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6. Landscape and Visual Impact Assessment

6.1 Introduction

6.1.1 This chapter presents the assessment of the likely significant effects of the Proposed Development with respect to landscape and visual amenity receptors. It should be read in conjunction with the Project description provided in **Chapter 4: Description of the Proposed Development** and with respect to relevant parts of the following chapters:

- **Chapter 7: Historic Environment**, which assesses the effects of the Proposed Development on heritage assets; and
- **Chapter 16: Socio-economics** including tourism and recreation which assesses the effects of the Proposed Development on the use of public rights of way (PRoW) within the Proposed Development Site.

6.1.2 This chapter describes:

- the legislation, policy and technical guidance that has informed the assessment (**Section 6.2**);
- 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 6.3**);
- the methods used for baseline data gathering (**Section 6.4**);
- overall baseline (**Section 6.5**);
- embedded measures relevant to landscape and visual amenity (**Section 6.6**);
- the scope of the assessment for landscape and visual amenity (**Section 6.7**);
- the methods used for the assessment (**Section 6.8**);
- the assessment of effects: LANDMAP Aspect Areas (**Section 6.9**);
- the assessment of effects: Brecon Beacons National Park (**Section 6.10**);
- the assessment of effects: local landscape designations (**Section 6.11**);
- the assessment of visual effects (**Section 6.12**);
- the assessment of cumulative (inter-project) effects (**Section 6.13**); and
- a summary of the significance conclusions (**Section 6.14**).

6.1.3 A number of appendices accompany this LVIA as follows:

- **Appendix 6A** LVIA Methodology and glossary;
- **Appendix 6B** LANDMAP filtering process;
- **Appendix 6C** LANDMAP Aspect Areas: baseline descriptions and sensitivity assessments;

- **Appendix 6D** LANDMAP Landscape Habitats Aspect Areas: Assessment of effects;
- **Appendix 6E** LANDMAP Visual and Sensory Aspect Areas: Assessment of effects;
- **Appendix 6F** LANDMAP Historic Landscape Aspect Areas: Assessment of effects;
- **Appendix 6G** LANDMAP Cultural Landscape Services Aspect Areas: Assessment of effects;
- **Appendix 6H** Brecon Beacons National Park LCAs: Assessment of effects; and
- **Appendix 6I** Viewpoint Assessment.

6.1.4 These appendices contain the extensive volume of baseline information and detailed assessments with summaries included in **Sections 6.9** and **6.12** in order to present a clear and succinct Draft ES chapter. Two further appendices will form part of the final ES as follows:

- **Appendix 6J** Assessment of effects on night-time views; and
- **Appendix 6K** Residential Visual Amenity Assessment.

6.1.5 The following figures also accompany this LVIA:

- **Figure 6.1** Landscape and Visual Study Area;
- **Figure 6.2** Zone of Theoretical Visibility (ZTV) to Blade Tip with Viewpoint Locations within the Study Area;
- **Figure 6.3** Zone of Theoretical Visibility (ZTV) to Hub Height with Viewpoint Locations within the Study Area;
- **Figure 6.4** Wind energy developments included in the Cumulative Landscape and Visual Impact Assessment (CLVIA);
- **Figure 6.5** Landform Plan of the Study Area;
- **Figure 6.6** National Landscape Character Areas with Zone of Theoretical Visibility (ZTV) to Hub Height and Blade Tip within the Study Area;
- **Figure 6.7** Host LANDMAP Geological Landscape Aspect Areas filtered into the Study Area with Zone of Theoretical Visibility (ZTV) to Hub and Blade Tip;
- **Figure 6.8** LANDMAP: Landscape Habitats Aspect Areas filtered into the Study Area with Zone of Theoretical Visibility (ZTV) to Hub and Blade Tip;
- **Figure 6.9** LANDMAP: Visual and Sensory Aspect Areas filtered into the Study Area with Zone of Theoretical Visibility (ZTV) to Hub and Blade Tip;
- **Figure 6.10** LANDMAP: Historic Landscape Aspect Areas filtered into the Study Area with Zone of Theoretical Visibility (ZTV) to Hub and Blade Tip;
- **Figure 6.11** LANDMAP: Cultural Landscape Services Aspect Areas filtered into the Study Area with Zone of Theoretical Visibility (ZTV) to Hub and Blade Tip;
- **Figure 6.12** National landscape designations with Zone of Theoretical Visibility (ZTV) to Hub Height and Blade Tip within the Study Area;

- **Figure 6.13** Brecon Beacons National Park Landscape Character Assessment Landscape Character Areas within the Study Area;
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- **Figure 6.28 (a-g)** Viewpoint 6: Llantrisant Road, Pen-y-Coedcae (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.29 (a-g)** Viewpoint 7: Tyn-y-Bryn Park, Tonyrefail (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.30 (a-g)** Viewpoint 8: Coed-Pen-Maen Common, Pontypridd (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.31 (a-g)** Viewpoint 9: Mynwent Penuel Cemetery, Llantrisant (existing view/wireline, wireline, photomontage, and cumulative wirelines);

- **Figure 6.32 (a-g)** Viewpoint 10: Bryn Terrace, Blaenclydach (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.33 (a-g)** Viewpoint 11: Shrine of Our Lady of Penrhys (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.34 (a-g)** Viewpoint 12: Promoted viewpoint east of Ferndale (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.35 (a-g)** Viewpoint 13: Taff Ely Ridgeway Walk, near Mynydd Maendy (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.36 (a-g)** Viewpoint 14: Summit of Mynydd Meio (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.37 (a-g)** Viewpoint 15: Summit of Garth Hill (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.38 (a-g)** Viewpoint 16: Valeways Millennium Heritage Trail near Pendoylan (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.39 (a-g)** Viewpoint 17: Cefn Sychbant (existing view/wireline, wireline, photomontage, and cumulative wirelines);
- **Figure 6.40 (a-g)** Viewpoint 18: Caerphilly Common (existing view/wireline, wireline, photomontage, and cumulative wirelines); and
- **Figure 6.41 (a-g)** Viewpoint 19: Gelligaer Common (existing view/wireline, wireline, photomontage, and cumulative wirelines).

6.1.6 Each set of visualisation figures for Viewpoints 1 to 19 is presented across a number of pages which are referenced as follows:

- a: Existing view comprising baseline photography and wireline;
- b: Wireline;
- c: Photomontage;
- d: Existing view and cumulative wireline;
- e: Cumulative wireline (site centre plus 90°);
- f: Cumulative wireline (site centre plus 180°);
- g: Cumulative wireline (site centre plus 270°); and
- h: Night-time view (where applicable); and
- i: Wireline (where applicable).

Limitations and assumptions

- 6.1.7 The Draft ES has been produced to fulfil the Applicant's consultation duties and enable consultees to develop an informed view of the likely significant effects of the Proposed Development.
- 6.1.8 There are no limitations which affect the robustness of the assessment of the likely significant effects of the Proposed Development.

6.2 Relevant legislation, planning policy and technical guidance

- 6.2.1 This section identifies the legislation, planning policy and technical guidance that has informed the assessment of effects with respect to landscape and visual amenity. Further information on policies relevant to the Project is provided in **Chapter 5: Legislation and policy overview**.

Legislation

- 6.2.2 A summary of the relevant legislation is given in **Table 6.1**.

Table 6.1 Legislation relevant to the LVIA

Legislation	Legislative context
<i>Wellbeing of Future Generations (Wales) Act 2015</i> ¹	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 11 ² 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
<i>Environment (Wales) Act 2016</i> ³	This Act requires, under Section 6 – Biodiversity and resilience of ecosystems duty, that a public authority must seek to maintain and enhance biodiversity and promote the resilience of ecosystems. This requirement could be interpreted to include landscape as part of the ecosystems approach.
<i>National Parks and Access to the Countryside Act 1949</i> ⁴	This Act provided the framework for the creation of National Parks and Areas of Outstanding Natural Beauty, including the Brecon Beacons National Park which lies within the LVIA Study Area. 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.

¹ 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 September 2022).

² Welsh Government. (2021). Planning Policy Wales, Edition 11. (Online). Available at: https://gov.wales/sites/default/files/publications/2021-02/planning-policy-wales-edition-11_0.pdf (Accessed April 2022).

³ National Assembly for Wales. (2016). Environment (Wales) Act 2016. (Online). Available at: <https://www.legislation.gov.uk/anaw/2016/3/contents/enacted> (Accessed September 2022).

⁴ 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 September 2022).

Planning policy

6.2.3 A summary of the relevant national and local planning policy is given in **Table 6.2**.

Table 6.2 Planning policy relevant to the LVIA

Policy	Policy context
National planning policy	
Planning Policy Wales, Edition 11⁵	<p>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.</p> <p>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 AONBs, 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 an AONB.</p> <p>Paragraph 6.3.12 and 6.3.13 relate to non-statutory designations such as Special Landscape Areas 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.</p> <p>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.</p>
Future Wales - The National Plan 2040⁶	<p>Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure notes that there is a presumption in favour of large-scale wind energy development in Pre-Assessed Areas for wind developments (which 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 Proposed Development Site lies partially within Pre-Assessed Area 10 (further detail is set out in Section 3.2 of 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.</p>
Future Wales - The National Plan 2040⁶	<p>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.</p>

⁵ Welsh Government. (2021). Planning Policy Wales, Edition 11. (Online). Available at: <https://gov.wales/planning-policy-wales> (Accessed September 2022).

⁶ Welsh Government. (2021). Future Wales - The National Plan 2040. (Online). Available at: <https://gov.wales/future-wales-national-plan-2040-0> (Accessed September 2022).

Policy	Policy context
Local planning policy	
Rhondda Cynon Taff County Borough Council (RCTCBC) Local Development Plan up to 2021⁷⁸	Policy AW 6 - Design and Placemaking. This Policy seeks to ensure that developments are of a high standard, that design protects and enhances the landscape and biodiversity whilst further promoting energy efficiency and the use of renewable energy.
	Policy AW 8 - Protection And Enhancement of the Natural Environment. This policy seeks to protect and enhance the natural heritage of the County Borough. Development proposals will only be permitted where there would be no unacceptable impact upon features of importance to landscape.
	Policy AW 13 - Large Wind Farm Development. This policy states that proposals for wind farm developments of 25MW and over will be permitted where it can be demonstrated that the proposal (amongst other criteria): <ul style="list-style-type: none"> - “Will not because of its siting, scale or design have an unacceptable effect on the visual quality of the wider landscape”; and - “Will protect the natural beauty and special qualities of the Brecon Beacons National Park”.
	Policy NSA 25 - Special Landscape Areas. This policy identifies nine areas which have been designated as Special Landscape Areas within the northern half of the county. Seven of these lie within 10km of the Proposed Development and coincide with the ZTV as set out in the baseline presented in Section 6.5 . The policy states that “ <i>Development within the defined Special Landscape Areas will be expected to conform to the highest standards of design, siting, layout and materials appropriate to the character of the area.</i> ” ⁷
	Policy SSA 23 - Special Landscape Areas. This policy identifies 11 areas which have been designated as Special Landscape Areas within the southern half of the county. All 11 of these areas lie within 10km of the Proposed Development and coincide with the ZTV as set out in the baseline presented in Section 6.5 . The policy states that “ <i>Development within the defined Special Landscape Areas will be expected to conform to the highest standards of design, siting, layout and materials appropriate to the character of the area.</i> ” ⁷
Caerphilly County Borough Local Development Plan up to 2021⁹	Policy CW4 - Natural Heritage Protection states that development proposals that affect locally designated natural heritage features, will only be permitted where they conserve and where appropriate enhance the distinctive or characteristic features of the Special Landscape Area (SLA) or Visually Important Local Landscape (VILL).
	Policy NH1 - Special Landscape Areas identifies six areas which have been designated as SLAs, one of which (NH1.3 Mynydd Eglwysilan) lies within 10km of the Proposed Development and coincides with the ZTV as set out in the baseline presented in Section 6.5 . The text accompanying the policy states that “ <i>these areas will be protected from any development that would harm their distinctive features or characteristics</i> ” and that the applicant will need to

⁷ Rhondda Cynon Taff County Borough Council (2011). Local Development Plan up to 2021. (Online) Available at: <https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/LocalDevelopmentPlan20062021.aspx> (Accessed September 2022).

⁸ RCTCBC is currently preparing a replacement LDP to cover a plan period between 2022-2037 with the intention to adopt the plan in the October 2025. The process began in April 2022 with the preparation of the Pre-Deposit Stage of the Revised LDP.

⁹ Caerphilly County Borough Council. (2010). Local Development Plan up to 2021. (Online). Available at: [https://www.caerphilly.gov.uk/Business/Planning-and-building-control-for-business/Local-Development-Plan/Local-Development-Plan-2010-\(Adopted\)/The-Adopted-LDP](https://www.caerphilly.gov.uk/Business/Planning-and-building-control-for-business/Local-Development-Plan/Local-Development-Plan-2010-(Adopted)/The-Adopted-LDP) (Accessed September 2022).

Policy	Policy context
Bridgend Local Development Plan 2006-2021 ¹⁰	<p>demonstrate that any development proposal will not have an unacceptable impact on the specific distinctive features or characteristics associated with the SLA.</p> <p>Policy ENV3 - Special Landscape Areas. This policy identifies nine areas which have been designated as SLAs, two of which (ENV3(2) Northern Uplands and ENV3(5) Mynydd y Gaer) lie within 10km of the Proposed Development and coincide with the ZTV as set out in the baseline presented in Section 6.5. The policy states that development in SLAs will only be permitted where it retains or enhances the character and distinctiveness of the SLA, the design of the development reflects the building traditions of the locality in its form, materials and details, and/or assimilates itself into the wider landscape; and that the proposed development is accompanied by a landscape assessment which takes into account the impact of the development and sets out proposals to mitigate any adverse effects.</p>
Brecon Beacons National Park Authority Local Development Plan 2007-2022 ¹¹	<p>SP9 - Renewable Energy. Whilst this policy refers to renewable energy schemes within the National Park, the accompanying text at paragraphs 3.16.2.9 and 3.16.2.10 recognises the potential impact of large-scale renewable energy projects located on the peripheries of the National Park which will be judged in accordance with SP2 Major Development in the National Park. Policy SP9 states that proposals for renewable energy schemes will only be permitted where they do not have a significant adverse impact on the Natural Beauty, wildlife, cultural heritage and special qualities of the National Park.</p> <p>SP2 - Major Development in the National Park – Strategic Policy. Major development in the National Park, should only take place in exceptional circumstances, where proven to be in the public interest. Proposals will be judged against a number of criteria including any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which these could be moderated.</p> <p>Policy 12 - Light Pollution. This policy states that proposals where lighting is required, it will be permitted where:</p> <ul style="list-style-type: none"> • the lighting proposed is appropriate to its purpose; and • there is not a significant adverse effect individually or cumulatively on a number of criteria including (of relevance to the LVIA), the character of the area and the visibility of the night sky.
Merthyr Tydfil Replacement Local Development Plan (2016 - 2031) ¹²	<p>Policy EnW5 - Landscape Protection identifies five areas that have been designated as Special Landscape Areas (SLAs), one of which (SLA4: Pontygwaith) lies within 10km of the Proposed Development and coincides with the ZTV. The policy states that development proposals will be permitted where it can be satisfactorily demonstrated that:</p> <p><i>“a) It would not cause unacceptable harm to the character and quality of the landscape setting of the County Borough;</i></p> <p><i>b) Development within Special Landscape Areas are sensitive to their special characteristics;</i></p>

¹⁰ Bridgend County Borough Council. (2013) Bridgend Local Development Plan 2006-202. (Online). Available at: <https://www.bridgend.gov.uk/residents/planning-and-building-control/development-planning/existing-bridgend-local-plan-2013/bridgend-local-development-plan-adoption-documents/> (Accessed September 2022).

¹¹ Brecon Beacons National Park Authority. (2013). Brecon Beacons National Park Local Development Plan 2007-2022. (Online). Available at: <https://www.beacons-npa.gov.uk/planning/draft-strategy-and-policy/brecon-beacons-national-park-local-development-plan/>

¹² Merthyr Tydfil County Borough Council. (2020). Replacement Local Development Plan (2016 - 2031). (Online). Available at: <https://www.merthyr.gov.uk/resident/planning-and-building-control/planning-policy/>

Policy	Policy context
	<p>c) Development respects the local distinctiveness and historic character of the landscape;</p> <p>d) Development will safeguard local landscape character and landscape features, including views, which make a significant contribution to the character, history and setting of the locality;</p> <p>e) Development secures the enhancement of the character, appearance and quality of the landscape, through restoration, management or enhancement where possible;</p> <p>f) There is no satisfactory alternative and the benefits associated with the development can be demonstrated to outweigh the harm; and</p> <p>g) Where damage to local landscape character cannot be avoided appropriate mitigation has been secured.”¹²</p>
Vale of Glamorgan Local Development Plan 2011- 2026 ¹³	<p>Policy SP10 - Built and Natural Environment. This policy requires development proposals to preserve and where appropriate, enhance the rich and diverse built and natural environment and heritage of the Vale of Glamorgan including Special Landscape Areas.</p> <p>Policy MG17 - Special Landscape Areas. Six areas are designated as special landscape areas under this policy. One of these (Ely Valley & ridge slopes) lies within 10km of the Proposed Development and coincides with the ZTV. The policy states that within the SLAs, development proposals will be permitted where it is demonstrated they would cause no unacceptable harm to the important landscape character of the area.</p>
Cardiff Local Development Plan 2006 - 2026 ¹⁴	<p>EN3 - Landscape Protection. Five areas are designated as SLAs under this policy, one of which (Garth Hill and Pentyrch Ridges) lies within 10km of the Proposed Development and coincides with the ZTV as set out in the baseline in Section 6.5. The policy states that “<i>Development will not be permitted that would cause unacceptable harm to the character and quality of the landscape and setting of the city.</i>”</p>

- 6.2.4 As well as the national and local development plans, reference has been made to the following:
- Landscape and Development Supplementary Planning Guidance¹⁵ (Brecon Beacons National Park Authority); and
 - Light Pollution & Obtrusive Lighting Supplementary Planning Guidance¹⁶ (Brecon Beacons National Park Authority).

Technical guidance

- 6.2.5 A summary of the technical guidance for the LVIA is given in **Table 6.3**.

¹³ Vale of Glamorgan Council. (2017) Vale of Glamorgan Local Development Plan 2011 – 2026. (Online). Available at: https://www.valeofglamorgan.gov.uk/en/living/planning_and_building_control/Planning/planning_policy/Planning-Policy.aspx (Accessed September 2022).

¹⁴ Cardiff Council. (2016). Cardiff Local Development Plan 2006 – 2026. (Online). Available at: <https://www.cardiffldp.co.uk/adopted-local-development-plan/>

¹⁵ Brecon Beacons National Park Authority. (2014). Landscape and Development Supplementary Planning Guidance. (Online). Available at: <https://www.beacons-npa.gov.uk/wp-content/uploads/Landscape-and-Development-SPG-Adopted-October-2014.pdf>

¹⁶ Brecon Beacons National Park Authority. (2015). Light Pollution & Obtrusive Lighting Supplementary Planning Guidance. (Online). Available at: <https://www.beacons-npa.gov.uk/wp-content/uploads/Obtrusive-Lighting-SPG-.pdf>

Table 6.3 Technical guidance relevant to the LVIA

Technical guidance document	Context
Guidelines for Landscape and Visual Impact Assessment (Third Edition) ¹⁷	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 the detailed implications for the methodology by which the LVIA has been undertaken being set out in Section 6.8.
Using LANDMAP in Landscape and Visual Impact Assessments (GN46) ¹⁸	This guidance outlines Natural Resources Wales (NRW) advice on how LANDMAP information should be used in LVIA's. 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) ¹⁹	This 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 Landscape and Visual Impact Assessment as part of an Environmental Impact Assessment should conform with the requirements set out within this document.
Visual Representation of Development Proposals ²⁰	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: <i>Visual Representation of Wind Farms v2.2</i> ¹⁹ and that the <i>Visual Representation of Development Proposals</i> is broadly consistent with the guidance, particularly in respect of Type 4 Visualisation.
Guidance: Assessing the Cumulative Impact of Onshore Wind Energy Developments ²¹	This guidance sets out advice on assessing cumulative landscape and visual impacts and is referenced in Chapter 7 of GLVIA3 ¹⁷ .
Technical Information Note -2/2019. – Residential Visual Amenity Assessment ²²	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 ¹⁷ . 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.

¹⁷ Landscape Institute and the Institute of Environmental Management and Assessment, (2013). Guidelines for Landscape and Visual Impact Assessment. 3rd edition. London. Routledge

¹⁸ Natural Resources Wales. (2021). 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 September 2022).

¹⁹ Scottish Natural Heritage (now NatureScot). (2017). Visual representation of wind farms: Guidance. Version 2.2. (Online). Available at: <https://www.nature.scot/visual-representation-wind-farms-guidance> (Accessed September 2022).

²⁰ Landscape Institute. (2019). Technical Guidance Note 06/19 Visual Representation of Development Proposals. London. Landscape Institute. (Online). Available at: <https://www.landscapeinstitute.org/visualisation/> (Accessed September 2022).

²¹ Scottish Natural Heritage (now NatureScot). (2012). Guidance: Assessing the Cumulative Impact of Onshore Wind Energy Developments. (Online). Available at: <https://www.nature.scot/doc/guidance-assessing-cumulative-impact-onshore-wind-energy-developments#Introduction+and+scope+of+this+guidance> (Accessed September 2022).

²² Landscape Institute (2019). Technical Guidance Note 2/19 - Residential Visual Amenity Assessment. (Online). Available at: <https://www.landscapeinstitute.org/technical-resource/rvaa/> (Accessed September 2022).

Technical guidance document	Context
Technical Information Note 04/2020 - Infrastructure ²³	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.

6.3 Consultation and engagement

Overview

- 6.3.1 The assessment has been informed by consultation responses and ongoing stakeholder engagement. An overview of the approach to consultation is provided in Section 2.4 of **Chapter 2: Approach to Environmental Impact Assessment**.

Scoping Opinion

- 6.3.2 A Scoping Direction was issued by the Planning and Environmental Decisions Wales (PEDW, formerly Planning Inspectorate Wales) on behalf of the Welsh Ministers, on 01 December 2021. 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 6.4**.

Table 6.4 Summary of EIA Scoping Direction responses for the LVIA

Consultee	Consideration	How addressed in this Draft ES
PEDW LVIA responses		
PEDW	LVIA Search and Study Areas.	The spatial scope of the LVIA is set out in Section 6.7 and the 24 km LVIA study area is shown in Figure 6.1 .
ID.5	PEDW agrees with Natural Resources Wales (NRW) that the ES should employ a search area of 26km and a study area of 24km, based on the interpretation of NRW's LANDMAP Guidance Note 46.	
PEDW	Potential for significant effects beyond 10km.	The viewpoint assessment and analysis of likely significance threshold contained within Appendix 6I has been used to scope the LVIA. This demonstrates that no significant effects are anticipated beyond 8.5km, even for high sensitivity receptors.
ID.6	The Applicant's attention is drawn to NRW's comments regarding the potential for significant effects over 10km, particularly in relation to High Sensitivity Receptors.	

²³ Landscape Institute (2020). Technical Information Note 04/2020 – Infrastructure. (Online). Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2018/01/LI-Infrastructure-TGN-FINAL-200924.pdf> (Accessed September 2022).

Consultee	Consideration	How addressed in this Draft ES
PEDW	Guidance Note 46 filtering process.	The application of the filtering process outlined in Using LANDMAP in Landscape and Visual Impact Assessments (GN46) ¹⁸ is set out in Appendix 6B .
ID.7	See NRW's comments on the application of Guidance Note 46.	
PEDW	Future Baseline	The future baseline is set out in Section 6.5 and includes reference to renewable energy schemes. The schemes considered in the Cumulative LVIA (CLVIA) as of September 2022 are included in Table 6.6 and therefore represent the current cumulative scenario.
ID.8	PEDW does not agree that changes to the baseline are unlikely. There are a significant number of renewable energy schemes at various stages of the consenting process that could result in cumulative effects and the current policy environment is supportive of renewable energy. The applicant is therefore advised to monitor progress of other schemes, for example the Twyn Hywel, Manmoel and Abertillery DNS wind farm schemes, and to ensure an accurate and up to date baseline upon finalisation of the ES.	
PEDW	Viewpoints	Two additional viewpoints from Caerphilly Common and Gelligaer Common have been included as Viewpoints 18 and 19 respectively.
ID.9	The applicant's attention is drawn to consultee comments regarding appropriate viewpoints. CCBC has requested additional viewpoints and MTCBC has requested that the applicant include Gelligaer Common in the scope of assessment. The applicant is advised to include these in the LVIA and to liaise with those consultees as appropriate.	
PEDW	Cumulative Assessment	The cumulative LVIA Study Area extends to a 26km radius as shown in the cumulative ZTVs presented in Figures 6.20, 6.21 and 6.22 . The wind turbine schemes listed in Table 6.6 include existing, consented, planning application and scoping stage developments.
ID.10	The applicant should extend the area of cumulative assessment to 26 km as suggested by NRW. As noted in section 6 of this Direction, PEDW does not agree that pre-application and scoping stage schemes can be scoped out of the LVIA. PEDW agrees that single turbines outside 10 km can be scoped out of the LVIA.	
PEDW	Receptors outwith the ZTV.	In accordance with the agreement from PEDW, landscape and visual receptors outwith the ZTVs shown in Figures 6.2 and 6.3 have not been considered further in the LVIA.
ID.11	PEDW agrees that receptors outwith the finalised ZTV can be scoped out.	
PEDW	Local / Regional Receptors.	The viewpoint assessment and analysis of likely significance threshold is contained within Appendix 6I and provides the evidence for scoping out local and regional landscape and visual receptors beyond 10km.
ID.12	PEDW agrees that, where supported by assessment and analysis, local and regional receptors beyond 10 km can be scoped out based on evidence as the ES is progressed. However, it is not considered appropriate to scope them out at this stage.	

Consultee	Consideration	How addressed in this Draft ES
PEDW ID.13	Wales Coast Path. Given the degree of separation and the intervening built environment, PEDW agrees that the Wales Coast path can be scoped out.	In accordance with the agreement from PEDW, visual receptors using the Wales Coast Path have not been considered further in the LVIA.
PEDW ID.14	Brecon Beacons National Park. Given the sensitivity of the designation, PEDW does not agree that effects on the BBNP can be scoped out.	The effects of the Project upon the special qualities of the Brecon Beacons National Park and upon the landscape character as defined by the Brecon Beacons National Park Landscape Character Assessment ²⁴ is considered in Section 6.10 and Appendix 6H respectively.
PEDW ID.15	Glamorgan Heritage Coast. PEDW agrees that in light of the degree of separation and intervening built development, the Glamorgan Heritage Coast can be scoped out.	In accordance with the agreement from PEDW, potential indirect landscape effects on the Glamorgan Heritage Coast have not been considered further in the LVIA.
PEDW ID.16	Decommissioning. PEDW agrees that decommissioning activities would be unlikely to introduce additional landscape or visual impacts and can therefore be scoped out of the LVIA.	In accordance with the agreement from PEDW, potential landscape and visual effects as a consequence of decommissioning activities have not been considered further in the LVIA.
PEDW ID.17	Significance of effects. The applicant's attention is drawn to comments from CCBC regarding the potential for including a 'Very high' descriptor when assessing magnitude of change. The applicant should give consideration to this approach.	A very high magnitude of change is included in the methodology summarised in Section 6.8 and set out in detail in Appendix 6A .
PEDW ID.18	Night-time assessment. The applicant's attention is drawn to comments from NRW and BBNPA regarding the need for evidence to support assertions made in the Scoping Report and the need to consider the BBNP's status as a Dark Sky Reserve.	Effects on the BBNP during the hours of darkness are set out in Appendix 6H and Section 6.10 which considers the effects on the special qualities of the BBNP including dark skies.
PEDW ID.19	Viewpoint at Craig y Fan Du This viewpoint is referred to in appendix 5, but is not in the list at Table 5.2.	Reference to Craig y Fan Du in Appendix 5.1 of the Scoping Report is an error.
Local Authority and NRW responses		
Rhondda Cynon Taff	Concur with NRW's comments and advise the developer has regard to NRW's concerns in	See responses to PEDW and NRW comments.

²⁴ Fiona Fyfe Associates, with Julie Martin Associates, Alison Farmer Associates and Countryside. (2012). Brecon Beacons National Park Landscape Character Assessment. (Online). Available at: <https://www.landscapeinstitute.org/technical-resource/rvaa/> <https://www.beacons-npa.gov.uk/planning/draft-strategy-and-policy/landscape-character-assessment/> (Accessed September 2022).

Consultee	Consideration	How addressed in this Draft ES
	finalising the details of the ES, or at least provide a response explaining why they do not agree with them	
Caerphilly County Borough Council Landscape Officer	<p>Viewpoints</p> <p>Recommends the following additional viewpoints: within the Caerphilly Borough:</p> <ul style="list-style-type: none"> - Caerphilly Common Trig Point within the South Caerphilly SLA, OS Grid ref 315261,185538. - From a location within the Gelligaer SLA and Historic Landscape. 	Two additional viewpoints from Caerphilly Common and Gelligaer Common have been included as Viewpoints 18 and 19 respectively.
Caerphilly County Borough Council Landscape Officer	Recommends five magnitude of change categories ranging from Negligible, Low, Medium, High to Very High are used in the assessment,	A very high magnitude of change is included in the methodology summarised in Section 6.8 and set out in detail in Appendix 6A .
Merthyr Tydfil County Borough Council	Regard should be given to the potential impacts on Gelligaer Common, which lies within 10km of the development and is a registered Landscape of Special Historic Interest. It is also designated (Gelligaer and Taf Bargod) as a Special Landscape Area in the Merthyr Tydfil Replacement Local Development Plan.	An Assessment of the Significance of the Impact of Development on Historic Landscape (ASIDOHL) is provided in Appendix 7E as part of the Historic Environment assessment. This considers changes to the settings of heritage assets using a study area of 5km from the Site boundary. The Gelligaer Common Landscape of Special Historic Interest is therefore outside of the scope of the ASIDOHL.
Merthyr Tydfil County Borough Council	The cumulative assessment should not only consider the impacts where the development would be visible in relation to other turbines, but should also consider other vantage points where there would be an increased awareness of wind turbines visible from the same location but in multiple locations. For example, there may be long distant panoramic views from Gelligaer Common Landscape of Special Historic Interest towards the development. There are already a number of wind turbines visible from the summit at Pengarnbugail in various direction that have some impact on the broad uninterrupted views. In this respect, the cumulative assessment should consider the capacity of the landscape to absorb additional turbine of various scales within the landscape from such vantage points.	The cumulative assessment takes account of 360° views from elevated areas within the landscape, including from within SLAs
Brecon Beacons National Park Authority	<p>Cumulative assessment</p> <p>The National Park Authority has recently been consulted on a number of new wind farm proposals on the fringes of the National Park boundary and the Authority has concern regarding</p>	The wind turbine schemes listed in Table 6.6 include existing, consented, planning application and scoping stage developments within the 26km CLVIA study area. The assessment of effects on landscape character, as defined by

Consultee	Consideration	How addressed in this Draft ES
	<p>their cumulative impact. A list has been provided above. Given this proliferation, we would argue that all existing, consented and submitted turbines within the identified radius need to be considered.</p>	<p>the Brecon Beacons National Park Landscape Character Assessment²⁴, is set out in Appendix 6H and includes a cumulative landscape assessment.</p>
<p>Brecon Beacons National Park Authority</p>	<p>ZTVs</p> <p>It would appear the Zone of Theoretical Visibility included in the Scoping Report has been calculated on the mid-range blade tip? If this is the case, this does not seem appropriate given the turbines could have a 180m blade tip.</p> <p>It is noted that 17 viewpoints are currently identified in total, with 1 (no. 17) viewpoint being within the National Park boundary. It is noted these are all proposed to be photomontages.</p>	<p>The ZTV presented in the Scoping Report utilised a blade tip height of 175m. The final ZTVs illustrated in Figures 6.2 and 6.3 of the LVIA have been calculated using a final blade tip height of 155m and hub height of 97.5m.</p>
<p>Brecon Beacons National Park Authority</p>	<p>Policy</p> <p>The legal and policy context should refer to the current Brecon Beacons National Park Management Plan (2015-2020). This is the document which sets out the Special Qualities of the National Park. Planning Policy Wales (PPW) requires that the special qualities of designated areas are given weight in the development planning and development management process. Therefore, this document (as well as the Special Qualities) will need to be carefully considered as part of the Environmental Impact Assessment process. It is noted that the National Park's Supplementary Planning Guidance on Landscape is not a draft - it is an adopted version. It would also be relevant for the EIA to reference the International Dark Sky Reserve as well as associated lighting policy and Supplementary Planning Guidance.</p>	<p>Relevant policies from the <i>Brecon Beacons National Park Authority Local Development Plan 2007-2022</i>¹¹ are referenced in Table 6.2. Reference has also been made to the adopted SPGs relating to Landscape and Development¹⁵ and Light Pollution & Obtrusive Lighting¹⁶.</p> <p>The <i>Brecon Beacons National Park Management Plan (2015-2020)</i>²⁷ is referenced in Table 6.5 along with the <i>Brecon Beacons National Park – Dark Sky Reserve External Lighting Management Plan</i>²⁹ and the special qualities are set out in the baseline in Section 6.5. The effects of the Project upon the special qualities of the Brecon Beacons National Park and upon the landscape character is considered in Section 6.10 and Appendix 6H.</p>
<p>Brecon Beacons National Park Authority</p>	<p>It is unclear whether any assessment is proposed to be undertaken regarding glint and glare. The National Park Authority would be supportive of some consideration being given to glint and glare.</p>	<p>As set out in Table 6.9, the turbines would be a non-reflective pale grey colour which would minimise the occurrence of glint and glare.</p>
<p>NRW</p>	<p>NRW agrees that a Night-time Lighting Assessment and Cumulative LVIA would be required.</p>	<p>A CLVIA is set out in Section 6.13. Cumulative effects are also included as part of the assessment of effects on the BBNP LCAs and Viewpoint Assessment set out in Appendices 6H and 6I respectively.</p> <p>Section 6.10 and Appendix 6H also include consideration of night-time effects on the BBNP.</p>

Consultee	Consideration	How addressed in this Draft ES
NRW	Paragraph 5.2.2 of the Scoping Report refers to search and study areas using NRW's LANDMAP Guidance Note 46 and the use of LANDMAP in the LVIA. This guidance is appropriate to the assessment.	The guidance document <i>Using LANDMAP in Landscape and Visual Impact Assessments (GN46)</i> ¹⁸ has been referred to in undertaking the LVIA and is referenced in Table 6.3 . The application of the filtering process outlined in GN46 is documented in Appendix 6B .
NRW	Paragraph 5.2.3 of the Scoping Report states that the Search Area and Study Area would be 23km from the site boundaries, based on NRW Guidance Note 46. Guidance Note 46 recommends a Search Area of 23-26km for turbines 146-175m and a 20-24km Study Area for turbines of this size. We advise that a Search Area of 26km and Study Area of 24km should be used, based on this guidance.	The final height of the proposed turbines would be a maximum of 155m to blade tip and a LVIA study area of 24km has been used as described in Section 6.7 and shown in Figure 6.1 .
NRW	Paragraph 5.2.4 of the Scoping Report considers that significant landscape effects on LANDMAP Aspect Areas are highly unlikely over 10km. We consider that the LVIA findings would indicate whether significant landscape effects occur beyond 10km.	The viewpoint assessment and analysis of likely significance threshold contained within Appendix 6I has been used to scope the LVIA. This indicates that no significant effects are anticipated beyond 8.5km, even for high sensitivity receptors, and provides the evidence for scoping out local and regional landscape and visual receptors beyond 10km. This provides a proportionate approach which concentrates the assessment upon the 85 LANDMAP Aspect Areas most likely to experience higher magnitudes of change within 10km of the Proposed development rather than the 272 LANDMAP Aspect Areas derived from the filtering process reported in Appendix 6B .
NRW	Paragraph 5.2.5 of the Scoping Report considers that significant effects on visual receptors are highly unlikely over 10km, but the scope includes visual receptors with particularly high sensitivity at distances of 10-23km. High sensitivity receptors have the potential to be significantly affected at greater distances, which informs the guidance on search and study areas in Guidance Note 46.	The viewpoint assessment and analysis of likely significance threshold contained within Appendix 6I indicates that no significant effects are anticipated beyond 8.5km, even for high sensitivity receptors.
NRW	Paragraph 5.2.6 of the Scoping Report states that consideration would be given to all 5 LANDMAP Aspect Areas as well as a number of documents. These documents are appropriate, but it should be noted that the National Park's SPG Landscape and Development 2014 is now available on the Brecon Beacons National Park's website.	Reference has also been made in Section 6.2 to the Brecon Beacons National Park Authority's adopted SPGs relating to Landscape and Development and Light Pollution & Obtrusive Lighting.

Consultee	Consideration	How addressed in this Draft ES
NRW	Paragraph 5.2.18 of the Scoping Report refers to the Guidance Note 46 filtering process which advises the retention of all LANDMAP historic landscape and visual and sensory aspect areas at filter 3 within the Study Area and the retention of those outside that may be highly visually sensitive up to the Search Area. Filter 3 areas are outstanding and high under question 40 for Historic Landscape and under overall evaluation, scenic quality (question 46) or character (question 48) for Visual and Sensory.	The filtering process is reported in Appendix 6B . This has subsequently been refined in accordance with the findings of the viewpoint assessment and analysis of likely significance threshold contained within Appendix 6I , which indicates that no significant effects are anticipated beyond 8.5km, even for high sensitivity receptors. Consequently, the assessment of effects on LANDMAP Aspect Areas has been limited to those within or partially within 10km of the Proposed Development.
NRW	Paragraph 5.2.20 of the Scoping Report refers incorrectly to the Carn y Cefn Wind Farm.	Noted.
NRW	Paragraph 5.2.27 of the Scoping Report states that the future baseline is unlikely to alter, particularly due to the reduction in renewable energy applications in the past 5 years. We do not agree with this statement. Given the changing policy context and climate emergency and the number of wind farm applications at scoping, combined with the increasing height of the technology, we consider that the future baseline has the potential to alter substantially.	The future baseline is set out in Section 6.5 and includes reference to renewable energy schemes.
NRW	Paragraph 5.3.4 of the Scoping Report refers to the Scottish Natural Heritage (SNH) wind farm guidance and Guidance Note 46, which are appropriate to the LVIA.	Reference to these documents, alongside other relevant technical guidance, is set out in Table 6.3 .
NRW	Table 5.2 of the Scoping Report includes one viewpoint from the National Park (Viewpoint 17, A4059 north of Penderyn (recreational receptors and vehicle-users). The Zones of Theoretical Visibility (ZTV) indicates visibility across this open upland area including the slopes of Cadair Fawr/Cefn Cadlan (public footpath and open access land) and Mynydd-y-Glog (open access land). It is not certain whether the selected viewpoint is the most representative, although it is clearly the most accessible. The viewpoint lies within Landscape Character Area 3 Fforest Fawr, as defined in the National Park's SPG Landscape and Development 2014. Within this area tranquillity, remoteness and wildness, long views and dark night skies are important landscape qualities. Guidance includes to reduce the visual impact of wind turbines beyond the National Park boundary. These special landscape qualities should be considered in the assessment of effects on receptors at this viewpoint.	<p>The ZTVs presented in Figures 6.2 and 6.3 reflect the final Proposed Development with turbines that are 155m to blade tip, compared to the initial ZTVs included as part of the Scoping Report which were based on a blade tip height of 175m. The location of Viewpoint 17 has been updated accordingly, as the location set out in the Scoping Report no longer coincides with the ZTV.</p> <p>The assessment of effects on the BBNP LCAs is included in Appendix 6H.</p>

Consultee	Consideration	How addressed in this Draft ES
NRW	<p>We consider that the CLVIA Search Area should be slightly larger than the LVIA Study Area, in order to include existing and proposed large wind farms within the area to the south of the National Park. We suggest a CLVIA Search Area of at least 26km, to coincide with the LVIA Search Area guide under Guidance Note 46.</p> <p>Schemes at scoping and pre-application may need to be scoped in if they are determined prior to this scheme. The applicant should rescope their ES through the EIA process to ensure the latest baseline information is being used.</p> <p>We agree that single turbines over 10km can be scoped out.</p>	<p>The cumulative LVIA Study Area extends to a 26km radius as shown in the cumulative ZTVs presented in Figures 6.20, 6.21 and 6.22.</p> <p>The wind turbine schemes listed in Table 6.6 include existing, consented, planning application and scoping stage developments as of September 2022 and therefore represent the latest cumulative scenario.</p>
NRW	<p>The Scoping Report states that a small part of the National Park lies within the Study Area and that the proposal would be seen with numerous other turbines in the baseline, therefore there is minimal potential for significant landscape effects. This may be the case, although there is the potential for cumulative effects and an assessment from Viewpoint 17, or nearby, would aid the assessment of effects on the National Park.</p>	<p>The assessment from Viewpoint 17, as set out in Appendix 6I includes an assessment of cumulative visual effects. Similarly, the assessment of effects on the BBNP LCAs presented in Appendix 6H includes an assessment of cumulative landscape effects.</p>
NRW	<p>Paragraphs 5.4.3 and 5.4.11 of the Scoping Report refers to Guidelines for Landscape and Visual Impact Assessment 3 (GLVIA3) and SNH Wind Farm guidance. These are considered appropriate.</p>	<p>Reference to these documents, alongside other relevant technical guidance, is set out in Table 6.3.</p>
NRW	<p>Paragraph 5.4.11 of the Scoping Report refers to the night-time assessment from 3 local viewpoints (viewpoints 1, 2 and 4) and states there would be no impact beyond 10km. Some evidence to support this statement would be helpful. It should be noted that the National Park is an International Dark Sky Reserve and that many of the upland areas outside the National Park also benefit from low degrees of light pollution. NRW has recently commission evidence on Dark Skies in Wales Natural Resources Wales / New map casts light on Wales' dark skies.</p>	<p>The assessment of effects on the BBNP LCAs is set out in Appendix 6H and on the Special Qualities of the BBNP included in Section 6.10, considers the effects on the night-time environment within the BBNP. The assessment of effects on night-time views from the three local viewpoints will form Appendix 6J of the final ES.</p>
NRW	<p>The Scoping Report states that the National Park has been scoped out due to minimal potential for landscape effects. However, viewpoint 17 is included, and in our opinion, should be assessed, given the sensitivities of the designation.</p>	<p>An assessment of effects on the BBNP LCAs is set out in Appendix 6H whilst effects on the Special Qualities of the BBNP is included in Section 6.10.</p>
NRW	<p>Appendix 5.1 of the Scoping Report notes that due to the large number of other wind energy developments in the CLVIA, overall cumulative effects may be greater than primary or additional effects of the proposal. We agree that this may be the case, hence the need for a thorough cumulative assessment.</p>	<p>A CLVIA is included in Section 6.13 as well as part of Section 6.11, Appendix 6H and Appendix 6I.</p>

Consultee	Consideration	How addressed in this Draft ES
NRW	Reference is made to a viewpoint at Craig- y-Fan Du, however, this is not included in the assessment.	Reference to Craig y Fan Du in Appendix 5.1 of the Scoping Report is an error.
NRW	The use of wirelines and photomontages, in line with Landscape Institute Technical Guidance Note (TGN) 06/19 and SNH Visual representation of wind farms (2017), is acceptable. We advise that, in accordance with Landscape Institute TGN 06/19, Visual Representation of Development Proposals, Type 4 representations with photomontages should be provided for viewpoints within the National Park, given the sensitivities. Cumulative photomontages/wirelines should also be produced illustrating cumulative effects on the National Park. Viewpoints from dark areas of landscape should be included as appropriate, not only from lit roads and settlements.	Photomontages are provided in Figures 6.23 to 6.41 for all 19 viewpoints including viewpoint 17, located within the BBNP. These are accompanied by 360° cumulative wirelines.

6.4 Data gathering methodology

Study area

LVIA study area

- 6.4.1 Using *LANDMAP in Landscape and Visual Impact Assessments (GN46)*¹⁸ advises that the LVIA study area for structures of a height of 146m to 175m should extend to 20km to 24km distant from each of the proposed turbine locations. As agreed during the consultation process, a LVIA study area of 24km has been utilised for the Proposed Development which has a maximum turbine height of 155m to blade tip. This LVIA study area is illustrated in **Figure 6.1**.
- 6.4.2 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 NRW, 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

- 6.4.3 On the basis of the consultation responses, the cumulative study area extends to 26km as illustrated in **Figure 6.4** and the cumulative ZTVs presented in **Figures 6.20 to 6.22**.

Desk study

- 6.4.4 A summary of the organisations that have supplied data, together with the nature of that data is outlined in **Table 6.5**.

Table 6.5 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 ²⁵	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 (CLAA) GIS dataset and evaluations.	Baseline information on landscape character in Wales, recorded and evaluated in a nationally consistent data set.
	Special Landscape Areas (SLAs) dataset	Baseline information on the spatial distribution of SLAs within South Wales
	Tranquillity and Place – Dark Skies Report No: 514 ²⁶	Web-based map of Dark Skies and Light Pollution in Wales and accompanying report provides baseline information with regard to light pollution.
Brecon Beacons National Park Authority	<i>A Management Plan for the Brecon Beacons National Park 2015-2020²⁷ and Future Beacons, The Management Plan for the Brecon Beacons National Park 2022-2027, Consultation Draft²⁸</i>	Baseline information on the special qualities of the National Park.
	<i>Brecon Beacons National Park Landscape Character Assessment²⁴</i>	Baseline information on landscape character within the National Park.
	<i>Brecon Beacons National Park – Dark Sky Reserve</i>	Provides practical advice on mitigating stray light within the boundaries of Brecon Beacons

²⁵ 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> (Accessed September 2022).

²⁶ Green C, Manson D, Chamberlain K 2021. Tranquillity and Place – Dark Skies. NRW Report No: 514. (Online). Available at: <https://luc.maps.arcgis.com/apps/opsdashboard/index.html#/1cd6ba8a1d7d4a62aff635cfcba4aec> (Accessed September 2022).

²⁷ Brecon Beacons National Park Authority. (2015). A Management Plan for the Brecon Beacons National Park 2015-2020. (online). Available at: <https://www.beacons-npa.gov.uk/the-authority/who-we-are/npmp/> (Accessed September 2022).

²⁸ Brecon Beacons National Park Authority. (2021). Future Beacons. The Management Plan for the Brecon Beacons National Park 2022-2027 Consultation Draft. (Online). Available at: <https://www.beacons-npa.gov.uk/the-authority/who-we-are/npmp/management-plan-review/> (Accessed September 2022).

Organisation	Data source	Data provided
	<i>External Lighting Management Plan</i> ²⁹	National Park but can be equally followed in the other parts of the adjacent counties to protect, maintain or improve the existing dark sky attributes and the rural environmental setting of intrinsic darkness.
Blaenau Gwent Council (on behalf of five local authorities that cover the Heads of the Valleys study area)	<i>Heads of the Valleys Smaller Scale Wind Turbine Development – Landscape Sensitivity and Capacity Study</i> ³⁰	This study covers five local authorities including the host local authority: Rhondda Cynon Taff Borough Council plus Blaenau Gwent County Borough Council; Torfaen County Borough Council, Caerphilly County Borough Council; and Merthyr Tydfil County Borough Council. As set out in its methodology, the Study is confined to wind turbine developments that do not exceed a planned capacity of 5MW i.e. for a maximum of two turbines over 109m blade tip height. Nevertheless, aspects of the Study are likely to remain relevant to the Proposed Development.
Rhondda Cynon Taff County Borough Council (RCTCBC)	<i>Development of Criteria for Special Landscape Area Designation for South east Wales Local Authorities</i> ³¹	Sets out the criteria which should be used to define SLAs across south-east Wales (the host and neighbouring authorities).
	<i>Proposals for Designation of Special Landscape Areas in Rhondda Cynon Taff – Draft Report</i> ³²	Provides baseline information on the SLAs within the area administered by RCTCBC.
	Public Rights of Way (ProWs) ³³	Provides the location and reference for ProWs within the area administered by RCTCBC
Caerphilly County Borough Council (CCBC)	<i>Designation of Special Landscape Areas</i> ³⁴	Provides baseline information on the SLAs within the area administered by CCBC.

²⁹ Lighting Consultancy and Design Services Ltd. (Undated). Brecon Beacons National Park – Dark Sky Reserve External Lighting Management Plan. (Online). Available at: <https://www.darksky.org/our-work/conservation/idsp/reserves/breconbeacons/> (Accessed September 2022).

³⁰ Gillespies. (2015). Heads of the Valleys Smaller Scale Wind Turbine Development - Landscape Sensitivity and Capacity Study. (Online). Available at: <https://www.blaenau-gwent.gov.uk/en/resident/planning/local-development-plan/spg-documents/> (Accessed April 2022).

³¹ TACP. (2007). Development of Criteria for Special Landscape Area Designations for South East Wales Local Authorities. (Online). Available at: <https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/LDPEvidenceBaseLibraryandAnnualMonitoringRe/RelateddocumentsEvidenceBase/EB48.pdf> (Accessed September 2022)

³² Bronwen Thomas Landscape Architect. (2008). Proposals for Designation of Special Landscape Areas in Rhondda Cynon Taff – Draft Report. (Online). Available at: <https://www.rctcbc.gov.uk/EN/Resident/PlanningandBuildingControl/LocalDevelopmentPlans/LDPEvidenceBaseLibraryandAnnualMonitoringRe/RelateddocumentsEvidenceBase/EB49.pdf> (Accessed September 2022)

³³ Rhondda Cynon Taff County Borough Council (undated). Public Rights of Way Mapping. (Online). Available at: <https://maps.rctcbc.gov.uk/myrhondda.aspx>

³⁴ TACP. (2008). Designation of Special Landscape Areas. (Online). Available at: <https://apps.caerphilly.gov.uk/LDP/Examination/PDF/SB47.pdf> (Accessed 08 July 2021)

Organisation	Data source	Data provided
Bridgend County Borough Council (BCBC)	<i>Designation of Special Landscape Areas</i> ³⁵	Provides baseline information on the SLAs within the area administered by BCBC
Merthyr Tydfil County Borough Council (MTCBC)	<i>Background Paper Special Landscape Areas</i> ³⁶	Provides baseline information on the SLAs within the area administered by MTCBC
Vale of Glamorgan Council	<i>Designation of Special Landscape Areas Review Against Historic Landscapes Evaluations Update</i> ³⁷	Provides baseline information on the SLAs within the area administered by the Vale of Glamorgan Council.
Sustrans	National Cycle Routes ³⁸	Provides details of National Cycle routes within the LVIA study area.

Zone of Theoretical Visibility (ZTV) and wind farms relevant to the cumulative assessment

- 6.4.5 Analysis of Zone of Theoretical Visibility maps (ZTVs) 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 155m and 97.5m Above Ground Level (AGL) respectively. 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.
- 6.4.6 Two ZTV maps have been provided as follows:
- **Figure 6.2:** illustrates the ZTV calculated to blade tip height (155m) at 1:50,000 scale and the locations of viewpoints 1-16, 18 and 19 (viewpoint 17 is shown on **Figure 6.13** at a scale of 1:185,000); and
 - **Figure 6.3:** illustrates the ZTV calculated to hub height (97.5m) at 1: 50,000 scale and the locations of viewpoints 1-16, 18 and 19 (viewpoint 17 is shown on **Figure 6.13** at a scale of 1:185,000).

³⁵ TACP. (2010). Bridgend County Borough Council Designation of Special Landscape Areas. (Online). Available at: https://www.bridgend.gov.uk/media/1796/designation_of_special_landscape_areas.pdf (Accessed September 2022)

³⁶ Merthyr Tydfil County Borough Council. (2018). Background Paper Special Landscape Areas. (Online). Available at: <https://www.merthyr.gov.uk/media/4434/sd26-special-landscape-areas-background-paper-june-2018.pdf>

³⁷ TACP. (2011). Vale of Glamorgan County Borough Council Designation of Special Landscape Areas, Review Against Historic Landscapes Evaluations Update. (Online). Available at:

https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/LDP/Background%20Papers/Designation_of_Special_Landscape_Areas_Review_Against_Historic_Landscapes_Evaluations_2011.pdf (Accessed September 2022)

³⁸ Sustrans. (2021). Map of the National Cycle Network. (Online). Available at: <https://www.sustrans.org.uk/national-cycle-network> (Accessed September 2022)

6.4.7 Other existing and consented wind farms, and wind farm applications within the cumulative LVIA study area are shown on **Figure 6.4** and included in **Table 6.6**.

Table 6.6 Wind Farms relevant to the cumulative assessment as of 14 September 2022

Name of wind farm	Local Authority	Number of wind turbines	Height to blade tip (m)	Approximate distance to the closest Proposed Mynydd y Glyn Wind Farm turbine (km)	Status
Cumulative LVIA Study Area (within 10km)					
Llwyncelyn Farm	Rhondda Cynon Taff	2	125	2.8	Operational
West of Rhiwfelin Farm	Rhondda Cynon Taff	1	100	3.6	Operational
Graig Fatha Farm	Rhondda Cynon Taff	1	126	4.2	Operational
Mynydd Portref Extension	Rhondda Cynon Taff	6	110	4.4	Operational
Mynydd Portref	Rhondda Cynon Taff	11	75/86	5	Operational
Headwind Taff Ely	Rhondda Cynon Taff	7	110	5.1	Consented
Taff Ely	Rhondda Cynon Taff	20	53	5.3	Operational
Twyn Hywel	Caerphilly County	20	200	5.4	Scoping
Bryntail Farm	Rhondda Cynon Taff	2	71	5.5	Operational
Mynachdy Farm	Rhondda Cynon Taff	2	67.5	5.5	Operational
Fforch Nest	Bridgend	11	115	6	Operational
Pant-y-Wal	Bridgend	10	115	6	Operational
Nant-y-Gwyddon	Rhondda Cynon Taff	1	121.5	6.6	Operational
Ferndale	Rhondda Cynon Taff	8	74	7.1	Operational
Land at Graig yr hufen Road	Caerphilly County	1	77	7.6	Consented
Bwlfa Farm, Gelli	Rhondda Cynon Taff	1	77	7.8	Operational
Pant-y-Wal Extension	Bridgend	8	125	7.8	Operational
Castell Llwyd Farm	Caerphilly County	1	77	9.5	Operational
Cefn Fforest Farm	Merthyr Tydfil	1	102	9.9	Operational
Cumulative LVIA study area (within 10 – 26km)					

Name of wind farm	Local Authority	Number of wind turbines	Height to blade tip (m)	Approximate distance to the closest Proposed Mynydd y Glyn Wind Farm turbine (km)	Status
Abergorki	Rhondda Cynon Taff	3	145	11.1	Operational
Maerdy T9	Rhondda Cynon Taff	1	145	12.1	Consented
Maerdy	Rhondda Cynon Taff	8	145	12.3	Operational
Afan Llynfi	Bridgend	15	118	12.5	Operational
Mynydd Bwlfa	Rhondda Cynon Taff	9	125	13	Operational
Pen y Cymoedd	Rhondda Cynon Taff	76	145	13.2	Operational
Oakdale Business Park	Caerphilly County	2	130	18.2	Operational
Pen-Y-Fan Industrial Estate	Caerphilly County	1	123.5	18.6	Operational
Foel Trawsant	Neath Port Talbot	11	145	19.2	Consented
Ffynnon Oer	Neath Port Talbot	16	91	20	Operational
Cruglwyn	Caerphilly County	2	86	20.2	Operational
Melin Court	Neath Port Talbot	5	145	20.6	Operational
Pen March	Caerphilly County/ Merthyr Tydfil	7	180	20.8	Scoping
Manmoel	Blaenau Gwent	5	180	21	Scoping
Mynydd Carn-y-Cefn	Blaenau Gwent	8	180	21	Planning
Pen Bryn Oer	Caerphilly County	3	110	21.1	Operational
Mynydd Llanhilleth	Blaenau Gwent/ Torfaen	8	180	22.3	Scoping
Eurocaps Premises, Crown Business Park	Blaenau Gwent	2	45	23.6	Operational
Coed y Gilfach Farm	Blaenau Gwent	2	45	23.7	Operational
Maesgwyn	Neath Port Talbot	4	125	23.8	Consented
Mynydd Brombil	Neath Port Talbot	4	100	23.9	Operational
Abertillery	Blaenau Gwent/ Torfaen	7	180	24.9	Scoping

6.4.8 Three cumulative ZTVs have been prepared to provide an indication of the intervisibility between those schemes that are considered to have the greatest potential to generate

significant cumulative landscape or visual effects. The three ZTVs and the schemes included in each are as follows:

- **Figure 6.20** Cumulative Zones of Theoretical Visibility in relation to West of Rhiwfelein Farm and Llwynceilyn Farm wind turbines;
- **Figure 6.21** Cumulative Zones of Theoretical Visibility in relation to Group 1 and Twyn Hywel wind farms. Group 1 includes Headwind Taff Ely, Mynydd Portref, Mynydd Portref Extension and Graig Fatha Farm wind turbines; and
- **Figure 6.22** Cumulative Zones of Theoretical Visibility in relation to Ferndale and Group 2 wind farms. Group 2 includes Pant-y-Wal, Pant-y-Wal Extension and Fforch Nest wind turbines.

Field Survey

6.4.9 A number of field surveys have been undertaken as follows:

- a field survey in March 2021 to obtain viewpoint photography and check the validity of the viewpoints subsequently listed in Table 5.2 of the Environmental Impact Assessment Scoping Report³⁹ issued in September 2021; and
- a second field survey in August 2022 to visit and obtain a photographic record from the viewpoint locations requested by consultees in the Scoping Direction, which was issued on behalf of the Welsh Ministers, on 01 December 2021.

6.4.10 All photography has been undertaken in accordance with the LI's Visual Representation of Development Proposals and has been undertaken during the winter months (where possible) 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.

6.4.11 Accurate locations are established using a hand-held Global Positioning System (GPS) unit and recorded on a standardised proforma.

Viewpoint analysis

6.4.12 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.

6.4.13 The viewpoints selected for the assessment have been agreed with consultees including the relevant local authorities, NRW and the BBNPA. The final viewpoint schedule is set out in **Table 6.7** which includes the reason for their selection and whether the viewpoints are representative, illustrative, or specific as defined in GLVIA3¹⁷.

6.4.14 Visualisations have been prepared for each viewpoint to accord with SNH guidance and include 90° baseline photographs and wirelines, and 53.5° photomontages and wirelines

³⁹ Wood Group UK Ltd (on behalf of Pennant Walters Ltd). (2020). Mynydd y Glyn Wind Farm, Environmental Impact Assessment Scoping Report (Document reference 42864-WOOD-XX-XX-RP-O-0001_A_C01)

at **Figures 6.23 – 6.41**. The viewpoint assessment for each of the 19 selected viewpoints is reported in **Appendix 6I**.

- 6.4.15 Cumulative wind farm developments that would be visible within the CLVIA Study Area have been illustrated as wirelines and follows the photomontage of the Proposed Development, also at **Figures 6.23 – 6.41**.

Table 6.7 LVIA Viewpoint locations

Viewpoint No. Title & Grid Ref	Minimum Separation Distance*	Viewpoint Typology (GLVIA3 ¹⁷) / Principal Receptor(s)	Comment	Night-time viewpoint?
1 – Hafod Wen, Tonyrefail E301821, N188597	1.3km (T6)	Illustrative – residential receptors	View from end of cul-de-sac illustrates views available to some of closest residents on eastern edge of this community.	Yes
2 – Public footpath east of Rhiwinder E302673, N187756	1.3km (T6)	Representative – residential & recreational receptors	Next to National Cycle Route/ProW at ‘Oaklands’ and representative of views available within and close to this small community as well as close distance views from south-west. Within RCT SLA Mynydd y Glyn and Nant Muchudd Basin.	Yes
3 – Hafod Lane, Llwyncelyn E304180, N191532	1.7km (T2)	Illustrative – residential & recreational receptors	Views from short section of minor elevated road illustrate some available to residents and recreational receptors with close distance views in this area above Trehafod and on northern side of closest section of Rhondda Valley. Within RCT SLA Llwyncelyn Slopes.	No
4 – Public footpath northwest of Trebanog E301495, N190585	1.7km (T1)	Illustrative – recreational receptors	Edge of Access Area on closest part of Mynydd y Cymmer which is likely to be popular with surrounding communities. Within RCT SLA Mynydd y Cymmer.	No
5 – A4233 crossing River Rhondda, Porth E302418, N191509	1.8km (T2)	Representative – residential and vehicular receptors	Representative of the most open views available to some residents in one of the closest communities and users of one of main ‘A’ roads	Yes
6 – Llantrisant Road, Pen-y-Coedcae	2.5km (T5)	Illustrative – Residential receptors	Field entrance on Llantrisant Road provides good example of views available to	No

Viewpoint No. Title & Grid Ref	Minimum Separation Distance*	Viewpoint Typology (GLVIA3 ¹⁷) / Principal Receptor(s)	Comment	Night-time viewpoint?
E306104, N187827			members of this community and close-distance views from south-east. Close to Roman Fort SM. Within RCT SLA S6: Mynydd y Glyn.	
7 – Tyn-y-Bryn Park, Tonyrefail E300562, N188031	2.7km (T6)	Representative – residential & recreational receptors	Provides open view over playing field representative views available to members of this large community and alongside section of National Cycle Route.	No
8 – Coed-Pen-Maen Common, Pontypridd E308182, N190091	4.1km (T5)	Illustrative – Residential receptors in east Pontypridd. Specific recreational receptors at viewpoint	Viewpoint/information board/seating at one of main entrances to valued recreational asset including heritage trail. One of more elevated locations in this community and illustrative of periodic open views available to many members of community. Access Land. Within RCT SLA S10: Taff Vale Eastern Slopes	No
9 – Mynwent Penuel Cemetery, Llantrisant E304688, N183754	5.3km (T7)	Illustrative – residential receptors	Views from northern side of cemetery are illustrative of open northern views available to some members of this large community. Edge of Access Land (Llantrisant Common) and RCT SLA Llantrisant Surrounds.	No
10 – Bryn Terrace, Blaenclydach E298419, N193035	5.6km (T1)	Representative – residential receptors	Representative of open, elevated views available to proportion of people in this and adjacent communities as well as middle-distance views from north-west.	No
11 – Shrine of Our Lady of Penrhys E300215, N194616	5.6km (T1)	Specific – recreational receptor Representative – residential receptors	Popular religious shrine that is representative of periodic open views available to residents in one of most elevated communities in central part of the LVIA study area between Rhondda Fawr and Fach Valleys.	No

Viewpoint No. Title & Grid Ref	Minimum Separation Distance*	Viewpoint Typology (GLVIA3 ¹⁷) / Principal Receptor(s)	Comment	Night-time viewpoint?
12 – Promoted viewpoint east of Ferndale E301189, N196407	6.8km (T2)	Specific – vehicular & recreational receptors	Minor road ascending eastern side of Rhondda Fach Valley with layby providing panoramic views.	No
13 – Taff Ely Ridgeway Walk, near Mynydd Maendy E297238, N185969	6.6km (T6)	Representative – recreational receptors	Most elevated point on this section of regional trail with nearby carpark marked on OS map. Access Land. Within Bridgend SLA Mynydd y Gaer. Illustrative of middle-distance views from west.	No
14 – Summit of Mynydd Meio E311426, N188293	7.3km (T5)	Representative – recreational receptors	Most elevated point on this section of regional trail (Rhymney Valley Ridgeway Walk). Access Land. Close to Senhenydd Dyke. Within Caerphilly CBC SLA Mynydd Eglwysilan. Illustrative of middle-distance views from east.	No
15 – Summit of Garth Hill E310335, N183500	8.5km (T5)	Specific / Illustrative – recreational receptors	Trig point is most elevated location in Garth hill adjacent to Taff Ely Ridgeway Walk. Access Land. Within Cardiff CC SLA Garth Hill and Pentyrch Ridges	No
16 – Valeways Millennium Heritage Trail near Pendoylan E305536, N177046	12.1km (T7)	Representative – residential and recreational receptors	Illustrative of long-distance views available from some elevated locations in Vale of Glamorgan. Viewpoint east of minor road due to hedgerow. Within Vale of Glamorgan SLA Ely Valley and Ridge Slopes.	No
17 – Cefn Sychbant E298880, N210845	22.2km (T2)	Illustrative-recreational receptors	Illustrative of long-distance views available from some of the closest elevated and accessible locations within the National Park.	No
18 – Caerphilly Common E315261, N185538	11.7km (T5)	Representative –recreational receptors	Illustrative of long-distance views available from the open access land of Caerphilly Common to the south of Caerphilly. Within Caerphilly SLA: South Caerphilly.	No

Viewpoint No. Title & Grid Ref	Minimum Separation Distance*	Viewpoint Typology (GLVIA3 ¹⁷) / Principal Receptor(s)	Comment	Night-time viewpoint?
19 – Gelligaer Common E313656, N199164	13.6km (T5)	Representative –recreational receptors	Requested by Caerphilly County Borough Council Landscape Officer. Illustrative of long-distance views available from the open access land of Gelligaer Common to the west of Bargoed. Within Caerphilly SLA: Gelligaer Common. Requested by Caerphilly County Borough Council Landscape Officer.	No

* to nearest turbine

6.5 Overall baseline

Current baseline

The Site and immediate surrounding area

- 6.5.1 The Site of the Proposed Development is located on the summit and upper slopes (above approximately 300 m AOD) of the steep-sided hill of Mynydd-y-Glyn to the south of a west-east orientated section of the Rhondda River. This section of the Rhondda River is west of its confluence with the River Taff at Pontypridd and east of the confluence of the Rhondda Fawr and Fach Rivers at Porth. The Site therefore is located at the southern edge of the extensive area of south Wales termed the Valleys. To the south the topography generally becomes less elevated towards the lower-lying Vale of Glamorgan.
- 6.5.2 The Site possesses relatively simple but distinct topography. In the central part of the site are two summits approximately 400 m apart. The north-western summit at 377 m AOD and the south-eastern summit at 375 m AOD. The latter is marked by a triangulation (trig) point. The summit is relatively flat descending gently for approximately 500 m in all directions to the 350 m contour line. To the north, south, and especially the west of this contour line, the slopes steepen as far as and beyond the boundary of the Site which is generally close to the 300 m contour line. To the east the topography descends more gently and has greater complexity due to the shallow incisions made by the upper streams that flow into the Nant Gelliwion water course to the south-east.
- 6.5.3 The topography and elevation of the Site is replicated in the surrounding area except to the south. There are hills and short ridgelines with similar elevations to the west (Mynydd Gilfach and Mynydd Pen-y-graig); to the north-west (Mynydd Dinas and Mynydd y Cymmer); to the north on the northern side of the Rhondda Valley (trig point summit at 356 m AOD east of Ynyshir); and, at a greater separation distance, to the east (Mynydd Meio and Cefn Eglwysilan). To the south towards Llantrisant, the topography becomes less elevated and more rolling with less distinctive hill summits generally less than 200 m AOD.

- 6.5.4 The Site's land-use almost entirely consists of a mosaic of improved and semi-improved grazing. There is a single small plantation of deciduous woodland located towards the southern boundary. There is no other tree cover within the site except a few stream-side trees in the south-east and scattered patches of scrub in the north-east. An extensive commercial coniferous plantation woodland is located adjacent to the north-eastern boundary. This plantation extends down to the bottom of the Rhondda Valley at Hopkinstown. Beyond the Site's southern boundary, the areas of lower elevation correspond with a gradual increase in tree cover. This comprises a limited number of small deciduous plantations and copses but more extensively tree cover in field boundaries.
- 6.5.5 Field boundaries within the Site are generally indistinct. There are periodic isolated lengths of stone wall routed alongside some of the main tracks. The absence of a distinctive field boundary pattern and tree cover results in the Site being open and exposed. There is no built development within the Site, but it is traversed by an overhead electricity transmission line supported by double pole pylons.
- 6.5.6 There is a limited public rights of way (ProW) network within and close to the Site, principally a ProW linking Porth in the Rhondda Valley to Langton Court Farm, one of the closest properties to the south-east. The distribution of ProWs within the Site can be viewed on **Figure 16.1**. A large proportion of the Site on its western and eastern parts is within an extensive tract of Access Land that extends north across all the closest section of the southern side of Rhondda Valley to the edge of the valley bottom settlements.
- 6.5.7 Beyond the Site boundary, a ~7.1km length of grid connection continues as an underground cable to the connection point at Upper Boat Substation. The route would follow Tonyrefail Road to the settlement of Pen-y-Coed where it would follow Llantrisant Road for a short stretch. The route would then head east across pastoral fields, crossing Black Road to meet an unnamed road which runs broadly parallel with Black Road. It would then continue south along the highway to Upper Church Village where it would turn east to follow Church Road, Tonteg Road and a small minor road to the Upper Boat Substation.

Landscape character

National Landscape Character

- 6.5.8 At the national scale of NRW's 48 National Landscape Character Areas (NLCAs), the Site is located within NLCA 37: South Wales Valleys. This covers an extensive upland area dissected by deep, urbanised valleys. The key characteristics of this NLCA are as follows:
- *"Extensive Upland plateaux - typically wild and windswept, often with unenclosed tracts, running roughly north-south as 'fingers' parallel between intervening deep valleys;*
 - *Numerous steep-sided valleys - typically aligned in parallel, flowing in southerly directions, shaped by southward flowing glaciers, leaving behind distinctive corrie ('cwm') and crag features. Major rivers include the Tawe, Taff and Rhymney;*
 - *Ribbon urban and industrial areas in valleys - in places extending up valley sides and to valley heads. The area is sometimes regarded as being part of a 'city region'. Middle and eastern valleys tend to be the most heavily and continuously developed, e.g Rhondda Valley. The uplands by comparison have little or no settlement;*
 - *Extensive remains of heavy industry - with a mix of derelict, preserved and largely redeveloped areas, notably for coal mining. Preserved as heritage (World heritage*

Site) at Blaenafon this typically includes old railway alignments, buildings and former tips;

- *Contrast of urban valley activity next to quiet uplands - e.g. busy roads, new developments, traffic noise, night lighting, verses the adjacent wilder, remoter, quieter uplands;*
- *Large blocks of coniferous plantation and deciduous woodland fringes - covering many steep hillsides and hilltops, most notably in the middle to western portion of the area, providing a softer contemporary landscape where there was once industry;*
- *Heather, rough grassland and steep bracken slopes - dominate many plateaux and are grazed mainly by sheep. Much is common land;*
- *Improved pastures on some lower valley sides - grazed by sheep and some dairy cattle;*
- *Field boundaries - dry stone walls mark the boundary of common land while fields on lower slopes are bounded by dense hawthorn hedges, interspersed with swathes of broadleaved woodland;*
- *Transport routes restricted to valleys - the intervening topography makes valley to valley travel difficult, except at heads and bottoms of valleys. Occasionally there are roads that climb steeply over passes with dramatic views and 'hair pin' bends; and*
- *Iconic cultural identify - many popular images of a tough, rugby-playing, religious, radically-minded society still remain associated with the South Wales Valleys, however today's post-industrial, internet-connected reality is somewhat different."*

6.5.9 The distribution of the host and other NLCAs within the LVIA study area is shown in **Figure 6.6**.

LANDMAP

Introduction

6.5.10 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 GN4611. The filtering process described within GN4611 is recorded in **Appendix 6B**. A landscape sensitivity assessment which considers both value and susceptibility in accordance with GLVIA3¹⁷ is included for each aspect in **Appendix 6C**.

Geological Landscapes Aspect Areas (GLAAs)

6.5.11 The host GLAAs are shown in **Figure 6.7**. The filtering process outlined in GN46 and recorded in **Appendix 6B** identified no GLAAs to be considered further in the assessment.

Landscape Habitats Aspect Areas (LHAAs)

6.5.12 The outcome of the filtering process recorded in **Appendix 6B** (as outlined in GN46) identified two LHAAs to be considered further in the assessment as follows:

- CYNONLH089; and
- CYNONLH094.

- 6.5.13 The location of these LHAAs in relation to the proposed turbine locations and the hub and blade tip ZTVs is shown on **Figure 6.8** and a baseline description is provided in **Appendix 6C**.

Visual and Sensory Aspect Areas (VSAAs)

- 6.5.14 The filtering process outlined in GN46 and recorded in **Appendix 6B** identified 81 VSAAs within the 24km study area. The Viewpoint Analysis presented in **Appendix 6I** identified no significant visual effects beyond a distance of 8.5km and as a consequence, 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 and therefore considers 17 VSAAs as follows:

- CYNONVS142 Mynydd y Glyn
- CYNONVS436 Mynydd Gaer
- CYNONVS496 Mynydd Maes-Teg
- CYNONVS317 Mynydd Eglwysilon & Mynydd Meio
- MRTHRVS767 Taff/Bargoed Confluence
- CRDFFVS003 Garth- west
- CRDFFVS002 Tyn-y-Coed
- CRDFFVS006 Pentyrch- north
- CRDFFVS007 Pentyrch- south
- CRDFFVS004 Garth Hill
- VLFGLVS962 Ystradowen/Hensol area
- VLFGLVS406 Ely Valley Flood Plain
- VLFGLVS002 Hensol Park
- MRTHRVS119 Gelligaer Farmlands
- CYNONVS113 Cwm Dar
- VLFGLVS933 Upper Thaw Valley
- CYNONVS622 Mynydd Llangeinwyr

- 6.5.15 The location of these VSAAs in relation to the proposed turbine locations and the hub and blade tip ZTVs is shown on **Figure 6.9** and a baseline description is provided in **Appendix 6C**.

Historic Landscape Aspect Areas (HLAAs)

- 6.5.16 The outcome of filtering process outlined in GN46 and recorded in **Appendix 6B** identified 185 HLAAs within the 24km study area, 41 of which lie within or partially within 10km of the proposed turbines and are therefore considered further in the assessment as follows:

- CYNONHL649 Nant Castellau and Nant Muchudd
- CYNONHL378 Rhondda Settlement Corridor
- CYNONHL999 Mynydd Cymmer
- CYNONHL833 Llanwonno and Cwm Clydach
- CYNONHL888 Mynyddau Hugh a Maendy
- CYNONHL993 Mynydd Meio
- CRDFFHL005 Garth Uplands
- CRDFFHL002 Capel Llanilltern and southwest Pentyrch
- MRTHRHL017 HL017 Quaker's Yard, Treharris and Trele
- CYNONHL515 Cynon Enclosed Valley Side

- CYNONHL977 Pontypridd and the Afon Taff
- CYNONHL687 Rhondda Uplands
- CYNONHL497 Ynysangharad Park
- CYNONHL992 Mynydd Brithweunydd
- CYNONHL805 Rhondda Fawr Enclosed Valley Side
- CYNONHL639 Gilfach Goch
- CYNONHL482 Llantrisant
- CYNONHL215 H05 Unenclosed Uplands
- CYNONHL988 Ogmores Valley Agricultural
- CYNONHL187 Coedcaerau-bach & Garthfawr
- CYNONHL878 Mynyddau Eglwysilian a Meio
- CYNONHL997 Rhondda Fach Enclosed Valley Side South
- CYNONHL290 Llanfabon and Llanbradach
- CYNONHL308 Senghenydd and Cwm yr Aber
- CYNONHL645 H12 Mynydd y Gaer and Allt y Rhiw
- CYNONHL295 Llanharri and Meisgyn
- MRTHRHL014 HL014 Cefn-y-Fan
- CRDFFHL022 Craig y Parc
- CYNONHL856 Mynyddau Merthyr ac Aberdar
- CYNONHL987 Talygarn
- MRTHRHL013 HL013 Cwm Cothi
- CYNONHL582 H09 Ogmores Valley Agricultural 1
- MRTHRHL011 HL011 Mynydd Merthyr and Mynydd Gethin
- CYNONHL596 Rudry
- VLFGLHL045 Hensol Castle
- CYNONHL924 H14 Cefn Hirgoed and Hirwaun Common
- CYNONHL634 Gelligaer and Llancaiach
- MRTHRHL016 HL016 Cwm Bargod East
- CYNONHL989 H32 St Brides Minor to Coychurch 2
- MRTHRHL022 HL022 Bargod Taf and Bedlinog corridor
- VLFGLHL042 Llanannor and Penllyn Moors

6.5.17 **Figure 6.10** illustrates the location of these HLAAs in relation to the proposed turbine locations and the hub and blade tip ZTVs at a scale of 1:100,000 and a baseline description is provided in **Appendix 6C**.

Cultural Landscape Services Aspect Areas (CLSAAAs)

6.5.18 The filtering process outlined in *GN46* and recorded in **Appendix 6B** identified one CLSAA to be considered further in the assessment as follows:

- CYNONCLS014 Mynydd y Glyn.

6.5.19 The location of the CLSAA in relation to the proposed turbine locations and the hub and blade tip ZTVs is shown on **Figure 6.11**. No description is provided for the CLSAAAs in the LANDMAP survey as recorded in **Appendix 6C**.

Landscape designations

Nationally designated landscapes

6.5.20 The following nationally designated landscapes fall wholly or partly within the study area:

- Brecon Beacons National Park; and
- Glamorgan Heritage Coast.

6.5.21 With respect to the Glamorgan Heritage Coast, this has been scoped out from further consideration as agreed with PEDW and documented in **Table 6.4** and **Table 6.12**.

Brecon Beacons National Park: Special Qualities

6.5.22 *A Management Plan for the Brecon Beacons National Park 2015-2020*²⁷ sets out the special qualities of the National Park with descriptions refined and placed into categories in the *Future Beacons, The Management Plan for the Brecon Beacons National Park 2022-2027, Consultation Draft*²⁸. The most up-to-date descriptions of the special qualities are as follows:

- *“Special Landscapes:*
 - ▶ *Sweeping grandeur and outstanding natural beauty: The Park’s sweeping grandeur and outstanding natural beauty observed across a variety of harmoniously connected landscapes, including marvellous gorges and waterfalls, classic karst geology with caves and sink holes, contrasting glacial landforms such as cliffs and broad valleys carved from old red sandstone and prominent hilltops with extensive views in all directions. A landscape that provides a sense of time depth and timelessness.*
 - ▶ *Contrasting patterns, colours, and textures: A working, living “patchwork” of contrasting patterns, colours, and textures comprising well-maintained farmed landscapes, open uplands, lakes and meandering rivers punctuated by small-scale woodlands, country lanes, hedgerows and stone walls and scattered settlements.*
 - ▶ *Rugged, remote and challenging: In the context of the UK, geographically rugged, remote and challenging landscapes.*
- *Special People:*
 - ▶ *Intimate sense of community: An intimate sense of community where small, pastoral towns and villages are comparatively safe, friendly, welcoming and retain a spirit of cooperation.”*
 - ▶ *Sense of place and cultural identity: A sense of place and cultural identity - “Welshness” - characterised by the indigenous Welsh language, religious and spiritual connections, unique customs and events, traditional foods and crafts, relatively unspoilt historic towns and villages, family farms and continued practices of traditional skills developed by local inhabitants to live and earn a living here, such as common land practices and grazing.*
- *Special Experiences:*
 - ▶ *Enjoyable and accessible: Enjoyable and accessible countryside with extensive, widespread and varied opportunities to pursue walking, cycling, fishing, water-based activities and other forms of sustainable recreation or relaxation.*

- ▶ *Sounds, sights, smells and tastes: A feeling of vitality and wellbeing that comes from enjoying the Park's fresh air, clean water, rural setting, open land and locally produced foods.*
- ▶ *Sense of discovery: A sense of discovery where people explore the Park's hidden secrets and stories such as genealogical histories, prehistoric ritual sites, relic medieval rural settlements, early industrial sites, local myths and legends and geological treasures from time immemorial.*
- ▶ *Peace, tranquillity and dark skies: A National Park offering dark night time skies, peace and tranquillity with opportunities for quiet enjoyment, inspiration, relaxation and spiritual renewal.*
- **Special Nature:**
 - ▶ *Diversity of wildlife and richness of seminatural habitats: Extensive and widespread access to the Park's diversity of wildlife and richness of semi-natural habitats, such as native woodlands, heathland and grassland, natural lakes and riparian habitats, ancient hedgerows, limestone pavement and blanket bogs including those of international and national importance.*²⁸

Brecon Beacons National Park: Landscape Character

- 6.5.23 The *Brecon Beacons National Park Landscape Character Assessment*²⁴ defines 15 Landscape Character Areas (LCAs) within the National Park, four of which coincide with the ZTV and LVIA study area as shown in **Figure 6.13** as follows:
- LCA 3: Fforest Fawr;
 - LCA 4: Waterfall Country and Southern Valleys;
 - LCA 8: Talybont and Taff Reservoir Valleys; and
 - LCA 9: Mynyddoedd Llangatwg and Llangynidr.
- 6.5.24 On the basis that potential effects on these landscapes would be limited to indirect effects on the key visual or perceptual characteristics of these landscapes, resulting from views of wind turbines. the baseline description below has concentrated upon those distinctive characteristics, special qualities, sensitivities, and management strategies most likely to be altered as a consequence of the Project. A complete list of the distinctive characteristics of each LCA as defined in the extant *Brecon Beacons National Park Landscape Character Assessment*²⁴ is included in the landscape assessment tables for the LCAs included in **Appendix 6H**.
- 6.5.25 LCA 3: Fforest Fawr: The pertinent distinctive characteristic of this LCA is “*An elevated, simple and expansive landscape, with colours and textures varying subtly with the underlying geology. Much of the LCA remains inaccessible except on foot, giving a sense of tranquillity, remoteness and relative wildness.*”⁴⁰
- 6.5.26 Amongst its special qualities, the published Profile for LCA 3 states (under the Scenic quality and Sense of place criteria) that this is a “*High scenic quality and a strong sense of place, particularly where there are views of distinctive summits and over surrounding lower land to provide a landscape context.*”⁴⁰ It also notes under the Perceptual qualities criteria that the area displays “*High tranquillity, resulting from many factors including openness, perceived naturalness, low noise (though roads have localised impacts at the*

⁴⁰ Fiona Fyfe Associates, with Julie Martin Associates, Alison Farmer Associates and Countryside. (2012). Brecon Beacons National Park Landscape Character Assessment. LCA 3 Profile [online]. Available at: https://www.beacons-npa.gov.uk/wp-content/uploads/LCA-3-PROFILE_final_120930.pdf (Accessed September 2022).

periphery of the LCA), landform and dark skies (this LCA is within the BBNP core dark skies area)”⁴⁰. It continues “The LCA’s inaccessibility, openness, timelessness and relative lack of human influence also contribute to its sense of relative wildness.”⁴⁰

- 6.5.27 Sensitivities include “*Visual impacts, noise and night-time light pollution associated with developments beyond the National Park boundary*”⁴⁰ whilst LCA-Specific Management Guidelines seek to “*Protect the undeveloped character of the landscape, and its special qualities including tranquillity, remoteness, and dark night skies*”⁴⁰ and “*Protect the views to and from the National Park which are integral to its setting*”⁴⁰.
- 6.5.28 LCA 4: Waterfall Country and Southern Valleys: This LCA is located in the south of the National Park, adjacent to the National Park boundary to the north of Hirwaun. The enclosed and relatively settled pastoral landscape is characterised by streams and waterfalls flowing in deep gorges with ridges of higher land featuring a more open quality and long views present between the valleys. Southern parts of the LCA (particularly higher land) are described as having “*intervisibility with land beyond the National Park boundary, with long views southwards.*”⁴¹ Sensitivities to its special qualities include a “*Loss of tranquillity due to visible or audible developments*”⁴¹ in relation to perceptual qualities and the LCA-Specific Management Guidelines include seek to “*Protect the upland skylines and occasional long views which form the backdrop to the area.*”⁴¹
- 6.5.29 LCA 8: Talybont and Taff Reservoir Valleys: This LCA abuts the southern boundary of the National Park near Merthyr Tydfil. It is characterised by its reservoirs, surrounded by steep sided, dark green forested valleys with more open ridges of upland moorland which have long views across the reservoirs and their surrounding forests located between the reservoir valleys. Sensitivities to its special qualities includes “*Changes in the composition of the landscape and views from the area*”⁴² in relation to scenic quality and, with regard to perpetual qualities, the “*Loss of tranquillity as a result of visually intrusive/ audible developments beyond the National Park boundary.*”⁴²
- 6.5.30 LCA 9: Mynyddoedd Llangatwg and Llangynidr: The pertinent distinctive characteristic of this landscape relates to the “*Very limited settlement, but views to settlement in the Usk valley to the north, and other development (e.g. roads, pylons) beyond the southern boundary of the National Park*”⁴³.
- 6.5.31 Its special qualities include (under the perceptual qualities criteria) “*An exceptionally open and exposed landscape. Its landform, and absence of settlement and development give it a sense of tranquillity, remoteness and relative wildness in parts, despite its proximity to settlements to the south. The western part is within the BBNP core dark skies area*”⁴³ with a corresponding sensitivity of “*Proximity to settlement and development to the south mean that perceptual qualities are sensitive to new development (including beyond the National Park boundary)*”⁴³. Under the Scenic quality and Sense of place criteria, special qualities are listed as “*Scenic quality and sense of place resulting from combination of openness, landform, moorland vegetation, archaeology and views to distinctive skylines in other LCAs*”⁴³ with sensitivities relating to “*Inappropriate development, (including outside the National Park) which affects skylines and/or views.*”⁴³ The LCA-Specific Management Guidelines continue with these themes and include guidelines to “*Protect the undeveloped character of the open moorland landscape, and its qualities of tranquillity, relative*

⁴¹ Fiona Fyfe Associates, with Julie Martin Associates, Alison Farmer Associates and Countryside. (2012). Brecon Beacons National Park Landscape Character Assessment. LCA 4 Profile [online]. Available at: https://www.beacons-npa.gov.uk/wp-content/uploads/LCA-4-PROFILE_final_120930.pdf (Accessed September 2022).

⁴² Fiona Fyfe Associates, with Julie Martin Associates, Alison Farmer Associates and Countryside. (2012). Brecon Beacons National Park Landscape Character Assessment. LCA 8 Profile (Online). Available at: https://www.beacons-npa.gov.uk/wp-content/uploads/LCA-8-PROFILE_final_120930.pdf (Accessed September 2022).

⁴³ Fiona Fyfe Associates, with Julie Martin Associates, Alison Farmer Associates and Countryside. (2012). Brecon Beacons National Park Landscape Character Assessment. LCA 9 Profile (Online). Available at: https://www.beacons-npa.gov.uk/wp-content/uploads/LCA-9-PROFILE_final_120930.pdf (Accessed September 2022).

wildness and dark night skies which exist despite its proximity to centres of population”⁴³ and “Protect the long views from the area, including those southwards to land outside the National Park”⁴³.

Locally designated landscapes

6.5.32 The following locally designated landscapes are entirely or partly located within 10km of the proposed turbines and coincide with the hub height and blade tip ZTVs and have therefore been scoped into the assessment as set out in **Table 6.11**:

- Rhondda Cynon Taff Special Landscape Areas (SLAs):
 - ▶ Mynydd y Cymmer;
 - ▶ Mynydd Troed y Rhiw Slopes;
 - ▶ Llwyncelyn Slopes;
 - ▶ Cwm Clydach;
 - ▶ Coed-yr-Hendy and Mwyndy;
 - ▶ Llantrisant Surrounds;
 - ▶ Mynydd y Glyn and Nant Muchudd Basin;
 - ▶ Mynydd Hugh and Llantrisant Forest;
 - ▶ Efail Isaf, Garth and Nantgarw Western Slopes;
 - ▶ Craig yr Allt;
 - ▶ Taff Vale Eastern Slopes, and
 - ▶ Treforest Western Slopes.
- Caerphilly SLAs:
 - ▶ NH1.3 Mynydd Eglwysilan.
- Bridgend SLAs:
 - ▶ ENV3(2) Northern Uplands; and
 - ▶ ENV3(5) Mynydd y Gaer.
- Merthyr Tydfil SLAs:
 - ▶ Pontygwaith.
- Vale of Glamorgan SLAs:
 - ▶ Ely Valley & ridge slopes.
- Cardiff SLAs:
 - ▶ Garth Hill and Pentyrch Ridges.

6.5.33 The locations of these areas are shown on **Figure 6.14** in relation to the hub height and blade tip ZTVs for the proposed Mynydd y Glyn Wind Farm. A description of the SLAs and their primary landscape qualities is set out in **Table 6.8**.

Table 6.8 Description and primary landscape qualities of SLAs

SLA reference and relevant viewpoint	Description and primary landscape qualities
Rhondda Cynon Taff SLAs	
Mynydd y Cymmer Viewpoint 4	<p>This SLA features a single isolated hill with primary landscape qualities and features which are described as follows</p> <ul style="list-style-type: none"> • <i>“Abrupt steep-sided hill with crags and scree slopes forming great contrasts to the settlements all around.</i> • <i>Prominent from all round, located at turning/meeting point of several valleys, and forming wild backdrop to all the valley settlements.</i> • <i>Open common land tops with very limited access.</i> • <i>Areas of blanket bog on tops.</i> • <i>Allotments and smallholdings around base and conspicuous cross on hillside.”³²</i> <p>The key management policies seek to retain the SLA as a wild isolated area and conserve the upland bog habitats.</p>
Mynydd Troed y Rhiw Slopes	<p>The Mynydd Troed y Rhiw Slopes SLA comprises an area of continuous hillside around the Rhondda valleys confluence. Its primary landscape qualities and features are described as follows:</p> <ul style="list-style-type: none"> • <i>“Length of hillsides that are particularly prominent from approaches from down the valley, forming turning point and division of Rhondda valleys.</i> • <i>Attractive mix of open common land and small fields on steep sides.</i> • <i>Some good ffridd habitats of dry heath.</i> • <i>Important pilgrim site of St Mary’s Well on upper slopes to north.</i> • <i>Prominent cairn on Mynydd Brith-weunydd.”³²</i> <p>The key management policies seek to retain the open hillsides and skylines and restrict encroachment of developments up the hillsides and to conserve historic sites and priority habitats.</p>
Llwyncelyn Slopes Viewpoint 3	<p>This SLA features a stretch of continuous hillside the primary landscape qualities and features of which are described as follows</p> <ul style="list-style-type: none"> • <i>“Length of steep hillsides at turning point in Rhondda valley, overlooking Porth.</i> • <i>Backdrop to views from Porth, Rhondda Heritage Park and main valley road and new bypass.</i> • <i>Attractive pattern of small fields with stone walls and hedges, accessed by winding lane.</i> • <i>Some areas of rhos pasture amongst improved grasslands.</i> • <i>Prominent masts and tanks on mid slopes.</i> • <i>Areas of broadleaf woodland on steep side valley.”³²</i> <p>The key management policies seek to conserve the pattern of farmland, unspoilt by industrialisation, conserve unimproved grassland and woodland habitats and to ensure developments do not encroach up hillsides.</p>
Cwm Clydach	<p>The Cwm Clydach SLA comprises the slopes of Cwm Clydach, plus the adjacent tops and wooded slopes. Its primary landscape qualities and features are cited as follows:</p> <ul style="list-style-type: none"> • <i>“Most of the area consists of the valley sides around Ynysybwl, secluded and hidden from the surrounding main valleys.</i>

SLA reference and relevant viewpoint	Description and primary landscape qualities
	<ul style="list-style-type: none"> • <i>Pattern of quiet farmland with irregular fields, small woods, and streams, linked by winding lanes.</i> • <i>Mixed hedges and stone walls on upper slopes.</i> • <i>Wooded slopes to Taff Vale are important part of views from A470, and backdrop above Pontypridd, as well as partially screening quarry</i> • <i>These form part of the mainly wooded western sides of Taff Vale, all of which are very important to the overall impression of the Valleys from the major north/south route through Wales.</i> • <i>Mix of broadleaf woodlands on Taff slopes are nature reserve.</i> • <i>Smaller areas of upper slopes and tops of Cynon valley with similar characteristics.</i> • <i>Cairns overlooking Cynon valley are part of series of intervisible monuments along the valley tops, of historic value.</i>³² <p>The key management policies relate to management to conserve wooded and slopes and skyline from Taff Vale. They also seek to conserve hedges, small woods and hilltop historic sites and retain the quiet secluded farmed character within the valley.</p>
Coed-yr-Hendy and Mwyndy	<p>This SLA covers two adjoining landscape types; the north-facing slopes and valley floor. The primary landscape qualities of this landscape are cited as follows:</p> <ul style="list-style-type: none"> • <i>“Small-scale flat valley bottom, and north-facing slopes of River Clun.</i> • <i>Areas of dry and wet woodland, including Coed-yr-Hendy.</i> • <i>Immediately adjacent to areas of housing and busy roads, retail developments and industry.</i> • <i>The area forms an attractive setting for Pontyclun and Talbot Green.</i> • <i>Coed-yr-Hendy is important part of views south from Llantrisant</i> • <i>Includes cemetery with green-winged orchid habitat</i> • <i>River adds biodiversity value, plus rhos pasture habitats on valley floor.</i>³² <p>The key management policies relate to protecting, retaining, conserving and enhancing the physical characteristics of the landscape.</p>
Llantrisant Surrounds Viewpoint 9	<p>The Llantrisant Surrounds SLA comprises a series of interlinked landscape types of ridge hills with fields and open common on lower land. The primary landscape qualities of this landscape are described as follows:</p> <ul style="list-style-type: none"> • <i>“Line of ridge hills on either side of Llantrisant, rising steeply from Ely and Clun valleys.</i> • <i>Part of the east/west ridge that forms the border between Vale and Valleys.</i> • <i>This ridge forms and important skyline feature from M4, including conspicuous hilltop town with church and castle, and well-preserved large hillfort on eastern hill.</i> • <i>The Ridgway Walk crosses from west to east.</i> • <i>The hills are mainly areas of irregular fields, large mixed hedges, with winding lanes alongside.</i> • <i>Lower-lying Llantrisant Common to the north has important historic and cultural connections to Llantrisant.</i> • <i>Llantrisant Common and other sites are habitats for Marsh Fritillary butterfly.</i>³²

SLA reference and relevant viewpoint	Description and primary landscape qualities
Mynydd y Glyn and Nant Muchudd Basin Viewpoint 2	<p>The key management policies relate to retaining, managing and conserving the physical characteristics of the landscape including the conserving the skyline which is formed by the ridge.</p> <p>This SLA covers two contrasting but inter-related landscape types of hill and basin. The primary landscape qualities of this landscape are described as follows:</p> <ul style="list-style-type: none"> • <i>“Largest area in RCT of un-industrialised lowland farmland rising to open and forested hill of Mynydd Glyn to north.</i> • <i>In basin there is a very attractive network of narrow winding lanes, small irregular fields bounded by large mixed hedges and many trees, scattered farms, unlike any other part of RCT.</i> • <i>This forms a major part of the wide views north from Llantrisant although secluded from all other areas</i> • <i>The basin has many areas of unimproved grassland primary habitats – candidate SSSI</i> • <i>Attractive north-flowing Nant Gelliwion valley leading into Pontypridd, with woodland SSSI.</i> • <i>Stone walls and open grassland on higher slopes.</i> • <i>Steep northern sides of Mynydd Glyn are the dominant backdrop to Porth, Trehafod and Pontypridd, with steep, wild rocky areas providing sharp contrasts to the settlements.</i> • <i>There are varied and extensive views from Mynydd Glyn to the Rhondda Valleys and across the coalfield plateau to the north, and south to the Llantrisant ridge.</i> • <i>Forestry with extensive felled areas and variety reaches down the eastern sides of Mynydd Glyn.</i> • <i>Traditional smallholdings and allotments on steep northern slopes overlooking Pontypridd and Trehafod.”³²</i> <p>The key management policies largely relate to conserving physical characteristics of the landscape including <i>“primary habitats relating to unimproved grassland”, “old patterns of farmland” and “patterns of smallholdings and associated uses”</i>. It also seeks to <i>“Ensure no large-scale developments to spoil integrity and seclusion of basin and surrounding slopes.”</i></p>
Mynydd Hugh and Llantrisant Forest Viewpoint 13	<p>This landscape comprises Vale/Valley border ridge. The primary landscape qualities of this SLA are described as follows:</p> <ul style="list-style-type: none"> • <i>“Prominent ridge of hills with extensive rounded tops, with forestry to the east, forming part of the east/west ridge that marks the border between Vale and Valleys</i> • <i>Series of small more enclosed valleys to north and south.</i> • <i>Historic features of Beacons and ruined church on ridge top.</i> • <i>The windfarm is prominent feature on the skyline from both north and south.</i> • <i>This ridge forms an important skyline feature from M4, and Vale of Glamorgan.</i> • <i>Ridgeway walk passes west/east through area.</i> • <i>There are extensive and varied views from the ridge, over the Vale of Glamorgan and Bristol Channel to the south and over the coalfield plateau to the north.</i> • <i>Llantrisant Forest of historic interest as first Forestry Commission forest in Wales, with attractive age/species structure, popular for biking and walking.</i>

SLA reference and relevant viewpoint	Description and primary landscape qualities
	<ul style="list-style-type: none"> • <i>Most of remainder of area is fields with hedges, with improved grassland on upper slopes and some rhos pasture on the northern slopes and valleys.</i> • <i>No roads through.</i> • <i>Primary habitats relating to un-improved marshy grassland and rhos pasture, mainly in northern slopes and basins.</i> • <i>Series of tips and reclaimed land in southern small valleys, becoming wooded. Llanharan House and grounds in the south are part of attractive lower slopes.”³²</i> <p>The key management policies relate to retaining, conserving, protecting and enhancing the physical characteristics of the landscape including conserving the skyline which is formed by the prominent ridge of hills.</p>
Efail Isaf, Garth and Nantgarw Western Slopes	<p>The Efail Isaf, Garth and Nantgarw Western Slopes SLA landscape comprises two inter-linked landscape types. The landscape primarily features rolling farmland of coherent character, with the distinct wooded slopes and valley floor to east also included within the designated area. The primary landscape qualities of this SLA are described as follows:</p> <ul style="list-style-type: none"> • <i>“Attractive farmland on rolling plateau, with irregular fields mainly of improved</i> • <i>grassland, large hedges, scattered farms and winding lanes</i> • <i>This farmland forms the foreground in views from popular Garth Hill to the south</i> • <i>Wooded slopes to Taff Vale are important part of views from A470 and Treforest Industrial Estate.</i> • <i>These form part of the mainly wooded western sides of Taff Vale, all of which are very important to the overall impression of the Valleys from the major north/south route through Wales.</i> • <i>Mix of broadleaf and coniferous woodlands.”³²</i> <p>The key management policies relate to maintaining the farmland character of plateau, including conserving hedgerows and small woods and the management of the wooded slopes.</p>
Craig yr Allt	<p>This is a well-defined landscape of prominent ridges and valleys which represents a continuation of the Caerphilly Mountain ridges to the east and south. The primary landscape qualities of the Craig yr Allt SLA are described as follows:</p> <ul style="list-style-type: none"> • <i>“Craig-yr-Allt rises steeply from Taff Vale, forming prominent enclosing landform</i> • <i>opposite Garth Hill.</i> • <i>The area is all part of the continuing series of ridges to east, and across the Taff valley to the west.</i> • <i>Craig-yr-Allt is open common, managed by RCT Countryside Service.</i> • <i>Fine views into Taff Vale from Craig-yr-Allt.</i> • <i>Southern ridge is of limestone, with softer profile, and golf course on top.</i> • <i>In the intervening valleys and slopes there are relatively large areas of broadleaf woodland interspersed with fields.</i> • <i>Taff Trail cycleway passes through area, on lower slopes.</i> • <i>Small areas of tips along the valleys are now well integrated with woodland</i> • <i>Ancient and semi-natural woodland.</i>

SLA reference and relevant viewpoint	Description and primary landscape qualities
Taff Vale Eastern Slopes Viewpoint 8	<ul style="list-style-type: none"> • <i>Some piecemeal encroachment of development on edges of Taff's Well and from Caerphilly.</i>"³² <p>The key management policies relate to the continued management of Craig-yr-Allt for biodiversity and public access and the management of woodland.</p> <p>This SLA features a continuous stretch of main valley side and adjoining hilltops. The primary landscape qualities are described as follows:</p> <ul style="list-style-type: none"> • <i>"Long stretch of rural hillsides in contrast to densely developed valley floor and valleys to west.</i> • <i>All area plays important role in overall impression of the South Wales Valleys as gained from the A470, the major north/south route through Wales.</i> • <i>Gradation of small-scale irregular fields and woods on lower slopes, to larger fields on shallower mid slopes, to open land on tops, linked by steep winding lanes.</i> • <i>High point of Cefn Eglwysilan with prominent masts on skyline acting as landmarks.</i> • <i>Various earthworks relating to historically important medieval estate of Senghenydd on ridge top.</i> • <i>Prominent Cilfynydd tips in north overlook Taff Vale. Unreclaimed and steep with sculptural forms, they are an important reminder of industrial past, now becoming attractively covered with gorse and heather.</i> • <i>In places the upper edge of the valley settlements are starting to creep up the hillside intrusively.</i> • <i>Taff Trail cycleway passes through lower part of the area.</i>"³² <p>The key management policies relate to the conservation of the skyline, the requirement to protect/preserve/conservate historic features relating to Senghenydd and restrict edge of settlement developments, especially on steep sites.</p>
Treforest Western Slopes	<p>The primary landscape qualities of the Treforest Western Slopes SLA are described as follows:</p> <ul style="list-style-type: none"> • <i>"Attractive farmland on rolling plateau, with irregular fields mainly of improved grassland, large hedges, and scattered farms.</i> • <i>Wooded slopes to Taff Vale are important part of views from A470 and Treforest.</i> • <i>These form part of the mainly wooded western sides of Taff Vale, all of which are very important to the overall impression of the Valleys from the major north/south route through Wales.</i> • <i>Mix of broadleaf woodlands and open common land on slopes.</i> • <i>Unclear edges with areas of derelict land around northern edge at Treforest.</i>"³² <p>The key management policies seek to maintain the farmland character of plateau, including the conservation of hedges and small woods and management to conserve the wooded and open slopes and skyline from Taff Vale.</p>
Caerphilly SLAs	
Mynydd Eglwysilan Viewpoint 14	Primary Landscape Qualities and Features <i>"Cultural Landscapes</i>

SLA reference and relevant viewpoint	Description and primary landscape qualities
	<ul style="list-style-type: none"> <i>This is a multi-period landscape, with emphasis on 19th and 20th century development as industrial and residential communities emerged in the immediate and surrounding areas. Some evidence of historic and contemporary human occupation and exploitation in the form of prehistoric monuments, redundant industrial workings and transport systems is present throughout the area.</i> <p><i>Landscape Habitats</i></p> <ul style="list-style-type: none"> <i>Agriculturally improved grassland with patches of broadleaved woodlands and bracken. Both upland and lowland areas are heavily grazed.</i> <i>Semi-improved grassland, marshy grassland and flushes, dry heath / acid grassland mosaic and areas of blanket mire occur throughout the SLA.</i> <i>Significant features found within the SLA include; ponds, hedgerows with mature tree species, unimproved acid grasslands, marshy grassland, bracken, European Protected Species, UK Protected Species and LBAP priority species and habitats.</i> <p><i>Geological Landscape</i></p> <ul style="list-style-type: none"> <i>Glacial mountain valley. Southerly Valley dissected through pennant sandstones (upper carboniferous) extensively filled with drift. Glacial sand / gravel in lower valley, with eskers at Abertridwr.</i> <i>Major colliery tips, some restored and several closed mine shafts.</i> <p><i>Visual and Sensory</i></p> <ul style="list-style-type: none"> <i>This is not a remote landscape due to the proximity of the valleys to their associated urban areas. The upland ridge is open with panoramic and sometimes dramatic views over upland and adjoining valleys. A pleasant landscape, with some attractive rolling farmland away from the built form of urban edges.</i> <i>Land cover is predominately rough grazing with bracken. There is a mixture of boundary treatments across the SLA. Rolling farmland hedgerows and stock proof fencing are the predominant boundary treatments, although there are some traditional stonewalls present.</i> <i>Some visual clutter of pylons slightly detracts from this otherwise wild / exposed typical upland area with a strong sense of place.</i> <p><i>Historical Landscapes</i></p> <ul style="list-style-type: none"> <i>The area represents a remarkably coherent, rich multi-period, well preserved landscape with significant remains of Roman military occupation.</i> <i>The overall landscape pattern characterised by a mixed fieldscape and a largely dispersed pattern of settlement that has survived relatively unchanged. Although there has been some encroachment by 20th century housing development.</i> <i>The archaeological record for this area is exceptionally rich with evidence of human activity dating back to the Bronze Age.</i> <i>The Nelson area is dominated by the 20th Century industrial settlement and transport corridor and developments, which has led to the substantial loss of earlier patterns of landscape and settlement in this area. However, there is still significant evidence for Roman and medieval occupation in this area.</i>

SLA reference and relevant viewpoint	Description and primary landscape qualities
	<ul style="list-style-type: none"> <i>The Mynydd Eglwysilian and Meio areas represent an important and remarkably well preserved historic landscape containing a wealth of archaeological evidence. The area is an extensive enclosed area of mountain moorland that has remained substantially intact and unaffected by 19th – 20th Century industrial exploitation or modern forestry plantations”.</i>⁴⁴ <p>Long term management guidelines include preventing the area from becoming too cluttered with incongruous vertical elements, including pylons and turbines</p>

Bridgend SLAs

Northern Uplands	<p>The primary landscape qualities and features of the Northern Uplands SLA are described as follows:</p> <ul style="list-style-type: none"> <i>“An open upland ridge landscape lying between approximately 250m and 550m AOD.</i> <i>The western half of the SLA consists of unenclosed uplands with easterly (in Ogmores Valley) and westerly (in Garw Valley) facing slopes of relatively narrow valleys, with boundaries of urban/rural interface on lower valley slopes. The Upper Ogmores Valley exhibits the classic characteristics of glaciation, namely a U-shaped valley which is interspersed with minor truncated spurs and small hanging side valleys.</i> <i>The busy A4064 that follows the river course along the Afon Garw floor is a slight visual and sensory detractor due to noise and movement of traffic.</i> <i>Panoramic and sometimes dramatic views over upland and adjoining valleys.</i> <i>The eastern half of the SLA has steep westerly facing slopes of the quite narrow valley (Ogmores), with views across the urban area (Ogmores Vale, Pricetown) on the valley floor with which it has an urban/rural interface.</i> <i>Attractive upland views within and out over Ogmores Vale and to other upland areas that survive largely intact and unaffected by modern afforestation.</i> <i>Wind noise is a dominant aesthetic factor which evokes particular experience of exposure and wildness.</i> <i>Some visual clutter of pylons slightly detracts from this otherwise wild/exposed typical upland area with a strong sense of place.</i> <i>Not remote as close to valleys and their associated urban areas.</i> <i>Predominant land cover of rough grazing and bracken, rock outcrops to the east and with some old stone walls. With acid grassland, heath and internationally important blanket bog habitats and including Cwm Cyffog SSSI. Lower Ogmores Valley includes some patchy broadleaved woodland and at Ogmores Vale the Aber Woods Ancient Woodland SINC, whilst the northern end of the SLA includes the conifer plantations, including Cwm Nant-y-moel and the area around Nant-y-moel itself.”</i>³⁵ <p>Key management policies relate to visual intrusion of incongruous vertical elements, the control of stock grazing and spread of modern forestry plantation, urban edge issues and the management of Aber Woods.</p>
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⁴⁴ Caerphilly County Borough Council. (2010). Local Development Plan up to 2021 Appendices to the Written Statement. (Online). Available at: <https://www.caerphilly.gov.uk/CaerphillyDocs/LDP/Appendices-to-Written-Statement.aspx>

SLA reference and relevant viewpoint	Description and primary landscape qualities
Mynydd y Gaer Viewpoint 13	<p>The primary landscape qualities and features of this SLA are described as follows:</p> <ul style="list-style-type: none"> • <i>“Undulating ridge line landform running east to west up to the attractive upland landscape associated with Mynydd y Gaer some 300 metres AOD.</i> • <i>In land use terms it includes the interface between the open uplands and the bounded fields of the lower lying agricultural landscapes. These are often defined by hedgerows with trees.</i> • <i>The southern edge of this scarp is dissected by a series of steep sided cwms, such as Cwm Crymlyn, Cwm Llwyd and Nant Ton-y-groes.</i> • <i>Limited areas of woodland or small spinneys although the north-western edge of the SLA includes the wooded slopes of Allt y Rhiw, which is designated a Special Area of Conservation (SAC) under the EU Natura 2000 programme, together with Coedtal-yfan on the western side of the Ogmore Valley which runs down into the Ogmore Valley and the conifer plantations to the west of Gelli-feddgaer.</i> • <i>Higher ground is open and exposed which is reflected in the sensory qualities of the area. Its level of exposure is reflected by the presence of the windfarm at Mynydd Hugh, which introduces a visual detractor to the area.</i> • <i>The SLA is traversed by the Ogwr Ridgeway Walk, as well as a range of other footpaths.</i> • <i>Along the edge of the SLA, the A4061, B4280 and A4093 roads introduce visual and sensory detractors.”³⁵</i> <p>Key management policies seek to retain agricultural land use and form, the maintenance of nature conservation and Natura 2000 designations and the control of windfarm developments.</p>

Merthyr Tydfil SLAs

Pontygwaith	<p>The area is comprised of a distinct steep sided U-shaped wooded valley. Its special/valued landscape qualities and features are cited as follows:</p> <ul style="list-style-type: none"> • <i>“The narrow geography of the valley and its dramatic enclosed character is a rare feature both locally and nationally.</i> • <i>Among the communications corridors within this area is significantly enhanced by its associations with Richard Trevithick, who undertook the first recorded steam locomotive journey on rails along the Penydarren Tramroad in 1804.</i> • <i>The rarity value of industrial transport corridors and nucleated industrial settlement are represented and enhanced by the survival of the impressive series of 19th century railway viaducts crossing the Afon Taff.</i> • <i>The area displays a strong degree of naturalness through the poetic movement of the Afon Taff in the secluded oak beech woodlands found within the valley.</i> • <i>Unusual example of man's ingenuity overcoming topographical obstacles as evidence of High Victorian engineering skills among large areas of connected woodlands, with numerous key species and ancient woodlands.</i> • <i>Quakers Yard - short-lived settlement for early Non-conformist sect Quakers Yard more obviously associated with dissenting religion.”³⁶</i> <p>Key management policies relate to the conservation and enhancement of semi-natural habitat areas, the protection and enhancement of the river corridor and</p>
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SLA reference and relevant viewpoint	Description and primary landscape qualities
	the wooded nature of this part of the valley and to maintain intervening areas of fieldscape.
Vale of Glamorgan SLAs	
Ely Valley & ridge slopes	<p>The primary landscape qualities and features of the Ely Valley and Ridge Slopes SLA are described as follows:</p> <ul style="list-style-type: none"> • <i>“The area is predominantly a lowland rolling landscape with the Ely River valley running through it from north to south-east. The majority of the lowland valley floor is flood plain, with a sense of openness that contrasts with the rising valley sides.</i> • <i>A rectilinear pattern of drainage ditches, creating much improved pasture, runs into the River Ely. Towards the east, enclosing the Ely floodplain, the landscape has an intact pastoral field pattern and traditional settlement pattern.</i> • <i>Hillsides contain headwaters that feed into the River Ely, and the slopes support improved grassland, arable and some neutral grassland. There are areas of severely fragmented woodland.</i> • <i>The M4 and A4232 are significant detractors but character is generally consistent with few areas affected by urban fringe and industry.</i> • <i>Pylons in Ely Valley North detract from otherwise attractive views in and out of this area. Inappropriate development of farms into dwellings and poor land management are threatening the character integrity here, and drainage and agricultural improvement threatens habitats.</i> • <i>To the north-west, the landscape is one of lowland valleys and hills, forming the upper reaches of various tributaries that flow into the Thaw and Ely valleys. It is a well-maintained landscape with a tranquil feeling. With strong hedgerow and woodland cover, it has high scenic, but low habitat value.</i> • <i>The southern boundary includes a ridge crest, prominent in the landscape and providing views across the Vale. The A48 bisects this ridge and linear settlements dominate. The landscape includes semi-natural broadleaf woodland, improved grassland, arable and amenity grassland. The southwest corner is more intensively farmed, with inappropriate grazing, chemical improvement, drainage, and infrastructure development all creating pressure on habitats.</i> • <i>The boundary has been extended to the west to include Hensol Forest. The forest is largely planted coniferous, with some semi-natural woodland, and is on a hilltop so is visible from the surrounding landscape. Confined to watercourses and steep slopes, it creates a landscape of uniform diversity with a sheltering, tranquil and safe feeling. Hensol lake has a secluded and distinct sense of place. The area is popular with visitors for recreation and the infrastructure is showing signs of wear.</i> • <i>Hensol Castle is a substantial mock-gothic building and there are plans for the rehabilitation of the castle and its grounds as a conference facility, giving it a viable future and hopefully matching the careful management evident in the Vale Hotel, Golf and Spa Resort under the same ownership.”³⁷</i> <p>Key management policies relate to the creation of links between fragmented woodland, improving Hensol Forest as a focus for recreation, maintaining the coherence of field pattern, managing neutral grassland and priority habitats and restricting development so it does not impinge on the ridge line.</p>
Cardiff SLAs	

SLA reference and relevant viewpoint	Description and primary landscape qualities
Garth Hill and Pentyrch Ridges	No description available.
Viewpoint 15	

Visual baseline

6.5.34 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 receptors⁴⁵. The baseline establishes the receptors that are scoped into the assessment and are taken forward to the assessment stage where the potential visual effects on views and visual amenity likely to be experienced by receptors (people) within the Study Area are assessed from the following receptor groups:

- views from settlements. It should be noted that views from scattered residential properties outside of the settlements and within 2km of the proposed turbines will be considered as part of a Residential Visual Amenity Assessment (RVAA) prepared as part of the Final ES;
- views experienced whilst travelling through the landscape (road users, walkers, horse riders and cyclists for example); and
- views from tourist and recreational destinations.

Visual receptors: Settlements

6.5.35 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.

6.5.36 For people in their communities, the LVIA study area exhibits the broad settlement pattern that is present across much of 'the Valleys' area of south Wales. This pattern is of periodic dense settlements on some sections of valley bottom or lower valley sides but limited settlement in more elevated areas. As occurs in the Taff and Rhondda Valleys, individual valley floor settlements can amalgamate with one another to result in a continuous area of settlement extending along several kilometres of a valley and/or into side valleys.

6.5.37 Settlements within 10km of the proposed turbines that are overlapped in full or part by the ZTV are as follows:

- Trehafod;
- Porth (Cymmer, Glynlach, Trebanog and Llwynceilyn);
- Ynyshir;
- Wattstown;
- Ynysybwl;

⁴⁵ IEMA Quality Mark Article. Use of Viewpoint Analysis as a tool in Landscape and Visual Impact Assessment (LVIA). (2016).

- Pontypridd (Trallwn, Coedpenmaen, Graigwen, Graig, Pantygrraigwen, Pentrebach, Pont-Sion Norton, Cilfynydd);
- Glyntaff, Rhydyfelin (Upper Boat), Hawthorn;
- Nantgarw;
- Church Village, Efail Isaf and Llantwit Fardre;
- Tynant and Beddau;
- Creigiau;
- Llantrisant, Talbot Green and Ynysmaerdy;
- Pontyclun, Groes-faen and Brynsadler;
- Llanharry;
- Bryncae;
- Pencoed;
- Tonyrefail;
- Penrhiwfer and Edmonstown;
- Tonypany (Trealaw, Llwynypia and Penygrraig);
- Treorchy / Treorci, Ystrad (Rhondda);
- Penrhys;
- Blaenllechau; and
- Treharris, Trelewis, Craig Berthlwyd, Nelson and Pentwyn Berthlwyd

6.5.38 A RVAA will be undertaken as part of the Final ES to assess the effects on residential visual amenity likely to arise as a result of the Proposed Development. Residential properties within 2km of the Proposed Development that are overlapped by the blade tip ZTV, where the highest magnitude of change has the potential to occur, will be grouped and considered in the final assessment and are shown on **Figure 6.17**.

Visual receptors: recreational routes and destinations

- 6.5.39 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:
- designated long distance footpaths;
 - sustrans National Cycle Routes;
 - outdoor Recreational Facilities, Historic Parks and Gardens and Country Parks; and
 - Public Rights of Way (PRoWs) and Access Land.

Designated long distance footpaths (national and regional trails)

- 6.5.40 Regional long-distance footpaths within 10km of the proposed turbines that are overlapped by the ZTV are shown in **Figure 6.16** and listed as follows:
- Penrhys Pilgrimage Way;

- Cistercian Way (Wales);
- Glamorgan Ridgeway Walk / Taff-Ely Ridgeway Walk;
- Taff Trail;
- Ogwr Ridgeway Walk;
- Rhymney Valley Ridgeway Walk;
- Celtic Way;
- Sky to Sea Through The Vale;
- Sky To Sea Over The Bwlch; and
- Capital Walk – Cardiff.

Sustrans National and Regional Cycle Routes

6.5.41 National Cycle Network (NCN) routes within the LVIA study area that are overlapped by the ZTV are shown in **Figures 6.16** and **6.17** and listed as follows:

- NCN4;
- NCN881;
- NCN8; and
- NCN47.

Historic Parks and Garden, Golf Courses and Country Parks

6.5.42 Outdoor Recreational facilities including historic parks and gardens, country parks and golf courses within 10km of the proposed turbines and that are overlapped by the ZTV are shown in **Figure 6.18** and listed as follows:

- Historic Parks and Gardens:
 - ▶ Ynysangharad Park;
 - ▶ Miskin Manor;
 - ▶ Hensol Castle;
 - ▶ Talygarn; and
 - ▶ Craig y Parc.
- Country Parks:
 - ▶ None.
- Golf Courses:
 - ▶ Pontypridd Golf Club;
 - ▶ Rhondda Golf Course;
 - ▶ Whitehall Golf Course;
 - ▶ Llantrisant and Pontyclun Golf Club;
 - ▶ Creigiau Golf Course; and

- ▶ St Mary's Golf.

Open Access Land and PRoWs

- 6.5.43 Open Access Land within 10km of the proposed turbines that is overlapped by the ZTV is shown in **Figure 6.18** whilst the dense network of local PRoW is shown on **Figure 6.16** and listed as follows:
- Open Access land and PRoW within 5km of proposed turbines; and
 - Open Access land between 5km-10km of the proposed turbines.

Visual receptors: transport routes

- 6.5.44 The transportation network of 'A' and 'B' roads is mainly routed along valley floors and lower sides. Consequently, vehicular receptors' journeys are often routed through extensive areas of built development with limited availability of outward views.
- 6.5.45 Transport routes within 10km of the proposed turbines and that are overlapped by the ZTV are listed as follows:
- M4;
 - A470;
 - A4058;
 - A4233;
 - A4119;
 - A4093;
 - A4054;
 - A473;
 - A4222;
 - A472;
 - B4278;
 - B4512;
 - B4595;
 - B4264;
 - B4278; and
 - B4254.

Future baseline

- 6.5.46 It is unlikely that the future baseline will alter markedly in the short term, although the recent planning applications and scoping requests for similar scale wind farms to the Proposed Development at Mynydd Carn y Cefn, Twyn Hywel, Mynydd Llanhilleth, Abertillery and Manmoel is likely to result in further planning applications and potentially consent for one or more wind farm schemes. All wind energy developments that are relevant to the cumulative assessment i.e. located within the CLVIA study area, including

the aforementioned planning application and scoping schemes, are listed in **Table 6.6** and their location shown in **Figure 6.4**.

- 5.1.1 In the long term there is potential for large-scale changes in agricultural practices in response to national or international agricultural and environmental policy. The long-term continuation of the decline of 'family' farms and the amalgamation of farm units into fewer, more intensively managed farm business could gradually lead to changes such as amalgamation of fields and the introduction of larger scale, less vernacular agricultural buildings. Should livestock farming continue to decline it is likely there would be a commensurate long-term decline in the management of field boundaries and a subsequent decline in the strength of field patterns, especially on more marginal elevated areas.
- 5.1.2 Many of the large blocks of forestry that are a conspicuous landscape feature across parts of the defined study area are coniferous. They are therefore likely to be felled as commercial crops at some point with localised landscape consequences including changes to the nature of available views available to some visual receptors within the detailed and defined study areas.
- 5.1.3 The UK climate is changing, and climate models indicate that this rate of change could accelerate. The predicted future baseline will alter in response to future climate change, such as, higher temperatures and changes to rainfall patterns and intensity. Many of these changes will, at least initially, be subtle, for example, extended growing seasons for certain crops. The following changes with a high likelihood of occurrence could directly or indirectly affect landscape character or levels of visibility:
 - warmer summers and an associated longer growing season potentially affecting the range of crops that can be grown;
 - wetter winters with consequent local flooding as was demonstrated in many parts of the detailed and defined study areas in early 2020;
 - decreases in soil moisture in summer and autumn and associated increased potential for drought stress on vegetation, such as, hedgerows and hedgerow trees; and
 - increased levels of tree loss, especially of more mature trees, due to the anticipated increase in the incidences and severity of winter storms and the increased incidence of diseases affecting specific tree species such as chalara for ash trees and phytophthora for a variety of species including oak, beech, larch and alder.

6.6 Embedded measures

- 6.6.1 A range of environmental measures have been embedded into the Proposed Development as outlined in **Section 4.8 of Chapter 4**. **Table 6.9** outlines how these embedded measures will influence the LVIA.

Table 6.9 Summary of the embedded environmental measures of relevance to LVIA

Receptor	Potential changes and effects	Embedded measures	Compliance mechanism
Construction			
Grassland	Some temporary losses of habitats (acid grassland, poor	Revegetation and reinstatement.	CEMP secured via DNS condition

Receptor	Potential changes and effects	Embedded measures	Compliance mechanism
	semi-improved grassland and wet heath) in working areas wind turbines, substation, tracks, overhead and underground grid connection and temporary construction compounds		
Broadleaved Plantation Woodland and scattered scrub	Small number of trees and shrubs lost to accommodate the junction between the A4233 and access track	The design of the Proposed Development has ensured that losses are minimised. Retained trees would be protected in accordance with BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations ⁴⁶	CEMP secured via DNS condition
Public Rights of Way (PRoW)	Impacts on use of PRoW RH ANT 75/1 near the A4233, PRoWs RH ANT 998/1, RH ANT 94/2 and RH ANT 999/1 which are crossed by the proposed access road, footpath RH ANT 181/1 between T4 and T5 and footpath RH ANT 179/1 which is crossed by the route of the overhead grid connection.	Safety signage, temporary closures and provision of a banksman. Set out in full in Table 4.3 of Chapter 4: Description of the Proposed Development and Section 16.6 of Chapter 16: Socio-economics including tourism and recreation	CEMP secured via DNS condition
Operation			
Residents in the closest properties to the proposed turbines	Effects on views and residential visual amenity of the nearest residential receptors	Design iterations as set out in Table 3.3 of Chapter 3: Scheme Need, Alternatives and Iterative Design Process including a reduction in the maximum tip height of the turbines from 180m to 155m.	Secured via DNS condition
All landscape and visual receptors within the study area	The visual apparency of the turbines and consequent impact upon landscape and visual receptors will be influenced by the colour of the blades, nacelle, and tower.	The turbine rotors and upper towers will be largely visible against the sky and therefore a non-reflective pale grey colour (e.g. RAL 7035) will be selected to minimise contrast.	DNS planning condition

⁴⁶ The British Standards Institution (2012). BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations

6.7 Scope of the assessment

The Proposed Development

- 6.7.1 All decommissioning activities, including use of on-site cranes, have been scoped out of the LVIA. The decommissioning activities would be short-lived within context of proposed 30 years operational period. No additional permanent elements would be introduced that could be visible beyond the Site's boundary and no additional landscape elements would be lost (other than those associated with the operation of the Proposed Development). In landscape and visual contexts, the decommissioning period is a short extension of the effects identified for the operational period, which after 30 years would be well-established components of the revised landscape and visual baseline. It is highly unlikely that the temporary introduction of one or two on-site cranes and some ground level plant and movement would generate any new adverse landscape and visual impacts whose magnitude would be sufficient to change previously non-significant effects into significant effects for any receptors.

Spatial scope

- 6.7.2 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 24km radius LVIA study area, as defined in accordance with GN46¹⁸ and the Zones of Theoretical Visibility (ZTVs). The cumulative assessment covers a 26km radius Study Area as agreed with consultees.
- 6.7.3 The ZTV analysis is used to define the LVIA's spatial scope and to indicate 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 seven proposed turbines. Details of the method used to produce the ZTVs is provided in **Appendix 6A**.
- 6.7.4 **Figures 6.2** and **6.3** show the ZTVs that have been calculated to show the area of theoretical visibility of the proposed turbines based on the eight-turbine layout with turbines having a blade tip height of 155m and hub height of 97.5m.

Temporal scope

- 6.7.5 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; and
 - a 30-year operational phase.

Potential receptors

- 6.7.6 The principal landscape and visual receptors that have been identified as being potentially subject to effects are summarised in **Table 6.10**.

Table 6.10 Landscape and visual receptors subject to potential effects

Receptor	Reason for consideration
Landscape receptors	
LANDMAP VSAs, HLAAs, GLAAs, LHAAs and CLSAs filtered into the assessment.	The LANDMAP Aspect Areas taken forward to the detailed assessment are derived from the process outlined in GN46 which intends to focus the detailed assessment on the potentially sensitive aspect areas most likely to be affected.
Nationally (statutory) designated landscapes and their character/special qualities: Brecon Beacons National Park	The Brecon Beacons National Park, occurring within the ZTV for the Project, is a landscape of national importance and high sensitivity.
Locally designated landscapes entirely or partly located within 10km of the boundary of the Site and within the ZTVs.	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 ZTVs.	Typically high sensitivity receptors where there is the potential for significant effects upon visual amenity.
Residential visual receptors in private residences within 2km of the Proposed Development and within the blade tip ZTV.	Typically high sensitivity receptors where there is the potential for substantial adverse effects upon residential visual amenity.
Recreational receptors using regionally promoted routes within the LVIA study area and ZTVs.	Typically high sensitivity receptors where there is the potential for significant effects upon visual amenity.
Recreational receptors using sections of Sustrans NCRs routed through the LVIA study area and within the ZTVs.	Typically high sensitivity receptors where there is the potential for significant effects upon visual amenity.
Recreational receptors using Open Access Areas within the ZTVs (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 in LVIA study area such as Country Parks and Golf Clubs and within the ZTVs	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 which coincide with the ZTVs	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

- 6.7.7 The effects on landscape and visual receptors which have the potential to be significant and have been taken forward for detailed assessment are summarised in **Table 6.11**.
- 6.7.8 The final scope of the assessment has been guided by the analysis of the Viewpoint Assessment provided in **Appendix 6I**. This analysis sets a distance threshold for likely significant effects and indicates that significant effects are unlikely to occur at distances beyond 8.5km, even for high sensitivity receptors. As a consequence, a conservative buffer of 10km from the turbine locations has been applied and receptors of local or regional importance have been considered within this 10km buffer.

Table 6.11 Landscape and visual receptors scoped in for further assessment

Receptors	Likely significant effects
Landscape receptors	
<p>LANDMAP VSAAAs, HLAAs, GLAAs, LHAAs and CLAAs</p> <p>As derived from the filtering process set out in Appendix 6B and which lie within 10km of the proposed turbines.</p>	<p>Construction phase:</p> <ul style="list-style-type: none"> 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, borrow pits, control buildings / sub-stations, contractors' facilities, site access and electrical cabling) may be significant. <p>Construction and operational phases:</p> <ul style="list-style-type: none"> Direct effects on the host landscape character and potentially landscape elements as a consequence of turbine erection and operation (including night-time effects resulting from aviation warning lights) are likely to be significant. Indirect effects related to the visibility of the turbines (including night-time effects resulting from aviation warning lights) and their effect on landscape character and perceptual characteristics have the potential to be significant.
Brecon Beacons National Park	The closest proposed turbine would be theoretically visible from the Brecon Beacons National Park at a separation distance of ~18.5km. Given that this is a landscape of high value, indirect effects upon its special qualities and landscape character have the potential to be significant.
<p>Rhondda Cynon Taff SLAs entirely or partially within 10km of the proposed turbines:</p> <ul style="list-style-type: none"> Mynydd y Cymmer; 	<p>Construction phase:</p> <ul style="list-style-type: none"> Direct effects upon the host SLA (Mynydd y Glyn and Nant Muchudd Basin) as a consequence of the site preparation and construction of associated infrastructure (tracks, borrow pits, control buildings / sub-stations, contractors' facilities, site access and electrical cabling) may be significant.

Receptors	Likely significant effects
<ul style="list-style-type: none"> • Mynydd Troed y Rhiw Slopes; • Llwyncelyn Slopes; • Cwm Clydach; • Coed-yr-Hendy and Mwyndy; • Llantrisant Surrounds; • Mynydd y Glyn and Nant Muchudd Basin; • Mynydd Hugh and Llantrisant Forest; • Efail Isaf, Garth and Nantgarw Western Slopes; • Craig yr Allt; • Taff Vale Eastern Slopes, and • Treforest Western Slopes. 	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Direct effects on the host SLA (Mynydd y Glyn and Nant Muchudd Basin) and the landscape qualities and features for which it has been designated as a consequence of turbine erection and operation (including aviation warning lights) are likely to be significant. • Indirect effects upon the remaining RCTCBC SLAs (and the landscape qualities and features for which they have been designated), as a consequence of turbine erection and operation (including night-time effects resulting from aviation warning lights) may be significant.
<p>Caerphilly SLAs entirely or partially within 10km of the proposed turbines:</p>	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Indirect effects upon a single Caerphilly CBC SLA (and the landscape qualities and features for which it has been designated), as a consequence of turbine erection and operation (including night-time effects resulting from aviation warning lights) may be significant.
<ul style="list-style-type: none"> • Mynydd Eglwysilan 	
<p>Bridgend SLAs entirely or partially within 10km of the proposed turbines:</p>	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Indirect effects upon two Bridgend CBC SLAs (and the landscape qualities and features for which they have been designated), as a consequence of turbine erection and operation (including night-time effects resulting from aviation warning lights) may be significant.
<ul style="list-style-type: none"> • Northern Uplands; and • Mynydd y Gaer 	
<p>Merthyr Tydfil SLAs entirely or partially within 10km of the proposed turbines</p>	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Indirect effects upon a single Merthyr Tydfil CBC SLA (and the landscape qualities and features for which it has been designated), as a consequence of turbine erection and operation (including night-time effects resulting from aviation warning lights) may be significant.
<ul style="list-style-type: none"> • Pontygwaith 	
<p>Vale of Glamorgan SLAs entirely or partially within 10km of the proposed turbines:</p>	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Indirect effects upon a single Vale of Glamorgan SLA (and the landscape qualities and features for which it has been designated), as a consequence of turbine erection and operation (including night-time effects resulting from aviation warning lights) may be significant.
<ul style="list-style-type: none"> • Ely Valley and Ridge Slopes 	
<p>Cardiff SLAs entirely or partially within 10km of the proposed turbines:</p>	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Indirect effects upon a single Cardiff SLA (and the landscape qualities and features for which it has been designated), as a consequence of turbine erection and operation (including night-time effects resulting from aviation warning lights) may be significant.
<ul style="list-style-type: none"> • Garth Hill and Pentyrch Ridges 	

Receptors	Likely significant effects
Visual receptors	
Residential receptors in the closest communities and recreational receptors (within ~2km of proposed turbines and the hub height ZTV).	<p>Construction phase of the Wind Farm development:</p> <ul style="list-style-type: none"> • Effects on views and visual amenity within ~2km where potential visibility of the proposed construction activities include site preparation and construction of associated infrastructure (tracks, borrow pits, control buildings / sub-stations, contractors' facilities, site access and electrical cabling) and Grid Connection; and • Effects on views and visual amenity from the erection of the wind turbines. <p>Operational phase of Wind Farm development and Grid Connection:</p> <ul style="list-style-type: none"> • Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines; • Views of the proposed aviation warning lights and potential adverse effects on night-time views; and • Views of the proposed Grid Connection – at this stage assumed to be a 1.4km section of 33kV overhead line on wooden poles within the Site and a 7.1km underground section between the Site and Upper Boat Substation. .
Residential receptors in communities substantially within the blade tip ZTV and within 10km of the Proposed Development:	<p>Construction and operational phases of the Wind Farm development:</p> <ul style="list-style-type: none"> • Effects on views and visual amenity from erection of the wind turbines; • Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines; and • Views of the proposed aviation warning lights and potential adverse effects on night-time views within ~10km distance.
<ul style="list-style-type: none"> • Trehafod; • Porth (Cymmer, Glynlach, Trebanog and Llwynceilyn); • Ynyshir; • Wattstown; • Ynysybwl; • Pontypridd (Trallwn, Coedpenmaen, Graigwen, Graig, Pantygraigwen, Pentrebach, Pont-Sion Norton, Cilfynydd); • Glyntaff, Rhydyfelin (Upper Boat), Hawthorn; • Nantgarw; • Church Village, Efail Isaf and Llantwit Fardre; • Tynant and Beddau; • Creigiau; • Llantrisant, Talbot Green and Ynysmaerdy; • Pontyclun, Groes-faen and Brynsadler; • Llanharry; • Bryncae; • Pencoed; • Tonyrefail; 	

Receptors	Likely significant effects
<ul style="list-style-type: none"> • Penrhiwfer and Edmonstown; • Tonypanyd (Trealaw, Llwynypia and Penygraig); • Treorchy / Treorci, Ystrad (Rhondda); • Penrhys; • Blaenllechau; and • Treharris, Trelewis, Craig Berthlwyd, Nelson and Pentwyn Berthlwyd. 	
<p>Recreational receptors using regionally promoted footpath routes within the blade tip ZTV and within 10km of the Proposed Development:</p> <ul style="list-style-type: none"> • Penrhys Pilgrimage Way; • Cistercian Way (Wales); • Glamorgan Ridgeway Walk / Taff-Ely Ridgeway Walk; • Taff Trail; • Ogwr Ridgeway Walk; • Rhymney Valley Ridgeway Walk; • Celtic Way; • Sky to Sea Through The Vale; • Sky To Sea Over The Bwlch; and • Capital Walk – Cardiff. 	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Effects on views and visual amenity from erection of the wind turbines; and • Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.
<p>Recreational receptors using National Sustrans Cycle Routes within the LVIA study area and which coincide with the blade tip ZTV:</p> <ul style="list-style-type: none"> • NCN4; • NCN881; • NCN8; and • NCN47 	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Effects on views and visual amenity from erection of the wind turbines; and • Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.
<p>Recreational receptors at visitor attractions in LVIA study area such as Country Parks and Golf Clubs within the blade tip ZTV and within 10km of the Proposed Development:</p> <ul style="list-style-type: none"> • Ynysangharad Park; 	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Effects on views and visual amenity from erection of the wind turbines; and • Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.

Receptors	Likely significant effects
<ul style="list-style-type: none"> • Miskin Manor; • Hensol Castle; • Talygarn; • Craig y Parc; • Pontypridd Golf Club; • Rhondda Golf Course; • Whitehall Golf Course; • Llantrisant and Pontyclun Golf Club; • Creigiau Golf Course; and • St Mary's Golf 	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Effects on views and visual amenity from erection of the wind turbines; and • Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.
<p>Recreational receptors in extensive upland Access Areas and at popular summits within LVIA study area (where not included in other categories):</p> <ul style="list-style-type: none"> • Open Access land within 5km of proposed turbines; and • Open Access land between 5km-10km of the Site 	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Effects on views and visual amenity from erection of the wind turbines; and • Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.
<p>Vehicular receptors travelling along 'A' and 'B' roads and any promoted tourist routes within the blade tip ZTV and within 10km of the Proposed Development:</p> <ul style="list-style-type: none"> • M4; • A470; • A4058; • A4233; • A4119; • A4093; • A4054; • A473; • A4222; • A472; • B4278; • B4512; • B4595; • B4264; • B4278; and • B4254. 	<p>Construction and operational phases:</p> <ul style="list-style-type: none"> • Effects on views and visual amenity from erection of the wind turbines; and • Effects on views and visual amenity resulting from visibility and movement of the proposed wind turbines.

6.7.9 The receptors/effects detailed in **Table 6.12** have been scoped out from being subject to further assessment because the potential effects are not considered likely to be significant.

Table 6.12 Landscape and visual receptors scoped out of the LVIA

Receptors/potential effects	Justification
Receptors:	
All LANDMAP Aspect Areas that do not fulfil the criteria set out in GN46¹⁸ and are beyond 10km from the proposed turbines	The filtering process set out within GN46 ¹⁸ 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 6I indicates that significant effects are not anticipated beyond 8.5km.
Local landscape designations that are located beyond 10km	The viewpoint analysis in Appendix 6I indicates that significant effects are not anticipated beyond 8.5km.
Local landscape designations within 10km that are substantially or completely outside the ZTVs as shown on Figure 6.14 and as set out in the Scoping Report:	<p>These include:</p> <ul style="list-style-type: none"> • S1-Llanharry Surrounds: almost entirely outside blade tip ZTV; • S2-Talygarn Surrounds: minimum 9 km separation distance, low tranquillity due to M4 presence and separated from proposal site by large areas of intervening built development; • S3-Ely Valley at Miskin: minimum 8 km separation distance, low tranquillity due to M4 presence and separated from proposal site by large areas of intervening built development; • N5-Cynon Valley Northern Slopes: only partly within 10 km and mostly forested; • N6-Cwm Orci: only partly within 10 km and adjacent presence of Maerdy Wind Farm; • N7-Rhondda Valley Northern Cwm: mostly beyond 10 km and nearby presence of Maerdy, Mynydd Bwlfa and Pen-y-Cwmoedd Wind Farms; and • N8-Hirwaun Common: almost entirely beyond 10km and nearby presence of Mynydd Bwlfa and Pen-y-Cwmoedd Wind Farms.
Glamorgan Heritage Coast	With a minimum separation distance of 20km, any effects pathway would be entirely dependent upon views being available. However, experience with existing wind farms in south Wales demonstrates that over such distances, especially from low lying coastal areas where views are focused out to sea, views would rarely be available and could not result in significant adverse effects upon the designation's special qualities. As a consequence, an assessment of the landscape effects on the Glamorgan Heritage Coast has been scoped out of the LVIA as agreed with consultees and documented in Table 6.4 .
Users of the Wales Coast Path	Review of Figure 6.17 shows that ZTV periodically extents as far as some sections of the coast and hence the Wales Coast Path between Cardiff and east of Porthcawl. The sections of the Coast Path within the ZTV will have a minimum separation distance in excess of 20km from the Proposed Development and receptors' attention is more likely to be focused on views along the coast and out to sea. The more easterly Wles Coast Path sections are also routed through extensive urban areas in Cardiff, Penarth, Barry and south of Cardiff Airport. In these circumstances it is highly unlikely that recreational receptors using any sections of the Wales Coast Path within the LVIA study area would be

Receptors/potential effects	Justification
	able to discern turbines at the Proposed Development. If views were to be available and weather conditions favourable, the Mynydd-y-Glyn turbines would always be viewed incrementally in the context of a proportion of the turbines at the numerous other operational wind energy developments listed in Table 6.6 and illustrated in Figure 6.4 . As a consequence, an assessment of the visual effects on user of the Wales Coast Path has been scoped out of the LVIA as agreed with consultees and documented in Table 6.4 .
Visual Receptors outwith the ZTV	All receptors within the LVIA study area that are outwith the blade tip ZTV would have no view of the Proposed Development and are scoped out, as agreed with consultees and recorded in Table 6.4 .
Temporal based:	
Decommissioning effects of the Proposed Development upon landscape and visual receptors	The decommissioning period is a short extension of the landscape and visual effects identified for the operational period, which after 30 years would be well-established components of the revised landscape and visual baseline.

Scope of the cumulative landscape and visual assessment

- 6.7.10 The landscape and visual cumulative assessment has been undertaken in relation to the following scenarios:
- Cumulative Scenario 1: Baseline wind turbines (Operational + Consented); and
 - Cumulative Scenario 2: Other proposed wind turbines (Cumulative Scenario 1 + Planning Application + Scoping Opinion).
- 6.7.11 As the level of effect sustained by receptors in any cumulative scenario cannot be less than that predicted in relation to the baseline scenario, it is established that the receptors predicted to sustain significant effects in **Sections 6.10 to 6.12** would necessarily experience significant effects as a result of the additional (incremental) effect of the introduction of Mynydd y Glyn Wind Farm into these scenarios as well. The focus of the cumulative assessment is therefore to identify which, if any, of the receptors that would not sustain significant effects as a result of the introduction of Mynydd y Glyn Wind Farm into the baseline scenario, may sustain significant effects as a result of the additional contribution of Mynydd y Glyn Wind Farm to a cumulative scenario. Where a receptor has been predicted to sustain a Minor or Negligible level of effect in relation to the baseline scenario, it is not considered that there are any circumstances in which that level of additional effect could result in significant effects in a cumulative scenario and these receptors are excluded from the cumulative assessment. As a result, the cumulative assessment is restricted to considering those receptors predicted to sustain Minor/Moderate or Moderate (not significant) levels of effect in relation to the baseline scenario.

6.8 Assessment methodology

- 6.8.1 The generic project-wide approach to the assessment methodology is set out in **Chapter 2: Approach to Environmental Impact Assessment**. However, whilst this has informed the approach that has been 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.

Methodology for predicted landscape and visual effects

6.8.2 The LVIA has been undertaken in accordance with the methodology set out in **Appendix 6A** and conforms to the GLVIA3¹⁷ which is widely accepted throughout the UK as the appropriate approach to use. Other technical guidance set out in **Table 6.3** has also informed the methodology included in **Appendix 6A**.

Significance evaluation methodology

6.8.3 The level of landscape and visual effects is determined with reference to landscape or visual sensitivity and the magnitude of landscape or visual change experienced. For each receptor, the evaluation process is informed by use of a matrix, as in **Table 6.13**, that sets out the level of effects and whether this is significant or not significant.

Table 6.13 Evaluation of Landscape and Visual Effects

		Landscape and Visual Sensitivity			
		High	Medium	Low	Very Low
Magnitude of Change	Very High	Major (Significant)	Major (Significant)	Major/Moderate (Significant)	Moderate (Potentially Significant)
	High	Major (Significant)	Major/Moderate (Significant)	Moderate (Potentially Significant)	Moderate/Minor (Not Significant)
	Medium	Major/Moderate (Significant)	Moderate (Potentially Significant)	Moderate/Minor (Not Significant)	Minor (Not Significant)
	Low	Moderate (Potentially Significant)	Moderate/Minor (Not Significant)	Minor (Not Significant)	Negligible (Not Significant)
	Very Low	Moderate/Minor (Not Significant)	Minor (Not Significant)	Negligible (Not Significant)	Negligible (Not Significant)
	Zero	None / No View			

6.9 Assessment of effects: LANDMAP Aspect Areas

Wind Farm development

Landscape Habitats Aspects Areas

6.9.1 The assessment of effects upon the two LHAA receptors within the Study Area which have been scoped into the assessment, is set out in the detailed assessment tables in

Appendix 6D: LANDMAP Landscape Habitats Aspect Areas: Assessment of effects.
A summary of the assessment of effects which may arise as a consequence of the operational Mynydd y Glyn wind turbines, is presented in **Table 6.14**. There would be no significant landscape effects.

Table 6.14 Summary of effects: LHAs (operation)

Aspect Area Reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
CYNONLH089 Unnamed	High	Medium-Low	Medium	Low to None	Moderate/Minor Not Significant to No Effect
CYNONLH094 Unnamed	Medium	Low	Medium-Low	Low to None	Moderate/Minor to Minor Not Significant to No Effect

Visual and Sensory Aspect Areas

6.9.2 The assessment of effects upon the 17 VSAA receptors within the Study Area which have been scoped into the assessment, is set out in the detailed assessment tables in **Appendix 6E: LANDMAP Visual and Sensory Aspect Areas: Assessment of effects**. A summary of the assessment of effects which may arise as a consequence of the operational Mynydd y Glyn wind turbines, is presented in **Table 6.15** with significant landscape effects indicated in **bold**.

Table 6.15 Summary of effects: VSAs (operation)

Aspect Area Reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
CYNONVS142 Mynydd y Glyn	Medium	High-Medium	High-Medium	Very High to Zero	Major Significant to No Effect
CYNONVS436 Mynydd Gaer	High	Medium	High-Medium	Medium to Zero	Major/Moderate to Moderate Significant to No Effect
CYNONVS496 Mynydd Maes-Teg	High	Medium	High-Medium	Medium to Zero	Major/Moderate to Moderate Significant to No Effect
CYNONVS317 Mynydd Eglwyslon & Mynydd Meio	High	Medium	High-Medium	Medium to Zero	Major/Moderate to Moderate Significant to No Effect

Aspect Area Reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
MRTHRVS767 Taff/Bargoed Confluence	High	Medium-Low	Medium	Low to Zero	Moderate/Minor Not Significant to No Effect
CRDFFVS003 Garth- west	High	Medium	High-Medium	Low to Zero	Moderate to Moderate/ Minor Not Significant to No Effect
CRDFFVS002 Tyn-y-Coed	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CRDFFVS006 Pentyrch- north	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CRDFFVS007 Pentyrch- south	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CRDFFVS004 Garth Hill	High	High-Medium	High-Medium	Low to Zero	Moderate to Moderate/ Minor Not Significant to No Effect
VLFGLVS962 Ystradowen/ Hensol area	High	Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
VLFGLVS406 Ely Valley Flood Plain	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
VLFGLVS002 Hensol Park	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
MRTHRVS119 Gelligaer Farmlands	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONVS113 Cwm Dar	High	Medium	High-Medium	Low to Zero	Moderate to Moderate/Minor Not Significant to No Effect
VLFGLVS933 Upper Thaw Valley	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONVS622 Mynydd Llangeinwyr	High	Medium	High-Medium	Low to Zero	Moderate to Moderate/Minor Not Significant to No Effect

Historic Landscape Aspect Areas

- 6.9.3 The assessment of effects upon the 41 HLAA receptors within the Study Area which have been scoped into the assessment, is set out in the detailed assessment tables in **Appendix 6F: LANDMAP Historic Landscape Aspect Areas: Assessment of effects**. A summary of the assessment of effects which may arise as a consequence of the operational Mynydd y Glyn wind turbines, is presented in **Table 6.16** with significant landscape effects indicated in **bold**.

Table 6.16 Summary of effects: HLAA's (operation)

Aspect Area Reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
CYNONHL649 Nant Castellau and Nant Muchudd	High	Medium- Low	Medium	Medium to Zero	Moderate Significant to No Effect.
CYNONHL378 Rhondda Settlement Corridor	High	Medium	High – Medium	Medium to Low to Zero	Moderate Significant to No Effect
CYNONHL999 Mynydd Cymmer	High	Low	Medium	Medium to Low to Zero	Moderate Not Significant to No Effect
CYNONHL833 Llanwonno and Cwm Clydach	High	Medium-Low	Medium	Low to Zero	Moderate/Minor Not Significant to No Effect
CYNONHL888 Mynyddau Hugh a Maendy	High	Medium	High-Medium	Very Low to Zero	Moderate/Minor to Minor Not Significant to No Effect
CYNONHL977 Pontypridd and the Afon Taff	High	Medium	High – Medium	Very Low to Zero	Moderate to Moderate/ Minor Not Significant to No Effect
CYNONHL687 Rhondda Uplands	High	Medium	High - Medium	Very Low to Zero	Moderate to Moderate/ Minor Not Significant to No Effect
CYNONHL497 Ynysangharad Park	High	Medium	High-Medium	Very Low to Zero	Moderate to Moderate/ Minor Not Significant to No Effect
CYNONHL992 Mynydd Brithweunydd	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONHL805	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor

Aspect Area Reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
Rhondda Fawr Enclosed Valley Side					Not Significant to No Effect
CYNONHL639 Gilfach Goch	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONHL482 Llantrisant	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONHL215 H05 Unenclosed Uplands	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONHL988 Ogmored Valley Agricultural	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONHL187 Coedcaerau-bach & Garthfawr	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONHL878 Mynyddau Eglwysilian a Meio	High	Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONHL997 Rhondda Fach Enclosed Valley Side South	High	Medium	High-Medium	Very Low to Zero	Moderate/ Minor to Minor Not Significant to No Effect
CYNONHL290 Llanfabon and Llanbradach	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONHL308 Senghenydd and Cwm yr Aber	High	Medium-Low	Medium	Low to Zero	Moderate/ Minor Not Significant to No Effect
CYNONHL645 H12 Mynydd y Gaer and Allt y Rhiw	High	Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
CYNONHL295 Llanharri and Meisgyn	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
CYNONHL993 Mynydd Meio	High	Low	Medium	Very Low to Zero	Minor Not Significant to No Effect

Aspect Area Reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
CRDFFHL005 Garth Upland	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
CRDFFHL002 Capel Llanilltern and southwest Pentyrch	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
MRTHRHL017 HL017 Quaker's Yard, Treharris and Trele	High	High-Medium	High-Medium	Very Low to Zero	Moderate/ Minor to Minor Not Significant to No Effect
CYNONHL515 Cynon Enclosed Valley Side	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
MRTHRHL014 HL014 Cefn-y-Fan	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
CRDFFHL022 Craig y Parc	High	Medium	High - Medium	Very Low to Zero	Moderate/Minor to Minor Not Significant to No Effect
CYNONHL856 Mynyddau Merthyr ac Aberdar	High	Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
CYNONHL987 Talygarn	High	High-Medium	High-Medium	Very Low to Zero	Moderate/Minor to Minor Not Significant to No Effect
MRTHRHL013 HL013 Cwm Cothi	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
CYNONHL582 H09 Ogmore Valley Agricultural 1	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
MRTHRHL011 HL011 Mynydd Merthyr and Mynydd Gethin	High	Medium	High - Medium	Very Low to Zero	Moderate/Minor to Minor Not Significant to No Effect
CYNONHL596 Rudry	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect

Aspect Area Reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
VLFGLHL045 Hensol Castle	High	High-Medium	High-Medium	Very Low to Zero	Moderate/Minor to Minor Not Significant to No Effect
CYNONHL924 H14 Cefn Hirgoed and Hirwaun Common	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
CYNONHL634 Gelligaer and Llancaiach	High	Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
MRTHRHL016 HL016 Cwm Bargod East	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
CYNONHL989 H32 St Brides Minor to Coychurch 2	High	Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
MRTHRHL022 HL022 Bargod Taf and Bedlinog corridor	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect
VLFGLHL042 Llansannor and Penllyn Moors	High	Medium-Low	Medium	Very Low to Zero	Minor Not Significant to No Effect

Cultural Landscape Services Aspect Areas

6.9.4 **Appendix 6G: LANDMAP Cultural Landscape Services Aspect Areas: Assessment of effects** contains the assessment of effects upon the single CLSAA receptor within the Study Area, which has been scoped into the assessment. A summary of the assessment of effects which may arise as a consequence of the operational Mynydd y Glyn wind turbines, is presented in **Table 6.17**.

6.9.5 In summary, no CLSAAs are predicted to experience significant landscape effects.

Table 6.17 Summary of effects: CLSAAs (operation)

Aspect Area Reference and name	Landscape value	Landscape susceptibility	Overall landscape sensitivity	Magnitude of change	Level of effect
CYNONCLS014 Mynydd y Glyn	Medium	Medium-Low	Medium	Medium to None	Moderate Not Significant to No Effect

Grid Connection

- 6.9.6 The assessment of effects on LANDMAP Aspect Areas as a consequence of the grid connection focusses on the host Aspect Areas due to the likely scale and extent of this component of the Proposed Development.

Geological Landscapes Aspect Areas

- 6.9.7 The overhead section of the grid connection corridor lies within GLAA CYNONGL032: Upper Ely. The overall evaluation of this GLAA is assessed in the LANDMAP survey sheet as Moderate. The underground section of the route crosses CYNONGL015: Taff valley (High value) and the susceptibility of the two GLAAs to the type of change proposed (assumed 33kV overhead line on wooden poles and underground cable) is assessed as Low through consideration of their physical and visual characteristics, the type of development and absence of any geological SINC, SSSI or RIGS sites in the vicinity of the grid connection route. The overall landscape sensitivity to change as a consequence of the grid connection is therefore assessed as Low. The proposed grid connection would comprise some minor excavations, many of which would be within an existing highway corridor and would not alter any features of geological or geomorphological significance. The magnitude of change would not exceed Very Low and operational effects would be Negligible, neutral, and Not Significant.

Landscape Habitats Aspects Areas

- 6.9.8 The host LHAA for the overhead section of the grid connection is CYNONLH094 (unnamed), much of which is improved grassland which is generally of low ecological value. Whilst the LANDMAP survey references a number of more valuable habitats present in small areas, such as marshy grassland and broadleaved woodland, the Phase 1 habitat presented in **Figure 4.6** of **Appendix 8A** indicates that these would not be affected by the proposed route of the overhead grid connection. The overall evaluation of this LHAA is recorded on the LANDMAP survey sheet as being Moderate. In terms of the underground grid connection, this would also pass through CYNONLH094 as well as CYNONLH088 as it crosses the pastoral landscape between Pen-y-Coedcae and Black Road. This area features agriculturally improved grassland and is stated as being of high value in the LANDMAP survey. Once at Upper Church Village, the route crosses CYNONLH090, which represents a heavily urbanised area of low value.
- 6.9.9 The susceptibility to the type of change proposed is assessed as Low as set out in **Appendix 6C** and the overall landscape sensitivity to change as a consequence of the grid connection is therefore assessed as Medium-Low.
- 6.9.10 Both overhead and underground sections of the proposed grid connection would not give rise to substantial habitat fragmentation with minimal losses of grassland associated with the overhead line. Any stripping of grassland habitat and short sections of hedgerow loss within the working corridor crossing part of CYNONLH088 would be temporary and all habitat reinstated post construction. As a consequence, the magnitude of change would be Low to Very Low and operational effects would be Moderate/Minor to Negligible, adverse, and Not Significant.

Visual and Sensory Aspect Areas

- 6.9.11 The overhead and a large proportion of the underground section of the grid connection lies within VSAA CYNONVS142: Mynydd y Glyn. The overall evaluation of this VSAA is assessed in the LANDMAP survey sheet as Moderate whilst its susceptibility is assessed as medium through consideration of its physical, visual and perceptual characteristics dan

the type of development proposed, leading to an overall medium landscape sensitivity. Once the underground route reaches Upper Church Village, it enters CYNONVS999: Llantrisant, which is recorded as being of Low value.

- 6.9.12 The introduction of the grid connection into this landscape would have limited characterising influence beyond the immediate grid connection corridor. The scale of the proposed grid connection means that the upland character of rough pasture, landform and elevated views would not be altered, as evidenced through the presence of an existing 33kv line which crosses this VSAA. The construction of the underground connection, which would primarily be routed along existing highways would be temporary and any short-term loss of grassland and short sections of hedgerow from within the working corridor as it crosses the agricultural landscape between Pen-y-Coedcae and Black Road would be reinstated post construction. The magnitude of change is unlikely to exceed Low and the level of operational effect would therefore be Moderate/Minor, adverse and Not Significant.

Historic Landscape Aspect Areas

- 6.9.13 The host HLAA's for the overhead grid connection are CYNONHL648: Mynyddau Cymmer a Glyn (for a short section of the route) and CYNONHL649: Nant Castellau and Nant Machudd. The overall value of the HLAA's is cited as Moderate and High respectively with the High value of CYNONHL649: Nant Castellau and Nant Machudd reflecting "*the extremely well-preserved nature of the irregular fieldscape in this area*" and "*the diverse, multi-period nature of the archaeological resource containing evidence of Bronze Age, Iron Age, Roman, medieval and post-medieval occupation*". A review of the physical, visual, and perceptual characteristics of the landscape indicates a Low susceptibility to the type of change proposed as a consequence of the grid connection and a Medium overall sensitivity.
- 6.9.14 The majority of the underground route also passes through CYNONHL649: Nant Castellau and Nant Machudd. Once the route enters Upper Church Village, it passes into CYNONHL284 Llanilltud Faerdref and Beddau. This is cited as being of Low value on account of it being "*An area dominated by mid to late 20th century housing development, which has largely obliterated the pre-1950s irregular fieldscape and pattern of isolated, dispersed settlement.*"
- 6.9.15 With respect to the overhead grid connection, the assessment in **Chapter 7: Historic Environment** concludes that very limited intrusive groundworks would take place in specific localised areas of wooden pole construction and therefore significant effects on the non-designated historic assets are considered unlikely. The irregular fieldscape would not be modified along the route of the overhead grid connection nor would it be overwhelmed by the scale of the wooden poles. The overall magnitude of change would not exceed Low and effects would be Moderate/Minor, adverse, and Not Significant.
- 6.9.16 The routing of much of the underground route along existing highway corridors would minimise any potential disturbance to heritage assets and would not erode any historic field or settlement patterns. The exception relates to the section of route that crosses through CYNONHL649: Nant Castellau and Nant Machudd between Pen-y-Coedcae and Black Road. The construction of this section may lead to some temporary disruption to the existing field patterns as the working corridor passes through the landscape, with some potential minor loss of short sections of existing hedgerow and field boundaries. This loss would be short term with boundaries reinstated post construction to ensure that the long-term operational effects of the underground section of grid connection upon the HLAA would be Not Significant.

Cultural Landscape Services Aspect Areas

- 6.9.17 In terms of CLSAAs, the host area for the overhead and much of the underground grid connection is CYNONCLS014: Mynydd y Glyn. This is assessed in **Table 6C.8 of Appendix 6C** as being of Medium landscape value and Medium susceptibility giving rise to a Medium overall landscape sensitivity. At Upper Church Village the route enters CYNONCLS134: Llantrisant.
- 6.9.18 The presence of an overhead line on wooden poles and underground cable would not undermine the integrity of the CLSAAs and the magnitude of change would not exceed Very Low. Landscape effects as a consequence of the operational grid connection would therefore be Minor, neutral and Not Significant.

6.10 Assessment of effects: Brecon Beacons National Park

Wind Farm development

Special Qualities of the National Park

Overview

- 6.10.1 The Proposed Development is not located within a nationally designated landscape and there can be no direct impact on the areas of the Brecon Beacons National Park (BBNP) within the Study Area.
- 6.10.2 Nonetheless, the Proposed Development may indirectly affect the Special Qualities (SQs), including views and perceptual qualities, for which the BBNP is valued and designated. This assessment considers the effects of the Proposed Development on the SQs and the integrity of the designation.
- 6.10.3 It is important to note that wind farm development is not necessarily incompatible with the valued qualities of a landscape, this will depend on the nature and / or effects of the development and the nature of the SQs. A visual effect on a view from within the BBNP for example, may or may not affect the SQ and the integrity of the designation. In particular paragraph 5.46 of GLVIA3¹⁷ further advises:
- *"An internationally, nationally or locally valued landscape does not automatically or by definition have high susceptibility to all types of change;"*
 - *"It is possible for an internationally, nationally or locally important landscape to have relatively low susceptibility to change resulting from the particular type of development in question, by virtue of both the characteristics of the landscape and the nature of the proposal"; and*
 - *"The particular type of change or development proposed may not compromise the specific basis for the value attached to the landscape." 17*
- 6.10.4 The effects of the Proposed Development on the SQs have been assessed in accordance with the methodology set out in **Appendix 6A**. In summary, the sensitivity of each relevant SQ is determined through a combination of value and the susceptibility of the SQ to change posed by the Proposed Development; this in turn is considered against the nature or magnitude of change in order to determine the level of effect on each receptor (SQ). Each effect is described in terms of its geographical extent (through reference to the viewpoints and ZTV) and whether it is temporary / long term, beneficial / neutral / adverse.

- 6.10.5 The focus of this assessment is the proposed wind turbines, including their composition, height and rotation relative to the BBNP. No ground-based or other associated infrastructure forming part of the Proposed Development would be visible due to the separation distance and intervening topography. The upper part of a crane may be visible during construction and aviation warning lights would also be visible from a limited part of the BBNP, where it coincides with the hub height ZTV.

Baseline

- 6.10.6 The BBNP boundary is illustrated in **Figure 6.12** which is overlapped by the hub height and blade tip ZTV, indicating the maximum extent of theoretical visibility across the National Park. Areas within the BBNP, from where the Proposed Development may be theoretically visible, range in distance from the Proposed Development of 18.5km across Onllwyn and Penmoelallt north of the A465 and west of the A70 to 24km across Waun Rydd to the east of Pontsticill Reservoir.
- 6.10.7 The SQs of the Brecon Beacons National Park, as set out in *A Management Plan for the Brecon Beacons National Park 2015-2020*²⁷ and the *Future Beacons, The Management Plan for the Brecon Beacons National Park 2022-2027, Consultation Draft*²⁸, are described in the baseline presented in **Section 6.5**. A review of these SQs concluded that the following should be included in the assessment as they relate to visual and perceptual aspects of the BBNP:
- *"Sweeping grandeur and outstanding natural beauty: The Park's sweeping grandeur and outstanding natural beauty observed across a variety of harmoniously connected landscapes, including marvellous gorges and waterfalls, classic karst geology with caves and sink holes, contrasting glacial landforms such as cliffs and broad valleys carved from old red sandstone and prominent hilltops with extensive views in all directions. A landscape that provides a sense of time depth and timelessness;*
 - *Contrasting patterns, colours, and textures: A working, living "patchwork" of contrasting patterns, colours, and textures comprising well-maintained farmed landscapes, open uplands, lakes and meandering rivers punctuated by small-scale woodlands, country lanes, hedgerows and stone walls and scattered settlements;*
 - *Rugged, remote and challenging: In the context of the UK, geographically rugged, remote and challenging landscapes;*
 - *Sounds, sights, smells and tastes: A feeling of vitality and wellbeing that comes from enjoying the Park's fresh air, clean water, rural setting, open land and locally produced foods; and*
 - *Peace, tranquillity and dark skies: A National Park offering dark night time skies, peace and tranquillity with opportunities for quiet enjoyment, inspiration, relaxation and spiritual renewal."*²⁸
- 6.10.8 There would be no effect on the SQs related to physical characteristics or on those relating to culture and the community. For these reasons, the following SQs have been excluded from the assessment:
- *Sense of place and cultural identity: A sense of place and cultural identity - "Welshness" - characterised by the indigenous Welsh language, religious and spiritual connections, unique customs and events, traditional foods and crafts, relatively unspoilt historic towns and villages, family farms and continued practices of traditional skills developed by local inhabitants to live and earn a living here, such as common land practices and grazing;*

- *Sense of discovery: A sense of discovery where people explore the Park's hidden secrets and stories such as genealogical histories, prehistoric ritual sites, relic medieval rural settlements, early industrial sites, local myths and legends and geological treasures from time immemorial;*
- *Diversity of wildlife and richness of seminatural habitats: Extensive and widespread access to the Park's diversity of wildlife and richness of semi-natural habitats, such as native woodlands, heathland and grassland, natural lakes and riparian habitats, ancient hedgerows, limestone pavement and blanket bogs including those of international and national importance;*
- *Enjoyable and accessible: Enjoyable and accessible countryside with extensive, widespread and varied opportunities to pursue walking, cycling, fishing, water-based activities and other forms of sustainable recreation or relaxation; and*
- *Intimate sense of community: An intimate sense of community where small, pastoral towns and villages are comparatively safe, friendly, welcoming and retain a spirit of cooperation."*²⁸

Assessment of effects on Special Qualities

- 6.10.9 A total of five SQs (numbered 1-5) are considered relevant to this assessment and have been assessed here with a summary of the assessment provided in **Table 6.14**.

SQ1: Sweeping grandeur and outstanding natural beauty

- 6.10.10 The relevant components of this SQ which may potentially be affected by the Proposed Development relate to the BBNPs "*Sweeping grandeur and outstanding natural beauty observed across a variety of harmoniously connected landscapes*"²⁸ and the "*extensive views in all directions*"²⁸. Its "*sense of time depth and timelessness*"²⁸ is also a quality which may be altered as a consequence of the proposed seven turbines at Mynydd y Glyn.
- 6.10.11 The sensitivity of this SQ is assessed as High. This has been derived from the High value of the National Park designation and the High to Medium susceptibility of this SQ to the type of change proposed. The high levels of intervisibility and corresponding strong visual relationships with surrounding landscapes from the slopes and summits of the uplands together with the strong sense of time depth are visual and perceptual characteristics which indicate a higher susceptibility to change, tempered slightly by the visual presence of existing vertical infrastructure (pylons and wind turbines) beyond the BBNP's boundary from within a proportion of the National Park.
- 6.10.12 Where visible, the Proposed Development would appear as up to seven turbines or turbine blades from within the fragmented areas of intervisibility indicated in the ZTV in **Figure 6.12**. There would be no intervisibility from within the majority of the area of the BBNP which coincides with the Study Area. As recorded in the Viewpoint Assessment in **Appendix 6I**, some Moderate/Minor levels of visual effect are likely to be experienced by recreational receptors crossing the open access land at Cefn Sychbant. The magnitude of visual change would not increase beyond Very Low from within the BBNP, as a consequence of the separation distance and therefore the small visible scale and extent of the wind farm which would occupy a very narrow proportion of the wide panoramic views which are available from the upland landscapes of the BBNP.
- 6.10.13 As shown in **Figure 6.4** and evidenced in the baseline photography from Viewpoint 17 (**Figure 6.39**), there are a number of existing turbines located in closer proximity to the southern boundary of the BBNP. The Proposed Development would therefore become an incremental or sometimes new, distant man-made vertical element within the "*extensive*

views in all directions” in which the “*variety of harmoniously connected landscapes*” would continue to be observed and would not significantly detract from the BBNP’s “*sweeping grandeur*”. The magnitude of change upon this SQ is assessed as Very Low from areas of the BBNP which coincide with the ZTV giving rise to a level of landscape effect which would be no greater than Moderate/Minor and Not Significant. The nature of this effect would be long term (reversible), indirect, and adverse. From the majority of the BBNP, there would be no change to this SQ.

SQ2: *Contrasting patterns, colours, and textures*

- 6.10.14 The pertinent component of this SQ is the variety of contrasting land use and land cover, “*punctuated*” by both natural and man-made landscape elements such as hedgerows, trees, stone walls and buildings.
- 6.10.15 The sensitivity of this SQ is assessed as High. This has been derived from the High value of the National Park designation and the Medium susceptibility of this SQ to the type of change proposed. The susceptibility of the SQ has been assessed as Medium given that it relates to a variety of different land use, which includes existing wind farm development visible from within the BBNP. However, it is also noted that wind farm development beyond the National Park boundary could be of sufficient scale and size to disrupt or dominate the existing patterns of land cover and landscape elements visible in the general views that are available from within the BBNP.
- 6.10.16 There would be no direct changes to the “*patchwork*” of *contrasting patterns, colours, and textures* within the National Park boundary as a consequence of the Proposed Development. Whilst the Proposed Development would appear as a new distant feature in outward views towards the Site, it would affect a very small part of the overall visual experience gained from these upland landscapes. Furthermore, some of the much wider landscape panoramas include existing wind turbines present beyond the National Park boundary, as recorded during the field survey and evidenced in the baseline photography from Viewpoint 17 (**Figure 6.39**). The Proposed Development would therefore become a very small-scale incremental man-made vertical element beyond the existing land cover within the National Park boundary.
- 6.10.17 The Proposed Development would lead to a Very Low magnitude of change on this SQ within areas of the BBNP which coincide with the ZTV and would, if anything, add to the variety of landscapes and their complexity, whilst also maintaining visual permeability. The level of landscape effect on this SQ would be Moderate/Minor to None and Not Significant. The nature of this effect would be long term (reversible), indirect, and adverse to neutral.

SQ3: *Rugged, remote and challenging*

- 6.10.18 The relevant component of this SQ relates to the perceptual quality of remoteness.
- 6.10.19 The sensitivity of this SQ is assessed as High. This has been derived from the High value of the National Park designation and the High to Medium susceptibility of this SQ to the type of change proposed. The susceptibility of the SQ has been assessed as High to Medium given that the sense of remoteness varies across the BBNP, as reflected in the published descriptions for the relevant LCAs in the *Brecon Beacons National Park Landscape Character Assessment*²⁴.
- 6.10.20 The closest areas of potential intervisibility with the proposed turbines coincide with those areas of landscape along the southern edge of the BBNP, which although noted in the *Brecon Beacons National Park Landscape Character Assessment*²⁴ as evoking a sense of remoteness, are not recognised as possessing the strong or high levels of remoteness found elsewhere within the National Park. Their proximity to the major conurbations

immediately to the south of the Park's boundary is noted in the published descriptions for the relevant LCAs within the *Brecon Beacons National Park Landscape Character Assessment*. As a consequence, the visual presence of the Proposed Development within a small proportion of the wide panoramas available would be incremental and would not significantly erode or dilute the baseline levels of remoteness within the fragmentary areas of landscape from which the Proposed Development would be visible. From the more distant areas of the BBNP where higher levels of remoteness are present, the Proposed Development would represent a very small scale and distant, man-made visual component, visible in optimum viewing conditions only. The BBNP would continue to be perceived as a rugged, remote and challenging landscape.

- 6.10.21 The Proposed Development would lead to a Very Low magnitude of change on this SQ from within areas of the BBNP which coincide with the ZTV. The level of landscape effect would be Moderate/Minor to None and Not Significant. The nature of this effect would be long term (reversible), indirect, and adverse.

SQ4: Sounds, sights, smells and tastes

- 6.10.22 The relevant component of this SQ relates to the visual qualities relating to “sights” and a “rural setting”. The Park's fresh air, clean water, open land and locally produced foods would not be affected by the Proposed Development.
- 6.10.23 As previously documented and as reported in **Appendix 6I**, the magnitude of visual change for Viewpoint 17 located within the BBNP would be Very Low, with the visible extent of the wind farm affecting 3° of the wide panoramas available. The seven turbines of the Proposed Development at Mynydd y Glyn would become a new visual component in outward views from a small proportion of the National Park, some of which feature existing wind turbines and vertical infrastructure but are unlikely to detract from the enjoyment of the National Park and the ensuing “feeling of vitality and wellbeing”. In terms of rural setting, this is already partially diluted in some southern or south-eastern views from along the closest southern edge of the BBNP to the Site, as a consequence of its proximity to Hirwaun and the almost continuous conurbations of Merthyr Tydfil, Tredegar and Ebbw Vale which extend along the A465 corridor. The magnitude of change upon this SQ is assessed as Very Low from areas of the BBNP which coincide with the ZTV giving rise to a level of landscape effect which would be Moderate/Minor and Not Significant to None within areas outwith the ZTV. The nature of this effect would be long term (reversible), indirect, and adverse.

SQ5: Peace, tranquillity and dark skies

- 6.10.24 The relevant component of this SQ relates to the visual and perceptual qualities relating to “dark night time skies” and “tranquillity”. In terms of dark night time skies, reference to the Brecon Beacons National Park Authority's *Light Pollution & Obtrusive Lighting Supplementary Planning Guidance*¹⁶ indicates that the core dark skies area (or Core Zone) within the BBNP, which features the strictest lighting controls, covers Cefn yr Ystrad and areas of potential hub height intervisibility to the west of this upland including Cefn Cilsanws, the upper slopes to the north-east of Garn ddu, Cadair Fawr and Cefn Sychbant. The remainder of the BBNP forms a Buffer Zone. The areas of potential hub height and therefore aviation warning light visibility are shown in **Figure 6.12** and represent a small proportion of the BBNP within the Core Zone. From these areas, the aviation warning lights may be visible as very small point features across a narrow proportion of the wider views which are available, and a separation distance in excess of 18.5km means that this distant visual presence would not alter the night-time

Environmental Zones within the BBNP as recommended by the Institution of Lighting Professionals⁴⁷.

- 6.10.25 With regard to tranquillity, the Proposed Development would appear as a simple wind farm of seven turbines, rotating at a slow and regular speed, visually affecting a very narrow part of the overall panoramas that are available from within the small proportion of the BBNP that coincides with the ZTV presented in **Figure 6.12**. It would not represent a visually disorganised development, or introduce noise, distracting and irregular movement or large numbers of people, all of which can detract from perceived levels of tranquillity. Recognised contributors to tranquillity⁴⁸ including the presence and/or perceptions of natural landscape, birdsong, peace and quiet and seeing the stars at night, all of which would continue to be present within the landscape.
- 6.10.26 The magnitude of change upon this SQ is assessed as Very Low from areas of the BBNP which coincide with the ZTV giving rise to a level of landscape effect which would be Moderate/Minor and Not Significant. The nature of this effect would be long term (reversible), indirect, and adverse. From the majority of the BBNP, there would be no change to this SQ.

Summary

- 6.10.27 A summary of the SQ assessment for the BBNP is set out in **Table 6.18**.

Table 6.18 Special Qualities Assessment for the Brecon Beacons National Park

Special Quality	Sensitivity	Magnitude of change	Level of effect change
Special Landscapes			
Sweeping grandeur and outstanding natural beauty	High	Very Low to Zero	Moderate/Minor to None Not Significant
Contrasting patterns, colours, and textures	High	Very Low to Zero	Moderate/Minor to None Not Significant
Rugged, remote and challenging	High	Very Low to Zero	Moderate/Minor to None Not Significant
Special People			
Intimate sense of community	Not assessed – cultural quality that could not be affected by the Proposed Development which is well beyond the BBNP boundary.		
Sense of place and cultural identity	Not assessed – cultural quality that could not be affected by the Proposed Development which is well beyond the BBNP boundary.		
Special Experiences			

⁴⁷Institution of Lighting Professionals (2021). Guidance Note 01/21 The Reduction of Obtrusive Light. (Online). Available at: <https://theilp.org.uk/publication/guidance-note-1-for-the-reduction-of-obtrusive-light-2021/> (Accessed April 2022).

⁴⁸Landscape Institute (2017). Technical Information Note 01/2017 (Revised). Tranquillity – An overview. (Online). Available at: <https://www.landscapeinstitute.org/technical-resource/tranquillity/> (Accessed April 2022).

Special Quality	Sensitivity	Magnitude of change	Level of effect
Enjoyable and accessible:	Not assessed – physical (recreational) quality that could not be affected by the Proposed Development which is well beyond the BBNP boundary.		
Sounds, sights, smells and tastes	High	Very Low to Zero	Moderate/Minor to None Not Significant
Sense of discovery	Not assessed – cultural quality that could not be affected by the Proposed Development which is well beyond the BBNP boundary.		
Peace, tranquillity and dark skies	High	Very Low to Zero	Moderate/Minor to None Not Significant
Special Nature			
Diversity of wildlife and richness of seminatural habitats	Not assessed – physical characteristic that could not be affected by the Proposed Development which is well beyond the BBNP boundary.		

Landscape character within the National Park

6.10.28 The assessment of the effects on the four LCAs within the BBNP which coincide with the hub and blade tip ZTVs as shown in **Figure 6.13** is presented in **Appendix 6H**. The conclusions of the assessment are set out in **Table 6.19** which indicates that there would be no significant landscape effects upon the distinctive characteristics and character of the LCAs within the BBNP.

Table 6.19 Summary of effects: BBNP LCAs (operation)

LCA	Summary of effects
LCA 3: Fforest Fawr	<p><u>Rationale:</u> ZTV coverage is fragmentary across this LCA, as illustrated in Figure 6.13 and is concentrated across three main areas at distances in excess of 18km (blade tip only) and over 20.5km for potential hub height visibility. The majority of the LCA lies outside of the ZTV.</p> <p>It is not considered that the Proposed Development would significantly alter the key perceptual and visual characteristics of this landscape, due to the fragmented visibility, separation distance and the existing and closer influence of wind energy development to the south, which means the Proposed Development would not appear incongruous. The distant and consequently small-scale presence of the Proposed Development in the wide panoramic views available from the elevated summits within the LCA, as shown in the photomontage in Figure 6.39, would give rise to an incremental influence on perceptual qualities relating to tranquillity, remoteness and relative wildness within these localised areas of landscape.</p> <p><u>Landscape sensitivity:</u> High (High value and High-Medium susceptibility) <u>Magnitude of change:</u> Very Low <u>Level of effect:</u> Moderate/Minor and Not Significant</p>

LCA	Summary of effects
LCA 4: Waterfall Country and Southern	<p><u>Rationale:</u> Figure 6.13 indicates a localised area of blade tip only visibility from within the LCA. This fragmented blade tip visibility and separation distance in excess of 23km, means that the distant presence of the blade tips would be barely perceptible and the Proposed Development would not significantly alter the key perceptual and visual characteristics of LCA 4, which would continue to be valued for its dramatic landform of steep, enclosed valleys, separated by ridges of flatter, higher land and for the numerous and often accessible waterfalls which contribute to the area's high scenic quality and strong sense of place.</p> <p><u>Landscape sensitivity:</u> High (High value and Medium susceptibility) <u>Magnitude of change:</u> Very Low <u>Level of effect:</u> Moderate/Minor and Not Significant</p>
LCA 8: Talybont and Taff Reservoir Valleys	<p><u>Rationale:</u> Areas of intervisibility with the Proposed Development are concentrated across three small areas as indicated in Figure 6.13. It is not considered that the Proposed Development would significantly alter the key perceptual and visual characteristics of LCA 8, which would continue to be characterised by its reservoirs and steep sided, forested valleys. This is due to the fragmented areas of intervisibility, within which the distant and consequently small-scale presence of the Proposed Development in the wide panoramic views available from the elevated summits, (at minimum distance of 19.5km and 21.5km), would have limited influence on perceptual qualities relating to tranquillity.</p> <p><u>Landscape sensitivity:</u> High (High value and Medium susceptibility) <u>Magnitude of change:</u> Very Low <u>Level of effect:</u> Moderate/Minor and Not Significant</p>
LCA 9: Mynyddoedd Llangatwg and Llangynidr	<p><u>Rationale:</u> Figure 6.13 indicates that the Proposed Development would be visible from within a small proportion of this LCA, at a minimum distance of 21.5km. The Proposed Development would affect a very small part of the overall visual experience gained from within this landscape, experienced as part of much wider panoramas in which existing vertical structures beyond the National Park boundary are present and hence would not be incongruous. It would not alter the key views north across the Usk Valley and across to the Central Beacons, as cited in the extant Profile, which are in the opposite direction to the turbines located to the south. It is not considered that the Proposed Development would significantly alter the distinctive characteristics or the key perceptual and visual characteristics of LCA 9, which would continue as an elevated plateau of moorland, characterised by its openness, smooth profile, lack of settlement, prehistoric archaeology and quarrying legacy.</p> <p><u>Landscape sensitivity:</u> High (High value and Medium susceptibility) <u>Magnitude of change:</u> Very Low <u>Level of effect:</u> Moderate/Minor and Not Significant</p>

Grid Connection

- 6.10.29 The overhead section of the grid connection using a 33kV overhead line on wooden poles, which passes between T6 and T7 before descending the south facing slopes of Mynydd y Glyn; would be too small in scale to give rise to any indirect effects on the Special Qualities or landscape character within the Brecon Beacons National Park at a separation distance in excess of 16.5km. The undergrounding of a section of grid connection from the Site to Upper Boat Substation would also be too small in scale and screened by the intervening landform to have any indirect effect on the Special Qualities or landscape character of the National Park.

6.11 Assessment of effects: locally designated landscapes

Wind Farm development

Direct landscape effects on SLAs

Mynydd y Glyn and Nant Muchudd Basin SLA

- 6.11.1 The location of the Mynydd y Glyn and Nant Muchudd Basin SLA is shown on **Figure 6.14**. As a local landscape designation (not of the highest or national level), the value of the Mynydd y Glyn and Nant Muchudd Basin SLA is assessed as High to Medium.
- 6.11.2 In terms of physical characteristics, whilst the open summit with homogenous land cover is of lower susceptibility to a wind energy development, this is countered by the smaller scale of the Nant Muchudd Basin which features *“narrow winding lanes, small irregular fields bounded by large mixed hedges and many trees, scattered farms”*³² which are characteristics of higher susceptibility. Visually, the landform forms a *“prominent backdrop to Lower Rhondda valley”*³² where the *“steep, wild rocky areas”*³² of the northern slopes provide *“sharp contrasts to the settlements”*³² of Porth, Trehafod and Pontypridd as well as forming *“a major part of the wide views north from Llantrisant”*³². These visual characteristics also indicate higher susceptibility. The primary qualities also include the *“un-industrialised”*³² nature of the landscape with a management guideline to *“ensure no large-scale developments to spoil integrity and seclusion of basin and surrounding slopes”*³². As a consequence, the overall sensitivity of this landscape to a wind farm development is assessed as High (High to Medium value and Medium to High susceptibility).
- 6.11.3 As this SLA would host all seven proposed turbines plus the access tracks and the ancillary elements it would experience some direct effects and the operational turbines would be dominant landscape elements across the SLA, with the exception of a small area to the south-east of Coedely and an area to the south-west of Maesycoed, which lie outside of the ZTV. The small irregular field pattern within the Nant Muchudd Basin would be maintained although may become dominated by the turbines due to their scale and proximity. The scale of the turbines from within the Nant Muchudd Basin is indicated by the photomontage from Viewpoint 2 in **Figure 6.24**. The un-industrialised nature of the landscape is also a characteristic which would be altered by the Proposed Development whilst the proposed turbines would also be clearly visible in the views from the settlements referenced in the primary landscape qualities as featuring Mynydd y Glyn as a backdrop in outwards views (i.e Porth (Viewpoint 5, **Figure 6.27**), Trehafod, Pontypridd (Viewpoint 8, **Figure 6.30**) and Llantrisant (Viewpoint 9, **Figure 6.31**). The alteration to a proportion of some of the primary landscape qualities and features as a consequence of the introduction of uncharacteristic large-scale elements would give rise to a Medium to High magnitude of change across a large proportion of the SLA which would change to a Low to Zero magnitude across areas of blade tip or no invisibility. The level of effect would therefore range from **Major** and **Significant** to None and Not Significant. The nature of these effects would be long-term (reversible), direct, and adverse.

Indirect landscape effects on SLAs and VILLs

- 6.11.4 For the remaining local landscape designations entirely or partly located within 10km of the proposed turbines and which have been scoped into the assessment (as set out in **Section 6.7**), landscape effects would be indirect, and the assessment of effects is presented in **Table 6.20**.

6.11.5 Significant landscape effects are predicted for the following SLAs:

- Llwynceilyn Slopes SLA (to the east of Cwm Hafod); and
- Cwm Clydach SLA (southern part to the north of Penygraigwen/Pantygraig Wen).

Table 6.20 Indirect effects on local landscape designations

Local Landscape Designation (see Figure 6.14)	Assessment
Rhondda Cynon Taff SLAs	
Mynydd y Glyn and Nant Muchudd Basin	As set out above, this SLA is predicted to sustain Significant effects as a result of the Proposed Scheme.
Mynydd y Cymmer	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Mynydd y Cymmer SLA is assessed as High to Medium. The susceptibility of the primary landscape qualities and features of the SLA to the type of development proposed are considered to be Low to Medium. The large-scale and generally simple, unenclosed land cover of grassland which dominates the open upland of the SLA, are indicators of a lower susceptibility. Whilst being “<i>bounded all round by the settlements of Porth, Dinas, Williamstown and Trebanog</i>”³² means that the SLA is not particularly remote, it does feature a “<i>wild, craggy character</i>”³² and the open views from the upland provide connections to the adjacent / surrounding landscape, which are indicators of a higher susceptibility to the type of change proposed. Overall, the SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a large proportion of this SLA coincides with the ZTV at distances of between ~1.2km and 3km. At these distances, the scale of the proposed turbines could give rise to a high or high/medium magnitude of visual change. Taken in isolation, this could lead to significant visual effects but the assessment here is focused on the primary landscape qualities and features and integrity of the SLA. As demonstrated in the viewpoint assessment and photomontage for Viewpoint 4 (Figure 6.26), which lies within the SLA, the visible scale and extent of the wind farm would affect approximately 31° of the wide panoramas which are available from this landscape. Consequently, the Proposed Development would appear as a new feature affecting a part of the overall visual experience gained from this upland landscape and would be viewed as part of much wider landscape panoramas, which include existing wind turbines at Llwynceilyn Farm, Mynydd Portref Extension, Graig Fatha Farm, Bryntail Farm and Castell Llwyd Farm which are present within the same field of view and other close and distant turbines including Pant-y-Wal, Pant-y-Wal Extension, Fforch Nest and Ferndale, within 360° views (as indicated in Figure 6.22). Consequently, the proposed turbines would not appear incongruous, and their presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated, which focus on physical attributes of the SLA and views towards Mynydd y Cymmer but do not include the outward views which are available.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed</p>

Local Landscape Designation (see Figure 6.14)	Assessment
Mynydd Troed y Rhiw Slopes	<p>Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Mynydd Troed y Rhiw Slopes SLA is assessed as High to Medium. The susceptibility of the primary landscape qualities and features of the SLA to the type of development proposed are considered to be Medium to Low. The SLA displays a number of qualities which are indicative of a moderate susceptibility including the slopes of the valley landform, although the largely homogenous landcover, unenclosed land and proximity to development and human activities indicates lower susceptibility. Overall, the SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderate proportion of this SLA coincides with the ZTV, concentrated across the closer, eastern half of the SLA at distances of between ~2.3km and 4.3km. At such distances the scale of the proposed turbines could give rise to a high/medium or medium magnitude of visual change, particularly from the upper slopes given their elevation and which, taken in isolation, could lead to significant visual effects. However, the assessment here is focused on the primary landscape qualities and features and integrity of the SLA. The Proposed Development would appear as a new feature affecting a part of the overall visual experience gained from the valley slopes which include existing wind turbines at Llwynceilyn Farm (which would be of a similar scale to those at Mynydd y Glyn in eastern views), as well as more distant Mynydd Portref, Mynydd Portref Extension, Graig Fatha Farm and Bryntail Farm in southern and eastern views. The existing turbines at Pant-y-Wal, Pant-y-Wal Extension and Fforch Nest would also be visible from some sections of the southern slopes as shown in Figure 6.23. Consequently, the proposed turbines would not appear incongruous, and their presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated, which focus on physical attributes of the SLA and the “<i>important pilgrim site of St Mary’s Well on upper slopes to north</i>”³² which lies outside of the ZTV.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Llwynceilyn Slopes	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Llwynceilyn Slopes SLA is assessed as High to Medium. The susceptibility of the primary landscape qualities and features of the SLA to the type of development proposed are considered to be Medium to Low with some of the qualities (those relating to “<i>areas of broadleaf woodland on steep side valley</i>”³² which limits opportunities for long range views) being indicators of lower susceptibility whilst the “<i>pattern of small fields with stone walls and hedges, accessed by a winding lane</i>”³² indicate a Medium susceptibility. The SLA is also host to “<i>prominent masts and tanks on mid slopes</i>”³² towards the</p>

Local Landscape Designation (see Figure 6.14)	Assessment
	<p>western end. Overall, the Llwynceilyn Slopes SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that nearly all of the SLA coincides with the ZTV at minimum distances of between ~1.3km and 3.7km. At this distance, the scale of the proposed turbines could give rise to a high or high/medium or medium magnitude of visual change as demonstrated in the photomontage from Viewpoint 3 (Figure 6.25), which is located within this SLA. Whilst the majority of the primary landscape qualities and features for which this area has been designated would not be altered by the Proposed Development, the scale of the turbines may dominate the smaller-scale field pattern which is prevalent across this SLA to the east of Cwn Hafod and consequently may indirectly influence the management guideline relating to the conservation of the “<i>pattern of farmland, unspoilt by industrialisation</i>”³².</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Medium to Zero. The effect of the Proposed Development would consequently range from Moderate to None and may locally be Significant within the eastern parts of the SLA. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Cwm Clydach	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Cwm Clydach SLA is assessed as High to Medium. The susceptibility of the primary landscape qualities and features of the SLA to the type of development proposed are considered to be Medium to Low with some of the qualities, those relating to the “<i>valley sides around Ynysybwl, secluded and hidden from the surrounding main valleys</i>”³², the “<i>pattern of quiet farmland with irregular fields, small woods, and streams, linked by winding lanes</i>”³² and the “<i>cairns overlooking Cynon valley are part of series of intervisible monuments along the valley tops</i>”³², being indicators of higher susceptibility. Characteristics of lower susceptibility include the “<i>mainly wooded western sides of Taff Vale</i>”³² which limits opportunities for long range views. Overall, the Cwm Clydach SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development located beyond the SLA’s boundary.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderate proportion of the SLA coincides with the SLA, although this is more limited within 5km of the proposed turbines and restricted to localised areas across Pen y Lan and Twyn y glog to the west of Ynysybwl at a minimum distance of ~3.6km and across the elevated ridge of land that runs north from Penygraigwen/ Pantygraig Wen at a minimum distance of ~2.9km. Close to and beyond 5km, the ZTV is concentrated across the upper landform which features St Gwynno Forest (not accounted for in the ZTV) and the ridge to the east of Ynysybwl and extends to a distance of ~8.6km from the proposed turbines.</p> <p>At distances of between ~2.9km and 8.6km the scale of the proposed turbines could give rise to a high to medium/low magnitude of visual change which, taken in isolation, could lead to significant visual effects. However, the assessment here is focused on the primary landscape qualities and features and integrity of the SLA. From the closest area of SLA to the north of</p>

Local Landscape Designation (see Figure 6.14)	Assessment
	<p>Penygraigwen/ Pantygraig Wen, the small scale “<i>pattern of quiet farmland with irregular fields</i>”³² could become dominated by the scale of the turbines to the south. Whilst this landscape is already crossed by high voltage overhead lines and consequently large-scale vertical infrastructure already plays a landscape role, there remains a small discrete area where this dominance could occur and which may indirectly influence the management guideline relating to “<i>secluded farmed character within the valley</i>”³².</p> <p>From larger areas of intervisibility, such as to the north-east of Buarth Capel, the increasing separation distance means that the proposed turbines would not be of a scale that would dominate the smaller scale field pattern or interrupt the series of cairns. The Proposed Development would appear as a new feature affecting a part of the overall visual experience gained from the upper valley slopes which include existing wind turbines at Llwynceilyn Farm (which would be of a larger scale to those at Mynydd y Glyn in southern views), as well as at Bwlfa Farm and Mynachdy Farm (of comparable scale in western views) and more distant turbines to the east and west. Consequently, the proposed turbines would not appear incongruous, and their presence would not significantly affect the stated primary landscape qualities and features for which this part of the landscape has been designated.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Medium to Zero. The effect of the Proposed Development would consequently range from Moderate to None and may locally be Significant within the southern parts of the SLA to the north of Penygraigwen/ Pantygraig Wen. Across the majority of the SLA, effects would be Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Coed-yr-Hendy and Mwyndy	<p><u>Sensitivity</u></p> <p>As a local landscape designation (not of the highest or national level), the value of the Coed-yr-Hendy and Mwyndy SLA is assessed as High to Medium. The susceptibility of the primary landscape qualities and features of the SLA to the type of development proposed are considered to be Medium to Low with characteristics such as being “<i>immediately adjacent to areas of housing and busy roads, retail developments and industry</i>” being indicators of lower susceptibility whilst those relating to the “<i>small-scale flat valley bottom, and north-facing slopes of River Clun</i>”³² with Coed-yr-Hendy being an “<i>important part of views south from Llantrisant</i>”³² being of higher susceptibility. Overall, the Coed-yr-Hendy and Mwyndy SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development located beyond the SLA’s northern boundary.</p> <p><u>Assessment of effects: Proposed Development</u></p> <p>There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderate proportion of this SLA coincides with the ZTV at distances of between ~6.6km and 7.3km. At these distances, the scale of the proposed turbines could give rise to a medium/low to low magnitude of visual change. Taken in isolation, this could lead to significant visual effects but the assessment here is focused on the primary landscape qualities and features and integrity of the SLA. The Proposed Development would appear as a new feature affecting a part of the overall visual experience gained from the upper, north-facing slopes and would be viewed as part of much wider landscape panoramas, which include existing wind turbines at Graig Fatha Farm as well as turbines within the Mynydd</p>

Local Landscape Designation (see Figure 6.14)	Assessment
	<p>Portref Extension, which are present within the same field of view. The presence of the proposed turbines would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated nor would it undermine any of the key policy and management objectives outlined for this SLA.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Llantrisant Surrounds	<p><u>Sensitivity</u></p> <p>As a local landscape designation (not of the highest or national level), the value of the Llantrisant Surrounds SLA is assessed as High to Medium. The susceptibility of the primary landscape qualities and features of the SLA to the type of development proposed are considered to be Medium to Low with characteristics such as the “east/west ridge that forms the border between Vale and Valleys”³² and an “important skyline”³² being of higher susceptibility together with the presence of the Ridgway Walk which crosses from west to east. Other physical qualities are of lower susceptibility to a development outwith the boundary of the SLA. Overall, the Llantrisant Surrounds SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development located beyond the SLA’s northern boundary.</p> <p><u>Assessment of effects: Proposed Development</u></p> <p>There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a large proportion of this SLA coincides with the ZTV at distances of between ~4km and 7km. At these distances, the scale of the proposed turbines could give rise to a medium to medium/low magnitude of visual change as demonstrated in the photomontage from Viewpoint 9 in Figure 6.31, which is located on the southern edge of Llantrisant Common. Whilst this could lead to significant visual effects, the focus of this assessment is on the primary landscape qualities and features and integrity of the SLA. Whilst the Proposed development would be clearly visible from locations within the SLA such as Llantrisant Common, areas around and to the south of the A473 are more wooded, which is not taken into account in the ZTV, and would partially restrict outward views. As shown in the photomontage from Viewpoint 16 (Figure 6.38), Mynydd y Glyn forms a backdrop to the east-west ridgeline on either side of Llantrisant in views from the south, cited as a primary landscape feature of this SLA, hence the proposed turbines would be visible above the ridgeline although rarely from the M4 given the prevalence of roadside trees. Other operational wind turbines in views include West of Rhiwfein Farm, Graig Fatha Farm and Mynydd Portref Extension as well as numerous more distant wind energy schemes which means that the Proposed Development would not be incongruous. The presence of the proposed turbines would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>

Local Landscape Designation (see Figure 6.14)	Assessment
Mynydd Hugh and Llantrisant Forest	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Mynydd Hugh and Llantrisant Forest SLA is assessed as High to Medium. Whilst a number of the stated primary landscape qualities and features would be of moderate susceptibility (the “<i>Series of small more enclosed valleys to north and south</i>”³², the ridge forming an “<i>important skyline feature from M4, and Vale of Glamorgan</i>”³², presence of the Ridgeway walk and the “<i>extensive and varied views from the ridge</i>”³²), this SLA is host to the wind energy schemes at Taff Ely, Mynydd Portref, Mynydd Portref Extension and Graig Fatha Farm hence the susceptibility of this landscape to a wind energy development beyond its boundaries is considered to be low. Overall, the Mynydd Hugh and Llantrisant Forest SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development located beyond the SLA’s northern boundary.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderate proportion of this SLA coincides with the ZTV at distances of between ~3.2km and 6.3km. This area of potential intervisibility would be reduced further within the eastern part of the SLA by the presence of Llantrisant Forest which would limit the availability of views. The existing turbines at Taff Ely were cited as a primary landscape quality at the time of publication of the <i>Proposals for Designation of Special Landscape Areas in Rhondda Cynon Taff</i>³² in 2008, which have subsequently been reinforced by the introduction of turbines at Mynydd Portref, Mynydd Portref Extension and Graig Fatha Farm within the SLA. The presence of the proposed turbines in northerly and north-easterly views from the summit and northern slopes of the ridgeline would not therefore, be incongruous from within an SLA which already hosts 38 wind turbines and would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Efail Isaf, Garth and Nantgarw Western Slopes	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Efail Isaf, Garth and Nantgarw Western Slopes SLA is assessed as High to Medium. The stated primary landscape quality relating to a “<i>rolling plateau, with irregular fields</i>”³² would be of moderate susceptibility to the proposed development outside of the SLA’s boundary whilst three of the primary landscape qualities of this SLA relate to its wooded character which could limit the availability of the outward views leading to parts of the SLA being visually well contained. The SLA is also crossed by a high voltage electricity line on steel lattice pylons. Overall, the Efail Isaf, Garth and Nantgarw Western Slopes SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development located beyond the SLA’s boundary.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a large proportion of this SLA coincides with the ZTV at distances of between ~6.3km and 8.6km,</p>

Local Landscape Designation (see Figure 6.14)	Assessment
	<p>although this would be reduced by the prevalent woodland cover not accounted for in the ZTVs. At these distances, the scale of the proposed turbines could give rise to a medium/low magnitude of visual change. Taken in isolation, this could lead to significant visual effects but the assessment here is focused on the primary landscape qualities and features and integrity of the SLA. Whilst the Proposed development would be visible from locations within the SLA where there is an absence of tree cover and beyond the high voltage overhead line in a good proportion of north-westerly views, this presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated. It would also not undermine any of the key policy and management objectives outlined for this SLA which target the SLA's woodland and farmland.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Craig yr Allt	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Craig yr Allt SLA is assessed as High to Medium. Whilst the “<i>fine views into Taff Vale from Craig-yr-Allt</i>”³² would be of higher susceptibility to change, the remaining primary landscape qualities and features would be of lower susceptibility to development beyond the SLA's boundary. Overall, the Craig yr Allt SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development located beyond the SLA's boundary.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderate proportion of this SLA coincides with the ZTV at distances of between ~9km and 11km. At these distances, the scale of the proposed turbines could give rise to low magnitude of visual change within the views available from Craig-yr-Allt. This is the only primary landscape quality which would be affected by the Proposed Development, but the presence of the turbines would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated nor would it undermine any of the key policy and management objectives outlined for this SLA.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Taff Vale Eastern Slopes	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Taff Vale Eastern Slopes SLA is assessed as High to Medium. The “<i>small-scale irregular fields</i>”³² on the lower slopes would be of higher susceptibility to a wind energy development whilst the open upland slopes and summit of Cefn Eglwysilan with its “<i>prominent masts</i>”³² would be of lower susceptibility. Overall, the Taff Vale Eastern Slopes SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development located beyond the SLA's boundary.</p>

Local Landscape Designation (see Figure 6.14)

Assessment

Assessment of effects: Proposed Development

There would be no direct landscape effects arising from the Proposed Development. Reference to **Figure 6.14** indicates that a large proportion of this SLA coincides with the ZTV at distances of between ~4.3km and 9km. At these distances, the scale of the proposed turbines could give rise to a medium to low magnitude of visual change, which taken in isolation, could lead to significant visual effects. However, the assessment here is focused on the primary landscape qualities and features and integrity of the SLA. At distances in excess of 4.3km, the turbines would not be of a scale which would dominate the small-scale field pattern across the lower, west facing slopes. The proposed turbines would appear as a new feature affecting a part of the overall visual experience gained from this landscape and would be viewed as part of much wider landscape panoramas, which include existing wind turbines at Llwynceilyn Farm which are present within the same field of view. Consequently, the proposed turbines would not appear incongruous, and their presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated.

The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.

Treforest Western Slopes

Sensitivity

As a local landscape designation (not of the highest or national level), the value of the Treforest Western Slopes SLA is assessed as High to Medium. The “*Attractive farmland on rolling plateau, with irregular fields mainly of improved grassland, large hedges, and scattered farms*”³² are indicators of higher susceptibility to a wind energy development whilst the “*wooded slopes*”³² would be of lower susceptibility. The SLA is also cross by a high voltage overhead line on steel lattice pylons. Overall, the Treforest Western Slopes SLA has been assessed as being of *Medium* sensitivity to the Proposed Development located beyond the SLA’s boundary.

Assessment of effects: Proposed Development

There would be no direct landscape effects arising from the Proposed Development. Reference to **Figure 6.14** indicates that a moderate proportion of this SLA coincides with the ZTV at distances of between ~2.6km and 5.6km. At these distances, the scale of the proposed turbines could give rise to a high to medium magnitude of visual change, which taken in isolation, could lead to significant visual effects. However, the assessment here is focused on the primary landscape qualities and features and integrity of the SLA, many of which are focussed on the SLA’s wooded slopes. The proposed turbines would appear as a new feature affecting a part of the overall visual experience gained from this landscape, which include existing wind turbines at Llwynceilyn Farm which are present within the same field of view. Consequently, the proposed turbines would not appear incongruous, and although prominent, their presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated nor would they undermine the key policies and management objectives outlined for this SLA.

Local Landscape Designation (see Figure 6.14)	Assessment
	<p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse</p>
Caerphilly SLAs	
Mynydd Eglwysilan	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Mynydd Eglwysilan SLA is assessed as High to Medium. The susceptibility of the primary landscape qualities and features of the SLA to the type of development proposed are considered to be Medium to Low with some of the qualities (those relating to an upland landscape, lower levels of remoteness and presence of existing vertical infrastructure (pylons)) being indicators of lower susceptibility whilst the levels of openness and the “<i>panoramic and sometimes dramatic views over upland and adjoining valleys</i>”⁴⁴ indicate a Medium susceptibility. Overall, the Mynydd Eglwysilan SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderately small proportion of this extensive SLA coincides with the ZTV at distances of between ~6.3km and 10km. At these distances, the scale of the proposed turbines could give rise to a medium/low to low magnitude of visual change, which taken in isolation, could lead to significant visual effects as assessed for Viewpoint 14 in Figure 6.36, located within the SLA. However, the assessment here is focused on the primary landscape qualities and features and integrity of the SLA. The proposed turbines would appear as a new feature affecting a small part of the overall visual experience gained from this upland landscape, which feature existing wind turbines as shown in the baseline photography from Viewpoint 14 and includes the turbines at Llwyncelyn Farm which are of comparable scale and present within the same field of view. Consequently, the proposed turbines would not appear incongruous, and their presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Bridgend SLAs	
Northern Uplands	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Northern Uplands SLA is assessed as High to Medium. Whilst the “<i>panoramic and sometimes dramatic views over upland and adjoining valleys</i>”³⁵ would be an indicator of higher susceptibility, this SLA is host to the Pant-y-Wal and Pant-y-Wal Extension wind turbines hence the susceptibility of this landscape to a wind energy development beyond its boundaries is</p>

Local Landscape Designation (see Figure 6.14)	Assessment
	<p>considered to be low. Overall, the Northern Uplands SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderately small proportion of this extensive SLA coincides with the ZTV at distances of between ~5.3km and 8km, concentrated across the eastern spur of Mynydd Maes-teg and Gilfach Goch. At these distances, the scale of the proposed turbines could give rise to a medium to medium/ low magnitude of visual change, which taken in isolation, could lead to significant visual effects. However, the assessment here is focused on the primary landscape qualities and features and integrity of the SLA. The proposed turbines would appear as a new feature affecting a small part of the overall visual experience gained from this upland landscape, which is host to the wind turbines of Pant-y-Wal and Pant-y-Wal Extension. Consequently, the proposed turbines would not appear incongruous, and their presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Mynydd y Gaer	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Mynydd y Gaer SLA is assessed as High to Medium. The upland landscape which is “<i>open and exposed</i>”³⁵ is an indicator of lower susceptibility particularly given the proximity of this SLA to the Taff Ely wind farm which is recognised in the primary landscape qualities and features as “<i>Its level of exposure is reflected by the presence of the windfarm at Mynydd Hugh, which introduces a visual detractor to the area</i>”³⁵. Overall, the Mynydd y Gaer SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderate proportion of this SLA coincides with the ZTV at distances of between ~6.3km and 9.6km. At these distances, the scale of the proposed turbines could give rise to a medium/low to low magnitude of visual change, which taken in isolation, could lead to significant visual effects. However, the assessment here is focused on the primary landscape qualities and features and integrity of the SLA. The proposed turbines would appear as a new feature affecting a small part of the overall visual experience gained from this upland landscape, which would feature existing turbines at Pant-y-Wal, Pant-y-Wal Extension and Fforch Nest in 360° views as well as the turbines at Taff Ely as shown in the baseline view from Viewpoint 13 (Figure 6.35) which is located within the eastern part of this SLA. Consequently, the proposed turbines would not appear incongruous, and their presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated.</p>

Local Landscape Designation (see Figure 6.14)	Assessment
<p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>	
<h3>Merthyr Tydfil SLAs</h3>	
Pontygwaith	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Pontygwaith SLA is assessed as High to Medium. The “<i>narrow geography of the valley</i>”³⁶ and its enclosed character are indicators of higher susceptibility to a wind energy development although this is countered by the wooded nature of this part of the valley which reduces intervisibility with surrounding landscapes. Overall, the Pontygwaith SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a small proportion of this SLA coincides with the ZTV at distances of between ~7.6km and 10km. At these distances, the scale of the proposed turbines could give rise to a medium/low to low magnitude of visual change. The main area of ZTV coverage coincides with the area of Pen-y-graig to the north of Edwardsville which is covered by forestry thereby limiting intervisibility. A small area to the south of Quaker’s Yard spanning both sides of the A472 also coincides with the ZTV from which there may be views of the proposed turbines. However, their presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated which are primarily focused around the industrial transport corridors and nucleated industrial settlement.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
<h3>Vale of Glamorgan SLAs</h3>	
Ely Valley and Ridge Slopes	<p><u>Sensitivity</u> As a local landscape designation (not of the highest or national level), the value of the Ely Valley and Ridge Slopes SLA is assessed as High to Medium. Characteristics such as the “<i>lowland rolling landscape</i>”³⁷ and the “<i>intact pastoral field pattern and traditional settlement pattern</i>”³⁷ are indicators of moderate susceptibility whilst the “<i>M4 and A4232 are significant detractors</i>”³⁷ and “<i>Pylons in Ely Valley North detract from otherwise attractive views in and out of this area</i>” are indicators of lower susceptibility.”³⁷. Overall, the Ely Valley and Ridge Slopes SLA has been assessed as being of <i>Medium</i> sensitivity to the Proposed Development.</p> <p><u>Assessment of effects: Proposed Development</u> There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderate proportion of this SLA within 10km of the Site coincides with the ZTV at a minimum</p>

Local Landscape Designation (see Figure 6.14)	Assessment
	<p>distance of ~9km. At these distances, the scale of the proposed turbines could give rise to a low magnitude of visual change. The proposed turbines would appear as a new feature affecting a small part of the overall visual experience gained from this landscape, visible beyond the M4 corridor and in the same field of view as existing turbines at Mynydd Portref, Mynydd Portref Extension and Taff Ely as well as the distant turbines at Pant-y-Wal, Pant-y-Wal Extension, Fforch Nest and Afan Llynfi. Consequently, the proposed turbines would not appear incongruous, and their presence would not significantly affect the stated primary landscape qualities and features for which this landscape has been designated nor would it undermine the key policy and management objectives set out from this SLA.</p> <p>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</p>
Cardiff SLAs	
Garth Hill and Pentyrch Ridges	<p><u>Sensitivity</u> <u>As a local landscape designation (not of the highest or national level), the value of the Garth Hill and Pentyrch Ridges SLA is assessed as High to Medium. The primary landscape qualities and features are not stated in the Cardiff Council Local Plan supporting documents but the area features Garth Hill which commands expansive views across the surrounding landscapes which visually, is an indicator of higher susceptibility. Overall, the Garth Hill and Pentyrch Ridges SLA has been assessed as being of Medium sensitivity to the Proposed Development.</u></p> <p><u>Assessment of effects: Proposed Development</u> <u>There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a small proportion of this SLA within 10km of the Site coincides with the ZTV at a minimum distance of ~7.3km, concentrated across Garth Hill and the western fringes of the SLA to the west of Pentyrch. These western fringes contain a prevalence of woodland which would limit the availability of views towards the Site. The scale of the proposed turbines from the SLA is illustrated in the photomontage from Viewpoint 15 (Figure 6.37) located on the summit of Garth Hill and which would give rise to a medium/low magnitude of visual change. Taken in isolation, this could lead to significant visual effects. However, the assessment here is focused on the landscape qualities and integrity of the SLA. As evidenced in the baseline photograph from Viewpoint 15, a large number of existing turbines are visible from within this SLA including Fforch Nest, Pant-y-Wal and Pant-y-Wal Extension; Llwyncelyn Farm and the cluster formed by Graig Fatha Farm, Mynydd Portref Extension, Mynydd Portref and Taff Ely. Consequently, the proposed turbines would not appear incongruous, and their presence would not significantly affect this SLA.</u></p> <p><u>The magnitude of change affecting the primary landscape qualities and features of the SLA would range from Low to Zero. The effect of the Proposed Development would consequently range from Moderate/Minor to None and Not Significant. The nature of these effects would be long-term (reversible), indirect, and adverse.</u></p>

Grid Connection

Mynydd y Glyn and Nant Muchudd Basin SLA

- 6.11.6 The Mynydd y Glyn and Nant Muchudd Basin SLA is also host to the overhead section of grid connection corridor which would cross the southern slopes of Mynydd y Glyn. The introduction of the grid connection and wooden poles would have limited characterising influence beyond the immediate grid connection corridor and would not be an incongruous feature of the landscape as a low voltage overhead line on wooden poles already crosses the SLA. The magnitude of change on the primary landscape qualities and features of the Mynydd y Glyn and Nant Muchudd Basin SLA would be Very Low. The level of operational effect would therefore be Moderate/Minor, adverse and Not Significant.
- 6.11.7 Beyond the Site, the undergrounding of the grid connection would also pass through part of the Mynydd y Glyn and Nant Muchudd Basin SLA. This would be concentrated within the highway corridor of Tonyrefail Road where activity and vehicle movement is common, thereby minimising disturbance to landscape elements and reducing the contrast of the short-lived construction activities. The route would then continue beyond the SLA before being routed along a highway which forms the western boundary of the Treforest Western Slopes SLA. The construction activities, taking place within the highway corridor would be temporary with all landcover reinstated post construction. As a consequence, the underground grid connection would not significantly affect the stated primary landscape qualities and features for which these landscapes have been designated nor would it undermine the key policy and management objectives set out for the SLAs.

6.12 Assessment of visual effects

Wind Farm development

Overview

- 6.12.1 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."*¹⁷
- 6.12.2 The type of effect may also be described as temporary or permanent, direct, or indirect, cumulative, and beneficial, neutral, or adverse. The assessment methodology is set out in **Appendix 6A**.
- 6.12.3 The residual visual effects assessed here are those effects remaining after all of the embedded design measures have been considered.
- 6.12.4 Visualisations of the Proposed Development are provided from 19 viewpoint locations and illustrated in **Figures 6.26 to 6.41**. Each of the viewpoints are assessed in a separate appendix (**Appendix 6I**).
- 6.12.5 The visual assessment has been set out as follows:

- Visual Effects during Construction;
- Visual Effects during Operation:
 - ▶ Assessment of visual effects from settlements;
 - ▶ Assessment of visual effects from promoted long-distance footpaths;
 - ▶ Assessment of visual effects from Sustrans National Cycle Routes;
 - ▶ Assessment of visual effects from Historic Parks and Gardens, Golf Courses, Country Parks, PRowWs and Open Access Land; and
 - ▶ Assessment of visual effects from Transport Routes (A and B roads).

Visual Effects During Construction

- 6.12.6 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 phase of the Proposed Development and the infrastructure components also have the potential to be significant.
- 6.12.7 The assessed levels of effect will tend to increase from Zero, 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 Site (access works) and / or temporary (temporary construction compounds) and subject to restoration on completion of the construction period.
- 6.12.8 An 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:

New internal access tracks, turning heads and crane hard-standings would provide access to the proposed turbines. Views of these works would be experienced by people on local PRowWs that traverse Mynydd y Glyn, noting some PRowW will be required to be temporarily closed during construction. PRowWs RH|ANT|75/1 near the A4233 and intersection between RH|ANT|998/1, RH|ANT|94/2 and RH|ANT|999/1 are crossed by the proposed access road and these footpaths would require management with information boards and signage provided to advise recreational users of the construction works taking place. The footpaths could remain open with appropriate management as set out in **Chapter 16: Socio-economics including tourism and recreation**.

A number of other PRowWs cross Mynydd y Glyn together with open access land present across the northern slopes and a proportion of the summit with a further small area of access land located to the north of Tonyrefail. There are also a number of close residential properties to the access route including those along Trebanog Road, Henllys, Channel Avenue and Rhiwgarn Road and isolated farmsteads on Mynydd y Glyn (Rhiw-garn-fach and Rhiw-garn-fawr). 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, access land and from some properties, resulting in a **Major/Moderate** effect that is **Significant**, temporary, and adverse.

Parts of the access tracks and associated works would also be clearly perceptible from elevated land to the west of Porth/north of Trebanog ~1.3km distant including parts of open access land and local PRow on Mynydd y Cymmer. The magnitude of change would be Low and visual effects Moderate and Not Significant where views of any ground level construction works would be typically restricted to the creation of the western section of access tracks and crane pad of T1. The nature of these effects would be short-term, indirect, and adverse.

- Substation Building:

The single storey substation building (~14 x 10m) is located between T6 and T7 and would be of traditional blockwork construction and faced in stone with a slate roof. Associated fencing would be of recessive colouring. By virtue of modest size and appearance, the construction of the substation would have limited visibility from the surrounding area. Views of any appreciable magnitude would be limited to short sections of the PRowS that cross the summit of Mynydd y Glyn, most notably footpath RH|ANT|95/1. The magnitude of change would be Low to Very Low such that the level of visual effect would be Moderate to Moderate/Minor and Not Significant. The nature of these effects would be short-term, indirect, and adverse.

- Temporary construction compounds:

The location of two construction compounds is illustrated on **Figure 4.1**, each extending up to a maximum of 50m x 50m in area. The western of the two compounds would be sited to the east of Henllys (Trebanog) and views of this compound are likely to be available to residents at properties on Henllys, Channel Avenue and Rhiwgarn Road and also those at Rhiw-garn-fach and Rhiw-garn-fawr. The compound would also be visible to walkers travelling along PRowS RH|ANT|998/1, RH|ANT|94/2 and RH|ANT|999/1 and using the open access land which surrounds the compound on its northern, eastern, and western sides. View of the eastern compound are likely to be limited to recreational receptors using PRowS RH|CYM|17/2 and RH|CYM|18/1 and the open access land. The proximity of recreational receptors to the compound means that the magnitude of change could locally rise to Medium, such that the level of visual effect would be Major/Moderate and locally Significant whilst for residents, the magnitude of change would be Low and effects Moderate and Not Significant. 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.

Visual Effects During Operation

- 6.12.9 The assessed levels of effect are likely to be at their greatest during the period of operation, due to the visibility of the proposed turbines. The main visual assessment although focused on the proposed turbines, also refers to the associated infrastructure, assessed above, where visible.

Assessment of Visual Effects from Settlements

- 6.12.10 The assessment of visual effects from settlements is set out in **Table 6.21**. The Viewpoint Analysis presented in **Appendix 6I** identified no significant visual effects beyond a distance of 8.5km from the proposed turbines. As a consequence, the assessment of visual effects from settlements has been restricted to those which lie within a 10km buffer of the proposed turbines, and which coincide with the blade tip and hub height ZTVs shown in **Figures 6.2** and **6.3**.

Table 6.21 Assessment of visual effects from settlements

Receptor	Assessment
Within 10km	
Trehafof	<p>The settlement occupies the lower valley slopes and valley base to the north-east of the Proposed Development and is located ~1km distance at the closest point. With reference to the ZTVs at Figures 6.2 and 6.3 the majority of the settlement lies within the ZTV and at least half of the terrace dwellings within the settlement are orientated south-west towards the Proposed Development, however, most residents would have restricted views due to screening by other dwellings and rising topography to the south of the village. A limited number of south-west and south facing dwellings would have views of the Proposed Development where views are slightly open and not restricted by other dwellings. Where visible from within the settlement, up to one hub and three blade tips would be visible beyond the wooded slopes of Mynydd y Glyn resulting in a Medium magnitude of change.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a Medium to High value, resulting in an overall High sensitivity. The magnitude of change would range from Zero to Medium. Residents would experience partly restricted or no views of the Proposed Development from gardens and roads within the settlement. The level of effect from the settlement would range from No Effect to Major / Moderate and Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Porth (Cymmer, Glynlach, Trebanog and Llwynceilyn)	<p>The linear town is ~3.5km long and comprises the small settlements of Cymmer, Glynlach, Trebanog and Llwynceilyn. Much of the town occupies the valley base and lower valley slopes to the north-west of the Proposed Development with much of Llwynceilyn and the outer areas of Trebanog located on higher ground.</p> <p>The closest proposed turbine would be ~0.8km from the eastern edge of the settlement (Trebanog). Outlying dwellings within 2km of the Proposed Development will be covered separately as part of the Residential Visual Amenity assessment. Viewpoints 3, 4 and 5 are located within different parts of the settlement which are assessed in detail at Appendix 6I.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 much of the settlement is located within the ZTV. From many residential properties within the town there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development. The greatest visibility would be from parts of the settlement located at higher ground and to the north of the A4233 and A4058 and include parts of Cymmer, Trebanog and Llwynceilyn. From much of these areas, where there are unrestricted or largely unrestricted views, up to six turbines would be theoretically visible (six hubs and one blade) beyond the slopes of Mynydd Y Glyn resulting in a High magnitude of change. From the lower valley parts of the settlement and including most of Glynlach, visibility of the Proposed Development would be more restricted due to topography, screening by other dwellings and localised vegetation. However, where visible, up to two turbines (two hubs) would be visible above and beyond the slopes of Mynydd Y Glyn resulting in a Medium magnitude of change. The magnitude of change across the settlement would frequently change along a single street and even within a discrete group of dwellings such as a small cul-de-sac or group of flats.</p> <p>Views would also be available of the access tracks and the grid connection overhead section on wooden poles from parts of Trebanog.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to High.</p> <p>The level of effect from the settlement would range from No Effect to Major and Significant. The Major and Significant effects would be limited to parts of Cymmer, Trebanog and Llwynceilyn whilst Major / Moderate and Significant effects would be</p>

Receptor	Assessment
Ynyshir	<p>limited to parts of Glynlach. The nature of these effects would be long-term (reversible), indirect and adverse.</p> <p>This linear settlement is ~1.5km long and occupies the lower valley slopes and valley base of Mynydd Troed-y-rhiw to the north-west of the Proposed Development. It continues north from Porth and is located ~2km distance at the closest point to the Proposed Development. With reference to the ZTVs at Figures 6.2 and 6.3 the majority of the settlement lies within the ZTV, however the majority of terrace dwellings are orientated east-west and consequently restricted views would predominantly be available. Only a limited number of south facing dwellings which are not restricted by other dwellings would have views of the Proposed Development. Oblique views would be available from the gardens of many properties, particularly from those on rising land on the eastern and western sides of the settlement. Where visible from within the settlement, up to seven turbines (six hubs and one blade) would be visible beyond the slopes of Mynydd y Glyn resulting in a Medium magnitude of change. The extent of visibility from the valley base of the settlement would be more limited. Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a Medium to High value, resulting in an overall High sensitivity. The magnitude of change would range from Zero to Medium. The level of effect from the settlement would range from No Effect to Major / Moderate and Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Wattstown	<p>The settlement occupies the valley slopes of Cefn Gwyngul to the north-west of the Proposed Development and is located ~4km distance at the closest point. With reference to the ZTVs at Figures 6.2 and 6.3 the upper, more elevated parts of the settlement lies within the ZTV and much of the terrace dwellings within the settlement are orientated south-east towards the Proposed Development, however, some of the residents would have restricted views due to screening by other dwellings and localised vegetation. A number of south-east and south facing dwellings would have views of the Proposed Development where views are more open and not restricted by other dwellings. Where visible from more elevated parts within the settlement, up to seven turbines (seven hubs) would be visible beyond the slopes of Mynydd y Glyn resulting in a Medium-Low magnitude of change. The extent of visibility from lower parts of the settlement would be more limited (Low to Zero magnitude of change). Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a Medium to High value, resulting in an overall High sensitivity. The magnitude of change would range from Zero to Medium-Low. Residents would experience partly restricted or no views of the Proposed Development from gardens and roads within the settlement. The level of effect from the settlement would range from No Effect to Major / Moderate to Moderate and Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Ynysybwl	<p>This linear settlement is ~2.5km long and occupies the lower valley slopes and valley base of Pen y Lan and Pen y Foel to the north-east of the Proposed Development. It is located ~5km distance at the closest point to the Proposed Development. With reference to the ZTVs at Figures 6.2 and 6.3, the majority of the settlement is outwith the ZTV with theoretical visibility limited to the northern edge of the settlement around Buarth-Y-Capel. From this area, visibility to the south-west would be limited up to blade tips, however, in reality they are likely to be largely screened by intervening vegetation resulting in a Very Low magnitude of change. Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a Medium to High value, resulting in an overall High sensitivity. The magnitude of change would range from Zero to Very Low. The level of effect from the settlement would range from No Effect to Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral.</p>

Receptor	Assessment
Pontypridd (Trallwn, Coedpenmaen, Graigwen, Graig, Pantygraigwen, Pentrebach, Pont-Sion Norton, Cilfynydd)	<p>This large town comprises a number of smaller areas of which Trallwn, Coedpenmaen, Graigwen, Graig, Pantygraigwen, Pentrebach, Pont-Sion Norton and Cilfynydd are included in this assessment. The remaining areas at Hopkinstown, Maesycod, Gelli-wion and Treforest are outwith the ZTV and are therefore excluded from the assessment. Much of the town occupies the valley base and lower valley slopes to the east and north-east of the Proposed Development with parts of Graigwen, Pantygraigwen, Pentrebach, Pont-Sion Norton and Cilfynydd located on higher ground. The closest proposed visible turbine would be ~2.5km from the western edge of the settlement (Graig). Viewpoint 8 is located within the settlement at Pentrebach which is assessed in detail at Appendix 6I.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 much of the areas of the settlement included in this assessment are located within the ZTV with the greatest visibility limited to areas of higher ground particularly from parts of Graigwen, Pantygraigwen, Pentrebach, Pont-Sion Norton and Cilfynydd. From many residential properties within the town there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and vegetation. From much of these elevated areas, where there are unrestricted or largely unrestricted views, up to seven turbines would be theoretically visible (five hubs and two blades) beyond the pylons and wooded slopes of Mynydd Y Glyn resulting in a Low magnitude of change. From the lower valley parts of the settlement and including most of Trallwn and Coedpenmaen, visibility of the Proposed Development would be more restricted due to topography, screening by other dwellings and localised vegetation. However, where visible, up to six turbines (two hubs and four blades / blade tips) would be visible resulting in a Low – Very Low magnitude of change. The magnitude of change across the settlement would frequently change along a single street and even within a discrete group of dwellings such as a small cul-de-sac or group of flats.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Low.</p> <p>The level of effect from the settlement would range from No Effect to Moderate and Not Significant. The effect would not be significant due to the limited extent of visibility of the Proposed Development, intervening vegetation and influence of other human development in the views including pylons, areas of coniferous forestry and built-form. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Glyntaff, Rhydyfelin (Upper Boat), Hawthorn	<p>These continuous linear settlements occupy the valley base and lower valley slopes of Mynydd Meio and Cwm Taf to the east / south-east of the Proposed Development and are located ~4.3km distance at the closest point. With reference to the ZTVs at Figures 6.2 and 6.3 much of Hawthorn and Glyntaff are outwith the ZTV with most of Rhydyfelin within the ZTV. Much of the terrace dwellings within these settlements are orientated south-west / south with oblique views towards the Proposed Development. A large number of residents would have restricted views due to screening by other dwellings and localised vegetation. A number of dwellings in Rhydyfelin located on high ground would have views of the Proposed Development where views are more open and not restricted by other dwellings. Where visible from more elevated parts within Rhydyfelin, up to seven turbines (six hubs and one blade) would be visible beyond the pylons and wooded slopes of Mynydd y Glyn resulting in a Medium-Low magnitude of change. The extent of visibility from lower parts of Rhydyfelin and all of Glyntaff and Hawthorn would be more limited (Very Low to Zero magnitude of change).</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a Medium to High value, resulting in an overall High sensitivity. The magnitude of change would range from Zero to Medium-Low.</p> <p>Residents would experience partly restricted or no views of the Proposed Development from gardens and roads within the settlement. The level of effect from the settlement would range from No Effect to Major / Moderate to Moderate and Significant. The Significant effects would be limited to elevated parts of Rhydyfelin with the remainder</p>

Receptor	Assessment
	<p>of the settlement and all of Glyntaff and Hawthorn experiencing not significant effects. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Nantgarw	<p>Nantgarw is a very small settlement located at the A470 / A468 junction located ~8.7km south-east of the Proposed Development. It is surrounded by mature woodland on all sides with very limited outward views.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 all of the settlement is located within the ZTV. However, in reality, the surrounding mature vegetation would screen much of the outward views towards the Proposed Development (even in the winter) resulting in a Very Low to Zero magnitude to change.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Very Low.</p> <p>The level of effect from the settlement would range from No Effect to Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral.</p>
Church Village, Efail Isaf and Llantwit Fardre	<p>This group of three settlements are located across undulating topography ~4.7km south-east of the Proposed Development at its closest point (Upper Church Village). With reference to the ZTVs at Figures 6.2 and 6.3 much of Church Village and Llantwit Fardre are outwith the ZTV whilst all of Efail Isaf is within the ZTV. The greatest theoretical visibility is limited to the north-western and south-eastern extremities of Church Village and Llantwit Fardre, however, in reality due to screening from surrounding intervening vegetation and from other dwellings, visibility from these areas are very limited. Where visible in partially restricted views, up to six turbines (four hubs and two blades) would be visible resulting in a Low-Very Low magnitude of change.</p> <p>Visibility from Efail Isaf would be largely restricted due to surrounding mature vegetation with only filtered views available from northern edges of the settlement resulting in a Low-Very Low magnitude of change.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Low-Very Low.</p> <p>The level of effect from the settlement would range from No Effect to Moderate / Minor and Not Significant. The effect would not be significant due to the limited extent of visibility of the Proposed Development as a result of intervening mature vegetation and other dwellings. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Tynant and Beddau	<p>This group of settlements are located ~4.3km distance south-east of the Proposed Development at their closest point. With reference to the ZTVs at Figures 6.2 and 6.3 the majority of the settlements are located within the ZTV, however the majority of dwellings would have restricted views towards the Proposed Development due to their orientation and / or intervening screening from other dwellings and localised vegetation. Where visible from the outer extremities of the settlements and from some open areas within the settlements where views are not completely restricted, up to seven turbines (seven hubs) would be visible beyond the wooded slopes of Mynydd Y Glyn resulting in a Medium magnitude of change. Oblique views from would also be available from the gardens of some properties, particularly those from the northern and western sides of the settlements.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a Medium to High value, resulting in an overall High sensitivity. The magnitude of change would range from Zero to Medium. The level of effect from the settlements would range from No Effect to Major / Moderate and Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>

Receptor	Assessment
Creigiau	<p>Creigiau is a small settlement located north of Junction 33 of the M4, ~8.3km south-east of the Proposed Development. It is surrounded by mature vegetation on all sides and mature trees associated with Creigiau Golf Club to the north-west with very limited views towards the Proposed Development.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 much of the settlement is located within the ZTV. However, in reality, the surrounding mature vegetation would screen views of the Proposed Development (even in the winter) resulting in a Very Low to Zero magnitude of change.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Very Low.</p> <p>The level of effect from the settlement would range from No Effect to Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral.</p>
Llantrisant, Talbot Green and Ynysmaerdy	<p>These three settlements are located close to one another on both sides of the A4119 south and west of Llantrisant Common. The closest proposed visible turbine would be ~4.4km from the northern edge of Ynysmaerdy. Viewpoint 9 is located within the settlement at Llantrisant which is assessed in detail at Appendix 6I.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 much of Ynysmaerdy, the northern edge of Llantrisant and western part of Talbot Green located within the ZTV. From many residential properties within these settlements there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and vegetation. Much of Talbot Green and Ynysmaerdy is surrounded by mature vegetation such views would towards the Proposed Development would be filtered, particularly in the winter from northern and western parts of the settlement. Where visible, up to six turbines would be visible through gaps in vegetation or built-form resulting in a Low magnitude of change. However, in relation to Llantrisant, there would be some open, elevated views from the northern edge of the settlement as illustrated in Viewpoint 9 where up to seven turbines (seven hubs) would be visible on Mynydd Y Glyn resulting in a Medium magnitude of change. Visibility from the remainder of the settlements would be restricted due to intervening screening.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Low (Ynysmaerdy and Talbot Green) and from Zero to Medium (Llantrisant).</p> <p>The level of effect from the settlement would range from No Effect to Moderate and Not Significant (Ynysmaerdy and Talbot Green) and from No Effect to Major / Moderate and Significant (Llantrisant). The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Pontyclun, Groes-faen and Brynsadler	<p>This group of settlements are located across undulating topography on either side of the A4119 north of Junction 34 of the M4, ~7km south of the Proposed Development at its closest point (Pontyclun). With reference to the ZTVs at Figures 6.2 and 6.3 only half of the settlements are located within the ZTV due to the undulating landform. Much of these settlements also have limited outward views to the north due to screening from other dwellings and intervening vegetation, however, there are parts of these settlements that would have partially unrestricted or filtered views towards the Proposed Development. Where visible in partially restricted views, up to seven turbines would be visible resulting in a Low magnitude of change.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Low.</p> <p>The level of effect from the settlement would range from No Effect to Moderate and Not Significant. The effect would not be significant due to the limited extent of visibility of the Proposed Development as a result of intervening mature vegetation, other</p>

Receptor	Assessment
Llanharry	<p>dwelling and other human development visible in the views. The nature of these effects would be long-term (reversible), indirect and adverse.</p> <p>Llanharry is a small to medium sized settlement located between Junctions 34 and 35 off the M4, ~8.9 south-west of the Proposed Development.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 much of the settlement is located within the ZTV. However, in reality, due to the undulating topography and the surrounding vegetation, views of the Proposed Development would be very limited (up to four blade tips only) resulting in a Very Low to Zero magnitude to change. Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Very Low. The level of effect from the settlement would range from No Effect to Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral.</p>
Bryncae	<p>Bryncae is a small settlement located across undulating topography which adjoins Dolau and Llanharan located ~7km south-west of the Proposed Development. It is surrounded by mature vegetation and the settlement of Llanharan to the north with very limited views towards the Proposed Development.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 the central and southern parts of this small settlement is located within the ZTV. However, in reality, the undulating topography and mature vegetation would screen views of the Proposed Development (even in the winter) resulting in a Very Low to Zero magnitude to change (up to four blade tips only). It may be noted that Dolau and Llanharan are completely outwith the ZTV.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Very Low. The level of effect from the settlement would range from No Effect to Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral.</p>
Pencoed	<p>Pencoed is a large settlement located across undulating topography off Junction 35 of the M4 and ~9.2km south-west of the Proposed Development. It is surrounded by mature vegetation to the north / north-east with very limited views towards the Proposed Development.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 the central and southern parts of this small settlement is located within the ZTV. However, in reality, the undulating topography and mature vegetation would screen views of the Proposed Development (even in the winter) resulting in a Very Low to Zero magnitude to change (up to four blade tips only).</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Very Low. The level of effect from the settlement would range from No Effect to Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral.</p>
Tonyrefail	<p>This town is located between Porth and Llantrisant and also comprises the small areas of Bryngolau, Ty'n-y-bryn, Hendreforgan and Thomastown. The closest proposed turbine would be ~1km from the eastern edge of the settlement. Viewpoints 1 and 7 are located within different parts of the settlement which are assessed in detail at Appendix 6I.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 much of the settlement including Bryngolau, Hendreforgan and Ty'n-y-bryn are located within the ZTV, with only the north-western edge of Thomastown within the ZTV. From many residential properties</p>

Receptor	Assessment
	<p>within the town there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and localised vegetation. The greatest visibility of the Proposed Development would be from parts of the settlement located on the eastern parts / edges and in central areas where there are unrestricted or partly unrestricted views. From these areas, up to seven turbines would be theoretically visible (six hubs and one blade) beyond the slopes of Mynydd Y Glyn resulting in a High to Medium magnitude of change. The magnitude of change across the settlement would frequently change along a single street and even within a discrete group of dwellings such as a small cul-de-sac or group of flats.</p> <p>Views would also be available of the access tracks and the overhead grid connection on wooden poles from eastern parts of Tonyrefail.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to High.</p> <p>The level of effect from the settlement would range from No Effect to Major to Major / Moderate and Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Penrhiwfer and Edmonstown	<p>These small settlements are located at the end of the long linear settlement of Tonypandy ~2.1km north-west of the Proposed Development. Much of these settlements occupy the valley base and lower valley slopes of Mynydd Dinas and Mynydd Pen-y-graig. With reference to the ZTVs at Figures 6.2 and 6.3 the majority of the settlements are located within the ZTV, however, more than half of the terrace dwellings within the settlements are orientated north-south away from the Proposed Development and most residents would have restricted views due to screening by other dwellings and localised vegetation. There would be a number of east facing dwellings and some gardens of dwellings would have views of the Proposed Development where views are slightly more open and not restricted by other dwellings. Where visible from within the settlement, up to seven turbines (six hubs and one blade) would be visible beyond the slopes of Mynydd y Glyn resulting in a Medium magnitude of change. The magnitude of change across the settlement would frequently change along a single street and even within a discrete group of dwellings such as a small cul-de-sac or group of flats.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a Medium to High value, resulting in an overall High sensitivity. The magnitude of change would range from Zero to Medium. The level of effect from the settlement would range from No Effect to Major / Moderate and Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Tonypandy (Trealaw, Llwynypia and Penygraig)	<p>Tonypandy is a large, linear settlement ~4-5km long located between Porth and Rhondda ~2.8km north-west of the Proposed Development at its closest point. It also comprises the smaller settlements of Trealaw, Llwynypia, Penygraig, Clydach Vale and Blaen Clydach. Much of this settlement occupies the valley base and lower valley slopes of Mynydd Brith-weynydd, Mynydd Pwllyrhebog, Llwynypia Mountain and Mynydd Pen-y-graig. Viewpoint 10 is located within the settlement which is assessed in detail at Appendix 6I.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 the upper, more elevated parts of the settlement (primarily Clydach Vale and Blaen Clydach, and elevated areas of Trealaw and Penygraig) lies within the ZTV with only the southern part of Llwynypia located within the ZTV. From many residential properties within the settlement there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and localised vegetation. The greatest visibility of the Proposed Development would be from elevated parts of the settlement where there are largely unrestricted or partly unrestricted views. Where visible, up to seven turbines (seven</p>

Receptor	Assessment
	<p>hubs) would be visible beyond the slopes of Mynydd y Glyn resulting in a Medium magnitude of change. The extent of visibility from lower parts of the settlement would be more limited (Low to Zero magnitude of change).</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a Medium to High value, resulting in an overall High sensitivity. The magnitude of change would range from Zero to Medium. Residents would experience partly restricted or no views of the Proposed Development from gardens and roads within the settlement. The level of effect from the settlement would range from No Effect to Major / Moderate and Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Treorchy / Treorci, Ystrad (Rhondda)	<p>Treorchy / Treorci and Ystrad are part of Rhondda located ~6km north-west of the Proposed Development. Much of these settlements occupy the valley base and lower valley slopes of Mynydd Ty'n-tyle, Mynydd Maerdy and Mynydd yr Eglwys. It may be noted that Ton Pentre and Gelli are entirely outwith the ZTV.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 much of the settlements are outwith the ZTV except for a small number of elevated areas. Where visible from these properties, up to two blade tips would be visible which is likely to be further screened by other dwellings and intervening vegetation resulting in a Very Low to Zero magnitude to change.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Very Low. The level of effect from the settlements would range from No Effect to Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral.</p>
Penrhys	<p>Penrhys is a very small settlement along Rhondda Fach to the east of the settlement of Rhondda and west of Tylorstown located ~5.5km north-west of the Proposed Development at its closest point. Much of the settlement occupies the valley base and lower valley slopes of Mynydd Ty'n-tyle. Viewpoint 11 is located within different parts of the settlement which is assessed in detail at Appendix 6I.</p> <p>With reference to the ZTVs at Figures 6.2 and 6.3 much of the central and upper parts of the settlement is located within the ZTV. From many residential properties within the settlement there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and vegetation. From much of these central and elevated areas, where there are unrestricted or largely unrestricted views, up to seven turbines would be theoretically visible (seven hubs) however, screening from intervening vegetation and other dwellings would restrict visibility to more blades and a small number of hubs as illustrated in Viewpoint 11 resulting in a Low magnitude of change. From the lower valley parts of the settlement, visibility of the Proposed Development would be more restricted due to topography. The magnitude of change across the settlement would frequently change along a single street and even within a discrete group of dwellings such as a small cul-de-sac or group of flats.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Low. The level of effect from the settlement would range from No Effect to Moderate and Not Significant. The effect would not be significant due to the limited extent of visibility of the Proposed Development, intervening vegetation and influence of other human development in the views including masts, areas of coniferous forestry and built-form. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
Blaenllechau	<p>Blaenllechau is a very small settlement along Rhondda Fach to the north of Ferndale located ~8km north-west of the Proposed Development at its closest point. Much of the settlement occupies the valley base and lower valley slopes of Twyn-y-Briddallt.</p>

Receptor	Assessment
	<p>With reference to the ZTVs at Figures 6.2 and 6.3 much of the upper parts of the settlement is located within the ZTV. From many residential properties within the settlement there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and vegetation. From much of the elevated areas, where there are unrestricted or largely unrestricted views, up to five turbines would be theoretically visible (three hubs and two blade tips) resulting in a Low – Very Low magnitude of change. From the lower valley parts of the settlement, visibility of the Proposed Development would be more restricted due to topography. The magnitude of change across the settlement would frequently change along a single street and even within a discrete group of dwellings such as a small cul-de-sac or group of flats.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Low – Very Low. The level of effect from the settlement would range from No Effect to Moderate / Minor and Not Significant. The effect would not be significant due to the limited extent of visibility of the Proposed Development, intervening distance and vegetation and influence of other human development in the views. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
<p>Treharris, Trelewis, Craig Berthlwyd, Nelson and Pentwyn Berthlwyd</p>	<p>This group of settlements are located ~8.6km north-east of the Proposed Development. With reference to the ZTVs at Figures 6.2 and 6.3 much of the settlements are outwith the ZTV except for a number of elevated areas across all the settlements. From many residential properties within the settlements there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and vegetation. Where visible from these properties located on higher ground and where there are largely unrestricted or partly restricted views, up to seven turbines (seven hubs) would be visible which is likely to be further screened by other dwellings and intervening vegetation resulting in a Low magnitude to change. The magnitude of change across the settlement would frequently change along a single street and even within a discrete group of dwellings such as a small cul-de-sac or group of flats.</p> <p>Residents have a High susceptibility to change and the views in the direction of the Site are assessed to be of a typically Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Low. The level of effect from the settlements would range from No Effect to Moderate and Not Significant. The effect would not be significant due to the limited extent of visibility of the Proposed Development, intervening distance and vegetation and influence of other human development in the views. The nature of these effects would be long-term (reversible), indirect and neutral.</p>

Assessment of visual effects from promoted long-distance footpaths

- 6.12.11 The assessment of visual effects from promoted long-distance footpaths is set out in **Table 6.22**. The Viewpoint Analysis presented in **Appendix 6I** identified no significant visual effects beyond a distance of 8.5km and as a consequence, the assessment of visual effects from promoted (regional) long distance footpaths include only those which lie within a 10km buffer of the proposed turbines. The location of the long distance promoted routes within 10km of the proposed turbines and in relation to the blade tip and hub height ZTVs is shown in **Figure 6.16**.
- 6.12.12 An assessment of the visual effects on users walking the Wales Coast Path, the only National Trail within the LVIA study area, has been scoped out of the assessment as agreed with PEDW and recorded in **Table 6.4**. For completeness, the routes within the LVIA study area have been mapped and are presented in **Figure 6.17** as evidence that

the routes are all of a regional level and that no further routes of national importance lie within the LVIA study area.

Table 6.22 Assessment of visual effects from promoted long-distance footpaths

Receptor	Assessment
Routes within 10km	
Penrhys Pilgrimage Way	<p>The Penrhys Pilgrimage Way follows public rights of way for 21 miles from Llandaff Cathedral in Cardiff to Penrhys in the Rhondda. Within the 10km study area it passes between Pentyrch in the southeast and its termination at Penrhys, passing~0.9km west of the Site. The route is illustrated on Figure 6.16 and Viewpoints 1, 2, 4, 9, and 11 located on the route is assessed in detail at Appendix 6I.</p> <p>ZTV coverage is indicated along the majority of the route within 5km, with patchy visibility indicated between Pentyrch and north of Talbot Green and as the route descends towards Trealaw as illustrated in Figure 6.16. Wireline analysis and review in the field indicate that visibility between Pentyrch and north of Talbot Green would be partially screened by woodland, intervening vegetation and the built environment in places with potential open views to the northwest of Groes-faen for approximately 0,5km and as it joins the Taff Ely Ridgeway Walk for approximately 1km. To the north of Llantrisant, the route leaves the low-lying valley and traverses an undulating landscape with elevated views and occasional screening or filtered views from hedgerows, field boundary trees and woodland areas. Views from this section from south to north of the route are assessed in Viewpoints 9, 2, 1 and 4. The magnitude of change ranges between Medium at Viewpoint 9 to High at Viewpoints 2, 1, and 4 as the route passes close to the Proposed Development. As the route descends into the Rhondda Fawr valley and crosses the Rhondda River, there would be no visibility of the Proposed Development. Visibility resumes as the route climbs out of the Rhondda valley to the north of Trealaw and traverses Mynydd Troed-y-rhiw (328m AOD). Beyond this the route follows a lower lying contour to the west of Pontygwaith and views would be screened by landform until the route terminates at Fynnon Fair (St Mary's Well), adjacent to Viewpoint 11 Low magnitude.</p> <p>Walkers on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of High value resulting in an overall High sensitivity. The magnitude of change would range from Zero due to intervening landform, and in places screening by intervening vegetation and the built environment, to a High magnitude of change where less restricted views are available including parts of the route between Llantrisant (Viewpoint 9) and northwest of Trebanog (Viewpoint 4). The resulting level of effect would range from No View to Major and Significant. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>
Cistercian Way (Wales)	<p>The Cistercian Way was developed in 1998 as an attempt to link all the Welsh Cistercian abbeys. The circular route from Caerphilly to Caerphilly is approximately 672 miles. Within the 10km study area it passes between Caerphilly in the southeast and Bwlch Mountain to the northwest, passing~1.8km northeast of the Site at its closest point. The route is illustrated on Figure 6.16. Viewpoint 11 is located on the route and is assessed in detail at Appendix 6I.</p> <p>ZTV coverage is indicated on elevated sections of the route to the east, north and northwest as illustrated in Figure 6.16. Theoretical visibility to the east is indicated between Groeswen and Pontypridd. In this section the route follows the Egywysilan Road (joining with the Rhymney Valley Ridgeway Walk for some of the route) and minor roads at Pontypridd. Wireline analysis and review in the field indicate that theoretical visibility would be partially screened by</p>

Receptor	Assessment
	<p>roadside and surrounding vegetation northwest of Groeswen for ~3.1km, there would be elevated open views for approximately 2km (Low / Medium magnitude of change) before the route passes through wooded vegetation along Penheol Ely Road on its descent towards Pontypridd. Between Pontypridd and Mynachdy there would be No View of the Proposed Development apart from potential glimpsed winter views at Cribyn-du. Northwest of Mynachdy, theoretical visibility is indicated until east of Stanleytown. However, this part of the route passes through fields with tree lined boundaries and plantation forest, views along this section would be heavily filtered (Low to Zero magnitude). To the west of Stanley theoretical visibility is again indicated as the route passes Viewpoint 11 on its ascent of the middle and upper slopes of Mynydd Ty'n-tyle (429m AOD) (low magnitude). There would be No View as the route skirts to the south and southwest of the summit, but theoretical visibility as it turns southwest and follows a southeast facing slope towards Ton Pentre and again as it climbs towards Mynydd Maendy (Low to Very Low magnitude).</p> <p>Walkers on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of High value resulting in an overall High sensitivity. The magnitude of change would range from Zero due to intervening landform, and in places screening by intervening vegetation, to a Medium / Low magnitude of change where less restricted views are available. The resulting level of effect would range from Major / Moderate to Moderate and Significant to No View and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>
Glamorgan Ridgeway Walk / Taff-Ely Ridgeway Walk	<p>The Glamorgan Ridgeway Walk is a 33 mile route that follows public rights of way and minor roads along the ridge line from Caerphilly Castle to Margam Country Park, near Port Talbot. Within the 10km study area it passes between Taff's Well to the southeast and Blackmill to the southwest of the study area, passing ~4.6km south of the Site at its closest point. The route is illustrated on Figure 6.16. Viewpoints 15 and 13 are located on the route and are assessed in detail at Appendix 6I.</p> <p>ZTV coverage is patchy along the route and indicated on elevated sections where the ridgeline allows views north towards the Proposed Development. From east to west, the first area of theoretical visibility is indicated as the route passes Garth Hill (Viewpoint 15) (Medium-Low magnitude). From here there would be limited views as the route passes through dense woodland west of Soar (Very Low to Zero magnitude). As the route passes north and northwest of Rhiwsaeson there would be some intermittent views between woodland areas (Low magnitude). Theoretical visibility to the west of Ynysmaerdy would be mostly screened as the route passes through Llantrisant Forest. West of this, there would be views towards the Proposed Development as the route traverses Mynydd Meiros and then very limited theoretical visibility due to intervening landform with occasional views at Mynydd-Hugh until the route reaches the summit southwest of Clwyd Lluetau (Viewpoint 13) (Low magnitude) where visibility would continue from elevated areas at greater distances as illustrated in Figure 6.16.</p> <p>Walkers on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of High value resulting in an overall High sensitivity. The magnitude of change would range from Zero due to intervening landform, and in places screening by intervening vegetation, to a Medium / Low magnitude of change where less restricted views are available. The resulting level of effect would range from Major / Moderate to Moderate and Significant to No View and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>

Receptor	Assessment
Taff Trail	<p>The Taff Trail is a 55 mile route that follows public rights of way and minor roads comprising old railway paths, forest paths and canals between Cardiff Bay and Brecon Caerphilly Castle to Margam Country Park, near Port Talbot. The route follows National Cycle Route 8 and is assessed below in Table 6.19. The Trail differs from NCN8 to the east of Abercynon where it passes along the A4054 to the east of the A470. Visibility along this section of the route would be mostly screened by dense vegetation along the route, although there may be possible heavily filtered views in winter views and as the route crosses the A470 on the B4725 to re-join NCN8 (Very Low magnitude). The Magnitude of change from localised sections would be Low to Very Low to Zero with a Moderate effect that would be Not Significant to No View along the majority of the route. Views would be extremely localised and fleeting visibility where the Proposed Development would be glimpsed over ~3.5km distant frequently within a foreground and middle ground urban context. The nature of these very localised effects would be long-term (reversible), indirect and neutral to adverse.</p>
Ogwr Ridgeway Walk	<p>The Ogwr Ridgeway Walk is a 22.8km walk that links the Taff-Ely Ridgeway Walk (Ffordd y Bryniau) with the Coed Morgannwg Way. It largely follows the tops of the southern Lower Pennant Sandstone ridge from Mynydd y Gaer and Bryn y Wrach, to Mynydd Baeden and Mynydd Margam. Within the 10km study area, the route follows the western section of the Glamorgan Ridgeway Walk / Taff-Ely Ridgeway Walk between Viewpoint 13 and Blackmill. This section of the route is assessed above. The magnitude of change would be Low to Zero and the level of effect would be Moderate and Significant at Viewpoint 13 to No View and Not Significant.</p>
Rhymney Valley Ridgeway Walk	<p>The Rhymney Valley Ridgeway Walk is a circular 44.4km route that follows public rights of way and minor roads across the hills surrounding the Rhymney Valley. The western part of the route is within the 10km study area arcing between Caerphilly to the southeast and Nelson to the northwest of the study area, passing ~6.3km east of the Site at its closest point. The route is illustrated on Figure 6.16. Viewpoint 14 is located on the route and is assessed in detail at Appendix 6I. ZTV coverage is patchy along the route and indicated on a short (~1.5km) section between the summit of Mynydd Meio (Viewpoint 14) and Coed Caecorrwg and for a longer (~4.2km) section between Cwmeldeg and the A472. Between Mynydd Meio (Viewpoint 14) (Medium-Low magnitude) and Coed Caecorrwg the route joins with the Cistercian Way assessed above and there would be elevated open views towards the Proposed Development, intermittent in places due to road / trackside vegetation, views of the proposed turbines would be similar to Viewpoint 14, Figure 6.36c (Medium / Low magnitude). Between Cwmeldeg and the A472, wireline analysis and Site visits indicate that the Proposed Development would be visible in views between 7.1km and 9.3km, on elevated areas there would be open views towards the proposed turbines (for ~1km section) (Low magnitude) as the route joins Tirmynydd Road and travels towards Nelson views would be mostly filtered by roadside and field boundary vegetation (Very Low to Zero magnitude). Walkers on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of High value resulting in an overall High sensitivity. The magnitude of change would range from Zero due to intervening landform, and in places screening by intervening vegetation, to a Medium / Low magnitude of change where less restricted views are available. The resulting level of effect would range from Major/Moderate to Moderate and Significant to No View. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>

Receptor	Assessment
Celtic Way	<p>The Celtic Way visits prehistoric sites through South Wales and the South West peninsula and is 1,125km in length route that follows public rights of way and minor roads across the hills surrounding the Rhymney Valley. Within the 10km study area, the route passes between Taff's Well and Llantrisant, before heading south at Rhiwsaeson and exiting the study area as it reaches the M4 transport corridor. The route is illustrated on Figure 6.16. Viewpoints 15 is located on the route and is assessed in detail at Appendix 6I.</p> <p>ZTV coverage is patchy along the route and indicated intermittently between Taff's Well and Llantrisant, and to the north of the M4 transport corridor. The section between Taff's Well and Llantrisant follows the route of the Glamorgan Ridgeway Walk (and briefly joins with the Penrhys Pilgrimage Way and the Capital Walk – Cardiff). This section of the route is assessed above and the magnitude of change would range from Medium/Low (at Viewpoint 15) to Low and Zero. The section between Rhiwsaeson and the M4 transport corridor would have intermittent theoretical visibility between Groes-faen and the M4. Wireline analysis and site visits indicate that views from this section would be heavily filtered by roadside vegetation and the magnitude of change would be Very Low to Zero.</p> <p>Walkers on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of High value resulting in an overall High sensitivity. The magnitude of change would range from Zero due to intervening landform, and in places screening by intervening vegetation, to a Moderate-Low magnitude near the summit of Mynydd Meio (Viewpoint 15). Much of the route within the 10km study areas is assessed as having a Low to Zero magnitude. The resulting level of effect would range from Moderate and Not Significant to No View for the majority of the route and Major/Moderate and Significant summit of Mynydd Meio. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>
Sky to Sea Through The Vale	<p>The Sky to Sea Through The Vale route connects the coastline at Penry Bay near St. Athan to Bryngarw Country Park, near Bridgend (35km). Within the 10km study area, the route passes between the M4 transport corridor east of Pencoed, and Blackmill. The route is illustrated on Figure 6.16.</p> <p>ZTV coverage indicates a very limited section of theoretical visibility for ~2km as the route passes to the east of Pencoed. Wireline analysis indicates that up to 5 hubs would be theoretically visible as the route crosses the M4 at a distance of 9.4-10km, with visibility of the turbines reducing due to intervening landform as the route continues towards Pencoed. Site visits indicate that these views would be heavily filtered by intervening near distance and middle distance vegetation such that at most the magnitude of change would be Very Low.</p> <p>Walkers on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of High value resulting in an overall High sensitivity. The magnitude of change would range from Zero due to intervening landform, and in places screening by intervening vegetation, to a Very Low magnitude east of Pencoed. 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 to adverse.</p>
Sky To Sea Over The Bwlch	<p>The Sky to Sea Over The Bwlch is a continuation of the Sky to Sea Through The Vale route and passes on public rights of way, forest tracks and minor roads between Bryngarw Country Park near Bridgend and Dare Valley Country Park, Aberdare (28.7km). Most of this route is outside the 10km study area, however a short section of the route is located within 10km between Bwlch y Clawdd and Treorchy / Treorci. The route is illustrated on Figure 6.16.</p> <p>ZTV coverage indicates a very limited section of theoretical visibility for ~1km as the route passes along Mynydd Maendy towards the fort remains west of</p>

Receptor	Assessment
	<p>Ton Pentre. This part of the route is shared with the Cistercian Way and is assessed above ((Low to Very Low magnitude)).</p> <p>Walkers on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of High value resulting in an overall High sensitivity. The magnitude of change would range from Zero due to intervening landform, and in places screening by intervening vegetation, to a Low to Very Low magnitude. The resulting level of effect would range from Moderate to Minor and Not Significant to No View. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>
Capital Walk - Cardiff	<p>The Capital Walk - Cardiff is a 59.5km route around Cardiff that follows public rights of way and minor roads across the surrounding hills and valleys. Most of this route is outside the 10km study area, however a short section of the route is located within 10km between Pentyrch and Taff's Well. The route is illustrated on Figure 6.16. Viewpoint 15 is located on the route and is assessed in detail at Appendix 6I.</p> <p>ZTV coverage is indicated for a short 1.7km section as the route climbs towards the summit of Mynydd Meio (Viewpoint 15) and continues along the ridgeline and east facing slopes, before descending towards Taff's Well where there is no theoretical visibility indicated. Part of this section follows the Glamorgan Ridgeway Walk / Celtic Way and is assessed above and the magnitude of change would range from Medium/Low the summit of Mynydd Meio (Viewpoint 15) and along the ridgeline, to Zero.</p> <p>Walkers on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of High value resulting in an overall High sensitivity. The magnitude of change would range from Zero due to intervening landform, to a Moderate-Low magnitude for a 2km section at Mynydd Meio. The resulting level of effect would range from Major/Moderate and Significant at the summit of Mynydd Meio, to No View. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>

Assessment of visual effects from Sustrans National Cycle Routes

6.12.13 The assessment of visual effects from Sustrans National Cycle Routes is set out in **Table 6.23**.

Table 6.23 Assessment of visual effects from National Cycle Network (NCN) routes

Receptor	Assessment
NCN4	<p>The Sustrans Route NCN4 is a 698km route between London and Fishguard in west Wales. Within the study area it travels between Newport and Port Talbert following public rights of way, urban roads and minor roads. The route would pass to the south of the Proposed Development at ~0.9km south of the Site at its closest point as it nears the lower slopes of Mynydd y Glyn. The route is illustrated on Figure 6.16. Viewpoints 2 and 7 are located on the route and are assessed in detail at Appendix 6I.</p> <p>ZTV coverage along the route is indicated between Nantgarw and Pontypridd (~8.3km) where the route joins NCN8 (see below Low to Very Low magnitude), and again for ~8.5km as the route passes between Gelli-wion (west of Pontypridd) and Gilfach Goch. There is very little theoretical visibility indicated between Port Talbert and Nantgarw, or west of Gilfach Goch. Wireframe analysis in combination with Site visits indicate that between Gelli-wion (west of Pontypridd) and Gilfach Goch there would be open views of all seven of the turbines with upper towers and hubs visible at distances of over 0.9km as</p>

Receptor	Assessment
	<p>illustrated in Viewpoint 2, Figure 6.24c (High magnitude). Views of the Proposed Development would become more distant as the route progresses west. A High/Medium magnitude is assessed at Viewpoint 7, Figure 6.29c and as the route passes to the southwest of Gilfach Goch, the magnitude would reduce to Low, with Very Low to No View of the proposed turbines for the remainder of the route within the study area.</p> <p>Cyclists on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall High sensitivity. The Magnitude of change from localised sections would be High resulting in a Major and Significant effect (within 5km of the Proposed Development) reducing to Low to Zero with a Moderate effect that would be Not Significant to No View for the remaining route. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>
NCN881	<p>The Sustrans Route NCN881 is a 19.5km route between Pontypridd and Route 47 by Llest-Wen Reservoir and travels predominantly through the valleys. The route would pass to the north of the Proposed Development at ~1.1km north of the Site at its closest point at Porth. The route is illustrated on Figure 6.16. Viewpoint 5 is located on the route and is assessed in detail at Appendix 6I. ZTV coverage along the route is indicated between Trehafod and Ynyshir (~4.9km). There is no theoretical visibility indicated between Wattstown and the end of the route at NCN47. Wireframe analysis in combination with Site visits indicate that between Trehafod and Ynyshir there would be screening from vegetation and the built environment for much of the route with some open areas where up to six of the proposed turbines would be visible or partially visible as illustrated in Viewpoint 5, Figure 6.27c (located near to the route). Where there are localised open views the magnitude of change would be High. For the majority of the route the magnitude of change would range between Low (in filtered winter views) to Zero.</p> <p>Cyclists on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall High sensitivity. The Magnitude of change from localised sections would be High resulting in a Major and Significant effect reducing to Low to Zero with a Moderate effect that would be Not Significant to No View for the remaining route. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>
NCN8	<p>The Sustrans Route NCN8 follows the Taff Trail and is a 55 mile route accessing public rights of way and minor roads comprising old railway paths, forest paths and canals between Cardiff Bay and Brecon. For much of the route, the trail is located on the lower slopes to the east of the River Taff valley. The route passes to the east of the Proposed Development and would pass ~3.5km east of the Site at its closest point at Pontypridd. The route is illustrated on Figure 6.16.</p> <p>ZTV coverage along the route is indicated for a short distance (~2km) at the start of the route in Cardiff city centre between the Millennium centre and Riverside, and then for a longer section (~8.3km) between Nantgarw and Pontypridd, and again for ~3.6km as the route passes to the east of Abercynon. There is no theoretical visibility indicated between Riverside in Cardiff and Nantgarw, or for the north of the route between Edwardsville and Brecon. Wireframe analysis in combination with Site visits indicate that there would be No View of the proposed turbines from Cardiff between the Millennium centre and Riverside due to screening from the built environment. Between Nantgarw and Pontypridd and east of Abercynon, views would be heavily filtered by trailside vegetation and/or the built environment. Some of this route is in cutting and there would be No View from these areas due to landform. There would be some glimpsed views through gaps in the</p>

Receptor	Assessment
	<p>vegetation in winter views where the route is at grade and views over or between buildings. The magnitude of change would be Low to Very Low to Zero.</p> <p>Cyclists on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall High sensitivity. The Magnitude of change from localised sections would be Low to Very Low to Zero with a Moderate effect that would be Not Significant to No View along the majority of the route. Views would be extremely localised and fleeting visibility where the Proposed Development would be glimpsed over ~3.5km distant frequently within a foreground and middle ground urban context. The nature of these very localised effects would be long-term (reversible), indirect and neutral to adverse.</p>
NCN47	<p>The Sustrans Route NCN47 is a 195km route between Newport and Fishguard and forms part of the Celtic Trail West. Within the study area, the route passes between Newport and east of Tonna. The route would pass to the north of the Proposed Development at ~4.2km at its closest point to the north of Glyncoch. The route is illustrated on Figure 6.16.</p> <p>ZTV coverage along the route is very patchy with theoretical visibility indicated at Treharris and as the route follows NCN8 between Abercynon and Glyncoch (Low to Zero magnitude), and in localised areas to the northwest of Ynysybwll as it climbs towards St Gwynno Forest, as it passes Carn-y-pigwn (470mAOD) and further to the northwest as it passes through elevated landform at Carn Foesen. For most of these areas the route passes through commercial and mixed forestry and views would be screened or heavily filtered (at most Very Low to Zero magnitude). However, there would be open views from a short (0.7km) section of the route to the south of Gwynno Forest where all seven turbines would be visible on the skyline of the view at ~6km (Medium/Low magnitude).</p> <p>Cyclists on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall High sensitivity. The magnitude of change from a short section of the route would be Medium to Low resulting in a Major/Moderate to Moderate and Significant level of effect for 0.7km. The remainder of the route within the study area is assessed as having a Very Low (localised) to Zero magnitude of change resulting in a Minor and Not Significant effect to No View. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>

Assessment of visual effects from Historic Parks and Gardens, Golf Courses, Country Parks and Open Access Land

- 6.12.14 The assessment of visual effects from historic parks and gardens, golf courses, country parks and open access land is set out in **Table 6.20**. The Viewpoint Analysis presented in **Appendix 6I** identified no significant visual effects beyond a distance of 8.5km from the proposed turbines. As a consequence, the assessment of visual effects from the local and regional recreational areas has been restricted to those which lie within a 10km buffer of the proposed turbines. The location of the historic parks and gardens, golf courses, country parks and open access land within 10km of the proposed turbines and in relation to the blade tip and hub height ZTVs is shown in **Figure 6.18**.
- 6.12.15 For completeness, the recreational areas within the LVIA study area have been mapped and are presented in **Figure 6.24**.

Table 6.24 Assessment of visual effects from Historic Parks and Gardens, Golf Courses and Open Access Land

Receptor	Assessment
Historic Parks and Gardens within 10km	
Ynysangharad Park	<p>Figure 6.18 indicates that whilst the ZTV indicates theoretical visibility (up to two turbines only) from much of the Park, visibility is restricted to blade tips only which would be largely screened by mature trees from within the Park, over ~3.2km distant.</p> <p>Users of the park have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Very Low. The resulting level of effect would range from No View to Minor and Not Significant. The nature of the effects experienced by users of the park would be long-term (reversible), indirect and neutral.</p>
Miskin Manor	<p>Figure 6.18 indicates that there is theoretical blade tip visibility from the perimeter of the park, however extensive mature tree cover within and surrounding the perimeter of the park would restrict views of the Proposed Development, over ~8.5km distant.</p> <p>Users of the park have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium to High value resulting in an overall High sensitivity. The magnitude of change would be Zero with No View.</p>
Hensol Castle	<p>Figure 6.18 indicates that there is theoretical visibility from the perimeter and eastern parts of the park, however extensive mature tree cover within and surrounding the perimeter of the park would largely restrict views of the Proposed Development, over ~9.5km distant. There would be some limited areas from elevated areas in the east of the park where there would be filtered views through gaps in vegetation to the north towards the Proposed Development.</p> <p>Users of the park have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Very Low. The resulting level of effect would range from No View to Minor and Not Significant. The nature of the effects experienced by users of the park would be long-term (reversible), indirect and neutral.</p>
Talygarn	<p>Figure 6.18 indicates that there is theoretical visibility from the northern and western parts of the park, however extensive mature tree cover within and surrounding the perimeter of the park would largely restrict views of the Proposed Development, over ~8.6km distant. There would be some limited areas from northern areas of the park where there would be partly unrestricted views towards the Proposed Development where up to seven turbines would be visible (seven hubs).</p> <p>Users of the park have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to Low. The resulting level of effect would range from No View to Moderate and Not Significant given the overall limited and restricted nature of views from the park and the intervening distance. The nature of the effects experienced by users of the park would be long-term (reversible), indirect and adverse.</p>
Craig y Parc	<p>Figure 6.18 indicates that there is theoretical visibility from the northern parts of the park, however extensive mature tree cover within and surrounding the perimeter of the park would restrict views of the Proposed Development, over ~9.8km distant.</p>

Receptor	Assessment
	<p>Users of the park have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium to High value resulting in an overall High sensitivity. The magnitude of change would be Zero with No View.</p>
Golf Courses within 10km	
Pontypridd Golf Club	<p>The receptor is illustrated on Figure 6.18 and is located on higher ground (slopes of Cefn Eglwysilan) above the settlement of Pontypridd, over ~5.7km distant. With reference to the ZTV at Figure 6.18, the majority of the golf course lies within the ZTV. Views west towards the site are partly restricted by tree cover throughout the golf course with the Proposed Development visible in mostly filtered or semi-open views. However up to seven turbines (seven hubs) would be visible in these partly restricted views resulting in a Medium magnitude of change.</p> <p>Users of the golf course have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero to Medium. The resulting level of effect would range from Moderate and Significant (given the extent of visibility in these partly restricted views) to No View. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>
Rhondda Golf Course	<p>The receptor is illustrated on Figure 6.18 and is located on higher ground (Mynydd Brith-weunydd) above the settlements of Trealaw and Pontygwaith, over ~4.3km distant. With reference to the ZTV at Figure 6.18 much of the golf course lies within the ZTV including the clubhouse and southern parts of the course. Views south-east towards the Site are partly restricted by tree cover in places with more open (and elevated) ground in the southern parts of the golf course where up to seven turbines (seven hubs) would be visible in these more open views resulting in a Medium magnitude of change.</p> <p>Users of the golf course have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero to Medium. The resulting level of effect would range from Moderate and Significant (given the extent of visibility of the Proposed Development from southern parts of the golf course) to No View. The nature of these effects would be long-term (reversible), indirect and neutral to adverse.</p>
Whitehall Golf Course	<p>Figure 6.18 indicates that the north-western end of the course lies within the ZTV however some mature tree cover would partly restrict views of the Proposed Development, over ~7.8km distant. Up to six turbines (six hubs) would be visible in partly restricted views resulting in a Low magnitude of change.</p> <p>Users of the golf course have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero to Low. The resulting level of effect would range from No View to Moderate / Minor and Not Significant given the intermittent and restricted nature of views from the majority of the golf course and intervening distance. The nature of the effects experienced by users of the golf course would be long-term (reversible), indirect and neutral to adverse.</p>
Llantrisant and Pontyclun Golf Club	<p>The receptor is illustrated on Figure 6.18 and is located west of Talbot Green, over ~5.7km distant. With reference to the ZTV at Figure 6.18 much of the golf course lies within the ZTV, however, it is surrounded by mature vegetation and views of the Proposed Development would be largely restricted limited to blade tips only (even in the winter) resulting in a Very Low magnitude of change.</p>

Receptor	Assessment
	<p>Users of the golf course have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero to Very Low. The resulting level of effect would range from No View to Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral.</p>
<p>Creigiau Golf Course</p>	<p>Figure 6.18 indicates that much of the golf course is located within the ZTV, however mature tree cover within and around the perimeter of the course would largely restrict views of the Proposed Development, over ~7.8km distant. Up to seven turbines (varied extent of visibility depending on location within the golf course) would be visible in partly restricted views from parts of the course resulting in a Low magnitude of change.</p> <p>Users of the golf course have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero to Low. The resulting level of effect would range from No View to Moderate / Minor and Not Significant given the intermittent and restricted nature of views from the majority of the golf course and intervening distance. The nature of the effects experienced by users of the golf course would be long-term (reversible), indirect and neutral to adverse.</p>
<p>St Mary's Golf</p>	<p>Figure 6.18 indicates that there is theoretical visibility from much of the golf course, however extensive mature tree cover within and surrounding the perimeter of the golf course would restrict views of the Proposed Development, over ~9.6km distant.</p> <p>Users of the golf course have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall Medium sensitivity. The magnitude of change would be Zero with No View.</p>
<p>Open Access Land within 10km</p>	
<p>Open Access land and PRoW within 5km of proposed turbines</p>	<p>Figure 6.18 indicates that a large proportion of the upland landscape to the north, north-west and west of the Site, above the settlements in the valleys is designated as open access land and also contains numerous PRoW. High points where the Proposed Development would be most prominent include Mynydd Y Glyn and its upper slopes surrounding the Site and Mynydd y Cymmer and Mynydd Dinas to the north-west (Viewpoint 4 – see Appendix 6I). Unrestricted views would also be available from parts of the elevated open access land and PRoW east and west of Ynyshir, Mynydd Brith-weunydd and north of Trealaw and Mount Pleasant, parts of Llantrisant Common (Viewpoint 9 – see Appendix 6I) to the south, and elevated land east (Viewpoint 8 – see Appendix 6I) and west of Pontypridd. Views would also be available of the access tracks and the overhead grid connection from the area of open access land at Mynydd y Glyn.</p> <p>The distribution of local PRoW within 5km of the proposed turbines is shown in Figure 6.16 and extend in all directions around the site with a number of PRoW also crossing Mynydd y Glyn and the surrounding slopes. Many of the local PRoW cross elevated land across Llwynceilyn slopes to the north, Mynydd y Cymmer and Mynydd Dinas to the north-west, Mynydd y Gilfach to the west as well as the lower slopes of the Nant Muchudd Basin to the south and the farmland around Pen-y-coedcae to the south-east. A limited number of PRoW also cross the western slopes of Cefn Eglwysilan above Pontypridd to the east. Viewpoints 1, 2, 3, 4, 6 and 7 can be used as a proxy to demonstrate the scale of the turbines from nearby PRoW where an absence of foreground</p>

Receptor	Assessment
	<p>screening elements and the direction of travel facilitates open views towards the Site.</p> <p>Users of the open access land and local PRow have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium to High value resulting in an overall High sensitivity. The magnitude of change would range from Zero to High, increasing to Very High for users of the PRow which cross Mynydd y Glyn. The resulting level of effect would range from No View to Major and Significant. The nature of the effects experienced by users of the open access land and local PRow would be long-term (reversible), indirect and neutral to adverse.</p>

<p>Open Access land between 5km-10km of the Site</p>	<p>Figure 6.18 indicates that a large proportion of the upland landscape to the north, north-west and west of the Site designated as open access land falls outwith the ZTV. Only a small proportion of open access land to the north-west, south-west, south-east, east and north-east are located within the ZTV. A detailed assessment from individual viewpoints referenced below is at Appendix 6l. Users of the open access land have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium to High value, resulting in an overall High sensitivity. Locations where the Proposed Development would be clearly visible with hub visibility include, Cefn Gwyngul (Viewpoint 12), Mynydd Meio (Viewpoint 14), Mynydd y Gaer (Viewpoint 13), Garth Hill (Viewpoint 15), Cefn Eglwysilan, Craig-Evan-Leyshon Common, Mynydd Eglwysilan, land south-west of Miskin, Tarren Maerdy, Mynydd Maes-teg and Mynydd y Gaer. At these locations, the magnitude of change would range from Zero to Medium. The resulting level of effect would range from No View to Major / Moderate and Significant. The nature of the effects experienced by users of the open access land would be long-term (reversible), indirect and neutral to adverse.</p>
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Assessment of visual effects from Transport Routes (A and B roads)

6.12.16 The assessment of visual effects from Transport Routes (A and B roads) is set out in **Table 6.25**.

Table 6.25 Assessment of visual effects from transport routes (A and B roads)

Receptor	Assessment
Within 10km	
M4	<p>This major route traverses the south of the 10km study area from Pencoed in the west to east of Miskin in the east. With reference to the ZTVs in Figures 6.2 and 6.3 theoretical visibility is intermittent along the stretch of route within 10km, however, screening from a combination of intervening mature roadside vegetation, bunding and built development would screen the majority of views north towards the Proposed Development. There may be glimpsed views from small sections of the route perpendicular to the direction of travel where only blades and blade tips would be visible (and a small number of hubs) beyond ~8.3km distance and seen both fleetingly and intermittently in the context of fast-moving traffic, foreground vegetation, road signage, pylons and other urban development.</p> <p>Road users on the motorway have a Low susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Low sensitivity. The magnitude of</p>

Receptor	Assessment
	<p>change range from Zero to Very Low. The resulting level of effect would range from No Effect to Negligible and Not Significant. The nature of these effects would be long-term (reversible), indirect and neutral.</p>
A470	<p>The majority of the route is a dual carriageway within 10km between the settlements Tongwynlais in the south-east to Aberfan in the north-east. With reference to the ZTVs in Figures 6.2 and 6.3, at least half of the route is located outside the ZTV. Travelling northbound, the first views would be between Nantgarw and Hawthorn where up to six turbines (six hubs) would be theoretically visible along a ~4km stretch of route however much of this section of the route is heavily screened by mature roadside vegetation largely restricting views of the Proposed Development with only glimpsed, filtered views possible in the winter (Low to Zero magnitude). Theoretical visibility would be available around Pontypridd where up to four blades / blade tips would be visible, however, much of this section of route is also screened by mature roadside vegetation with very limited views towards the Proposed Development (Very Low to Zero magnitude). Similarly, from the stretch of route north of Cilfynydd where there would be theoretical visibility for southbound users, visibility of the Proposed Development is largely restricted due to mature roadside vegetation (Low to Zero magnitude).</p> <p>Road users on this dual carriageway have a Low susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Low sensitivity. The magnitude of change from visibility of the proposed turbines ~3.5-8km distant would range from Zero to Low. The resulting level of effect would range from No Effect to Minor and Not Significant from the aforementioned localised sections. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
A4058	<p>The route connects the A405 in Pontypridd to Treorchy within 10km. Viewpoint 5 is located close to this route on the adjacent A4233 in Porth. With reference to the ZTVs in Figures 6.2 and 6.3 only road users along a ~1km section of the route within the built-up area of Trealaw and a ~3km section of route within the built-up area of Porth have the potential for any views of the Proposed Development. The remainder of the route within 10km is outwith the ZTV. Review in the field indicates that built development and tree planting along the route would partially screen views from the majority of the ~1km section within Trealaw with intermittent direct views where up to two blade tips and one hub may be visible, typically over ~4km distance. Views however from the ~3km section of route within Porth would have intermittent views of up to seven turbines (five hubs and two blades) typically over ~1km distance and seen both fleetingly and intermittently in the context of foreground tree planting, road signage, lighting columns and other urban development.</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium to Low value resulting in an overall Medium sensitivity. The magnitude of change would vary from Zero to High. The resulting level of effect would range from No Effect to Major / Moderate and Significant (intermittent views along ~3km section of route at Porth). The nature of these effects would be long-term (reversible), indirect and adverse.</p>
A4233	<p>The A4233 route connects Maerdy to the A4119 at Tonyrefail via the A4058 in Porth within 10km. Viewpoint 5 is on this route at the River Rhonda crossing in Porth. With reference to the ZTVs in Figures 6.2 and 6.3 there would be theoretical visibility along a ~5.5km section of the route as it passes through the built-up areas of Ynyshir, Porth, and Trebanog. The remainder of the route within 10km is outwith the ZTV. Review in the field indicates that built development and tree planting along the route would partially screen views</p>

Receptor	Assessment
	<p>from the majority of a ~2km section within Ynysgir with intermittent direct views where up to one blade and five hubs may be visible in the direction of travel (southbound), typically over ~2.5km distance. As the route nears Porth views open slightly and there would be open views of all seven turbines as the route crosses the bridge over the Rhonda River as illustrated in Viewpoint 5, Figure 6.27c at ~1.8km distance. There is a break in the route where it joins the A4058 in Porth for ~0.5km. The route between Porth (A4058) and Trebanog passes through further built development and roadside vegetation and views would be intermittent and oblique with three hubs and two blades intermittently visible at Porth and up to six hubs visible as the route climbs towards Trebanog at ~1.3km distance. The proposed turbines would be visible in the context of foreground tree planting, road signage, lighting columns and other urban development.</p> <p>Road users have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium to Low value resulting in an overall Medium sensitivity. The magnitude of change would vary from Zero to High. The resulting level of effect would range from No Effect to Major / Moderate and Significant (intermittent views along ~3.5km section of route between Porth and Trebanog). The nature of these effects would be long-term (reversible), indirect and adverse.</p>
<p>A4119</p>	<p>The A4119 connects the M4 (J34) to the A4058 in Tonypany within 10km. A further branch of the route passes parallel to the M4 towards Capel Llanilltern. With reference to the ZTVs in Figures 6.2 and 6.3 only road users along a ~1km section of the route east of Pontyclun, a ~1.1km section at Ynysmaerdy, and intermittent short sections of the route at Tonyrefail, Edmondston and Tonypany have the potential for any views of the Proposed Development. Theoretical visibility is also indicated on the branch to Capel Llanilltern. The remainder of the route within 10km is outwith the ZTV. Review in the field indicates that built development and tree planting along the route would partially screen views from the route as it passes through Ynysmaerdy, Tonyrefail and Tonypany. At Ynysmaerdy, there may be glimpsed views above commercial roadside buildings and in winter views where up all seven hubs would be visible at over ~ 4.5km. At Tonyrefail and Tonypany up to four hubs may be visible in heavily filtered winter views, typically between 3km – 4.5km distance. There would be more open views from the branch of the route to Capel Llanilltern between settled areas and woodland blocks where all seven hubs would be visible in views north. Views from this section would be oblique and at distances of between ~8km- 10km and seen both fleetingly and intermittently.</p> <p>Road users have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium to Low value resulting in an overall Medium sensitivity. The magnitude of change would vary from Zero to Medium/Low. The resulting level of effect would range from No Effect to Moderate and Not Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
<p>A4093</p>	<p>The A4093 connects the A4119 at Tonyrefail to the A4061 at Blackmill within 10km. With reference to the ZTVs in Figures 6.2 and 6.3 only road users along a ~2.5km section of the route west of Tonyrefail, a ~2km section at Glynogwr have the potential for any views of the Proposed Development. The remainder of the route within 10km is outwith the ZTV. Review in the field indicates that built development and tree planting along the route would intermittently screen views from the route to the west of Tonyrefail. However there would be some open views from this section of all seven turbines in the direction of travel eastbound, and at distances of between 2.9km and 4.6km. At Glynogwr, there would be open views for eastbound road users in the</p>

Receptor	Assessment
A4054	<p>direction of travel for ~1km as the route descends east from the settlement where the turbines would be visible at distances of over ~7km. Road users have a Medium susceptibility to change and the views in the direction of the Site are assessed to be of Medium to Low value resulting in an overall Medium sensitivity. The magnitude of change would vary from Zero to High. The resulting level of effect would range from No Effect to Major and Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p> <p>The A4054 runs parallel to the A470 between the settlements Tongwynlais in the south-east and Aberfan in the north-east within 10km. With reference to the ZTVs in Figures 6.2 and 6.3, at least half of the route is located outside the ZTV. Travelling northbound, the first views would be at Treforest Industrial Estate to Upper Boat where up to five blades would be theoretically visible along a ~2km stretch of route however much of this section of the route is screened by mature roadside vegetation and commercial buildings restricting views of the Proposed Development with only glimpsed views possible in the winter (Very Low to Zero magnitude). Theoretical visibility would be available around Pontypridd where up to four blades / blade tips would be visible, however, much of this section of route is also screened by mature roadside vegetation with very limited views towards the Proposed Development (Very Low to Zero magnitude). Similarly, from the stretch of route north of Cilfynydd where there would be theoretical visibility for southbound users, visibility of the Proposed Development is largely restricted due to mature roadside vegetation (Low to Zero magnitude).</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Medium sensitivity. The magnitude of change from visibility of the proposed turbines ~3.5-8km distant would range from Zero to Low. The resulting level of effect would range from No Effect to Minor and Not Significant from the aforementioned localised sections. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
A473	<p>The A473 Connects the A4054 at Upper Boat in the southeast with Pencoed in the southwest within 10km. With reference to the ZTVs in Figures 6.2 and 6.3, there would be theoretical visibility for most of the eastern half of the route within 10km. Travelling westbound, there would be theoretical views for ~4.5km between Ton-teg and Llantrissant however this section of the route is heavily screened by mature roadside woodland and tree planting restricting views of the Proposed Development with only glimpsed views possible in the winter (Very Low to Zero magnitude). Theoretical visibility would be available for a short ~1.5km section of the route as it passes through the west of Talbot Green, however, much of this section of route is also screened by mature roadside vegetation with very limited views towards the Proposed Development (Very Low to Zero magnitude).</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Medium sensitivity. The magnitude of change from filtered winter views of the proposed turbines ~6km distant would range from Zero to Very Low. The resulting level of effect would range from No Effect to Minor and Not Significant from the aforementioned localised sections. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
A4222	<p>The A4222 connects the A473 at Talbot Green with Ystradowen in the south within 10km. With reference to the ZTVs in Figures 6.2 and 6.3, there would be theoretical visibility for most of the route within 10km. However, views along</p>

Receptor	Assessment
	<p>most of this section of the route would be partly screened by buildings and mature roadside vegetation restricting views of the Proposed Development with only glimpsed views possible in the winter (Very Low to Zero magnitude). There would be views for ~0.3km as the route crosses the M4 and gains elevation as it progresses south at a distance of ~8.8km where all seven turbines would be visible on the horizon in the direction of travel, northbound. Views from this section would be slightly filtered by roadside vegetation in places (Low magnitude).</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Medium sensitivity. The magnitude of change from filtered winter views of the proposed turbines ~8.8km distant would range from Zero to Low. The resulting level of effect would range from No Effect to Moderate/Minor and Not Significant from the aforementioned localised sections. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
A472	<p>The A472 connects Nelson and the A470 at Abercynon within 10km. With reference to the ZTVs in Figures 6.2 and 6.3, there would be theoretical visibility for 0.5km at Nelson and for ~0.1km at the A4054 roundabout. Views to the south of Nelson would be mostly screened by intervening middle distance and near distance vegetation such that there would be filtered winter views of up to seven turbines at hub height on the horizon in the direction of travel at a distance of over ~9.2km (Very Low to Zero magnitude). Views would be heavily filtered at the A4054 roundabout by roadside vegetation restricting views of the Proposed Development with only glimpsed views possible in the winter at ~8.2km (Very Low to Zero magnitude).</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Medium sensitivity. The magnitude of change from filtered winter views of the proposed turbines ~8.8km distant would range from Zero to Low. The resulting level of effect would range from No Effect to Moderate/Minor and Not Significant from the aforementioned localised sections. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
B4278	<p>The B4278 connects the A4093 east of Hendryforan with the A4058 at Porth and roughly follows the A4119 to Tonypany and then the A4058 to Porth, splitting either side of the Rhonda River at Porth. With reference to the ZTVs in Figures 6.2 and 6.3, there would be theoretical visibility between Hendryforan and Williamstown (~3.8km) and between Tonypany and Porth (~7km). Views between Hendryforan and Tonyrefil would be mostly screened by the built environment at Tonyrefail and intervening roadside vegetation such that there would be filtered winter views and glimpsed views for much of this section (Very low to Zero magnitude). As the route leaves the settlement at Penhiwfer Road there would be intermittent open views of up to seven turbines on the horizon in the direction of travel (northbound) at a distance of ~2.5km (High to Zero magnitude). Views are again screened by the built environment between Tonypany and Porth. There would be intermittent views of up to three hubs between buildings at Trealaw increasing to five hubs and two blades intermittently visible as the route enters Porth (High to Zero magnitude). More open views would be available as the route travels along Rheola Road and in intermittent views from Porth where the turbines would be visible at a distance of ~1km within a setting including buildings, street signs, street lighting, overbridges (High to Zero magnitude).</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to</p>

Receptor	Assessment
B4512	<p>Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero to High. The resulting level of effect would range from No Effect to Major and Significant from views in Porth and Penhiwfer Road. The nature of these effects would be long-term (reversible), indirect and adverse.</p> <p>The B4512 connects the A4058 at Ystrad with the A4233 at Stanleytown. Viewpoint 11 is located adjacent to this route. The ZTVs in Figures 6.2 and 6.3, indicate theoretical visibility on the eastern half of the route between the shrine and the A4233. Views along this section of the route would be partly filtered by intervening vegetation and buildings, as illustrated in Viewpoint 11, Figure 6.33c, and intervening landform would progressively screen the hubs as the route continues east until only a blade tip would be theoretically visible as the route nears the A4233 (Low to Zero magnitude).</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero to Low. The resulting level of effect would range from No Effect to Moderate/Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
B4595	<p>The B4595 connects the A4119 at Llantrisant with the A4058 at Treforest. The ZTVs in Figures 6.2 and 6.3, indicate theoretical visibility for ~0.8km as the route passes through Church Village, and for ~4km between Tynant and Llantrisant. Views from Church Village would be screened by buildings (Zero magnitude). Views towards the proposed turbines between Tynant and Llantrisant would be mostly screened by roadside vegetation and buildings. There would however be open views for ~0.2km as the route passes to the west of Beddau where all seven turbines would be visible for northbound road users at a distance of 4.7km (Medium magnitude). Views from the rest of the route to Llantrisant would be screened by roadside vegetation and buildings, although there would be some elevated views between buildings at Llantrisant where all seven turbines would be visible on the horizon at ~5.5km distance (Medium/Low to Zero magnitude).</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero along the majority of the route to Medium and Medium /Low in localised views to the west of Beddau and Llantrisant. The resulting level of effect would range from No Effect to Moderate and Not Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>
B4264	<p>The B4264 connects the A4119 at Miskin with the A4222 at Pontyclun. The ZTVs in Figures 6.2 and 6.3, indicate theoretical visibility for ~0.4km between School Road roundabout and the A4119, and for ~0.5km between Clun Avenue and the A4222. Review in the field indicates that views between School Road roundabout and the A4119 would be heavily filtered by roadside and middle-distance treelines (Very Low to Zero magnitude). Views towards the proposed turbines between Clun Avenue and the A4222 would be mostly screened by roadside vegetation and buildings (Very Low to Zero magnitude).</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero along the majority of the route to Very Low in localised views at the western and eastern ends of the route. The resulting</p>

Receptor	Assessment
B4254	<p>level of effect would range from No Effect to Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p> <p>The B4254 connects the A4054 at Edwardsville with the B4255 at Trelewis which it joins and then departs east along Gelligear Road towards Llancaich Fawr Manor within 10km. The ZTVs in Figures 6.2 and 6.3, indicate theoretical visibility for ~0.8km as the route passes through Teharris, and for ~0.2km as the route turns east along Gelligear Road. Review in the field indicates that as the route passes through Teharris views would be mostly screened by roadside buildings, although there would be some intermittent views between buildings of up to 6 turbines on the horizon at a distance of ~9.3km (Low to Zero magnitude). At Gelligear Road, there would be elevated views in the direction of travel (westbound) of all seven turbines on the horizon, although partially filtered by middle distance tree lines, at a distance of ~10km (Low to magnitude).</p> <p>Road users on this route have a Medium susceptibility to change and the views in the direction of the Site on the distant horizon are assessed to be of Low to Medium value resulting in an overall Medium sensitivity. The magnitude of change would range from Zero along the majority of the route to Low in localised views at Teharris and Gelligear Road. The resulting level of effect would range from No Effect to Moderate/Minor and Not Significant. The nature of these effects would be long-term (reversible), indirect and adverse.</p>

Grid Connection

- 6.12.17 The introduction of the overhead section of grid connection and wooden poles would have limited visibility beyond the immediate grid connection route experienced by High sensitivity recreational users of PRoW RH|ANT|95/1 which crosses the route, users of the adjoining access land to the north, residents of an isolated cluster of dwellings along the lower southern slopes of Mynydd y Glyn (although the prevalence of woodland and tree cover would limit the availability of views), and to a lesser extent fleeting views experienced by users of the NCN4 as it follows Pantybrad to the south of the Site. The wooden poles and overhead grid connection would often be viewed against a backdrop of the rising slopes with only a small number of wooden poles extending above the skyline in views from the south. With the exception of the recreational receptors immediately adjacent to the grid connection for which the magnitude of change may locally increase to Medium (giving rise to locally Significant visual effects), the magnitude of change would be Low, and the level of operational effect would therefore be Moderate, adverse, and Not Significant.
- 6.12.18 There would be no long-term visual effects as a consequence of the underground section of grid connection with all landcover reinstated post construction. During the construction phase, road users travelling along the local roads along which the connection is routed would experience some short-term visual disturbance to their views. Residents at some properties within Upper Church Village and Pen-y-coedcae would also have some short-lived views of ground-based construction activities. These would take place within existing highway corridors thereby minimising visual contrast and short-term visual effects are unlikely to exceed Moderate and would be adverse and Not Significant.

6.13 Preliminary assessment of cumulative (inter-project) effects

- 6.13.1 A preliminary cumulative effects assessment (CEA) has been undertaken for the Proposed Development which considers the combined impacts with other developments on the same single receptor or resource (inter-project effects). The detailed method followed in identifying and assessing potential cumulative effects is set out in **Section 2.8** of **Chapter 2**.
- 6.13.2 The landscape and visual cumulative assessment is concerned with the evaluation of the effects that could be generated were the Mynydd y Glyn Wind Farm to become operational along with some or all of the other wind energy developments that are either already operational, have been consented or are proposed i.e. planning application or scoping opinion, within an extended 26 km radius cumulative study area. The wind energy developments that are included are shown on **Figure 6.4** and **Section 1.5** of **Appendix 6A** sets out full details of the methodology for the cumulative assessment.
- 6.13.3 The cumulative landscape and visual assessments have considered the total cumulative effect upon landscape and visual receptors arising from the introduction of the seven turbines at the proposed Mynydd y Glyn Wind Farm into the baseline scenarios of operational, consented and planning application and scoping opinion wind energy developments. The key consideration is the impact of the additional or incremental effect that would be generated by the introduction of the proposed Mynydd y Glyn Wind Farm. In particular, the cumulative assessment considers the potential for the introduction of the Mynydd y Glyn wind turbines into the various cumulative baseline scenarios to increase the cumulative magnitude of change so that the combined level of cumulative effect sustained by a landscape or visual receptor also increases. This increase could potentially result in a cumulative landscape or visual effect that would be significant with Mynydd y Glyn's turbines present that would otherwise be not significant if the Mynydd y Glyn turbines were not present.
- 6.13.4 The landscape effects resulting from the operation of Mynydd y Glyn Wind Farm alone are described in **Appendices 6B to 6H** and **Sections 6.9 to 6.11**. The visual effects resulting from the operation of Mynydd y Glyn Wind Farm alone are described in **Appendix 6I** and **Section 6.12**. Significant landscape and visual effects are summarised in **Section 6.14** in **Table 6.25** and are restricted to a range of receptors within ~10 km of the Proposed Development. As the level of effect experienced in any cumulative scenario cannot be less than that predicted in relation to Mynydd y Glyn alone, it is established that the visual receptors listed in **Table 6.25** would necessarily experience significant visual effects as a result of the incremental effect of the introduction of Mynydd y Glyn Wind Farm into any cumulative scenario as well. The focus of this assessment is therefore to identify which, if any, of the landscape or visual receptors that would not experience significant effects as a result of the introduction of Mynydd y Glyn Wind Farm alone, may experience significant effects as a result of the incremental contribution of Mynydd y Glyn Wind Farm. Where a landscape or visual receptor was predicted to experience a Minor level of effect or below in relation to the baseline scenario, it is not considered that there are any circumstances in which that level of incremental effect could result in significant effects in a cumulative scenario and these receptors are excluded from this assessment. As a result, this assessment is restricted to considering those landscape and visual receptors predicted to experience Moderate (not significant) or Moderate/Minor levels of effect in relation to Mynydd y Glyn Wind Farm alone.
- 6.13.5 The cumulative assessment is based around two development scenarios, as set out in current best practice guidance produced by NatureScot (Assessing the cumulative landscape and visual impact of onshore wind energy developments 2021). Scenario One includes other operational (and under construction) and consented wind energy

developments; Scenario Two includes proposed wind energy developments (subject of a formal planning application or Scoping Opinion/Direction). It should be recognised that in reality, not all of these wind energy developments may be granted planning consent, and as such, the second scenario is a worst-case scenario that may never come to pass.

- 6.13.6 As described in **Section 6.4** of this chapter and set out in **Table 6.6**, the assessment considers 41 wind energy developments within the 26km radius cumulative study area. These wind energy developments and their status reflects the situation prevailing at the time of the cut-off point for inclusion which was September 2022. The Cumulative Landscape and Visual Impact Assessment (CLVIA) only assesses the effects during the operational period. This is because the construction period is comparatively brief and it is not possible to know which of the identified wind energy developments in the cumulative study area would be operational or being constructed during Mynydd y Glyn Wind Farm's construction period.
- 6.13.7 In accordance with the LVIA's underlying approach of assessing the worst-case scenario, the CLVIA assumes that all the wind energy developments proposed at the time of the assessment have become operational. However, it is acknowledged that a CLVIA can never be an exact prediction of the situation that will exist during the 30 year long operational period because it is unlikely that all the proposed wind energy developments will be operational. In addition, whilst new wind energy developments will become operational others will be decommissioned, re-powered or extended.
- 6.13.8 As specified in the methodology set out in **Section 1.5** of **Appendix 6A**, the cumulative visual assessment considers simultaneous visibility i.e. where turbines at more than one wind energy development could be visible from a fixed viewpoint in both simultaneous or fixed views (one 90° field of the visual receptor's view) or successive views (when the visual receptor turns through a full 360°) as well as sequential visibility when receptors would have the potential to have views of more than one wind energy development as they travel along a route e.g. a main road, long distance trail or a national cycle route.
- 6.13.9 With regard to potential cumulative effects upon landscape designations and landscape character (in the form of the local landscape designations and the Brecon Beacons National Park), consideration has been given to the potential for wind turbines to generate the following types of cumulative effect:
- The wind energy developments could be perceived as separate isolated man-made features within or from a landscape designation in a manner that would be too infrequent or of insufficient scale or prominence for their turbines' presence to be considered to undermine the valued attributes of a landscape designation;
 - The wind energy developments could be perceived as becoming a characteristic of a landscape designation but would not attain sufficient prominence to be considered to alter the valued attributes of a landscape designation – this is referred to as a 'landscape with wind farms'; and
 - The wind energy developments could be perceived as becoming a dominant characteristic of part of a landscape designation, potentially redefining it as a 'wind farm landscape' and/or as conflicting with the valued attributes of a landscape designation.
- 6.13.10 **Figures 6.20 – 6.22** illustrate the ZTVs for the wind energy developments within the cumulative study area that are most likely to contribute to significant effects with Mynydd y Glyn, considering proximity and turbine size. These figures show the blade tip height ZTVs for each wind farm group in relation to the blade tip ZTV for Mynydd y Glyn Wind Farm. When reviewing the ZTV figures it should be noted that although the cumulative study area has a 26km radius, the radii for the ZTVs for the individual wind energy

developments has been adjusted to the appropriate study area for the turbine height as set out in LANDMAP Guidance Note 46 prepared by NRW.

- 6.13.11 The CLVIA has been aided by the production of 360° cumulative wireframes from the same 19 viewpoints that have been used in the visual assessment. The figures show wireframes for each quadrant of the compass to allow an appreciation of the other wind energy developments that could be visible to visual receptors at or close to the viewpoint's location. In these views Mynydd y Glyn's turbines might be visible in the same 90° field of views as other turbines i.e. simultaneous views, or in other directions around the full potential 360° field of view i.e. successional views. Where visibility of wind turbines would be restricted by intervening buildings or planting this is recorded in the Viewpoint Assessment at **Appendix 6I**. The viewpoint locations Nos. 1-16, 18 and 19 are shown in **Figures 6.2 & 6.3**, and viewpoint No. 17 from the Brecon Beacons National Park is shown in **Figure 6.13**. The cumulative wireframes are shown in **Figures 6.23 – 6.41**.

Scenario One: Cumulative Landscape Effects

- 6.13.12 In Scenario One, the proposed development at Mynydd y Glyn Wind Farm would be physically separate and distinct from all other cumulative wind energy developments. As such, it is considered that there would be no significant cumulative effect upon landscape elements and patterns.
- 6.13.13 **Section 6.11** and **Table 6.16** sets out the landscape effects upon local landscape designations (**Figure 6.14**) predicted to result from the operation of Mynydd y Glyn Wind Farm together with the operational wind farms that form part of the baseline scenario for the main LVIA. That assessment identified that significant landscape effects would be experienced by the host 1. Mynydd y Glyn and Nant Muchudd Basin Special Landscape Area (SLA) and parts of two nearby SLAs i.e. 19. Llwynceilyn Slopes SLA and 18. Cwm Clydach SLA.
- 6.13.14 Three operational wind energy schemes are located within the three local landscape designations and up to ~5km from Mynydd y Glyn (i.e. turbines at Llwynceilyn Farm, Mynachdy Farm and West of Rhiwfelin Farm). Whilst these operational turbines have a minor incremental role in each of the effects upon the landscape designations, the significance or otherwise of the effects is not dependent upon the interaction between these operational wind turbines and Mynydd y Glyn, and significant effects would arise in relation to Mynydd y Glyn alone.
- 6.13.15 The fact that local landscape designations cover the majority of elevated land above the settled valleys within the study area including extensive tracts of land occupied by commercial scale windfarms including Taff Ely and Mynydd Portef and their respective extensions, means this degree of landscape change would be in accordance with the pattern of landscape change within and immediately adjacent to local landscape designations, in order to contribute towards Wales renewable energy targets.
- 6.13.16 In Scenario One a reduced magnitude of landscape change has been assessed to occur as a result of the operation of Mynydd y Glyn upon 15 additional SLAs where Moderate/Minor effects that are Not Significant have been recorded, as described in **Section 6.11** and **Table 6.16** (i.e. Mynydd y Cymmer SLA, Mynydd Troed y Rhiw Slopes SLA, Coed-yr-Hendy and Mwyndy SLA, Llantrisant Surrounds SLA, Mynydd Hugh and Llantrisant Forest SLA, Efail Isaf, Garth and Nantgarw Western Slopes SLA, Craig yr Allt; Taff Vale Eastern Slopes SLA; Treforest Western Slopes SLA, Mynydd Eglwysilan SLA, Northern Uplands SLA, Mynydd y Gaer SLA, Pontygwaith SLA, Ely Valley and Ridge Slopes SLA, and Garth Hill and Pentyrch Ridges SLA). With reference to **Figure 6.14** these local landscape designations lie between ~1.2km and ~10km of the Mynydd y Glyn Wind Farm. Of these designations, significant landscape effects are predicted to already

occur as a result of operational windfarms (Pant-y-Wal, Fforch Nest, Taff Ely and Mynydd Porftref) within three of the SLA (Mynydd y Gaer SLA, Mynydd Hugh and Llantrisant Forest SLA, and Northern Uplands) as a result of the SLA hosting or lying in close proximity to an operational wind farm. From the remaining SLA designations, the addition of the Proposed Development would not raise the overall magnitude of turbines present to a level where any Significant landscape effects would occur when considering the presence of all baseline wind farm schemes (both operational and consented).

- 6.13.17 With reference to **Figure 6.4**, 13 operational and two consented wind energy schemes lie within ~5km to ~10km of the Proposed Development. These schemes already have, or would have, a defining role upon landscape character at a distance of more than 5km from the Mynydd Y Glyn Wind Farm. As set out in the baseline LVIA there is clear landform and land-use separation between these baseline schemes and the Proposed Development by virtue of major transport corridors and urban development in the intervening valleys. This separation results in a low or very low magnitude of indirect effects upon landscape character that the Mynydd y Glyn Wind Farm would contribute to, beyond ~5km.
- 6.13.18 In conclusion, the absence of significant cumulative landscape effects does not differ to those predicted in relation to the baseline scenario used for the main body of the LVIA, where it is assessed that the indirect effects from the Mynydd y Glyn Wind Farm on local landscape designations beyond ~5km would not be significant. The established overall pattern of separation distance and topography between operational wind farms consists of a separation of ~4 to ~5km between Taff Ely/Mynydd Portref, Pant-y-Wal/Fforch Nest and Ferndale wind farms, would be reflected in the location of the Proposed Development.
- 6.13.19 With regard to potential cumulative effects upon the Brecon Beacons National Park, Viewpoint 17 (**Figure 6.39**) illustrate the weakness of the visual effects pathway between the designation and Mynydd y Glyn Wind Farm and also the minor incremental effect that the geographically limited presence of the Mynydd y Glyn Wind Farm would have upon this nationally designated landscape. Consequently under Scenario One the introduction of Mynydd y Glyn Wind Farm would not result in any significant cumulative landscape effects upon the Brecon Beacons National Park.

Scenario One: Cumulative Visual Effects

- 6.13.20 In the majority of cases, the potential for visibility of multiple wind energy schemes from settlements is limited by surrounding built development and tree cover, however where multiple schemes are potentially visible from the same location in parts of Tonyrefail, Porth, and Blaenclydach (as demonstrated from Viewpoints 1, 5, and 10) the visibility of operational and consented wind energy schemes would have a modest visual impact (not significant) and it is the addition of the Mynydd y Glyn Wind Farm in its own right that would result in a significant visual effect.
- 6.13.21 Locations where there is the potential for visibility of multiple wind farms and the Proposed Development include some recreational routes and destinations located on elevated land. Review of the cumulative visualisations from all viewpoints indicates that in some locations operational wind turbines from more than one development already have a significant visual effect and the addition of the Mynydd y Glyn turbines would have a non-significant contribution to the overall magnitude of turbine presence, as illustrated at the Shrine of Our Lady of Penrhys in Viewpoint 11 (**Figure 6.33d-e**). At other locations there is the potential for Significant cumulative effects from the addition of the Proposed Development, however the principal contributor to the significant visual impact is the operational or consented scheme, as illustrated at Viewpoint 13 along the Taff Ely Ridgeway Walk near Mynydd Maendy (**Figure 6.35d-g**).

- 6.13.22 Overall, due to the significant separation and topographical changes between the Proposed Development and the other wind energy schemes, it is assessed that there is no potential for the addition of the Mynydd y Glyn Wind Farm to result in significant visual effects where these would not arise in relation to either Mynydd y Glyn or one or more of the other wind energy schemes alone.

Scenario Two: Cumulative Landscape Effects

- 6.13.23 This section considers the incremental landscape effects that may arise from the introduction of Mynydd y Glyn Wind Farm into a scenario in which all the operational and consented wind energy schemes in the cumulative study area are considered, together with the proposed wind energy schemes i.e. planning application and Scoping Opinion/Direction. It is particularly concerned with the potential for the operation of Mynydd y Glyn Wind Farm to result in the expansion of any significant effect upon landscape designations as a result of an interaction/s with proposed wind energy schemes.
- 6.13.24 The nearest additional wind energy scheme that would be introduced into this scenario is the scoping scheme at Twyn Hywel, approximately 5.2km to the northeast of the Mynydd y Glyn Wind Farm. Whilst the introduction of this 20 turbine Wind Farm (with turbines up to 200m to tip) would have significant landscape effects within the Taff Vale Eastern Slopes SLA and Mynydd Eglwysilan SLA, the visual effects pathway between this Scoping scheme and the Mynydd y Glyn Wind Farm is relatively weak, by virtue of the valley of the River Taff as illustrated in the ZTV in **Figure 6.21**, and further reinforced by major transport corridors and urban development, including the town of Pontypridd illustrated in the Viewpoint 8 cumulative visualisations (**Figures 6.30d-g**). Consequently, there would be no significant cumulative landscape effect between the Proposed Development and the scoping scheme at Twyn Hywel.
- 6.13.25 At separation distances in excess of 20km, the relationship between the other additional wind farms included in this scenario at Mynydd Carn-y-Cefn (In Planning) and Pen March, Manmoel, Abertillery and Mynydd Llanhilleth (In Scoping) would be too weak to give rise to any significant cumulative landscape effects with the Mynydd y Glyn Wind Farm.

Scenario Two: Cumulative Visual Effects

- 6.13.26 As described in relation to Scenario One, field observations have confirmed the general lack of a strong visual relationship between baseline wind energy schemes and locations at which the Mynydd y Glyn Wind Farm may give rise to a Moderate (not significant) or Slight/Moderate level of visual effect. The only additional wind energy scheme included in Scenario Two that could have a contribution to significant effects is the Twyn Hywel Scoping scheme that is considered in more detail below, noting all other schemes in planning or at Scoping stage (i.e. Mynydd Carn-y-Cefn, Pen March, Manmoel, Abertillery and Mynydd Llanhilleth) are located more than 20km to the northeast of the Mynydd y Glyn Wind Farm with the intervening land at the mid-point comprising largely lower lying land and urban development in the valleys including the settlements of Ystrad Mynach, Gelligear and Pontllanfraith. Consequently, it is assessed that there is no potential for significant cumulative effects as a result of the addition of the Proposed Development.
- 6.13.27 There are limited opportunities for visibility of the Scoping scheme at Twyn Hywel and the Mynydd-y-Glyn windfarm, a conclusion reached with reference to the Cumulative ZTV at **Figure 6.21** and key viewpoints located between the two developments i.e. Viewpoints 6 and 14. In relation to Viewpoint 6 (**Figure 6.28**) from the edge of Pen-y-Coedcae and Viewpoint 14 from the summit of Mynydd Meio (**Figure 6.36**) there would be visibility of both Twyn Hywel that would be visually significant in its own right, and Mynydd y Glyn that

would also be significant in its own right. The notable horizontal separation of the two schemes that would only be visible successively (i.e. if somebody turned their head) indicates the nature of the cumulative effect and the ~5.2km separation of the two schemes, similar to the established pattern of operational wind farms elsewhere in the study area, noting the separation between Taff Ely/Mynydd Portref and Pant-y-Wal/Forch Nest wind farms is substantially less, at ~3.4km.

- 6.13.28 The assessment above has illustrated the nature of the interaction between Mynydd y Glyn Wind Farm and other proposed wind energy schemes from receptors where the greatest potential for significant cumulative visual effects to be experienced. It is therefore concluded that the introduction of Mynydd y Glyn Wind Farm into this scenario would not result in significant visual effects where these would not arise in relation to either Mynydd y Glyn or one of the other wind farm schemes alone.

6.14 Preliminary significance conclusions

- 6.14.1 A summary of the significant effects as a result of the preliminary landscape and visual impact assessment is provided in **Table 6.26**. The magnitude of change and level of effect recorded in **Table 6.26** represents the maximum level recorded for the receptor and as such may only apply to a localised part of a route, settlement, or open space. The effects would also only apply to the latter stages of the construction and the full operational phase of the Proposed Development.

Table 6.26 Summary of significant landscape and visual effects

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
LANDMAP – Visual and Sensory Aspect Areas				
CYNONVS142 Mynydd y Glyn	High-Medium	Very High to Zero	Major Significant to No Effect	The Proposed Development is located within the centre of the VSAA and the ZTVs demonstrate that the hubs and blades of the proposed turbines would also be visible from a large proportion of the VSAA. There are no other wind turbines within the VSAA, however the Pant-y-Wal Wind Farm lies ~0.1km to the north/west and Taff Ely Wind Farm ~1.25km to the south. The presence of the proposed turbines and associated movement would be a new urbanising influence within the VSAA that would contrast with the relatively remote upland landscape and some smaller scale elements in the landscape including scattered farmsteads. The magnitude of change would range from Very High for the central part of the VSAA, to Zero for the parts of the VSAA outside the ZTVs, most notably to the east.
CYNONVS436 Mynydd Gaer	High-Medium	Medium to Zero	Major/Moderate to Moderate Significant to No Effect	ZTVs demonstrate that the hubs and blades of the proposed turbines would be visible from within a moderate proportion of the VSAA at a minimum distance of ~3.0km. There are many existing wind turbines within the VSAA including the Taff Ely Wind Farm. Views of the proposed turbines and associated rotor movement would therefore be an incremental indirect influence within this VSAA. The Proposed Development would introduce an additional urbanising element in views and the magnitude of change would range from Medium for the parts of the VSAA within the ZTVs, to Zero for the parts of the VSAA outside the ZTVs.
CYNONVS496 Mynydd Maes-Teg	High-Medium	Medium to Zero	Major/Moderate to Moderate Significant to No Effect	ZTVs demonstrate that the hubs and blades of the proposed turbines would be visible from within a moderate proportion of the VSAA at a minimum distance of ~4.4km. There are many existing wind turbines within the VSAA including the Pant-y-Wal and extension wind farms and the Fforch Nest Wind Farm. The presence of the proposed turbines and associated movement would therefore introduce an additional urbanising

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				element in views, incremental to views of closer operational wind turbines in the VSAA. The magnitude of change would range from Medium for the parts of the VSAA within ZTVs, to Zero for the parts of the VSAA outside the ZTVs.
CYNONVS317 Mynydd Eglwysilon & Mynydd Meio	High-Medium	Medium to Zero	Major/Moderate to Moderate Significant to No Effect	ZTVs demonstrate that the hubs and blades of the proposed turbines would be visible from within a moderate proportion of the VSAA at a minimum distance of ~5.4km. There are a small number of operational wind turbines within the VSAA. The presence of the proposed turbines and associated movement would represent an incremental urbanising element in views from the VSAA set beyond the urban extent of Pontypridd in the valley. The magnitude of change would range from Medium for the parts of the VSAA within ZTVs, to Zero for the parts of the VSAA outside the ZTVs.
<u>LANDMAP – Historic Landscape Aspect Areas</u>				
CYNONHL649 Nant Castellau and Nant Muchudd	Medium	Medium to Zero	Moderate Significant to No Effect.	ZTVs demonstrate that the hubs and blades of the proposed turbines would be visible from within a large proportion of the HLAA at a minimum distance of ~0.3km. There is one existing wind turbine within the HLAA and there are many wind turbines south-west of the HLAA at Taff Ely the closest at ~1.5km. There would be no direct effects upon any of the attributes for which this landscape is valued including the listed buildings and scheduled monuments (Pen-y-Coedcae Camp and Lle'r Gaer). The presence of the proposed turbines and associated movement would be a new indirect man-made vertical influence on the HLAA and would have an indirect adverse effect upon the appreciation of the varied medieval field enclosure pattern and dispersed farmsteads. The magnitude of change would range from Medium for the parts of the HLAA within the ZTVs and directly adjoining the Proposed Development to the south and west, to Zero for the limited parts of the HLAA outside the ZTVs.

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
CYNONHL378 Rhondda Settlement Corridor	High - Medium	Medium to Low to Zero	Moderate Significant to No Effect	ZTVs demonstrate that the hubs and blades of the proposed turbines would be visible from within a moderate proportion of the HLAA at a minimum distance of ~0.8km. There are no existing wind turbines within the HLAA, however there are many wind turbines surrounding the HLAA including Fforch Nest scheme to the west comprising of 11 turbines the closest at ~1.5km, and 2 turbines to the east at Llwyncelyn Farm ~600m from the HLAA. Additionally, the Rhondda Settlement Corridor is already heavily urbanised with modern buildings and major transport corridors. The presence of the proposed turbines and associated movement would therefore be an indirect man-made vertical influence, contrasting with the tightly integrated urban settlement. The historic character that forms the core of the Rhondda Historic Landscape designation is still dominated by development from the 19 th and 20 th century that has recently evolved through closures of collieries and development of new housing. There would be no direct effects upon any of the attributes for which this landscape is valued for which this landscape is valued, including numerous listed buildings within the HLAA. The magnitude of change would range from Medium to Low for the parts of the HLAA within ZTVs, to Zero.

Local Landscape Designations

Mynydd y Glyn and Nant Muchudd Basin SLA	High-Medium	High-Medium to Zero	Major Significant to No Effect	This SLA would host all seven proposed turbines plus the access tracks and the ancillary elements and would therefore experience some direct effects. The operational turbines would be dominant landscape elements across part of the the SLA, with the exception of some small, largely peripheral areas which lie outside of the ZTV. The small irregular field pattern within the Nant Muchudd Basin would be maintained although may become dominated by the turbines due to their scale and proximity. as indicated by the photomontage from Viewpoint 2 in Figure 6.24 . The un-industrialised nature of the landscape is also a primary landscape quality which would be altered by the Proposed Development whilst the proposed turbines would also be clearly visible in the views from the settlements referenced in the primary landscape qualities as featuring Mynydd y Glyn as a backdrop in outwards views. The alteration to a
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Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				proportion of some of the primary landscape qualities and features as a consequence of the introduction of the Proposed Development would give rise to a Medium to High magnitude of change across a large proportion of the SLA which would change to a Low to Zero magnitude across areas of blade tip or no invisibility.
Llwyncelyn Slopes SLA (eastern half)	Medium	Medium to Zero	Moderate Locally Significant to No Effect	There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that nearly all of the SLA coincides with the ZTV at a minimum distance of ~1.3km. At this distance, the scale of the proposed turbines could give rise to a high or high/medium or medium magnitude of visual change as demonstrated in the photomontage from Viewpoint 3 (Figure 6.25), which is located within this SLA. Whilst the majority of the primary landscape qualities and features for which this area has been designated would not be altered by the Proposed Development, the scale of the turbines may dominate the smaller-scale field pattern which is prevalent across this SLA to the east of Cwn Hafod and consequently may indirectly influence the management guideline relating to the conservation of the “ <i>pattern of farmland, unspoilt by industrialisation</i> ” ³² .
Cwm Clydach (southern part)	Medium	Medium to Zero	Moderate Locally Significant to No Effect	There would be no direct landscape effects arising from the Proposed Development. Reference to Figure 6.14 indicates that a moderate proportion of the SLA coincides with the SLA. From the closest area of SLA to the north of Penygraigwen/ Pantygraig Wen at a minimum distance of ~2.9km, the small scale “ <i>pattern of quiet farmland with irregular fields</i> ” ³² could become dominated by the scale of the turbines to the south. Whilst this landscape is already crossed by high voltage overhead lines and consequently large-scale vertical infrastructure already plays a landscape role, there remains a small discrete area where this dominance could occur and which may indirectly influence the management guideline relating to “ <i>secluded farmed character within the valley</i> ” ³² . Effects within the southern parts of the SLA to the north of Penygraigwen/ Pantygraig Wen would therefore be Moderate and locally Significant.

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				From elsewhere within the SLA, the increasing separation distance means that the proposed turbines would not be of a scale that would dominate the smaller scale field pattern and their presence would not significantly affect the stated primary landscape qualities and features for which this part of the landscape has been designated.
Visual Receptors: Settlements				
Residents in the settlement of Trehafod	High	Medium to Zero	Major/Moderate Significant to No Effect	The settlement occupies the lower valley slopes and valley base to the north-east of the Proposed Development and is located ~1km distance at the closest point. The majority of the settlement lies within the ZTV and at least half of the terrace dwellings within the settlement are orientated south-west towards the Proposed Development, however, most residents would have restricted views due to screening by other dwellings and rising topography to the south of the village. A limited number of south-west and south facing dwellings would have views of the Proposed Development where views are slightly open and not restricted by other dwellings. Where visible from within the settlement, up to one hub and three blade tips would be visible beyond the wooded slopes of Mynydd y Glyn resulting in a Medium magnitude of change.
Residents in the settlement of Porth (Cymmer, Glynlach, Trebanog and Llwynceilyn)	High	High to Zero	Major or Major/Moderate Significant to No Effect	<p>The linear town is ~3.5km long and comprises the small settlements of Cymmer, Glynlach, Trebanog and Llwynceilyn. Much of the town occupies the valley base and lower valley slopes to the north-west of the Proposed Development with much of Llwynceilyn and the outer areas of Trebanog located on higher ground. The closest proposed turbine would be ~0.8km from the eastern edge of the settlement (Trebanog).</p> <p>Much of the settlement is located within the ZTV. From many residential properties within the town there would be varied visibility of the Proposed Development, although this is dependent on individual dwelling orientation and other local factors including intervening built development. The greatest visibility would be from parts of the settlement located at higher ground and to the north of the A4233 and A4058 and include parts of Cymmer, Trebanog and Llwynceilyn. From</p>

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				much of these areas, where there are unrestricted or largely unrestricted views, up to six turbines would be theoretically visible (six hubs and one blade) beyond the slopes of Mynydd Y Glyn resulting in a High magnitude of change. From the lower valley parts of the settlement and including most of Glynlach, visibility of the Proposed Development would be more restricted due to topography, screening by other dwellings and localised vegetation. However, where visible, up to two turbines (two hubs) would be visible above and beyond the slopes of Mynydd Y Glyn resulting in a Medium magnitude of change.
Residents in the settlement of Ynyshir	High	Medium to Zero	Major/Moderate Significant to No Effect	This linear settlement is ~1.5km long and occupies the lower valley slopes and valley base of Mynydd Troed-y-rhiw to the north-west of the Proposed Development. It continues north from Porth and is located ~2km distance at the closest point to the Proposed Development. The majority of the settlement lies within the ZTV, however the majority of terrace dwellings are orientated east-west and consequently restricted views would predominantly be available. Only a limited number of south facing dwellings which are not restricted by other dwellings would have views of the Proposed Development. Oblique views from would be available from the gardens of many properties, particularly from those on rising land on the eastern and western sides of the settlement. Where visible from within the settlement, up to seven turbines (six hubs and one blade) would be visible beyond the slopes of Mynydd y whilst the extent of visibility from the valley base of the settlement would be more limited.
Residents in the settlement of Wattstown	High	Medium-Low to Zero	Major/Moderate to Moderate Significant to No Effect	The settlement occupies the valley slopes of Cefn Gwyngul to the north-west of the Proposed Development and is located ~4km distance at the closest point. The upper, more elevated parts of the settlement lies within the ZTV and much of the terrace dwellings within the settlement are orientated south-east towards the Proposed Development. However, some of the residents would have restricted views due to screening by other dwellings and localised vegetation. A number of south-east and south facing dwellings would have views of the Proposed Development where views are more open and not restricted by other dwellings. Where visible from more elevated parts within the settlement, up to seven

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				turbines (seven hubs) would be visible beyond the slopes of Mynydd y Glyn resulting in a Medium-Low magnitude of change. The extent of visibility from lower parts of the settlement would be more limited (Low to Zero magnitude of change).
Residents in the settlements of Glyntaff, Rhydyfelin (Upper Boat), Hawthorn	High	Medium-Low to Zero	Major/Moderate to Moderate Significant to No Effect	These continuous linear settlements occupy the valley base and lower valley slopes of Mynydd Meio and Cwm Taf to the east / south-east of the Proposed Development and are located ~4.3km distance at the closest point. Much of Hawthorn and Glyntaff are outwith the ZTV with most of Rhydyfelin within the ZTV. Much of the terrace dwellings within these settlements are orientated south-west / south with oblique views towards the Proposed Development. A large number of residents would have restricted views due to screening by other dwellings and localised vegetation. A number of dwellings in Rhydyfelin located on high ground would have views of the Proposed Development where views are more open and not restricted by other dwellings. Where visible from more elevated parts within Rhydyfelin, up to seven turbines (six hubs and one blade) would be visible beyond the pylons and wooded slopes of Mynydd y Glyn resulting in a Medium-Low magnitude of change. The extent of visibility from lower parts of Rhydyfelin and all of Glyntaff and Hawthorn would be more limited (Very Low to Zero magnitude of change). The Significant effects would be limited to elevated parts of Rhydyfelin with the remainder of the settlement and all of Glyntaff and Hawthorn experiencing not significant effects.
Residents in the settlements of Tynant and Beddau	High	Medium to Zero	Major/Moderate Significant to No Effect	This group of settlements are located ~4.3km distance south-east of the Proposed Development at their closest point. The majority of the settlements are located within the ZTV, however the majority of dwellings would have restricted views towards the Proposed Development due to their orientation and / or intervening screening from other dwellings and localised vegetation. Where visible from the outer extremities of the settlements and from some open areas within the settlements where views are not completely restricted, up to seven turbines (seven hubs) would be visible beyond the wooded slopes of Mynydd Y Glyn. Oblique views from would also be available from the

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				gardens of some properties, particularly those from the northern and western sides of the settlements.
Residents in the settlements of Llantrisant, Talbot Green and Ynysmaerdy	High	Medium (Llantrisant) to Low (Ynysmaerdy and Talbot Green) to Zero	Major/Moderate Significant (Llantrisant) to No Effect Moderate Not Significant (Ynysmaerdy and Talbot Green) to No Effect	<p>These three settlements are located close to one another on both sides of the A4119 south and west of Llantrisant Common. The closest proposed visible turbine would be ~4.4km from the northern edge of Ynysmaerdy. Much of Ynysmaerdy, the northern edge of Llantrisant and western part of Talbot Green are located within the ZTV. From many residential properties within these settlements there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and vegetation. Much of Talbot Green and Ynysmaerdy is surrounded by mature vegetation such views would towards the Proposed Development would be filtered, particularly in the winter from northern and western parts of the settlement. Where visible, up to six turbines would be visible through gaps in vegetation or built-form resulting in a Low magnitude of change.</p> <p>From Llantrisant, there would be some open, elevated views from the northern edge of the settlement where up to seven turbines (seven hubs) would be visible on Mynydd Y Glyn resulting in a Medium magnitude of change. Visibility from the remainder of the settlements would be restricted due to intervening screening.</p>
Residents in the settlement of Tonyrefail	High	High to Medium to Zero	Major to Major/Moderate Significant to No Effect	<p>This town is located between Porth and Llantrisant and also comprises the small areas of Bryngolau, Ty'n-y-bryn, Hendreforgan and Thomastown. The closest proposed turbine would be ~1km from the eastern edge of the settlement. Much of the settlement including Bryngolau, Hendreforgan and Ty'n-y-bryn are located within the ZTV, with only the north-western edge of Thomastown within the ZTV. From many residential properties within the town there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and localised vegetation. The greatest visibility of the Proposed Development would be from parts of the settlement located on the eastern parts / edges and in central areas</p>

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				where there are unrestricted or partly unrestricted views. From these areas, up to seven turbines would be theoretically visible (six hubs and one blade) beyond the slopes of Mynydd Y Glyn.
Residents in the settlements of Penrhiwfer and Edmonstown	High	Zero to Medium to Zero	Major/Moderate Significant to No Effect to	These small settlements are located at the end of the long linear settlement of Tonypandy ~2.1km north-west of the Proposed Development. Much of these settlements occupy the valley base and lower valley slopes of Mynydd Dinas and Mynydd Pen-y-graig. The majority of the settlements are located within the ZTV, however, more than half of the terrace dwellings within the settlements are orientated north-south away from the Proposed Development and most residents would have restricted views due to screening by other dwellings and localised vegetation. There would be a number of east facing dwellings and some gardens of dwellings would have views of the Proposed Development where views are slightly more open and not restricted by other dwellings. Where visible from within the settlement, up to seven turbines (six hubs and one blade) would be visible beyond the slopes of Mynydd y Glyn.
Residents in the settlement of Tonypandy (Trealaw, Llwynypia and Penygraig)	High	Medium to Zero	Major/Moderate Significant to No Effect	Tonypandy is a large, linear settlement ~4-5km long located between Porth and Rhondda ~2.8km north-west of the Proposed Development at its closest point. It also comprises the smaller settlements of Trealaw, Llwynypia, Penygraig, Clydach Vale and Blaen Clydach. Much of this settlement occupies the valley base and lower valley slopes of Mynydd Brith-weynydd, Mynydd Pwllyrhebog, Llwynypia Mountain and Mynydd Pen-y-graig. The upper, more elevated parts of the settlement (primarily Clydach Vale and Blaen Clydach, and elevated areas of Trealaw and Penygraig) lie within the ZTV with only the southern part of Llwynypia located within the ZTV. From many residential properties within the settlement there would be varied visibility of the Proposed Development, although this depends on individual dwelling orientation and other local factors including intervening built development and localised vegetation. The greatest visibility of the Proposed Development would be from elevated parts of the settlement where there are largely unrestricted or partly unrestricted views. Where visible, up to seven turbines (seven

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				hubs) would be visible beyond the slopes of Mynydd y Glyn resulting in a Medium magnitude of change. The extent of visibility from lower parts of the settlement would be more limited (Low to Zero magnitude of change).
Visual Receptors: recreational routes				
Recreational users of the Penrhys Pilgrimage Way	High	High to Zero	Major Significant to No Effect	<p>Within the 10km study area the Penrhys Pilgrimage Way passes between Pentyrch in the southeast and its termination at Penrhys, passing~0.9km west of the Site.</p> <p>The majority of the route within 5km lies within the ZTV but becomes fragmented between Pentyrch and north of Talbot Green and as the route descends towards Trealaw. Views would be partially screened by woodland, intervening vegetation and the built environment in places with potential open views to the northwest of Groes-faen for approximately 0,5km and as it joins the Taff Ely Ridgeway Walk for approximately 1km. To the north of Llantrisant, the route leaves the low-lying valley and traverses an undulating landscape with elevated views and occasional screening or filtered views from hedgerows, field boundary trees and woodland areas. The magnitude of change ranges between Medium at Viewpoint 9 to High at Viewpoints 2, 1, and 4 as the route passes close to the Proposed Development. As the route descends into the Rhondda Fawr valley and crosses the Rhondda River, there would be no visibility of the Proposed Development. Visibility resumes as the route climbs out of the Rhondda valley to the north of Trealaw and traverses Mynydd Troed-y-rhiw (328m AOD). Beyond this the route follows a lower lying contour to the west of Pontygwaith and views would be screened by landform until the route terminates at Ffynnon Fair (St Mary's Well), adjacent to Viewpoint 11 where there would be a Low magnitude of change.</p>
Recreational users of the Cistercian Way (Wales)	High	Medium-Low to Zero	Major/Moderate to Moderate Significant to No Effect	<p>Within the 10km study area the Cistercian Way (Wales) passes between Caerphilly in the southeast and Bwlch Mountain to the northwest, passing~1.8km northeast of the Site at its closest point.</p>

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Recreational users of the Glamorgan Ridgeway Walk / Taff-Ely Ridgeway Walk	High	Medium-Low to Zero	Major/Moderate to Moderate Significant to No Effect	<p>Elevated sections of the route to the east, north and northwest coincide with the ZTV Theoretical visibility to the east is indicated between Groeswen and Pontypridd. In this section the route follows the Eglwysilan Road (joining with the Rhymney Valley Ridgeway Walk for some of the route) and minor roads at Pontypridd. Visibility would be partially screened by roadside and surrounding vegetation northwest of Groeswen for ~3.1km, there would be elevated open views for approximately 2km (Low / Medium magnitude of change) before the route passes through wooded vegetation along Penheol Ely Road on its descent towards Pontypridd. Between Pontypridd and Mynachdy there would be No View of the Proposed Development apart from potential glimpsed winter views at Cribyn-du. Northwest of Mynachdy, theoretical visibility is indicated until east of Stanleytown. However, this part of the route passes through fields with tree lined boundaries and plantation forest and therefore views along this section would be heavily filtered (Low to Zero magnitude). To the west of Stanley theoretical visibility is again indicated as the route passes Viewpoint 11 on its ascent of the middle and upper slopes of Mynydd Ty'n-tyle (429m AOD) (Low magnitude). There would be No View as the route skirts to the south and southwest of the summit, but theoretical visibility as it turns southwest and follows a southeast facing slope towards Ton Pentre and again as it climbs towards Mynydd Maendy (Low to Very Low magnitude).</p> <p>Within the 10km study area the Glamorgan Ridgeway Walk passes between Taff's Well to the southeast and Blackmill to the southwest of the study area, passing~4.6km south of the Site at its closest point. ZTV coverage is fragmented along the route and indicated on elevated sections where the ridgeline allows views north towards the Proposed Development. From east to west, the first area of theoretical visibility is indicated as the route passes Garth Hill (Viewpoint 15) (Medium-Low magnitude). From here there would be limited views as the route passes through dense woodland west of Soar (Very Low to Zero magnitude). As the route passes north and northwest of Rhiwsaeson there would be some intermittent views between woodland areas (Low magnitude). Theoretical visibility to the west of Ynysmaerdy would be mostly</p>

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				screened as the route passes through Llantrisant Forest. West of this, there would be views towards the Proposed Development as the route traverses Mynydd Meiros and then very limited theoretical visibility due to intervening landform with occasional views at Mynydd-Hugh until the route reaches the summit southwest of Clwyd Lluestau (Viewpoint 13) (Low magnitude) where visibility would continue from elevated areas but at greater separation distances
Recreational users of the Ogwr Ridgeway Walk	High	Low to Zero	Moderate Significant to No Effect	Within the 10km study area, the route of the Ogwr Ridgeway Walk follows the western section of the Glamorgan Ridgeway Walk / Taff-Ely Ridgeway Walk between Viewpoint 13 and Blackmill which is assessed in the entry above.
Recreational users of the Rhymney Valley Ridgeway Walk	High	Medium-Low to Zero	Major/Moderate Significant to No Effect	The western part of the Rhymney Valley Ridgeway Walk is within the 10km study area arcing between Caerphilly to the southeast and Nelson to the northwest of the study area, passing ~6.3km east of the Site at its closest point. ZTV coverage is fragmented along the route and indicated on a short (~1.5km) section between the summit of Mynydd Meio (Viewpoint 14) and Coed Caecorrwg and for a longer (~4.2km) section between Cwmeldeg and the A472. Between Mynydd Meio (Viewpoint 14) (Medium-Low magnitude) and Coed Caecorrwg the route joins with the Cistercian Way assessed above and there would be elevated open views towards the Proposed Development, intermittent in places due to road / trackside vegetation and where views of the proposed turbines would be similar to Viewpoint 14 (Medium / Low magnitude). Between Cwmeldeg and the A472, the Proposed Development would be visible in views between 7.1km and 9.3km; on elevated areas there would be open views towards the proposed turbines for ~1km section of the route (Low magnitude) and as the route joins Tirmynydd Road and travels towards Nelson views would be mostly filtered by roadside and field boundary vegetation (Very Low to Zero magnitude).
Recreational users of the Capital Walk – Cardiff	High	Medium-Low to Zero	Major/Moderate to Moderate	A short section of the Capital Walk - Cardiff is located within 10km of the proposed turbines between Pentyrch and Taff's Well. ZTV coverage is indicated for a short 1.7km section as the route climbs towards the

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
			Significant to No Effect	summit of Mynydd Meio (Viewpoint 15) and continues along the ridgeline and east facing slopes, before descending towards Taffy's Well where there is no theoretical visibility indicated. Part of this section follows the Glamorgan Ridgeway Walk / Celtic Way and is assessed above and the magnitude of change would range from Medium/Low the summit of Mynydd Meio (Viewpoint 15) and along the ridgeline, to Zero.
Recreational users of NCN4	High	High to Zero	Major Significant (within 5km of the Proposed Development) to No Effect	Within the study area Sustrans Route NCN4 travels between Newport and Port Talbert following public rights of way, urban roads and minor roads. The route would pass at ~0.9km south of the Site at its closest point as it nears the lower slopes of Mynydd y Glyn. ZTV coverage along the route is indicated between Nantgarw and Pontypridd (~8.3km) where the route joins NCN8 (Low to Very Low magnitude), and again for ~8.5km as the route passes between Gelli-wion (west of Pontypridd) and Gilfach Goch. There is very little theoretical visibility indicated between Port Talbert and Nantgarw, or west of Gilfach Goch. Between Gelli-wion (west of Pontypridd) and Gilfach Goch there would be open views of all seven of the turbines with upper towers and hubs visible at distances of over 0.9km as illustrated in Viewpoint 2 (High magnitude). Views of the Proposed Development would become more distant as the route progresses west. A High/Medium magnitude is assessed at Viewpoint 7 as the route passes to the southwest of Gilfach Goch whilst the magnitude would reduce to Low, with Very Low to No View of the proposed turbines for the remainder of the route within the study area. Cyclists on the route have a High susceptibility to change and the views in the direction of the Site are assessed to be of Medium value resulting in an overall High sensitivity. The Magnitude of change from localised sections would be The nature of these effects would be long-term (reversible), indirect and neutral to adverse.
Recreational users of NCN881	High	High to Zero	Major Significant to No Effect	Sustrans Route NCN881 would pass at ~1.1km north of the Site at its closest point at Porth. ZTV coverage along the route is indicated between Trehafod and Ynyshir (~4.9km). There is no theoretical visibility indicated between Wattstown and the end of the route at NCN47. Between Trehafod and Ynyshir there would be screening from

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
				vegetation and the built environment for much of the route with some open areas where up to six of the proposed turbines would be visible or partially visible as illustrated in Viewpoint 5 (located near to the route). Where there are localised open views the magnitude of change would be High. For the majority of the route the magnitude of change would range between Low (in filtered winter views) to Zero.
Recreational users of NCN47	High	Medium-Low to Zero	Major/Moderate to Moderate Significant (for 0.7km) to No Effect	<p>Within the study area, Sustrans Route passes between Newport and east of Tonna and would pass the Proposed Development ~4.2km at its closest point to the north of Glyncoch.</p> <p>ZTV coverage along the route is very fragmented with theoretical visibility indicated at Treharris and as the route follows NCN8 between Abercynon and Glyncoch (Low to Zero magnitude), and in localised areas to the northwest of Ynysybwl as it climbs towards St Gwynno Forest, as it passes Carn-y-pigwn (470mAOD) and further to the northwest as it passes through elevated landform at Carn Foesen. For most of these areas the route passes through commercial and mixed forestry and views would be screened or heavily filtered (at most Very Low to Zero magnitude). However, there would be open views from a short (0.7km) section of the route to the south of Gwynno Forest where all seven turbines would be visible on the skyline of the view at ~6km (Medium/Low magnitude).</p>
<u>Visual Receptors: recreational destinations</u>				
Recreational users of Pontypridd Golf Club	Medium	Medium to Zero	Moderate Significant to No Effect	<p>The receptor is located on higher ground (slopes of Cefn Eglwysilan) above the settlement of Pontypridd, over ~5.7km distant. With reference to the ZTV indicates that the majority of the golf course lies within the ZTV. Views west towards the site are partly restricted by tree cover throughout the golf course with the Proposed Development visible in mostly filtered or semi-open views. However up to seven turbines (seven hubs) would be visible in these partly restricted views.</p>

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Recreational users of Rhondda Golf Course	Medium	Medium to Zero	Moderate Significant to No Effect	The receptor is located on higher ground (Mynydd Brith-weunydd) above the settlements of Trealaw and Pontygwaith, over ~4.3km distant. Much of the golf course lies within the ZTV including the clubhouse and southern parts of the course. Views south-east towards the Site are partly restricted by tree cover in places with more open (and elevated) ground in the southern parts of the golf course where up to seven turbines (seven hubs) would be visible in these more open views.
Recreational users of Open Access land and PRoW within 5km of proposed turbines	High	Very High to Zero	Major Significant to No Effect	High points of open access land and PRoW network where the Proposed Development would be most prominent include Mynydd Y Glyn and its upper slopes surrounding the Site and Mynydd y Cymmer and Mynydd Dinas to the north-west. Unrestricted views would also be available from parts of the elevated open access land and PRoW east and west of Ynyshir, Mynydd Brith-weunydd and north of Trealaw and Mount Pleasant, parts of Llantrisant Common to the south, and elevated land east and west of Pontypridd. The magnitude of change would range from Zero to High, increasing to Very High for users of the PRoW and open access land on Mynydd y Glyn.
Recreational users of Open Access land between 5km-10km of the Site	High	Medium to Zero	Major/Moderate Significant to No Effect	A large proportion of the upland landscape to the north, north-west and west of the Site designated as open access land falls outwith the ZTV. Only a small proportion of open access land to the north-west, south-west, south-east, east and north-east are located within the ZTV. Locations where the Proposed Development would be clearly visible with hub visibility include, Cefn Gwyngul (Viewpoint 12), Mynydd Meio (Viewpoint 14), Mynydd y Gaer (Viewpoint 13), Garth Hill (Viewpoint 15), Cefn Eglwysilan, Craig-Evan-Leyshon Common, Mynydd Eglwysilan, land south-west of Miskin, Tarren Maerdy, Mynydd Maes-teg and Mynydd y Gaer. At these locations, the magnitude of change would range from Zero to Medium.
Visual Receptors: transport routes				

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Users of the A4058	Medium	High to Zero	Major/Moderate Significant to No Effect	The route connects the A405 in Pontypridd to Treorchy within 10km of the Proposed Development. Only road users along a ~1km section of the route within the built-up area of Trealaw and a ~3km section of route within the built-up area of Porth have the potential for any views of the Proposed Development. The remainder of the route within 10km is outwith the ZTV. Built development and tree planting along the route would partially screen views from the majority of the ~1km section within Trealaw with intermittent direct views where up to two blade tips and one hub may be visible, typically over ~4km distant. Views from the ~3km section of route within Porth would have intermittent views of up to seven turbines (five hubs and two blades) typically over ~1km distance and seen both fleetingly and intermittently in the context of foreground tree planting, road signage, lighting columns and other urban development.
Users of the A4233	Medium	High to Zero	Major/Moderate Significant to No Effect	The A4233 route connects Maerdy to the A4119 at Tonyrefail via the A4058 in Porth within 10km of the Proposed Development. There would be theoretical visibility along a ~5.5km section of the route as it passes through the built-up areas of Ynyshir, Porth, and Trebanog. The remainder of the route within 10km is outwith the ZTV. Built development and tree planting along the route would partially screen views from the majority of a ~2km section within Ynyshir with intermittent direct views where up to one blade and five hubs may be visible in the direction of travel (southbound), typically over ~2.5km distant. As the route nears Porth views open slightly and there would be open views of all seven turbines as the route crosses the bridge over the Rhonda River as illustrated in Viewpoint 5, at ~1.8km distant. The route between Porth (A4058) and Trebanog passes through further built development and roadside vegetation and views would be intermittent and oblique with three hubs and two blades intermittently visible at Porth and up to six hubs visible as the route climbs towards Trebanog at ~1.3km distant. The proposed turbines would be visible in the context of foreground tree planting, road signage, lighting columns and other urban development.

Receptor	Sensitivity of receptor ¹	Magnitude of change ²	Significance ³	Summary rationale
Users of the A4093	Medium	High to Zero	Major/Moderate Significant to No Effect	The A4093 connects the A4119 at Tonyrefail to the A4061 at Blackmill within 10km of the Proposed Development. Road users along an ~2.5km section of the route west of Tonyrefail and ~2km section at Glynogwr have the potential for any views of the Proposed Development. The remainder of the route within 10km is outwith the ZTV. Built development and tree planting along the route would intermittently screen views from the route to the west of Tonyrefail although there would be some open views from this section of all seven turbines in the direction of travel (eastbound), and at distances of between 2.9km and 4.6km. At Glynogwr, there would be open views for eastbound road users in the direction of travel for ~1km as the route descends east from the settlement where the turbines would be visible at distances of over ~7km.
Users of the B4278	Medium	High to Zero	Major/Moderate Significant to No Effect	The B4278 connects the A4093 east of Hendryforgan with the A4058 at Porth and roughly follows the A4119 to Tonypandy and then the A4058 to Porth, splitting either side of the Rhonda River at Porth. There would be theoretical visibility between Hendryforgan and Williamstown (~3.8km) and between Tonypandy and Porth (~7km). Views between Hendryforgan and Tonyrefail would be mostly screened by the built environment at Tonyrefail and intervening roadside vegetation such that there would be filtered winter views and glimpsed views for much of this section (Very Low to Zero magnitude). As the route leaves the settlement at Penhiwfer Road there would be intermittent open views of up to seven turbines on the horizon in the direction of travel (northbound) at a distance of ~2.5km (High to Zero magnitude). Views are again screened by the built environment between Tonypandy and Porth. There would be intermittent views of up to three hubs between buildings at Trealaw increasing to five hubs and two blades intermittently visible as the route enters Porth (High to Zero magnitude). More open views would be available as the route travels along Rheola Road and in intermittent views from Porth where the turbines would be visible at a distance of ~1km within a setting including buildings, street signs, street lighting and overbridges (High to Zero magnitude).

1. The sensitivity of a receptor is defined using the criteria set out in Section 6.8 and **Appendix 6A** and is defined as Very Low, Low, Medium, and High.
2. The magnitude of change on a receptor resulting from activities relating to the development is defined using the criteria set out in Section 6.8 and **Appendix 6A** and is defined as Very Low, Low, Medium, High and Very High.
3. The significance of the environmental effects is based on the combination of the sensitivity/importance/value of a receptor and the magnitude of change and is expressed as Major, Major/Moderate (significant), Moderate (potentially significant) or Moderate/Minor, Minor or Negligible (not significant), subject to the evaluation methodology outlined in Section 6.8 and **Appendix 6A**.