guidance Note (GN) 010. (Online). Available at: https://ymgyngghori.cyfoethnaturiol.cymru/north-east-gogledd-ddwyrain/new-national-park-proposal-information-page-wales/user_uploads/a-gn010-statutory-landscape-designation-procedural-guidance.pdf

⁴⁰ Welsh Government (2026). Written Statement: Inquiry to consider Designation Order for Glyndŵr National Park. (Online). Available at: <https://www.gov.wales/written-statement-inquiry-consider-designation-order-glyndwr-national-park>

- 7.5.34. The boundary of the proposed Glyndŵr National Park is illustrated in **Figure 7.7** (Sheets 1 to 4) which is overlapped by the blade tip ZTV, indicating the maximum extent of theoretical visibility across the proposed National Park. The proposed boundary, as defined in the Designation Order Map⁴¹, is located at a minimum distance of approximately 11.5 km from the Proposed Development.
- 7.5.35. The draft SQ Headlines for the proposed Glyndŵr National Park are as follows:
- *“An inspiring space that promotes mental, physical and spiritual wellbeing;*
 - A place with cohesive communities and distinctive settlement patterns;
 - A story of human interaction with the landscape over millennia;
 - A home to Internationally and locally important species and habitats;
 - A distinctive, complementary and contrasting landscape; and
 - A landscape providing benefits beyond its borders”⁴².
- 7.5.36. Further detail of the features and characteristics which underpin the draft SQ Headlines are set out in **Appendix 7J**, alongside an assessment of effects undertaken in accordance with NatureScot’s Special Landscape Qualities - Guidance on assessing effects²⁴.
- 7.5.37. A review of the draft SQs listed above concluded that the following headlines should be included in the assessment as one or more of the emerging characteristics relate to visual and perceptual aspects of the proposed Glyndŵr National Park:
- *An inspiring space that promotes mental, physical and spiritual health and wellbeing; and*
 - *A distinctive, complementary and contrasting landscape.*
- 7.5.38. There would be no effect on the draft SQs related to physical characteristics and features or on those relating to culture and the community. For these reasons, the characteristics and features under the remaining four headlines of have been excluded from the assessment in **Appendix 7J**.

Shropshire Hills National Landscape

- 7.5.39. The Shropshire Hills National Landscape lies at a minimum distance of 20 km to the south-east of the Proposed Development with its boundary illustrated in **Figure 7.7** (Sheets 1 to 4) which is overlapped by the blade tip ZTV.
- 7.5.40. The SQs of this landscape are defined in the Shropshire Hills National Landscape: An Area of Outstanding Natural Beauty Management Plan 2025-2030⁴³ and include physical qualities such as Diversity and Contrast, Hills, Farmed Countryside, Woodlands, Rivers and River Valleys, Geology, Wildlife and Heritage, alongside visual and perceptual qualities (Scenic and environmental quality and Tranquillity) and cultural qualities (Culture and Opportunities for Enjoyment).

⁴¹ Available to view at: <https://ymgynggori.cyfoethnaturiol.cymru/north-east-gogledd-ddwyrain/notification-period-2026/>

⁴² Craggatak Consulting (2024). Identification of the special qualities of the area of search for a potential new National Park in North East Wales. (online). Available at: https://ymgynggori.cyfoethnaturiol.cymru/north-east-gogledd-ddwyrain/wales-national-park-proposal-public-consultation/user_uploads/nrw-special-qualities-report--final--24-03-11.pdf

⁴³ Shropshire Council and Telford & Wrekin Council (2026). Shropshire Hills National Landscape: An Area of Outstanding Natural Beauty Management Plan 2025-2030 (online). Available at: <https://www.shropshirehills-nl.org.uk/a-special-place/management-plan/2025-30-management-plan>

Locally Designated Landscapes

Special Landscape Areas (SLAs)

- 7.5.41. A number of locally designated landscapes are entirely or partly located within the LVIA Study Area as follows:
- SLA 48: South Ceredigion Uplands;
 - SLA 50: Rheidol Valley;
 - SLA 59: Dyfi Estuary and Valley; and
 - SLA 72: Corris Ceredigion.
- 7.5.42. The location of the SLAs within the LVIA Study Area is illustrated on **Figure 7.7** (Sheets 1-4).

Visual Baseline

- 7.5.43. The visual assessment draws upon the visual receptor baseline informed by the ZTVs, desk study, field survey and viewpoint analysis. The detailed analysis of viewpoints is used to guide the assessment of visual receptors⁴⁴. The baseline establishes the receptors that are scoped into the assessment, and taken forward to the assessment stage, where the potential effects on views and visual amenity likely to be experienced by receptors (people) within the Study Area are assessed in the following groups:
- Views from settlements;
 - Views experienced whilst travelling through the landscape by road users, walkers, horse riders and cyclists for example; and
 - Views from tourist and recreational destinations.
- 7.5.44. The Viewpoint Analysis presented in **Appendix 7K** identified no significant visual effects beyond a distance of 7km from the proposed turbines. As a consequence, the visual assessment has focussed on all local receptors within 10 km of the proposed turbines. However, national level receptors such as National Trails are included within the 27 km LVIA Study Area given their national status..

Visual receptors: settlements

- 7.5.45. The assessment of visual effects likely to be experienced from settlements / communities includes consideration of residential areas, the public realm, and public open spaces within the settlement boundaries that would be frequented by people.
- 7.5.46. For people in their communities, the LVIA Study Area exhibits the broad settlement pattern that is present across much of Mid Wales. This pattern is one of small settlements that are generally confined to the base of valleys, with remote farmsteads in more elevated areas. Beyond core transport routes such as the A470 and A458, most smaller settlements are reached by B classified roads or narrow hedged lanes.

⁴⁴ IEMA Quality Mark Article. Use of Viewpoint Analysis as a tool in Landscape and Visual Impact Assessment (LVIA). (2016).

7.5.47. Settlements⁴⁵ within 10km of the proposed turbines that are overlapped in full or part by the ZTV are illustrated in **Figure 7.10 Settlements within 10km** as follows:

- Clatter;
- Carno;
- Pontdolgoch;
- Adfa;
- Cefn Coch;
- Caersws;
- Talerddig;
- Trefeglwys;
- Aberhafesp;
- Llanwyddelan;
- Dolfach;
- Tregynon; and
- Llandinam.

7.5.48. It should be noted that views from scattered residential properties outside of settlements and within 2km of the proposed turbines is considered as part of the RVAA in **Appendix 7L**. The assessment methodology used in the RVAA is set out in **Appendix 7A**. Individual or small groups of residential properties within 2km of the proposed turbines that are overlapped by the ZTVs and included in the RVAA, are illustrated by **Figures 7.14 Residential Properties within 2km (Blade Tip ZTV)** and **7.15 Residential Properties within 2km (Hub Height ZTV)** in relation to the blade tip and hub height ZTVs respectively.

Visual receptors: Recreational routes and destinations

7.5.49. The LVIA Study Area includes a wide range of visual receptors undertaking outdoor recreational activities where the availability of views and their composition are likely to contribute to receptors' enjoyment of their activity. Recreational receptors within the blade tip ZTV have been identified under the following categories:

- Sustrans National Cycle Routes;
- Designated long-distance footpaths;
- Public Rights of Way (PRoWs) and Access Land; and
- Outdoor Recreational Facilities, Historic Parks and Gardens and Country Parks.

⁴⁵ Settlements are defined as those areas identified by a settlement boundary in the Powys LDP 2011-2026 Proposals Maps (for towns and villages), listed as a small village in the Powys LDP 2011-2026 or fulfil the criteria which defines a rural settlement (historically recognised / named settlements which contain at least 10 closely grouped dwellings (not including farmhouses, rural conversions or dwellings originally granted for local need/affordable or agricultural/rural occupancy)).

Sustrans National Cycle Routes

- 7.5.50. National Cycle Routes (NCRs) within the LVIA Study Area are illustrated in **Figure 7.7** (Sheets 1-4) in relation to the blade tip ZTV as follows:
- NCR 8: known as Lôn Las Cymru, Route 8 runs in sections down the whole length of Wales and covers a total distance of 391.7 km. The route passes through the western half of the LVIA Study Area from Rhayader in the south to Machynlleth before continuing north through the Eryri National Park towards Dolgellau.
 - NCR 81: runs from Aberystwyth to Wolverhampton over a distance of 191.2 km, with the section running through Wales called Lôn Cambria.
 - NCR 82: a short section of NCR 82 lies within the Study Area between Derwenlas and Machynlleth and lies outside of the blade tip ZTV.
 - NCR 825: this 107 km routes forms an almost circular cycle route around the old county of Radnorshire. The route passes through the southernmost part of the LVIA Study Area between Rhayader and Llanbister Road station and lies entirely outside of the blade tip ZTV.
 - NCR 44: is a 50 km route that runs from west of Shrewsbury to Little Minsterley. A short section of the route lies approximately 26 km to the east-south-east of the Proposed Development with the majority of this section located outside the blade tip ZTV.

Designated long-distance footpaths

- 7.5.51. The routes of the two National Trails that pass through the LVIA Study Area are illustrated in **Figure 7.7** (Sheets 1-4) in relation to the blade tip ZTV and are as follows:
- Offa's Dyke Path: a 285 km long way-marked walking trail through the borderlands of Wales and England and links Sedbury Cliffs near Chepstow on the banks of the Severn estuary with the coastal town of Prestatyn on the shores of the Irish sea.
 - Glyndŵr's Way: a 217 km long National Trail which starts in Knighton and ends in Welshpool.
- 7.5.52. A number of regionally promoted long-distance footpaths also pass through the LVIA Study Area as shown on **Figure 7.7** (Sheets 1-4). Those within 10 km of the Proposed Development that are overlapped by the ZTV are listed as follows:
- Cistercian Way (Wales);
 - Severn Way; and
 - William Morgan Ride.

Public Rights of Way (PRoWs) and Open Access Land

- 7.5.53. Open Access Land within 10km of the Proposed Development that is overlapped by the ZTV is shown in **Figure 7.11 Local Recreational Routes and Key Recreational Destinations within 10km** along with the dense network of local PRoW and are assessed under the following groups:
- Open Access Land and PRoW within 5 km of proposed turbines; and
 - Open Access Land and PRoW between 5 km-10 km of the proposed turbines.
- 7.5.54. Due to their status as nationally designated landscapes, two further visual receptor groups have also been included within the LVIA Study Area as follows:
- Notable hill summits and Open Access Land within the Eryri National Park (beyond 10km); and

- Notable hill summits and Open Access Land within the Shropshire Hills National Landscape (beyond 10km).

Outdoor Recreational Facilities, Historic Parks and Gardens and Country Parks

- 7.5.55. Recreational and tourist / visitor attractions relevant to the LVIA include those features that appear as prominent landmarks or landscape features, and locations associated with passive recreation such as walking, where there is a clear relationship between the feature / destination and an appreciation of the landscape. Historic Parks and Gardens are included where these are open to the public, as well as National Trust gardens / land and CADW visitor sites which are overlapped by the blade tip ZTV. Some of these locations are also referred to in the **Chapter 8: Cultural Heritage**. The assessment excludes locations for team sports and other recreational / tourist destinations where the focus of activity is not on the landscape or is indoors - for example museums, libraries, and gift shops.
- 7.5.56. Gregynog is the only Historic Park and Garden within 10 km of the proposed turbines which is open to the public and coincides with the ZTV coverage.
- 7.5.57. There are no Country Parks within the blade tip ZTV and 10 km of the proposed turbines.

Visual receptors: transport routes

- 7.5.58. The main transport route (A470) within the Study Area extends generally in a north-west to south-east direction, connecting North Wales to South Wales via Eryri National Park.
- 7.5.59. Transport routes within 10 km of the proposed turbines and that are overlapped by the ZTV are listed as follows and included in the assessment:
- A470;
 - A489;
 - B4568;
 - B4569; and
 - B4389;
- 7.5.60. Overlapping road, walking and cycling routes have not been 'double counted' and are assessed as one receptor where they occur with the highest sensitivity receptor taking precedence in the assessment.

FUTURE BASELINE

- 7.5.61. The Proposed Development would cover a period of approximately 43 years (including construction, operation and decommissioning). The approximate time periods associated with the Proposed Development, and whether they are predominantly long-term or short-term (in accordance with the LVIA Methodology in **Appendix 7A**) are listed as follows:
- Construction: up to 24-months (short-term)
 - Operation: up to 40-years (long-term and reversible); and
 - Decommissioning: up to 12-months (short-term).

- 7.5.62. The LVIA also recognises that some elements of the Proposed Development such as access tracks would remain beyond the construction and decommissioning period, although access tracks may re-vegetate over time if left un-used.
- 7.5.63. The LVIA considers that during this period of 40 years, the predicted future baseline and evolution of landscape and visual receptors is unlikely to change significantly under the current regime of landscape and forestry management and maintenance. However, land management, and consequently landscape character, is dependent on a number of economic and environmental factors including the future effects of climate change and human adaptation which are difficult to predict at a local level and not a matter for this assessment. It is however likely that mitigation and adaptation in response to changing climate and biodiversity pressures will continue to have an influence on this area in the form of increased renewable energy and other environmental changes which are likely to alter the landscape baseline as follows:
- Change resulting from an increased reliance on renewable energy, including wind farm development; and
 - Change to current levels of forestry and woodland. Many of the large blocks of forestry that are a conspicuous landscape feature across parts of the defined LVIA Study Area are coniferous. They are therefore likely to be felled / replanted as crops at some point with localised landscape consequences including changes to the nature of views available to some visual receptors within the LVIA Study Area.

7.6 EMBEDDED MEASURES

- 7.6.1. The iterative design of the Proposed Development is detailed within **Chapter 3: Scheme Need, Alternatives and Iterative Design Process** with a full project description including the associated infrastructure detailed in **Chapter 4: Description of the Proposed Development**. The design has evolved through consideration of a range of environmental and technical constraints in line with Section 4.1 of Designing for Renewable Energy in Wales⁴⁶ which states “*The construction of large-scale wind and solar energy installations should result from a thorough, multidisciplinary site selection and design process*”.

WIND FARM DESIGN CONSIDERATIONS

- 7.6.2. The design of the Proposed Development has evolved through a series of workshops involving consideration of a range of environmental and technical constraints. From a landscape perspective the aim has been to consider the appearance of the wind farm as an object or composition in the landscape, made up of a series of wind turbines. T7 as a result of the design workshops has been reduced to 180 m to reduce adverse effects from nearby residential receptors (Refer to **Chapter 3: Scheme Need, Alternatives and Iterative Design Process**).
- 7.6.3. The design process has followed the mitigation hierarchy in that where the turbines cannot be screened from view their appearance in the landscape has been considered in terms of its design, reducing the scale of the development and ensuring that where visible, the wind farm composition would appear as a simple and cohesive development.

⁴⁶ Design Commission for Wales (2023) Designing for Renewable Energy in Wales. (Online). Available at: <https://www.gov.wales/sites/default/files/publications/2023-12/designing-for-renewable-energy-in-wales.pdf> (Accessed March 2026)

- 7.6.4. Considerable attention was given to the design and layout of the proposed turbines to produce a layout which achieves the ‘best fit’ with the landform of the application Site whilst taking account of other environmental, technical and economic considerations.
- 7.6.5. The main design objectives of relevance to the LVIA were as follows:
- Create a wind farm of the size and number of turbines that relates to the scale and nature of the landscape in which it is located (Section 5.2 of Designing for Renewable Energy in Wales⁴⁶);
 - Create a simple and coherent layout (Section 5.3 of Designing for Renewable Energy in Wales⁴⁶);
 - Create a design which relates to the existing cumulative context (Section 5.10 of Designing for Renewable Energy in Wales⁴⁶); and
 - Create a design which takes account of relevant national, regional and local policy and guidance.
- 7.6.6. In addition to the opportunities afforded by the Site location, the design and layout of the Proposed Development provides further mitigation. The ‘simple’ turbine layout is suitable for the underlying landform and simple national landscape character of the Cambrian Mountains and accords with the NatureScot guidance Siting and Designing Windfarms in the Landscape⁴⁷, and Designing for Renewable Energy in Wales⁴⁶ for wind farm development as a simple, balanced and cohesive turbine composition as well as being located within large-scale, broad and simple NLCA. The proposed turbines have been cohesively located to limit the visibility of the proposed turbines, where possible, as well as reducing the horizontal and vertical extent of the Proposed Development from key views and particularly when perceived from nearby settlements, residential properties, the Eryri National Park, proposed Glyndŵr National Park, the Shropshire Hills National Landscape and the A470. The height of the turbines has been set at 180 m to 200 m to blade tip for operational reasons but is not considered to be over-scaled considering the relatively large-scale landscape setting of its location. The scale of the turbines can be accommodated in this location, creating a simple, cohesive, balanced and clear design and visual composition that seeks to minimise excessive ‘turbine clutter’ in the form of uneven gaps / overlaps and outlying turbines where possible. This has the following design advantages:
- The Proposed Development would appear as a clearly recognisable scheme that ‘fits’ with the scale and simplicity of the local landscape character, such that the aesthetics and visual composition of the turbines (appearing as a simple and reasonably balanced composition) can be appreciated in their own right where visible; and
 - The simple visual composition of the broadly ordered rows of regularly spaced turbines reflects the “*vast upland, rolling, windswept plateau of moorland hills*” character of the Cambrian Mountains.

LANDSCAPE SPECIFIC MITIGATION

Construction Mitigation

- 7.6.7. The Outline Construction Environmental Management Plan (CEMP) (included as a standalone document) includes measures to mitigate adverse landscape and visual effects during construction such as the restriction of construction traffic to designated routes.

⁴⁷ NatureScot (2017) Siting and Designing Windfarms in the Landscape Version 3a. (Online). Available at: <https://www.nature.scot/doc/siting-and-designing-wind-farms-landscape-version-3a> (Accessed March 2026)

- 7.6.8. There would be regular environmental monitoring and reporting to ensure the removal, reinstatement, and clear up of the temporary construction compound / laydown areas and any related construction arisings / redundant material.
- 7.6.9. A Site Restoration Plan will be submitted to PCC for its approval before construction begins. The key elements will include the reinstatement of the construction compound, laydown areas and cable trenches. Site tracks would be 'softened' with shoulders graded with excavated subsoil and completed with the original topsoil or turfs where available.
- 7.6.10. The temporary construction compound and laydown areas will be fully re-instated with stored turfs or excavated soil and / or re-planted to accord with the Site Restoration Plan.

New Site Access and Internal Access Tracks

- 7.6.11. Limited sections of the wind farm access tracks (as described in **Chapter 4 Description of the Proposed Development**) would be most visible from a small number of viewpoints including VP 3 and VP 8 within 10 km. These low levels of visibility of the Site infrastructure confirm reduced landscape and visual effects on the surrounding receptors.
- 7.6.12. On completion of Site construction, the Site entrance and access tracks would be cleared of any construction signage and left in a tidy and co-ordinated condition with verges restored and field boundary fencing neatly tied into new gates / access details.

Wind Turbines

- 7.6.13. A total of 11 wind turbines are proposed at a blade tip height of up to 200 m (180 m for T7), each with an associated crane pad. The turbines would be a uniform, semi-matte grey colour (no company logos or advertising) to reduce their contrast with the background sky and minimise their reflectivity.
- 7.6.14. The proposed turbines would all rotate in the same direction and at a slow and predictable speed of approximately 5 revolutions per minute (rpm) up to a maximum of approximately 10rpm. The 33kV switchboard/transformer required for each turbine would be located within the turbine tower, but subject to final manufacturer's design.

Temporary Construction Compound

- 7.6.15. The site compound and laydown area would be fully re-instated with stored turfs or excavated soil and / or re-seeded to match the local contours and the existing vegetation.

Substation

- 7.6.16. The main substation building would have very low visibility from the surrounding areas, primarily due to the surrounding landform. The final finish of the control building and associated fencing would be agreed with the local planning authority but would be selected to have a low contrast with the surrounding landscape. **Figure 4.8** provides an illustration of the control building elevations.

Battery Energy Storage System

- 7.6.17. The BESS would be located on a 50 m x 50 m hardstanding compound located adjacent to the substation and control building compound within the centre of the Site at a lower elevation to limit visibility. The location of the BESS compound is shown on **Figure 1.2**. The colour of the BESS units (32No) would be white/ light grey in colour and would strongly contrast with the surrounding colours in the landscape.

Electrical Cables

- 7.6.18. All on-site electrical cables linking the turbines and substation would be underground and buried within a trench alongside the internal access tracks.

Operational Mitigation

- 7.6.19. The operation of the Proposed Development would cover a period of 40 years and include site management to ensure the adequate maintenance of site facilities and landscape features, such as access tracks, field boundaries, gates, and signage. As stated above the substation, control building compound and BESS have been located within the centre of the Site at a lower elevation to limit visibility during operation.

Decommissioning Mitigation

- 7.6.20. The Proposed Development would be decommissioned at the end of its operational period which is expected to take up to approximately 12 months. In accordance with **Chapter 4**, all visible, above ground structures (turbines and substation) would be removed upon decommissioning, thereby rendering the vast majority of the landscape and visual effects as reversible. Subject to landowner requirements, the main operational site entrance and some of the internal access tracks would remain, with redundant areas and crane hard standings removed and restored to previous state in accordance with any relevant industry guidance.

SUMMARY

- 7.6.21. The range of environmental measures that have been embedded into the Proposed Development is outlined in **Section 4.6**. **Table 7-8** outlines how these embedded measures influence the LVIA.

Table 7-8 - Summary of the Embedded Environmental Measures

Receptor	Potential Changes and Effects	Embedded Measures	Compliance Mechanism
Construction / Decommissioning Phase			
Grassland within the Site	Loss of grassland habitat within the Site has the potential to affect landscape character and visual amenity of visual receptors located close to the Site.	Some instances of habitat loss (unimproved and semi-improved grassland) would be temporary and reinstated post construction within working areas and temporary construction compounds. Cable routes would be buried below ground and reseeded/ managed as appropriate grassland habitat. Where permanent loss occurs, loss would be offset by mitigation planting elsewhere on site as compensation and enhancement would be provided. Existing access points, roads and tracks have been used where possible to minimise vegetation loss, and to provide betterment to existing roads.	CEMP and Habitat Management Plan (HMP) secured via DNS condition
Operation Phase			
Landscape and visual receptors located close to the Proposed Development.	Changes to local landscape character and close distance views of ancillary infrastructure.	The single storey substation building would be traditional blockwork construction and faced in stone with a slate roof to tie in with the existing character. Associated fencing would be either moorland green / brown or dark grey in order to blend with either the existing landscape colours or traditional building colours for the area.	DNS planning condition
All landscape and visual receptors within the LVIA Study Area	The visual apparency of the turbines and consequent impact upon landscape and visual receptors would be influenced by the colour of the blades, nacelle, and tower.	The turbine rotors and upper towers would be largely visible against the sky and therefore a non-reflective pale grey colour (e.g., RAL 7035) would be selected to minimise contrast.	DNS planning condition

7.7 SCOPE OF THE ASSESSMENT

OVERVIEW

- 7.7.1. The scope of the LVIA is based upon a review of the baseline information detailed in **Section 7.5** (and relevant appendices) and has been established through an ongoing scoping process which includes the Scoping Report^{Error! Bookmark not defined.} and PEDW's Scoping Direction. Further information can be found in **Chapter 2: Approach to Environmental Impact Assessment**.

SPATIAL SCOPE

- 7.7.2. The spatial scope of the assessment of landscape and visual effects covers the area of the Proposed Development contained within the red line boundary, together with the 27 km radius LVIA Study Area, as defined in accordance with GN46¹⁷ and the ZTVs detailed in **Section 7.4**. The cumulative assessment also covers a 27 km radius Study Area.
- 7.7.3. The ZTV analysis is used to refine the LVIA's spatial scope and indicates the areas from where it may be theoretically possible to view all or some of the proposed blade tips and nacelles (hub heights) of one or more of the 11 proposed turbines. Details of the method used to produce the ZTVs is provided in **Appendix 7A**.
- 7.7.4. **Figures 7.2 to 7.5** show the ZTVs that have been calculated to show the area of theoretical visibility of the proposed turbines based on the 11-turbine layout and a candidate wind turbine with a blade tip height of 200 m (180 m for T7) and hub height of 118.5 m.

TEMPORAL SCOPE

- 7.7.5. The temporal scope of the assessment of landscape and visual effects is consistent with the period over which the Proposed Development would be carried out and therefore covers the following periods:
- A construction phase with a duration of approximately 24-months;
 - A 40-year operational phase; and
 - The 12-month decommissioning phase.
- 7.7.6. A Night-time Assessment (or 'Aviation Lighting Impact Assessment') which provides an assessment of the landscape, visual and cumulative effects of the aviation warning lights is included in **Appendix 7M**. This has been undertaken in accordance with the Guidance on Aviation Lighting Impact Assessment²⁵.

POTENTIAL RECEPTORS

- 7.7.7. The landscape and visual receptors that have been identified as being potentially subject to effects are summarised in **Table 7-9**.

Table 7-9 - Landscape and Visual receptors subject to potential effects

Receptor	Reason for Consideration
Landscape Receptors	
LANDMAP VSAAAs, HLAAs, GLAAs, LHAAs and CLSAAAs filtered into the assessment.	Considered in accordance with paragraphs 6.3.20 and 6.3.21 of Planning Policy Wales, Edition 12 ³ and Policy DM4 - Landscape in the Powys Adopted Local Development Plan 2011 -2026 ⁸ . The LANDMAP Aspect Areas taken forward to the detailed assessment are derived from the process outlined in GN46 ¹⁷¹⁷ which intends to focus the detailed assessment on the potentially sensitive aspect areas most likely to be affected.
Nationally (statutory) designated landscapes and their special qualities within the LVIA Study Area and which coincide with the blade tip ZTV.	Landscapes of national importance are of high landscape value.
Locally designated landscapes within the LVIA Study Area and which coincide with the blade tip ZTV.	Locally designated landscapes (and the landscape qualities and features for which they are designated) are of local (county level) importance.
Visual Receptors	
Residential visual receptors in communities within the LVIA Study Area and which coincide with the blade tip ZTV.	Typically, high sensitivity receptors where there is the potential for significant effects upon visual amenity.
Residential visual receptors in private residences within 2 km of the proposed turbines and which coincide with the blade tip ZTV (included within the RVAA in Appendix 7L).	Typically, high sensitivity receptors where there is the potential for substantial adverse effects upon residential visual amenity.
Recreational receptors using sections of Sustrans NCRs routed through the LVIA Study Area and which coincide with the blade tip ZTV.	Typically, high sensitivity receptors where there is the potential for significant effects upon visual amenity.
Recreational receptors using promoted and long-distance routes within the LVIA Study Area and which coincide with the blade tip ZTV.	Typically, high sensitivity receptors where there is the potential for significant effects upon visual amenity.
Recreational receptors using Open Access Areas and the local PRow network within the LVIA Study Area and which coincide with the blade tip ZTV (where not included in other categories).	Typically, high sensitivity receptors where there is the potential for significant effects upon visual amenity.
Recreational receptors at visitor attractions (such as Country Parks) within the LVIA Study Area and which coincide with the blade tip ZTV.	Typically, high or medium sensitivity receptors where there is the potential for significant effects upon visual amenity.

Receptor	Reason for Consideration
Vehicular receptors travelling along 'A' and 'B' roads and any promoted tourist routes within the LVIA Study Area and which coincide with the blade tip ZTV.	Typically, medium or low sensitivity receptors where there is the potential for significant effects upon visual amenity affecting large numbers of people.

LIKELY SIGNIFICANT EFFECTS

- 7.7.8. The effects on the landscape and visual receptors which have the potential to be significant and have been taken forward for detailed assessment are summarised in **Table 7-10**.
- 7.7.9. The final scope of the assessment has been guided by the analysis of the Viewpoint Assessment provided in **Appendix 7K**. This analysis sets a distance threshold for likely significant effects and indicates that significant effects are unlikely to occur at distances beyond 7 km, even for high sensitivity receptors. As a consequence, a conservative buffer of 10 km from the turbine locations has been applied and receptors of local or regional importance have been considered within this 10 km buffer.

Table 7-10 - Likely Significant Effects on Landscape and Visual Receptors Scoped in for Further Assessment

Receptor Type	Likely Significant Effects
Landscape Receptors	
LANDMAP VSAAs, HLAAs, GLAAs, LHAAs and CLAAAs As derived from the filtering process set out in Appendix 7B and which lie within 10 km of the proposed turbines (as set out in paragraph 7.7.9).	<u>Construction phase:</u> - Direct localised effects on parts of the host Aspect Areas' landscape character and landscape elements as a consequence of the site preparation and construction of associated infrastructure (tracks, control buildings / sub-stations, contractors' facilities, site access and electrical cabling) may be significant. <u>Construction, operational and decommissioning phases:</u> - Direct effects on the host landscape character and potentially landscape elements as a consequence of turbine erection and operation are likely to be significant. - Indirect effects related to the visibility of the turbines and their effect on landscape character and perceptual characteristics have the potential to be significant.
Eryri National Park	<u>Construction, operational and decommissioning phases:</u> The Eryri National Park is located at a separation distance of approximately 16 km from the Proposed Development. Given that this is a landscape of high value, indirect effects upon its special qualities have the potential to be significant.
Proposed Glyndŵr National Park	<u>Construction, operational and decommissioning phases:</u> The Proposed Glyndŵr National Park is located at a separation distance of approximately 11.5 km from the Proposed Development. Whilst the Designation Order is yet to be confirmed by the Welsh Government, the evidence demonstrates that the statutory criteria

Receptor Type	Likely Significant Effects
	relating to Natural Beauty and opportunities for open air recreation have been met. Given that this is a landscape of high value, indirect effects upon its draft special qualities have the potential to be significant.
Visual Receptors	
Residential receptors in the closest properties (within 2 km of the proposed turbines and the blade height ZTV), which are included within the RVAA in Appendix 7L .	<u>Construction and decommissioning phases:</u> - Effects on views and visual amenity within 2 km where potential visibility of the proposed construction activities include site preparation and construction of associated infrastructure (tracks, control buildings / sub-stations, contractors' facilities, site access and electrical cabling); - Effects on views and visual amenity from the erection of the wind turbines; and - Effects on views and visual amenity from the decommissioning of the wind turbines and associated infrastructure. <u>Operational phase:</u> - Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.
Residential receptors in communities within the blade tip ZTV and within 10 km of the proposed turbines (as set out in paragraph 7.7.9).	<u>Construction, operational and decommissioning phases:</u> - Effects on views and visual amenity from erection and eventual decommissioning of the wind turbines; and - Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.
Recreational receptors using Sustrans National Cycle Routes within the LVIA Study Area and which coincide with the blade tip ZTV.	<u>Construction, operational and decommissioning phases:</u> - Effects on views and visual amenity from erection and eventual decommissioning of the wind turbines; and - Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.
Recreational receptors using nationally promoted recreational routes within the blade tip ZTV and the LVIA Study Area and regionally promoted recreational routes within the blade tip ZTV and within 10 km of the proposed turbines (as set out in paragraph 7.7.9).	<u>Construction, operational and decommissioning phases:</u> - Effects on views and visual amenity from erection and eventual decommissioning of the wind turbines; and - Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.
Recreational receptors at visitor attractions within the blade tip ZTV and within 10 km of the proposed turbines (as set out in paragraph 7.7.9).	<u>Construction, operational and decommissioning phases:</u> - Effects on views and visual amenity from erection and eventual decommissioning of the wind turbines; and - Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.

Receptor Type	Likely Significant Effects
Recreational receptors in Open Access Land and at popular summits within LVIA Study Area (where not included in other categories): - Open Access Land and local PRoWs within 5 km of proposed turbines; - Open Access Land and local PRoWs between 5 km-10 km of the Site; - Notable hill summits and Open Access Land within the Eryri National Park (beyond 10 km); and - Notable hill summits and Open Access Land within the Shropshire Hills National Landscape (beyond 10 km).	<u>Construction, operational and decommissioning phases:</u> - Effects on views and visual amenity from erection and eventual decommissioning of the wind turbines; and - Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.
Vehicular receptors travelling along 'A' and 'B' roads and any promoted tourist routes within the blade tip ZTV and within 10 km of the Proposed Development (as set out in paragraph 7.7.9).	<u>Construction, operational and decommissioning phases:</u> - Effects on views and visual amenity from erection and eventual decommissioning of the wind turbines; and - Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.

7.7.10. The effects detailed in **Table 7-11** have been scoped out from being subject to further assessment because the potential effects are not considered likely to be significant.

Table 7-11 - Summary of pathways and effects scoped out of this assessment

Receptor/potential effects	Justification
All receptors within the 27 km LVIA Study Area where the ZTV coverage indicates no visibility of the Proposed Development.	Receptors outside of the ZTV for the Proposed Development would have no view of the Proposed Development.
All LANDMAP Aspect Areas that do not fulfil the criteria set out in GN46 ¹⁷ and are beyond 10 km from the proposed turbines	The filtering process set out within GN46 ¹⁷ intends to focus the detailed assessment of potentially sensitive landscape and visual receptors on the aspect areas most likely to be affected. The viewpoint analysis in Appendix 7K indicates that significant effects are not anticipated beyond 10 km.
For each LANDMAP aspect layer (GLAAs, LHAAs, VSAAAs, HLAAs and CLSAAs), an additional WSP assigned filter has been applied which excludes any aspect areas within the LVIA Study Area that	Aspect areas illustrated as having less than 20% of their area within the blade tip ZTV are unlikely to be significantly affected by the Proposed Development and would be excluded from the LVIA.

Receptor/potential effects	Justification
have less than 20% of their area within the blade tip ZTV.	
Landscape Effects on the SQs of the Shropshire Hills National Landscape	The very limited distribution of theoretical visibility of the Proposed Development across the closest parts of the Shropshire Hills National Landscape within the LVIA Study Area as well as the long intervening distance of approximately 20 km supports the conclusion that the special qualities and integrity of the National Landscape are unlikely to be significantly affected by the Proposed Development.
Local landscape designations that are located beyond 10 km or are predominantly or entirely outside of the blade tip ZTV.	The viewpoint analysis in Appendix 7K indicates that significant effects are not anticipated beyond 10 km. The SLAs which lie within the LVIA Study Area (SLA 48: South Ceredigion Uplands, SLA 50: Rheidol Valley, SLA 59: Dyfi Estuary and Valley and SLA 72: Corris) are all located in excess of 18 km from the proposed turbines. As a consequence, significant indirect landscape effects are not anticipated, and local landscape designations are scoped out of the LVIA.
Registered Landscapes of Outstanding and Special Historic Interest within the LVIA Study Area.	Registered Landscapes of Outstanding and Special Historic Interest are not considered as a landscape designation. Since the Register identifies and provides information on the most important and best-surviving historic landscapes, an assessment of effects (including, where relevant, an assessment of the significance of the impact of development on historic landscape areas (ASIDOHL2)) would be undertaken in Chapter 8: Cultural Heritage by a cultural heritage or historic environment specialist. This aligns with the advice provided in paragraph 5.11 of GLVIA3¹⁵ which states: “<i>The sharing of relevant baseline information should not be confused with the need for separate cultural heritage appraisals such as historic landscape characterisation and assessment or historic townscape appraisal, or there will be a danger of both double handling and inappropriate judgements by non-experts. It is particularly important that responsibilities are clear in considering any effects on the settings and views for historic buildings, Conservation Areas and other heritage assets.</i>” As such, an assessment of the effects on Landscapes of Historic Interest is scoped out of the LVIA.
Visual receptors beyond 10 km	The viewpoint analysis in Appendix 7K indicates that significant effects are not anticipated beyond 10 km. Therefore, effects on settlements, transport routes, local PRow and outdoor recreational facilities that are overlapped by the ZTV are assessed within 10 km. National level recreational receptors (National Trails) overlapped by the ZTV are assessed within the wider 27 km Study Area.
Night-time effects on landscape receptors	Scoped out in Table 7-1 of the Scoping Report ⁴⁸ , with the focus of the Night-time Assessment in Appendix 7M being on night-time visual effects.

⁴⁸ WSP on behalf of Wind2 Ltd (2025). Parc Ynni Calon y Gwynt EIA Scoping Report.

7.8 ASSESSMENT METHODOLOGY

OVERVIEW

- 7.8.1. The generic project-wide approach to the assessment methodology is set out in **Chapter 2**. However, whilst this has informed the approach that has used in this LVIA, it is necessary to set out how this methodology has been applied, and adapted as appropriate, to address the specific needs of this LVIA.

DETERMINATION OF SIGNIFICANCE

- 7.8.2. The LVIA has been undertaken in accordance with the methodology set out in **Appendix 7A** and conforms to the GLVIA3¹⁵ which is widely accepted throughout the UK as the appropriate approach to use. Other technical guidance set out in **Table 7-3** has also informed the methodology included in **Appendix 7A**.

SIGNIFICANCE EVALUATION METHODOLOGY

- 7.8.3. The significance of landscape or visual-related effects is derived by considering both the sensitivity of the receptor and the magnitude of landscape or visual change. In this assessment, effects are considered to be significant or not significant according to the matrix in **Table 7-12**.

Table 7-12 - Evaluation of Landscape and Visual Effects

	Landscape and Visual Sensitivity		
Magnitude of Change	High	Medium	Low
High	Substantial	Major	Moderate
High - Medium	Substantial to Major	Major to Moderate	Moderate to Minor
Medium	Major	Moderate	Minor
Medium - Low	Major to Moderate	Moderate to Minor	Minor
Low	Moderate	Minor	Negligible
Low - Very Low	Moderate to Minor	Negligible	Negligible
Very Low	Minor	Negligible	Negligible
Zero	None / No View		

- 7.8.4. In accordance with the EIA Regulations, it is important to determine whether the effects, assessed as a result of the Proposed Development, are likely to be significant. Significant landscape and visual effects are highlighted in bold in the assessment text and in most cases, relate to effects that result in a '**Substantial**', '**Substantial to Major**', '**Major**' or a '**Major to Moderate**' effect as indicated in **Table 7-12** (in bold and shaded dark grey). 'Moderate' levels of effect can also be assessed as significant, subject to the assessor's professional opinion, which should be clearly explained as part of the assessment. All other levels of effect indicate a non-significant effect.

- 7.8.5. In those instances where there would be no effect, the magnitude has been recorded as ‘Zero’ and the level of effect as ‘None’ or ‘No View’. Intermediate levels of magnitude and levels of effect are also used in the LVIA and are shown in **Table 7-12** in italics, for example High - Medium magnitude or *Substantial to Major* level of effect.

7.9 ASSESSMENT OF LANDSCAPE EFFECTS

OVERVIEW

- 7.9.1. Landscape Effects are defined by the Landscape Institute in GLVIA3, paragraphs 5.1 and 5.2 as follows.

“An assessment of landscape effects deals with the effects of change and development on landscape as a resource. The concern ... is with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. ... The area of landscape that should be covered in assessing landscape effects should include the site itself and the full extent of the wider landscape around it which the proposed development may influence in a significant manner.”

- 7.9.2. These effects are assessed by considering the landscape sensitivity (value and susceptibility) against the magnitude of change. The type of effect can also be described as temporary or permanent, direct or indirect, cumulative and beneficial, neutral, or adverse.
- 7.9.3. The landscape effects assessed here, are those effects remaining after all of the proposed design mitigation has been taken into account. An assessment of the cumulative landscape effects, taking account of other operational and consented wind farm development and any current wind farm applications, as set out in Table 7-6 has been undertaken according to the methodology detailed in **Appendix 7A**.

ASSESSMENT OF LANDSCAPE EFFECTS: LANDMAP ASPECT AREAS

Geological Landscape Aspect Areas

- 7.9.4. A detailed assessment of the effects upon the four GLAA receptors which have been scoped into the assessment, is set out in **Appendix 7D**. A summary of the assessment of effects during the construction and operational phases⁴⁹ is presented in **Table 7-13**, which confirms that there would be no significant landscape effects.

⁴⁹ The magnitude of change and level of effect are recorded separately within the summary tables where these differ between phases. Where just one magnitude of change and level of effect is recorded, this would be the same for both the construction and operational phases.

Table 7-13 - Summary of Effects: GLAAs (construction and operational phases)

Aspect Area reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
■ MNTGMGL392 Lanwnog	Medium	Low	Medium-Low	Very Low to Zero	Negligible and Not Significant to None
MNTGMGL528 Caersws	Medium	Medium-Low	Medium	Low to Zero.	Minor and Not Significant to None
MNTGMGL760 Llyn Mawr	Medium	Medium-Low	Medium	Low to Zero.	Minor and Not Significant to None
MNTGMGL918 Mynydd Waun Fawr-Cefn Gwyn	High	Low	Medium	Low to Zero. e	Minor and Not Significant to Non

7.9.5. The assessments contained within **Appendix 7D** also conclude that there would be no significant cumulative landscape effects on the four GLAAs.

Landscape Habitat Aspect Areas

7.9.6. A detailed assessment of the effects upon the three LHAA receptors which have been scoped into the assessment, is set out in **Appendix 7E**. A summary of the assessment of effects during the construction and operational phases⁴⁹ is presented in **Table 7-14**.

7.9.7. The assessment has concluded that there would be significant effects on parts of the one LHAA receptor namely:

- MNTGMLH052 (unnamed) (construction and operational phases).

Table 7-14 - Summary of effects: LHAAs (construction and operational phases)

Aspect Area Reference and Name	Landscape Value	Landscape Susceptibility	Overall Landscape Sensitivity	Magnitude of Change	Level of Effect
■ MNTGMLH028 ■ (unnamed)	High	Low	Medium	Medium-Low to Zero	Moderate to Minor and Not Significant to None
■ MNTGMLH052 (unnamed)	Medium	Medium	Medium	Medium to Zero	Moderate and Significant⁵⁰ to None

⁵⁰ The Moderate level of effect is assessed as being Significant due to the High sensitivity (High value and High susceptibility as assessed in accordance with **Table 7A-1** of **Appendix 7A**) of the Ancient Woodland as a landscape element, upon which there would be direct effects (on small peripheral areas) under a worst-case scenario.

Aspect Area Reference and Name	Landscape Value	Landscape Susceptibility	Overall Landscape Sensitivity	Magnitude of Change	Level of Effect
■ MNTGMLH094 (unnamed)	Medium	Medium-Low	Medium-Low	Low to Zero	Minor to Negligible and Not Significant to None

7.9.8. The assessments contained within **Appendix 7E** also conclude that there would be no significant cumulative landscape effects on the three LHAs.

Visual and Sensory Aspect Areas

7.9.9. The assessment of effects upon the 15 VSAA receptors within the LVIA Study Area which have been scoped into the assessment, is set out in the detailed assessment tables in **Appendix 7F**. A summary of the assessment of effects which may arise during the construction and operational phases⁴⁹ of the Proposed Development, is presented in **Table 7-15**, with significant landscape effects indicated in **bold**.

7.9.10. In summary, there would be significant effects on parts of the following VSAA receptors:

- MNTGMVS235 Carno Mosaic (construction and operational phases);
- MNTGMVS694 Carno Uplands (construction and operational phases);
- MNTGMVS733 Esgair Cwmowen Uplands (construction and operational phases);
- MNTGMVS865 Caersws River Bowl (construction phase); and
- MNTGMVS695 Trannon Uplands Bryn Crugog (construction and operational phases).

Table 7-15 - Summary of effects: VSAA (construction and operational phases)

Aspect Area reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
Host VSAA					
■ MNTGMVS235 ■ Carno Mosaic	Medium	Medium	Medium	Construction phase:	
				High to Zero	Major and Significant to None
				Operational phase:	
				Medium to Zero	Moderate ⁵¹ and Significant to None

⁵¹ The Moderate effect is assessed as being Significant due to the proximity of the VSAA to the Proposed Development and the scale of the changes.

Aspect Area reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
■ MNTGMVS694 Carno Uplands	Medium	Medium	Medium	Construction phase:	
				High-Medium to Zero	Major to Moderate to None
				Operational phase:	
				Medium to Zero	Moderate ⁵¹ and Significant to None
■ MNTGMVS733 Esgair Cwmowen Uplands	Medium	Medium	Medium	High to Zero	Major and Significant to None
■ MNTGMVS865 Caersws River Bowl	Medium	Medium	Medium	Construction phase:	
				Medium to Zero	Moderate ⁵¹ and Significant to None
				Operational phase:	
				Medium-Low to Zero	Moderate to Minor and Not Significant
Other VSAAAs					
■ MNTGMVS179 ■ Trannon ■ Moors	Medium	Medium	Medium	Low to Zero	Minor and Not Significant to None
MNTGMVS204 Llanidloes Farmland	Medium	Medium	Medium	Low to Zero	Minor and Not Significant to None
MNTGMVS211 Llandinam	Medium	Medium	Medium	Low-Very Low to Zero	Negligible and Not Significant to None
MNTGMVS212 Llandinam Hill and Scarp Mosaic	High	High-Medium	High	Low to Zero	Moderate and Not Significant to None

Aspect Area reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
MNTGMVS227 Cefn Carnedd Wooded Hillside	Medium	High-Medium	High-Medium	Low to Zero	Moderate to Minor and Not Significant to None
MNTGMVS254 Kerry Ridgeway	High	High-Medium	High-Medium	Low to Zero	Moderate to Minor and Not Significant to None
MNTGMVS363 Newydd Fynyddog	Medium	High-Medium	High-Medium	Low to Zero	Moderate to Minor and Not Significant to None
MNTGMVS457 Clywedog Upland Grazing	High	Medium	High-Medium	Low to Zero	Moderate to Minor and Not Significant to None
MNTGMVS695 Trannon Uplands Bryn Crugog	Medium	High-Medium	High-Medium	Medium-Low to Zero	Major to Moderate and Significant to Moderate to Minor and Not Significant to None.
MNTGMVS819 Castle Caereinion Farmlands	Medium	Medium	Medium	Low to Zero	Minor and Not Significant to None
MNTGMVS899 Tregynon Rolling Hills	High	Medium	High-Medium	Low to Zero	Moderate to Minor and Not Significant to None

7.9.11. The assessments contained within **Appendix 7F** also conclude that there would be significant cumulative landscape effects upon the following VSAs:

- MNTGMVS235 Carno Mosaic (as a consequence of the Proposed Development);
- MNTGMVS694 Carno Uplands (as a consequence of the Proposed Development and the scoping scheme at Llyn Lort);
- MNTGMVS733 Esgair Cwmowen Uplands (as a result of the operational Mynydd Clogau and Tirgwynt Wind Farms, Esgair Cwmowen planning application scheme, the scoping scheme at Llyn Lort and the Proposed Development);
- MNTGMVS179 Trannon Moors (as a result of the operational Carno I and II and consented Carno III turbines and not the Proposed Development);

- MNTGMVS254 Kerry Ridgeway (as a result of the Llandinam, Llandinam Repowering and Garn Fach turbines and not the Proposed Development);
- MNTGMVS363 Newydd Fynyddog (as a result of the operational Carno I and II and consented Carno III turbines and not the Proposed Development);
- MNTGMVS457 Clywedog Upland Grazing (as a result of the Carno III and Banc Du Energy Park turbines and not the Proposed Development);
- MNTGMVS695 Trannon Uplands Bryn Crugog (as a result of the operational Carno I and II and consented Carno III turbines and not the Proposed Development); and
- MNTGMVS899 Tregynon Rolling Hills (due to the scoping scheme at Llyn Lort and not the Proposed Development).

Historic Landscape Aspect Areas

7.9.12. The assessment of effects upon the 13 HLAA receptors which have been scoped into the assessment, is set out in the detailed assessment tables in **Appendix 7G**. A summary of the assessment of effects which may arise during the construction and operational phases⁴⁹ of the Proposed Development, is presented in **Table 7-16** with significant landscape effects indicated in **bold**.

7.9.13. In summary, there would be significant effects on parts of the following four HLAA receptors:

- MNTGMHL559 Allt Fawr;
- MNTGMHL820 Penbedw;
- MNTGMHL859 Ffridd Rhyd Ddu; and
- MNTGMHL433 Middle Banwy / Upper Rhiw.

Table 7-16 - Summary of effects: HLAAs (operational phase)

Aspect Area reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
Host HLAAs					
■ MNTGMHL559 ■ Allt Fawr	High	Medium	High-Medium	Medium to Zero	Major to Moderate and Significant to None
■ MNTGMHL820 - Penbedw	High	High	High	Medium to Zero	Major and Significant to None
■ MNTGMHL859 - Ffridd Rhyd Ddu	High	Medium	High-Medium	High-Medium to Zero	Substantial to Major to Moderate and Significant to None

Aspect Area reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
■ MNTGMHL902 Caersws basin	High	Medium	High-Medium	Low to Zero	Moderate to Minor and Not Significant to None
Other HLAA's					
MNTGMHL352 Upper Banwy	High	High-Medium	High	Low to Zero	Moderate and Not Significant to None
MNTGMHL433 Middle Banwy / Upper Rhiw	High	High-Medium	High	Medium (closest part of the HLAA) to Low to Zero	Major and Significant for the closest part of the HLAA, and up to Moderate and Not Significant to None
MNTGMHL649 Gregynog	High	High-Medium	High	Very Low to Zero	Minor and Not Significant to None
MNTGMHL704 Trannon Moor	High	Low	Medium	Low (within the eastern half of the HLAA), to Very Low (within the central section) and Zero	Minor and Not Significant to None
MNTGMHL719 Brooks	High	High-Medium	High	Low-Very Low to Zero	Moderate to Minor and Not Significant to None
MNTGMHL789 Mochdre	High	High-Medium	High	Low to Zero	Moderate and Not Significant to None
MNTGMHL827 Caersws	High	Medium	High-Medium	Low-Very Low to Zero	Moderate to Minor and Not Significant to None
MNTGMHL952 Lower Clywedog / Upper Severn	High	Medium	High-Medium	Low to Zero	Moderate and Not Significant to None

Aspect Area reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
MNTGMHL970 Gelli Hill	High	High-Medium	High	Low to Zero	Moderate and Not Significant to None

7.9.14. The assessments contained within **Appendix 7G** also conclude that there would be significant cumulative landscape effects upon the following HLAAs:

- MNTGMHL559 Allt Fawr (due to both the Proposed Development and the scoping scheme at Llyn Lort);
- MNTGMHL820 Penbedw (as a consequence of the Proposed Development);
- MNTGMHL859 Ffridd Rhyd Ddu (as a result of the operational Mynydd Clogau and Tirgwynt Wind Farms, Esgair Cwmowen planning application scheme, the scoping scheme at Llyn Lort and the Proposed Development);
- MNTGMHL352 Upper Banwy (due to the scoping scheme at Llyn Lort and not the Proposed Development).
- MNTGMHL433 Middle Banwy / Upper Rhiw (as a consequence of the Proposed Development and the scoping scheme at Llyn Lort);
- MNTGMHL704 Trannon Moor (due to the operational Carno I and II Wind Farms and not the Proposed Development); and
- MNTGMHL952 Lower Clywedog / Upper Severn (due to the operational Bryn Blaen Wind Farm and planning application scheme at Banc Du Energy Park and not the Proposed Development).

Cultural Landscape Services Aspect Areas

7.9.15. **Appendix 7H** contains the assessment of effects upon the four CLSAA receptors within the LVIA Study Area, which has been scoped into the assessment. A summary of the assessment of effects which may arise as a consequence of the Proposed Development, is presented in **Table 7-17**.

7.9.16. The assessment has concluded that there would be significant effects on parts of the one CLSAA receptor namely:

- MNTGMCLS108 Esgair Cwmowen Uplands.

Table 7-17 - Summary of effects: CLSAAs (operational phase)

Aspect Area reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
■ MNTGMCLS021 Carno Mosaic	Medium	Medium	Medium	Medium-Low	Moderate to Minor and Not Significant

Aspect Area reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
MNTGMCLS099 Carno Uplands	Medium	High-Medium	High-Medium	Low to Zero	Moderate to Minor and Not Significant to None
MNTGMCLS108 Esgair Cwmowen Uplands	High	High	High	High to Zero	Substantial and Significant to None
MNTGMCLS130 Caersws River Bowl	Medium	Medium	Medium	Low to Zero	Minor and Not Significant to None

- 7.9.17. The assessments contained within **Appendix 7H** also conclude that there would be significant cumulative landscape effects upon CLSAA MNTGMCLS108 Esgair Cwmowen Uplands as a consequence of the operational Mynydd Clogau and Tirgwynt Wind Farms, Esgair Cwmowen planning application scheme, the scoping scheme at Llyn Lort and the Proposed Development.

ASSESSMENT OF LANDSCAPE EFFECTS: ERYRI NATIONAL PARK

Special Qualities

- 7.9.18. **Appendix 7I** provides a detailed assessment of the effects of the Proposed Development on the SQs of the ENP. This has been undertaken in accordance with the methodology set out in **Appendix 7A** and NatureScot's Special Landscape Qualities - Guidance on assessing effects²⁴, and has been informed by **Figures 7.7** (Sheets 1-4) and the baseline photography and photomontage for Viewpoint 20, presented in **Figure 7.35**. The figures prepared in respect of the aviation lights which are contained in **Annex 7M.1** of **Appendix 7M** have also informed the assessment of effects on tranquillity, with dark skies recognised as a contributor to tranquillity.
- 7.9.19. The Proposed Development is not located within the ENP, being approximately 16 km from its boundary. In assessing the indirect effects of the Proposed Development on the visual and perceptual SQs of the ENP, the assessment has concluded that there would be no significant effects on the SQs or the integrity of the ENP.
- 7.9.20. A summary of the SQ assessment for the ENP is set out in **Table 7-18**.

Table 7-18 - Summary of the SQ Assessment for the ENP

Special Quality	Sensitivity	Magnitude of change	Level of effect
■ SQ No.1 Diverse Landscapes	High	Very Low to Zero	Minor and Not Significant to None
■ SQ No. 2 Community Cohesion	Not assessed - cultural quality that could not be affected by the Proposed Development which is well beyond the ENP boundary.		

Special Quality	Sensitivity	Magnitude of change	Level of effect
■ SQ No. 3 Vibrancy of the Welsh Language	Not assessed - cultural quality that could not be affected by the Proposed Development which is well beyond the ENP boundary.		
■ SQ No. 4 Inspiration for the Arts	Not assessed - cultural quality that could not be affected by the Proposed Development which is well beyond the BBNP boundary.		
■ SQ No. 5 Tranquillity and Solitude	High	Very Low to Zero	Minor and Not Significant to None
■ SQ No. 6 Recreation Leisure & Learning	Not assessed - physical characteristic that could not be affected by the Proposed Development which is well beyond the ENP boundary.		
■ SQ No. 7 Historic landscapes	Not assessed - physical characteristic that could not be affected by the Proposed Development which is well beyond the ENP boundary.		

ASSESSMENT OF LANDSCAPE EFFECTS: PROPOSED GLYNDŴR NATIONAL PARK

Special Qualities

- 7.9.21. **Appendix 7J** provides an assessment of the effects of the Proposed Development on the draft SQs of the proposed Glyndŵr National Park. This has been undertaken in accordance with the methodology set out in **Appendix 7A** and NatureScot's Special Landscape Qualities - Guidance on assessing effects²⁴, and has been informed by **Figures 7.7** (Sheets 1-4) and the baseline photography and photomontage for Viewpoint 13, presented in **Figure 7.28**. The figures prepared in respect of the aviation lights which are contained in **Annex 7M.1 of Appendix 7M** have also informed the assessment of effects on tranquillity, with dark skies recognised as a contributor to tranquillity.
- 7.9.22. The Proposed Development is not located within the proposed Glyndŵr National Park, being approximately 11.5 km from its proposed boundary. In assessing the indirect effects of the Proposed Development on the visual and perceptual draft SQs, the assessment has concluded that there would be no significant effects on the draft SQs or the potential future integrity of the proposed Glyndŵr National Park.
- 7.9.23. A summary of the draft SQ assessment for the proposed Glyndŵr National Park is set out in **Table 7-19**.

Table 7-19 - Summary of the draft SQ Assessment for the proposed Glyndŵr National Park

Special Quality Headline	Sensitivity	Magnitude of change	Level of effect
■ An inspiring space that promotes mental, physical and spiritual health and wellbeing	High	Low-Very Low to Zero	Moderate to Minor and Not Significant to None

Special Quality Headline	Sensitivity	Magnitude of change	Level of effect
A place with cohesive communities and distinctive settlement patterns	Not assessed - cultural and physical qualities that could not be affected by the Proposed Development which is well beyond the proposed Glyndŵr National Park boundary.		
A story of human interaction with the landscape over the millennia	Not assessed - physical characteristics that could not be affected by the Proposed Development which is well beyond the boundary of the proposed Glyndŵr National Park.		
A home to internationally and locally important species and habitats	Not assessed - physical characteristics that could not be affected by the Proposed Development which is well beyond the boundary of the proposed Glyndŵr National Park.		
A distinctive, complementary and contrasting landscape	High	Low-Very Low to Zero	Moderate to Minor and Not Significant to None
A landscape providing benefits beyond its borders	Not assessed - the Proposed Development is located well beyond the boundary of the proposed Glyndŵr National Park.		

7.10 ASSESSMENT OF VISUAL EFFECTS

OVERVIEW

- 7.10.1. Visual effects are assessed by considering the sensitivity of the receptor (people in the landscape) and the magnitude of change that would affect the view or overall visual amenity. They are defined by the Landscape Institute in GLVIA 3, paragraphs 6.2 as follows:

"An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity. The concern here is with assessing how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements."

- 7.10.2. The assessment has taken a precautionary approach and focused on visual receptors within 10 km of the Proposed Development, in order to assess the likely significant visual effects. This has been guided by the results of the viewpoint analysis (**Appendix 7K**). Within the wider 27 km Study Area, the assessment has included receptors of national importance such as National Trails, Sustrans National Cycle Routes and popular hill walking summits within the Eryri National Park and Shropshire Hills National Landscape that are overlapped by the blade tip ZTV.

VISUAL EFFECTS DURING CONSTRUCTION, OPERATION AND DECOMMISSIONING

- 7.10.3. The majority of the significant visual effects would be experienced as a result of views of the proposed turbines during the operational period and this forms the main focus of the assessment. However, the visual effects associated with the construction and decommissioning phases of the Proposed Development and the infrastructure components also have the potential to be significant and these have been included in the assessment where there is the potential for a significant visual effect.

- 7.10.4. An outline description of the visual effects associated with the construction and decommissioning phases is set out here.

Visual Effects during Construction

- 7.10.5. The assessed levels of effect would increase from Very Low, at the start of construction and progressively increase to a maximum level of effect, equal to that occurring during operation, upon completion of the construction period. The construction effects although temporary are likely to involve greater movement of machinery and visibility of contrasting construction activity, background noise and associated lighting. The nature of these effects would be temporary, direct, and adverse. Some construction activities may be remote from the turbine locations (access works) and / or temporary (temporary construction compounds) and subject to restoration on completion of the construction period.
- 7.10.6. An outline assessment of each of the component parts of the Proposed Development likely to be constructed during the construction period is provided as follows.

New Internal Access Tracks, Turning Heads and Crane Hard-standings

- 7.10.7. New internal access tracks, turning heads and crane hard-standings would provide construction access to the proposed turbines. Views of these works would be experienced by recreational users of local PRoW, bridleways and restricted byways including the Cistercian Way, in close proximity to the Proposed Development. Details around proposed permissive routes are being discussed with the LPA PRoW Officer and details will be included for Final ES within **Chapter 12** and the Outline PRoWMP (**Appendix 12A**).
- 7.10.8. There are also a number of close residential properties located in close proximity to the access route including Llyn Mawr, Lakeside View, New House, Cerreg Ateb, Pant y Gwalia and Slate House (as assessed in the RVAA in **Appendix 7L**). Where views are available to residents and recreational receptors, the magnitude of change would vary and potentially could be up to Medium for parts of some routes and from some properties, resulting in a **Major and Significant** effect that is temporary, indirect and adverse. However, for residential receptors located in close proximity to the access route, the residential visual amenity threshold would not be reached.

Temporary construction compound

- 7.10.9. A temporary construction compound is proposed west of T1 and south of T2 within the south-eastern part of the Proposed Development where there would be views from Cistercian Way Long Distance Route and other local PRoWs. The proximity of recreational receptors to the compound means that the magnitude of change could locally rise to High, such that the level of visual effect would be **Substantial and locally Significant**. The upper parts of the compound may be visible above intervening landform from residential properties Llyn Mawr and Lakeside View. The magnitude of change would be Low and the level of visual effect would be Moderate and Not Significant.
- 7.10.10. The nature of these effects would be short-term, indirect, and adverse. Once the erection and commissioning of the wind turbines is complete, the construction compounds would be removed and the land reinstated.

Grid Connection Infrastructure

- 7.10.11. The substation compound and control building is proposed to the north-west of T2 within the south-eastern part of the Proposed Development where there would be views from Cistercian Way and other local PRowS. The proximity of recreational receptors to the substation means that the magnitude of change could locally rise to High, such that the level of visual effect would be **Substantial and locally Significant**. The nature of these effects would be short-term, indirect, and adverse.
- 7.10.12. The upper parts of the substation and control building may be visible above intervening landform from the residential property Lakeside View. The magnitude of change would be Low and the level of visual effect would be Moderate and Not Significant. The nature of these effects would be long-term (reversible), direct, and adverse when compared to the pre-existing baseline landscape of the local area.
- 7.10.13. Electrical cables connecting to the proposed turbines to the substation would be underground within the Site, and post construction there would be no visual effects. As set out in **Chapter 2: Approach to EIA**, the potential environmental effects resulting from the off-site grid connection will be assessed as part of a separate application.

Visual Effects during Operation

- 7.10.14. The assessed levels of effect are likely to be at their greatest during the period of operation (which is the focus of the main visual assessment below), due to the visibility of the proposed turbines and associated infrastructure. However, in comparison to a busy construction site, the appearance of the Proposed Development would also recover a 'calmer' visual character with negligible levels of maintenance activity visible on Site.

Visual Effects during Decommissioning

- 7.10.15. During decommissioning the wind farm would return to a construction site for a temporary period and the level of visual effect would gradually reduce with the removal of the turbines and associated above ground infrastructure. Therefore, the visual effects likely to be experienced during the decommissioning period would gradually reduce from the operational levels and would not be significant on completion of the decommissioning. As with the construction period, although temporary, these works are likely to involve greater movement of machinery and visibility of contrasting construction activity (including elevated crane activity), background noise and associated lighting. In overall terms the level of visual effect would reduce to non-significant levels and the nature of these effects would be long-term, direct, and neutral when compared to the pre-existing baseline landscape of the local area.

ASSESSMENT OF VISUAL EFFECTS: SETTLEMENTS AND RESIDENTIAL PROPERTIES

- 7.10.16. The visual effects likely to be experienced from settlements include consideration of residential areas, the public realm and public open spaces within the settlement boundaries (as defined in the Powys Adopted Local Development Plan 2011 -2026⁸ and shown in **Figure 7.10**) that would be frequented by people. Residents have a High susceptibility to visual change and the views in the direction of the Site are typically assessed to be of a Medium to High value, resulting in an overall High sensitivity.

7.10.17. As outlined in the baseline, there are approximately 44 individual residential properties within 2 km of the proposed turbines (excluding those within settlements). The location of the properties is shown in **Figures 7.14** and **7.15** in relation to the blade tip and hub height ZTVs respectively, whilst the list of residential properties and associated assessment is reported in the RVAA in **Appendix 7L**.

7.10.18. In summary, there would be significant visual effects as a result of the construction, operational and decommissioning phases of the Proposed Development on small parts of the following six settlements within 10 km of the proposed turbines:

- Clatter;
- Carno;
- Pontdolgoch;
- Adfa;
- Cefn Coch; and
- Talerddig.

Table 7-20 - Visual Effects on Views from Settlements

Settlement	Assessment
1) Clatter	Clatter is a small rural settlement located approximately 2.8 km south of the closest turbine (T5) of the Proposed Development. The A470 is located towards the north-eastern part of the settlement and is sited in a valley surrounded by steeply sloping hillsides with the Afon Carno located to the north of the settlement. Residential properties are located north of the A470 along with Llanwnnog Methodist Chapel and south of the A470 off Clos Hen Dy. Properties closest to the A470 are generally orientated in a north-east / south-west direction and some properties located further south are orientated in a north-west / south-east direction. The surrounding landscape is well vegetated with belts of woodland planting along the river corridor, surrounding hillsides and within fields. Hedgerows and trees are also located along parts of the A470 and Clos Hen Dy which restricts views to the surrounding landscape from some locations. Viewpoint 1 is located on the A470 near Llanwnnog Methodist Chapel. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of between 7-9 blades and between 4-6 hubs for much of the village. The upper parts of turbines T1-T9 would be visible on the skyline from areas throughout the village where built form and vegetation do not screen the view. T3, T4 and T5 would be visible as hubs and from some locations the hubs of T6 and T8 would also be visible just above the horizon. T5 would be the closest and most prominent turbine with more of the tower visible. Access roads and other infrastructure would be screened by intervening landform. Road users travelling along the A470 and Clos Hen Dy would have glimpsed transient views of the Proposed Development between the gaps in vegetation and built form. The magnitude of change would range from <i>High-Medium to Zero</i>. The level of effect of the Proposed Development would range from Substantial to Major and Significant to No View (where there is screening from built form and vegetation). The nature of these effects would be long-term (reversible), indirect and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The operational Llandinam Wind Farm (approximately 9.9 km south-south-east) and the consented Llandinam Repowering Wind Farm (approximately 9.8 km south-south-east) would be screened by intervening vegetation and built form. The remaining operational and consented wind farms would be screened by landform. The magnitude of change is judged to be <i>Zero</i> and therefore, there would be no cumulative effects. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> No application or scoping wind farms would be visible from this location due to intervening landform. The magnitude of change is judged to be <i>Zero</i> and therefore, there would be no cumulative effects.
2) Carno	Carno is a large village located approximately 3.2 km south-west of the closest turbines (T5 and T6) of the Proposed Development. The settlement is spread out along the A470 which runs through the centre of settlement in a north-west to south-east direction. The village is sited within a valley surrounded by hills and with the Afon Carno located to the east. Within the northern part of the settlement there are residential properties clustered to the west of the A470 accessed off residential roads and are orientated in different directions. There are also properties located off the A470 mainly to the west which are orientated in a north-east to south-west direction. To the east of the A470 there are some industrial

Settlement	Assessment
	units situated amongst some residential properties with a railway bounding the eastern edge in the northerly part of the settlement. Within the central area of the settlement there are residential properties located off Winllan Lane which are orientated in a north to south direction and further south there is a cluster of residential properties the village shop/post office, Community Council offices and are generally orientated in a north-east/ south-west direction along the A470. The largest cluster of properties are located to the south of the settlement where there are several roads which spur off west of the A470, with properties generally orientated in a north/south direction and some orientated in a north-east / south-west direction. To the north of this cluster of residential properties are playing fields and a junior school. To the east of the A470 there is a church and several other residential properties, with Viewpoint 2 located on the Junction of the A470 and Ffordd Dol Lin to the south-east of the Settlement. The settlement is well vegetated throughout with garden vegetation, tree planting along residential roads / A470 and pockets of woodland planting around some of the industrial units. There are also linear belts of woodland / tree planting on the outskirts of the settlement which limits views towards the surrounding hillsides. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of between 1-3 and 4-6 turbines within the cluster of properties in the northernmost part of the village. There is no ZTV coverage south of the minor road which branches off the A470 extending slightly further south. Towards the school and playing fields visibility would be between 1-3 turbines increasing to 4-6 further south and 7-9 along the southern most boundary of the settlement. From some properties in the northernmost part of the settlement where intervening built form and vegetation does not screen the view, the hubs and blades of T7 and T8 and potentially the tip of T9 and blade of T6 would be visible just above the horizon. Further south in the area towards the playing fields and school the blade of T5 may be visible above the treeline. In the southern part of the settlement, as illustrated in Viewpoint 2, the blades of T1, T3 and T5 would be visible above the coniferous vegetation on the hillside, with the blade tips of T2, T4 and T6 screened by vegetation. The remaining turbines would be screened by landform. There are a few residential properties on the far south of the settlement that are oriented towards the Proposed Development where the towers and hubs of T4, T5 and T6, the hub of T3 and the blades of T1, T2, T7, and T8 would be visible on the skyline. Access tracks to T5 and T6 may be visible however other infrastructure would be screened by intervening landform. The magnitude of change would range from <i>Medium</i> (far south of the settlement) to <i>Low-Very Low</i> (for the remainder of the Settlement) to <i>Zero</i>. The level of effect of the Proposed Development on views from the settlement would range from Major and Significant (Properties to far south of Settlement) to Moderate to Minor and Not Significant (for the remainder of the settlement) to No View. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The operational Tirgwynt Wind Farm (approximately 4.2 km north-east) is visible on the skyline from the northern part of the settlement where built form and intervening vegetation does not screen the view. Other operational wind farms are screened by intervening landform and vegetation from this part of the settlement. The consented Llanbrynmair Wind Farm (approximately 5.8 km north-north-west) and blade tips of the consented Carno III Wind Farm (approximately 4 km south-west) would be screened by intervening built form and vegetation.

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	In the southern part of the settlement the consented Llanbrynmair Wind Farm (approximately 5.8 km north-north-west) would be screened by trees. The operational Carno II Wind Farm (approximately 14.3 km west) is visible in the distance with upper parts of the turbines appearing just above the tree line where intervening built form does not screen the view. A couple of turbines within the consented Carno III Wind Farm (approximately 3.7 km west) may be visible from some parts of the settlement but the majority of the wind farm would be screened by landform and hillside vegetation. The magnitude of change is judged to be <i>Very Low</i>. The combined cumulative effect would range from Major and Significant (to the far south of Settlement due to the Proposed Development) to Moderate to Minor and Not Significant (for the remainder of the settlement) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> From the northern part of the settlement where built form does not screen the view there would be views of the upper parts of the application Esgair Cwmowen Wind Farm (approximately 4.6 km north-east) and some turbines within the scoping Llyn Lort Wind Farm (approximately 6.2 km north-north-east) visible on the skyline viewed in conjunction with the operational Tirgwynt Wind Farm. In the southern part of the settlement there would be no application or scoping wind farms within the view. The magnitude of change is judged to be <i>Low-Very Low</i>. The combined cumulative effect would range from Major and Significant (to the far south of Settlement due to the Proposed Development) to Moderate to Minor and Not Significant (for the remainder of the settlement) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct, cumulative and adverse.
3) Pontdolgoch	Pontdolgoch is a small rural village located approximately 3.7 km south of the closest turbine (T3) of the Proposed Development. The village is spread out with the A470 passing through the village in generally a north-west / south-east direction with minor roads spurring off the A470 serving residential properties to the west. The village is sited in a valley surrounded by hillsides with the Afon Carno flowing through the village. A railway line also borders the village to the east. There are linear belts of woodland / tree planting located within adjacent fields, along the river corridor, railway line and A470 which restricts views out to the surrounding countryside. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of between 7-9 blades and hubs for the majority of the settlement reducing to 4-6 hubs for properties closest to the A470. Turbines T1-T9 would be visible beyond a ridgeline with the upper parts visible on the skyline from properties located on the northern and western parts of the settlement where built form and vegetation do not screen the view. The most prominent turbine would be T5 with the tower visible against the skyline and appearing stacked with T6. T2 would be visible as a blade and T9 a blade tip. There are belts of woodland planting within the central and south-eastern parts of the village along the A470 which would screen views from residential properties in this part of the village. There would be glimpsed transient views from small sections of the A470 to the south-eastern parts of the village where turbines T5-T7 would be visible on the skyline through gaps in the woodland planting. The magnitude of change would range from <i>High-Medium</i> to

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	Zero. The level of effect of the Proposed Development would range from Substantial to Major and Significant to No View and Not Significant (due to screening provided from built form and vegetation). The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The operational Llandinam Wind Farm (approximately 8.7 km south-south-east) and the consented Wind Farms Llandinam Repowering (approximately 8.6 km south-south-east) and Garn Fach (approximately 10.6 km south-south-east) may be visible on a clear day from a small number of properties situated to the west of the settlement where intervening built form and vegetation does not screen the view. The remaining operational and consented wind farms would be screened by landform. The magnitude of change is judged to be <i>Very Low</i>. The combined cumulative effect would range from Substantial to Major and Significant (due to the Proposed Development) to No View and Not Significant. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> No application or scoping wind farms would be visible from this location due to intervening landform. The magnitude of change is judged to be <i>Zero</i> and therefore, there would be no further cumulative effects.
4) Adfa	Adfa is a small village located approximately 5.2 km north-east of the closest turbine (T11) of the Proposed Development. It is a linear settlement with a minor road running through the middle in generally an east-west direction with some residential streets spurring off this road. The properties are generally orientated in a north/south direction along the minor road except to in the eastern part of the settlement where properties along Treganol and Maesgwastad are orientated east/ west direction. The settlement is located in a rural location with views out across the surrounding pastoral fields bound by mature hedgerows and hedgerow trees and rolling hillsides. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 10-11 turbines. There would be views south-west towards the Proposed Development primarily from the eastern areas of the village and properties located on the southern side of the village. The Proposed Development would be visible beyond a ridgeline in the distance. The upper parts of 11 turbines would be visible on the skyline with half the turbines appearing in combination with Mynydd Clogau. There may be some screening/ filtering of some of the turbines from intervening foreground vegetation along the roadside, within gardens and field boundaries. There would be limited views from the minor road in the central and western parts of the village due to screening provided by intervening buildings. Views from properties north of the minor road would largely be screened by intervening residential properties, however, there may be glimpsed views of some turbines through gaps in the intervening properties. Access tracks and ancillary infrastructure would be screened by intervening landform. The magnitude of change would range from <i>Medium</i> (Properties to east and south where there is no screening) to <i>Medium-Low</i> (Properties to the east and south where there is partial screening) to <i>Zero</i>. The level of effect of the Proposed Development on views from the settlement would range from Major and Significant (Properties to south) to Major to Moderate and Significant (Properties to south and east of Settlement with some screening provided by vegetation) to

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	No View. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The operational Mynydd Clogau Wind Farm (approximately 2.5 km south-west) is visible as full turbines on the skyline with many of them appearing stacked or overlapping and would appear partially in front of the Proposed Development. The operational Tirgwynt (approximately 6 km west) is also visible on the skyline. No other operational or consented wind farms would be visible due to intervening landform. The magnitude of change is judged to be <i>Medium-Low</i>. The combined cumulative effect would range from Major and Significant (Properties to south due to the Proposed Development) to Major to Moderate and Significant (Properties to south and east of Settlement with some screening provided by vegetation, due to the Proposed Development, Mynydd Clogau and Tirgwynt) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The application Esgair Cwmowen Wind Farm (approximately 5.2 km west) would be visible on the skyline in combination with Tirgwynt Operational Wind Farm. The scoping Llyn Lort Wind Farm (approximately 5.3 km north-west) would be visible primarily from properties to positioned on the northern of the settlement (which have limited or no view of the Proposed Development) with potentially some visibility from properties positioned on the southern side of the settlement and the minor road through gaps in built form. No other application wind farms would be visible due to intervening landform. The magnitude of change is judged to be <i>Medium</i>. The combined cumulative effect would range from Major and Significant (Properties to south due to the Proposed Development and Llyn Lort) to Major to Moderate and Significant (Properties to south and east of Settlement with some screening provided by vegetation, due to the Proposed Development, Mynydd Clogau, Tirgwynt and Llyn Lort) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct and adverse.
5) Cefn Coch	Cefn Coch is a very small rural village located approximately 5.5 km north-east of the closest turbine (T11) of the Proposed Development. It is a linear settlement with a minor road running through the middle in a north-east / south-west direction with some minor residential streets spurring off this road with properties generally orientated in a south-east / north-west direction. In the centre of the village is Cefn Coch Inn. The settlement is located in a rural location with views out across the surrounding pastoral fields bound by mature hedgerows and hedgerow trees and low rolling hillsides. Viewpoint 3 has been taken to the south-east of Cefn Coch Inn. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 10-11 turbines throughout the settlement. The Proposed Development would be visible on the skyline in the distance primarily from the western parts of the village and properties located on the southern edge where intervening foreground vegetation and built form does not screen the view. The properties are not orientated towards the development and therefore views would be from the curtilages. All 11 turbines including hubs and towers would be visible on the skyline. T9 and T11 would appear further down the slope and there may be

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	visibility of the access tracks to these turbines. The Proposed Development would be screened by intervening vegetation and built form from properties located on the eastern side of the village. Motorists travelling along the minor road would have glimpsed transient views through gaps in vegetation and built form. The magnitude of change would be <i>Medium</i> to <i>Zero</i>. The level of effect of the Proposed Development on views from the settlement would range from Major and Significant to No View. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The operational Mynydd Clogau Wind Farm (approximately 3.2 km south-west) is visible in the distance on the skyline where mature tree planting in the foreground does not screen the view and would be visible alongside the Proposed Development. The operational Tirgwynt Wind Farm (approximately 5 km west-south-west) and the blade tips of the operational Garreg Lwyd (approximately 23.8 km south-east) are screened by intervening vegetation. The blades of the consented Llanbrymair Wind Farm (approximately 10.4 km west-north-west) would be screened by intervening vegetation and built form. No other operational or consented wind farms would be visible. The magnitude of change is judged to be <i>Very Low</i>. The combined cumulative effect would range from Major and Significant (due to the Proposed Development) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The application Esgair Cwmowen (approximately 4.4 km south-west) would be screened by foreground vegetation. The scoping Llyn Lort Wind Farm (approximately 3.3 km west-north-west) would be visible on the skyline with some turbines filtered by intervening vegetation. Llyn Lort Wind Farm would be visible over a large horizontal field of view given the close proximity to the settlement and the turbines would appear relatively large in the view. No other application wind farms would be visible due to intervening landform. The magnitude of change is judged to be High-medium. The combined cumulative effect would range from Substantial to Major and Significant (due to the Llyn Lort) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct, cumulative and adverse.
6) Caersws	Caersws is a large village located approximately 6 km south-east of the closest turbine (T1) of the Proposed Development. There are two main roads within the settlement the B4569 which passes through the village in a north-east/ south-west direction (with NCR 81 running along the B4589 towards western side of village) and the A489 / NCR 81 passing through the western part of the village in a south-east/ north-west direction. There are several residential roads which spur off these main routes. The village is sited in a valley surrounded by hillsides in the mid distance, with the River Severn located to the south of the settlement. On the western edge of the village there is a railway line and Caersws station. Further east of the junction with the B4569 and A489 there are amenities such as the Village Hall, play area and a hotel. The residential properties are generally orientated in a south-east / north-west to south to south-east / north to north-west direction. The village is surrounded by pastoral land with hedgerow field boundaries, trees, pockets of woodland and some roadside vegetation which

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	filters views out towards the surrounding hillsides. Viewpoint 6 is located along the B4569 / NCR 81 to the far west of the village. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 4-6 blades / 1-3 hubs in the western part of the settlement and 1-3 blades to the east of the junction. In the western part of the settlement (as illustrated in Viewpoint 6) up to four turbines would be visible where intervening foreground vegetation and built form does not screen the view. T1 would appear as an outlier to the right of the view and would be visible as a blade above the treeline set against the sky. T5 and T6 are overlapping and would be visible against the skyline with the towers screened by intervening landform. T7 would be heavily filtered by vegetation and in the Summer months would be screened from view. Views of the Proposed Development further east of the A489 / B4569 junction, would be limited to residential properties located on the northern edge of the settlement where views of the turbines would be limited to between 1-3 blades / blade tips. Built form would screen views from the roadside and other properties within the main part of the settlement. Access tracks and ancillary infrastructure would be screened by intervening landform. The magnitude of change experienced by residents, users of the NCR and road users within the settlement would range from <i>Low to Zero</i>. The level of effect of the Proposed Development on views from the settlement would range from Moderate and Not Significant to No View. The effect would be not significant due to the overall limited extent of visibility of the Proposed Development within the settlement due to intervening landform and vegetation. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The upper parts of the operational Cefn Croes Wind Farm (approximately 23.6 km south-west) is not visible due to intervening vegetation and built form and the upper parts of the operational Llandinam Wind Farm (approximately 6.3 km south) is not visible due to intervening distance, vegetation and built form. The tips of the consented Llanbrynmair Wind Farm (approximately 14.5 km north-west) would be screened by intervening vegetation as would the consented Carno III Wind Farm (approximately 9.9 km west) and the consented Garn Fach Wind Farm (approximately 8.5 km south). Some turbines within the consented Llandinam Repowering Wind Farm (approximately 6 km south) would potentially be visible in the far distance from properties to the south of the settlement where intervening vegetation would not screen the view. No other operational and consented wind farms would be visible due to intervening landform. The magnitude of change is judged to be <i>Very Low</i>. The combined cumulative effect would be Moderate and Not Significant (due to the Proposed Development) to No View and Not Significant. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The upper parts of the application Banc Du Wind Farm (approximately 15.4 km south-west) and the application Rhiwlas (approximately 16.1 km south-west) would be screened by intervening built form and vegetation for much of the settlement, where visible they would be seen in the distance. No other application and scoping wind farms would be visible due to intervening landform. The magnitude of change is judged to be <i>Very Low</i>. The combined cumulative effect would be Moderate and Not Significant (due to the Proposed Development) to No View and Not Significant. The additional effect of the Proposed Development

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	would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse.
7) Talerddig	Talerddig is small village located approximately 6.2 km distance south south-west of the closest turbine (T7) of the Proposed Development. The A470 passes through the eastern side of the village in a north-west to south-east direction. A minor road spurs off to the west of the A470 where there is a cluster of properties and continues across a bridge over a railway line to the western side of the village where there are a small number of residential properties. The village is sited at the base of several valleys surrounded by steeply sided hillsides, with the Afon laen located to the north and the Afon Tyn-y-rhos located to the east. The railway line is located in a deep cutting with dense vegetation on both sides. In the northern part of the village alongside the A470 there are steep hillsides heavily vegetated with woodland planting. In the wider landscape there are further woodland belts along river corridors and within fields which restricts views out towards the surrounding landscape. Viewpoint 4 is located on the A470 to the east of Talerddig. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 10-11 blades / 7-9 hubs to the south-east of the settlement with no visibility to the west across the railway and north due to intervening landform. Visibility of the Proposed Development would primarily be limited to properties located on the edge of the settlement due to screening provided by intervening built form within the settlement. The Proposed Development would appear behind a ridgeline with turbines T5, T7, T8 and T9 would be visible on the skyline with the towers screened to varying degrees. The hub and blades of T4 and T6 would be partially screened by vegetation (as illustrated by Viewpoint 4). T10 and the blades/ blade tips of T1, T2, T3, and would likely be screened by intervening vegetation. T7 would appear slightly smaller in scale at 180m in height and would appear deceptively further back in the view compared with T5 and T8. The turbines would also be visible in conjunction with overhead electricity lines on the skyline. The magnitude of change would be <i>Medium-Low</i> (eastern part of the settlement) to <i>Zero</i>. The level of effect of the Proposed Development on views from the settlement would range from Major to Moderate and Significant to No View. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The blades of two turbines within the operational Tirgwynt Wind Farm (approximately 5.7 km east) are visible above intervening vegetation. The operational Llandinam Wind Farm (approximately 18 km south-east) is not visible due to intervening vegetation. The operational Carno II Wind Farm (approximately 2.7 km south-west) is visible on the skyline. The upper parts of two turbines within the operational Cemmaes Wind Farm (approximately 8.3 km north-west) are visible in the distance. The consented Garn Fach Wind Farm (approximately 19.8 km south-east) and the consented Llandinam Repowering Wind Farm (approximately 18.4 km south-east) would be screened by intervening vegetation. The consented Llanbrynmair Wind Farm (approximately 3 km north) would be visible on the skyline with intervening vegetation filtering views towards the lower parts of the turbines and would screen the blade/ blade tips of others. No other operational or consented wind farms would be visible due to intervening landform. The magnitude of change is judged to be <i>Medium - Low</i>. The combined cumulative effect would range from Major to Moderate and Significant (due to the

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	Proposed Development and Carno II) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The blades of application Esgair Cwmowen Wind Farm (approximately 6.1 km east) would be screened by intervening vegetation, and no other application or scoping wind farms would be visible due to intervening landform. The magnitude of change is judged to be Zero and therefore, there would be no cumulative effects.
8) Trefeglwys	Trefeglwys is a large village located approximately 6.5 km distance south to south-west of the closest turbine (T5) of the Proposed Development. The village is spread-out with clusters of properties positioned along the B4569 and along minor roads which spur off from the main route. Properties are orientated in both a north/south and east/west direction. The settlement is sited within a valley surrounded by hills with the Afon Trannon located to the south of the village. The village is surrounded by pastoral land with hedgerow field boundaries and trees and there is also roadside and garden vegetation which filters views out towards the surrounding hillsides. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 4-6 blades / 1-3 hubs in the central and southern parts of the settlement, reducing to 1-3 blades and with no visibility in the northern part of the settlement. The Proposed Development would appear behind a ridgeline with the towers screened by landform. In the southern part of the settlement the hubs of T1, T2, and T3 would be visible and the blades of T4 would be visible on the horizon where intervening foreground vegetation and built form does not screen the view. Towards the central part of the settlement landform would increasingly screen the turbines from view with T1 only visible as a hub and T2-T5 visible as blades / blade tips from properties with clear views to the north / north-east. Roadside views would be screened by intervening vegetation. Further north only blade tips would be visible however from the majority of properties intervening vegetation and built form would screen these from view. Access tracks and ancillary infrastructure would be screened by intervening landform. The magnitude of change experienced by residents within the settlement would range from Very Low to Zero. The level of effect of the Proposed Development on views from the settlement would range from Minor and Not Significant to No View. The nature of these effects would be long-term (reversible), direct and neutral. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> The operational Llandinam Wind Farm (approximately 8.3 km south-east) and Llandinam Repowering Wind Farm (approximately 8.6 km south-east) would be screened by intervening hillside woodland planting. No other operational and consented wind farms would be visible due to intervening landform. The magnitude of change is judged to be zero and therefore, there would be no cumulative effects. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The blades of application Rhiwlas Wind Farm (approximately 11.7 km south-south-west) would be barely discernible given the intervening distance and some vegetation located on the hillside. No other application and scoping wind farms

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	would be visible due to intervening landform. The magnitude of change is judged to be Zero and therefore, there would be no cumulative effects.
9) Aberhafesp	Aberhafesp is rural village located approximately 7.1 km distance south-east of the closest turbine (T1) of the Proposed Development. The village is spread out along the B4568 which generally runs in south-east to north-west direction. There are groups of properties positioned off small side roads which spur off the main road to the north and to the west of the settlement there are properties located to the south of the B4568. Properties are generally orientated north-south and south-west to north-east. The village is sited on the side of the River Severn Valley, on the lower slopes of Bryn-y-pentre located to the north and the River Severn to the south. The landform is undulating within the settlement with steep hillsides positioned to the north and south. There are long distance views along the valley overlooking pastoral land towards distant hillsides. The settlement is well vegetated with tree and hedge planting within gardens and along the roadside and towards the edges of the settlement. There is also mixed woodland planting on the slopes to the north. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 10-11 blades / 4-6 hubs in pockets to the west and central parts of the settlement. There are patches of no visibility to the east of the settlement near Hill Crest and a section of the settlement further west and areas where there would be 4-6 blades and 1-3 blades / hubs visible due to localised landform. Properties to the far west are not orientated towards the Proposed Development and the Proposed Development would be filtered by foreground vegetation in the summer month and views from the B4568 from this part of the Settlement would be screened by built form and vegetation. As the landform rises towards the second group of properties there would be views experienced by residents and motorists towards the Proposed Development where 11 turbines would be visible beyond a ridgeline with the towers of T1 and T4 visible and the hubs of T2, T3, and T8 visible on the horizon. The remaining turbines would be visible as blades. There are however foreground trees which would screen parts of the Proposed Development from view particularly in the summer months. Towards the central part of the settlement there would be no views of the Proposed Development due to intervening topography and a belt of woodland planting. There would be a small section along the B4568 to the south of Hill Crest where motorists would have transient views of the blades of T5, T6 and T7 on the skyline in the distance. Access tracks and ancillary infrastructure would be screened by intervening landform. The magnitude of change experienced by residents and motorists within the settlement would range from <i>Low</i> (western part of the settlement) to <i>Very Low</i> (Section of the B4568 south of Crest Hill) to <i>Zero</i>. The level of effect of the Proposed Development on views from the settlement would range from Moderate and Not Significant (western part of the settlement) to Minor and Not Significant (Section of the B4568 south of Crest Hill) to No View. The effect would be not significant due to the overall limited extent of visibility of the Proposed Development within the settlement due to intervening landform and vegetation. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> Due to intervening landform, there would be no operational wind farms visible from the settlement. The blade tips of the consented Carno III (approximately 13.4 km west) would be screened by intervening vegetation and distance. No other operational and consented wind farms would be visible due to intervening

Settlement	Assessment
	landform. The magnitude of change is judged to be <i>Zero</i> and therefore, there would be no cumulative effects. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The blades of application Banc Du Wind Farm (approximately 18.5 km south-west) would be screened by intervening vegetation and distance. No other application and scoping wind farms would be visible due to intervening landform. The magnitude of change is judged to be <i>Zero</i> and therefore, there would be no cumulative effects.
10) Llanwyddelan	Llanwyddelan is a very small rural village located approximately 7.4 km north-east of the closest turbine (T11) of the Proposed Development. It is a compact settlement with properties clustered along a minor road and orientated in a north north-west to south south-east direction. To the east of the village there is Llanwyddelan Church and in the centre of the village positioned south of the minor road are large farm buildings. The village is surrounded by pastoral land with long distance views over rolling countryside. Within the village there is tree planting within the curtilage of the residential properties and roadside hedges which limits intervisibility within the settlement and views to the surrounding countryside. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 10-11 blades and hubs to the west of Llanwyddelan Church. There is no ZTV coverage around the church due to localised topography. In reality due to intervening vegetation and built form the Proposed Development would be visible from the western part of the settlement where all turbines would be visible on the skyline in the distance with the towers screened by landform to varying degrees. Access tracks and ancillary infrastructure would be screened by intervening landform. The magnitude of change experienced by residents within the settlement would range from <i>Low</i> to <i>Zero</i>. The level of effect of the Proposed Development on views from the settlement would range from Moderate and Not Significant (western part of the settlement) to No View. The effect would be not significant due to the overall limited extent of visibility of the Proposed Development within the settlement due to intervening landform. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The operational Mynydd Clogau Wind Farm (approximately 4.7 km south-west) is visible from properties to the west of the settlement where they appear as full turbines on the skyline in the distance and would appear partially in front of the Proposed Development. The operational Tirgwynt Wind Farm (approximately 8.3 km west) is also visible on the skyline in the distance. No other operational and consented wind farms would be visible due to intervening landform. The magnitude of change is judged to be <i>Very Low</i>. The combined cumulative effect would range from Moderate and Not Significant (western part of the settlement due to the Proposed Development) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The application Esgair Cwmowen Wind Farm (approximately 7.5 km west) would be visible in the distance and on the skyline in combination with the operational Tirgwynt Wind Farm from properties to the west of the settlement. The scoping

Settlement	Assessment
	Llyn Lort Wind Farm (approximately 7.2 km north-west) would be visible primarily from properties to the west and the northern edge of the settlement where turbines would appear on the skyline but would be filtered or screened from the majority of the properties by intervening foreground vegetation. No other application wind farms would be visible due to intervening landform. The magnitude of change is judged to be <i>Medium-Low</i> . The combined cumulative effect would range from Major to Moderate and Significant (western and northern parts of the settlement due to the Llyn Lort) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct and adverse.
11) Dolfach	Dolfach is a small rural settlement located approximately 8.4 km north-west of the closest turbine (T7) of the Proposed Development. It is compact with the A470 running in a south-east to north-west direction. The village is sited in a valley with steeply sided hills to the north and south and the Afon Iaen located to the southern boundary of the settlement. Properties are positioned along the A470 orientated in a north-east / south-west direction and off a minor road north of the A470. The village is well vegetated with tree planting located within the curtilage of properties and there are mature belts surrounding the village along the river corridor and on the surrounding hillsides. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 1-3 blades from properties located to the south of the A470 and 4-6 blades / 1-3 hubs for a farm located to the south-western extents of the village. In reality, there would be no visibility of the Proposed Development due to screening provided by intervening woodland. The magnitude of change would therefore be <i>Zero</i> and the level of effect would be <i>No View</i>. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1 & 2)</u> Given there is <i>No View</i> of the Proposed Development, there would be no cumulative effects.
12) Tregynon	Tregynon is a large village located approximately 8 km distance east of the closest turbine (T1) of the Proposed Development. The village is relatively compact with the B4389 running through the centre in a north / north-east to south / south-west direction changing to an east-west direction in the southern part of the settlement. A minor road crosses in a west-east direction in the northern part of the settlement. Small residential roads spur off these main roads in several directions with properties orientated along the roads. The village is situated in a valley surrounded by low hills and the Bechan Brook is located to the south of the settlement. In the centre of the village is a community centre, playground and a school. The village is surrounded by pastoral fields with hedgerow boundaries and linear belts of trees. The village is well vegetated with linear belts of mature tree planting, roadside hedges with tree and garden vegetation which limits visibility of the surrounding hillsides. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 10-11 blades / 4-6 hubs to the far south of the settlement with between 4-6 blades / 1-3 hubs in the central and eastern parts of the settlement reducing to 1-3 blades further to the north. In reality, there would be no visibility along the north-western part of the settlement due to intervening landform. Foreground tree planting to the west of the B4389 would screen views from properties located on the southern edge of the settlement. From within the

Settlement	Assessment
	central and eastern parts of the settlement and intervening properties would screen the Proposed Development. There may be views of the upper parts of T1, T2, T3 and T5 mainly from the curtilage of properties in the western part of the settlement (Tan-y-Llan) in the winter months with intervening vegetation further west would likely screen views in the summer months. Access tracks and ancillary infrastructure would be screened by intervening landform. The magnitude of effect is judged to be <i>Very Low</i>. The level of effect of the Proposed Development on views from the settlement would range from Minor and Not Significant to No View. The nature of these effects would be long-term (reversible), direct and adverse to neutral. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> There would no operational or consented wind farms visible from this settlement due to intervening landform. Therefore, there would be no cumulative effects. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> There would no application or scoping wind farms visible from this settlement due to intervening landform. Therefore, there would be no cumulative effects
13) Llandinam	Llandinam is a large village located approximately 9 km south of the closest turbine (T1) of the Proposed Development. The village is quite spread out with the A470 positioned along its western edge. The settlement is sited within a valley with steeply side hills to the east and west and with the River Severn located to the west. Properties which follow the route of the A470 are orientated in an east-west direction. Minor roads spur off the A470 to other parts of the settlement where properties are orientated in both an east-west and north-south direction. To the far north of the settlement there are large farm buildings and towards the centre of the village there is a primary school, play area, village hall and two churches. The village and surrounding landscape are well vegetated with roadside planting along the A470, mature woodland planting within the village particularly around the churches, mature woodland planting on the edges of the village within fields and along the river corridor and further mixed woodland plantations on the hillsides. The vegetation limits views within the village and out to the surrounding landscape. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2-7.5 and 7.10) indicate theoretical visibility of the Proposed Development of between 7-9 turbines along the length of the village with 10-11 towards the eastern areas of the settlement. The Proposed Development would be viewed beyond a ridgeline in the distance with the lower parts of the towers screened to varying degrees. Towards the far north of the village there would be visibility of the upper parts of T1-T4 and T9-T11 on the skyline with the hubs of T3, T4 likely screened by woodland on the hillside. There is the potential for visibility of all turbines for a small number of properties located off the minor road towards the eastern edge of the central part of the village. The turbines would be seen in the distance on the hillside with some hillside woodland planting potentially screening/ partially screening some of the turbines. Within the remaining areas of the settlement the Proposed Development would be screened by intervening built form and woodland planting. Access tracks and ancillary infrastructure would be screened by intervening landform. The magnitude of change would be <i>Low</i> to <i>Zero</i>. The level of effect of the Proposed Development on views from the settlement would range from Moderate and Not Significant to No View. The effect would be not significant due to the overall limited extent of visibility of the Proposed Development within the settlement due to intervening landform and

Settlement	Assessment
	vegetation. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> The blade tips of operational Tirgwynt Wind Farm (approximately 11.7 km north-north-west) and operational Mynydd Clogau Wind Farms (approximately 9.88 km north) are not visible due to intervening distance and vegetation. The consented Carno III Wind Farm (approximately 10.7 km north-west) would not visible due to screening from vegetation. All other operational and consented wind farms would be screened by landform. The magnitude of change would be <i>Zero</i> therefore, there would be no cumulative effects. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The blade tips of application Esgair Cwmowen Wind Farm (approximately 11.2 km north-north-east) would not be visible due to intervening distance and vegetation. The application Rhiwlas Energy Park (approximately 12.7 km south-west) would not be visible due to intervening vegetation. All other application and scoping wind farms would be screened by landform. The magnitude of change would be <i>Zero</i> therefore, there would be no cumulative effects.

ASSESSMENT OF VISUAL EFFECTS: PROMOTED RECREATIONAL ROUTES

The visual assessment has considered the potential visual effects likely to be experienced by people (walkers / cyclists / horse riders / and others) on recreational routes overlapped by the blade tip ZTV and is set out in

7.10.19. Table 7-21

7.10.20. The recreational routes in this section include the promoted long-distance walking trails and national cycle routes identified in **Section 7.5**. The users of local Public Rights of Way (PRoWs) are assessed under a separate receptor heading.

7.10.21. Recreational receptors using all of the identified routes have been assessed as being of High sensitivity on account of the High-Medium value as recreational routes, some of which are routed through designated landscapes and the High susceptibility of the people using these routes, mostly walkers and cyclists, whose attention would be focused on the landscape around them. Exceptions would include sections of route that follow existing roads through settlements.

7.10.22. In summary, there would be significant visual effects as a result of the construction, operational and decommissioning phases of the Proposed Development from parts of four long-distance recreational routes as follows:

- NCR 81;
- Cistercian Way (Wales);
- Severn Way; and
- William Morgan Ride.

Table 7-21 - Visual Effects on Views from Promoted Recreational Routes

Recreational Route	Assessment
Sustrans National Cycle Routes (NCRs) within the LVIA Study Area	
NCR 8	The Section of the NCR within the Study Area runs to the north-west and south-south-west of the Proposed Development (circa 27 km - 11.8 km) as shown on Figures 7.7.1 and 7.7.4. <u>Assessment: Proposed Development</u> The route begins to the north-west of the Study Area to the west of Aberllefenni where it proceeds in a southerly direction towards Machynlleth and then runs east towards Dylife (VP 14). There would be no visibility until VP14 (west of Dylife) due to landform. 11 turbines would be visible on the skyline (as illustrated in VP 14) with T5 and T6 appearing as full turbines and the towers of T2, T3 and T11 would be largely screened by landform. Turbines T2 and T3 would appear stacked as would T7 and T9 with overlapping of T8. Parts of the access track associated with T5 and T6 would be visible whilst all remaining infrastructure components screened by intervening landform (<i>Low</i> magnitude). The route continues east to its closest point from the Proposed Development and then heads south towards Staylitle (approximately 12 km distant) continuing through Hafren Forest before heading east towards Llanidloes where it meets NCR 81. There would be no visibility through this section of the route due to intervening landform and forestry. The route continues in a southerly direction where there is no visibility except to the south and east of Bryn Blaen-y-glyn (approximately 17.5 km distant) where up to 11 turbines are theoretically visible in the distance and on the skyline with the lower parts of the towers screened by landform to varying degrees. Further screening of towers is likely due to intervening woodland planting (<i>Very Low</i> magnitude). The magnitude of change would range from <i>Low</i> (area to the west of Dylife) to <i>Very Low</i> (near Bryn Blaen-y-glyn) to <i>Zero</i> due to the intervening screening influence of landform, vegetation and the built environment. The resulting level of effect would range from Moderate and Not Significant to Minor and Not Significant to No View. The effect would be not significant due to the overall limited extent of visibility of the Proposed Development due to intervening landform and vegetation. The nature of these effects would be long-term (reversible), indirect and adverse. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> From the area to the west of Dylife (Viewpoint 14) the operational wind farms of Tirgwynt and Carno I & II located to the north-east are visible on the skyline in the distance and would appear alongside the Proposed Development (<i>Low</i> magnitude). The operational Garreg Lwyd and Llandinam Wind Farms located to the south-east are visible in the far distance on a clear day (<i>Very Low</i> magnitude). Bryn Blaen and Bryn Titli operational wind farms located to the south-east are visible in the distance with blades and some hubs visible on the skyline (<i>Very Low</i> magnitude). The blade tips of operational Cefn Croes Wind Farm located to the south are screened by intervening distance and vegetation. The consented Carno III Wind Farm located to the east would be visible in the mid-distance appearing larger than existing wind farms in the view and partially on the skyline over a small Horizontal Field of View (HFOV) (<i>Medium</i> magnitude). The consented Garn Fach and Llandinam Repowering Wind Farms located to the south-east would be visible in the far distance on a clear day (<i>Very Low</i> magnitude). To the south and east of Bryn Blaen-y-glyn the operational Bryn Blaen Wind Farm is visible behind a ridgeline in wider views to the west. The upper parts of some of the turbines visible on the skyline in relatively close distance views (<i>Medium</i> magnitude).

Recreational Route	Assessment
	The magnitude of change is judged to range from <i>Medium</i> (near Bryn Blaen-y-glyn due to Bryn Blaen Wind Farm and west of Dylife due to Carno III) to <i>Zero</i>. The combined cumulative effect would range from Major and Significant (near Bryn Blaen-y-glyn due to Bryn Blaen and west of Dylife due to Carno III) to <i>No View</i>. The additional effect of the Proposed Development would remain as assessed above. The nature of these effects would be long-term (reversible) direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> From the area to the west of Dylife (Viewpoint 14) the application Esgair Cwmowen application Wind Farm located to the north-east would be visible in the far distance and located behind Carno II (<i>Very Low</i> magnitude). The application wind farms of Banc Du Energy Park and Rhiwlas Energy Park located to the south-east would be visible on the skyline in the distance (<i>Low</i> magnitude). The scoping Llyn Lort Wind Farm located to the north-east would appear alongside Tirgwynt Wind Farm and would largely be screened by intervening landform and coniferous woodland (<i>Very Low</i> magnitude). To the south and east of Bryn Blaen-y-glyn there may be visibility of the upper parts of Esgair Cwmowen Wind Farm and Llyn Lort in conjunction and alongside the Proposed Development where intervening vegetation does not screen the turbines (<i>Very Low</i> magnitude). In wider views to the west there would be visibility of the upper parts of Banc Du Energy Park in close distance views on the skyline in conjunction with the operational Bryn Blaen (<i>High-medium</i> magnitude) and to the south there would be close up views of the upper parts of some of the turbines within Rhiwlas Energy Park with some coniferous tree planting providing some screening (<i>Medium</i> magnitude). The magnitude of change is judged to range from <i>Medium-High</i> (near Bryn Blaen-y-glyn due to Banc Du Energy Park and to a lesser extent Rhiwlas Energy Park) to <i>Low</i> (Area to the west of Dylife) to <i>Zero</i>. The combined cumulative effect would range from Substantial to Major and Significant (near Bryn Blaen-y-glyn due to Banc Du Energy Park and to a lesser degree Bryn Blaen and Rhiwlas Energy Park and west of Dylife due to Carno III) to <i>No View</i>. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse.
NCR 81	The Section of the NCR within the Study Area runs to the south-south-west of the Proposed Development to the south of Llanidloes to north-east towards Welshpool (circa 6 km - 27 km distant) as shown on Figures 7.7.2 and 7.7.3. <u>Assessment: Proposed Development</u> From Cwmbelan to Llanidloes there would be theoretical visibility of up to 11 turbines for a short section the route. The turbines would be positioned beyond a ridgeline with the upper sections visible on the skyline, however due to roadside and vegetation within the surrounding landscape along this section of the route it is likely that the Proposed Development would be screened. From Llanidloes the route runs in a north-easterly direction towards Caersws. Due to landform, there would be intermittent visibility along this section of the route. The Proposed Development (as illustrated in Viewpoint 10, approximately 11.3 km distant) would be visible for a short section of the route where turbines would be visible on the skyline with landform screening the towers to various degrees. Foreground vegetation would filter views of the hubs of T2, T9 and would largely screen T8 particularly in the summer months. There would also be some filtering of the tower and blades of T5 and T9 (<i>Low</i> magnitude). There is a section of the route to the north of Cefn Carnedd where up to 10-11 turbines would be theoretically visible on the skyline, with some visible as blades (<i>Medium-Low</i> magnitude). As the route approaches to the west of Caersws (as illustrated in

Recreational Route	Assessment
	Viewpoint 6, approximately 6.2 km) visibility would reduce to four turbines with T1 appearing as an outlying blade and T5, T6 and T7 visible against the skyline with some filtering of T7 due to intervening vegetation (<i>Low</i> magnitude). South-east of Caersws up to 11 turbines would be visible for a short section of the route on the skyline with some filtering of the turbines due to roadside vegetation. (<i>Low</i> magnitude). Within Newtown the Proposed Development would be screened by built form and there would be no visibility of the Proposed Development for the section of the route between Newtown and Welshpool due to intervening landform. The magnitude of change would range from <i>Medium-Low</i> (Section of the route north of Cefn Carnedd) to <i>Low</i> to <i>Zero</i> due to the intervening screening influence of landform, vegetation and the built environment. The resulting level of effect would range from Major to Moderate and Significant (Section of the route north of Cefn Carnedd) to Moderate and Not Significant to No View. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> Along the section of the route (as illustrated in Viewpoint 10) the blades of operational Tirgwynt Wind Farm located to the north are visible in the distance above the landform and treeline (<i>Very Low</i> magnitude). The operational Bryn Blaen Wind Farm located to the south-west is visible on the skyline in the distance (<i>Very Low</i> magnitude). The blades and hubs of some turbines within the consented Llandinam Repowering Wind Farm located to the south-east would be visible on the skyline with some screened by intervening vegetation (<i>Low</i> magnitude). The blades and some hubs of the consented Carno III Wind Farm located to the north-west would be visible on the skyline in the distance (<i>Low</i> magnitude). The operational Wind Farms of Mynydd Clogau, Llandinam, Bryn Titli, Cefn Croes and the consented Garn Fach would be screened by intervening vegetation, and the blade tips of Carno I & Carno II would be screened by intervening distance. There is a section of the route to the north of Cefn Carnedd where the upper parts of Carno III may be visible in the distance (<i>Very Low</i> magnitude). As the route approaches to the west of Caersws (as illustrated in Viewpoint 6) some turbines within the consented Llandinam Repowering Wind Farm located to the south would possibly be visible in the far distance, with others being screened by intervening built form and vegetation (<i>Very Low</i> magnitude). The operational wind farms of Cefn Croes, Llandinam and the consented wind farms of Llanbrynmair, Carno III and Garn Fach would be screened by intervening vegetation. South-east of Caersws there is no visibility of operational wind farms due to intervening distance. There may be visibility of the upper parts of the consented Carno III in the distance (<i>Very Low</i> magnitude). The magnitude of change is judged to range from <i>Low</i> (Section of the route near Viewpoint 10) to <i>Very Low</i> to <i>Zero</i>. The combined cumulative effect would range from Major to Moderate and Significant (Section of the route north of Cefn Carnedd due to the Proposed Development) to Moderate and Not Significant (Due to Llandinam Repowering Wind Farm, Carno III and the Proposed Development) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> Along the section of the route (as illustrated in Viewpoint 10) some blade tips of application Esgair Cwmowen Wind Farm located to the north may be visible above the

Recreational Route	Assessment
	treeline (<i>Very Low</i> magnitude). Application Banc Du Energy Park Wind Farm located to the south-west would be visible on the skyline with some screening of the towers and blades provided by intervening vegetation (<i>Low</i> magnitude). The application Rhiwlas Energy Park Wind Farm located to the south would be screened by foreground vegetation. To the north of Cefn Carnedd and to the west of Caersws (as illustrated in Viewpoint 6) there would be no application or scoping wind farms visible due to intervening landform and the application Banc Du Wind Farm located to the south-west would be screened by intervening vegetation. South-east of Caersws there may be visibility in the distance and on the skyline of the upper parts of Rhiwlas Energy Park and Banc Du Energy Park to the south-west with the towers screened by landform (<i>Very Low</i> magnitude). The magnitude of change is judged to range from <i>Low</i> (Section of the route near Viewpoint 10) to <i>Very Low</i> to <i>Zero</i>. The combined cumulative effect would range from Major to Moderate and Significant (Section of the route north of Cefn Carnedd due to the Proposed Development) to Moderate and Not Significant (Due to Llandinam Repowering Wind Farm, Carno III, Banc Du Energy Park and the Proposed Development) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), direct and adverse.
National Trails within the LVIA Study Area	
Offa's Dyke Path	The section of the path within the Study Area runs in a north-south direction to the east of the Proposed Development (circa 22 km - 27 km distant) as shown on Figures 7.7.2 and 7.7.3. The trail passes east of Welshpool and heads south through the Vale of Montgomery before passing through the Shropshire Hills towards the eastern extent of the Study Area. <u>Assessment: Proposed Development</u> With reference to the ZTV (Figures 7.7.2 and 7.7.3) theoretical visibility is shown to be along the western edge of Beacon Ring hillfort (north-east of the Proposed Development approximately 26 km distant) including areas of woodland to the north and south towards the settlement of Ffordun. Visibility continues for approximately 2km section across the Vale of Montgomery towards Viewpoint 17 where visibility further south ceases. From the Beacon Ring hillfort, the Proposed Development on a clear day would be visible on the skyline in the far distance and viewed in conjunction with other windfarms. In the areas where the path passes through forestry the view would be screened. Further south towards the settlement of Ffordun the Proposed Development would be visible in the distance on the skyline with the lower parts of the turbines screened by landform and intervening vegetation. Further south in the Vale of Montgomery as illustrated by Viewpoint 17 (approximately 22 km distant) the Proposed Development would be visible as blades with the hub of T11 visible above the horizon and some turbines screened by intervening vegetation. Access tracks and all other infrastructure components would be screened by intervening distance or landform. The magnitude of change would be <i>Very Low</i> in sections of the route where the Proposed Development is visible to <i>Zero</i> due to the intervening screening influence of landform, vegetation and the built environment. The resulting level of effect would range from Minor and Not Significant to No View. The nature of these effects would be long-term (reversible), indirect and neutral.

Recreational Route	Assessment
	<u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> From the Beacon Ring hillfort, the operational wind farms of Garreg Lwyd, Llandinam, Bryn Blaen, Cefn Croes, Mynydd Clogau, Carno I & II, Tirgwynt and the consented schemes of Garn Fach, Llandinam Repowering, Carno III and Llanbrynmair may be visible on a clear day in the far distance, with vegetation likely to screen views of some turbines. Further south along the route near Ffordun the operational schemes of Garreg Lwyd, Carno I & II and the consented Llanbrynmair would be screened by landform. Further south in the Vale of Montgomery (as illustrated by Viewpoint 17) the blade tips of Mynydd Clogau and Tirgwynt would be screened by intervening vegetation. The magnitude of change would be <i>Very Low</i>. The combined cumulative effect would range from Minor and Not Significant to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and neutral. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> From the Beacon Ring hillfort on a clear day the application windfarms of Rhiwlas Energy Park, Banc Du Energy Park, Esgair Cwmowen and the scoping wind farm of Llyn Lort may be visible on a clear day in the far distance, with vegetation likely to screen views of some turbines. Further south along the route near Ffordun the application scheme Rhiwlas Energy Park would be screened by landform. Further south in the Vale of Montgomery as illustrated by Viewpoint 17 the blade tips of Esgair Cwmowen would be screened by vegetation and Banc Du Energy Park would be screened by landform. The magnitude of change would be <i>Very Low</i>. The combined cumulative effect would range from Minor and Not Significant to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and neutral.
Glyndŵr's Way	The section on path within the Study Area (as shown on Figures 7.7.1-7.7.4) ranges from 27 km to the south-east to 7.8 km at its nearest point to the north-west. In the south-east the route runs to the east of Stanky Hill and Black Mountain located on the south-eastern extents of the 27 km Study Area and proceeds north then west past Llanbadarn Fynydd, then south and west towards Abbeycwmhir. From this point the path proceeds in a north-west direction towards Llanidloes and continues in a north-westerly direction towards Staylitttle and then towards Machynlleth on the western extents of the scheme (approximately 26 km distant). From Machynlleth the path proceeds in a north-easterly direction to the north of Llanbrynmair (Viewpoint 11, approximately 11.9 km distant), continuing in a north-easterly direction north of Moelddolwn (Viewpoint 7, approximately 9.2 km distant) passing through Llangafan and north towards Viewpoint 13 (approximately 13.6 km distant). The route continues north and then heads east towards Meifod (Viewpoint 16, approximately 20.3 km distant) where it heads south towards Y Golfa (Viewpoint 15, approximately 18.9 km distant) and ceases just to the south of Welshpool. <u>Assessment: Proposed Development</u> With reference to the ZTV (Figure 7.7.3) theoretical visibility of the Proposed Development is shown to be from Black Mountain (approximately 25 km distant south-east) where the blades of 11 turbines may be visible in the distance where intervening vegetation does not screen the view. There would be no further visibility until Fron Top (approximately 21 km distant) where 11 turbines may be visible in the distance with the upper parts visible on the skyline. There would be no further visibility until the section of path west of Pegwn Bach (approximately 15-16 km) where all 11 turbines would be

Recreational Route	Assessment
	visible on the skyline in the distance. The section of path that runs west towards Moelfre is likely to be screened by woodland vegetation. There would be visibility of up to 11 turbines on the skyline in the area around Newchapel (approximately 14 km distant) but there would be no visibility south of Gorn Hill due to intervening landform and within Llanidloes due to intervening built form and vegetation. (<i>Very Low</i> magnitude). With reference to the ZTV (Figure 7.7.4) theoretical visibility of the Proposed Development is shown for the section of the path to the north-east of Llanidloes (approximately 11.5 km distant), further west including the view above Llyn Clywedog Dam up to 11 turbines would be visible on the skyline in the distance with landform screening the towers to various degrees (<i>Low</i> magnitude). Theoretical visibility near Penycrochen would be limited to blades and hubs with the turbines likely to be screened by intervening woodland to east. Further west from Penycrochen to Machynlleth there would be no visibility of the Proposed Development due to intervening landform. From Machynlleth the route heads north-east where there is no visibility of the Proposed Development (Figure 7.7.1) until the section of the route near Commins Gwalia to Viewpoint 11 (approximately 11.9 km distant). Up to 11 turbines would be visible along this section of the route on the skyline with the lower parts of the towers screened by landform to varying degrees. (<i>Low</i> magnitude). The route continues in a north-easterly direction where there is visibility either side of Cors Fforchog of the upper parts of the 11 turbines. Visibility returns north of Moelddolwn (Viewpoint 7, approximately 9.2 km distant) where 11 turbines would be visible with four visible as blades (<i>Low</i> magnitude). North of Llangadfan (Viewpoint 13, approximately 13.6 km distant) the upper parts of up to 10 turbines would be visible in the distance (<i>Low-Very Low</i> magnitude). North of Viewpoint 13 the route proceeds into area of forestry where there would be no visibility. Upon exiting the forest at Pant Llogel the path heads east where visibility is limited to higher areas of ground including Allt Dolanog (approximately 15 km distant) where the upper parts of the Proposed Development would be seen in the distance on the skyline with some hubs screened by landform. With reference to the ZTV (Figure 7.7.2) as the route continues east there would be no visibility until it reaches the area around Meifod (Viewpoint 16, approximately 20.3 km distant) where the majority of the Proposed Development would be visible as blades. From Meifod the route continues south where there would be intermittent visibility towards Y Golfa (Viewpoint 15, approximately 18.9 km distant) where 11 turbines would appear in the distance and on the skyline with the towers screened by intervening landform. (<i>Very low</i> magnitude). The route ceases in Welshpool where there would be no visibility. The magnitude of change would range from <i>Low</i> (within sections of the route that are located between 9-12 km distant) to <i>Low - Very Low</i> (within sections of the route between 12-14 km) to <i>Very Low</i> (for sections beyond 14 km) to <i>Zero</i> (where landform or intervening vegetation screens the view). The resulting level of effect would range from Moderate and Not Significant (within sections of the route that are located between 9-12 km distant) to Moderate to Minor and Not Significant (within sections of the route between 12-14 km) to Minor and Not Significant (for sections beyond 14 km) to No View. The effects would not be significant due to intervening landform, distance and vegetation filtering views from sections of the route. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> To the south-east (approximately 20 km distant) the route passes in very close proximity to the operational Garreg Lwyd Wind Farm which may be visible in conjunction with the Proposed Development located in the far distance (<i>High</i>

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	magnitude). Other wind farms visible in the far distance in conjunction with the Proposed Development are the operational Llandinam Wind Farm and the consented Llandinam Repowering, and Garn Fach. (<i>Very Low</i> magnitude). As the route passes to the south of the Proposed Development (approximately 15 km distant) it passes relatively close to the operational Llandinam (<i>Medium</i> magnitude) and the consented Llandinam Repowering (<i>High-medium</i> magnitude) with the majority of turbines appearing beyond landform with some visible on the skyline with the towers screened to varying degrees. Other operational wind farms theoretically visible include Mynydd Clogau, Tirgwynt, Cemmaes, Carno I & II and the consented Llanbrynmair and Carno III all visible on the skyline in the far distance (<i>Very Low</i> magnitude). As the route passes further to the south-west of the Proposed Development the route passes within approximately 2.7km of the consented Carno III which would be sited within the woodland, with the upper parts prominent on the skyline, however due to woodland located to the east the Proposed Development would likely be screened from this location. Along sections of the route located to the north-west of the Proposed Development there would be views of the operational Carno I & II and the consented Carno III in the distance (<i>Very Low</i> magnitude). To the north-west the route passes in close proximity to the consented Llanbrynmair Wind Farm where turbines would be visibly prominent in the foreground, on the skyline with some screening of the towers by intervening landform. (<i>High</i> magnitude). Other wind farms that are theoretically visible in conjunction with the Proposed Development include the operational Tirgwynt Wind Farm (<i>Low</i> magnitude) with the operational Garreg Llwyd, Llandinam and the consented Llandinam Repowering and Garn Fach visible further in the distance (<i>Very Low</i> magnitude). To the north of the Proposed Development the operational Tirgwynt would be visible alongside the Proposed Development (<i>Low</i> magnitude) with Carno I & II and consented Carno III visible further in the distance on the skyline (<i>Very Low</i>). The consented Llanbrynmair would also be visible in wider views (<i>Medium-Low</i> magnitude). Along sections of the route located to the north-east of the Proposed Development there would be views of Tirgwynt Wind Farm, Carno I&II and on clear days operational wind farms of Cefn Croes, Bryn Blaen, Bryn Tilti, Llandinam and the consented Carno III, Llandinam Repowering and Garn Fach may be visible in the far distance (<i>Very Low</i> magnitude). The magnitude of change is judged to range from <i>High</i> magnitude where the route passes within close proximity to operational and consented schemes (Garreg Lwyd to south-east and Llanbrynmair to the north-west) to <i>High-Medium</i> to <i>Medium</i> (where the route passes close to the operational Llandinam and consented Llandinam Repowering to the south) to <i>Low</i> from parts of the route to the north-west (Tirgwynt) to <i>Very Low</i> to <i>Zero</i> for the remaining sections of the route. The combined cumulative effect would range from Substantial and Significant (Garreg Lwyd and Llanbrynmair) to Substantial to Major and Significant (Llandinam and Llandinam Repowering) to Moderate and Not Significant (Proposed Development and Tirgwynt) to Minor and Not Significant to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> From sections of the route to the south-east, south and south-west (approximately 13.3 km distant) of the Proposed Development, Esgair Cwmowen application Wind Farm and Llyn Lort scoping Wind Farm would theoretically be visible in the distance with the

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	upper parts of the turbines visible on the skyline in conjunction with the Proposed Development. (<i>Low to Very Low</i> magnitude). From sections of the route to the north-west Esgair Cwmowen and Llyn Lort would be visible in conjunction with the Proposed Development in the distance. Banc Du Energy Park would also be theoretically visible in wider views with the upper parts of some turbines visible on the skyline. (<i>Very Low</i> magnitude). The route passes within approximately 4.5 km north-west of Llyn Lort where the turbines would be visible over a large horizontal field of view, all with hubs and many of the towers visible (<i>High-Medium</i> magnitude reducing to <i>Medium</i> further north). Esgair Cwmowen would also be visible in conjunction with the Proposed Development appearing behind the ridgeline with some visible only as blades and the towers screened to varying degrees. (<i>Very Low</i> magnitude) On the section of the route to the north-east Banc Du Energy Park and Rhiwlas Energy Park located to the south-west may be visible in the far distance on clear days and Esgair Cwmowen would be visible on the skyline (<i>Very Low</i> magnitude). Llyn Lort would also be visible on the skyline in conjunction with the Proposed Development (<i>Low</i> magnitude). The magnitude of change is judged to range from <i>High-Medium</i> (towards the sections of the route closest to Llyn Lort) to <i>Medium</i> (reducing with distance from Llyn Lort) to <i>Low</i> (Llyn Lort) to <i>Very Low</i> to <i>Zero</i>. The combined cumulative effect would range from Substantial to Major and Significant (towards the sections of the route closest to Llyn Lort) to Major Significant (reducing with distance from Llyn Lort) to Moderate and Not Significant (Proposed Development and Llyn Lort) to Minor and Not Significant to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse.
Other promoted recreational routes within 10 km of the proposed turbines	
■ Cistercian Way (Wales)	The part of the route within the 10 km Study Area is located to the south-east to north-east of the Proposed Development. It travels in a northerly direction from Abbeycwmhir (10 km distant) until it reaches the Site where it passes directly to the east of T1. From this point the route heads in a north-easterly direction. <u>Assessment: Proposed Development</u> With reference to ZTV (Figure 7.7.3) theoretically visibility of the Proposed Development is shown to the south to the east of Moel Iart (approximately 10 km distant) where there would be visibility of 11 turbines, with 10 hubs visible on the skyline. As the route progresses further north towards Caersws landform would increasingly screen the lower parts of the turbines and the total number of turbines visible. There are also trees adjacent to some sections of the route that would filter views towards the Proposed Development (<i>Low</i> magnitude). As the route progresses into Caersws built form would screen views towards the Proposed Development. North of Caersws only two blades would be visible due to intervening landform and the section of the route near Llanwnnog there would be no visibility. Theoretical visibility returns to the south-west of Ddified where 11 turbines would be visible on the skyline with some turbines visible as full turbines and others appearing behind landform with the towers screened to varying degrees. The route proceeds further north where it passes immediately east of T1 where turbines would be dominant in foreground views and there would be views of ancillary infrastructure such as compounds, control building, substation and access tracks (<i>High</i> magnitude). Visibility towards the Proposed Development continues as the route progresses north-east where all 11 turbines would remain visible along with ancillary infrastructure.

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	(<i>High-Medium</i> magnitude). As the route progresses further north-east and heads towards the settlement of Adfa (circa 5 km distant) the turbines would appear behind landform with some visible as blades. Planting alongside the route and within fields may also help to filter views of the Proposed Development (<i>Medium</i> magnitude). As the route progresses east of Llanllugan there would be visibility of 11 turbines. Some turbines would be visible as blades in areas of lower ground with increased visibility of the turbines on higher ground where access tracks and ancillary infrastructure may also be visible. There may be some screening provided by adjacent hedgerows and trees within the landscape that may help to filter views. (<i>Medium-Low</i> magnitude). There would be no visibility in the Afon Rhiw valley due to intervening landform. Upon exiting the valley (approximately 9 km) the Proposed Development would be visible on the skyline with landform screening the lower parts of the turbines with four turbines visible as blades (<i>Low</i> magnitude). The magnitude of change is judged to range from <i>High</i> (within approximately 2 km of the Proposed Development) resulting in a Substantial and Significant level of effect to <i>High-Medium</i> (within 2-4 km of the route) resulting in a Substantial to Major and Significant level of effect to <i>Medium</i> (circa 4-6 km north-east) resulting in a Major and Significant level of effect to <i>Medium-Low</i> (7-8 km north-east towards Llanllugan) resulting in a Major to Moderate and Significant level of effect to <i>Low</i> (beyond 9 km north-east and south of Caersws) resulting in a Moderate and Not Significant level of effect to <i>Zero</i> and No View (where intervening landform or vegetation screens views). <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> Towards the south-eastern section of the route near Moel Iart (approximately 10 km distant) there would be theoretical visibility of the operational Tirgwynt Wind Farm in conjunction with the Proposed Development, visible in distant views with the upper parts of the turbines visible on the skyline. In wider views the upper parts of operational wind farms of Mynydd Clogau, Cemmaes, Carno I & II and the consented Llanbrynmair and Carno III may be visible where intervening vegetation does not screen the view (<i>Very Low magnitude</i>). As the route progresses further north-west in the direction of Caersws, landform would increasingly screen operational and consented wind farms from view. The upper parts of Carno I & II and the consented Carno III would potentially be visible in the distance to the north-west and from sections of the route on higher ground. The upper parts of operational wind farms of Cefn Croes, Bryn Blaen and Bryn Titli would be visible in wider views to the south-east (<i>Very Low</i> magnitude). As the route continues north-west from Caersws towards Ddified the upper parts of Tirgwynt Wind Farm would be seen in conjunction with the Proposed Development with Cemmaes, Carno I & II and Carno III located to the west within the same field of view. Cefn Croes and Bryn Blaen may also be visible in wider views to the south-west and the operational Llandinam and the consented wind farms of Llandinam Repowering and Garn Fach may be visible in the distance to the south (<i>Low</i> magnitude). As the route passes to the east of T1 the Proposed Development would be visible in conjunction with Tirgwynt Wind Farm in relatively close distance views with some landform screening the lower parts on the turbines (<i>Medium</i> magnitude) other operational wind farms mentioned above. As the route continues north-east it passes close to Mynydd Clogau where the turbines are prominent with blades on the skyline and would be viewed in conjunction with the Proposed Development along with Tirgwynt, and further north-west Cemmaes and the consented Llanbrynmair and further operational and consented schemes as mentioned above in wider views. (<i>High</i> magnitude due to Mynydd Clogau).

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	As the route proceeds further north-east away from the Proposed Development and towards Adfa there would be continued views of Mynydd Clogau in conjunction with the Proposed Development and Tirgwynt alongside. Landform would now screen operational and consented schemes in wider views. (<i>Medium</i> magnitude). Further to the north-east past Llanllugan Mynydd Clogau would be visible in conjunction with the Proposed Development and Tirgwynt alongside but would be smaller in scale (<i>Low</i> magnitude). Further to the north-east (9-10 km distant) Mynydd Clogau and Tirgwynt would continue to be visible (<i>Low</i> magnitude) with potentially Llandinam, Llandinam Repowering and Garn Fach visible in the distance within wider views. The magnitude of change is judged to range from <i>High</i> (sections of the route close to Mynydd Clogau) to <i>Medium</i> (sections of the route closest to Tirgwynt) to <i>Low</i> (remaining sections of the route to the north of Caersws) to <i>Very Low</i> (sections of the route south of Caersws) to <i>Zero</i>. The combined level of effect would range from Substantial and Significant (within approximately 2 km of the Proposed Development and sections closest to Mynydd Clogau) to Substantial to Major and Significant (within 2-4 km of the route due to the Proposed Development and Mynydd Clogau) to Major and Significant (circa 4-6 km north-east due to Proposed Development and Mynydd Clogau) to Major to Moderate and Significant (7-8 km north-east towards Llanllugan due to the Proposed Development) and Moderate and Not Significant (beyond 9 km north-east and south of Caersws) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> Towards the south-eastern section of the route near Moel Iart (approximately 10 km distant) there would be theoretical visibility of the application Esgair Cwmowen Wind Farm and Llyn Lort scoping Wind Farm in conjunction with the Proposed Development visible in distant views with the upper parts visible on the skyline. (<i>Very Low</i> magnitude). As the route progresses a little further north only the blade tips of Esgair Cwmowen and Llyn Lort would be visible due to landform. The application wind farms of Banc Du Energy Park and Rhiwlas Energy Park are theoretically visible on the skyline in wider distant views to the south-west for a short section of the route. Continuing north on the approach to Caersws there would only be the upper parts of Rhiwlas Energy Park visible with the towers and many of the hubs screened by landform. (<i>Very Low</i> magnitude). As the route continues north-west from Caersws towards Ddified and Bwlch y Garreg the upper parts of Esgair Cwmowen and Llyn Lort would be seen in conjunction with the Proposed Development with the majority of the turbines screened by landform from several sections of the route. Banc Du Energy Park and Rhiwlas Energy Park would be visible in wider views to the south-south-west. (<i>Low</i> magnitude). As the route passes to the east of T1 the Proposed Development would be visible in conjunction with Esgair Cwmowen and Llyn Lort in relatively close distance views with the majority of hubs visible on the skyline and towers screened to varying degrees. Banc Du Energy Park and Rhiwlas Energy Park would continue to be visible in wider views (<i>High-Medium</i> magnitude). As the route continues north-east towards Adfa views of Esgair Cwmowen and Llyn Lort would continue alongside the Proposed Development with the turbines visible over a large horizontal field of view with more of the towers visible due to less screening by landform and would be seen behind the operational Mynydd Clogau. Banc Du Energy Park and Rhiwlas Energy Park would continue to be visible in wider views. (<i>High-Medium</i> magnitude due to Llyn Lort).

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	Further to the north-east past Llanllugan, Esgair Cwmowen and Llyn Lort would be visible with half of Llyn Lort visible as blades due to intervening landform and others appearing as towers and hubs on the skyline. Esgair Cwmowen would continue to be visible on the skyline but would appear smaller in scale (<i>Medium - Low</i> magnitude). Further to the north-east (9-10 km distant) Esgair Cwmowen and Llyn Lort would continue to be visible. From some sections of the route Llyn Lort would be more visible on the skyline due to less screening by landform (<i>Medium</i> magnitude due to Llyn Lort) The magnitude of change is judged to range from <i>High-Medium</i> (To the east of the Proposed Development and north-east towards Adfa due to Llyn Lort) to <i>Medium</i> (Further north-east between 5-10 km due to Llyn Lort) to <i>Low</i> (sections of the route to the north of Caersws towards Ddified and Bwlch y Garreg) to <i>Very Low</i> (sections of the route south of Caersws) to <i>Zero</i>. The combined level of effect would range from Substantial and Significant (Within 2 km of the Proposed Development and sections closest to Mynydd Clogau) to Substantial to Major and Significant (within 2-4 km of the route due to the Proposed Development and Mynydd Clogau, Llyn Lort and to a lesser extent Tirgwynt and Esgair Cwmowen extending to 5 km due to Llyn Lort) to Major and Significant (5–10 km north-east due to Llyn Lort) and Moderate and Not Significant (south of Caersws) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse.
Severn Way	The part of the route within the 10 km Study Area is located to the south-east of the Proposed Development. West of Llandinam (10 km distant) the route travels in a northerly direction towards Caersws (Viewpoint 6) where it then heads east towards Rhydlydan and then north which is the closest section of the route at approximately 5 km distant. The route continues east (Viewpoint 5) before heading south-east towards the 10 km Study Area. <u>Assessment: Proposed Development</u> With reference to ZTV (Figure 7.7.3) theoretically visibility of the Proposed Development is shown to the south on the hillside to the west of Llandinam where up to 11 turbines would be visible on the skyline, however woodland planting in the foreground would likely provide screening from this part of the route. (<i>Low</i> magnitude). As the route continues further north there would be no visibility of the Proposed Development for a short section of the route due to intervening landform. Visibility of the Proposed Development would return to the north of Cefn Carnedd (approximately 7 km distant) where 10 turbines would be visible on the skyline with the lower parts of the towers screened by landform and four turbines visible as blades (<i>Medium-Low</i>). Further north, to the west of Caersws (as illustrated in Viewpoint 6, approximately 6.1 km distant) four turbines would be visible on the skyline with one visible as a blade (<i>Low</i> magnitude). Built form would limit views within Caersws settlement. For the section of the route east of Caersws and north of Rhydlydan the Proposed Development would be visible on the skyline as blades with only T1 visible as a hub. As the route progresses south of Bwlch-y-ffridd (as illustrated on Viewpoint 5), 11 turbines would be visible on the skyline, three visible as blades and three visible as blade tips. The towers would be largely screened by landform (<i>Medium-Low</i> magnitude). The route continues south-east heading towards Newtown and to the extents of 10 km Study Area where visibility of the Proposed Development is intermittent due to landform and woodland planting. The Proposed Development would be visible from the southern extent where 11 turbines would theoretically be visible on the skyline with the towers screened to varying degrees. Vegetation within the landscape may filter views towards the Proposed Development (<i>Low</i> magnitude).

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	The magnitude of change is judged to range from <i>Medium-Low</i> (sections of the route north of Cefn Carnedd, east of Caersws and north of Rhydlydan) resulting in a Major to Moderate and Significant level of effect to <i>Low</i> magnitude (sections of the route west of Llandinam, west of Caersws and south-east heading towards Newtown) resulting in a Moderate and Not Significant level of effect (due to intervening landform and vegetation which screens / partially screens some of the turbines or lower parts of the towers) to <i>Zero</i> and No View. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> With reference to ZTV (Figure 7.7.3) visibility of the blade tips of operational Wind Farms of Tirgwynt and Mynydd Clogau is shown to the south on the hillside to the west of Llandinam, however these would likely to be screened by intervening distance and vegetation. The operational Carno I & II and the consented Carno III Wind Farm may be visible on the skyline in the distance to the south-west and in wider views the operational Cefn Croes, Bryn Blaen and Llandinam and the consented wind farms of Llandinam Repowering and Garn Fach may be visible in the distance to the south where intervening vegetation does not screen the view (<i>Low</i> due Llandinam Repowering). To the north of Cefn Carnedd (approximately 7 km distant) and west of Caersws (as illustrated in Viewpoint 6, 6.1 km distant) the blade tips of the operational Cefn Croes Wind Farm located to the south-west is not visible due to intervening vegetation. The operational Llandinam Wind Farm located to the south is not visible due to intervening distance, vegetation and built form. The tips of the consented Llanbrynmair Wind Farm located to the north-west would be screened by intervening vegetation as would the consented wind farms of Carno III located to the west and Garn Fach located to the south. Some turbines within the consented Llandinam Repowering Wind Farm located to the south would possibly be visible in the far distance, with others being screened by intervening built form and vegetation (<i>Very Low</i> magnitude). For the section of the route east of Caersws and north of Rhydlydan and south of Bwlch-y-ffridd (as illustrated on Viewpoint 5), the operational Cefn Croes Wind Farm is visible in the far distance on the skyline to the south-west of the viewpoint. Bryn Blaen Wind Farm is screened by intervening vegetation. Some turbines within Bryn Titli Wind Farm are visible on the skyline in the far distance to the south-west and Llandinam Wind Farm located to the south south-west is screened by intervening vegetation. The consented wind farms of Garn Fach and Llandinam Repowering would be screened by vegetation (<i>Very Low</i> magnitude). Further south-east towards the 10 km Study Area there may be views of operational turbines Carno I & II, Cefn Croes and the upper parts of the consented Llandinam Repowering and Garn Fach in the distance on the skyline. (<i>Very Low</i> magnitude). The magnitude of change is judged to range from <i>Low</i> to <i>Very Low</i>. The combined cumulative effect would range from Major to Moderate and Significant level of effect (Due to the Proposed Development) to a Moderate and Not Significant level of effect (due to intervening landform and vegetation which screens/ partially screens some of the turbines or lower parts of the towers) to <i>Zero</i> and No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> With reference to ZTV (Figure 7.7.3) visibility of the blades of application Esgair Cwmowen Wind Farm and the upper parts of scoping Llyn Lort Wind Farm is shown to the south on the hillside to the west of Llandinam, however due to intervening

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	foreground woodland planting they are likely to be screened. The upper parts of the application Banc Du Energy Park and the blades of Rhiwlas Energy Park located in wider views to the south-west may be visible in the distance where intervening vegetation does not screen the view (<i>Very Low</i> magnitude). To the north of Cefn Carnedd (approximately 7 km distant) and west of Caersws (As illustrated in Viewpoint 6, approximately 6.2 km distant) there would be no application or scoping schemes visible due to intervening landform and Banc Du Energy Park would be screened by intervening vegetation. For the section of the route east of Caersws and north of Rhydlydan and south of Bwlch-y-ffridd (as illustrated on Viewpoint 5) some turbines within the application wind farms of Banc Du Energy Park and Rhiwlas Energy Park would be visible on the skyline to the south-west whereas others would be screened by intervening vegetation (<i>Very Low</i> magnitude). Further south-east towards the 10 km Study Area there may be distant views of some turbines within Llyn Lort scoping wind farm with some that would be visible as blades and others as hubs and towers. The upper parts of Banc Du Energy Park may also be visible in the distance. (<i>Very low</i> magnitude). The magnitude of change is judged to be <i>Very Low</i>. The combined cumulative effect would range from Major to Moderate and Significant level of effect (Due to the Proposed Development) to a Moderate and Not Significant level of effect (due to intervening landform and vegetation which screens / partially screens some of the turbines or lower parts of the towers) to <i>Zero</i> and No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse.
William Morgan Ride	The part of the route within the 10 km Study Area is located to the west and north of the Proposed Development. <u>Assessment: Proposed Development</u> The section of the route located to the west of Mynydd Esgair has no ZTV coverage due to intervening landform (as illustrated on Figure 7.7.2). For a short section to the west of Mynydd Esgair (approximately 9 km distant) there would be visibility of 11 turbines which would appear behind a ridgeline with the towers screened to varying degrees and T11 appearing as a blade (<i>Low</i> magnitude). As the route heads further east, there is a short section that has no visibility until it reaches the point to the south of Ffridd yr Ystrad where between 10-11 turbines would be visible beyond a ridgeline. As the route progresses further to the east T11 would no longer be visible and turbines T1 and T2 would only be visible as blades. The route continues east towards the A470 and Talerddig (as represented by Viewpoint 4, approximately 6.2 km distant) where the Proposed Development would be visible on the skyline, behind a ridgeline with the towers screened to varying degrees. T10 and the blade tips of T1 and T2 would be screened by intervening vegetation and T11 would be screened by intervening landform. (<i>Medium-Low</i> magnitude). To the north of Talerddig due to intervening landform and vegetation it is likely that only the upper parts of T5 and T6 would be visible for a short section of this route (<i>Low</i> magnitude). Approximately 2 km north-north-east of Talerddig (approximately 6 km distant from Proposed Development) there is a short section of the route where there would be 11 turbines visible on the skyline with the towers screened by landform to varying degrees with T11 appearing as a blade (<i>Medium-Low</i> magnitude). Visibility of the Proposed Development would then cease due to intervening landform until it reaches the southern slopes of Moel Ddolwen where visibility of the turbines would be limited to up to six blades/ blade tips (<i>Very Low</i> magnitude). The magnitude of change is judged to range from <i>Medium-Low</i> resulting in a Major to Moderate and Significant level of effect to <i>Low</i> magnitude resulting in a Moderate

Recreational Route	Assessment
	and Not Significant level of effect (due to intervening landform and vegetation which screens / partially screens some of the turbines or lower parts of the towers) to <i>Very Low</i> resulting in a Minor and Not Significant level of effect to <i>Zero</i> and No View. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> For a short section to the west of Mynydd Esgair (approximately 9 km distant) there would be no visibility of operational or consented wind farms due to intervening landform. The section of the route to the south of Ffridd yr Ystrad passes within approximately 0.6 km of operational Carno II Wind Farm where some turbines are visible behind a ridgeline with the towers screened to varying degrees and with some turbines only visible as blades. From this part of the route the operational wind farm of Tirgwynt would be visible alongside Proposed Development appearing on the skyline in the distance. The consented Llanbrynmair would be visible in the distance in wider views to the north where it would appear on the skyline. (<i>High-medium</i> magnitude due to Carno II). As illustrated on Viewpoint 4 the blades of two turbines within the operational Tirgwynt Wind Farm are visible to the east above intervening vegetation. The operational Carno II Wind Farm is visible on the skyline to the south-west. The upper parts of two turbines within Cemmaes Wind Farm are visible in the distant valley to the north-west. The consented Llanbrynmair Wind Farm would be visible on the skyline to the north of the viewpoint. Intervening vegetation would filter views towards the lower parts of the turbines and would screen the blade/ blade tips of others. The operation Llandinam and consented wind farms of Garn Fach and Llandinam Repowering located to the south-east would be screened by intervening vegetation (<i>Medium - Low</i> due to Carno II). Approximately 2 km north-north-east of Talerddig the operational Tirgwynt would be visible alongside the Proposed Development and Carno I & II and blades of consented Carno III in wider views to the south-west (<i>Medium- Low</i> magnitude due to Tirgwynt). The consented Llanbrynmair is located within approximately 1 km to the north where turbines would be visible on the skyline, however given the intervening woodland planting there would be screening that may limit the visibility of the turbine to blades and potentially some hubs (<i>Medium</i> magnitude). On the southern slopes of Moel Ddolwen the upper parts of Tirgwynt would be visible in conjunction with the blades of the Proposed Development and the consented Llanbrynmair would be visible in views to the south-west and west where intervening woodland vegetation does not screen the Proposed Development (<i>Medium</i> magnitude). The magnitude of change is judged to range from <i>High - Medium</i> (where the route passes close to Carno II) to <i>Medium</i> (Where the route passes close to Llynbrynmair) to <i>Medium - Low</i> for the remainder of the route to <i>Zero</i>. The combined cumulative effect would range from Substantial to Major and Significant level of effect (Due to Carno II) to Major and Significant level of effect (Due to Llynbrynmair) to Major to Moderate and Significant level of effect (Proposed Development, Carno II and Tirgwynt) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> For a short section to the west of Mynydd Esgair (approximately 9 km distant) there would be no visibility of any application or scoping wind farms due to intervening landform. The section of the route to the south of Ffridd yr Ystrad the upper parts of application Esgair Cwmowen and the scoping Llyn Lort would be visible on the skyline

Recreational Route	Assessment
	alongside the Proposed Development (<i>Medium-Low</i> magnitude). As illustrated on Viewpoint 4 the blades of application Esgair Cwmowen Wind Farm would be screened by intervening vegetation. Approximately 2 km north-north-east of Talerddig the upper parts of Esgair Cwmowen would be visible alongside the Proposed Development with landform screening the towers. Llyn Lort would be limited to a few blades due to intervening landform (<i>Very Low</i> magnitude). On the southern slopes of Moel Ddolwen the blade tips of Esgair Cwmowen may be visible in conjunction with the Proposed Development. Llyn Lort would also be visible in conjunction with the Proposed Development on the skyline with many of the towers and hubs visible over a large horizontal field of view (<i>High-Medium</i> magnitude). The magnitude of change is judged to range from <i>High - Medium</i> (where Llyn Lort is visible over a large horizontal field of view) to <i>Medium - Low</i> (South of Ffridd yr Ystrad due to Llyn Lort) to <i>Very Low</i> for the remainder of the route to <i>Zero</i>. The combined cumulative effect would range from Substantial to Major and Significant level of effect (Due to Carno II and Llyn Lort) to Major and Significant level of effect (Due to Llynbrynmair) to Major to Moderate and Significant level of effect (Proposed Development, Carno II, Tirgwynt and Llyn Lort) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse.

ASSESSMENT OF VISUAL EFFECTS: KEY OUTDOOR RECREATIONAL DESTINATIONS, OPEN ACCESS LAND, LOCAL PROWS AND KEY HILL SUMMITS

- 7.10.23. The visual assessment has considered the potential visual effects likely to be experienced by people at key outdoor recreational destinations, PROWs, Open Access Land and key hill summits within designated landscapes, which are overlapped by the ZTV, within 10 km of the proposed turbines. All of the destinations have been assessed as of High sensitivity on account of their High - Medium value as recreational and tourist destinations, some of which are located within designated landscapes and the High susceptibility of the people visiting these destinations, whose attention would be focused on the landscape around them.
- 7.10.24. In summary, there would be significant visual effects upon the views of users of some areas of Open Access Land, some PROWs and some Notable Hill Summits within 5 km as a result of the construction, operational and decommissioning phases of the Proposed Development.

Table 7-22 - Visual Effects on Views from Key Outdoor Recreational Destinations, Open Access Land, Local PROWs and Key Hill Summits

Receptor	Assessment
Visitors to Historic Parks and Gardens within 10 km of the proposed turbines	
Gregynog	Gregynog Hall is located approximately 7 km east of the closest turbine (T1) of the Proposed Development. The gardens cover an area of approximately 304 Ha. Much of the gardens is well vegetated with more open, lower lying land stretching from the north-east to south-west. <u>Assessment: Proposed Development</u> The ZTVs (Figures 7.2 - 7.5) indicate theoretical visibility of the Proposed Development of between 10 - 11 turbines with wireline analysis confirming the

Receptor	Assessment
	turbines would appear beyond landform on the skyline with the hubs of 8 turbines being visible from land south-east of Gregynog Hall. However, in reality due to extensive intervening vegetation, views of the Proposed Development would be screened or heavily filtered. Access tracks and ancillary infrastructure would be screened by intervening landform. The magnitude of change would range from <i>Low to Zero</i>. The level of effect of the Proposed Development would be Moderate and Not Significant to No View. The level of effect is judged not to be significant because of the extensive intervening vegetation screening views of the Proposed Development. The nature of effect would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The blade tips of the operational Mynydd Clogau Wind Farm (approximately 5.2 km north-west) would appear on the skyline but would be screened by vegetation. The blade tips of operational Cefn Croes Wind Farm (approximately 30.9 km south-west) and turbines comprising operational Bryn Blaen Wind Farm (approximately 22.1 km south-west) would be screened by intervening vegetation. No consented wind farms would be visible from the gardens. The magnitude of change is judged to be <i>Low to Zero</i>. Therefore, there would be no cumulative effects. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of effect would be long-term (reversible), direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> Turbines comprising the scoping Llyn Lort Wind Farm (approximately 8.3 km north-west), the application Banc Du Energy Park (approximately 22.2 km south-west) and the application Rhiwlas Energy Park (approximately 23.2 km south-west) would appear on the skyline but would be screened by vegetation. The magnitude of change is judged to be <i>Low to Zero</i>. Therefore, there would be no cumulative effects. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of effect would be long-term (reversible), direct, cumulative and adverse.
Open Access Land, PRowS and Notable Hill Summits within 10 km	
Open Access Land, PRowS and Notable Hill Summits within 5 km	Figure 7.11 indicates the areas designated as open access land and the PRowS network within 5 km. <u>Assessment: Proposed Development</u> Within the Site, there are two areas of designated open access land (Figure 7.11). Turbine T10 falls within the northern area of open access land. Turbines T5, T6 and T4 are located close to the boundary of the more southern open access land on the hillside of Garreg-hir. There are two areas of Open Access Land immediately to the east of the Proposed Development, adjacent to the Site. The larger of these is crossed by some PRowS. There are other areas of open access land within 5 km, one approximately 0.6 km west, one approximately 2.8 km north-west, one approximately 2.2 km north, one approximately 3.2 km east and one approximately 3.7 km south-west of the Proposed Development. Other open access land within forested areas include Bryn yr Ysbyty (approximately 0.5 km west), area south of Mynydd Waun Fawr (approximately 4 km north) and Belan-ddu Wood (approximately 4.2 km north-east). Due to the screening provided by the coniferous plantation's, visibility would be limited to the outer edges facing the Proposed Development. Within these areas of Open Access Land and associated PRowS there are locations where all 11 turbines would be visible to recreational receptors

Receptor	Assessment
	The distribution of local PRowS within 5 km extends in all directions around the Proposed Development with a number of PRowS also crossing through the Site. The footpaths which fall within the Site would have the greatest visibility of all 11 turbines and given their proximity, would be visually prominent. Footpaths located to the north-west and west of the Proposed Development would have less visibility due to intervening landform screening a number of the turbines. Notable hill summits within 5 km include Garreg-hir and Y Glonc (within the Site) and due to their proximity would have visibility of all turbines in panoramic views from these summits. Other notable summits include Y Foel (approximately 2.4 km north), Mynydd Garth-pwt (approximately 3.7 km south-west), Foel y Belan (approximately 4.5 km south) and Bryn y Gadair (approximately 5.0 km south-west). These summits would have visibility of 10–11 turbines. The magnitude of change on users of the PRowS, open access land and notable hill summits which cross the Site and those located within approximately 3 km where turbines can be seen within close proximity and against the skyline would be <i>High</i>. Between 3–5 km from PRowS and open access land the magnitude of change would range from <i>High to Medium</i>. In areas where landform or vegetation screens the view the magnitude would be <i>Zero</i>. The resulting level of effect would range from Substantial and Significant (within 3 km) to, Substantial to Major / Major and Significant (3–5 km) to No View. The nature of the effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The operational turbines Mynydd Clogau Wind Farm (east) and Tirgwynt Wind Farm (north-north-west) are located within 5 km of the Proposed Development. From elevated vantage points there would be 360-degree views of operational windfarms extending beyond the 5 km radius including turbines within Carno I Wind Farm and Carno II Wind Farm to the west, Cefn Croes Wind Farm, Bryn Blaen Wind Farm and Bryn Titli Wind Farm to the south-west, Llandinam Wind Farm to the south and Garreg Lwyd Wind Farm to the south-east. No consented turbines are located within 5 km of the Proposed Development. From elevated vantage points there would be 360-degree views of consented windfarms extending beyond the 5 km radius including turbines within Llanbrynmair Wind Farm to the north-west, Carno III Wind Farm to the south-west, Llandinam Repowering Wind Farm and Garn Fach Wind Farm to the south. From these elevated vantage points the turbines generally appear as several groups forming continuous collections of turbines in addition to distinct individual wind farms. The magnitude of change is judged to be <i>High to Zero</i> where landform and vegetation screens the view from certain locations. The combined cumulative effect would range from Substantial and Significant (due to the Proposed Development, Mynydd Clogau and Tirgwynt) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> Within 5 km from many of the receptor locations Esgair Cwmowen would be screened by landform or intervening vegetation. Where there is visibility of turbines, the blades and some hubs would be visible against the skyline. The magnitude of change is judged to be <i>High to Zero</i>. The combined cumulative effect would range from Substantial and Significant (due to the Proposed Development, Mynydd Clogau, Tirgwynt and Esgair Cwmowen) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed

Receptor	Assessment
	Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse.
Open Access Land, PRoWs and Notable Hill Summits within 5-10 km	Figure 7.11 indicates the areas designated as open access land and the PRoW network within 5-10 km. <u>Assessment: Proposed Development</u> Within 5-10 km, there are several areas of designated open access land (Figure 7.11). The largest of these is south-west of the Proposed Development. There are other areas of open access land to the south-west, north-west, north and south-east of the Proposed Development. Other open access land within forested areas includes the area north-west of Foel Fawr (approximately 5.2 km north-north-east) and the area north of Staylittle / Penffordd_Las (approximately 9.2 km south-west). Due to the screening provided by the coniferous plantation's, visibility would be limited to the outer edges facing the Proposed Development. Within these areas of Open Access Land and associated PRoWs there are locations where all 11 turbines would be visible to recreational receptors The distribution of local PRoWs within 5-10 km extends in all directions around the Proposed Development. Footpaths located to the north-west, south-west and south of the Proposed Development would have less visibility due to intervening landform screening a number of the turbines. Notable hill summits within 5-10 km include Bryn y Castell (approximately 6.2 km north), Bryn Amlwg (approximately 7.2 km west), Bryn Crugog (approximately 7.5 km south-west), Newydd Fynyddog (approximately 8.1 km north-west). These summits would have visibility of 10 - 11 turbines. The summit of Bryn yr Oerfa (approximately 9.7 km south-west) shows theoretical visibility of 10-11 turbines (Figure 7.4), however, in reality, views for receptors would be screened by vegetation from this location. The magnitude of change on users of the PRoWs, open access land and notable hill summits between 5-10 km where turbines can be seen against the skyline would be <i>Medium - Low</i>. In areas where landform or vegetation screens the view the magnitude would be <i>Zero</i>. The resulting level of effect would range from Major to Moderate and Significant to No View. The nature of the effects would be long-term (reversible), indirect and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> From open access land, PRoWs and notable hill summits with elevated vantage points such as Bryn Amlwg and Newydd Fynyddog, the majority of operational wind farms and all consented wind farms would be visible. These would generally be distant views where turbines would be seen against a backdrop of vegetation or appear on the skyline. Carno II Wind Farm would appear dominant in the immediate foreground from Bryn Amlwg summit. There would be close up dominant views of the operational Carno I Wind Farm and the operational Carno II Wind Farm from open access land and PRoWs west-south-west of the Proposed Development. The consented Llanbrynmair Wind Farm would be dominant from PRoWs to the north-west of the Proposed Development. The consented Carno III Wind Farm is located between areas of open access land with the wind farm being dominant in views from local PRoWs. The magnitude of change on users of the open access land / PRoWs / notable hill summits would range from <i>High</i> to <i>Low</i> to <i>Zero</i> where intervening landform and vegetation screens views. The combined cumulative effect would range from Substantial and Significant (due to Carno I Wind Farm, Carno II Wind Farm, Llanbrynmair Wind Farm and Carno III Wind Farm) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the

Receptor	Assessment
	Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> From open access land, PRowS and notable hill summits between 5-10 km the majority of application wind farms would be visible in the background either partially against a landform backdrop or appearing on the skyline. The scoping Llyn Lort Wind Farm would be prominent from elevated vantage points such as Bryn y Castell summit where it would be partially visible against a landform backdrop whilst mainly appearing on the skyline over an extended horizontal angle of view. Llyn Lort Wind Farm would be dominant in views from open access land and PRowS north of the Proposed Development. The magnitude of change on users of the open access land / PRowS / notable hill summits would range from <i>High</i> to <i>Low</i> to <i>Zero</i> where intervening landform and vegetation screens views. The combined cumulative effect would range from Substantial and Significant (due to Llyn Lort Wind Farm, Carno I Wind Farm, Carno II Wind Farm, Llanbrynmair Wind Farm and Carno III Wind Farm) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse.
Notable hill summits within the LVIA Study Area	
Notable hill summits within the Eryri National Park	Notable hill summits within the Eryri National Park (beyond 15 km) that have theoretical visibility of the Proposed Development of up to 11 turbines and are not located in areas of forestry include (but not limited to) Foel Dinas (approximately 21.7 km), Maen Du (VP20) (approximately 23.7 km), Glasgwm (approximately 26.0 km), Waun Oer (approximately 26.0 km), Foel Goch (approximately 26.4 km) and Aran Fawddwy (approximately 26.8 km). The turbine towers would be visible against a landform backdrop with blades visible against the skyline from many of these summits where there are panoramic views and other wind farms visible within the large-scale landscape. The magnitude of change on hill walkers at these summits would be <i>Very Low</i>. On summits where landform or vegetation screens the view the magnitude would be <i>Zero</i>. The resulting level of effect would be Minor and Not Significant to No View. The nature of the effects would be long-term (reversible), direct and neutral. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> The majority of the operational and consented turbines would be visible from these hill summits where they would appear as distant windfarm developments either visible against a landform backdrop or appearing against the skyline. The magnitude of change on hill walkers at these summits is judged to be <i>Very Low</i>. On summits where landform or vegetation screens the view the magnitude would be <i>Zero</i>. The combined cumulative effect would range be Minor and Not Significant to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and neutral. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The majority of application turbines and turbines of the scoping Llyn Lort Wind Farm would be visible from these hill summits where they would appear as distant windfarm developments either visible against a landform backdrop or appearing against the skyline. The magnitude is judged to be <i>Very Low</i>. On summits where landform or vegetation screens the view the magnitude would be <i>Zero</i>.

Receptor	Assessment
	The combined cumulative effect would range be Minor and Not Significant to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and neutral.
Notable hill summits within the Shropshire Hills National Landscape	The only notable hill summit within the Shropshire Hills National Landscape (beyond 20 km) that has theoretical visibility of the Proposed Development is the Black Mountain which is included as Viewpoint 18. A detailed assessment of the visual effects on the views of recreational receptors at this viewpoint is considered in Table 7K.19 of Appendix 7K which concluded a Minor and Not Significant visual effect (High sensitivity and Very Low magnitude of change). The additional and combined and additional cumulative effect is also concluded as Minor and Not Significant.

ASSESSMENT OF VISUAL EFFECTS: TRANSPORT ROUTES (A AND B ROADS)

- 7.10.25. This section of the assessment considers the sequential and cumulative visual effects likely to be experienced by road users accessing the main road network ('A' and 'B' roads) which are overlapped by the ZTV within 10 km of the Proposed Development. The views from these routes (including rail routes) would be experienced transiently by road users (mainly drivers / passengers and where appropriate cyclists) who would experience the wind farm as part of the changing sequence of views experienced from the road / rail route.
- 7.10.26. In accordance with the methodology in **Appendix 7A** and paragraph 6.33 of GLVIA 3, road users have a Medium susceptibility to change and the views in the direction of the Site are typically assessed as being of Medium to Low value resulting in an overall Medium sensitivity. Any variation to this Medium sensitivity is recorded under the individual assessments
- 7.10.27. In summary, there would be significant effects as a result of the construction, operational and decommissioning phases of the Proposed Development on limited to sections of the A470 transport route:

Table 7-23 - Visual Effects on Views from Key Transport Routes (A and B roads)

Receptor	Assessment
A470	Within 10 km of the Proposed Development the A470 passes on a broadly south-east to north-west alignment and passes within approximately 2.1 km of the Proposed Development at its closest point to the south, as it passes through Clatter. <u>Assessment: Proposed Development</u> Travelling from south to north along the route, and with reference to the ZTVs in Figures 7.2 - 7.5, visibility of up to 11 turbines (blades and tips) would theoretically be achievable as the route travels between Llandinam and Caersws (approximately 4.4 km of the route). Intervening landform would reduce visibility of the Proposed Development closer to Caersws (<i>Medium - Low</i> magnitude). As the route enters Caersws and heads north-west through Clatter (Viewpoint 1) (approximately 4.6 km of the route), then Clatter to Carno (Viewpoint 2) (approximately 3.9 km of the route) ZTV coverage indicated remains consistent, between 4 - 9 turbines (blades and tips) theoretically visible. In reality, visibility of the Proposed Development would vary between open, filtered and screened views due to intervening built environment and roadside vegetation (<i>Medium to Low - Very Low</i> magnitude). Between Carno and Talerddig (Viewpoint 4), as the A470 proceeds north-west (approximately 5.1 km of the route). Several sections of ZTV coverage are indicated,

Receptor	Assessment
	including areas with no view due to intervening landform. In reality, visibility of the Proposed Development would vary between open and filtered views due to occasional intervening built structure and roadside vegetation and no view. (<i>Medium - Low to Low - Very Low</i> magnitude). In locations where landform or vegetation screens the view the magnitude would be <i>Zero</i>. As the route heads north-west from Talerddig to the eastern edge of Llanbrynmair (approximately 4.2 km of the route) the majority of views are screened by intervening landform. There is a small section where 1-3 turbines (blades and tips) would be theoretically visible (<i>Very Low</i> magnitude). In locations where landform or vegetation screens the view the magnitude would be <i>Zero</i>. The magnitude of change for users of the A470 would range from <i>Medium</i> (for short sections around Clatter) to <i>Zero</i>. The resulting level of effect would range from Moderate and Significant to No View. The nature of these effects would be long-term (reversible), direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites (Scenario 1)</u> There would be sequential views of consented and operational wind farms blade tips to the north-east as the route travels north towards Caersws. There would be sequential views of the operational Tir Gwynt Wind Farm to the east as the route travels south-west from Talerddig to Carno. The magnitude of change is judged to range from <i>Medium - Low to Zero</i> (where landform or vegetation screens the view). The combined level of effect would be Moderate and Significant to No View (due to the Proposed Development). The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), cumulative, direct and adverse. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> There would be sequential views of the application Esgair Cwmowen Wind Farm and the scoping Llyn Lort Wind Farm to the east as the route travels south-west from Talerddig to Carno the magnitude of change is judged to range from <i>Medium - Low to Zero</i> (where landform or vegetation screens the view). The combined level of effect would be Moderate and Significant to No View (due to the Proposed Development). The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), cumulative, direct and adverse.
A489	Within 10 km of the Proposed Development the A489 passes on a broadly east to west alignment between the western edge of Newtown and south-east of Caersws where it joins the A470. At its closest point it passes within approximately 6.8 km of the Proposed Development at its closest point to the south-east. <u>Assessment: Proposed Development</u> Travelling from east to west along the route, and with reference to the ZTVs in Figures 7.2 - 7.5, as the road leaves the western edge of Newport visibility of up to 9 turbines (blades and tips) would theoretically be possible, reducing to zero as the road moves west where intervening landform would reduce visibility of the Proposed Development around Penstrowed. Visibility of up to 11 turbines (blades and tips) would theoretically be achievable as the route travels along the central section of the A489 (approximately 2.5 km of the route). As the A489 nears Caersws, where it joins the A470, theoretical visibility reduces to up to 9 turbines (blades and tips) (<i>Low</i> magnitude). In locations where landform or vegetation screens the view the magnitude would be <i>Zero</i>. The magnitude of change for users of the A489 would range from <i>Low</i> (for the approximately 2.5 km section of the route nearest to the Proposed Development) to

Receptor	Assessment
	Zero. The resulting level of effect would range from Minor and Not Significant to No View. The nature of these effects would be long-term (reversible), direct and neutral. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> The route section to the west of Newtown, when travelling west on the A489 would afford brief sequential views of the operational Tirgwynt Wind Farm and Mynydd Clogau Wind Farm (blade tips) which would be theoretically visible. In reality these would be difficult to see. The magnitude of change is judged to range from <i>Low - Very Low</i> to <i>Zero</i> (where landform or vegetation screens the view). The combined level of effect would be Minor and Not Significant to No View (due to the Proposed Development). The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), cumulative, direct and neutral. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The route section to the west of Newtown when travelling west on the A489 would afford brief sequential views where the application Esgair Cwmowen Wind Farm and the scoping Llyn Lort Wind Farm (blade tips) would be theoretically visible. In reality these would be difficult to see. The magnitude of change is judged to range from <i>Very Low</i> to <i>Zero</i> (where landform or vegetation screens the view). The combined level of effect would be Minor and Not Significant to No View (due to the Proposed Development). The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), cumulative, direct and neutral.
B4568	Within 10 km of the Proposed Development the B4568 passes on a broadly south-east to north-west alignment, starting on the western edge of Newtown, travelling through Aberhafesp, Rhydlydan and Llanwnnog before joining with the A470. The road passes within approximately 4.0 km of the Proposed Development at its closest point to the south-east, as it travels through Llanwnnog. <u>Assessment: Proposed Development</u> Travelling from south-east to north-west along the route, and with reference to the ZTVs in Figures 7.2 - 7.5, as the road leaves the western edge of Newport there is no view of the Proposed Development due to intervening landform (approximately 1.2 km of the route) (<i>Zero</i> magnitude). Theoretical visibility of up to 11 turbines (blades and tips) would then become possible (approximately 1.0 km of the route), although roadside vegetation is generally hedgerow and views are available of the surrounding landscape in this section, views of the Proposed Development would be oblique for receptors. Travelling north-west, theoretical visibility would reduce to no view due to intervening landform as the road moves west into Aberhafesp. At Aberhafesp increased built form and vegetation screen views toward the Proposed Development from the B4568 (<i>Low</i> magnitude). In locations where landform, built environment or vegetation screens the view, the magnitude would be <i>Zero</i>. For the section of the B4568 between Aberhafesp and Rhydlydan (approximately 1.5 km of the route) there would be theoretical visibility of 11 turbines (blades and tips). Roadside vegetation at points along this section, particularly around the settlements, would help to filter views of the Proposed Development for receptors travelling north-west. (<i>Low</i> magnitude). Between Rhydlydan and Llanwnnog (approximately 3.9 km of the route) the number of turbines (blades and tips) in the Proposed Development theoretically visible to receptors reduces from 7 - 9 to zero as the road travels west. A combination of landform and roadside vegetation help to reduce available views of the Proposed

Receptor	Assessment
	Development on this section (<i>Low - Very Low</i> magnitude). In locations where landform or vegetation screens the view the magnitude would be <i>Zero</i>. Where the B4568 joins the A470 there would be theoretical visibility of up to 6 turbines (blades and tips) however, views for receptors at this location would be oblique (<i>Low</i> magnitude). The magnitude of change for users of the B4368 would range from <i>Low</i> to <i>Zero</i>. The resulting level of effect would range from Minor and Not Significant to No View. The nature of these effects would be long-term (reversible), direct and neutral. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> The route section to the west of Newtown when travelling west on the A489 would afford brief sequential views where the operational Tirgwynt Wind Farm and Mynydd Clogau Wind Farm (blade tips) would be theoretically visible. In reality these would be difficult to see. The magnitude of change is judged to be <i>Low - Very Low</i> to <i>Zero</i> (where landform or vegetation screens the view). The combined level of effect would be Minor and Not Significant to No View (due to the Proposed Development). The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), cumulative, direct and neutral. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> The route section to the west of Newtown when travelling west on the A489 would afford brief sequential views where the application Esgair Cwmowen Wind Farm and the scoping Llyn Lort Wind Farm (blade tips) would be theoretically visible. In reality these would be difficult to see. The magnitude of change is judged to range from <i>Very Low</i> to <i>Zero</i> (where landform or vegetation screens the view). The combined level of effect would be Minor and Not Significant to No View (due to the Proposed Development). The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible), cumulative, direct and neutral.
B4569	Within 10 km of the Proposed Development the B4569 passes to the south, starting just to the east of Caersws it travels west and then south towards Trefeglwys where it continues south until it reaches the extents of the 10 km detailed Study Area. The road passes within approximately 5.5 km of the Proposed Development at its closest point. <u>Assessment: Proposed Development</u> Travelling from west to south along the route, and with reference to the ZTVs in Figures 7.2 - 7.5, as the road leaves the junction with the B4568 and heads towards the settlement of Caersws there would be theoretical visibility of up to 3 blades. However, only one blade (T1) would be visible towards the east of Caersws due to vegetation providing screening further to the north. As the road enters Caersws visibility would reduce due to screening provided by built form. Upon exiting Caersws (as illustrated in Viewpoint 6, approximately 6.2 km distant) up to four turbines would be theoretically visible on the horizon, three of which would be visible as hubs and one as a blade. (<i>Low</i> magnitude). There would be visibility of the Proposed Development for the next approximately 2 km of the route with visibility gradually increasing to up to 11 turbines on the skyline with three appearing as blades and the lower parts of the towers screened by landform to varying degrees. There are sections of the route where due to roadside hedges and trees, the view towards the Proposed Development would be filtered or screened (<i>Low</i> magnitude). Due to intervening landform, the visibility of the Proposed Development would cease until the route reaches the Trefeglwys. From the section of the route towards the

Receptor	Assessment
	southern part of the settlement there would be visibility of between 4-6 turbines with the towers screened by landform. As the route continues south visibility would gradually increase to up to 11 turbines, however up to five would be visible as blades/ blade tips which would likely be screened by intervening vegetation and distance (<i>Low magnitude</i>). The magnitude of change for users of the B4569 would range from <i>Low</i> to <i>Zero</i>. The resulting level of effect would range from Minor and Not Significant to No View. The nature of these effects would be long-term (reversible), direct and neutral. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> In the section of the route to the east of Caersws operational wind farms are screened by landform and intervening distance. There may be visibility of the blades of Llandinam Repowering to the south in the distance. Upon exiting Caersws (as illustrated by Viewpoint 6) the operational wind farms of Cefn Croes, Llandinam and the consented schemes of Llanbrynmair, Carno III and Garn Fach would be screened by intervening vegetation. Some turbines within the consented Llandinam Repowering Wind Farm located to the south would possibly be visible in the far distance, with others being screened by intervening built form and vegetation (<i>Very Low magnitude</i>). For the approximately 2 km section to the west of Caersws the upper parts of Llandinam Repowering Wind Farm may be discernible above the treeline (<i>Very Low magnitude</i>). In the section of the route to the south of Trefeglwys landform provides screening to operational and consented wind farms with the exception of Llandinam Repowering where the upper parts may be discernible above the treeline (<i>Very Low magnitude</i>). The magnitude of change would be <i>Very Low</i>. The combined cumulative effect would range from Minor and Not Significant (Due to the Proposed Development) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and neutral. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> In the section of the route to the east of Caersws application and scoping wind farms would be screened by intervening vegetation and landform. Upon exiting Caersws (as illustrated by Viewpoint 6) the application Banc Du Energy Park located to the south-west would be screened by intervening vegetation. For the approximately 2 km section to the west of Caersws the upper parts of Banc Du Energy Park may be discernible above the treeline (<i>Very Low magnitude</i>). In the section of the route to the south of Trefeglwys, landform would screen the application and scoping wind farms. The magnitude of change would be <i>Very Low</i>. The combined cumulative effect would range from Minor and Not Significant (Due to the Proposed Development) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and neutral.
B4389	Within 10 km of the Proposed Development the B4389 passes to the east, starting just west of Bettws Cedewain it passes in a north-westerly direction through Tregynon where it continues in a northerly direction until it reaches the extents of the 10 km detailed Study Area. <u>Assessment: Proposed Development</u> From the section of the route to the west of Bettws Cedewain just south of Tregynon there would be no visibility of the Proposed Development due to intervening landform.

Receptor	Assessment
	To the south of Tregynon the ZTVs (Figures 7.2-7.5) indicate theoretical visibility of the Proposed Development of between 10-11 blades / 4-6 hubs reducing to 4-6 blades / 1-3 hubs as the route passes through the central part of the settlement with no visibility in the northern part of settlement. In reality, tree planting to the west of the B4389 and within the wider landscape along with built form would screen the Proposed Development along the route to the south and within the settlement itself. As the route proceeds north there would be no visibility due to intervening landform until 1.5 km further north where the ZTV indicates visibility of between 1-3 blades, however these would be screened by intervening vegetation. Visibility of the Proposed Development would return to north-west of New Mills where the upper parts of 11 turbines would be visible on the skyline in the distance (approximately 9-10 km distant) with landform screening of the lower parts of the towers. Vegetation within the wider landscape may also filter views of some of the turbines and vegetation woodland vegetation along sections of the road would also provide screening (<i>Low</i> magnitude). The magnitude of change for users of the B4389 would range from <i>Low</i> to <i>Zero</i>. The resulting level of effect would range from Minor and Not Significant to No View. The nature of these effects would be long-term (reversible), direct and neutral. <u>Cumulative Assessment: Proposed Development + Operational+ Consented Sites (Scenario 1)</u> In the section of the route to the north-west of New Mills the operational wind farm Mynydd Clogau is visible on the skyline in the distance and would be visible in conjunction with the Proposed Development. Some turbines within the operational Tirgwynt Wind Farm are visible in the distance with landform and vegetation screening some of the turbines (<i>Low -Very Low</i> magnitude). Further north as the land rises towards the 10 km Study Area boundary the operational Mynydd Clogau is visible with some turbines seen against a landform backdrop and the upper parts of others visible on the skyline and would be seen in conjunction with the Proposed Development. The operational Tirgwynt is also visible on the skyline in the distance (<i>Low -Very Low</i> magnitude). The consented Llandinam Repowering may be visible in the far distance on a clear day. (<i>Very Low</i> magnitude). The magnitude of change would be <i>Low - Very Low</i> to <i>Zero</i>. The combined cumulative effect would range from Minor and Not Significant (Due to the Proposed Development) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and neutral. <u>Cumulative Assessment: Proposed Development + Operational + Consented Sites + Applications (Scenario 2)</u> In the section of the route to the north-west of New Mills the upper parts of the application Esgair Cwmowen Wind Farm may be visible in conjunction with Tirgwynt Wind Farm where intervening vegetation does not screen the turbines from view (<i>Low-Very Low</i> magnitude). The scoping Llyn Lort Wind Farm would be visible on the skyline with some visible as blades due to intervening landform (<i>Low</i> magnitude). Further north as the land rises towards the 10 km Study Area boundary visibility of Llyn Lort would increase and turbines would appear larger on the skyline (<i>Medium-Low</i> magnitude) The magnitude of change would range from <i>Medium-Low</i> to <i>Low</i> to <i>Zero</i>. The combined cumulative effect would range from Moderate to Minor and Not Significant (Llyn Lort) to Minor and Not Significant (Llyn Lort and the Proposed Development) to No View. The additional effect of the Proposed Development would be the same as that assessed above for the Proposed Development only. The nature of these effects would be long-term (reversible) direct, cumulative and adverse / neutral.

ASSESSMENT OF NIGHT-TIME VISUAL EFFECTS

- 7.10.28. The Night-time Assessment of the visual effects of the aviation warning lights for the Proposed Development is set out in **Appendix 7M** and accords with NatureScot's Guidance on Aviation Lighting Impact Assessment²⁵. This is based on an Aviation Lighting Strategy which is summarised as follows:
- Reduced number of aviation warning lights to four turbines (T1, T5, T7 and T10) with no proposed mid-tower lights;
 - Dimming of lights to 10% of peak intensity during periods of clear visibility (>5 km from the wind farm); and
 - Angle intensity mitigation.
- 7.10.29. Three night-time viewpoints, on the A470 at Clatter, on the A470 east of Talerddig and on a minor road east of New Mills, which coincide with day-time viewpoints VP1, VP4 and VP8, accompany the Night-time Assessment. Night-time photomontages for the three viewpoints are contained in **Annex 7M.1** of **Appendix 7M** and a detailed assessment of the night-time visual effects presented in **Annex 7M.2**, which includes a darkness survey describing the baseline night-time environment, as observed during the field survey. This concludes that no significant night-time visual effects would occur during the construction, operation and decommissioning phases of the Proposed Development and there would be no significant cumulative night-time visual effects.
- 7.10.30. A desk-based assessment of the night-time visual effects of the aviation warning lights for receptors at the remaining 17 viewpoints is also presented in **Appendix 7M**. This also concluded no significant visual effects during the operational phase of the Proposed Development as a consequence of the aviation warning lights.

7.11 ASSESSMENT OF CUMULATIVE (INTER-PROJECT) EFFECTS

- 7.11.1. A cumulative effects assessment (CEA) has been undertaken for the Proposed Development which considers the combined impacts with other operational, consented and proposed wind farm developments on the same single receptor (inter-project effects). This is reported under each landscape and visual receptor assessment and has been undertaken in accordance with the methodology set out in **Appendix 7A**.

SIGNIFICANT CUMULATIVE LANDSCAPE EFFECTS

- 7.11.2. The cumulative landscape assessments reported in **Appendix 7D** to **Appendix 7J** have concluded that **Significant** combined cumulative effects would occur for the following landscape receptors:

LANDMAP VSAAs

- MNTGMVS235 Carno Mosaic (as a consequence of the Proposed Development);
- MNTGMVS694 Carno Uplands (due to the Proposed Development and the scoping scheme at Llyn Lort);
- MNTGMVS733 Esgair Cwmowen Uplands (due to the Proposed Development, operational Mynydd Clogau, Tirgwynt, Carno I and Carno II Wind Farms, consented Carno III Wind Farm, Esgair Cwmowen planning application scheme and the scoping scheme at Llyn Lort);
- MNTGMVS179 Trannon Moors (as a consequence of the operational Carno I and Carno II Wind Farms and the consented Carno III Wind Farm);

- MNTGMVS254 Kerry Ridgeway (due to the operational Llandinam Wind Farm and the consented wind farm schemes at Llandinam Repowering and Garn Fach);
- MNTGMVS363 Newydd Fynyddog (as a consequence of the operational Carno I and Carno II Wind Farms and the consented Carno III Wind Farm);
- MNTGMVS457 Clywedog Upland Grazing (due to the consented Carno III Wind Farm and the planning application scheme at Banc Du);
- MNTGMVS695 Trannon Uplands Bryn Crugog (as a consequence of the Proposed Development at the operational Carno I and Carno II Wind Farms and the consented Carno III Wind Farm); and
- MNTGMVS899 Tregynon Rolling Hills (due to the scoping scheme at Llyn Lort).

LANDMAP HLAAs

- MNTGMHL559 Allt Fawr (due to both the Proposed Development and the scoping scheme at Llyn Lort);
- MNTGMHL820 Penbedw (as a consequence of the Proposed Development);
- MNTGMHL859 Ffridd Rhyd Ddu (due to the Proposed Development, operational Mynydd Clogau and Tirgwynt Wind Farms, Esgair Cwmowen planning application scheme and the scoping scheme at Llyn Lort);
- MNTGMHL352 Upper Banwy (due to the scoping scheme at Llyn Lort);
- MNTGMHL433 Middle Banwy / Upper Rhiw (as a consequence of the Proposed Development and the scoping scheme at Llyn Lort);
- MNTGMHL704 Trannon Moor (due to the operational Carno I and Carno II Wind Farms); and
- MNTGMHL952 Lower Clywedog / Upper Severn (as a consequence of the operational Bryn Blaen Wind Farm and planning application scheme at Banc Du).

LANDMAP CLSAAs

- MNTGMCLS108 Esgair Cwmowen Uplands (due to the Proposed Development, operational Mynydd Clogau, Tirgwynt Wind Farms, Esgair Cwmowen planning application scheme and the scoping scheme at Llyn Lort).

Proposed Glyndŵr National Park Draft SQs

- SQ Headline: An inspiring space that promotes mental, physical and spiritual health and wellbeing (due to the scoping scheme at Llyn Lort); and
- SQ Headline: A distinctive, complementary and contrasting landscape (as a consequence scoping scheme at Llyn Lort).

SIGNIFICANT CUMULATIVE VISUAL EFFECTS

- 7.11.3. The cumulative visual assessments reported in **Appendix 7K** and **Section 7.10** have concluded that **Significant** combined cumulative effects would occur for the visual receptors:

Viewpoints

- Viewpoint 3: Cefn Coch (as a consequence of the Proposed Development);
- Viewpoint 4: A470, east of Talerddig (as a consequence of the Proposed Development and the operational Carno Wind Farm);

- Viewpoint 5: Severn Way, south of Bwlch-y-Ffridd (as a consequence of the Proposed Development);
- Viewpoint 7: Glyndŵr's Way, north of Moelddolwn (due to the scoping scheme at Llyn Lort);
- Viewpoint 12: Cambrian Way, west of Bont Dolgadfan (as a consequence of the consented Carno III Wind Farm);
- Viewpoint 13: B4395, north of Llangadfan (as a consequence of the scoping scheme at Llyn Lort); and
- Viewpoint 14: Sustrans NCR 8, west of Dylife (due to the consented Carno III Wind Farm).

Settlements

- Residents in Carno (southern part of the settlement) (due to the Proposed Development);
- Residents in Pontdolgoch (as a consequence of the Proposed Development);
- Residents in Adfa (due to the Proposed Development, operational Mynydd Clogau, and Tirgwynt Wind Farms and the scoping scheme at Llyn Lort);
- Residents in Cefn Coch (as a consequence of the Proposed Development and the scoping scheme at Llyn Lort);
- Residents in Talerddig (due to the Proposed Development and the operational Carno II Wind Farm; and
- Residents in Llanwyddelan (as a consequence of the scoping scheme at Llyn Lort).

Recreational Routes and Destinations

- Users of NCR 8 (section of the route north of Cefn Carnedd) (due to the Proposed Development);
- Users of Glyndŵr's Way (sections of the route closest to the scoping scheme at Llyn Lort as a consequence of Llyn Lort);
- Users of the Cistercian Way (within a distance of approximately 4 km from the proposed turbines due to the Proposed Development and the operational Mynydd Clogau and Tirgwynt Wind Farms, planning application scheme at Esgair Cwmowen and scoping scheme at Llyn Lort and at distances of 5-10 km to the north-east of the proposed turbines due to the scoping scheme at Llyn Lort);
- Users of the Severn Way (sections of the route north of Cefn Carnedd, east of Caersws and north of Rhydydan as a consequence of the Proposed Development);
- Users of the William Morgan Ride (due to the Proposed Development, operational wind farms at Carno II and Tirgwynt, consented Llynbrynmair Wind Farm and the scoping scheme at Llyn Lort);
- Users of Open Access Land, local PRoWs and at notable hill summits within 5 km of the proposed turbines (as a consequence of the Proposed Development, operational wind farms at Mynydd Clogau and Tirgwynt and the planning application scheme at Esgair Cwmowen); and
- Users of Open Access Land, local PRoWs and at notable hill summits within 5 -10 km of the proposed turbines (due to the Proposed Development, operational Carno I and Carno II Wind Farms, consented wind farms schemes at Llanbrynmair and Carno III and the scoping scheme at Llyn Lort).

Key Transport Routes

- Users of the A470 (for a section at Clatter due to the Proposed Development).

7.12 SIGNIFICANCE CONCLUSIONS

- 7.12.1. A summary of the significant (residual) construction, operational and decommissioning effects identified in the LVIA is provided in Table 7-24. The magnitude of change and level of effect recorded in Table 7-24 represents the maximum level recorded for the receptor and as such may only apply to a localised part of a landscape receptor unit, route, settlement, or open space.
- 7.12.2. Effects on receptors not included in **Table 7-24** are judged to be not significant.

Table 7-24 - Summary of significance of effects: Construction, Operational and Decommissioning Phases

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
Landscape receptors: LANDMAP - Landscape Habitat Aspect Areas				
MNTGMLH052 (unnamed)	Medium	Medium to Zero	Moderate and Significant to None	The proposed access road from the A470 would pass through two sections of the LHAA, giving rise to the direct loss of habitat. At a worst-case, this would include sections of field boundary hedgerow and arable land, a small number of individual trees, improved grassland and limited tree removal from within the eastern fringes of the woodland at Coed yr Henblas and from along the western edge of Coed Neuadd-newydd, both of which are designated as Ancient Semi-Natural Woodland. The loss of peripheral areas of Ancient Woodland together with areas of grassland, sections of hedgerow and a small number of individual trees which would disrupt the pattern of '<i>smaller improved grass fields</i>', together with the presence of the access road which contrasts with the retained habitats, would give rise to a localised Medium magnitude of change within and close to the route of the proposed access road. This Moderate level of effect is assessed as being Significant due to the High sensitivity (High value and High susceptibility) of the Ancient Woodland as a landscape element. Reference to Figure 7.5 demonstrates that up to six hubs only would be visible from within the LHAA during the operational phase, which reduces the potential for the scale of the proposed turbines to contrast with or detract from the complexity of habitats or to dominate the pattern of '<i>smaller improved grass fields</i>' which exists within this LHAA. The access road would be retained throughout the duration of the operational phase.
Landscape receptors: LANDMAP - Visual and Sensory Aspect Areas				
MNTGMVS235 Carno Mosaic	Medium	Medium to Zero	Moderate and Significant to None	The nearest proposed turbines would be sited less than 1 km to the north-east of this VSAA. Figure 7.8d indicates extensive ZTV coverage, with the blade tips of 1-6 turbine being visible from the closest areas of landscape and 7-11 turbines commonly being visible from areas at 2-6 km distance from the

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				turbines. The introduction of Proposed Development would indirectly detract from the views out of this VSAA, as indicated at Viewpoint 1 (Figure 7.16a-i Viewpoint 1 A470, Clatter) and Viewpoint 2 (Figure 7.17a-i Viewpoint 2 A470, Carno) which are located within or on the boundary of this VSAA and which is described as being an “ <i>Attractive</i> ” landscape, which is of “ <i>Moderate</i> ” scenic quality. The Proposed Development is of a proximity whereby the scale of this contemporary vertical infrastructure may have a partial characterising influence over this “ <i>intimate</i> ” and “ <i>traditional farming landscape</i> ” and where visible, would slightly dilute perceptions of visual tranquillity ⁵² which is predominantly category 7 (39.8%) or category 8 (59.6%) in areas away from the A470 corridor.
MNTGMVS694 Carno Uplands	Medium	Medium to Zero	Moderate and Significant to None	The ZTV (Figure 7.8d) indicates that the proposed turbines would be visible from across a moderately extensive area of the VSAA, where 10-11 turbines would occasionally be visible although in reality, the coniferous forestry (not accounted for in the ZTV calculation) would restrict a proportion of the views. There would be no direct (physical) effects upon any of the attributes for which this landscape is valued. However, the presence of Proposed Development at a minimum separation distance of 100 m would detract from the “ <i>Attractive views</i> ” recorded for this landscape, which has a “ <i>moderate</i> ” scenic quality on account of the “ <i>Underlying upland landscape type compromised by plantations</i> ”. The LANDMAP Survey also records this as being a “ <i>tranquil</i> ”, “ <i>remote</i> ” and “ <i>wild</i> ” landscape, with visual tranquillity being recorded as being predominantly category 8 (91.12%) and where visible, the Proposed Development would slightly dilute these perceptual qualities. The magnitude of change as a result of the Proposed Development would be Medium within localised parts of the VSAA closest to the Proposed Development

⁵² The Natural Resources Wales Visual Tranquillity data (rural) ranges from Category 1 (least visually tranquil) to Category 10 (most visually tranquil).

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
MNTGMVS733 Esgair Cwmowen Uplands	Medium	High to Zero	Major and Significant to Moderate and Not Significant to None	This is the host VSAA for the proposed turbines and their introduction would detract from the “<i>Attractive views</i>” and “<i>High</i>” scenic quality of the VSAA. The ZTV in Figure 7.8d indicates extensive theoretical visibility across the sub-area at Pen y Pigyns, where all 11 turbines would commonly be visible at a distance of approximately 5-7.4 km; across the summit and northern slopes of the sub-area at Mynydd Garth-pwt and Foel y Belan, where 10-11 turbines would be visible at distances of approximately 2-5 km; and across the southern half of the Esgair Cwmowen Uplands sub-area to a distance of approximately 4 km. Between 4 km and 10 km, theoretical visibility becomes more fragmented. Whilst this VSSA already hosts 17 operational turbines at Mynydd Clogau and 12 operational turbines at Tirgwynt, the scale of these are smaller than the Proposed Development at a height of 66 m and 116 m to blade tip respectively and reference to the Cumulative ZTVs in Figures 7.13.1 and 7.13.2 indicates that there are areas within the VSAA where only the Proposed Development would be visible. Where visible, the Proposed Development would dilute perceptual qualities relating to tranquillity and remoteness. The magnitude of change would be High within the southern part of the Esgair Cwmowen sub-area, particularly areas to the immediate south and to the east of the Site where existing turbines currently have no landscape role, reducing to Medium or Low (or Zero) across the two sub-areas to the south and across the northern areas of the Esgair Cwmowen sub-area, due to increased separation distance and the landscape role of existing wind turbines.
MNTGMVS695 Trannon Uplands Bryn Crugog	High-Medium	Medium-Low to Zero	Major to Moderate and Significant to Moderate to Minor and Not Significant to None	The ZTV in Figure 7.8d indicates potential visibility from across a limited proportion of this VSAA, concentrated across its northern and eastern fringes at a minimum distance of approximately 3.9 km from the closest turbine, with smaller pockets of theoretical visibility occurring along the southern edge the VSAA. There would be no direct (physical) effects upon any of the attributes for which this landscape is valued. The introduction of Proposed Development

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				would indirectly and incrementally detract from the attractive views which are recorded in the LANDMAP Survey, with scenic quality noted as being “ <i>High</i> ” on account of the “ <i>Attractive and intimate scale rural aspect area displaying a number of common attractive and ‘traditional’ rural farming characteristics.</i> Views within and to the surroundings areas maintain a high aesthetic appearance”. Visual tranquillity is recorded as being predominantly category 7 (26.38%) and category 8 (72.69%), with the VSAA also being described as “ <i>remote</i> ” and “ <i>wild</i> ” on “ <i>upper reaches and plateau edge</i> ”. Where visible, the Proposed Development may contribute to a slight dilution of these perceptual qualities. Whilst the summary description states that “ <i>Views on the plateau edge are drawn towards the movement of the wind turbines on the Trannon Moors</i> ” (Carno I and II with a maximum blade tip height of 79 m), the relative proximity and therefore scale of the proposed turbines may locally contrast with the “ <i>intimate and small scale field pattern</i> ” and “ <i>Domestic in settlement scale with a scattered rural farmstead pattern</i> ” which are key characteristics recorded from this VSAA.
Landscape receptors: LANDMAP - Historic Landscape Aspect Areas				
MNTGMHL559 Allt Fawr	High-Medium	Medium to Zero	Major to Moderate and Significant to None	The construction phase would result in direct landscape effects on the part of the Site and its component landscape elements which coincide with this HLAA, concentrated along the central section of the access road from the A470. Changes to the landscape would include (at a worst-case) the removal of field boundary trees as well as small peripheral sections of two Ancient Woodlands (Coed yr Henblas and Coed Neuadd-newydd), new access track creation with associated earthworks, and the presence and movement of people, construction vehicles and machinery. The removal of a proportion of the trees which delineate the traditional “ <i>Irregular fieldscapes of medieval to post-medieval origin</i> ”, would locally alter the coherence of this field pattern within and close to the access road corridor. Elsewhere within the HLAA, the removal of a limited number of trees within small sections of Ancient Woodland would partially and locally dilute the role of the existing woodland, which is recorded in the LANDMAP Survey as being important to the

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				historical pattern of the area. The access road from the A470 would be present throughout the operational phase, with the continued localised disruption to the field and woodland pattern within the eastern fringes of this HLAA The ZTV in Figure 7.8f indicates that the proposed turbines would be visible from within the majority of this HLAA during the operational phase, at a minimum distance of approximately 0.2 km. Viewpoint 1 (Figure 7.16a-i Viewpoint 1 A470, Clatter), Viewpoint 2 (Figure 7.17a-i Viewpoint 2 A470, Carno) and Viewpoint 4 (Figure 7.19a-i Viewpoint 4 A470, East of Talerddig) are all located within the HLAA. The presence of the proposed turbines and associated movement above the horizon would represent a contemporary and contrasting vertical influence from within the HLAA, and would have an indirect adverse effect upon the appreciation of the hillfort at Castell Carno, nucleated post-medieval settlements at Clatter and Pontdolgoch and the traditional “<i>farmsteads, houses and cottages of later medieval to 18th-century origin</i>”, all of which are listed as key historic elements of this landscape. The proximity and therefore scale of the turbines, as evidenced in Figures 7.16a-i, 7.17a-i and Figure 7.19a-i may also contrast with the “<i>irregular fieldscapes</i>”.
MNTGMHL820 Penbedw	High	Medium to Zero	Major and Significant to None	The construction phase would result in direct landscape effects on the part of the Site and its component landscape elements which coincide with this HLAA, concentrated along the new southern section of the access road from the A470. Changes to the landscape would include (as a worst-case scenario), the removal of field boundary hedgerow and trees, new access road creation with associated earthworks, and the presence and movement of people, construction vehicles and machinery. The removal of a small proportion of the hedgerows and trees which delineate the traditional “<i>Irregular fieldscapes of medieval to post-medieval origin between Llanwnnog and Gregynog</i>”, would locally alter the coherence of this field pattern within and close to the access road. From elsewhere within the HLAA, the periodic

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				deployment of cranes during the erection of the proposed turbines would be apparent and would represent large-scale, contemporary and contrasting elements from the “<i>Gwyn Fynydd enclosure</i>” and “<i>Dispersed farms and houses of post-medieval origin</i>” which are all recorded as key elements of this HLAA. The access road from the A470 would be present throughout the operational phase with the continued localised disruption to the field pattern within the western fringes of this HLAA The ZTV in Figure 7.8f indicates that the proposed turbines would be visible from within a moderately high proportion of this HLAA during the operational phase, at a minimum distance of approximately 1 km. The presence of the proposed turbines and associated movement above the horizon would represent a contemporary and contrasting vertical influence and would have an indirect adverse effect upon the appreciation of the Gwyn Fynydd enclosure and the traditional “<i>farmsteads, houses and cottages of later medieval to 18th-century origin</i>”, all of which are listed as key historic elements of this landscape. The proximity and therefore scale of the turbines, may also contrast with the key patterns relating to “<i>Irregular fieldscapes of medieval to post-medieval origin</i>”. The “<i>Wyle Cop hillfort</i>” and “<i>Small nucleated church settlement of medieval origin at Llanwnnog</i>”, which are also recorded as key elements, lie outside of the ZTV.
MNTGMHL859 Ffridd Rhyd Ddu	High-Medium	High-Medium to Zero	Substantial to Major to Moderate and Significant to None	This is an extensive HLAA which would host all 11 turbines, ancillary infrastructure, access tracks and the northern (upgraded) section of the access road into the Main Site. The ZTV (Figure 7.8f) indicates that the proposed turbines would be visible from across the majority of the southern half of the HLAA to a distance of approximately 4 km, becoming more fragmentary at distances between distances of 4 km to 10 km. As shown in Figure 7.12 Cumulative Context, this HLAA already hosts the 17 operational turbines at Mynydd Clogau and 12 operational turbines at Tirgwynt, although the scale of these existing turbines is smaller than the proposed development at a height of 66 m and 116 m to blade tip respectively. The presence of these wind farms is recorded in the LANDMAP Survey for the HLAA which notes the “<i>Wind farms have begun to appear</i>”

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				<i>within this area during the early 21st century with windfarms established at Mynydd Clogau and Tir Gwynt (near Cefn Coch) by 2017.”</i> The presence of the proposed turbines would have direct effects within this aspect area, where their scale and movement would strongly contrast with, and detract from the appreciation of, the key element of this HLAA which relates to the <i>“Early settlement and land use is represented by dispersed, Neolithic to Bronze Age hilltop burial and ritual monuments and by dispersed abandoned prehistoric, medieval and post-medieval settlements.”</i> The presence of the turbines, given the scale of this modern, vertical infrastructure, would alter the perception of the 18 cairns, standing stones and ritual sites which lie within the Site and closest areas. The Proposed Development would represent an extension to and intensification of (given its increased scale) the existing contemporary influence of wind farms within this HLAA, with the smaller scale of the existing turbines and their siting to the north, away from the main concentration of historic sites, resulting in lower levels of contrast.
MNTGMHL433 Middle Banwy / Upper Rhiw	High	Medium from within the closest parts of the HLAA to the Site to Low with increasing separation distance to Zero	Major and Significant for the closest part of the HLAA, and up to Moderate and Not Significant to None for the remaining majority of the HLAA	The ZTV in Figure 7.8f demonstrates that the proposed turbines would be visible from within an extensive area of the HLAA within 10 km, becoming more fragmentary and largely absent at distances in excess of 10 km. The closest proposed turbine (T11) would be located at a minimum distance of approximately 0.5 km from the south-western boundary of the HLAA. Viewpoint 3 (Figure 7.18a-i Viewpoint 3 Cefn Coch) and Viewpoint 8 (Figure 7.23a-i Viewpoint 8 Minor Road, East of New Mills) lie within and on the eastern boundary of the HLAA respectively. There would be no direct effects upon any of the attributes for which this landscape is valued. The presence of the proposed turbines and associated movement above the horizon to the south would represent a new man-made vertical influence on the HLAA, and would have an indirect adverse but limited effect upon the appreciation of the <i>“small nucleated church settlements of probably medieval or earlier origin”</i> at Llanwyddelan and Llanllugan, with both settlements lying within 10km of the turbines and

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				coinciding with the ZTV. The small hillforts at Pen-y-Coed, Ffrith Mathrafal and Bryn-y-Saethau also coincide with the ZTV, but all lie at distances in excess of 10km therefore limiting the potential for the Proposed Development to detract from the appreciation of these key elements The scale and proximity of the proposed turbines would however, contrast with the small scale “<i>irregular field patterns</i>” which represents a key pattern which occurs across the closest part of the HLAA to the Site. Whilst the same field pattern is also evident across the southern part of the Aspect Area, the increasing separation distance reduces the scale of the turbines and the degree to which they would contrast. The scale and contemporary nature of the turbines may also contrast with the closest dispersed farms and cottages of medieval and later origin.
Landscape receptors: LANDMAP - Cultural Landscape Services Aspect Areas				
MNTGMCLS108 Esgair Cwmowen Uplands	High	High within the Site and closest area of the CLSAA, reducing to Low with increasing separation distance to Zero	Substantial and Significant within the Site and closest area of the CLSAA to Moderate and Not Significant to None	The construction phase would result in direct landscape effects on part of the Site and its component landscape elements which coincide with this CLSAA. This would be concentrated around the 11 turbines, the BESS, substation and control building compounds, internal access tracks and the temporary construction compound, all of which are sited within this receptor unit. The level of construction activity and associated contrasting colours, movement and presence of people would be uncharacteristic and would contrast with the dominant cultural identity indicators relating to Agriculture and Subsistence (CL2 38.71%) and Religious Funerary and Ritual - Prehistoric (CL32 17.634%), with the latter manifested in the cairns and standing stones which occur frequently across the southern part of this upland landscape. The ZTV (Figure 7.8g) indicates that the proposed turbines would be visible from across the majority of the southern half of the CLSAA during the operational phase to a distance of approximately 4 km, becoming more fragmentary at distances between distances of 4 km to 10 km. As shown in Figure 7.12, this CLSAA already hosts the 17 operational turbines at Mynydd Clogau and 12 operational turbines at Tirgwynt, although the scale of these

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				existing turbines are smaller than the proposed development at a height of 66 m and 116 m to blade tip respectively whilst the cumulative ZTVs in Figures 7.13.1 and 7.13.2 indicate that there are areas within the CLSAA (including within and close to the Site) where only the Proposed Development would be visible. The presence of the proposed turbines would have direct effects within this aspect area which is described in the LANDMAP survey sheet as having a '<i>strong sense of place/ local distinctiveness</i>'. Their scale and movement would strongly contrast with the dominant cultural identity indicators relating to Agriculture and Subsistence (CL2 38.71%) and Religious Funerary and Ritual - Prehistoric (CL32 17.634%), with the latter manifested in the cairns and standing stones which occur frequently across this upland landscape, as well as the Llyn y Tarw ritual complex. The turbines may, to a lesser degree, be viewed as a contemporary extension to the dominant cultural identity indicator in respect of Infrastructure (HER class CL20 12.473%), although this occurs in lower proportions than within other CLSAAs considered in the assessment and the proposed turbines would be of a scale which far exceeds the types of infrastructure recorded as part of the baseline. No art/ artistic expressions, folklore/legends or events/ traditions associated with the landscape have been recorded in the LANDMAP Survey. The presence of the turbines, given the scale of this modern, vertical infrastructure, would alter the perception of the cairns and standing stones, which are contributors to the cultural identity of this landscape, both within the Site and areas closest to the Site.
Visual receptors: settlements				
Clatter	High	High-Medium to Zero	Substantial to Major and Significant to No View	Clatter is a small rural settlement located approximately 2.8 km distance south of the closest turbine (T5) of the Proposed Development. Clatter is sited in a valley surrounded by steeply sloping hillsides with the Afon Carno located to the north of the settlement. Residential properties are located north of the A470 along with Llanwnnog Methodist Chapel and south of the A470 off Clos

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				Hen Dy. With reference to the ZTV's (Figures 7.2-7.5) indicate theoretical visibility of between 7-9 blades and between 4-6 hubs for much of the village. The upper parts of turbines T1-T9 would be visible on the skyline from areas throughout the village where built form and vegetation do not screen the view. T3, T4 and T5 would be visible as hubs and from some locations the hubs of T6 and T8 would also be visible just above the horizon. T5 would be the closest and most prominent turbine with more of the tower visible. Access roads and other infrastructure would be screened by intervening landform. Road users travelling along the A470 and Clos Hen Dy would have glimpsed transient views of the Proposed Development between the gaps in vegetation and built form.
Carno	High	Medium (far south of the settlement) to Low-Very Low to Zero for the remainder of the Settlement	Major and Significant (properties to far south of settlement) to Moderate to Minor and Not Significant to No View (remainder of the settlement).	Carno is a large village located approximately 3.2 km distance south-west of the closest turbines (T5 and T6) of the Proposed Development. The village is sited within a valley surrounded by hills and with the Afon Carno located to the east. The settlement is spread out along the A470 which runs through the centre of settlement in a north-west to south-east direction. With reference to the ZTV's (Figures 7.2-7.5) indicate theoretical visibility of between 1-3 and 4-6 turbines within the cluster of properties in the northernmost part of the village. There is no ZTV coverage south of the minor road which branches off the A470 extending slightly further south. Towards the school and playing fields visibility would be between 1-3 turbines increasing to 4-6 further south and 7-9 along the southern most boundary of the settlement. From some properties in the northernmost part of the settlement where intervening built form and vegetation does not screen the view, the hubs and blades of T7 and T8 and potentially the tip of T9 and blade of T6 would be visible on just above the horizon. Further south in the area towards the playing fields and school the blade of T5 may be visible above the treeline. In the southern part of the settlement as illustrated in Viewpoint 2 the blades of T1, T3 and T5 would be visible above the coniferous vegetation on the hillside, with the blade tips of T2, T4 and T6 screened by vegetation. The remaining turbines would be screened by landform. There are a few residential properties on the far south of the settlement that are oriented towards the Proposed Development where

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				the towers and hubs of T4, T5 and T6, the hub of T3 and the blades of T1, T2, T7, and T8 would be visible on the skyline. Access tracks to T5 and T6 may be visible however other infrastructure would be screened by intervening landform.
Pontdolgoch	High	High-Medium to Zero.	Substantial to Major and Significant to No View	Pontdolgoch is a small rural village located approximately 3.7 km south of the closest turbine (T3) of the Proposed Development. The village is sited in a valley surrounded by hillsides with the Afon Carno flowing through the village. The village is spread out with the A470 passing through the village in generally a north-west/ south-east direction with minor roads spurring off the A470 serving residential properties to the west. The ZTVs (Figures 7.2-7.5) indicate theoretical visibility of between 7-9 blades and hubs for the majority of the settlement reducing to 4-6 hubs for properties closest to the A470. Turbines T1-T9 would be visible beyond a ridgeline with the upper parts visible on the skyline from properties located on the northern and western parts of the settlement where built form and vegetation do not screen the view. The most prominent turbine would be T5 with the tower visible against the skyline and would appear stacked with T6. T2 would be visible as a blade and T9 a blade tip. There are belts of woodland planting within the central and south-eastern parts of the village along the A470 which would screen views from residential properties in this part of the village. There would be glimpsed transient views from small sections of the A470 to the south-eastern parts of the village where turbines T5-T7 would be visible on the skyline through gaps in the woodland planting.
Adfa	High	Medium (properties to east and south where there is no screening) to Medium-Low (properties to the east and south	Major and Significant (properties to the east and south where there is no screening) to Major to Moderate and Significant	Adfa is a small rural village located approximately 5.2 km north-east of the closest turbine (T11) of the Proposed Development. It is a linear settlement with a minor road running through the middle in generally an east-west direction with some residential streets spurring off this road. The ZTVs (Figures 7.2-7.5) indicate theoretical visibility of the Proposed Development of between 10-11 turbines. There would be views south-west towards the Proposed Development primarily from the eastern areas of the village and properties located on the southern side of the village. The Proposed

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
		where there is partial screening) to Zero	(properties to the east and south of settlement with some screening provided by vegetation) to No View	Development would be visible beyond a ridgeline in the distance. The upper parts of the of 11 turbines would be visible on the skyline with half the turbines appearing in combination with Mynydd Clogau. There may be some screening/ filtering of some of the turbines from intervening foreground vegetation along the roadside, within gardens and field boundaries. There would be limited views from the minor road in the central and western parts of the village due to screening provided by intervening buildings. Views from properties north of the minor road would largely be screened by intervening residential properties, there may however be glimpsed views of some turbines through gaps in the intervening properties. Access tracks and ancillary infrastructure would be screened by intervening landform.
Cefn Coch	High	Medium to Zero	Major and Significant to No View.	Cefn Coch is a very small rural village located approximately 5.5 km north-east of the closest turbine (T11) of the Proposed Development. It is a linear settlement with a minor road running through the middle in a north-east/south-west direction with some minor residential streets spurring off this road with properties generally orientated in a south-east/north-west direction. In the centre of the village is Cefn Coch Inn. The ZTVs (Figures 7.2-7.5) indicate theoretical visibility of the Proposed Development of between 10-11 turbines throughout the settlement. The Proposed Development would be visible on the skyline in the distance primarily from the western parts of the village and properties located on the southern edge where intervening foreground vegetation and built form does not screen the view. The properties are not orientated towards the development and therefore views would be from the curtilages. All 11 turbines including hubs and towers would be visible on the skyline. T9 and T11 would appear further down the slope and there may be visibility of the access tracks to these turbines. The Proposed Development would be screened by intervening vegetation and built form from properties located on the eastern side of the village. Motorists travelling along the minor road would have glimpsed transient views through gaps in vegetation and built form.

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
Talerddig	High	Medium-Low (eastern part of the settlement) to Zero.	Major to Moderate and Significant to No View	Talerddig is small village located approximately 6.2 km distance south south-west of the closest turbine (T7) of the Proposed Development. The village is sited at the base of several valleys surrounded by steeply sided hillsides, with the Afon laen located to the north and the Afon Tyn-y-rhos located to the east. The A470 passes through the eastern side of the village in a north-west to south-east direction. A minor road spurs off to the west of the A470 where there is a cluster of properties and continues across a bridge over a railway line to the western side of the village where there are a small number of residential properties. The ZTVs (Figures 7.2-7.5) indicate theoretical visibility of the Proposed Development of between 10-11 blades / 7-9 hubs to the south-east of the settlement with no visibility to the west across the railway and north due to intervening landform. Visibility of the Proposed Development would primarily be limited to properties located on the edge of the settlement due to screening provided by intervening built form within the settlement. The Proposed Development would appear behind a ridgeline with turbines T5, T7, T8 and T9 visible on the skyline with the towers screened to varying degrees. The hub and blades of T4 and T6 would be partially screened by vegetation (as illustrated by Viewpoint 4). T10 and the blades/ blade tips of T1, T2, T3, and would likely be screened by intervening vegetation. T7 would appear slightly smaller in scale at 180 m in height and would appear deceptively further back in the view compared with T5 and T8. The turbines would also be visible in conjunction with overhead electricity lines on the skyline.
Visual receptors: recreational routes				
NCR 81	High	Medium-Low (section of the route north of Cefn Carnedd) to Low to Zero	Major to Moderate and Significant (section of the route north of Cefn Carnedd) to Moderate and Not	The Section of the NCR within the 27 km Study Area runs to the south-south-west of the Proposed Development to the south of Llanidloes to north-east towards Welshpool (circa 6 km-27 km distant) as shown on Figures 7.7.2 and 7.7.3 . From Cwmbelan to Llanidloes there would be theoretical visibility of up to 11 turbines for a short section the route. The turbines would be positioned beyond a ridgeline with the upper sections visible on the skyline,

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
			Significant to No View	however due to roadside and vegetation within the surrounding landscape along this section of the route it is likely the Proposed Development would be screened. From Llanidloes the route runs in a north-easterly direction towards Caersws. Due to landform, there is intermittent visibility along this section of the route. The Proposed Development (as illustrated in Viewpoint 10, approximately 11.3 km distant) would be visible for a short section of the route where turbines would be visible on the skyline with landform screening the towers to various degrees. Foreground vegetation would filter views of the hubs of T2, T9 and would largely screen T8 particularly in the summer months. There would also be some filtering of the tower and blades of T5 and T9 (<i>Low</i> magnitude). There is a section of the route to the north of Cefn Carnedd where up to 10-11 turbines would be theoretically visible on the skyline, with some visible as blades. (<i>Medium-Low</i> magnitude). As the route approaches to the west of Caersws (as illustrated in Viewpoint 6, approximately 6.2 km) visibility would reduce to four turbines with T1 appearing as a blade as an outlier and T5, T6 and T7 visible against the skyline with some filtering of T7 due to intervening vegetation (<i>Low</i> magnitude). South-east of Caersws up to 11 turbines would be visible for a short section of the route on the skyline with some filtering of the turbines due to roadside vegetation (<i>Low</i> magnitude). Within Newtown the Proposed Development would be screened by built for and there would be no visibility of the Proposed Development for the section of the route between Newtown and Welshpool due to intervening landform.
Cistercian Way	High	High (within approximately 2 km of the Proposed Development) to High-Medium (within 2-4 km of the Proposed Development) to	Substantial and Significant (within approximately 2 km of the Proposed Development) to Substantial to Major and Significant within 2-4 km of the route)	The part of the route within the 10 km Study Area is located to the south-east to north-east of the Proposed Development. It travels in a northerly direction from Abbeycwmhir (10 km distant) until it reaches the site where it passes directly to the east of T1. From this point the route heads in a north-easterly direction. With reference to ZTV (Figure 7.7.3) theoretically visibility of the Proposed Development is shown to the south to the east of Moel Iart (approximately 10 km distant) where there would be visibility of 11 turbines, with 10 hubs visible on the skyline. As the route progresses further north towards Caersws landform would increasingly screen the lower parts of the

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
		Medium (circa 4-6 km north-east) to Medium-Low (7 -8 km north-east towards Llanllugan) to Low (beyond 9 km north-east and south of Caersws) to Zero	to Major and Significant (circa 4- 6 km north-east) to Major to Moderate and Significant (7 -8 km north-east towards Llanllugan) to Moderate and Not Significant (beyond 9 km north-east and south of Caersws) to No View.	turbines and the total number of turbines visible. There are also trees adjacent to some sections of the route that would filter views towards the Proposed Development (<i>Low</i> magnitude). As the route progresses into Caersws built form would screen views towards the Proposed Development. North of Caersws only two blades would be visible due to intervening landform and the section of the route near Llanwnnog there would be no visibility. Theoretical visibility returns to the south-west of Ddified where 11 turbines would be visible on the skyline with some turbines visible as full turbines and others appearing behind landform with the towers screened to varying degrees. The route proceeds further north where it passes immediately east of T1 where turbines would be dominant in foreground views and there would be views of ancillary infrastructure such as compounds, control building, substation and access tracks (<i>High</i> magnitude). Visibility towards the Proposed Development continues as the route progresses north-east where all 11 turbines would remain visible along with ancillary infrastructure. (<i>High-Medium</i> magnitude). As the route progresses further north-east and heads towards the settlement of Adfa (circa 5 km distant) the turbines would appear behind landform with some visible as blades. Planting alongside the route and within fields may also help to filter views of the Proposed Development (<i>Medium</i> magnitude). As the route progresses east of Llanllugan there would be visibility of 11 turbines. Some turbines would be visible as blades in areas of lower ground with increased visibility of the turbines on higher ground where access tracks and ancillary infrastructure may also be visible. There may be some screening provided by adjacent hedgerows and trees within the landscape that may help to filter views (<i>Medium- Low</i> magnitude). There would be no visibility in the Afon Rhiw valley due to intervening landform. Upon exiting the valley (approximately 9 km) the Proposed Development would be visible on the skyline with landform screening the lower parts of the turbines with four turbines visible as blades (<i>Low</i> magnitude).

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
Severn Way	High	Medium-Low to Low to Zero	Major to Moderate and Significant to Moderate and Not Significant to No View.	The part of the route within the 10 km Study Area is located to the south-east of the Proposed Development. West of Llandinam (10 km distant) the route travels in a northerly direction towards Caersws (Viewpoint 6) where it then heads east towards Rhydlydan and then north which is the closest section of the route at approximately 5 km distant. The route continues east (Viewpoint 5) before heading south-east towards the 10 km Study Area. With reference to ZTV (Figure 7.7.3) theoretically visibility of the Proposed Development is shown to the south on the hillside to the west of Llandinam where up to 11 turbines would be visible on the skyline, however woodland planting in the foreground would likely provide screening from this part of the route. (<i>Low</i> magnitude). As the route continues further north there would be no visibility of the Proposed Development for a short section of the route due to intervening landform. Visibility of the Proposed Development would return to the north of Cefn Carnedd (approximately 7 km distant) where 10 turbines would be visible on the skyline with the lower parts of the towers screened by landform and four turbines visible as blades (<i>Medium-Low</i>). Further north, to the west of Caersws (as illustrated in Viewpoint 6, approximately 6.2 km distant) four turbines would be visible on the skyline with one visible as a blade (<i>Low</i> magnitude). Built form would limit views within Caersws settlement. For the section of the route east of Caersws and north of Rhydlydan the Proposed Development would be visible on the skyline as blades with only T1 visible as a hub. As the route progresses south of Bwlch-y-ffridd (as illustrated on Viewpoint 5), 11 turbines would be visible on the skyline, three visible as blades and three visible as blade tips. The towers would be largely screened by landform (<i>Medium-Low</i> magnitude). The route continues south-east towards the extents of 10 km Study area where visibility of the Proposed Development is intermittent due to landform and woodland planting. The Proposed Development would be visible from the southern extent where 11 turbines would theoretically be visible on the skyline with the towers screened to varying degrees. Vegetation within the landscape may filter views towards the Proposed Development (<i>Low</i> magnitude).

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
William Morgan Ride	High	Medium-Low to Low magnitude to Very Low to Zero	Major to Moderate and Significant to Moderate and Not Significant to Minor and Not Significant to No View.	The part of the route within the 10 km Study Area is located to the west and north of the Proposed Development. The section of the route located to the west of Mynydd Esgair has no ZTV coverage due to intervening landform (as illustrated on Figure 7.7.2). For a short section to the west of Mynydd Esgair (approximately 9 km distant) there would be visibility of 11 turbines which would appear behind a ridgeline with the towers screened to varying degrees and T11 appearing as a blade (<i>Low</i> magnitude). As the route heads further east, there is a short section that has no visibility until it reaches the point to the south of Ffridd yr Ystrad where between 10-11 turbines would be visible beyond a ridgeline. As the route progresses further to the east T11 would no longer be visible and turbines T1 and T2 would only be visible as blades. The route continues east towards the A470 and Talerddig (as represented by Viewpoint 4, approximately 6.2 km distant) where the Proposed Development would be visible on the skyline, behind a ridgeline with the towers screened to varying degrees. T10 and the blade tips of T1 and T2 would be screened by intervening vegetation and T11 would be screened by intervening landform (<i>Medium-Low</i> magnitude). To the north of Talerddig due to intervening landform and vegetation it is likely that only the upper parts of T5 and T6 would be visible for a short section of this route (<i>Low</i> magnitude). Approximately 2 km north-north-east of Talerddig (approximately 6 km distant from Proposed Development) there is a short section of the route where there would be 11 turbines visible on the skyline with the towers screened by landform to varying degrees with T11 appearing as a blade (<i>Medium-Low</i> magnitude). Visibility of the Proposed Development would then cease due to intervening landform until it reaches the southern slopes of Moel Ddolwen where visibility of the turbines would be limited to up to six blades / blade tips (<i>Very Low</i> magnitude).
Visual receptors: recreational destinations				
Open Access Land, PProWs and Notable	High	High (within 3 km of Proposed	Substantial and Significant (within	Figure 7.11 indicates the areas designated as open access land and the PProW network within 5 km.

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
Hill Summits within 5 km		Development), High to Medium (between 3 - 5 km of Proposed Development) to Zero	3 km) to Substantial to Major / Major and Significant (3 - 5 km) to No View.	Within the Site, there are two areas of designated open access land (Figure 7.11). Turbine T10 falls within the northern area of open access land. Turbines T5, T6 and T4 are located close to the boundary of the more southern open access land on the hillside of Garreg-hir. There are two areas of Open Access Land immediately to the east of the Proposed Development, adjacent to the Site. The larger of these is crossed by some PRowWs. There are other areas of open access land within 5 km, one approximately 0.6 km west, one approximately 2.8 km north-west, one approximately 2.2 km north, one approximately 3.2 km east and one approximately 3.7 km south-west of the Proposed Development. Other open access land within forested areas include Bryn yr Ysbyty (approximately 0.5 km west), an area south of Mynydd Waun Fawr (approximately 4 km north) and Belan-ddu Wood (approximately 4.2 km north-east). Due to the screening provided by the coniferous plantations, visibility would be limited to the outer edges facing the Proposed Development. Within these areas of Open Access Land and associated PRowWs there are locations where all 11 turbines would be visible to recreational receptors The distribution of local PRowWs within 5 km extends in all directions around the Proposed Development with a number of PRowWs also crossing through the Site. The footpaths which fall within the Site would have the greatest visibility of all 11 turbines and given their proximity, would be visually prominent. Footpaths located to the north-west and west of the Proposed Development would have less visibility due to intervening landform screening a number of the turbines. Notable hill summits within 5 km include Garreg-hir and Y Glonc (within the Site) and due to their proximity would have visibility of all turbines in panoramic views from these summits. Other notable summits include Y Foel (approximately 2.4 km north), Mynydd Garth-pwt (approximately 3.7 km south-west), Foel y Belan (approximately 4.5 km south) and Bryn y Gadair (approximately 5.0 km south-west). These summits would have visibility of 10-11 turbines.

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
Open Access Land, PRowS and Notable Hill Summits within 5 - 10 km	High	Medium - Low to Zero	Moderate and Significant to No View	Within 5-10 km, there are several areas of designated open access land (Figure 7.11). The largest of these is south-west of the Proposed Development. There are other areas of open access land to the south-west, north-west, north and south-east of the Proposed Development. Other open access land within forested areas includes the area north-west of Foel Fawr (approximately 5.2 km north-north-east) and the area north of Staylittie / Penffordd_Las (approximately 9.2 km south-west). Due to the screening provided by the coniferous plantation's, visibility would be limited to the outer edges facing the Proposed Development. Within these areas of Open Access Land and associated PRowS there are locations where all 11 turbines would be visible to recreational receptors The distribution of local PRowS within 5-10 km extends in all directions around the Proposed Development. Footpaths located to the north-west, south-west and south of the Proposed Development would have less visibility due to intervening landform screening a number of the turbines. Notable hill summits within 5-10 km include Bryn y Castell (approximately 6.2 km north), Bryn Amlwg (approximately 7.2 km west), Bryn Crugog (approximately 7.5 km south-west), Newydd Fynyddog (approximately 8.1 km north-west). These summits would have visibility of 10 - 11 turbines. The summit of Bryn yr Oerfa (approximately 9.7 km south-west) shows theoretical visibility of 10-11 turbines (Figure 7.4), however, in reality, views for receptors would be screened by vegetation from this location.
Visual receptors: transport routes				
A470	Medium	Medium (for short sections around Clatter) to Zero	Moderate and Significant to No View	Within 10km of the Proposed Development the A470 passes on a broadly south-east to north-west alignment and passes within approximately 2.1 km of the Proposed Development at its closest point to the south, as it passes through Clatter. Travelling from south to north along the route, and with reference to the ZTVs in Figures 7.2 - 7.5, visibility of up to 11 turbines (blades and tips) would theoretically be achievable as the route travels between Llandinam and

Receptor	Sensitivity of receptor	Magnitude of Change	Significance	Summary Rationale
				Caersws (approximately 4.4 km of the route). Intervening landform would reduce visibility of the Proposed Development closer to Caersws (<i>Medium - Low</i> magnitude of change). As the route enters Caersws and heads north-west through Clatter (Viewpoint 1) (approximately 4.6 km of the route), then Clatter to Carno (Viewpoint 2) (approximately 3.9 km of the route) ZTV coverage indicated remains consistent, between 4 - 9 turbines (blades and tips) theoretically visible. In reality, visibility of the Proposed Development would vary between open, filtered and screened views due to intervening built environment and roadside vegetation (<i>Medium to Low - Very Low</i> magnitude of change). Between Carno and Talerddig (Viewpoint 4), as the A470 proceeds north-west (approximately 5.1 km of the route). Several sections of ZTV coverage are indicated, including areas with no view due to intervening landform. In reality, visibility of the Proposed Development would vary between open and filtered views due to occasional intervening built structure and roadside vegetation and no view. (<i>Medium - Low to Low - Very Low</i> magnitude of change). In locations where landform or vegetation screens the view the magnitude would be <i>Zero</i>. As the route heads north-west from Talerddig to the eastern edge of Llanbrynmair (approximately 4.2 km of the route) the majority of views are screened by intervening landform. There is a small section where 1-3 turbines (blades and tips) would be theoretically visible (<i>Very Low</i> magnitude of change). In locations where landform or vegetation screens the view the magnitude would be <i>Zero</i>.



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