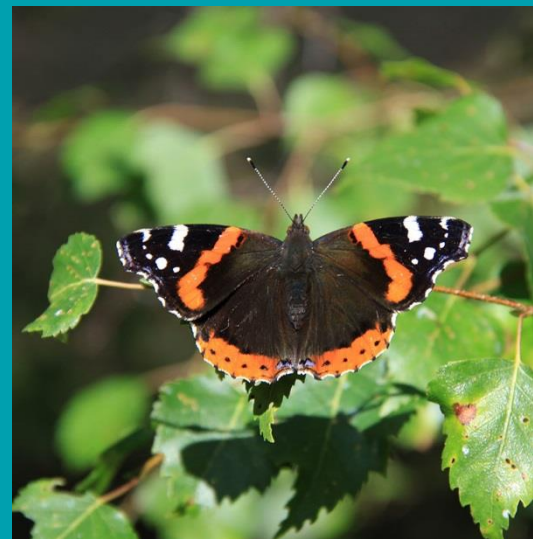


Foel Trawsnant Wind Farm - Section 73 Application

Design and Access Statement - Update



Report for

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1. Introduction

1.1 Background

This Design and Access Statement (DAS) Update has been prepared by Wood Group UK Ltd (Wood) on behalf of Pennant Walters (Foelt) Ltd (the Applicant). The DAS Update forms part of a suite of documents supporting a planning application to vary Condition 3 for an approved development of 11 wind turbines at Foel Trawsnant, decided by Neath Port Talbot County Borough Council (NPTCBC) in November 2021 (application ref: P2014/0825). The Proposed Development would see an increase in the maximum rotor diameter from up to 90m to up to 133m, whilst maintaining the maximum height to blade tip of 145m. Whilst the approved development is for the installation of up to 11 turbines, the Applicant is currently proposing to only install 8 of these.

- 1.1.1 The approved development was supported by a Design and Access Statement (document ref: 40217rr065i1) (referred to as the 2019 DAS from here on) which set out the design process and rationale. This DAS Update provides an overview of the design considerations in relation to the proposed variation of Condition 3 only. It seeks to supplement the 2019 DAS submitted with the original application and not repeat the information contained in that document. This DAS Update should therefore be read in conjunction with the 2019 DAS.
- 1.1.2 This DAS Update has been prepared in line with the Planning (Wales) Act 2015 which sets out the requirements regarding the contents of a DAS and reflects the objectives of good design set out in Planning Policy Wales (PPW) (Welsh Government, 2021)¹ and Technical Advice Note 12: Design (TAN 12) (Welsh Government, 2016)². The DAS Update is informed by the guidance in Design and Access Statements in Wales (Welsh Government, 2017)³.

1.2 Purpose and structure of the Report

- 1.2.1 The DAS Update explains the design rationale for the revisions to the approved Foel Trawsnant Wind Farm scheme, providing an explanation of the design principles and concepts that have informed the Proposed Development (as described in ES Addendum **Chapter 4: Wind farm site selection and design** and **Chapter 5: Description of the Proposed Development**), and how access issues have been taken into consideration. The DAS demonstrates the design evolution and suitability of the Foel Trawsnant Wind Farm as is proposed to be amended by variation of Condition 3.
- 1.2.2 The structure of the DAS Update is aligned to the Design and Access Statements in Wales (Welsh Government, 2017) guidance although it covers the same elements as reported in the originally submitted 2019 DAS. The DAS is structured as follows:

¹ Welsh Government (2021) Planning Policy Wales Edition 11

² Welsh Government (2016) Technical Advice Note 12 - Design

³ Welsh Government (2017) Design and Access Statements in Wales

- **Section 1: Introduction** – provides background information on Design and Access Statements, the approach to design, and renewable energy policy background.
- **Section 2: Summary of the Proposal** – provides a summary of the site location and the proposed development.
- **Section 3: Vision** – sets out the vision for the proposed development.
- **Section 4: Site and Context Analysis** – sets out the site's context and the relevant planning policy.
- **Section 5: Design Development** – summarises the factors that were considered in the design process.
- **Section 6: The Proposal** – shows how the Proposed Development responds to PPW's requirements for good design and highlights how the design process has produced an appropriate scheme in relation to the planning policy context.

1.3 Approach to the design

- 1.3.1 The 2019 DAS (doc ref: 40217rr065i1), which supported the approved development, sets out the approach to the design of the development and the process of site selection and scheme refinement following the selection of the site. Additionally, the design of the wind farm has been informed by the Environmental Impact Assessment (EIA).
- 1.3.2 The approach to the design outlined in the present variation of condition application has been informed by that outlined in the approved development's 2019 DAS and 2019 Environmental Statement (ES) (doc ref: 40217rr066i1). The Proposed Development is also informed by an ES Addendum which identifies the potential environmental effects arising from the changes proposed to the approved development.

1.4 Wind power and national policy

- 1.4.1 The need to address climate change is embedded in law. The Climate Change Act 2008 (as amended) requires the UK to achieve a 100% reduction in greenhouse gas (GHG) emissions, otherwise known as net zero, in 2050. Welsh Ministers are bound to deliver net zero in 2050 under the Environment (Wales) Act 2016, which also requires Welsh Ministers to produce a plan to show how Wales will meet the reductions in GHG required for each five-year period to 2050.
- 1.4.2 In September 2017 the Welsh Government Cabinet Secretary for Environment and Rural Affairs announced to the Welsh Assembly that it was setting a target of generating 70% of Wales' electricity consumption from renewable energy by 2030 and a target for one Gigawatt of renewable electricity capacity in Wales to be locally owned by 2030⁴. This target is embedded in PPW (Edition 11) and Future Wales: The National Plan 2040⁵ (which is discussed in more depth in the following section). The Welsh Government's Energy

⁴ Lesley Griffiths high on ambition for clean energy. Available via: <http://www.assembly.wales/en/bus-home/pages/rop.aspx?meetingid=4644&assembly=5&c=Record%20of%20Proceedings#C494225>

⁵ Welsh Government (2021) Future Wales: the national plan 2040

Generation in Wales 2019 Report⁶ published in October 2020 assessed the percentage of energy consumption provided by renewables to be at 51% (against the target of 70%).

- 1.4.3 The Welsh Government recognises the importance of wind power in meeting the renewable targets for 2030 and to ensure that the necessary carbon reductions are achieved on the path to net zero in 2050.

⁶ Welsh Government (2020) Energy Generation in Wales 2019

2. Summary of the Proposed Development

2.1 Site Location

- 2.1.1 The centre of the Foel Trawsnant Wind Farm amended scheme site is approximately 2.3km to the northwest of Maesteg, with Cwmafan approximately 5.5km to the southwest. **Figure 2.1** shows the site location with planning application boundary, whilst **Figure 2.2** shows the proposed site layout. The main site (excluding access tracks) lies at between approximately 250 and 371 m AOD altitude. Habitats present include semi-improved grassland, mire communities, as well as areas of upland heath and acid grassland, with the predominant land use being stock grazing.

2.2 Summary of the Proposed Development

- 2.2.1 The Proposed Development would see the variation of Condition 3 of the approved development scheme for the Foel Trawsnant Wind Farm (application ref: P2014/0825) approved on 25th November 2021. The approved scheme is described as:

"Installation of 11 wind turbines with a maximum tip height of 145m, together with ancillary development including substation and control building, on site underground electrical cables, stone site access tracks, temporary construction compounds, turbine foundations and temporary crane pads".

- 2.2.2 The application seeks to vary condition (3) of the approved development. Condition (3) is currently worded as follows:

Condition (3) The development shall be carried out in accordance with the following approved plans:

- 40217-Shr214 Site Layout Location Plan
- 40217-Shr215 Wind turbine - elevations
- 40217-Shr216 Substation Control building - plans and elevations
- 40217-Shr217 Transformer Housing - Plan and elevations
- 40217-Shr218 Turbine Pad Foundation plan and cross section
- Construction Traffic Management Plan

- 2.2.3 The Proposed Development would see the following changes to the consented scheme:

- An increase in the rotor diameter of five of the consented turbines (T5, T6, T9, T10 and T11) to 133m; and
- An increase in the rotor diameter of three of the consented turbines (T1, T2 and T8) to 117m.

- 2.2.4 The wind turbines would have an associated reduction in hub height to maintain the maximum tip height of 145m. The Applicant is also currently proposing to install 8 turbines as opposed to the 11 outlined in the approved development.

Figure 2.1 Site Location

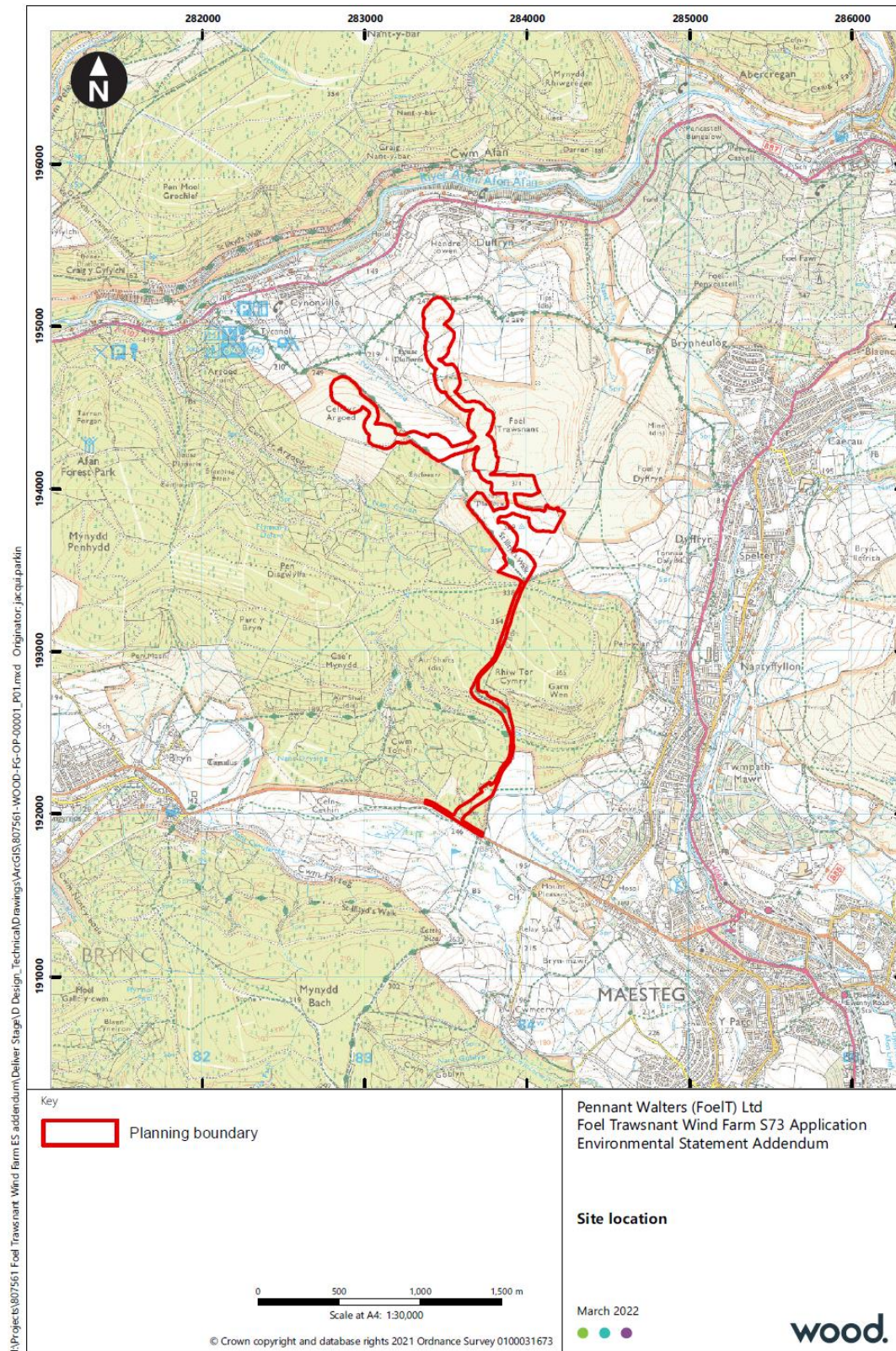
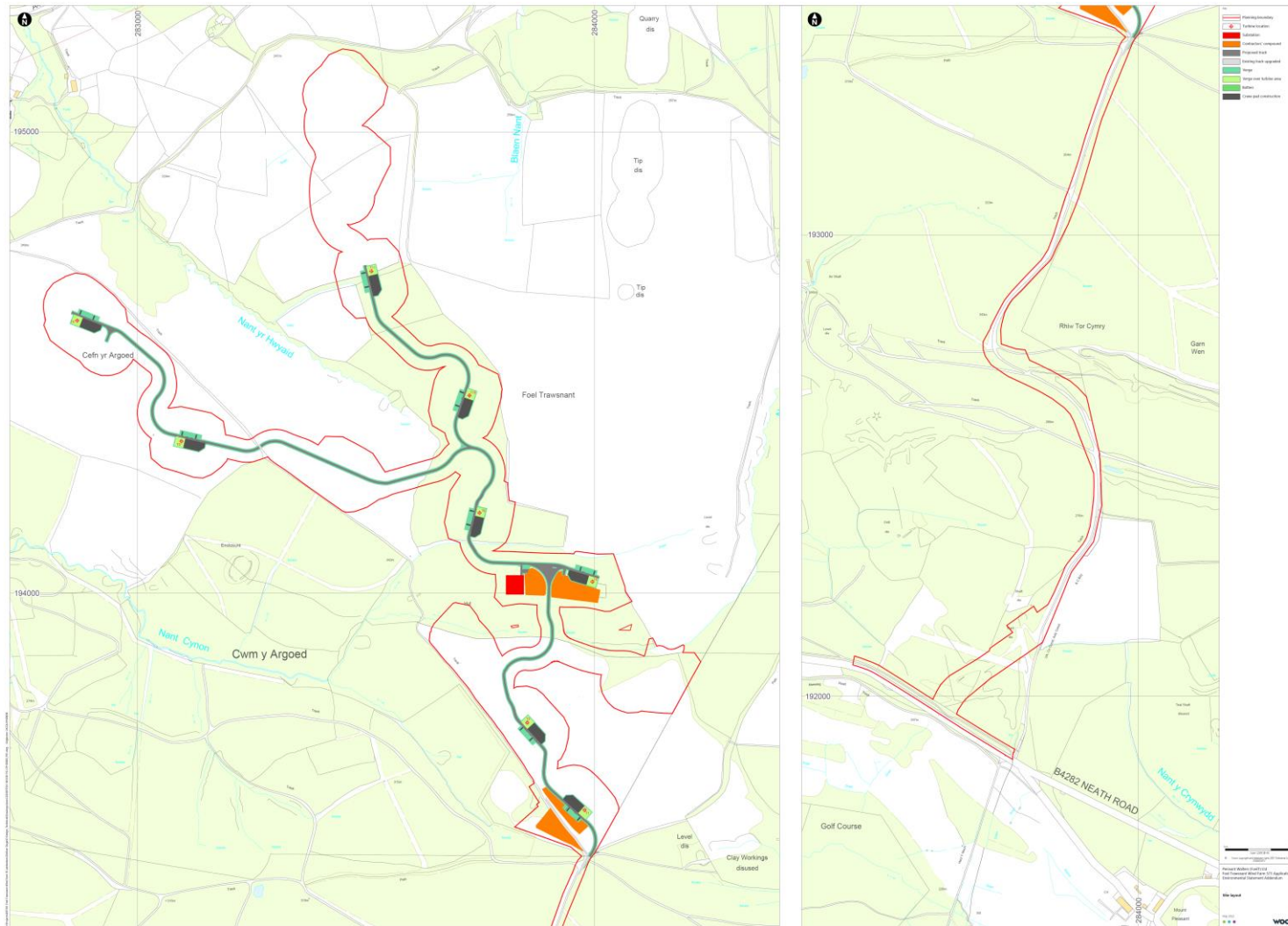


Figure 2.2 Proposed Site Layout



3. Vision

3.1 Vision for the Proposed Development

- 3.1.1 Underpinning the design of the Proposed Development is the intention to provide a wind farm that will provide a source of renewable energy to support the energy needs of Wales without having significant effects on the environment. The Proposed Development would see the provision of fewer turbines (with increased rotor diameter) compared to the approved development.
- 3.1.2 The Proposed Development has been located and designed to:
- Ensure carbon emissions are reduced;
 - Provide the most appropriate locations for wind turbines to ensure that the maximum amount of wind energy can be utilised from the site;
 - Minimise any landscape and visual impacts on the surrounding area;
 - Ensure that the public access to the site is maintained, in a safe manner; and
 - Ensure the residential and the environmental amenity of features in and around the site are protected.
- 3.1.3 The design process reflects the vision.

4. Site and Context Analysis

4.1 Site location and context

- 4.1.1 The development site occupies an area of approximately ~46.5 ha located on the southern and western slopes of Foel Trawsant between the Llynfi Valley to the south and east and the Afan Valley to the north. The site occupies a position toward the northern end of the higher ground between the Afan and Llynfi Valleys and includes the highest point on Foel Trawsant, at 371m AOD.
- 4.1.2 The majority of the land within the site is given over to pasture in the form of semi-improved grassland although there is some dense scrub associated with the Nant yr Hwyaidd Valley which incises the northern part of the site and some other areas of bracken around the site's perimeter. Pasture remains the dominant landcover across the remainder of the massif to the north of the site, which is also host to several large and prominent spoil heaps. The extensive coniferous plantations comprising the Afan Forest cover much of the upland area to the south of the site.
- 4.1.3 The site is approximately 2.3km to the north-north-west of Maesteg. The agglomerated settlements of Brynheulog, Caerau, Dyffryn, Spelter and Nantyffyllon occupy the lower slopes and floor of the Llynfi Valley and form a northern extension of Maesteg. The smaller, more nucleated settlements of Cynonville and Duffryn Rhondda are located on the lower southern slopes of the Afan Valley to the north and north-east of the development site.
- 4.1.4 Similar patterns of vegetation cover to that within the site boundary are found across the adjacent landscapes to the north and the extensive coniferous plantations of Afan Forest form the primary land cover to the south. Built development is mainly confined to the valley floors, especially within the Llynfi Valley to the east. Deciduous woodland is mainly confined to the non-urban valley floors, particularly in the Afan Valley to the north of the site. This pattern of settlement in the valleys and a mosaic of pasture and coniferous plantations over higher ground is repeated throughout the detailed study area, with pasture giving way to open moorland on the higher elevations found to the east and north of the area.

4.2 The Development Plan

Future Wales

- 4.2.1 The Welsh Government published Future Wales: The National Plan 2040 (Future Wales from here on) in February 2021. This was therefore published after submission of the application for the approved development but prior to determination of the application by NPTCBC in November 2021. Future Wales sets out national policy and is the highest tier of the development plan. Future Wales includes a range of high-level policies which are intended to shape local authority development plans and inform decision making on applications for Developments of National Significance (DNS).

4.2.2 There are two specific policies on renewable and low carbon energy:

- **Policy 17 – Renewable and Low Carbon Energy and Associated Infrastructure** sets out the Welsh Government's support for the development of all renewable and low carbon technologies in principle. The policy sets out the presumption in favour of large-scale wind in the Pre-assessed Areas for wind energy subject to the requirements of Future Wales' Policy 18, which requires detailed consideration of certain criteria. The site is within PAA 9.
- **Policy 18 – Renewable and Low Carbon Energy Developments of National Significance states** sets out a range of criteria that developments must meet including ensuring no unacceptable adverse: visual impacts on nearby communities; impacts on heritage assets; impacts by virtue of shadow flicker; and impacts on the transport network. The supporting text of Policy states that *"Irrespective of location or scale, the design and micro-siting of proposals must seek to minimise the landscape and visual impact, particularly those in close proximity to homes and tourism receptors."*

Local Development Plan

4.2.3 The NPTCBC Local Development Plan (LDP) was adopted in 2016 and provides County Borough wide strategic guidance for land use until 2026. The Development Plan remains the same as for the approved development. **Table 4.1** highlights the relevant LDP policies for this DAS.

Table 4.1 Local Development Plan policies

Theme	Adopted LDP policy	Policy summary
Overarching Policies	SP1 Climate Change	The policy sets out overall approach to climate change and includes (at criteria 4) the County Borough making an appropriate contribution to renewable and low carbon energy generation.
	SP2 Health	The policy sets out that a number of measures to reduce high levels of ill health including (inter alia) through reducing exposure to elements that could adversely affect ill through new development.
	SC1 Settlement limits	Development outside settlements identified in the hierarchy will only be permitted where associated with certain types of development including (under 10.) that associated with either agriculture, forestry, minerals or energy generation.
	SP4 Infrastructure	Developments will be expected to make efficient use of existing infrastructure and make adequate provision, where required, ensuring no detrimental effects on the area.
	I1 Infrastructure requirements	In addition to necessary improvements to infrastructure additional works/funding may, where appropriate, be required to ensure that the impact of development is mitigated including (inter alia) provision for biodiversity and environmental interest, community facilities.

Theme	Adopted LDP policy	Policy summary
Area Based Policies	SP6 Development in the Valleys Strategy Area	The policy sets out policy approach to reinvigorating the economic and communities of the valleys area through a number of area-specific measures.
Topic Based Policies:	SP 11 Employment Growth	The policy supports existing employment uses and expanding employment development through specific measures. They include taking a flexible approach to employment proposals in the Valleys Strategy Area.
The Economy		
	SP 13 Tourism	The economic prosperity will be promoted through encouraging high quality tourism, resisting proposals that would result in the loss of tourism facilities and allocating land for tourism development, where appropriate.
	TO 4 Walking and cycling routes	The policy defines a number of routes where proposals that would have an adverse impact on their implementation would be resisted. This includes TO 4/3 Great Dragon Ride Route.
Topic Based Policies:	SP 14 The Countryside and undeveloped coast	The policy seeks the protection of the countryside and undeveloped coast by (inter alia) allowing only appropriate development outside settlements, the designation and protection of Special Landscape Areas and protection of Green Wedges.
Environment and Resources		
	EN 2 Special Landscape Areas	The policy designates Special Landscape Areas. The site is within Foel Trawsnant (EN2/6) SLA. The policy only permits development where it is demonstrated that there are no significant adverse impacts the features and characteristics for which the SLA is designated.
	SP 15 Biodiversity and Geodiversity	The policy sets out the approach to the protection, conservation, enhancement and management of important habitats, species and sites of geological importance.
	EN 6 Important Biodiversity and Geodiversity Sites	The policy states that proposals that would affect Regionally Important Geodiversity Sites (RIGS), Local Nature Reserves (LNRs), Sites of Interest for Nature Conservation (SINCs), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) or S42 ⁷ habitats or species will only permitted where they conserve and where possible enhance importance of the site or development could not reasonable be located elsewhere. Mitigation/compensation will need to be agreed where adverse effects are unavoidable.
	EN 7 Important Natural Features	The policy only supports proposals where an adverse effect on ecologically or visually important natural features such as trees, woodlands, hedgerows/field boundaries, watercourses or ponds where full account has been taken of the relevant features to ensure they are retained and enhanced, where possible,

⁷ Now S7 under the Environment (Wales) Act 2016

Theme	Adopted LDP policy	Policy summary
		or where the feature has been taken into account and where removal is unavoidable, mitigation measures are agreed.
	SP 16 Environmental Protection	The policy seeks the protection of air, water and ground quality and the environment generally through measures that include (inter alia) ensuring proposals have no significant adverse effects on the quality of these features and do not significantly increase pollution levels.
	EN 8 Pollution and Land Stability	The policy seeks to avoid unacceptable risk from (inter alia) air pollution, noise pollution, light pollution and states that proposals which would create new problems or exacerbate existing issues will not be acceptable unless mitigation is in place.
	M1 Development in Mineral Safeguarding Areas	The policy sets out criteria for assessment of proposals within mineral safeguarding areas. The site falls within an area safeguarded for sandstone resource.
	SP 18 Renewable and Low Carbon Energy	Through this policy the County Borough seeks a proportionate contribution to meeting national renewable energy targets and energy efficiency targets whilst balancing the impact of development on the environment and communities. This includes encouraging all forms of renewable/low carbon technologies, where appropriate, and ensuring there is no unacceptable impact on the environment and amenity.
	RE 1 Criteria for the Assessment of Renewable and Low Carbon Energy Development	This criteria-based policy which allows an assessment This includes a criterion related to ensuring large scale wind farm developments (>25MW) will be expected to be located within the boundaries of the refined Strategic Search Areas. Additionally all schemes will be required to demonstrate compliance with five criteria related to visual amenity and natural environment, high ways safety, radar, and site restoration (where appropriate).
Topic Based Policies:	SP 20 Transport Network	The policy ensures the transport system and infrastructure will be developed in a safe, efficient and sustainable manner through a number of measures including (inter alia) restricting development which would have an unacceptable impact on highway safety and requiring proposals to provide safe and efficient access.
Transport and Access	TR 2 Design and Access of New Development	The policy includes a number of criteria related to design and access which ensures highways safety is not compromised, developments is accessible and Transport Assessments and Travel Plans accompany proposals, where appropriate.
Topic Based Policies:	SP 21 Built Environment	The policy seeks to conserve and enhance the built environment and historic heritage by (inter alia) encouraging high quality design, safeguarding features of historic/cultural importance and identification of designated sites to enable protection and enhancement, where possible.

Theme	Adopted LDP policy	Policy summary
Culture and Heritage	and Historic Heritage	
	BE 1 Design	Requires all development proposals to be of a high quality design which takes into account its context. The policy sets out ten criteria which must be met to satisfy the policy including: complementing and enhancing character and appearance of the site; respecting the context of the site and its place in the landscape; and using land efficiently.

4.3 Supplementary Planning Guidance

4.3.1 NPTCBC adopted the Design Supplementary Planning Guidance (SPG) in July 2017. The Design SPG sets out guidance on meeting the Council's design policy criteria contained within LDP Policy BE 1: Design:

- Vision;
- Character and Appearance (Criterion 1);
- Wider Context (Criterion 2);
- Materials and Landscaping (Criterion 3);
- Highway Safety and Amenity (Criterion 4);
- Retention of Important Features (Criterion 5);
- Community Safety (Criterion 6);
- Integrated Transport and Linkages (Criterion 7);
- Resource Efficiency (Criterion 8);
- Drainage Systems (Criterion 9);
- Inclusive Design (Criterion 10); and
- Involvement/Consultation.

4.3.2 This DAS Update considers this criteria in line with the Welsh Government's 2017 DAS guidance.

5. Design Development

5.1 Overview

- 5.1.1 The site selection process and the design iterations that led to the approved development are set out in Section 3.3 of the 2019 DAS. This was informed by the EIA process as outlined in the 2019 ES. The design has been further refined since approval was achieved in 2021 which has been further assessed and informed by EIA (as reported in the ES Addendum).
- 5.1.2 The further design changes take into account the lack of availability of the proposed turbines outlined in the approved development. The proposed design therefore takes this into account and has involved:
- A reduction in turbine numbers from 11 to 8, with turbines T3, T4 and T7, and associated infrastructure including crane pads, cabling and connecting site access tracks, from the approved development being removed;
 - Increasing the rotor diameter of five of the consented turbines (T5, T6, T9, T10 and T11) to 133m; and
 - Increasing the rotor diameter of three of the consented turbines (T1, T2 and T8) to 117m.
- 5.1.3 ES Addendum **Chapter 4: Wind farm site selection and design** sets out further information.

5.2 Turbine design

- 5.2.1 The turbines envisaged in the approved development are no longer available. The Proposed Development therefore reflects iterative design considerations that take into account market availability and innovative turbine design. The turbines have a lower hub height and larger rotor diameter. **Table 5.1** shows the differences in turbines between the approved development and Proposed Development.

Table 5.1 Comparison of turbines between the approved development and Proposed Development

Turbine	Approved Development	Proposed Development
T1	Hub height: 100m Rotor diameter: 90m Grid reference: E283979, N193524	Hub height: 86.5m Rotor diameter: 117m Grid reference: E283979, N193530
T2	Hub height: 100m Rotor diameter: 90m Grid reference: E283842, N193719	Hub height: 86.5m Rotor diameter: 117m Grid reference: E283853, N193719
T3	Hub height: 100m	REMOVED

Turbine	Approved Development	Proposed Development
	Rotor diameter: 90m Grid reference: E283693, N193910	
T4	Hub height: 100m Rotor diameter: 90m Grid reference: E283428, N194260	REMOVED
T5	Hub height: 100m Rotor diameter: 90m Grid reference: E283092, N194327	Hub height: 78.5m Rotor diameter: 133m Grid reference: E283096, N194329
T6	Hub height: 100m Rotor diameter: 90m Grid reference: E282867, N194591	Hub height: 78.5m Rotor diameter: 133m Grid reference: E282868, N194591
T7	Hub height: 100m Rotor diameter: 90m Grid reference: E284155, N193809	REMOVED
T8	Hub height: 100m Rotor diameter: 90m Grid reference: E284009, N194034	Hub height: 86.5m Rotor diameter: 117m Grid reference: E283996, N194025
T9	Hub height: 100m Rotor diameter: 90m Grid reference: E283761, N194191	Hub height: 78.5m Rotor diameter: 133m Grid reference: E283748, N194174
T10	Hub height: 100m Rotor diameter: 90m Grid reference: E283728, N194431	Hub height: 78.5m Rotor diameter: 133m Grid reference: E283726, N194429
T11	Hub height: 100m Rotor diameter: 90m Grid reference: E283513, N194700	Hub height: 78.5m Rotor diameter: 133m Grid reference: E283512, N194698

- 5.2.2 To accommodate the larger rotor diameter, the proposed turbine locations take advantage of the micro-siting allowance within the red line boundary. The details of access tracks (other than length) and the design of the crane pads is the same as described in the 2019 DAS.

5.3 Public involvement and consultation

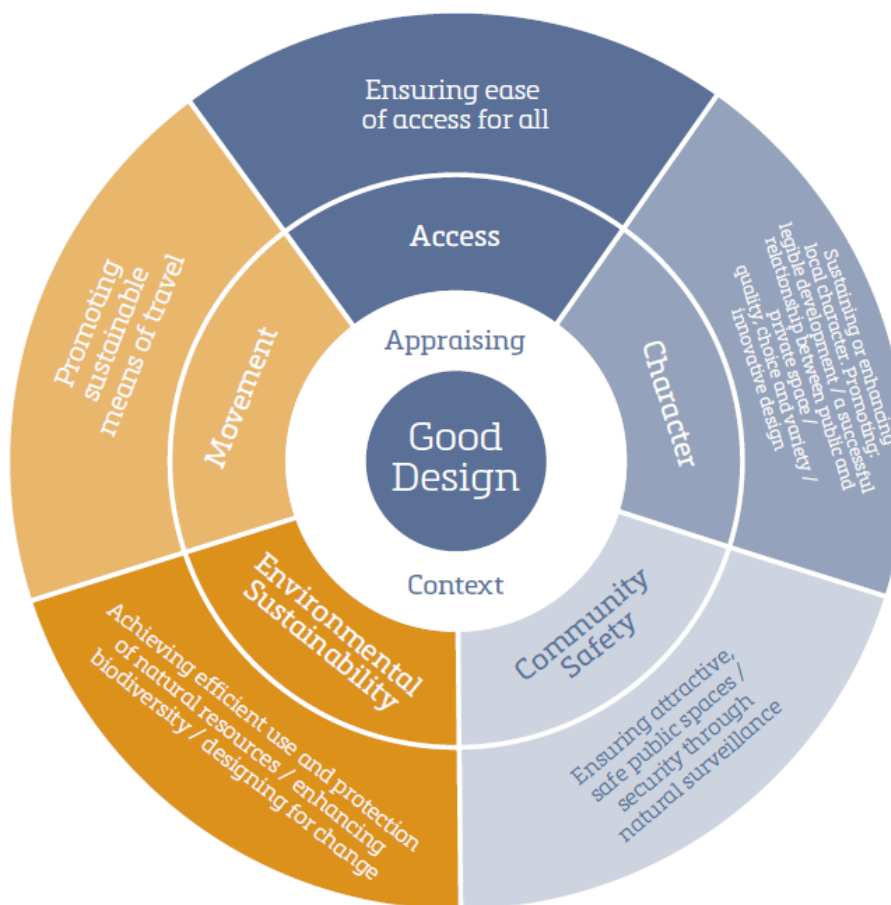
- 5.3.1 Section 3.13 of the 2019 DAS and Chapter 3 of the 2019 ES set out the approach to consultation and involvement for the approved development. The development of the scheme has been informed by consultation with stakeholders and the process of EIA. No further public consultation has been undertaken.
- 5.3.2 Further consultation has been undertaken with officers of NPTCBC for consideration of some technical areas (ornithology and noise), as reported in the ES Addendum.

6. The Proposed Development

6.1 Introduction

6.1.1 This section sets out further information about the Proposed Development and how it meets the objectives of Good Design contained in the PPW in line with the Welsh Government (2017) DAS guidance. The objectives of Good Design are included in **Figure 6.1**.

Figure 6.1 Objectives of Good Design



Source: Welsh Government (2021) Planning Policy Wales – Edition 11

6.1.2 The five objectives examined in the following sections are:

- **Character** – sustaining or enhancing local character promoting legible design and a successful relationship between public and private spaces;
- **Access** – ensuring access for all;
- **Movement** – promoting sustainable means of transport;
- **Environment sustainability** – ensuring the efficient and protection of resources; and

- **Community safety** – ensuring safe and attractive spaces.

6.1.3 At the start of each section the Welsh Government's (2017) DAS guidance requirements are captured. Additionally, in the final section, consideration is given to how the proposed development responds to the policy context.

6.2 Character

DAS Guidance: How does the proposal sustain or enhance local character and promote legible development, a successful relationship between public and private space, quality, choice and variety and innovative design?

Wind farm design

6.2.1 Proposals to deliver and construct 8 of the 11 turbines approved by the original permission see that turbines T3, T4 and T7 (and associated infrastructure including crane pads, cabling and connecting site access tracks) from the approved development would not be developed. This results in a reduction in the total area of the temporary and permanent site infrastructure from 9.6ha in the approved development to 6.53ha.

Public and private space

6.2.2 The development is not intended to facilitate access by members of the public. However, the PRoW network and open access land forms important access routes through the site. The negative effects on these assets will be mitigated to ensure continued access during the operational phase to the standard at which they are currently provided.

Cultural heritage

6.2.3 Section 3.7 of the 2019 DAS sets out how the approved development will not involve the loss of any buildings or features within the site. The Proposed Development does not involve changes to the approved scheme in this respect.

6.2.4 Detailed assessment of the effects of the Proposed Development on the historic environment have been scoped out of the ES Addendum following review of the proposed changes to the approved development, the historic environment baseline, the policy and statutory context. The site access tracks, hardstandings, foundations and laydown areas for the Proposed Development will not extend beyond areas previously assessed. It is therefore concluded that the Proposed Development would not give rise to any additional effects on the historic environment as compared to the approved development and the conclusions.

Shadow Flicker

6.2.5 The assessment in the ES Addendum **Chapter 15: Shadow Flicker** has identified the potential for significant shadow flicker effects at 31 occupied buildings, and non-

significant effects at two occupied buildings. Mitigation has been identified in the form of a control system which automatically shuts down the wind turbine causing the effect to restrict effects to less than 30 minutes per day and/or 30 hours per year at any property. With this measure in place no shadow flicker significant effects would arise from the Proposed Development.

Noise

- 6.2.6 ES Addendum **Chapter 11: Noise** finds that whilst the candidate turbine may change, the residential amenity of surrounding areas would be protected by an appropriately worded planning condition based on ETSU-R-97 limits. Compliance of these limits can be proven with measurements taken at residential receptor locations once the wind farm is operational.

6.3 Access

DAS Guidance: How do the proposals ensure ease of access for all into the development and to all elements within the site?

Site Access

- 6.3.1 No changes are proposed to the principal access as part of the approved development as described in the previously submitted 2019 ES and DAS.

Construction traffic

- 6.3.2 Details of the type and routing of the general construction traffic are the same as for the approved development as described in the previously submitted 2019 ES and DAS.
- 6.3.3 The 2018 Construction Traffic Management Plan (CTMP) has been revised to take into account the increased dimensions of the proposed turbine blades. The proposed haulage route for abnormal indivisible load (AIL) vehicles through Maesteg has been revised. Swept path analysis has therefore been undertaken of the proposed revised route through Maesteg and reported in an update to the CTMP in (ES Addendum - **Appendix 13A**).

Access on site

- 6.3.4 The Proposed Development would see the removal of connecting site access tracks from the approved development in line with the reduction of wind turbines proposed from 11 to 8. The length of new site access tracks required is reduced by 580m from the approved development to approximately 1.22km.

6.4 Movement

DAS Guidance: How does the proposal promote sustainable means of travel?

- 6.4.1 As set out in the previously submitted 2019 DAS and ES, the wind turbines, substation and other infrastructure on site will only be accessed by construction personal and maintenance teams who will periodically attend the development site to, for example, maintain and service the turbines. Given the site's location in relation to the public transport network, the opportunity for contractors to travel to work by public transport is not viable.
- 6.4.2 With respect effects on users of PRoW, Condition 13 of planning permission ref. P2014/0825 relates to the diversion of PRoW within the site. The applicant no longer proposes to divert the bridleway (ProW 39) or footpath (PRoW 40) referred to in the condition. Both will remain in place and available to users with alternative routes also provided for use, if desired, during both the construction and operation phases.

6.5 Environmental Sustainability

DAS Guidance: How does the proposal achieve efficient use and protection of natural resources, enhance biodiversity, and demonstrate designing for change?

Renewable Energy

- 6.5.1 Dependant on the final turbine choice, the Proposed Development would likely produce between 33-35MW of renewable energy. The proposed development would equate to taking around 35,360 tonnes of CO₂ out of the atmosphere each year.⁸ With regards to resource efficiency, and supporting a reduced reliance on fossil fuels, this is considerable.
- 6.5.2 As described in the 2019 DAS and ES which supported the approved development, the site design has been influenced by considerations of the optimal scheme for wind power. The Proposed Development would see a reduction in turbines, with no increase in overall height, with the potential increase in energy generation.

⁸ Assuming a rated capacity of 33MW and load factor average for Wales of 27.8% which takes into account the intermittent nature of the wind, the availability of the wind turbines and array losses. The load factor is based on Department of Energy and Climate Change (2021) Long term average figures for Wales and the UK - Energy Trends Section 6: Renewables (ET6.1 Renewable Electricity Capacity and Generation, September 2021. Capacity factor for UK.) Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/437811/et6_1.xls. Based on BEIS Digest of UK Energy Statistics estimated carbon dioxide emissions per GWh of electricity supplied by all of fossil fuels of 440 tonnes per GWh of electricity supplied.

Landscape and Visual

- 6.5.3 To support the Proposed Development an assessment of the landscape and visual impacts has been undertaken. The ES Addendum **Chapter 7: LVIA** concludes that the Proposed Development would not result in any receptors experiencing significant landscape or visual effects in addition to those previously identified in relation to the approved development.

Ecological resources

- 6.5.4 The assessment in ES Addendum **Chapter 9: No-Avian Ecology** shows that the changes in the Proposed Development do not change the conclusions of the 2019 ES, with the effects on (non-avian) biodiversity receptors remaining 'Not Significant'. Six Section 7 priority habitats are present on site:
- ponds (six within the planning boundary along the access track and two within the site boundary);
 - rivers (watercourses);
 - upland heathland (wet heath and dry heath);
 - upland flushes, fens and swamps (marshy grassland and acid/neutral flush within the wind farm site and small localised patches along the access track);
 - blanket bog (wet modified bog); and
 - dry heath (very small areas along the access route within the planning boundary).
- 6.5.5 The outline Habitat Management Plan which details measures for the long-term management and enhancement of the site post construction remains unchanged (2019 ES Appendix 9C). The oHMP will bring approximate 15ha of grassland into long-term management designed to improve its biodiversity value, including measures (e.g. drainage control) that will increase the extent of Section 7 habitats at the site.
- 6.5.6 ES **Chapter 10: Ornithology** states that further survey work is undertaken between now and early July to support the assessment of effects of the Proposed Development. Until completion of the surveys currently being undertaken and the production of updated Collision Risk Modelling (CRM), it is not possible to conclude whether any changes to the original assessment conclusions would occur. However, based on the relatively low levels of bird activity across the site during the various surveys undertaken over the years and initial results from the 2021/2022 survey work, it is considered unlikely that any major changes would occur.

Water resources and sustainable drainage systems

- 6.5.7 No changes are proposed to the approved development that have implications for the approach to drainage. As identified in Section 3.11 of the 2019 DAS, consideration has been given to the use of Sustainable Drainage Systems (SuDS) for the disposal of surface water. The overall strategy inherent in the scheme design is to ensure that run-off rates do not exceed the greenfield run-off rate in any of the watercourses. This will be achieved through the use of SuDs and attenuation techniques.

- 6.5.8 The 2019 ES chapter concluded that the construction, operation and decommissioning of the approved development would not lead to any significant effects on the water environment.

6.6 Community Safety

DA DAS Guidance: How has the proposal ensured attractive, safe public spaces and security through natural surveillance?

- 6.6.1 The site is located some distance away from settlements (approximately 2.3km to the northwest of Maesteg, with Cwmafan approximately 5.5km to the southwest). Impacts on the safety of these communities are therefore unlikely. However, the scheme will be delivered in safe manner and ensure that the opportunities for crime are minimised through effective design measures, such as fencing around substation incorporated into the scheme.
- 6.6.2 As outlined in **Section 6.4**, the applicant no longer proposes to divert the bridleway (ProW 39) or footpath (PRow 40). Both will remain in place and available to users with alternative routes also provided for use, if desired, during both the construction and operation phases.

6.7 Responding to the planning policy context

DAS Guidance: This section of the document provides the opportunity to explain how the proposals have responded to relevant planning policy and guidance. The relevant policy and guidance should have been identified at the site and context analysis stage, this section should provide a summary of the design decisions that have been made in response to these policies.

- 6.7.1 The policy context is set out in **Section 4**. The proposed development would make a contribution to the generation of renewable energy, required to support the reduction in carbon emissions that Future Wales and Planning Policy Wales are seeking to achieve and is located in the PAA for wind energy area 9. The development would also support the NPTCBC Local Development Plan policy provisions that seek to address climate change within the borough. The design vision therefore responds to these policy requirements.
- 6.7.2 The approved development was designed so as to minimise the take up of land, the impact on the landscape and the effects on biodiversity assets, which is further supported by the changes outlined in the Proposed Development, which will see a reduction in the number of turbines developed (along with a reduction in the required associated infrastructure and access tracks). Additionally, through the ES Addendum the effects on a range of other environmental receptors have been assessed. This process has helped to ensure that where possible the design of the windfarm has sought to avoid or reduce the environmental impacts.

- 6.7.3 The approach to design complies with the policy provisions and supports achievement of the design objectives outlined in the NPTCBC Design SPG.

7. Conclusion

- 7.1.1 This DAS Update outlines and reflects on the design and, where necessary, access elements of the Proposed Development and the series of changes to the design of the approved development sought via variation to Condition 3 of the approved application (ref: P2014/0825). The design has been influenced by the EIA process as reported in the 2019 ES and the ES Addendum, which aims to ensure sustainability, but also minimise the effects upon the character of the area and sensitive receptors.
- 7.1.2 The adoption of management measures in the form of a Construction Traffic Management Plan (an updated CTMP is provided separately in support of the planning application), Construction Environmental Management Plan and Construction Method Statement will further reduce environmental effects of the Proposed Development.

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